



2021-22 Outcome Based Management Key Performance Indicator Data Definition Manual



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Version	Date	Author	Comments	Approved by
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1.1		Analytics and Performance Reporting, ISPD	Correction to KPI 48 exclusions to clarify removal of financial products in line with approved change to all efficiency KPIs.	Nicholas Webb, A/Director, Budget Strategy, Purchasing and System Performance

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1.0 Introduction

1.1 Background

As per Section 61 of the *Financial Management Act 2006*, Annual Reports are required to be produced for an Agency that is a department or statutory authority (including any affiliated or related body).

Annual Reports are an important tool in assisting the public's understanding of the operations of government agencies, as well as ensuring financial and performance accountability to Parliament.

On 1 July 2016, amendments to the governance structure for the Western Australian (WA) health system, under the *Health Services Act 2016*, resulted in the establishment of Health Service Providers as statutory entities and the WA Department of Health, led by the Director General, as the System Manager.

All statutory entities are responsible for producing their Annual Reports:

- WA Department of Health
- North Metropolitan Health Service
- South Metropolitan Health Service
- East Metropolitan Health Service
- Child and Adolescent Health Service
- WA Country Health Service
- Health Support Services
- PathWest Laboratory Medicine WA and
- Quadriplegic Centre.

1.2 Purpose

This document applies to the 2021-22 suite of Key Performance Indicators (KPIs) required to be reported in Annual Reports for the WA health system. These KPIs have been approved by the Under Treasurer and will be audited by the Office of the Auditor General (OAG).

Information and System Performance, Purchasing and System Performance, WA Department of Health is responsible for the development and maintenance of the KPI definition manual on behalf of all entities. Before referencing this manual please ensure you have the latest version from the [Policy Frameworks website](#).

The KPI definition manual provides information on how KPIs are calculated for use in the WA health system Annual Reports, with the intent to:

- ensure accuracy and consistency in data collection, collation and analysis
- support the interpretation of what a KPI measures
- allow comparison across WA health system services and
- support the audit process conducted by the OAG.

The manual contains definitions for all KPIs including:

- WA health system Outcomes (all KPIs) and Services (efficiency KPIs only)
- the methodology/calculation used to construct the KPI result
- data sources and systems used to calculate the KPI
- data quality statements
- performance targets and target rationales that have been set to assess performance by key stakeholders and
- the reporting cycle/period.

A reference list denoting the reporting of KPIs by Health Service Provider/entity can be seen in Addendum 1 of the *Outcome Based Management Policy*.

1.3 KPI Manual Template and Business Rules

The KPI Manual template and business rules are based on the Australian Institute of Health and Welfare's (AIHW) national metadata standards¹ and modified to align with data standards specific to the WA health system. The WA Department of Health acknowledges the assistance of the AIHW for services provided in relation to METeOR, Australia's repository for national metadata standards for the health, community services, early childhood, homelessness and housing assistance sectors, which is owned by the AIHW.

There are eight sections which include:

- Identifying and definitional attributes
- Collection and usage attributes
- Representational attributes
- Indicator conceptual framework
- Data source attributes
- Accountability attributes
- Source and reference attributes and
- Registry management attributes.

The *KPI Manual template and business rules* document is located in Appendix A.

1.4 The 2021-22 KPI Manual

The KPI Manual was drafted in accordance with the Annual Report and Budget Paper KPI definitions. Data providers are consulted to review and update the draft KPI Manual based on the business rules in Appendix A.

¹ Australian Government, Australian Institute of Health and Welfare, Metadata Online Registry (METeOR) 'Indicator template with business rules.pdf'
<http://meteor.aihw.gov.au/content/item.phtml?itemId=400044&nodeId=file4f87d57714ce0&fn=Indicator%20template%20with%20business%20rules.pdf>

2.0 WA health system Annual Reporting Requirements for 2021-22

The WA health system comprises of nine legal entities that are required under the *Financial Management Act 2006* to produce an annual report, as a means of disseminating performance information, to the Minister for Health, the State Government, Parliament and the public. The legal entities are:

- WA Department of Health
- North Metropolitan Health Service
- South Metropolitan Health Service
- East Metropolitan Health Service
- Child and Adolescent Health Service
- WA Country Health Service
- Health Support Services
- PathWest Laboratory Medicine WA and
- Quadriplegic Centre.

WA health system annual reports must include reporting KPIs to enable stakeholders to assess the WA health system's performance in achieving government desired outcomes and the delivery of services.

3.0 WA health system Outcomes and Services

To comply with its legislative obligation as a Western Australian government agency, the WA health system operates under the Outcome Based Management (OBM) Framework. This framework describes how Outcomes, Services and KPIs are used to measure agency performance towards achieving the relevant overarching whole-of-government goal. The WA health system's KPIs measure the effectiveness and efficiency of the health services provided by the WA health system in achieving agreed outcomes.

All WA health system reporting entities contribute to the achievement of these outcomes through health services delivered directly by the entities or indirectly through contracts with non-government organisations.

The WA health system's outcomes and 2021-22 Annual Report Key Performance Indicators are shown in Addendum 1 of the *Outcome Based Management Policy*.

4.0 WA health system Key Performance Indicators

The suite of 2021-22 KPIs consists of effectiveness and efficiency indicators that cover each outcome and each service respectively.

When interpreting the KPI definitions, the following should be considered with respect to assigned targets and reporting requirements.

4.1 Performance targets

Effectiveness indicator targets have been based on:

- national or international approved/aspirational targets
- rigorous testing
- past performance
- KPI custodian/management decisions.

Efficiency indicator targets are derived from the 2021-22 Government Budget Statements (GBS).

4.2 KPI Reporting Requirements

- The WA health system is required under an Act of Parliament, as well as the Treasurer's Instructions, to present KPIs to Parliament.
- The OAG will perform an interim audit of information systems, followed by a final audit of KPIs.
- The WA health system is required to report actual results against targets.

5.0 Common terms

Information on common terms used within the KPI definition manuals can be found in the Australian Institute of Health and Welfare [Hospitals A-Z Glossary](#) and the general [Australia's health glossary](#).

6.0 Acronyms

ABF	Activity Based Funding
ABS	Australian Bureau of Statistics
AECC	Australian Emergency Care Classification
AHMAC	Australian Health Ministers' Advisory Council
AIHW	Australian Institute of Health and Welfare
AIR	Australian Immunisation Register
AMI	Acute Myocardial Infarction
AP	Accounts Payable
ATS	Australasian Triage Scale
CAHS	Child and Adolescent Health Service
CHEs	Contracted Health Entities
DAMA	Discharged against medical advice
DenIM PMS	Dental Information Management Patient Management System
DHS	Dental Health Services
DoH	Department of Health
EDDC	Emergency Department Data Collection
EMHS	East Metropolitan Health Service
ESWLDC	Elective Services Wait List Data Collection
FNOF	Fractured Neck of Femur
FTE	Full-time equivalent
GBS	Government Budget Statement
GL	General Ledger
GP	General Practitioner
HA-SABSI	Healthcare-associated <i>Staphylococcus aureus</i> bloodstream infections
HaDSCO	Health and Disability Services Complaints Office
HATH	Hospital at the Home (Silver Chain)
HCW	Health care worker
HSS	Health Support Services
HISWA	Healthcare Infection Surveillance WA
HITH	Hospital In The Home
HMDC	Hospital Morbidity Data Collection
HPV	Human Papilloma Virus
HSP	Health Service Provider

ICT	Information and communications technology
IHD	Ischaemic heart disease
IHPA	Independent Hospital Pricing Authority
ISPD	Information and System Performance Directorate
JHC	Joondalup Health Campus
KPI	Key Performance Indicator
LP	Linkage Project
MBI	Modified Barthel Index
METeOR	Metadata Online Registry (AIHW)
MITH	Mental Health In The Home
MNS	Midwives Notification System
MTD	Month to date
NAPAAWL DC	Non Admitted Patient Activity and Wait list Data Collection
N/A	Not Applicable
NMHS	North Metropolitan Health Service
No.	Number
NSDS	National Standards for Disability Services
nWAU	National Weighted Activity Unit
OAG	Office of the Auditor General
OBD	Occupied Bed Days
OBM	Outcome Based Management
OHCWA	Oral Health Centre of Western Australia
OGS	Other Goods & Services
PAC/CN	Post-acute care/Community Nursing
PATS	Patient Assisted Travel Scheme
PHC	Peel Health Campus
PHU	Public Health Unit
PBRC	Patient Billing Revenue Collection system
PSOLIS	Psychiatric Services On Line Information System
PYLL	Potential Years of Life Lost
QUAD	Quadriplegic Centre
RITH	Rehabilitation In The Home
RoGS	Report on Government Services
SA2	Statistical Area Level 2
SDS	School Dental Service
SJOG	St John of God
SMHS	South Metropolitan Health Service

TCP	Transition Care Program
TOPAS	The Open Patient Administration System
UDG	Urgency Disposition Group
UMRN	Unit Medical Record Number
WA	Western Australia
WACHS	WA Country Health Service
WAU	Weighted Activity Unit
webPAS	web based Patient Administration System
YTD	Year to date

7.0 Key Performance Indicator Definitions

7.1 Outcome 1: Public hospital-based services that enable effective treatment and restorative healthcare for Western Australians

7.1.0 Performance indicator contributing to Outcome 1

Percentage of emergency department patients seen within recommended times: (a) % Triage Category 1 (2 minutes); (b) % Triage Category 2 (10 minutes); (c) % Triage Category 3 (30 minutes); (d) % Triage Category 4 (60 minutes); (e) % Triage Category 5 (2 hours)

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Waiting times for emergency hospital care
<i>Catalogue identifier:</i>	Nil
<i>Reporting entities/scope:</i>	NMHS, SMHS, EMHS, CAHS, WACHS Hospitals in scope for this indicator are those with a publicly funded Level 3B Emergency Service or above (as defined in the IHPA Definition of Emergency Services for ABF), including Contracted Health Entities. The terms Emergency Service and Emergency Department are used interchangeably for the purposes of this definition.
<i>Description:</i>	The percentage of all Emergency Department (ED) Triage 1, 2, 3, 4 and 5 patients seen within the required timeframe for medical assessment and treatment, according to their triage category.
<i>Rationale:</i>	<p>The Australasian College for Emergency Medicine developed the Australasian Triage Scale (ATS) to ensure that patients presenting to Emergency Departments are medically assessed, prioritised according to their clinical urgency and treated in a timely manner².</p> <p>This performance indicator measures the percentage of patients being assessed and treated within the required ATS timeframes. This provides an overall indication of the effectiveness of WA's Emergency Departments which can assist in driving improvements in patient access to emergency care.</p>
<i>Indicator set:</i>	Annual Reports 2021-22: Performance Indicator
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	Annual Reports 2021-22: <ul style="list-style-type: none">• Outcome 1: Public hospital-based services that enable effective treatment and restorative healthcare for Western Australians• Effectiveness.

² Australasian College for Emergency Medicine. (2013) Policy on the Australasian Triage Scale, Australasian College for Emergency Medicine, Melbourne. Available from: <https://acem.org.au/getmedia/484b39f1-7c99-427b-b46e-005b0cd6ac64/P06-Policy-on-the-ATS-Jul-13-v04.aspx>

Collection and usage attributes

Population group age from: All ages.

Population group age to: All ages.

Computation description: [Numerator] divided by [Denominator] multiplied by 100 (expressed as percentage).

General Notes:

Emergency department waiting times by triage category are calculated by subtracting the time at which the patient presented at the emergency department (that is, the time at which the patient is clerically registered or triaged, whichever occurs earlier) from the time of commencement of service by a treating medical officer or nurse. Patients who do not wait for care after being triaged or clerically registered are excluded from the data.

Triage 1, 2, 3, 4 and 5 attendances are counted from event records in the Emergency Department Data Collection (EDDC) using [Presentation Date] and [Presentation Time], [Triage category], [Seen by doctor], [Seen by nurse] and [Episode end status].

[Presentation Date] and [Presentation Time] and [Clinical Care Commencement date] and [Clinical Care Commencement time] are used to calculate {Wait time to be seen}.

[Presentation Date] and [Presentation Time] are the earlier of [Arrival Date] and [Arrival Time] and [Triage Date] and [Triage Time].

Emergency department clinical care can be commenced by a doctor, nurse, mental health practitioner or other health professional, when investigation, care and/or treatment is provided in accordance with an established clinical pathway defined by the emergency department. Individual ED Heads of Department determine valid clinical pathways for their own hospitals and decide who can use a pathway and under what circumstances.

Placement of a patient in a cubicle and observations taken to monitor a patient pending a clinical decision regarding commencement of a clinical pathway, do not constitute commencement of care.

Patients with an [Episode end status] of 'Did not wait to be attended by a healthcare professional' should not have a clinical care commencement date, because they left before investigation, care and/or treatment was commenced by a health professional.

In the EDIS enterprise system, there is currently no capacity to record every individual staff member's name, so a senior doctor "staff name" of "ZZ_CLINICAL_CARE_COMMENCED" was created in the senior doctor palette. Any non-medical/non-Nurse Practitioner staff member who starts treatment on a

pathway is to use that entry to designate that they commenced clinical care and to enter the time they commenced the pathway (i.e. the [Clinical Care Commencement date] and [Clinical Care Commencement time]) in the [PP_SNR_DOC_DATE] field. The staff member's name is to be entered into the EDIS [Clinical Comments] field and this information is not to be erased.

The following business rules apply for the recording of clinical care commencement:

- For EDIS sites (excluding Bunbury Hospital): [Clinical Care Commencement date] and [Clinical Care Commencement time] are recorded in the [Dr_Seen] field in the Emergency Department Data Collection (EDDC). This field is automatically populated with the earliest time that clinical care was commenced; whether this is the EDIS field [Treating doctor time] or the [Senior doctor time]
- For SJOG Midland Public Hospital: Clinical care begins when treatment or a diagnostic service (via a recognised clinical pathway) is commenced by the doctor. The [Clinical Care Commencement date] and [Clinical Care Commencement time] is recorded in the EDDC in the [Seen by doctor] field
- For Peel Health Campus prior to transitioning to EDIS (08/09/20): The Rapid Assessment Team (RAT) icon in the Meditech ED Module is used to record the time to commencement of clinical care by staff disciplines other than a senior doctor as per this definition. For Peel Health Campus the earlier of [Seen by doctor] or [Seen by Rapid Assessment Team] is used as the time clinical care commenced
- For all WACHS sites (including Bunbury Hospital): clinical care begins when treatment or a diagnostic service (via a recognised clinical pathway) is commenced by either the doctor, nurse or other health professional. The [Clinical Care Commencement date] and [Clinical Care Commencement time] is recorded in the EDDC in the [Seen by doctor] or [Seen by nurse] field. The [Clinical Care Commencement date] and [Clinical Care Commencement time] is the earlier of [Seen by doctor] or [Seen by nurse].

Inclusions:

- Triage category = 1 (Resuscitation)
- Triage category = 2 (Emergency)
- Triage category = 3 (Urgent)

- Triage category = 4 (Semi-urgent)
- Triage category = 5 (Non-urgent).

Exclusions:

- [Presentation Date] and [Presentation Time] values are invalid or null; or
- [Clinical Care Commencement date] and [Clinical Care Commencement time] values are invalid or null; or
- {Wait time to be seen} < 0; or.
- [Discharge Date] is null.

Computation:

{Proportion Seen within recommended time} = Numerator for each [Triage category], divided by the Denominator for each same [Triage category], expressed as a percentage by each [Triage category], with all exclusions applied to both Numerator and Denominator.

Numerator:

The number of Triage 1, 2, 3, 4 or 5 patients seen within recommended time is a count of the number of records where:

- [Triage category] = 1 and {Wait time to be seen} is ≤ 2 minutes
- or [Triage category] = 2 and {Wait time to be seen} is ≤ 10 minutes
- or [Triage category] = 3 and {Wait time to be seen} is ≤ 30 minutes
- or [Triage category] = 4 and {Wait time to be seen} is ≤ 60 minutes
- or [Triage category] = 5 and {Wait time to be seen} is ≤ 120 minutes.

{Wait time to be seen} = [Clinical Care Commencement date] and [Clinical Care Commencement time] minus [Presentation Date] and [Presentation Time].

Numerator data elements:

Data Elements

[Triage category]

{Wait time to be seen}

[Clinical Care Commencement date]

[Clinical Care Commencement time]

[Presentation Date]

[Presentation Time]

Data Source

Emergency Department Data Collection

Guide for use

Nil

Denominator:

Total Triage 1, 2, 3, 4 or 5 patients

Denominator data elements:

Data Elements

[Triage category]

Data Source

Emergency Department Data Collection

Guide for use

Nil

*Disaggregation data elements:***Data Element/Data Set**

[Triage category]

[Establishment identifier]

Data Source

See Numerator and/or Denominator.

Guide for use

Nil

Comments:

The Australasian College of Emergency Medicine has provided recommendations regarding the proportion of patients seen within the benchmarked time for each triage category³:

Australasian Triage Scale Category	Treatment Acuity (Maximum waiting time for medical assessment and treatment)	Performance Indicator Threshold
Triage 1	Immediate*	100%
Triage 2	10 minutes	80%
Triage 3	30 minutes	75%
Triage 4	60 minutes	70%
Triage 5	120 minutes	70%

*A time interval of less than or equal to 2 minutes is used to identify those Triage 1 patients seen within time.

These recommended times and categories are used both locally by the WA Department of Health and nationally by the Department of Health and Ageing, and the Australian Institute of Health and Welfare.

Representational attributes

Representation class: Percentage

Data type: Number

Unit of measure: Person

Format: NNN.N%

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes*Data sources:***Data Source**

Emergency Department Data Collection

³ <https://acem.org.au/getmedia/484b39f1-7c99-427b-b46e-005b0cd6ac64/P06-Policy-on-the-ATS-Jul-13-v04.aspx>

Data provider

System Analytics Branch, Analytics and Performance Reporting, Information & System Performance, Purchasing and System Performance, WA Department of Health.

Data custodian

Principal Data Management Officer, Data Management, Information & Performance Governance, ISPD, WA Department of Health.

Quality statement:

Due to the rapid ED work environment and patient care being the priority of ED staff, the source data systems do not always have robust, complete data. Some fields may be left blank or contain illogical date/time data values. There may also be a delay or lag in data entry due to the primary requirement to deliver time critical patient care.

A national definition exists for this indicator, although differences in the exclusion criteria can result in different figures being reported locally and nationally.

The national definition is available on the METeOR website under the National Healthcare Agreement Indicator Set 'National Healthcare Agreement: PI 21a - Waiting times for emergency hospital care: Proportion seen on time, 2020'

<https://meteor.aihw.gov.au/content/index.phtml/itemId/716686>

Accountability attributes*Benchmark:*

Triage 1 ≤ 2 minutes: 100%

Triage 2 ≤ 10 minutes: 80%

Triage 3 ≤ 30 minutes: 75%

Triage 4 ≤ 60 minutes: 70%

Triage 5 ≤ 120 minutes: 70%

These target values apply to all reporting entities for this KPI.

Sourced from: The Australasian College of Emergency Medicine.

Approved by: Director General, WA Department of Health.

Methodology:

Nil

Further data development/ collection required:

Nil

Other issues caveats:

Due to quality assurance processes, historical figures may be subject to change.

A lag is included in data reporting to allow for coding of information.

Source and reference attributes*Reference documents:*

Report on Government Services (RoGS) 2021 Part E

Health, Section 12 Public Hospitals, Indicator - Emergency department waiting times, "Emergency department waiting times by triage category – proportion of patients seen on time" <https://www.pc.gov.au/research/ongoing/report-on-government-services/2021/health>

National Healthcare Agreement: PI 21a - Waiting times for emergency hospital care: Proportion seen on time, 2020
<https://meteor.aihw.gov.au/content/index.phtml/itemId/716686>

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

7.1.1 Key effectiveness indicators contributing to Outcome 1

Unplanned hospital readmissions for patients within 28 days for selected surgical procedures: (a) knee replacement; (b) hip replacement; (c) tonsillectomy & adenoidectomy; (d) hysterectomy; (e) prostatectomy; (f) cataract surgery; (g) appendicectomy

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Unplanned Readmissions
<i>Catalogue identifier:</i>	0001
<i>Reporting entities/scope:</i>	NMHS, SMHS, EMHS, CAHS (c and g only), WACHS
<i>Description:</i>	<p>Unplanned hospital readmissions to the same or another public hospital or Contracted Health Entity (CHE) (public activity only) within 28 days for selected surgical procedures:</p> <ul style="list-style-type: none">(a) knee replacement(b) hip replacement(c) tonsillectomy & adenoidectomy(d) hysterectomy(e) prostatectomy(f) cataract surgery(g) appendicectomy. <p>This KPI measures the proportion of patient separations from all WA Health public hospitals for the above surgical procedures that are followed by an unplanned readmission to any public hospital within 28 days of discharge. Readmissions are reported against the hospital where the initial admission occurred (index admission).</p> <p>Unplanned readmissions are those readmissions where the principal diagnosis and readmission interval indicate that the readmission may be related to the care provided by the hospital in an index surgical episode of care.</p>
<i>Rationale:</i>	<p>Unplanned hospital readmissions may reflect less than optimal patient management and ineffective care pre-discharge, post-discharge and/or during the transition between acute and community-based care⁴. These readmissions necessitate patients spending additional periods of time in hospital as well as utilising additional hospital resources.</p> <p>Readmission rate is considered a global performance measure, as it potentially points to deficiencies in the functioning of the overall healthcare system. Along with providing appropriate interventions, good discharge planning</p>

⁴ Australian Institute of Health and Welfare (2009). Towards national indicators of safety and quality in health care. Cat. no. HSE 75. Canberra: AIHW. Available at: <https://www.aihw.gov.au/reports/health-care-quality-performance/towards-national-indicators-of-safety-and-quality/contents/table-of-contents>

can help decrease the likelihood of unplanned hospital readmissions by providing patients with the care instructions they need after a hospital stay and helping patients recognise symptoms that may require medical attention.

The seven surgeries selected for this indicator are based on those in the current National Healthcare Agreement Unplanned Readmission performance indicator (NHA PI 23).

Indicator set:

Annual Reports 2021-22

Frequency:

Annual, by calendar year

Outcome area:

Annual Reports 2021-22:

- Outcome 1: Public hospital based services that enable effective treatment and restorative healthcare for Western Australians
- Effectiveness.

Collection and usage attributes

Population group age from:

All ages.

Population group age to:

All ages.

Computation description:

Unplanned readmissions are those readmissions where the principal diagnosis indicates an adverse event.

Limited to surgeries at, and readmissions to, WA health system hospitals. This includes all admissions for in-scope procedures at WA public hospitals (regardless of financial election) and public patients at CHEs (i.e. Joondalup Health Campus, Peel Health Campus and St. John of God Midland Hospital).

All readmissions that meet the readmission criteria are included in the calculation; e.g. if a patient readmits to hospital for complications following surgery twice within 28 days, both readmissions are counted in the numerator.

Principal diagnoses codes

A principal diagnosis for the readmission has one of the following ICD-10-AM (8th, 9th, 10th and 11th editions) codes: T80–88, E89, G97, H59, H95, I97, J95, K91, M96 or N99.

Diagnosis code	Description
E89	Post procedural endocrine and metabolic disorders, not elsewhere classified
G97	Post procedural disorders of nervous system, not elsewhere classified
H59	Post procedural disorders of eye and adnexa, not elsewhere classified
H95	Post procedural disorders of ear and mastoid process, not elsewhere classified
I97	Post procedural disorders of circulatory

	system, not elsewhere classified
J95	Post procedural respiratory disorders, not elsewhere classified
K91	Post procedural disorders of digestive system, not elsewhere classified
M96	Post procedural musculoskeletal disorders, not elsewhere classified
N99	Post procedural disorders of genitourinary system, not elsewhere classified
T80	Complications following infusion, transfusion and therapeutic injection
T81	Complications of procedures, not elsewhere classified
T82	Complications of cardiac and vascular prosthetic devices, implants and grafts
T83	Complications of genitourinary prosthetic devices, implants and grafts
T84	Complications of internal orthopaedic prosthetic devices, implants and grafts
T85	Complications of other internal prosthetic devices, implants and grafts
T86	Failure and rejection of transplanted organs and tissues
T87	Complications peculiar to reattachment and amputation
T88	Other complications of surgical and medical care, not elsewhere classified

Procedure codes

The following is a list of the specific Australian Classification of Health Interventions (ACHI - 8th, 9th, 10th and 11th editions) procedure codes (Principal Procedure or Additional Procedure) which are included in the specifications for each of the selected surgical procedures.

Knee replacement

Procedure Code	Description
49518-00	Total arthroplasty of knee, unilateral
49519-00	Total arthroplasty of knee, bilateral
49521-00	Total arthroplasty of knee with bone graft to femur, unilateral
49521-02	Total arthroplasty of knee with bone

	graft to tibia, unilateral
49524-00	Total arthroplasty of knee with bone graft to femur and tibia, unilateral

Hip replacement

Procedure Code	Description
49318-00	Total arthroplasty of hip, unilateral
49319-00	Total arthroplasty of hip, bilateral

Tonsillectomy and adenoidectomy

Procedure Code	Description
41789-00	Tonsillectomy without adenoidectomy
41789-01	Tonsillectomy with adenoidectomy
41801-00	Adenoidectomy without tonsillectomy

Hysterectomy

Procedure Code	Description
35653-01	Total abdominal hysterectomy
35653-04	Total abdominal hysterectomy with removal of adnexa
35653-07	Laparoscopic total abdominal hysterectomy
35657-00	Vaginal hysterectomy
35661-00	Abdominal hysterectomy with extensive retroperitoneal dissection
35664-00	Radical abdominal hysterectomy with radical excision of pelvic lymph nodes
35664-01	Radical vaginal hysterectomy with radical excision of pelvic lymph nodes
35667-00	Radical abdominal hysterectomy
35667-01	Radical vaginal hysterectomy
35667-02	Laparoscopic radical abdominal hysterectomy
35667-03	Laparoscopically assisted radical vaginal hysterectomy

35670-00	Abdominal hysterectomy with radical excision of pelvic lymph nodes
35673-02	Vaginal hysterectomy with removal of adnexa
90443-00	Other excision of uterus
90448-01	Total laparoscopic abdominal hysterectomy
90448-02	Total laparoscopic abdominal hysterectomy with removal of adnexa

Prostatectomy

Procedure Code	Description
37200-03	Suprapubic prostatectomy
37200-04	Retropubic prostatectomy
37200-05	Other open prostatectomy
37203-00	Transurethral resection of prostate [TURP]
37203-06	Other closed prostatectomy
37209-00	Radical prostatectomy
37209-01	Laparoscopic radical prostatectomy
37210-00	Radical prostatectomy with bladder neck reconstruction
37210-01	Laparoscopic radical prostatectomy with bladder neck reconstruction
37211-00	Radical prostatectomy with bladder neck reconstruction and pelvic lymphadenectomy
37211-01	Laparoscopic radical prostatectomy with bladder neck reconstruction and pelvic lymphadenectomy
37224-00	Endoscopic destruction procedures on prostate
37224-03	Endoscopic resection of prostate
90407-00	Excision of other lesion of prostate
90408-00	Destruction procedures on prostate
90408-02	Other closed destruction procedures on prostate

Cataract surgery

Procedure Code	Description
42698-00	Intracapsular extraction of crystalline lens
42698-02	Extracapsular extraction of crystalline lens by phacoemulsification and aspiration of cataract
42698-04	Other extracapsular extraction of crystalline lens
42698-05	Other extraction of crystalline lens
42698-06	Intracapsular extraction of crystalline lens
42698-07	Phacoemulsification of crystalline lens
42698-08	Other extracapsular extraction of crystalline lens
42702-04	Extracapsular extraction of crystalline lens by phacoemulsification and aspiration of cataract with insertion of foldable artificial lens
42702-05	Extracapsular extraction of crystalline lens by phacoemulsification and aspiration of cataract with insertion of other artificial lens
42731-01	Extraction of crystalline lens by posterior chamber sclerotomy with removal of vitreous

Appendicectomy

Procedure Code	Description
30571-00	Appendicectomy
30572-00	Laparoscopic appendicectomy

Hospitals contributing to this KPI

EMHS:

Armadale/Kelmscott District Memorial Hospital, Bentley Hospital, Kalamunda Hospital, Royal Perth Hospital and St John of God Midland Hospital (public patients).

NMHS:

King Edward Memorial Hospital for Women, Osborne Park Hospital, Sir Charles Gairdner Hospital and Joondalup Health Campus (public patients).

SMHS:

Fiona Stanley Hospital, Fremantle Hospital, Murray Hospital, Rockingham General Hospital and Peel Health Campus (public patients).

CAHS:

Perth Children's Hospital, Princess Margaret Hospital for Children (prior to 10 June 2018).

WACHS:*Great Southern*

Albany Hospital, Denmark Hospital, Gnowangerup Hospital, Katanning Hospital, Kojonup Hospital, Plantagenet Hospital, Ravensthorpe Hospital.

Goldfields

Esperance Hospital, Kalgoorlie Hospital, Laverton Hospital, Leonora Hospital, Norseman Hospital.

South West

Augusta Hospital, Bridgetown Hospital, Boyup Brook Soldiers Memorial Hospital, Bunbury Hospital, Busselton Hospital, Collie Hospital, Donnybrook Hospital, Harvey Hospital, Margaret River Hospital, Nannup Hospital, Pemberton Hospital, Warren Hospital.

Kimberley

Broome Hospital, Derby Hospital, Fitzroy Crossing Hospital, Halls Creek Hospital, Kununurra Hospital, Wyndham Hospital.

Pilbara

Hedland Health Campus, Newman Hospital, Nickol Bay Hospital (prior to 19 September 2018), Karratha Health Campus, Onslow Health Service, Paraburdoo Hospital, Roebourne Hospital, Tom Price Hospital.

Midwest

Carnarvon Hospital, Dongara Multi-Purpose Health Centre, Exmouth Hospital, Geraldton Hospital, Kalbarri Health Centre, Meekatharra Hospital, Morawa Hospital, Mullewa Hospital, Northampton Hospital, North Midlands Hospital.

Wheatbelt

Beverley Hospital, Boddington Hospital, Bruce Rock Memorial Hospital, Corrigin Hospital, Dalwallinu Hospital, Dumbleyung Memorial Hospital, Goomalling Hospital, Kellerberrin Memorial Hospital, Kondinin Hospital, Kununoppin Hospital, Lake Grace Hospital, Merredin

Hospital, Moora Hospital, Narembeen Memorial Hospital, Narrogin Hospital, Northam Hospital, Quairading Hospital, Southern Cross Hospital, Wagin Hospital, Wongan Hills Hospital, Wyalkatchem-Koorda Hospital, York Hospital.

Computation:

(Numerator/denominator) x 1,000.

Calculated separately for each of the specified procedures.

Results are presented as a rate and expressed as per 1,000 separations.

Numerator:

Number of separations for public hospitals which meet all the following criteria:

- The episode is a readmission to the same or another public hospital (or by a public patient at a CHE) following a separation in which one of the following procedures was performed (referred to as the 'index' separation): knee replacement, hip replacement, tonsillectomy and adenoidectomy, hysterectomy, prostatectomy, cataract surgery, appendectomy (see procedure codes in *Computation Description*).
- The readmission is for the same individual as the index separation; that is,
 - the Root LP number for the readmission is the same as the Root LP number for the index separation
 - or if Root LP number is blank, a concatenation of Hospital Number and UMRN is the same as the index separation.
- The Admission Date for the readmission is within 28 days of the Separation Date of the index separation.
- The Principal Diagnosis for the readmission is one of the following ICD-10-AM codes: T80-T88, E89, G97, H59, H95, I97, J95, K91, M96 or N99.
- The Source of Referral – Professional is not 7 (statistical admission/type change).
- The Source of Referral – Location is not 4 (Acute Hospital) or 5 (Psychiatric Hospital).
- The Admission Status is not 3 (Elective – waitlist) or 4 (Elective – not waitlist).
- HMDC exclusions have been applied (see *Exclusions* below).
- Note: The rules for counting contiguous admission(s)⁵ following the index separation in the numerator are detailed in the Appendix to this indicator.

All readmissions occurring within the 28-day readmission interval are counted. If there is more than one surgical procedure category applicable in the index episode of care,

⁵ Contiguous admissions are where the separation of one inpatient event is the same as the admission date for a subsequent inpatient event, for the same person. The inpatient events may occur at different hospitals.

then the readmission is counted for each surgical procedure category.

Readmission Period

The 28-day readmission interval is measured from the separation date of the index episode of care. Where there are contiguous separations following the index admission, the readmission interval is measured from the separation date of the last contiguous admission that meets the selection criteria described below.

Inclusions

- All WA public hospital separations.
- For Joondalup and Peel Health Campuses and St John of God Midland Hospital, only public patients are selected – i.e. those with a funding source of Australian Health Care Agreement or Reciprocal Health Care Agreement.
- For reporting purposes, the readmission is counted against the year in which the initial separation occurred (even if a separation for a contiguous admission occurs in the following year).

Exclusions

The following Inpatient Data Collections standard exclusions are applied to both the numerator and denominator:

Client Status:

- 3 (Boarder)
- 5 (Contracted Care)⁶
- 7 (Organ Procurement)
- 8 (Resident)

Care Type:

- 27 (Organ Procurement)
- 28 (Boarder)
- 30 (Aged Care)
- 31 (Flexible Care).

Note: Standard exclusions changed for separations in 2021-22 due to changes in reporting requirements. From 1 July 2021, separations where Client Status = 0 are no longer excluded, but separations where Client Status = 5 (Contracted Care) are excluded in some circumstances.

⁶ Except where Contract Type = (A)B. Contract Type (A)B reflects a situation where Hospital A contracts Hospital B to provide a whole episode of care and the patient does not attend Hospital A for any part of the episode of care. For more information please see the Admitted Patient Activity Data Business Rules:

<https://ww2.health.wa.gov.au/About-us/Policy-frameworks/Information-Management/Mandatory-requirements/Collection/Patient-Activity-Data>

Note that separations prior to 1 July 2021 still apply the previous standard exclusion method; that is, data is excluded where Client Status = 0 and not excluded when Client Status = 5.

Numerator data elements:

Data Elements

[Client Status]
 [Care Type]
 [Establishment (Hospital) Identifier]
 [Client Identifier (Unit Medical Record Number)]
 [Principal Diagnosis]
 [Funding Source for Hospital Patient]
 [Admission Date]
 [Separation Date]
 [Admission Time]
 [Separation Time]
 [Source of Referral – Professional]
 [Source of Referral – Location]
 [Admission Status]
 [Account Number]
 [Mode of Separation]
 {Length of Stay}

Data Source

Hospital Morbidity Data Collection (HMDC)

Guide for use

See Patient Activity Data (PAD) Policy - Admitted Activity (link in *Reference Documents* section).

Data Element

Root LP Number

Data Source

WA Data Linkage System

Guide for use

See Data Linkage WA website (link in *Reference Documents* section)

Denominator:

Number of separations from public hospitals which meet all the following criteria:

- One of the following procedures was performed: knee replacement; hip replacement; tonsillectomy and adenoidectomy; hysterectomy; prostatectomy; cataract surgery; appendectomy as a Principal Procedure or in any Additional Procedure fields (see procedure codes in *Computation description*). This is the index separation.
- HMDC exclusions have been applied (see *Exclusions* below).

- The Mode of Separation is not 8 (Deceased).
- Note: If there is/are contiguous admission(s) following the index separation, use the final Separation Date of any subsequent admission(s) as the starting point for counting the readmission days, where the subsequent admissions meet the following criteria:
- The subsequent Admission Date is equal to the Separation Date of the preceding separation (the preceding separation can be the index separation, or another acute admission that follows the index separation where all events are contiguous and meet the criteria described here)
- The subsequent admission Care Type is 21 (Acute)
- The Source of Referral – Location for the subsequent admission is 4 (Acute Hospital) or 5 (Psychiatric Hospital)
- The Source of Referral – Professional for the subsequent admission is not 7 (statistical admission/type change).
- These rules for counting contiguous admission(s) following the index separation in the denominator are further described in the Appendix.

Inclusions

- All WA health system public hospital separations.
- For Joondalup and Peel Health Campuses and St John of God Midland Hospital, only public patients are selected: those with a funding source of Australian Health Care Agreement or Reciprocal Health Care Agreement.

Exclusions

The following Inpatient Data Collections standard exclusions are applied to both the numerator and denominator:

Client Status:

- 3 (Boarder)
- 5 (Contracted Care)⁷
- 7 (Organ Procurement)
- 8 (Resident).

Care Type:

- 27 (Organ Procurement)
- 28 (Boarder)
- 30 (Aged Care)
- 31 (Flexible Care).

⁷ Except where Contract Type = (A)B. Contract Type (A)B reflects a situation where Hospital A contracts Hospital B to provide a whole episode of care and the patient does not attend Hospital A for any part of the episode of care. For more information please see the Admitted Patient Activity Data Business Rules:

<https://ww2.health.wa.gov.au/About-us/Policy-frameworks/Information-Management/Mandatory-requirements/Collection/Patient-Activity-Data>

Note: Standard exclusions changed for separations in 2021-22 due to changes in reporting requirements. From 1 July 2021, separations where Client Status = 0 are no longer excluded, but separations where Client Status = 5 (Contracted Care) are excluded in some circumstances.

Note that separations prior to 1 July 2021 still apply the previous standard exclusion method; that is, data is excluded where Client Status = 0 and not excluded when Client Status = 5.

Denominator data elements:

Data Element/Data Set

[Client Status]
 [Care Type]
 [Establishment (Hospital) Identifier]
 [Client Identifier (Unit Medical Record Number)]
 [Funding Source for Hospital Patient]
 [Admission Date]
 [Separation Date]
 [Admission Time]
 [Separation Time]
 [Principal and Additional Procedures]
 [Source of Referral – Professional]
 [Source of Referral – Location]
 [Mode of Separation]
 [Account Number]
 [Mode of Separation]
 {Length of Stay}

Data Source

HMDC

Guide for use

See Hospital Morbidity Data System Reference Manual (link in *Reference Documents* section).

Data Element

Root LP Number

Data Source

WA Data Linkage System

Guide for use

See Data Linkage WA website (link in *Reference Documents* section)

Disaggregation data elements:

Data Element/Data Set

Establishment (Hospital) Identifier
 Separation Date
 Principal or Additional Procedure

Data Source

HMDC

Guide for use

Reported separately for each procedure type.

Cases for inclusion in calendar year determined by:

Denominator: Separation date between 1 January and 31 December in reference year;

Numerator: Denominator time period plus 28 days.

Comments:

A change in data collection and reporting practices for contracted care activity, implemented from 1 July 2021, removes the requirement for public hospital funding sites to report an admission where the patient has not physically been admitted to the funding site. These changes also result in a single admission being reported where patient care is split between the funding hospital and contracted service. These changes will impact only a very small proportion of cases and any impacts are expected to be very small or negligible.

- This reporting definition is dependent on coded data and linked data; therefore, the indicator is reported by calendar year to take into account the delay for complete coded data.
- Health Service Providers are required to clinically code and submit inpatient data to the HMDC, WA Department of Health. The Inpatient Data Collections calculate this indicator using the HMDC data and Root LP Numbers.
- Not all procedures are conducted at all hospitals. For example, knee replacement, hip replacement, hysterectomy, cataract surgery and prostatectomy are rarely conducted within CAHS.
- CAHS are only required to report on unplanned hospital readmissions for the following surgical procedures from 2020-21 onwards:
 - (c) tonsillectomy & adenoidectomy;
 - (g) appendicectomy.

Representational attributes

Representation class: Rate

Data type: Number

Unit of measure: Person

Format: NN.N

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

- Hospitalisation data: HMDC
- Root LP numbers: WA Data Linkage System

Data provider

Hospitalisation data

- System Analytics Branch, Analytics and Performance Reporting, Information & System Performance, Purchasing and System Performance, WA Department of Health.

Root LP numbers

- Data Engineering, Data and Information Systems Unit, Information & System Performance, Purchasing and System Performance, WA Department of Health.

Data custodian

Hospitalisation data

- Principal Data Management Officer, Data Management, Information & Performance Governance, ISPD, WA Department of Health.

Quality statement:

This methodology is based on the National Healthcare Agreement Performance Indicator 23 - Unplanned hospital readmission rates, 2021. However, the following modifications have been made to ensure reporting of readmissions is as accurate as possible:

- Inclusion of readmissions to any public hospital (not just the hospital where the initial separation occurred)
- The exclusion of separations with an Admission Status of 3 (Elective – Waitlist) or 4 (Elective – not waitlist) from the numerator
- Consideration of contiguous hospital separations; i.e. where a patient is transferred from the hospital where surgery was performed to another hospital, the readmission interval begins from the last contiguous acute separation.

Direct comparisons should not be made with national figures due to the above differences.

In-scope readmissions are limited to those with a principal diagnosis that is indicative of a post-operative adverse event.

The Root LP (Linkage Project) number is generated by Data Engineering and uses probabilistic matching to match cases. This is a 'best estimate' used to match cases based on a series of patient identifying information; however, false matches are possible.

Accountability attributes

Benchmark:

- a) Knee replacement: ≤ 23.0 per 1,000 separations
- b) Hip replacement: ≤ 17.1 per 1,000 separations
- c) Tonsillectomy & adenoidectomy: ≤ 81.8 per 1,000 separations
- d) Hysterectomy: ≤ 42.3 per 1,000 separations
- e) Prostatectomy: ≤ 36.1 per 1,000 separations

- f) Cataract surgery: ≤1.1 per 1,000 separations
- g) Appendicectomy: ≤25.7 per 1,000 separations

Sourced from: Targets are set by Purchasing and System Performance Division each year, based on the best statewide results achieved within the previous five calendar years, excluding the most recent calendar year due to the required data lag and timing of the GBS process.

Approved by: Director General, WA Department of Health
Nil

Methodology:

*Further data development/
collection required:*

National work is underway to improve the methodology for National Healthcare Agreement Performance Indicator 23.

Other issues caveats:

Note where a patient has multiple in-scope procedures within the same period (e.g. hysterectomy followed by an appendicectomy) and then readmits, a readmission is recorded against each index procedure.

Source and reference attributes

Reference documents:

Report on Government Services (RoGS) 2021 Part E Health, Public Hospitals Section 12, Indicator – Selected unplanned hospital readmission rates
<https://www.pc.gov.au/research/ongoing/report-on-government-services/2021/health/public-hospitals>

Hospital Morbidity Data System Reference Manual
<https://ww2.health.wa.gov.au/About-us/Policy-frameworks/Information-Management/Mandatory-requirements/Collection/Patient-Activity-Data>

WA Data Linkage website:
<https://www.datalinkage-wa.org.au/>

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Appendix to KPI 0001 Unplanned Readmissions: Treatment of contiguous hospital separations for denominator and numerator.

Note:

DOA – date of admission

DOS – date of separation

PDx – principal diagnosis

Scenario 1

Separation A	Separation B	Separation C
Procedure performed	Care type: Acute	Care type: Non-acute

DOS Separation A = DOA Separation B **AND**

DOS Separation B = DOA Separation C

Denominator – Index episode of care	Numerator – Readmission
<ul style="list-style-type: none"> • Include Separation A in the denominator • Include Separation B in the index episode of care if: <ul style="list-style-type: none"> - DOS Separation A = DOA Separation B <u>AND</u> - Source of Referral-Location for Separation B is 4 (<i>acute hospital</i>) or 5 (<i>psychiatric hospital</i>) and Source of Referral-Professional is not 7 (<i>statistical admission/type change</i>). 	<ul style="list-style-type: none"> • Include Separation B in the numerator as a readmission for Separation A if: <ul style="list-style-type: none"> - (Source of Referral-Location for Separation B is not 4 or 5) or (Source of Referral-Professional is not 7) <u>AND</u> - PDx is a readmission PDx as per inclusions <u>AND</u> - Admission Status is not 3 or 4. • Include Separation C in the numerator as a readmission for Separation B if: <ul style="list-style-type: none"> - Separation B is in denominator <u>AND</u> - (Source of Referral-Location for Separation C is not 4 or 5) or (Source of Referral-Professional is not 7) <u>AND</u> - PDx is a readmission PDx as per inclusions <u>AND</u> - Admission Status is not 3 or 4.

Readmission Interval

The readmission interval applies from the DOS for Separation A to the DOA for a readmission.

If separation B is included in the index episode of care, the readmission interval for both Separations A and B applies from the DOS for separation B to the DOA for a readmission.

Scenario 2

Separation A	Separation B	Separation C
Procedure performed	Care type: Non-acute	Care type: Acute

DOS Separation A = DOA Separation B **AND**

DOS Separation B = DOA Separation C

Denominator – Index episode of care	Numerator – Readmission
<ul style="list-style-type: none"> • Include Separation A in the denominator <ul style="list-style-type: none"> - Separations B and C are <u>not</u> included in the denominator. 	<ul style="list-style-type: none"> • Include Separation B in the numerator as a readmission for Separation A if: <ul style="list-style-type: none"> - (Source of Referral-Location for Separation B is not 4 or 5) or (Source of Referral-Professional is not 7) <u>AND</u> - PDx is a readmission PDx as per inclusions <u>AND</u> - Admission Status is not 3 or 4. • Include Separation C in the numerator as a readmission for Separation A if: <ul style="list-style-type: none"> - Separation B is not in numerator <u>AND</u> - PDx is a readmission PDx as per inclusions <u>AND</u> - Admission Status is not 3 or 4.

Readmission Interval

The readmission interval is measured from the DOS for Separation A.

Percentage of elective wait list patients waiting over boundary for reportable procedures (a) % Category 1 over 30 days (b) % Category 2 over 90 days (c) % Category 3 over 365 days

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Proportion of elective wait list patients waiting over boundary Cases on list and over boundary Cases over clinically recommended waiting time
<i>Catalogue identifier:</i>	0002
<i>Reporting entities/scope:</i>	NMHS, SMHS, EMHS, CAHS, WACHS
<i>Description:</i>	Percentage of all elective patients on the wait list for a reportable procedure whose waiting time is over the clinically recommended time for their urgency category at census date, reported by urgency category. Reported as an average of weekly census data for the financial year.
<i>Rationale:</i>	<p>Elective surgery refers to planned surgery that can be booked in advance following specialist assessment that results in placement on an elective surgery waiting list.</p> <p>Elective surgical services delivered in the WA health system are those deemed to be clinically necessary. Excessive waiting times for these services can lead to deterioration of the patient's condition and/or quality of life, or even death⁸. Waiting lists must be actively managed by hospitals to ensure fair and equitable access to limited services, and that all patients are treated within clinically appropriate timeframes.</p> <p>Patients are prioritised based on their assigned clinical urgency category:</p> <ul style="list-style-type: none"> • Category 1 – procedures that are clinically indicated within 30 days • Category 2 – procedures that are clinically indicated within 90 days • Category 3 – procedures that are clinically indicated within 365 days. <p>On 1 April 2016, the WA health system introduced a new statewide performance target for the provision of elective services. For reportable procedures, the target requires that no patients (0%) on the elective waiting lists wait longer than the clinically recommended time for their</p>

⁸ Derrett, S., Paul, C., Morris, J.M. (1999). Waiting for Elective Surgery: Effects on Health-Related Quality of Life, International Journal of Quality in Health Care, Vol 11 No. 1, 47-57.

procedure, according to their urgency category.

Indicator set: Annual Reports 2021-22

Frequency: Annual, by financial year.

Reported as an average of weekly census results, extracted from source systems every Monday.

Outcome area:

Annual Reports 2021-22:

- Outcome 1: Public hospital based services that enable effective treatment and restorative healthcare for Western Australians
- Effectiveness.

Collection and usage attributes

Population group age from: All ages.

Population group age to: All ages.

Computation description: [Numerator] divided by [Denominator] multiplied by 100 (expressed as percentage).

General Notes:

This KPI represents the average percentage of elective patients on list waiting over boundary for the financial year (based on weekly on list census data), expressed as a percentage.

The on list census represents a snap-shot of the number of patients on the wait list at a point in time. Weekly census data is used to calculate an average result for the financial year.

Reportable procedures are defined as those that are not listed on the Elective Services Wait List Data Collection (ESWLDC) Commonwealth Non-Reportable Procedures list (see *Reference documents*). This list is consistent with the Australian Institute of Health and Welfare (AIHW) list of Code 2 (other) procedures that do not meet the definition of elective surgery. It also includes additional procedure codes that are intended to better reflect the procedures identified in the AIHW Code 2 list.

Ambulatory Surgery Initiative cases meeting the definition of a reportable procedure are included in reporting.

Over boundary

A patient on the elective wait list is classified as waiting over boundary if the waiting time at census date, minus the listing date for care, minus days when the patient was not ready for care, minus days when the patient had a less urgent category, is more than the clinically recommended time for their urgency category, i.e.:

- Category 1 – 30 days
- Category 2 – 90 days
- Category 3 – 365 days.

Time not ready for care

Permissible values for 'Client listing status' are 1 - Ready for Care, 2 – Staged, 3 – Deferred (up to 30 June 2016), 5 – Not ready for care pending improvement of clinical condition (from 1 July 2016), or 6 – Not ready for care – deferred for personal reasons (from 1 July 2016). All values other than '1 – Ready for care' are considered 'not ready for care'.

Days when the patient was not ready for care is obtained from the {Time not ready} field. This field is calculated by subtracting the date(s) the person was recorded as 'not ready for care' from the date(s) the person was subsequently recorded as again being 'ready for care'.

Days on list

No change in urgency category

If the patient is on the wait list at a web-based Patient Administration System (webPAS) site, St John of God (SJOG) Midland Hospital, or Peel Health Campus (PHC) (from 2015/16 onwards) and is in the same urgency category at census date as when they were added to the wait list (i.e., if [Urgency Reassignment Date] = [Listing Date]) then {Days on list} is calculated by subtracting the listing date for care from the census date **minus** days when the patient was 'not ready for care'.

Change in urgency category

If the patient is on the wait list at a webPAS site, SJOG Midland Hospital or PHC (from 2015/16 onwards) and is in a different urgency category at census date from the date they were added to the wait list, then {Days on list} is calculated by summing the number of days waited for the urgency category the patient is in at census date, plus the number of days waited where the patient was in a higher urgency category (e.g., see the table below).

Urgency Category	Days on List calculation
1	[Urgency 1 days]
2	[Urgency 1 days] + [Urgency 2 days]
3	[Urgency 1 days] + [Urgency 2 days] + [Urgency 3 days]

Note that [Urgency 1/2/3 Days] is the number of days the patient has been on the wait list in each urgency category, less any days that they were not ready for care. Therefore [Time Not Ready for Care] does not need to be further subtracted.

If the patient is on the wait list at Joondalup Health Campus (JHC), the {Days on list} is equal to the {List Days} field,

which is the number of days the patient has been on the wait list, less days that they were not ready for care.

Calculation for Days on list

If ([Feeder System] = (TOPAS or webPAS or PHC (from 2015/16 onwards) or SJOG Midland Hospital) and [Urgency Reassignment Date] = [Listing Date]), then {days on list} = [Census Date] minus [Listing Date], minus [Time Not Ready for Care].

If [Feeder System] = (TOPAS or webPAS or PHC (from 2015/16) or SJOG Midland Hospital) and [Urgency Reassignment Date] ≠ [Listing Date] then {days on list} =

- If [Clinical Urgency Category] = 1 then {days on list} = [Urgency Category 1 Days]
- If [Clinical Urgency Category] = 2 then {days on list} = [Urgency Category 1 Days] + [Urgency Category 2 Days]
- If [Clinical Urgency Category] = 3 then {days on list} = [Urgency Category 1 Days] + [Urgency Category 2 Days] + [Urgency Category 3 Days]

Note: [Urgency Category 1/2/3 Days] excludes time not ready for care, therefore [Time Not Ready for Care] does not need to be further subtracted.

If [Feeder System] = (JHC), then {days on list} = {List Days}.

Calculation

For cases where [Census Date] is within/equal to the start and end date of the reference period, identify cases where ({days on list} > number of clinically recommended days by urgency category) and [Event Type] = 'ONL' and [Client Listing Status] = 1 and ((If [Procedure Code] not null, and [Procedure Code] not on the Excluded Procedures List (MDG-03-012)), or (If [Procedure Code] is null and [Wait List Type] = 2 and [Wait List Category] = 1)).

Inclusions:

All cases in metropolitan and rural public hospitals, as well as public patients at Peel and Joondalup Health Campuses and St John of God Midland Hospital.

- All cases on list – i.e. [Event Type] = ONL
- [Clinical Urgency Category] = 1, 2 or 3
- [Client Listing Status] = 1 (Ready for Care)
- Cases where [Census Date] is within/equal to the start and end date of the reference period

For cases with a procedure code:

Include cases with procedure codes that are not on the Elective Services Wait List Commonwealth Non-Reportable

Procedures list (MDG-03-012).

For cases without a procedure code:

Include cases where:

- Wait List Type = 2 (Surgical), AND;
- Wait List Category = 1 (Elective)

Exclusions:

Cases not ready for care – i.e. [Client Listing Status] = 2 (Staged) or 3 (Deferred) or 5 (Pending Improvement of Clinical Condition) or 6 (Deferred for Personal Reasons).

- Deaths – i.e. [Date of death] is not null.

Computation:

(Numerator/denominator) x 100

Numerator:

Cases over boundary

Count of all cases (split by urgency category) at census date where days on list > clinically recommended time for the urgency category and Event Type = 'ONL' and Client Listing Status = 1.

Sum cases over boundary for each census date that falls within the financial year. Divided by the number of census dates to obtain 'average number of cases over boundary' for the financial year.

Numerator data elements:

Data Elements

[Clinical Urgency Category]

[Procedure Code]

[Wait Date] (Listing Date)

[Census Date]

[Client Listing Status]

[Event Type]

[Urgency Category 1 Days]

[Urgency Category 2 Days]

[Urgency Category 3 Days]

{Time Not Ready for Care}

[Wait List Type]

[Wait List Category]

[Date of Death]

{Feeder system} (source system)

{Days Waited}

{List days}

[Urgency Reassignment Date]

{Reportable status}

Data Source

Elective Services Wait List Data Collection.

Guide for use

Nil.

Denominator:

Total number of cases on list

Count of all cases (split by urgency category) at census date where Event Type = 'ONL' and Client Listing Status = 1.

Sum cases on list for each census date that falls within the financial year. Divided by the number of census dates to obtain 'average number of cases on list' for the financial year.

Denominator data elements:

Data Elements

[Clinical Urgency Category]
[Procedure Code]
[Wait Date] (Listing Date)
[Census Date]
[Client Listing Status]
[Event Type]
[Urgency Category 1 Days]
[Urgency Category 2 Days]
[Urgency Category 3 Days]
[Time Not Ready for Care]
[Wait List Type]
[Wait List Category]
[Date of Death]
{Feeder system} (source system)
{Days Waited}
{List days}
[Urgency Reassignment Date]
{Reportable Status}

Data Source

Elective Services Wait List Data Collection.

Guide for use

Nil

Disaggregation data elements:

Data Element/Data Set

[Clinical Urgency Category]
[Establishment Code]

Data Source

Elective Services Wait List Data Collection

Guide for use

Reported by Health Service Provider and Clinical Urgency Category.

Comments:

- Data provision to ESWLDC from HSPs (data extracted from webPAS by HSS) and CHEs occurs every Monday, for the preceding week (ending Sunday).
- All elective surgery wait list cases which are reported to the ESWLDC are included in the calculation of this KPI, including public cases performed at St John of God Midland Public Hospital, Joondalup Health Campus and Peel Health Campus. No public hospitals are

specifically excluded from the scope of this KPI.

Representational attributes

<i>Representation class:</i>	Percentage
<i>Data type:</i>	Number
<i>Unit of measure:</i>	Person
<i>Format:</i>	NNN.N%

Indicator conceptual framework

<i>Framework and dimensions:</i>	2021-22 Outcome Based Management Framework
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Data source attributes

Data sources:

Data Source

Elective Services Wait List Data Collection, which uses wait list extracts from webPAS, PHC, JHC and SJOG Midland Hospital.

Data provider

System Analytics Branch, Analytics and Performance Reporting, Information and System Performance, Purchasing and System Performance, WA Department of Health.

Data custodian

Principal Data Management Officer, Wait List Data Collections, Information & Performance Governance, ISPD, WA Department of Health

Quality statement:

Data in the ESWLDC is based on point-in-time extracts ("snapshots") and therefore, reflects the information in the source systems at a point in time. Any errors in data entry by sites will be reflected in the snapshot and cannot be retrospectively corrected in the ESWLDC.

Health Service Providers are responsible for developing procedures and processes to manage their wait lists and ensure compliance with the Elective Surgery Access and Waiting List Management Policy.

The expected procedure code (and therefore the reportable status) indicated in the ESWLDC can be different to what is recorded in the Hospital Morbidity Data System (HMDS); for example, if a clinical decision is made to perform a different procedure during the surgical episode.

Accountability attributes

Benchmark: 0%

Sourced from: WA State Health Executive Forum (endorsed on 29 January 2016).

Approved by: Director General, WA Department of Health.

Methodology: Nil

Further data development/
collection required: Nil

Other issues caveats: Nil

Source and reference attributes

Reference documents:

Report on Government Services (RoGS) 2021 Part E Health, Section 12 Public Hospitals, Indicator - Waiting times for admitted patient services, 'Elective surgery waiting times by clinical urgency category'

<https://www.pc.gov.au/research/ongoing/report-on-government-services/2021/health>

National Healthcare Agreement PI 20b: 'Waiting times for elective surgery: proportion seen on time'

<https://meteor.aihw.gov.au/content/index.phtml/itemId/725787>

National Elective Surgery Urgency Categorisation Guideline

<http://www.coaghealthcouncil.gov.au/Portals/0/National%20Elective%20Surgery%20Categorisation%20-%20Guideline%20-%20April%202015.pdf>

ESWLDC Commonwealth Non-Reportable Procedures

http://wsfm004app:8085/paq_reports/Waitlist/Waitlist%20Documents/ESWLDC%20Commonwealth%20Non-Reportable%20Procedures.pdf

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Healthcare-associated *Staphylococcus aureus* bloodstream infections (HA-SABSI) per 10,000 occupied bed-days

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Healthcare-associated <i>S.aureus</i> bloodstream infection
<i>Catalogue identifier:</i>	0003
<i>Reporting entities/scope:</i>	NMHS, SMHS, EMHS, CAHS, WACHS
<i>Description:</i>	Healthcare-associated <i>Staphylococcus aureus</i> bloodstream infections (HA-SABSI) per 10,000 occupied bed-days in public hospitals that provide acute healthcare.
<i>Rationale:</i>	<p><i>Staphylococcus aureus</i> bloodstream infection is a serious infection that may be associated with the provision of health care. <i>Staphylococcus aureus</i> is a highly pathogenic organism and even with advanced medical care, infection is associated with prolonged hospital stays, increased healthcare costs and a marked increase in morbidity and mortality (SABSI mortality rates are estimated at 20-25%⁹).</p> <p>HA-SABSI is generally considered to be a preventable adverse event associated with the provision of health care. Therefore this KPI is a robust measure of the safety and quality of care provided by WA public hospitals.</p> <p>A low or decreasing HA-SABSI rate is desirable and the WA target reflects the nationally agreed benchmark.</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by calendar year.
<i>Outcome area:</i>	Annual Reports 2021-22: <ul style="list-style-type: none">• Outcome 1. Public hospital based services that enable effective treatment and restorative healthcare for Western Australians• Effectiveness.

Collection and usage attributes

<i>Population group age from:</i>	All ages.
<i>Population group age to:</i>	All ages.

⁹ van Hal, S. J., Jensen, S. O., Vaska, V. L., Espedido, B. A., Paterson, D. L., & Gosbell, I. B. (2012). Predictors of mortality in *Staphylococcus aureus* Bacteremia. *Clinical microbiology reviews*, 25(2), 362–386. doi:10.1128/CMR.05022-11

Computation description:

[Numerator] divided by [Denominator], multiplied by 10,000 (expressed as rate per 10,000 occupied bed-days).

General Notes:

This KPI represents the total number of HA-SABSI patient episodes, by hospital, for the calendar year, expressed as a rate per 10,000 bed-days.

A patient episode of SABSI is defined as a positive blood culture for *Staphylococcus aureus*. For surveillance purposes only the first isolate per patient is counted, unless 14 days has passed without a positive culture, after which an additional episode is counted. A SABSI is considered to be healthcare-associated if one of the following criteria is met:

- Criterion 1
the first positive blood culture is collected more than 48 hours after hospital admission or less than 48 hours after discharge and was not incubating on admission.
- Criterion 2
the first positive blood culture is collected 48 hours or less after admission and one or more of the following key clinical criteria was met:
 - the SABSI is a complication of the presence of an indwelling medical device (e.g. intravascular line, haemodialysis vascular access, cerebrospinal fluid shunt, urinary catheter)
 - the SABSI occurs within 30 or 90 days of a surgical procedure*, depending on the procedure type, where the SABSI is related to the surgical site
 - the SABSI is related to invasive instrumentation or incision performed within 48 hours or there is compelling evidence that the SABSI is related to the invasive procedure
 - the SABSI is associated with neutropenia (Neutropenia is defined as at least 2 separate days with values of total white blood cell count or absolute neutrophil count $< 500 \text{ cells/mm}^3$ ($0.5 \times 10^9/\text{L}$) collected within a 7 day time period which includes the date of the bloodstream infection (Day 1), the 3 calendar days before and the 3 calendar days after) contributed to by cytotoxic therapy.

* Follow up periods for SABSI related to a Surgical Site Infection

30 day surveillance	
Abdominal aortic aneurysm repair	Laminectomy
Limb amputation	Liver transplant
Appendix surgery	Neck surgery

Shunt for dialysis	Kidney surgery
Bile duct, liver or pancreatic surgery	Ovarian surgery
Carotid endarterectomy	Prostate surgery
Gallbladder surgery	Rectal surgery
Colon surgery	Small bowel surgery
Caesarean section	Spleen surgery
Gastric surgery	Thoracic surgery
Heart transplant	Thyroid and/or parathyroid surgery
Abdominal hysterectomy	Vaginal hysterectomy
Kidney transplant	Exploratory laparotomy
	Other surgery not listed
90 day surveillance	
Breast surgery	Cardiac surgery
Coronary artery bypass graft with both chest and donor site incisions	Coronary artery bypass graft with chest incision only
Craniotomy	Spinal fusion
Open reduction of fracture	Herniorrhaphy
Hip arthroplasty	Pacemaker surgery
Knee arthroplasty	Peripheral vascular bypass surgery
Refusion of spine	Ventricular shunt

Note that SABSI surgical surveillance is not limited to the commonly performed procedures listed in the above table. Other procedures are considered on a case-by-case basis to determine if they meet the criteria for a superficial, deep or organ space infection.

- The case definition for HA-SABSI utilised in this report differs from the national definition in regard to Surgical Site Infection related SABSI surveillance periods. Nationally these are followed for a 30 day period but for this report a 90 day follow up period is utilised as per Healthcare Infection Surveillance WA (HISWA) definition.
- The denominator used for OBM reporting is occupied bed days, which differs slightly from patient days used nationally.

Inclusions:

Numerator

- All patients (inpatients and non-inpatients) who acquire an HA-SABSI due to the provision of healthcare.
- All acute care metropolitan and in-scope rural public hospitals and one acute care mental health service.

Denominator

- The total number of multi-day and same-day bed-days

from acute care hospitals including rehabilitation and aged care areas within an acute care hospital, Hospital In The Home, same-day admissions to wards/units, e.g. haemodialysis units, day treatment wards, day-surgery or procedure units, psychiatric units/hospitals.

- Qualified newborns.

Exclusions:

Numerator

- SABSI that arises in neonates less than 48 hours after delivery unless there is compelling evidence that the infection is related to a procedure or intervention during birth.
- Cases where a known previous positive test has been obtained within the last 14 days.

Denominator

- Unqualified newborns (client status of 2 or 10), posthumous organ procurement and hospital boarders.
- Hospitals designated as 'Small hospitals' by WACHS (Small hospitals are defined in accordance with the *WA Health Clinical Services Framework 2014-2024*) and residential aged care/nursing home type establishments co-located with WACHS public hospitals.
- Rehabilitation in the home.

Computation:

(Numerator/denominator) x 10,000

Numerator:

The total number of healthcare-associated *Staphylococcus aureus* blood stream infections per hospital in the reporting period.

Numerator data elements:

Data Elements

[HOSPITALID]

[HOSPITALNAME]

[INDICATORGROUPNAME] (Specified Organism Bloodstream Infections)

[PERSONID] (Unique patient identifier)

[PRIMARYDATE] (Specimen date)

[TEXTFIELD2] (Laboratory specimen number)

[FIELD1] (Organism)

[FIELD2] (Acquisition)

Data Source

Healthcare Infection Surveillance Western Australia (HISWA) Data Collection.

Guide for use

See HISWA Reference Manual (link in Reference Documents section).

Denominator:

The total number of multi-day and same-day (ICU, non-ICU

and psychiatric) occupied bed-days from in-scope hospitals in the reporting period.

Denominator data elements:

Data Elements

[DENOMTYPE] (BED)
[HOSPID]
[HOSPITAL]
[ITEM1] (Bed day type)
[ITEM2] (Patient Type)
[DENOMTOTAL]
[MTH]
[QTR]
[YR]

Data Source

HISWA Data Collection

Guide for use

See HISWA Reference Manual (link in Reference Documents section)

Disaggregation data elements:

Data Element/Data Set

Nil

Data Source

Nil

Guide for use

Nil

Comments:

- Some strains of *Staphylococcus aureus* are resistant to commonly used antibiotics (this means the antibiotics are no longer effective) and these are known as methicillin-resistant *Staphylococcus aureus* (MRSA).
- The rate of HA-SABSI includes both methicillin-sensitive *Staphylococcus aureus* (MSSA) and MRSA bloodstream infections.
- Infections caused by the provision of healthcare (healthcare associated infections or HAIs) are generally preventable infections and healthcare workers (HCWs) need to ensure all infection prevention management practices are implemented to prevent these infections occurring. Bacteria can be transferred to patients by HCWs with contaminated hands or by indirect contact with contaminated equipment or environmental surfaces. Infections can develop due to, for example, non-compliance by HCWs with standard precautions that include hand hygiene, use of aseptic technique and inadequate patient skin antisepsis prior to invasive procedures.
- The WA health system has implemented significant infection prevention management practices to minimise the risk of a patient acquiring a HAI including HA-SABSI. Measuring the rate of these types of infections occurring in public hospitals providing acute care is a method of assessing the effectiveness of the infection prevention

practices in place as well as indicating a measure of the healthcare facility's quality and safety standards for its patients.

- Hospitals contributing to this KPI:

EMHS:

Armadale/Kelmscott District Memorial Hospital, Bentley Hospital, Kalamunda Hospital, Royal Perth Hospital.

NMHS:

King Edward Memorial Hospital (excluding neonatal wards: reported under CAHS), Osborne Park Hospital, Sir Charles Gairdner Hospital, North Metropolitan Mental Health Service (included as Graylands Hospital).

SMHS:

Fiona Stanley Hospital, Fremantle Hospital, Murray District Hospital, Rockingham General Hospital.

CAHS:

Princess Margaret Hospital for Children (up to 10 June 2018), Perth Children's Hospital, neonatal wards (HDU, NIS3, SCN2, SCN3, SCNM, SCNW and SCNS) at King Edward Memorial Hospital.

WACHS:

Great Southern

Albany Hospital, Katanning Hospital.

Goldfields

Esperance Hospital, Kalgoorlie Hospital.

South West

Busselton Hospital, Bunbury Hospital, Collie Hospital, Margaret River Hospital, Warren Hospital.

Kimberley

Broome Hospital, Derby Hospital, Kununurra Hospital.

Pilbara

Hedland Health Campus, Newman Hospital, Nickol Bay Hospital (prior to 19 September 2018), Karratha Health Campus.

Midwest

Carnarvon Hospital, Geraldton Hospital.

Wheatbelt

Merredin Hospital, Moora Hospital, Northam Hospital, Narrogin Hospital.

- Contracted Health Entities are not in scope for this KPI, as it is not currently possible to differentiate between public and private bed days in the HISWA Data Collection.

Representational attributes

Representation class:

Rate

<i>Data type:</i>	Number
<i>Unit of measure:</i>	Episode
<i>Format:</i>	N.NN

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

HISWA Data Collection

NB. The HISWA Data Collection utilises data entered by contributing hospitals from other sources (including webPAS Discharge extract).

Data provider

Healthcare Associated Infection Unit, Communicable Disease Control Directorate, Public and Aboriginal Health, WA Department of Health.

Data custodian

Healthcare Associated Infection Unit, Communicable Disease Control Directorate, Public and Aboriginal Health, WA Department of Health WA Department of Health.

Quality statement:

The indicator uses a nationally recognised definition of a patient episode of HA-SABSI agreed by all states and territories:

- The HAIU reviews all blood culture results that are positive for *Staphylococcus aureus* that are collected and processed by the state pathology service, PathWest, to determine if these are HAIs or community associated infections (CAIs). These validated cases are then checked against the HISWA database to ensure the database extract contains all HAIs, and no CAIs.

Denominator data submitted for National reporting (e.g. AIHW, including MyHospitals) utilises patient days rather than bed days. The yearly variance between patient days and bed-days is estimated to be less than one percent.

Accountability attributes

Benchmark:

≤ 1.0 infections per 10,000 occupied bed days.

The WA target of 1.0 per 10,000 patient days corresponds to the *Staphylococcus Aureus* Bacteraemia (SAB) national benchmark for public hospital reporting which came into effect from 1 July 2020.

Sourced from: Australian Health Ministers' Advisory Council (AHMAC)

Approved by: Director General, WA Department of Health.

Methodology:

Nil

Further data development/
collection required:

Nil

Other issues caveats:

Nil

Source and reference attributes

Reference documents:

Report on Government Services (RoGS) 2021 Part E Health, Section 12 Public Hospitals, Indicator - Adverse Events in Public Hospitals – Selected Healthcare Associated Infections.

<https://www.pc.gov.au/research/ongoing/report-on-government-services/2021/health>

National Health Agreement PI 22: 'Healthcare associated infections: *Staphylococcus aureus* bacteraemia' (*Staphylococcus aureus* bacteraemia (SAB) associated with acute care public hospitals (excluding cases associated with private hospitals and non-hospital care)).

<https://meteor.aihw.gov.au/content/index.phtml/itemId/725781>

Australian Commission on Safety and Quality in Health Care (ACSQHC) SAB Prevention Resources

www.safetyandquality.gov.au/sab

MyHospitals website (Australian Institute of Health and Welfare)

Reports '*Staphylococcus aureus* bacteraemia (SAB) infections' as counts and rates per 10 000 patient days under surveillance for most public hospitals and a number of private hospitals.

<https://www.aihw.gov.au/reports-data/myhospitals>

HISWA Surveillance Manual

<https://ww2.health.wa.gov.au/-/media/Files/Corporate/general-documents/Infectious-diseases/PDF/HISWA/healthcare-infection-surveillance-manual.pdf>

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Survival rates for sentinel conditions

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0004
<i>Reporting entities/scope:</i>	EMHS, NMHS, SMHS, WACHS.
<i>Description:</i>	<p>Percentage of patients who, following admission for a stroke, acute myocardial infarction, or fractured neck of femur, are discharged as 'alive' from a public hospital.</p>
<i>Rationale:</i>	<p>This indicator measures performance in relation to the survival of people who have suffered a sentinel condition - specifically a stroke, acute myocardial infarction (AMI), or fractured neck of femur (FNOF).</p> <p>These three conditions have been chosen as they are leading causes of hospitalisation and death in Australia for which there are accepted clinical management practices and guidelines. Patient survival after being admitted for one of these sentinel conditions can be affected by many factors including the diagnosis, the treatment given, or procedure performed, age, co-morbidities at the time of the admission, and complications which may have developed while in hospital. However, survival is more likely when there is early intervention and appropriate care on presentation to an emergency department and on admission to hospital.</p> <p>By reviewing survival rates and conducting case-level analysis, targeted strategies can be developed that aim to increase patient survival after being admitted for a sentinel condition.</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by calendar year
<i>Outcome area:</i>	<p>Annual Reports 2021-22:</p> <ul style="list-style-type: none">• Outcome 1: Public hospital based services that enable effective treatment and restorative healthcare for Westerns Australians• Effectiveness.

Collection and usage attributes

<i>Population group age from:</i>	Stroke: 0 years of age. AMI: 0 years of age. FNOF: 70 years of age.
<i>Population group age to:</i>	No limit
<i>Computation description:</i>	[Numerator] divided by the [Denominator], multiplied by 100 (expressed as a percentage).

Inclusions

- Stroke - all admissions with principal diagnosis in the range I60.x-I64.x (ICD-10-AM).
- AMI - emergency admissions with principal diagnosis in the range I21.x-I22.x (ICD-10-AM).
 - Emergency admissions: Separations with admissions status of 6 (Emergency - Emergency Department Admission) or 7 (Emergency – Direct Admission).
- FNOF - all admissions with principal diagnosis of S72.0x (ICD-10-AM).
- Alive separations are those with mode of separation other than 'Deceased'.
- Patients discharged from contributory sites (below). For Joondalup and Peel Health Campuses and St John of God Midland Hospital only public patients are selected; that is, those with a funding source of Australian Health Care Agreement or Reciprocal Health Care Agreement.

Exclusions

- Unqualified newborns (client status of 2 or 10); boarders; organ procurements; aged care residents; Ambulatory Surgery Initiative cases; contracted care in some circumstances¹⁰; and procedures cancelled (Z53).
- Mode of separation of deceased is excluded from numerator counts.

Note: Standard exclusions changed for separations in 2021-22 due to changes in reporting requirements. From 1 July 2021, separations where Client Status = 0 are no longer excluded, but separations where Client Status = 5 (Contracted Care) are excluded in some circumstances.

Note that separations prior to 1 July 2021 still apply the previous standard exclusion method; that is, data is excluded where Client Status = 0 and not excluded when Client Status = 5.

Computation:

[Numerator] divided by the [Denominator], multiplied by 100 (expressed as a percent).

- Calculations for Stroke and AMI are as per the following age groups:
 - (a) 0 to 49 years
 - (b) 50 to 59 years

¹⁰ Except where Contract Type = (A)B. Contract Type (A)B reflects a situation where Hospital A contracts Hospital B to provide a whole episode of care and the patient does not attend Hospital A for any part of the episode of care. For more information please see the Admitted Patient Activity Data Business Rules:

<https://ww2.health.wa.gov.au/About-us/Policy-frameworks/Information-Management/Mandatory-requirements/Collection/Patient-Activity-Data>

- (c) 60 to 69 years
- (d) 70 to 79 years
- (e) 80 years and above.

- Calculation for FNOF are as per the following age groups:
 - (a) 70 to 79 years
 - (b) 80 years and above.

Numerator:

Stroke

Number of hospital separations with principal diagnosis of stroke and classified as 'alive' at discharge.

AMI

Number of hospital separations with an emergency admission status, a principal diagnosis of acute myocardial infarction and classified as 'alive' at discharge.

FNOF

Number of hospital separations with principal diagnosis of fractured neck of femur and classified as 'alive' at discharge.

Numerator data elements:

Data Element/Data Set

[Establishment Number]

[Client Status]

[Care Type]

[Separation Date]

[Principal Diagnosis]

[Ward on Discharge]

[Funding Source]

[Admission Status]

{Age on Admission} (calculated from Admission Date and Date of Birth)

[Mode of Separation]

Data Source

HMDC

Guide for use

See Patient Activity Data (PAD) Policy - Admitted Activity (link in *Reference Documents* section).

Denominator:

Stroke

Total number of hospital separations with a principal diagnosis of stroke.

AMI

Total number of hospital separations with an emergency admission status and a principal diagnosis of acute myocardial infarction.

FNOF

Total number of hospital separations with a principal diagnosis of fractured neck of femur.

Denominator data elements:

Data Element/Data Set
 [Establishment Number]
 [Client Status]
 [Care Type]
 [Separation Date]
 [Principal Diagnosis]
 [Ward on Discharge]
 [Funding Source]
 [Admission Status]
 {Age on Admission} (calculated from Admission Date and Date of Birth)
 [Mode of Separation]

Data Source
 HMDC

Guide for use
 See Patient Activity Data (PAD) Policy – Admitted Activity (link in *Reference Documents* section).

Disaggregation data elements:

Data Element/Data Set
 [Separation Date]
 [Establishment Number]
 [Principal diagnosis]
 {Age on Admission} (calculated from Admission Date and Date of Birth)

Data Source
 HMDC

Guide for use
 See Hospital Morbidity Data System Reference Manual (link in *Reference Documents* section).

Comments:

A change in data collection and reporting practices for contracted care activity, implemented from 1 July 2021, removes the requirement for public hospital funding sites to report an admission where the patient has not physically been admitted to the funding site. These changes also result in a single admission being reported where patient care is split between the funding hospital and contracted service.

These changes will impact only a very small proportion of cases and any impacts are expected to be very small or negligible.

Contributory Sites

NMHS:

King Edward Memorial Hospital (excluding neonatal wards), Osborne Park Hospital, Sir Charles Gairdner Hospital (including SCGH Mental Health Service until 5/9/18), Joondalup Health Campus, Graylands Hospital

(including Selby Inpatient Unit and State Forensic Unit).

SMHS:

Fiona Stanley Hospital, Fremantle Hospital, Murray Hospital, Peel Health Campus, Rockingham General Hospital.

EMHS:

Armadale/Kelmscott Memorial Hospital, Bentley Hospital, Kalamunda Hospital, Royal Perth Hospital, St John of God Midland Public Hospital.

WACHS:

Great Southern

Albany Hospital, Denmark Hospital, Gnowangerup Hospital, Katanning Hospital, Kojonup Hospital, Plantagenet Hospital, Ravensthorpe Hospital.

Goldfields

Esperance Hospital, Kalgoorlie Hospital, Laverton Hospital, Leonora Hospital, Norseman Hospital.

South West

Augusta Hospital, Bridgetown Hospital, Boyup Brook Soldiers Memorial Hospital, Bunbury Hospital, Busselton Hospital, Collie Hospital, Donnybrook Hospital, Harvey Hospital, Margaret River Hospital, Nannup Hospital, Pemberton Hospital, Warren Manjimup Hospital.

Kimberley

Broome Hospital, Derby Hospital, Fitzroy Crossing Hospital, Halls Creek Hospital, Kununurra Hospital, Wyndham Hospital.

Pilbara

Hedland Health Campus, Karratha Health Campus, Newman Hospital, Nickol Bay Hospital (prior to 19 September 2018), Onslow Health Service, Paraburdoo Hospital, Roebourne Hospital, Tom Price Hospital.

Midwest

Carnarvon Hospital, Dongara Health Centre, Exmouth Hospital, Geraldton Hospital, Kalbarri Health Centre, Meekatharra Hospital, Morawa Hospital, Mullewa Hospital, North Midlands Hospital, Northampton Hospital.

Wheatbelt

Beverley Hospital, Boddington Hospital, Bruce Rock Memorial Hospital, Corrigin Hospital, Dalwallinu Hospital, Dumbleyung Hospital, Goomalling Hospital, Kellerberrin Memorial Hospital, Kondinin Hospital, Kununoppin Hospital, Lake Grace Hospital, Merredin Hospital, Moora Hospital, Narembeen Memorial Hospital, Narrogin Hospital, Northam Hospital, Quairading Hospital, Southern Cross Hospital, Wagin Hospital, Wongan Hills Hospital, Wyalkatchem-Koorda Hospital, York Hospital.

Note that CAHS is out of scope for this indicator due to its

paediatric cohort, resulting in negligible or no in-scope cases for the relevant conditions.

Representational attributes

Representation class: Percentage
Data type: Number
Unit of measure: Separation
Format: NNN.N%

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

HMDC

Data provider

System Analytics Branch, Analytics and Performance Reporting, Information & System Performance, Purchasing and System Performance, WA Department of Health.

Data custodian

Principal Data Management Officer, Data Management, Information & Performance Governance, ISPD, WA Department of Health.

Quality statement:

Nil

Accountability attributes

Benchmark:

Age Group	Stroke (%)	AMI (%)	FNOF (%)
0-49 years	95.2	99.1	N/A
50-59 years	94.9	98.8	N/A
60-69 years	94.1	98.1	N/A
70-79 years	92.3	96.8	98.9
80+ years	86.0	92.1	96.9

Sourced from: This target is the average result for the 5 previous calendar year periods, excluding the most recent calendar year.

Approved by: Director General, WA Department of Health.

Methodology:

Nil

Further data development/ collection required:

Annual Report KPIs are reviewed annually.

Other issues caveats:

Limitations

Due to the small numbers of separations on which some

findings are calculated, caution should be taken in the interpretation of the overall performance of health services.

Lag period

This indicator is reported by calendar year to allow for the lag associated with clinical coding of medical records.

Source and reference attributes

Reference documents: Patient Activity Data available from <https://ww2.health.wa.gov.au/About-us/Policy-frameworks/Information-Management/Mandatory-requirements/Collection/Patient-Activity-Data> Information & Performance Governance, ISPD, WA Department of Health.

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Percentage of admitted patients who discharged against medical advice: a) Aboriginal patients; and b) Non-Aboriginal patients

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Discharged against medical advice (DAMA)
<i>Catalogue identifier:</i>	0005
<i>Reporting entities/scope:</i>	NMHS, SMHS, EMHS, CAHS, WACHS
<i>Description:</i>	<p>The percentage of admitted patient episodes that ended in discharge against medical advice during the reporting period, reported by Aboriginal status.</p>
<i>Rationale:</i>	<p>Discharge against medical advice (DAMA) refers to patients leaving hospital against the advice of their treating medical team or without advising hospital staff (e.g. absconding or missing and not found). Patients who do so have a higher risk of readmission and mortality¹¹ and have been found to cost the health system 50% more than patients who are discharged by their physician.¹²</p> <p>Between July 2015 and June 2017 Aboriginal patients (3.4%) in WA were over 11 times more likely than non-Aboriginal patients (0.3%) to discharge against medical advice, compared with 6.2 times nationally (3.1% and 0.5% respectively)¹³. This statistic indicates a need for improved responses by the health system to the needs of Aboriginal patients.</p> <p>This indicator provides a measure of the safety and quality of inpatient care. Reporting the results by Aboriginal status measures the effectiveness of initiatives within the WA health system to deliver culturally secure services to Aboriginal people. While the aim is to achieve equitable treatment outcomes, the targets reflect the need for a long-term approach to progressively closing the gap between Aboriginal and non-Aboriginal patient cohorts.</p> <p>Discharge against medical advice performance measure is also one of the key contextual indicators of Outcome 1 “Aboriginal and Torres Strait Islander people enjoy long and healthy lives” under the new National Agreement on Closing the Gap, which was agreed to by the Coalition of Aboriginal and Torres Strait Islander Peak Organisations,</p>

¹¹ Yong et al. Characteristics and outcomes of discharges against medical advice among hospitalised patients. *Internal medicine journal* 2013;43(7):798-802.

¹² Aliyu ZY. Discharge against medical advice: sociodemographic, clinical and financial perspectives. *International journal of clinical practice* 2002;56(5):325-27.

¹³

Australian Institute of Health and Welfare 2020. Aboriginal and Torres Strait Islander Health Performance Framework 2020 summary report. Cat. no. IHPF 2. Canberra: AIHW.

and all Australian Governments in July 2020.

Indicator set:

Annual Reports 2021-22

Frequency:

Annual, by calendar year

Outcome area:

Annual Reports 2021-22:

- Outcome 1. Public hospital based services that enable effective treatment and restorative healthcare for Western Australians
- Effectiveness.

Collection and usage attributes

Population group age from: All ages.

Population group age to: All ages.

Computation description: [Numerator] divided by the [Denominator] multiplied by 100 (expressed as a percentage).

General Notes

- This indicator is calculated from the Hospital Morbidity Data Collection (HMDC), using the 'Mode of Separation' field to identify separations where the patient left against medical advice.
- This indicator is based on the Aboriginal and Torres Strait Islander Health Performance Framework indicator 'Discharge against medical advice' (<https://indigenoushpf.gov.au/>) with the following modifications:
 - Mental Health separations are included
 - Chemotherapy separations are excluded.

Inclusions (HMDC values in parentheses):

- Consider all patients at public hospitals and only public patients at Contracted Health Entities (CHEs). Public patients are identified using Funding Source:
 - Australian Health Care Agreements (21)
 - Reciprocal Health Care Agreement (30)
 - Ambulatory Surgery Initiative (33).

Exclusions (HMDC values in parentheses):

- Principal diagnosis of:
 - Dialysis (Z49)
 - Chemotherapy (Z51.1) or
 - Cancelled procedures (Z53).
- Care types:
 - Organ procurement (27)
 - Boarders (28)
 - Aged Care Resident (30) or
 - Flexible Care (31).
- Client status
 - Unqualified newborn (2 or 10)

- Boarder (3)
- Contracted Care (5)¹⁴
- Organ procurement (7) or
- Resident (8).
- Non-inpatient care (e.g. nursing home, residential aged care).
- Non-WA facilities.

Note: Standard exclusions changed for separations in 2021-22 due to changes in reporting requirements. From 1 July 2021, separations where Client Status = 0 are no longer excluded, but separations where Client Status = 5 (Contracted Care) are excluded in some circumstances.

Note that separations prior to 1 July 2021 still apply the previous standard exclusion method; that is, data is excluded where Client Status = 0 and not excluded when Client Status = 5.

Computation:

(Numerator/denominator) x 100

Numerator:

- a) Number of separations for Aboriginal patients as per *Denominator*, and where the mode of separation is recorded as 'left against medical advice' (HMDC Mode of Separation value = 6) during the reporting period, from hospitals within each Health Service Provider's catchment.
- b) Number of separations for non-Aboriginal patients as per *Denominator*, and where the mode of separation is recorded as 'left against medical advice' (HMDC Mode of Separation value = 6) during the reporting period, from hospitals within each Health Service Provider's catchment.

Numerator data elements:

Data Elements

[Client Status]
[Care Type]
[Establishment Code]
[Separation Date]
[Funding Source]
[Indigenous Status]
[Principal Diagnosis]
[Mode of Separation]

Data Source

HMDC

¹⁴ Except where Contract Type = (A)B. Contract Type (A)B reflects a situation where Hospital A contracts Hospital B to provide a whole episode of care and the patient does not attend Hospital A for any part of the episode of care. For more information please see the Admitted Patient Activity Data Business Rules:

<https://ww2.health.wa.gov.au/About-us/Policy-frameworks/Information-Management/Mandatory-requirements/Collection/Patient-Activity-Data>

Guide for use

See Patient Activity Data (PAD) Policy – Admitted Activity (link in *Reference Documents* section).

Denominator:

- a) Total number of separations for Aboriginal patients during the reporting period, for each Health Service Provider.
- b) Total number of separations for non-Aboriginal patients during the reporting period, for each Health Service Provider.

Denominator data elements:**Data Elements**

[Client Status]
[Care Type]
[Establishment Code]
[Separation Date]
[Funding Source]
[Indigenous Status]
[Principal Diagnosis]

Data Source

Hospital Morbidity Data Collection

Guide for use

See Patient Activity Data (PAD) Policy - Admitted Activity (link in *Reference Documents* section).

Disaggregation:**Aboriginal Status**

Aboriginal identification includes HMDC *Indigenous Status* of:

- Aboriginal not Torres Strait Islander (1)
- Torres Strait Islander not Aboriginal (2)
- Aboriginal and Torres Strait Islander (3)

Non-Aboriginal includes HMDC *Indigenous Status* of:

- Other (4).

Disaggregation data elements:**Data Elements**

[Establishment Code]
[Separation Date]
[Indigenous Status]

Data Source

Hospital Morbidity Data Collection

Guide for use

See Hospital Morbidity Data System Reference Manual (link in *Reference Documents* section).

Comments:

A change in data collection and reporting practices for contracted care activity, implemented from 1 July 2021, removes the requirement for public hospital funding sites to report an admission where the patient has not physically been admitted to the funding site. These changes also result in a single admission being reported where patient care is split between the funding hospital and contracted

service.

These changes will impact only a very small proportion of cases and any impacts are expected to be very small or negligible.

Contributory Sites

NMHS:

King Edward Memorial Hospital (excluding neonatal wards: reported under CAHS), Osborne Park Hospital, Sir Charles Gairdner Hospital (including SCGH Mental Health Unit until 5/9/18), Joondalup Health Campus, Graylands Hospital (including Selby Inpatient Unit and State Forensic Unit).

SMHS:

Fiona Stanley Hospital, Fremantle Hospital, Murray District Hospital, Peel Health Campus, Rockingham General Hospital.

EMHS:

Armadale/Kelmscott Memorial Hospital, Bentley Hospital, Kalamunda Hospital, Royal Perth Hospital, St John of God Midland Public Hospital.

CAHS:

Princess Margaret Hospital (prior to 10 June 2018), Perth Children's Hospital, neonatal wards (HDU, NIS3, SCN2, SCN3, SCNM, SCNW and SCNS) at King Edward Memorial Hospital.

WACHS:

Great Southern

Albany Hospital, Denmark Hospital, Gnowangerup Hospital, Katanning Hospital, Kojonup Hospital, Plantagenet Hospital, Ravensthorpe Hospital.

Goldfields

Esperance Hospital, Kalgoorlie Hospital, Laverton Hospital, Leonora Hospital, Norseman Hospital.

South West

Augusta Hospital, Bridgetown Hospital, Boyup Brook Soldiers Memorial Hospital, Bunbury Hospital, Busselton Hospital, Collie Hospital, Donnybrook Hospital, Harvey Hospital, Margaret River Hospital, Nannup Hospital, Pemberton Hospital, Warren Manjimup Hospital.

Kimberley

Broome Hospital, Derby Hospital, Fitzroy Crossing Hospital, Halls Creek Hospital, Kununurra Hospital, Wyndham Hospital.

Pilbara

Hedland Health Campus, Karratha Health Campus, Newman Hospital, Nickol Bay Hospital (prior to 19 September 2018), Onslow Health Service, Paraburdoo Hospital, Roebourne Hospital, Tom Price Hospital.

Midwest

Carnarvon Hospital, Dongara Health Centre, Exmouth Hospital, Geraldton Hospital, Kalbarri Health Centre, Meekatharra Hospital, Morawa Hospital, Mullewa Hospital, North Midlands Hospital, Northampton Hospital.

Wheatbelt

Beverley Hospital, Boddington Hospital, Bruce Rock Memorial Hospital, Corrigin Hospital, Dalwallinu Hospital, Dumbleyung Hospital, Goomalling Hospital, Kellerberrin Memorial Hospital, Kondinin Hospital, Kununoppin Hospital, Lake Grace Hospital, Merredin Hospital, Moora Hospital, Narembeen Memorial Hospital, Narrogin Hospital, Northam Hospital, Quairading Hospital, Southern Cross Hospital, Wagin Hospital, Wongan Hills Hospital, Wyalkatchem-Koorda Hospital, York Hospital.

- Discharge against medical advice is one of the key contextual indicators of Outcome 1 “Aboriginal and Torres Strait Islander people enjoy long and healthy lives” under the new National Agreement on Closing the Gap which has been agreed by the Coalition of Aboriginal and Torres Strait Islander Peak Organisations, and all Australian Governments in July 2020.¹⁵
- Discharge against medical advice may also be referred to as ‘discharge at own risk’ or ‘left against medical advice’ and includes patients who abscond without notice.
- In alignment with national reporting rules for admitted patient care, the following cases are excluded as they do not meet admission criteria: organ procurement, hospital boarders, aged care residents, flexible care, and cancelled procedures. Unqualified newborns (client status of 2 or 10) are also excluded, as per national reporting rules (see also: <https://meteor.aihw.gov.au/content/index.phtml/itemId/327254>).
- Dialysis and chemotherapy separations are also excluded due to the large number of these separations per year. The inclusion of these separations can overly influence results.

Representational attributes

¹⁵ The Coalition of Peaks and Australian Governments. (2020). *The National Agreement on Closing the Gap 2020*. Canberra: Australian Government

<i>Representation class:</i>	Percentage
<i>Data type:</i>	Number
<i>Unit of measure:</i>	Person
<i>Format:</i>	NNN.NN%

Indicator conceptual framework

<i>Framework and dimensions:</i>	Aboriginal and Torres Strait Islander Health Performance Framework 2021-22 Outcome Based Management Framework
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Data source attributes

<i>Data sources:</i>	Data Source Hospital Morbidity Data Collection
	Data provider System Analytics Branch, Analytics and Performance Reporting, Information & System Performance, Purchasing and System Performance, WA Department of Health.
	Data custodian Principal Data Management Officer, Data Management, Information & Performance Governance, ISPD, WA Department of Health.
<i>Quality statement:</i>	Nil.

Accountability attributes

<i>Benchmark:</i>	Target: a) Aboriginal patients $\leq 2.78\%$. b) Non-Aboriginal patients $\leq 0.99\%$ Sourced from: a) The target for Aboriginal patients is based on a 50% reduction in the gap between performance for WA Aboriginal and non-Aboriginal patient cohorts for 2016-17 to 2017-18. b) The target for non-Aboriginal patients is the national performance for non-Aboriginal patients over the 2016-17 to 2017-18 period, as provided by the AIHW. Targets will be reviewed annually to drive progressive closure of the gap between Aboriginal and non-Aboriginal patient cohorts. Approved by: Director General, WA Department of Health.
<i>Methodology:</i>	Nil
<i>Further data development/ collection required:</i>	Nil
<i>Other issues caveats:</i>	<ul style="list-style-type: none"> Aboriginal people are not always accurately identified in administrative collections (i.e. hospital records, birth and death registrations) due to definition variations,

different data collection methods and failure to record Aboriginal status.

- The incompleteness of Aboriginal identification means the number of hospital separations for Aboriginal and/or Torres Strait Islander patients is likely underestimated. In 2011-12, it was found that an estimated 4% of Aboriginal patients were either not identified or incorrectly identified in WA's public hospital records.¹⁶
- Patients may identify their Aboriginal status differently across separations. For this indicator, a patient will be grouped to Aboriginal or non-Aboriginal based on how their Aboriginal status was recorded in that separation.

Source and reference attributes

Reference documents:

- Aboriginal and Torres Strait Islander Health Performance Framework: indicator 'Discharge against medical advice' <https://indigenoushpf.gov.au/>
- Patient Activity Data available from <https://ww2.health.wa.gov.au/About-us/Policy-frameworks/Information-Management/Mandatory-requirements/Collection/Patient-Activity-Data>
Information & Performance Governance, ISPD, WA Department of Health.

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

¹⁶ Australian Institute of Health and Welfare. 2013. *Indigenous identification in hospital separations data – Quality report*. Cat. No. IHW 90. Canberra: AIHW.

Percentage of live-born term infants with an Apgar score of less than 7 at 5 minutes post delivery

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Apgar score of less than 7 at 5 minutes for births at or after term.
<i>Catalogue identifier:</i>	0006
<i>Reporting entities/scope:</i>	EMHS, NMHS, SMHS, WACHS
<i>Description:</i>	The percentage of infants live-born at or after term (from 37 completed weeks gestational age) with an Apgar score of less than 7 at 5 minutes after birth.
<i>Rationale:</i>	<p>This indicator of the condition of newborn infants immediately after birth provides an outcome measure of intrapartum care and newborn resuscitation.</p> <p>The Apgar score is an assessment of an infant's health at birth based on breathing, heart rate, colour, muscle tone and reflex irritability. An Apgar score is applied at one, five and (if required by the protocol) ten minutes after delivery to determine how well the infant is adapting outside the mother's womb. Apgar scores range from zero to two for each condition with a maximum final total score of ten. The higher the Apgar score the better the health of the newborn infant.</p> <p>This outcome measure can lead to the development and delivery of improved care pathways and interventions to improve the health outcomes of Western Australian infants and aligns to the National Core Maternity Indicators (2020) Health, Standard 16/09/2020.</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by calendar year
<i>Outcome area:</i>	Annual Reports 2021-22: <ul style="list-style-type: none"> • Outcome 1: Public hospital based services that enable effective treatment and restorative healthcare for Western Australians • Effectiveness.

Collection and usage attributes

<i>Population group age from:</i>	5 minutes.
<i>Population group age to:</i>	5 minutes.
<i>Computation description:</i>	[Numerator] divided by [Denominator] multiplied by 100 (expressed as a percentage)

Hospitals contributing to this KPI:

EMHS

Armadale Kelmscott Hospital, Bentley Hospital, St John

of God Midland Public Hospital (public patients only).

NMHS

King Edward Memorial Hospital for Women, Osborne Park Hospital, Joondalup Health Campus (public patients only).

SMHS

Fiona Stanley Hospital, Rockingham Hospital, Peel Health Campus (public patients only).

WACHS

Goldfields: Esperance Hospital, Kalgoorlie Hospital.

Great Southern: Albany Hospital, Katanning Hospital.

Kimberley: Broome Hospital, Derby Hospital, Kununurra Hospital.

Midwest: Carnarvon Hospital, Geraldton Hospital SJOG Geraldton Hospital (public patients transferred during COVID-19 response).

Pilbara: Hedland Health Campus, Nickol Bay Hospital (prior to 19 September 2018), Karratha Health Campus (from 19 September 2018).

South West: Bridgetown, Bunbury, Busselton, Collie, Margaret River, Warren-Manjimup.

Wheatbelt: Narrogin Hospital, Northam Hospital.

Note:

- Births are predominantly in the above sites, however may occasionally occur at non-maternity sites.
- Due to COVID-19, women booked at Bentley Hospital had their care transferred to KEMH or Armadale Hospital (based on patient postcode), with the last birth occurring at Bentley on 27 March 2020.
- Similarly, all women booked at Geraldton Hospital had their care transferred to SJOG Geraldton; the last birth at Geraldton Hospital was on 6 April 2020. Maternity services reopened at Geraldton Hospital on 14 September 2021.

Inclusions:

Infants included are live births of babies born at or after term at public hospital services and public births at contracted health entities (contributory sites listed above).

Exclusions:

Infants excluded are stillbirths, and babies born before term (before 37 weeks).

Infants for whom no Apgar score at 5 minutes was recorded (e.g. Not Known).

<i>Computation:</i>	(Numerator/denominator) x 100
<i>Numerator:</i>	The number of babies born alive at or after term (from 37 completed weeks gestational age) with an Apgar score of less than seven at five minutes.
<i>Numerator data elements:</i>	<p>Data Element/Data Set {Product of conception—gestational age, completed weeks N[N]} [Birth—birth status, code N] [Birth—Apgar score (at 5 minutes), code NN] [Establishment – organisation identifier] [Patient election status]</p> <p>Data Source Midwives Notification System</p> <p>Guide for use Nil</p>
<i>Denominator:</i>	The number of live-born babies born at or after term (from 37 completed weeks gestational age).
<i>Denominator data elements:</i>	<p>Data Element/Data Set Product of conception—gestational age, completed weeks N[N] Birth—birth status, code N Establishment – organisation identifier Patient election status</p> <p>Data Source Midwives Notification System</p> <p>Guide for use Data source type: Administrative by-product data</p>
<i>Disaggregation data elements:</i>	<p>Data Element/Data Set Establishment – organisation identifier</p> <p>Data Source Midwives Notification System</p> <p>Guide for use Data source type: Administrative by-product data.</p>
<i>Comments:</i>	<ul style="list-style-type: none"> For women booked at Geraldton Hospital who had their care transferred to SJOG Geraldton, data linkage is required to identify these public patients from the birth records submitted by SJOG Geraldton prior to reporting. At the time of reporting for the 2021-2022 financial year, a small proportion of these births may not be included due to a lag in the availability of records. Maternity services reopened at Geraldton Hospital on 14 Sep 2021. A birth is defined as the event in which a baby comes out of the uterus after a pregnancy of least 20 weeks gestation or weighing 400 grams or more. If the baby

is alive the birth is a live birth. If the baby is not alive the birth is a stillbirth.

- Gestational age is a clinical measure of the duration of the pregnancy. Gestational age is reported as completed weeks. Term is defined as gestational ages between 37 and 41 weeks.
- The Apgar score is calculated by assessing the infant against five criteria (Appearance, Pulse, Grimace, Activity, Respiration) on a scale from 0-2, and then adding these values to give a score 0-10. A score of less than seven at five minutes after birth is considered to be an indicator of complications and of compromise for the baby.
- This definition was compiled using information from METeOR identifier: 728719.
- Metadata for the MNS data items are available on the online national metadata repository, METeOR. The metadata details for items used in producing this indicator are available in the current version National Core Maternity Indicators (PI 04–Apgar score of less than 7 at 5 minutes for births at or after term, 2020) at:
<https://meteor.aihw.gov.au/content/index.phtml/itemId/728719>

Representational attributes

<i>Representation class:</i>	Percentage
<i>Data type:</i>	Number
<i>Unit of measure:</i>	Person
<i>Format:</i>	NNN.NN%

Indicator conceptual framework

<i>Framework and dimensions:</i>	2021-22 Outcome Based Management Framework
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Data source attributes

Data sources:

Data Source

Midwives Notification System

Data provider

Data Management, Information & System Performance, Purchasing and System Performance, WA Department of Health.

Data custodian

Principal Data Management Officer, Data Management, Information & Performance Governance, ISPD, WA Department of Health.

Quality statement:

- The Apgar score measure is a consistent and well-recognised clinical indicator of maternity care over time. Standard national and international indicator definitions, classifications and data recording

practices are in place and regularly reviewed.

- Regular validation audits are conducted to confirm that a high level of data quality is maintained, including that the low Apgar scores are clinically accurate.

Accountability attributes

Benchmark:

Target: $\leq 1.8\%$

Sourced from: The target is the national average (excluding cases where Apgar is 'Not Known') from the AIHW publication 'Australia's mothers and babies'. In 2021-22 the target is the 2018 national figure:

<https://www.aihw.gov.au/reports/mothers-babies/australias-mothers-and-babies-2018-in-brief/summary>

Approved by: Director General, WA Department of Health.

Methodology:

Nil

*Further data development/
collection required:*

Nil

Other issues caveats:

Nil

Source and reference attributes

Reference documents:

National Core Maternity Indicators: PI 04 - Apgar score of less than 7 at 5 minutes for births at or after term (2020) Health, 16/09/2020.

(<https://meteor.aihw.gov.au/content/index.phtml/itemId/728719>)

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Readmissions to acute specialised mental health inpatient services within 28 days of discharge

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0007
<i>Reporting entities/scope:</i>	NMHS, SMHS, EMHS, WACHS, CAHS
<i>Description:</i>	<p>Percentage of in-scope overnight separations from public acute specialised mental health inpatient services that are followed by a readmission to the same or to another acute specialised mental health inpatient service within 28 days of discharge.</p>
<i>Rationale:</i>	<p>Readmission rate is considered to be a global performance measure as it potentially points to deficiencies in the functioning of the overall mental healthcare system.</p> <p>While multiple hospital admissions over a lifetime may be necessary for someone with ongoing illness, a high proportion of readmissions shortly after discharge may indicate that inpatient treatment was either incomplete or ineffective, or that follow-up care was not adequate to maintain the patient's recovery out of hospital¹⁷.</p> <p>These readmissions mean that patients spend additional time in hospital and utilise additional resources. A low readmission rate suggests that good clinical practice is in operation. Readmissions are attributed to the facility at which the initial separation (discharge) occurred rather than the facility to which the patient was readmitted.</p> <p>By monitoring this indicator, key areas for improvement can be identified. This can facilitate the development and delivery of targeted care pathways and interventions aimed at improving the mental health and quality of life of Western Australians.</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by calendar year
<i>Outcome area:</i>	<p>Annual Reports 2021-22:</p> <ul style="list-style-type: none">• Outcome 1. Public hospital based services that enable effective treatment and restorative healthcare for Western Australians• Effectiveness.

¹⁷ Australian Health Ministers Advisory Council Mental Health Standing Committee (2011). Fourth National Mental Health Plan Measurement Strategy. Available at: <https://www.aihw.gov.au/getmedia/d8e52c84-a53f-4eef-a7e6-f81a5af94764/Fourth-national-mental-health-plan-measurement-strategy-2011.pdf.aspx>

Collection and usage attributes

Population group age from: All ages.

Population group age to: All ages.

Computation description: [Numerator] divided by [Denominator] multiplied by 100 (expressed as a percentage).

General notes

- The target group for this indicator includes all patients discharged from and/or re-admitted to acute specialised public mental health inpatient services in the table below (see Inclusions).
- Readmissions are attributed to the facility from which initial hospital separation occurred rather than the facility to which the patient was readmitted.
- An acute specialised mental health inpatient service is defined as a service providing specialist psychiatric care for people with an acute episode of a mental disorder and short-term management is the focus of treatment. This category applies only to services within a mental health service setting providing overnight admitted patient care.

Inclusions

- Includes planned as well as unplanned readmissions. It is acknowledged nationally and within state services that it is not possible to obtain robust and consistent information on unplanned readmissions only.
- All public patient separations from designated mental health acute inpatient units within WA (refer to below list).
- All publicly funded patients separating from contracted entities (Joondalup Health Campus and St John of God Midland Public Hospital).
- All readmissions occurring within the specified readmission interval are counted. There can be multiple readmissions associated with an index separation.
- Readmissions where the initial separation occurred within the reference period are in scope.
- Readmissions where the person is separated and readmitted on the same day are included. Note this inclusion only applies if the inpatient episodes have not been excluded for other reasons outlined in the Exclusions section (e.g. patient was discharged/transferred to another acute hospital).
- Hospital in the Home – Mental Health are considered specialised acute mental health inpatient services and separations from these services are included.

Facility	Hospital
North Metropolitan Health Service	
Graylands Adult Mental Health Services	Graylands Hospital
Selby Older Adult Mental Health Service	Selby Authorised Lodge
Joondalup Mental Health Unit (excluding the MHEDA unit)	Joondalup Health Campus
Sir Charles Gairdner Hospital Adult Mental Health Services	Sir Charles Gairdner Hospital Mental Health Service (between 20/8/15 and 5/9/2018) Sir Charles Gairdner Hospital (from 5/9/2018)
King Edward Memorial Hospital Mother Baby Inpatient Unit	King Edward Memorial Hospital
Osborne Park Lodge	Osborne Park Hospital
The Frankland/State Forensic Mental Health Services	State Forensic Mental Health Service
South Metropolitan Health Service	
Fiona Stanley Hospital Mental Health Inpatient	Fiona Stanley Hospital
Alma Street Centre	Fremantle Hospital
Alma Street Older Adult Mental Health Services	Fremantle Hospital
Mimidi Park Mental Health Unit	Rockingham General Hospital
Child and Adolescent Health Service	
Bentley Adolescent Unit (up to 13 June 2018)	Bentley Hospital and Health Service
PCH Ward 5A Inpatients	Perth Children's Hospital
East Metropolitan Health Service	
Moodjar and Yorgum Adult Mental Health Services	Armadale/Kelmscott Memorial Hospital and Health Service
Armadale Mental Health Service for Older People (Banksia ward)	Armadale/Kelmscott Memorial Hospital and Health Service
Armadale Adult Mental Health Rehabilitation Unit (Karri MHU)	Armadale/Kelmscott Memorial Hospital and Health Service
Bentley (Mill Street Centre) Adult Mental Health Services	Bentley Hospital and Health Service
Bentley Older Adult Mental Health Services	Bentley Hospital and Health Service
East Metropolitan Youth Unit	Bentley Hospital and Health Service
Royal Perth Hospital Mental Health Unit (Ward 2K and MHEC ward from 16 October 2019)	Royal Perth Hospital
St John of God Midland Public Hospital Adult Mental Health Services	St John of God Midland Public

	Hospital
St John of God Midland Public Hospital Older Adult Mental Health Services	St John of God Midland Public Hospital
WA Country Health Service	
Albany Mental Health Unit	Albany Hospital
Mabu Liyan Mental Health Unit (Broome Acute Psychiatric Unit)	Broome Hospital
Bunbury Acute Psychiatric Unit	Bunbury Hospital
Kalgoorlie Hospital Mental Health Inpatient Unit	Kalgoorlie Regional Hospital

Exclusions

For both the numerator and denominator the following exclusions apply:

- separations from non-acute wards in psychiatric inpatient units:
 - John Milne Centre (JMC ward) (Bentley Hospital);
 - PLFO1, HUFO and FRAC1 wards (State Forensic Mental Health Service); or
 - Casson, Ellis and Murchison wards (Graylands Hospital)
- A principal diagnosis of:
 - Cancelled procedures (Z53).
- A care type of:
 - Organ procurement (27);
 - Boarders (28);
 - Aged Care Resident (30); or
 - Flexible Care (31).
- A client status of:
 - Unqualified newborn (2 or 10);
 - Boarder (3);
 - Contracted Care (5)¹⁸
 - Organ procurement (7); or
 - Resident (8).
- same-day separations (admission date = separation date);
- separations where the length of stay is equal to one day and a procedure code for Transcranial Magnetic Stimulation (96252-00, 96253-00, 96254-00; present in any procedure field) is recorded; or
- separations where the length of stay is equal to

¹⁸ Except where Contract Type = (A)B. Contract Type (A)B reflects a situation where Hospital A contracts Hospital B to provide a whole episode of care and the patient does not attend Hospital A for any part of the episode of care. For more information please see the Admitted Patient Activity Data Business Rules:

<https://ww2.health.wa.gov.au/About-us/Policy-frameworks/Information-Management/Mandatory-requirements/Collection/Patient-Activity-Data>

one day and a procedure code for Electro-convulsive Therapy (Procedure Block = 1907; present in any procedure field) is recorded.

The following separations are excluded only when calculating the **denominator**:

- A mode of separation of:
- separations that end by transfer to an(other) acute (1) or psychiatric hospital (3);
- statistical and change of care type separations (5) ¹⁹;
- separations that end in death (8);

Note: Standard exclusions changed for separations in 2021-22 due to changes in reporting requirements. From 1 July 2021, separations where Client Status = 0 are no longer excluded, but separations where Client Status = 5 (Contracted Care) are excluded in some circumstances.

Note that separations prior to 1 July 2021 still apply the previous standard exclusion method; that is, data is excluded where Client Status = 0 and not excluded when Client Status = 5.

Computation:

(Numerator / denominator) x 100

Numerator:

Number of in-scope overnight public separations from designated acute specialised mental health inpatient services occurring within the reference period, that are followed by a readmission to the same or other acute designated mental health inpatient unit within 28 days.

Numerator data elements:

Data Element/Data Set

[Hospital Code]
 [Ward Code]
 [Admission Date]
 [Separation Date]
 [Mode of Separation]
 [Data Linkage Unique Patient Identifier]
 [Unit Medical Record Number]
 [Patient Type]
 [Episode of Care Type]
 [Primary Diagnosis]
 [Procedure codes]
 [Length of Stay]
 [Pay Class]

Data Source

Hospital Morbidity Data Collection (Inpatient Separations)

Guide for use

¹⁹ Statistical discharges break a single hospital stay into multiple parts. Includes within hospital transfers or changes of care type, program classification (e.g. from acute unit to non-acute unit)

[Patient Type], [Episode of Care Type] and [Primary Diagnosis] are used to exclude boarders, organ procurements, aged care residents, funding (duplicate) cases and cancelled procedures.

[Pay Class] is used to exclude ambulatory care, private patients in the contracted entities (Joondalup Health Campus and St John of God Midland Public Hospital).

[Procedure codes] and [Length of Stay] are used to exclude separations with a length of stay of one day and procedures for ECT and TMS are performed.

Denominator:

Number of in-scope overnight public separations from acute specialised mental health inpatient services occurring within the reference period.

Denominator data elements:

Data Element/Data Set

[Hospital Code]

[Ward Code]

[Admission Date]

[Separation Date]

[Mode of Separation]

[Data Linkage Unique Patient Identifier]

[Unit Medical Record Number]

[Patient Type]

[Episode of Care Type]

[Primary Diagnosis]

[Procedure codes]

[Length of Stay]

[Pay Class]

Data Source

Hospital Morbidity Data Collection (Inpatient Separations)

Guide for use

[Patient Type], [Episode of Care Type] and [Primary Diagnosis] are used to exclude boarders, organ procurements, aged care residents, funding (duplicate) cases and cancelled procedures.

[Pay Class] is used to exclude ambulatory care, private patients in the contracted entities (Joondalup Health Campus and St John of God Midland Public Hospital).

[Procedure codes] and [Length of Stay] are used to exclude separations with a length of stay of one day and procedures for ECT and TMS are performed.

Disaggregation data elements:

Data Element/Data Set

Hospital Code

Data Source

See Numerator and/or Denominator.

Guide for use

Nil

Comments:

- A change in data collection and reporting practices for

contracted care activity, implemented from 1 July 2021, removes the requirement for public hospital funding sites to report an admission where the patient has not physically been admitted to the funding site. These changes also result in a single admission being reported where patient care is split between the funding hospital and contracted service.

These changes will impact only a very small proportion of cases and any impacts are expected to be very small or negligible.

- International literature identifies the concept of one month as an appropriate defined time period for the measurement of readmissions following separation from an acute inpatient mental health service. Based on this a timeframe of 28 days for this indicator has been set and endorsed by the AHMAC Mental Health Information Strategy Standing Committee (as at 24 March 2011).
- This indicator is reliant on the use of a unique patient identifier to calculate readmissions across different hospitals. The unique patient identifier uses the Unique Identifier produced by Data Engineering within the WA Department of Health.
- This KPI aligns with the Fourth National Mental Health Plan Measurement Strategy indicator 'Readmission to hospital within 28 days of discharge', which the Mental Health Commission also reports in its Annual Report.
- This indicator is calculated using the same methodology as published in *Key Performance Indicators for Australian Public Mental Health Services (2020)* (<https://meteor.aihw.gov.au/content/index.phtml/itemId/720487>) and data reported in the *Mental health services in Australia* (last updated 20 Jul 2021).
- This KPI is reported by calendar year to allow for the lag associated with clinical coding of medical records.

Representational attributes

<i>Representation class:</i>	Percentage
<i>Data type:</i>	Number
<i>Unit of measure:</i>	Separations
<i>Format:</i>	NNN.N%

Indicator conceptual framework

<i>Framework and dimensions:</i>	2021-22 Outcome Based Management Framework
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Data source attributes

<i>Data sources:</i>	Data Source Hospital Morbidity Data System (Inpatient Separations)
	Data provider System Analytics Branch, Analytics and Performance

Reporting, ISPD, WA Department of Health.

Data custodian

Principal Data Management Officer, Data Management, Information & Performance Governance, ISPD, WA Department of Health.

Quality statement:

- The indicator is an underestimate of all possible unplanned/unexpected readmissions because:
 - The HMDC is based on clinically coded data, which may remain incomplete for lengthy periods if HSPs do not comply with required submission and edit timeframes.
 - The identification of readmissions to any hospital uses the unique patient identifier generated by Data Engineering within the Department of Health available within the HMDC. Generation of the unique patient identifier uses probabilistic matching of patient information sourced from multiple datasets held within Data Engineering. The linking process requires further delay to the time when the data become available for analysis.

Accountability attributes

Benchmark:

≤ 12%

Sourced from: *Fourth National Mental Health Plan Measurement Strategy (May 2011)* produced by the Mental Health Information Strategy Subcommittee, AHMAC, Mental Health Standing Committee.²⁰

Approved by: Director General, WA Department of Health.

Methodology:

Nil

*Further data development/
collection required:*

Nil

Other issues caveats:

- Diagnosis codes are not referenced in the calculation, so it cannot be guaranteed that the two admissions (occurring within 28 days) are for the same or clinically related mental health conditions.
- Data limitations mean planned and unplanned readmissions cannot be differentiated.
- Only separations from designated acute specialised mental health units are reported for this KPI (i.e. patients admitted to an acute designated unit and subsequently transferred to a general ward and discharged from that general ward are not included).

Source and reference attributes

²⁰ More information can be accessed at this link: <https://www.aihw.gov.au/getmedia/d8e52c84-a53f-4eef-a7e6-f81a5af94764/Fourth-national-mental-health-plan-measurement-strategy-2011.pdf.aspx>

Reference documents:

- **Report on Government Services (RoGS) 2021** Part E Health, Chapter 13 Services for mental health, Indicator – ‘Readmissions to hospital within 28 days of discharge’
<https://www.pc.gov.au/research/ongoing/report-on-government-services/2021/health/services-for-mental-health>
- **KPIs for Australian Public Mental Health Services – PI 02J – Mental health readmissions to hospital, 2020**
<https://meteor.aihw.gov.au/content/index.phtml/itemId/723381>
- **KPIs for Australian Public Mental Health Services: PI 02 – Mental health readmissions to hospital, 2020 (Service level)**
<https://meteor.aihw.gov.au/content/index.phtml/itemId/725525>

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Percentage of post-discharge community care within 7 days following discharge from acute specialised mental health inpatient services

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	7 Day Community Mental Health Follow-up Rate of post-discharge community care
<i>Catalogue identifier:</i>	0008
<i>Reporting entities/scope:</i>	NMHS, SMHS, EMHS, CAHS, WACHS
<i>Description:</i>	Percentage of separations from acute public mental health inpatient services where post-discharge follow-up is provided within 7 days.
<i>Rationale:</i>	<p>In 2017-18, one in five (4.8 million) Australians reported having a mental or behavioural condition²¹. Therefore, it is crucial to ensure effective and appropriate care is provided not only in a hospital setting but also in the community.</p> <p>Discharge from hospital is a critical transition point in the delivery of mental health care. People leaving hospital after an admission for an episode of mental illness have increased vulnerability and, without adequate follow up, may relapse or be readmitted.</p> <p>The standard underlying this measure is that continuity of care requires prompt community follow-up in the period following discharge from hospital. A responsive community support system for persons who have experienced a psychiatric episode requiring hospitalisation is essential to maintain their clinical and functional stability and to minimise the need for hospital readmissions. Patients leaving hospital after a psychiatric admission with a formal discharge plan that includes links with public community based services and support are less likely to need avoidable hospital readmissions.</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by calendar year
<i>Outcome area:</i>	Annual Reports 2021-22: <ul style="list-style-type: none">• Outcome 1: Public hospital based services that enable effective treatment and restorative healthcare for Western Australians• Effectiveness.

Collection and usage attributes

<i>Population group age from:</i>	All ages.
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²¹ [National Health Survey 2017-18](#)

Population group age to: All ages.

Computation description: [Numerator] divided by the [Denominator], multiplied by 100 (expressed as a percentage).

General notes:

An acute mental health inpatient service is defined as a service that provides voluntary and involuntary short-term inpatient management and treatment during an acute phase of mental illness, until the person has recovered enough to be treated effectively and safely in the community.

A community mental health service contact²² is the provision of a clinically significant service by a specialised mental health service provider(s) for patients (and/or their associates), excluding service contacts delivered to patients while they are admitted to a psychiatric hospital or a designated psychiatric unit in acute care hospitals and those who are resident in 24 hour staffed specialised residential mental health services. The nature of the service contact would normally warrant a dated entry in the clinical record of the patient.

Reported at the facility (hospital) from which the patient was discharged.

Only acute mental health wards at WA public hospitals (including public patients admitted to Contracted Health Entities) are included. Some specific units are excluded if they primarily provide non-acute inpatient mental health services.

Inclusions:

- Includes all separations from public acute psychiatric inpatient services, irrespective of diagnosis.
- Hospital in the Home – Mental Health are considered specialised acute mental health inpatient services and separations from these services are included in the denominator.
- All triage service events.
- Community service contacts recorded in the seven days immediately following separation where the patient and/or associate is present at the time of contact.
- All WA public acute designated mental health inpatient services (as listed below):

Facility

North Metropolitan Health Service

Graylands Adult Mental Health Services

Hospital

Graylands Hospital

²²

<https://workspaces.hdwa.health.wa.gov.au/doh/SPD/Mental%20Health%20Linked%20Data%20Repository/Community-Mental-Health-Patient-Activity-Data-Business-Rules.pdf>

Selby Older Adult Mental Health Service	Selby Authorised Lodge
Joondalup Mental Health Unit (excluding the MHEDA ward)	Joondalup Health Campus
Sir Charles Gairdner Hospital Adult Mental Health Services	Sir Charles Gairdner Hospital
King Edward Memorial Hospital Mother Baby Inpatient Unit	King Edward Memorial Hospital
Osborne Park Lodge	Osborne Park Hospital
The Frankland/State Forensic Mental Health Services	State Forensic Mental Health Service
South Metropolitan Health Service	
Fiona Stanley Hospital Mental Health Inpatient	Fiona Stanley Hospital
Alma Street Centre	Fremantle Hospital
Alma Street Older Adult Mental Health Services	Fremantle Hospital
Mimidi Park Mental Health Unit	Rockingham General Hospital
CAHS	
Bentley Adolescent Unit (up to 13 June 2018)	Bentley Hospital and Health Service
PCH Ward 5A Inpatients	Perth Children's Hospital
East Metropolitan Health Service	
Moodjar and Yorgum Adult Mental Health Services	Armadale/Kelmscott Memorial Hospital and Health Service
Armadale Mental Health Service for Older People (Banksia ward)	Armadale/Kelmscott Memorial Hospital and Health Service
Armadale Adult Mental Health Rehabilitation Unit (Karri MHU)	Armadale/Kelmscott Memorial Hospital and Health Service
Bentley (Mill Street Centre) Adult Mental Health Services	Bentley Hospital and Health Service
Bentley Older Adult Mental Health Services	Bentley Hospital and Health Service
East Metropolitan Youth Unit	Bentley Hospital and Health Service
Royal Perth Hospital Mental Health Unit (Ward 2K) (MHEC ward from 16 October 2019)	Royal Perth Hospital
St John of God Midland Public Hospital Adult Mental Health Services	St John of God Midland Public Hospital
St John of God Midland Public Hospital Older Adult Mental Health Services	St John of God Midland Public Hospital

WACHS

Albany Mental Health Unit	Albany Hospital
Mabu Liyan Mental Health Unit (Broome Acute Psychiatric Unit)	Broome Hospital
Bunbury Acute Psychiatric Unit	Bunbury Hospital
Kalgoorlie Hospital Mental Health Inpatient Unit	Kalgoorlie Regional Hospital

Exclusions:

The following community mental health service contacts are excluded when calculating the **numerator**:

- mental health service contacts on the day of separation;
- contacts where neither a client nor their associate participated; or
- the community mental health service event is not deemed as a 'service contact' (refer to the Community Mental Health Service Contact definition in General Notes).

The following separations are excluded when calculating the **denominator**:

- A principal diagnosis of:
 - Cancelled procedures (Z53).
- A care type of:
 - Organ procurement (27);
 - Boarders (28);
 - Aged Care Resident (30); or
 - Flexible Care (31).
- A client status of:
 - Unqualified newborn (2 or 10)
 - Boarder (3);
 - Contracted Care (5)²³
 - Organ procurement (7); or
 - Resident (8).
- same-day separations (admission date = separation date);
- separations where the length of stay is equal to one day and a procedure code for Transcranial Magnetic Stimulation (96252-00, 96253-00, 96254-00; present in any procedure field) is recorded; or
- separations where the length of stay is equal to one day and a procedure code for Electro-convulsive Therapy (Procedure Block = 1907;

²³ Except where Contract Type = (A)B. Contract Type (A)B reflects a situation where Hospital A contracts Hospital B to provide a whole episode of care and the patient does not attend Hospital A for any part of the episode of care. For more information please see the Admitted Patient Activity Data Business Rules:

<https://ww2.health.wa.gov.au/About-us/Policy-frameworks/Information-Management/Mandatory-requirements/Collection/Patient-Activity-Data>

present in any procedure field) is recorded.

- A mode of separation of:
 - separations that end by transfer to an(other) acute (1) or psychiatric hospital (3);
 - statistical and change of care type separations²⁴ (5);
 - separations that end in death (8);
- separations where the patient is discharged to residential mental health services
 - Hampton Road Service (22);
 - Ngulla Mia Hostel (2600);
 - St Bartholomew's House (4094, 4038, 4034);
 - Richmond Wellbeing (5007);
 - MIND Australia (5575);
 - Life Without Barriers (2601);
 - Vinnies MHS (2368, 2370, 2372, 4023);
 - Neami National (5633);
 - Devenish Lodge (874);
 - Honey Brook Lodge (161);
 - Salisbury Home (519);
 - Casson House (508);
 - Romily House (517);
 - St Jude's Hostel (315);
 - BP Luxury Care (2603);
 - Burswood Care (4221);
 - Southern Cross Care (4077, 4061);
 - Amana Living (189).
- separations from non-acute wards in psychiatric inpatient units:
 - John Milne Centre (JMC ward) (Bentley Hospital);
 - PLFO1, HUFO and FRAC1 wards (State Forensic Mental Health Service); or
 - Casson, Ellis and Murchison wards (Graylands Hospital).

Note: Standard exclusions changed for separations in 2021-22 due to changes in reporting requirements. From 1 July 2021, separations where Client Status = 0 are no longer excluded, but separations where Client Status = 5 (Contracted Care) are excluded in some circumstances.

Note that separations prior to 1 July 2021 still apply the previous standard exclusion method; that is, data is excluded where Client Status = 0 and not excluded when Client Status = 5.

Computation:

(Numerator/denominator) x 100

²⁴ Statistical discharges break a single hospital stay into multiple parts. Includes within hospital transfers or changes of care type, program classification (e.g. from acute unit to non-acute unit)

<i>Numerator:</i>	Number of in-scope overnight public separations from designated acute mental health inpatient services within the reference period for which a community ambulatory service contact, in which the patient and/or associate participated, was recorded in the seven days immediately following that separation.
<i>Numerator data elements:</i>	<p>Data Element/Data Set</p> <p>[Service contact flag] [Service event item code] [Service contact start date and time] [Service event category] [Client present at contact] indicator [Associate present at contact] indicator [Data Linkage Unique Patient Identifier] [Unit Medical Record Number]</p> <p>Data Source Mental Health Information Data Collection (MIND) (Ambulatory mental health service contacts)</p> <p>Guide for use Nil</p>
<i>Denominator:</i>	Number of in-scope overnight public separations for designated acute mental health inpatient services occurring within the reference period.
<i>Denominator data elements:</i>	<p>Data Element/Data Set</p> <p>[Hospital Code] [Ward Code] [Discharged To] [Admission Date] [Separation Date] {Length of Stay} [Mode of Separation] [Principal procedure] [Additional procedure] [Data Linkage Unique Patient Identifier] [Unit Medical Record Number]</p> <p>[Patient Type], [Episode of Care Type] and [Primary Diagnosis] are used to exclude boarders, organ procurements, aged care residents, funding (duplicate) cases and cancelled procedures.</p> <p>[Pay Class] is used to exclude ambulatory care, private patients in the contracted entities (Joondalup Health Campus and St John of God Midland Public Hospital).</p> <p>[Principal and Additional Procedure codes] and [Length of Stay] are used to exclude separations with a length of stay of one day and procedures for ECT and TMS are performed.</p>

Data Source

Hospital Morbidity Data Collection (Inpatient separations)

Guide for use

There is a lag in the availability of inpatient separations for reporting due to the time taken to clinically code the medical record of a discharged patient. There is also a lag in the data linkage required to uniquely identify the same patient across the two data collections. For this reason, the indicator is reported by calendar year.

Disaggregation data elements:

Data Element/Data Set

Hospital Code.

Data Source

See Numerator and/or Denominator.

Guide for use

Nil.

Comments:

A change in data collection and reporting practices for contracted care activity, implemented from 1 July 2021, removes the requirement for public hospital funding sites to report an admission where the patient has not physically been admitted to the funding site. These changes also result in a single admission being reported where patient care is split between the funding hospital and contracted service.

These changes will impact only a very small proportion of cases and any impacts are expected to be very small or negligible.

This indicator was adopted as a national KPI for Australian public mental health services in 2005, incorporated in the Council of Australian Governments' Action Plan as a progress measure for monitoring outcomes of the Plan and, with some modification to the specifications, continued as an indicator under the 5th National Mental Health and Suicide Prevention Plan.

The Triage Module of the Psychiatric Online Information System (PSOLIS) does not capture patient/associate present. As such, all Triage service events are deemed as patient being present and included in the numerator.

This indicator is calculated using the same methodology as published in *Key Performance Indicators for Australian Public Mental Health Services (2020)* (<https://meteor.aihw.gov.au/content/index.phtml/itemId/720487>) and data reported in the *Mental health services in Australia* (last updated 20 Jul 2021). As of 2019-20, this definition includes contacts with a patient's carer or support person ('associate') in the numerator calculation.

Representational attributes

<i>Representation class:</i>	Percentage
<i>Data type:</i>	Number
<i>Unit of measure:</i>	Episode
<i>Format:</i>	NNN.N%

Indicator conceptual framework

<i>Framework and dimensions:</i>	2021-22 Outcome Based Management Framework
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Data source attributes*Data sources:***Data Source****Numerator:**

Mental Health Information Data Collection (MIND)
(Ambulatory mental health service contacts)

Denominator:

Hospital Morbidity Data Collection (Inpatient Separations)

Root LP numbers:

WA Data Linkage System

Data provider

- MIND data: System Analytics Branch, Analytics and Performance Reporting, ISPD, WA Department of Health
- Hospitalisation data: System Analytics Branch, Analytics and Performance Reporting, ISPD, WA Department of Health
- Root LP numbers: Data Engineering, ISPD, Purchasing and System Performance Division, WA Department of Health.

Data custodian

- Principal Data Management Officer, Data Management, Information & Performance Governance, ISPD, WA Department of Health.

Quality statement:

The indicator is likely to be an underestimate of post-discharge care within seven days as it is only based on follow-up provided by public mental health services and relies on the availability of a unique patient identifier across the HMDC (separations data) and MIND (community service contacts data).

Accountability attributes

<i>Benchmark:</i>	≥75%
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Sourced from: The target is an endorsed value from the Australian Health Minister's Advisory Council Mental Health Standing Committee, May 2011.²⁵

The target will be subject to periodic review and will be further informed by analysis of the data.

Approved by: Director General, WA Department of Health.

Methodology:

Nil

*Further data development/
collection required:*

Nil

Other issues caveats:

The data source for this KPI was transitioned from the Mental Health Information System (MHIS) to MIND in the 2018-19 reporting year. As such, direct comparison with published results from previous years should be approached with caution, due to changes in the methodology for counting community mental health service contacts.

From 2019-20, to align with national definitions, this indicator includes service contacts delivered to the patient's associate (irrespective of the patient themselves being present at the time of contact) in the numerator. As such, direct comparisons with published results from previous years should be approached with caution.

Some public patients discharged from designated mental health inpatient services will not be followed up by a public community team. These patients may leave the State or be treated by a private mental health practitioner or a General Practitioner. As the centralised data collections do not capture the required information in these circumstances, these patients are counted as not receiving contact within 7 days.

Mental health community contacts and acute inpatient separations are sourced from two different data collection systems. Each system has a different unique patient identifier and requires the use of data linkage to allow unique tracking of consumers across all public mental health services in WA. This could result in an under-estimate in the proportion of post-discharge contacts identified.

The indicator is reported by calendar year to allow for reporting period, data coding and quality checking.

Follow-up post discharge care occurs after the patient has been discharged from acute specialised mental health inpatient service. There are occasions when the follow-up care is provided by an inpatient team, recorded as a

²⁵ More information can be accessed at this link:

<https://www.aihw.gov.au/getmedia/d8e52c84-a53f-4eef-a7e6-f81a5af94764/Fourth-national-mental-health-plan-measurement-strategy-2011.pdf.aspx>

community service contact.

Only separations from designated acute specialised mental health units are reported for this KPI (i.e. patients admitted to an acute designated unit and subsequently transferred to a general ward and discharged from that general ward are not included).

Source and reference attributes

Reference documents:

Report on Government Services (RoGS) 2021

Part E Chapter 13: Services for mental health, Indicator – ‘Rate of community follow-up within first seven days of discharge from a psychiatric admission’.

<https://www.pc.gov.au/research/ongoing/report-on-government-services/2021/health/services-for-mental-health>

National Health Agreement Indicator PI 25 ‘Rate of community follow up within first seven days of discharge from a psychiatric admission, 2021’

<https://meteor.aihw.gov.au/content/index.phtml/itemId/725773>

Post discharge community mental health care, 2020

<https://meteor.aihw.gov.au/content/index.phtml/itemId/723388>

5th National Mental Health and Suicide Prevention Plan

<https://www.mentalhealthcommission.gov.au/monitoring-and-reporting/fifth-plan/5th-national-mental-health-and-suicide-prevention>

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

7.1.2 Key efficiency indicators within Outcome 1

Average admitted cost per weighted activity unit

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0009
<i>Reporting entities/scope:</i>	NMHS, SMHS, EMHS, CAHS, WACHS
<i>Description:</i>	Measures the costs of delivering admitted patient services using a common unit of activity, termed the estimated Weighted Activity Unit (WAU).
<i>Rationale:</i>	<p>This indicator is a measure of the cost per WAU compared with the State target, as approved by the Department of Treasury and published in the 2021-22 Budget Paper No. 2, Volume 1.</p> <p>The measure ensures a consistent methodology is applied to calculating and reporting the cost of delivering inpatient activity against the state's funding allocation. As admitted services received nearly half of the overall 2021-22 budget allocation, it is important that efficiency of service delivery is accurately monitored and reported.</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	Annual Reports 2021-22: <ul style="list-style-type: none">• Outcome 1. Public hospital based services that enable effective treatment and restorative healthcare for Western Australians• Service 1 – Public Hospital Admitted Services.• Efficiency.

Collection and usage attributes

<i>Population group age from:</i>	All ages.
<i>Population group age to:</i>	All ages.
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$).

General notes:

- This indicator includes all public hospitals (metropolitan and rural) with inpatient services and public activity at Contracted Health Entities (i.e., Joondalup Health Campus, SJOG Midland Hospital and Peel Health Campus), excluding:
 - Small Country Hospitals
 - Next Step Drug and Alcohol services
 - Nursing posts and other non-hospital establishments.
- Estimated Weighted Inpatient Activity is the result

of weighting the Total Estimated Unweighted Inpatient Activity using the WA ABF Operating Model. Where data is coded this is done via Diagnosis Related Group (DRG) recognising the relevant national and local adjustments. Uncoded data is weighted according to estimated specialty weights via Specialty on Admission.

- Total Estimated Unweighted Inpatient Activity is counted from Hospital Morbidity Data Collection (HMDC) extracts (coded data) and hospital patient administration system discharge extracts (uncoded data) using the [Client Status] or [Patient Type], [Separation Date], [Account Number], and [Establishment Code] fields.
- This definition reflects the WA ABF Operating Model weighting mechanism as used in the service agreements between DoH and HSPs. The WA ABF Operating Model is essentially the national Independent Hospitals Pricing Authority (IHPA) model with adjustments to better align to WA service delivery.
- Total Estimated Weighted Inpatient activity (separation based data):
When coded information is unavailable, uncoded data is used to estimate the count via the use of hospital patient administration system discharge extracts. Care is taken to avoid over counting by comparing to the HMDC.
WAUs are influenced by a number of factors:
 - The Australian Refined Diagnosis Related Group (AR-DRG) version 10.0 or Australian National Subacute and Non-Acute Patient (AN-SNAP) version 4.0 classification
 - stay type
 - length of stay
 and a number of adjustments:
 - Paediatric
 - Specialist Psychiatric Age
 - Patient Remoteness
 - Indigenous Status
 - Radiotherapy
 - Dialysis
 - Intensive Care Unit (ICU) hours
 - Private Patients
 - Hospital Remoteness
 - Hospital Acquired Complications Adjustment.
- The ICU adjustment is only relevant to specified hospitals with an eligible ICU or Paediatric ICU as determined by IHPA. Currently for WA, these are the ICUs at Armadale, Bunbury, Fiona Stanley, Joondalup, Rockingham, Royal Perth, Sir Charles Gairdner and Perth Children's hospitals. Further

information on the national IHPA model, its specifications and adjustments can be found at www.iHPA.gov.au.

- Dialysis activity contracted through public hospitals is included.
- Under current local definitions for admitted patients, the following patient types are not considered non-admitted patients – Ambulatory Surgery Initiative, Organ Procurement, Boarders, Cancelled Elective Surgery, Aged Care & and Flexible Care Residents. Apart from Ambulatory Surgery Initiative patient types, the other listed patient types are excluded from the WA ABF Operating model.
- Note that Cancelled Elective Surgery is identified using the [Principal Diagnosis] field, and therefore can only be identified in coded data.
- Unqualified newborn activity (client status of 2 or 10) is also excluded from the WA ABF Operating model as the costs are attributed to the mother's episode of care.
- Activity is always counted at the funding hospital regardless of where the activity is contracted to be delivered. Activities being funded outside the Health Service are not included.

Inclusions:

Numerator:

- From cost centres mapped to the following Outcome Based Management (OBM) Programs under Service 1:
 - 1.1 (Acute inpatient activity)
 - 1.2 (Sub-acute inpatient activity)
 - 1.3 (Teaching, training and research funding – inpatient)
 - 2.1 (Public Private Partnership – Inpatient Activity)
 - 2.2 (PPP – Teaching, training and research – inpatient)

Include (for all HSPs except for NMHS):

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
- Internal and External Revenue, defined as (Account L2):
 - B15000 – External Revenue
 - B42000 - Services to External Health Services & Organisations

Note that the inclusion of Internal and External Revenue act as an offset against Total Expenditure.

For NMHS only, include:

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses

The above calculation applies to NMHS due to their individual cost centre structure and treatment of external revenue.

Denominator:

- All records from HMDC, TOPAS, webPAS, and Contracted Health Entities (CHEs)* extracts.

**For CHEs only, include only public patients:*

Funding Source	HMDC
Australian Health Care Agreements	21
Correctional Facility	29
Reciprocal HealthCare Agreement	30

Exclusions:

Numerator:

Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1')

Financial Products defined as expenditure within the following (Account Level 2):

- A77000 – Depreciation Expenses;
- A77100 – Depreciation Expenses - Leases;
- A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
- A79000 - Amortisation Expenses
- A75000 - Debtors Expenses
- A76000 - Financial Expenses
- A76100 - Financial Expenses – Leases
- A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense

Denominator:

For Metropolitan and Country hospitals – separation based data

- The following records are excluded from the HMDC extract:
 - Cases with a record status: D (Deleted), E (Data Entry), I (In Progress), M (Modify), N (New), P (Pending), R (Replaced), V (Removed) or X (Error).
- Exclude duplicate records from within each TOPAS, webPAS, and HMDC extract:
 - Duplicate records = [Establishment Code] and

[Account Number] are identical within the HMDC, TOPAS and webPAS data sets.

- For TOPAS and webPAS records:
 - Exclude uncoded (TOPAS/webPAS) record where coded (HMDC) record has the same values for the following fields: [Establishment Code] and [Account Number]
 - Exclude uncoded (TOPAS/webPAS) record where the coded record in the HMDC Deleted, Replaced or Removed (DRV) extract* has the same values for the following fields: [Establishment Code] and [Account Number]

*The HMDC DRV extract is an extract of coded records with a [Record Status] of D (Deleted), R (Replaced) or V (Removed), where a matching record with a [Record Status] of C (Clean) **does not** exist in HMDC (records are matched using [Establishment Code] and [Account Number]).

For HMDC, TOPAS and webPAS records, exclude contracted services:

	TOPAS	WebPAS	HMDC
[Client Status] or [Patient type] = Contracted Service	5	CED	5

The following patient subgroup exclusions are identified in the dataset sequentially, using if-then-else criteria, then excluded based on the values attributed to each exclusion within {Ctyp}:

Sub-group excluded:	Source system value			Group to {Ctyp} as:
	TOPAS	webPAS	HMDC	
Boarders				
Care Type / Episode of Care =	10.0	BRD	28	BR
Or				
Client Status/Patient Type =	3	BDR	3	BR
Unqualified Newborns				
Client Status/Patient Type =	2	UNQ	2	UnqNB

**Organ
Procurement**

Care
Type/Episode of Care = 9.0 ORG 27 OP

**Flexible Care
Residents**

Care
Type/Episode of Care = N/A FLC 31 FCR

Aged Care

Care
Type/Episode of Care = N/A N/A 30 ACR

**Cancelled
Elective
Surgery**

*first three
characters of
[Principal
Diagnosis] =* N/A N/A Z53 CES

**Ambulatory
Surgery
Initiative**

Funding Source = N/A N/A 33 Acute

- Excludes patient activity in designated mental health inpatient units defined as:

Hospital Name	Establishment Code	Ward
Albany Regional Hospital	201	G
Armadaale Kelmscott District Memorial Hospital	203	BANKS
		KARRI
		MOOJR
		YORGM
		LOPEN
		LH DU
Bentley Hospital	255	ECTD
		JMC (or 9)
		6 (or W6)
		6A (or W6A)
		7 (or W7)
		8 (or W8)
		9CP
		9CS
		10A (or W10A)

		10B (or W10B)
		10C (or W10C)
		11 (or W11)
Broome Hospital	206	PSYCH
Bunbury Regional Hospital	208	APU
		PICU
Fiona Stanley Hospital	106	MBU
		MHA
		MHB
Fremantle Hospital	102	W41
		W42
		W51
		W43
		DSW
		ECT
		MHITH
Graylands Hospital	935	MITH
		PINC
		DORR
		CASS or CASA
		ELLS
		MURC
		SMIT
		MONT
		MURCW
		MURFO
		SEGH
Kalgoorlie Regional Hospital	226	MHU
King Edward Memorial Hospital	104	MBU
Osborne Park Hospital	239	OL
		OHITH
		PL
Perth Children's Hospital	107	5A
Rockingham General Hospital	277	MHAO
		MHAC
		MHEC
		MHEO
		MITH
Royal Perth Hospital	101	2K
		MHEC
Selby Authorised Lodge	158	SELBY, SELB
		SITH
		PICU
Sir Charles Gairdner Hospital	105	TAN
		KAR
		JUR
		ISD
		MHOA

		YHITH
		MHITH
St John of God Midland Public Hospital	6007	4A
		4B
		4C
St John of God Mount Lawley Hospital	629	UFU
State Forensic Mental Health Service	135	FRAA1
		FRAB1
		FRAC1
		HUFO
		MURFO
Joondalup Health Campus Mental Health Unit	642	JHCLMHU
		JHCPMHU
		JHCBMHU

Computation:

Numerator/denominator

Numerator:

Total Expenditure for admitted patients in public hospitals and admitted public patients in CHes.

Numerator data elements:

Data Element/Data Set

- [OBM Program Code]
- [Cost Centre L5 name]
- [Cost Centre Posting Code]
- [Account L2 code]
- {YTD amount}

Data Sources

- OBM Allocation application
- Oracle 11i financial system

Guide for use

Nil

Denominator:

Total weighted activity for admitted patients in public hospitals and admitted public patients in CHes.

HMDC records:

- **Sum of (Count** of the number of records where [Separation Date] has a value that is within/equal to the reference period (i.e., calendar month). **Minus** cases with a record status of D, E, I, M, N, P, R, V, X. **Minus** cases where [Establishment Code] and [Account Number] are identical within the data set. **Minus** [Client Status] = 5. **Minus** {Ctyp} = BR, UnqNB, OP, FCR, ACR, ASI or CES) **multiplied** by the corresponding WAU.
- *And for CHes only:* where [Funding Source] = (21, 29, or 30).

Further documentation explaining the calculation of a WAU is available under Pricing at

<https://www.ihpa.gov.au>.

TOPAS, webPAS, and CHes discharge records:

- **Sum of (Count** of the number of records where [Separation Date] has a value that is within/equal to the reference period (i.e., calendar month). **Minus** TOPAS & webPAS records where [Establishment Code] **and** [Account Number] = records in HMDC **or** HMDC DRV extract. **Minus** records where [Establishment Code] and [Account Number] are identical within the data sets. **Minus** [Client Status] = 5. **Minus** {Ctyp} = BR, UnqNB, OP, ACR, ASI or FCR) **multiplied** by the corresponding Specialty Weight.
- *And for CHes only:* where [Funding Source] = (21, 29, or 30).

To calculate a 'Specialty on Admission' weight for an episode:

Where

Ot is the one-time weight

MTpd is the multi-time per diem weight

NOS are equal to the nights of stay where a same day episode receives a score of 0 (NOS = [Separation Date] minus [Admission Date] minus [Leave days])

Psych Adj is Specialist Psych day loading

Ind is the indigenous status loading

Rem is the patient remoteness loading

HRem is the hospital remoteness loading

ICU is the ICU loading

As per the IHPA model

'Specialty on Admission' weight = (Ot + MTpd × NOS) × (1 + Psych Adj) + Ind + Rem + HRem + ICU

Refer to the 'Specialty on Admission' cost weight schedule, produced by Economic Modelling, Information and System Performance, Purchasing and System Performance, WA Department of Health.

Denominator data elements:

Data Element/Data Set

HMDC extracts:

- [Care Type] (Episode of care)
- [Establishment Code]
- [Ward]
- [Client status] (Patient type)
- [Account number]
- [Principal diagnosis]
- [Funding source] (Payment classification)
- [Record status]

- [Admission date]
- [Separation date]

TOPAS, webPAS, and CHEs discharge records:

- [Care Type] (Episode of care)
- [Establishment Code]
- [Ward]
- [Client status] (Patient type)
- [Account number]
- [Funding source] (Payment classification)
- [Admission date]
- [Separation date]
- [Specialty on admission]

Data Sources

- HMDC extracts
- TOPAS, webPAS, and CHEs discharge extracts

Guide for use

Nil

Disaggregation data elements: **Data Element/Data Set**
[Establishment Code]

Data Source

See Numerator and/or Denominator

Guide for use

Nil

Comments: A change in data collection and reporting practices for contracted care activity, implemented from 1 July 2021, removes the requirement for public hospital funding sites to report an admission where the patient has not physically been admitted to the funding site. These changes also result in a single admission being reported where patient care is split between the funding hospital and contracted service.

These changes will impact only a very small proportion of cases and any impacts are expected to be very small or negligible.

Representational attributes

Representation class: Mean (average)

Data type: Monetary amount

Unit of measure: Currency

Format: \$N,NNN

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Sources

Numerator:

- OBM Allocation application
- Oracle 11i financial system.

Denominator:

- HMDC extracts
- TOPAS, webPAS, CHEs discharge extracts.

Data provider

Numerator:

- System Business Analytics, Information and System Performance, Purchasing and System Performance, WA Department of Health
- Health Service Providers' Finance.

Denominator:

- WAUs: Economic Modelling, Information and System Performance, Purchasing and System Performance, WA Department of Health
- Hospital Morbidity Data Collection: System Analytics Branch, Information and System Performance, Purchasing and System Performance, WA Department of Health.

Quality statement:

Admitted data is only partially coded at reporting time.

Accountability attributes

Benchmark:

The state (aggregated) target as approved by the Department of Treasury for Average admitted cost per weighted activity unit is \$6,907.

Sourced from: 2021-22 Budget Paper No. 2, Volume 1, page 317.

Approved by: Director General, WA Department of Health.

Note: The target outlined above is only relevant to annual reporting and GBS. A different benchmark based on HSPs' service agreements is used for the ongoing performance management of HSPs.

Methodology:

Nil

Further data development/ collection required:

Nil

Other issues caveats:

Nil

Source and reference attributes

Reference documents:

- National ABF Operating Model documentation, available under Pricing at <https://www.ihpa.gov.au>.

- Patient Activity Data Policy Information Compendium, available at <https://ww2.health.wa.gov.au/About-us/Policy-frameworks/Information-Management/Mandatory-requirements/Collection/Patient-Activity-Data>.

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Average Emergency Department cost per weighted activity unit

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0010
<i>Reporting entities/scope:</i>	NMHS, SMHS, EMHS, CAHS, WACHS
<i>Description:</i>	Measures the costs of delivering Emergency Department (ED) services against a common unit of activity, termed the Weighted Activity Unit (WAU).
<i>Rationale:</i>	<p>This indicator is a measure of the cost per WAU compared with the State target as approved by the Department of Treasury, which is published in the 2021-22 Budget Paper No. 2, Volume 1.</p> <p>The measure ensures that a consistent methodology is applied to calculating and reporting the cost of delivering ED activity against the state's funding allocation. With the increasing demand on EDs and health services, it is important that ED service provision is monitored to ensure the efficient delivery of safe and high-quality care.</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	Annual Reports 2021-22: <ul style="list-style-type: none">• Outcome 1. Public hospital based services that enable effective treatment and restorative healthcare for Western Australians• Service 2: Public Hospital Emergency Services.• Efficiency

Collection and usage attributes

<i>Population group age from:</i>	All ages.
<i>Population group age to:</i>	All ages.
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$)

General notes:

- This indicator includes all public hospitals with an Emergency Department (ED)/service and public activity at Contracted Health Entities (i.e., Joondalup Health Campus, SJOG Midland Hospital and Peel Health Campus), excluding:
 - Small Country Hospitals
 - Nursing posts and other non-hospital establishments.
- Weighted ED Attendances are the product of the {WA Emergency Department

Attendances} and the corresponding WAU cost weights. Cost weighting is by Australian Emergency Care Classification V1.0 or Urgency Disposition Groups (UDG) version 1.3 classification and adjusted according to indigenous status, patient remoteness and hospital remoteness.

- ED Attendances are counted from event records in the Emergency Department Data Collection (EDDC) using [Presentation date and time]. [Presentation date and time] is the earlier of [Arrival date and time] and [triage date and time]. [Presentation date and time] is used to ensure that the attendance is within the desired reference period, e.g. some patients may arrive before midnight and be triaged after midnight. Recording the earlier of the fields ensures the correct date and time is referenced.
- An attendance at the ED is recorded when a patient is registered in any manner in one of the electronic data collection systems, that is, includes those cases that may not have been completely clerically registered or triaged. [Presentation date and time] indicates the commencement of an ED attendance. This data element encompasses all ED events regardless of whether treatment was subsequently provided in the ED or the individual was registered for care.
- 'Registered for care' is determined by the allocation of a Unit Medical Record Number (UMRN) or client identifier.
- For all metropolitan hospitals and large country hospitals, AECCs are used to group ED attendances. AECCs group ED attendances according to episode end status (disposition), triage category, age, transfer mode and diagnosis. Each AECC category has a corresponding price weight WAU.
- WA's ED model allows for records to be grouped to UDG where insufficient information is available to group to AECC (i.e. diagnosis information unavailable). The UDG groups attendances based on the patient's triage category and whether or not they were admitted to the hospital they attended.
- AECC and UDG grouper software are produced by the Independent Hospital Pricing Authority (IHPA).

Inclusions:

Numerator:

- From cost centres mapped to the following

Outcome Based Management (OBM)
Programs under Service 2:

- 3.1 (Emergency Department Activity)
- 3.2 (Teaching, Training and Research – Emergency Department)
- 4.1 (Public, Private Partnership – Emergency Department Activity)
- 4.2 (PPP – Teaching, Training and Research – Emergency Department).

Include (for all HSPs except for NMHS):

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
- Internal and External Revenue, defined as (Account L2):
 - B15000 - External Revenue
 - B42000 - Services to External Health Services & Organisations.

Note that the inclusion of Internal and External Revenue acts as an offset against Total Expenditure.

For NMHS only, include:

- Total Expenditure, defined as (Account L5)
- AAA300 - Total Expenses
- The above calculation applies to NMHS due to their individual cost centre structure and treatment of external revenue.

Denominator:

- Cases are included if the triage has or has not been recorded
- Cases are included if the clerical registration is incomplete, that is, no UMRN allocated
- As there are no cases excluded from the attendance count, those who are 'Dead on arrival', 'Did Not Waits', are inpatients, are referred to 'after hours GP', and who may be direct admissions will be included in the attendance count.

Exclusions:

Numerator:

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1').
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;
 - A77100 – Depreciation Expenses - Leases;
 - A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
 - A79000 - Amortisation Expenses
 - A75000 - Debtors Expenses
 - A76000 - Financial Expenses

- A76100 - Financial Expenses – Leases
- A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense

Denominator:

- Exclude duplicate records within the EDDC extract:
Duplicate records = [Establishment Code], [Account Number], [UMRN], [Date of Birth] and [Arrival Datetime] are identical within the EDDC extract.

Computation:

Numerator / Denominator

Numerator:

Total Expenditure for ED patients in public hospitals and public patients in Contracted Health Entities (CHEs).

Numerator data elements:

Data Element/Data Set

[OBM Program Code]
[Cost Centre L5 name]
[Cost Centre Posting Code]
[Account L2 code]
{YTD amount}

Data Source

- OBM Allocation application
- Oracle 11i financial system

Guide for use

Nil

Denominator:

Total weighted activity for ED patients in public hospitals and public patients in CHEs.

{Weighted ED Attendances}

- Count of the number of records where [Presentation date and time] has a value that is within/equal to the start and end date for the reference period (i.e., calendar month) minus records where [Establishment Code], [Account Number], [UMRN], [Date of Birth] and [Arrival Datetime] are identical within the EDDC extract. These values are then multiplied by the corresponding WAU for each record.
- Both the AECC and UDG grouper group attendances by Episode End Status (also known as disposal code or disposition code) and Triage Category.
- Group [Episode end status/Disposal Code] for the AECC and UDG groupers to new field [EpiEndStat]:

[Episode End Status/Disposal Code] =	EDDC Value	Group to [EpiEndStat]
• Admitted to ward/other admitted patient unit	1	1 (Admitted)

• Admitted to ED OBS	10	
• Admitted to Hospital in the Home	11	
• Admit from HATH	12	
• Returned to HITH	14	
• Returned to RITH	15	
• ED service event completed; departed under own care	2	
• Nursing Home	13	2
• Returned to HATH	16	(Discharged)
• Transferred from HITH	17	
• Transferred from RITH	18	
• Reversal	20	
• Transferred to another hospital for admission	3	3 (Transferred)
• Did not wait to be attended by medical officer	4	4 (Did not wait)
• Left at own risk	5	5 (Left at own risk)
• Died in ED	6	6 (Died in ED)
• Dead on arrival; not treated in ED	7	7 (DOA)
• Referred A/H GP	8	8 (Referred from Triage)
• Unknown	9	9 (Other)

Group [Triage Category] for AECC and UDG grouper to new field [Triage]:

[Triage Category] =	EDDC code	Group to [Triage]
• Resuscitation	1	1
• Emergency	2	2
• Urgent	3	3
• Semi-urgent	4	4
• Non-urgent	5	5
All other codes:		
• Dead on arrival	6	
• Direct Admission	7	9 (other)
• Inpatient	8	
• Not stated	9	

AECC WAUs:

For records from hospitals with valid [Triage], [EpiEndStat], [Age], [Transfer mode] and [Diagnosis] (metro) or [Major Diagnostic Category] (country):

- Apply AECC grouper using [Triage], [EpiEndStat],

[Age], [Transfer mode] and [Diagnosis] (metro) or [Major Diagnostic Category] (country).

- AECC grouper and documentation is available from <https://www.ihsa.gov.au>.

UDG WAUs:

- For records from public hospitals (including public patients at CHEs) with a missing or invalid [Diagnosis] (metro) or [Major Diagnostic Category] (country):
- Apply UDG grouper using [Triage] and [EpiEndStat].
- UDG grouper and documentation is available from <https://www.ihsa.gov.au>.

Denominator data elements:

Data Element/Data Set

[Establishment code]
{Presentation date and time}
[Arrival date and time]
[UMRN]
[Account number]
[Date of Birth]
[Arrival Datetime]
[Triage Category]
[Triage]
[EpiEndStat]
[Diagnosis]
[Age]
[Transfer mode]
[Major Diagnostic Category]

Data Source

EDDC

Guide for use

Nil

Disaggregation data elements:

Data Element/Data Set

Nil

Data Source

Nil

Guide for use

Nil

Comments:

Nil

Representational attributes

Representation class: Mean (average)

Data type: Monetary amount

Unit of measure: Currency

Format: \$N,NNN

Indicator conceptual framework

Framework and dimensions:

2021-22 Outcome Based Management Framework.

Data source attributes

Data sources:

Data Source

Numerator:

- OBM Allocation application
- Oracle 11i financial system.

Denominator:

- Emergency Department Data Collection

Data provider

Numerator:

- System Business Analytics, Information and System Performance, Purchasing and System Performance, WA Department of Health
- Health Service Providers' Finance

Denominator:

- WAUs: Economic Modelling, Information and System Performance, Purchasing and System Performance, WA Department of Health
- EDDC: System Analytics Branch, Information and System Performance, Purchasing and System Performance, WA Department of Health

Quality statement:

Emergency department data is complete every month.

Accountability attributes

Benchmark:

The state (aggregated) target as approved by the Department of Treasury for Average Emergency Department cost per weighted activity unit is \$6,847.

Source from: 2021-22 Budget Paper No. 2, Volume 1, page 318.

This target applies to each of the noted reporting entities for this KPI.

Approved by: Director General, WA Department of Health.

Note: The target outlined above is only relevant to annual reporting and GBS. A different benchmark based on HSPs' service agreements is used for the ongoing performance management of HSPs.

Methodology:

Nil

Further data development/ collection required:

Please note that work is currently underway to reduce the number of ED attendances that do not have a valid diagnosis code. This includes review of the Episode End Status / Disposal Codes.

Other issues caveats: Nil

Source and reference attributes

Reference documents:

- National ABF Operating Model documentation, available under Classifications at <https://www.ihpa.gov.au>.

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Average non-admitted cost per weighted activity unit

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0011
<i>Reporting entities/scope:</i>	NMHS, SMHS, EMHS, CAHS, WACHS
<i>Description:</i>	Measures the costs of delivering non-admitted patient services against a common unit of activity, termed the Weighted Activity Unit (WAU).
<i>Rationale:</i>	<p>This indicator is a measure of the cost per WAU compared with the State (aggregated) target, as approved by the Department of Treasury, which is published in the 2021-22 Budget Paper No. 2, Volume 1.</p> <p>The measure ensures that a consistent methodology is applied to calculating and reporting the cost of delivering non-admitted activity against the state's funding allocation. Non-admitted services play a pivotal role within the spectrum of care provided to the WA public. Therefore, it is important that non-admitted service provision is monitored to ensure the efficient delivery of safe and high-quality care.</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	Annual Reports 2021-22: <ul style="list-style-type: none">• Outcome 1. Public hospital based services that enable effective treatment and restorative healthcare for Western Australians• Service 3 – Public Hospital Non-Admitted Services.• Efficiency

Collection and usage attributes

<i>Population group age from:</i>	All ages.
<i>Population group age to:</i>	All ages.
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$)

General notes:

- Non-admitted patients are those who receive non-emergency care from a health service but who do not undergo a formal admission process.
- Specialist mental health care and community health services are out of scope for this KPI.

Outpatient Clinic Services:

- The term 'clinic' describes various arrangements under which a Hospital delivers specialist services to non-admitted non-emergency department patients.

- These services are provided through specific organisational units staffed to administer and provide a certain range of care in defined locations, at regular or irregular times and where one or more specialist providers deliver care to booked patients.
- Generally, in such clinics, a booking system is administered, and patient care records are maintained to document patient attendances and care provided.
- Note that genetics activity at PCH is mapped to KEMH as the activity reflects services provided by Genetic Services of Western Australia (KEMH).

Non-Admitted Patient Service Event:

- A non-admitted patient service event is an interaction between one or more healthcare provider(s) and one non-admitted patient, which must have therapeutic/clinical content and result in a dated entry in the patient's medical record.
- Special case exceptions are home self-care (when no clinician is present) and multidisciplinary case conferences (when no patient is present) which are valid service events.

Outpatient services provided to admitted patients:

- An outpatient service delivered to an admitted patient is still to be recorded however will be excluded from Non-Admitted Patient Service Event reporting, even where the outpatient activity is not related to the reason for admission.
- This outpatient service delivered to an admitted patient is funded as part of the admitted patient episode.

Weighting Methodology:

- To calculate {Weighted Non-Admitted Patient Service Events}, unweighted non-admitted patient service events are multiplied by their corresponding WAUs. WAUs are applied to each service event based on the Tier 2 clinic type, adjustments relating to, for example, Indigenous status, and whether the clinic is multidisciplinary, patient remoteness and the hospital remoteness level.
- The definitions of the Tier 2 clinic categories (Non-Admitted Services Classification) are available from <https://www.ihpa.gov.au>.
- Non-admitted activity at Kwinana Community Health Centre is reported under Rockingham General Hospital.
- Non-admitted activity at the Oral Health Centre of Western Australia is reported under Sir Charles Gairdner Hospital.
- This indicator includes all public ABF-funded non-

admitted activity purchased from HSPs, as per their Service Agreements. It does not include:

- Small Country Hospitals (no activity targets)
- Nursing posts and other non-hospital establishments.
- Non-admitted activity undertaken by Contracted Health Entities under contractual arrangements directly with the WA Department of Health.

Inclusions:

Numerator:

- From Cost Centres mapped to the following Outcome Based Management (OBM) Programs under Service 3:
- 5.1 (Non-admitted activity)
- 5.2 (Teaching, Training and Research – Non-admitted)
- 6.1 (Public, Private Partnership – Non-admitted Activity)
- 6.2 (PPP – Teaching, Training and Research – Non-admitted Activity).

Include (for all HSPs except for NMHS):

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
- Internal and External Revenue, defined as (Account L2):
 - B15000 - External Revenue
 - B42000 - Services to External Health Services & Organisations

Note that the inclusion of Internal and External Revenue acts as an offset against Total Expenditure.

For NMHS only, include:

- Total Expenditure, defined as (Account L5)
- AAA300 - Total Expenses

The above calculation applies to NMHS due to their individual cost centre structure and treatment of external revenue.

Denominator:

- {Unweighted Non-Admitted Patient Service Events} for the following Non Admitted Patient Data Collection (NAP DC) inclusions:

<i>Field and value names+</i>	<i>NAP DC</i>
Appointment date = Not missing, not invalid	DDMMYYYY
Appointment mental health indicator* = Not specialist	N

mental health	
Appointment attendance code* = Attended Multidisciplinary case conference	ATT MCC (20.56)
Appointment client type code = Outpatient	OP
Appointment session type code* = Individual Group session Multidisciplinary case conference	IND GRP MCC (20.56)
For Health Service Providers: All Appointment payment classification codes are included. For Contracted Health Entities: Appointment payment classification code = Australian Health Care Agreements Reciprocal Health Care Agreements	AHA REC
Clinic NMDS Tier 1 Code = National codes	01 to 24
NHCDC Tier 2 Clinic type code = Not missing, not invalid (as per the IHPA Tier 2 Non- Admitted Services Definitions Manual)	NN.NN

Note: The fields listed above that are derived fields for one or more source systems within the NAP DC are indicated by an asterisk. That is, the fields are mapped and/or calculated from the source system data for some source systems (e.g. TOPAS, webPAS), as they are either not available directly from the source systems or because some of the field values are set based on other fields.

Exclusions:

Numerator:

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1').
- Financial Products defined as expenditure within the

following (Account Level 2):

- A77000 – Depreciation Expenses;
- A77100 – Depreciation Expenses - Leases;
- A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
- A79000 - Amortisation Expenses
- A75000 - Debtors Expenses
- A76000 - Financial Expenses
- A76100 - Financial Expenses – Leases
- A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense

Denominator:

- {Unweighted Non-Admitted Patient Service Events} for the following NAP DC exclusions:

+Field and value names	NAP DC
Appointment date = Missing, invalid	DDMMYYYY
Appointment mental health indicator* = is specialist mental health	Y
Appointment attendance code* = Did not attend Did not wait Non-client event Not specified Unknown	DNA DNW NCE NSP UNK
Appointment client type code = Inpatient Continuing Care Primary Health External/Community Emergency Not specified Unknown	IP CC PH EX ED NS UN
Appointment session type code* = Non client event Not specified Unknown	NCE NSP UNK
For Health Service Providers: No Appointment payment	

classification codes are excluded. For Contracted Health Entities: Appointment payment classification code not = Australian Health Care Agreements Reciprocal Health Care Agreements	 AHA REC
Clinic NMDS Tier 1 Code not = National codes	0, >24
NHCDC Tier 2 Clinic type code = Missing, invalid (as per the IHPA Tier 2 Non-Admitted Services Definitions Manual)	

Note: The fields listed above that are derived fields for one or more source systems within the NAP DC are indicated by an asterisk. That is, the fields are mapped and/or calculated from the source system data for some source systems (e.g. webPAS), as they are either not available directly from the source systems or because some of the field values are set based on other fields.

- {Unweighted Non-Admitted Patient Service Events} for the following [NHCDC Tier 2 Clinic Type] exclusions:

[NHCDC Tier 2 Clinic Type] (see Tier 2 classification information at https://www.iHPA.gov.au) =	
General Practice and Primary care	20.06
Psychiatry	20.45
Psychogeriatric	20.50
Aged Care Assessment	40.02
Primary healthcare	40.08
Family Planning	40.27
General Counselling	40.33
Specialist Mental Health	40.34
Psychogeriatric	40.37
General Imaging	30.01
Medical Resonance Imaging (MRI)	30.02
Computerised Tomography (CT)	30.03
Nuclear Medicine	30.04
Pathology (Microbiology, Haematology, Biochemistry)	30.05

Positron Emission Tomography (PET)	30.06
Mammography Screening	30.07
Clinical Measurement	30.08
COVID-19 Response (Diagnostics)	30.09
COVID-19 Response	20.57 40.63
COVID-19 Vaccination	10.21

- Specialist mental health activity captured in the NAP DC from any feeder system is excluded from the count. This activity is to be reported to Mental Health Data Collections through Psychiatric Services On Line Information System (PSOLIS).

Computation:

Numerator/denominator

Numerator:

Total expenditure for all non-admitted patient services in public hospitals and all non-admitted services provided to public patients by Contracted Health Entities (CHEs).

Calculation: sum (YTD amount)

Numerator data elements:

Data Element/Data Set

[OBM Program Code]

[Cost Centre L5 name]

[Cost Centre Posting Code]

[Account L2 code]

{YTD amount}

Data Sources

- OBM Allocation Application
- Oracle 11i Financial System

Guide for use

Nil

Denominator:

Total non-admitted weighted activity for all patients in public hospitals and all public patients receiving non-admitted services from CHEs.

{Unweighted Non-Admitted Patient Service events} = Count of records in NAP DC where:

- [Appointment date] has a value that is within/equal to the start and end date for the reference period (e.g., calendar month), and
- [Appointment mental health indicator]* = N, and
- [Clinic Tier 2 Classification Code] not = 20.06, 20.45, 20.50, 40.02, 40.08, 40.27, 40.33, 40.34, 40.37, 30.01, 30.02, 30.03, 30.04, 30.05, 30.06, 30.07, 30.08, 30.09, 20.57, 40.63 or 10.21 and
- [Appointment attendance code]* = ATT or MCC (20.56), and
- [Appointment session type code]* = IND or GRP or MCC (20.56), and

- [Appointment client type code] = OP, and
- [Clinic NMDS Tier 1 Code] in (1 to 24), and
- [Appointment payment classification code] = all codes for HSPs and AHA or REC for Contracted Health Entities, and

{Weighted Non-Admitted Patient Service Events} =

Apply the applicable WAU using the [NHCDC Tier 2 clinic type]. Refer to the documentation available at <https://www.iHPA.gov.au>.

Denominator data elements:

Data Element/Data Set

[Establishment code]

[Feeder system code]*

[Appointment_date]

[Appointment attendance code]*

[Appointment client type code]

[Appointment session type code]*

[Appointment payment classification code]

[Appointment mental health indicator]*

[Clinic NMDS Tier 1 Code]

[Clinic Tier 2 Classification Code]

Data Source

NAP DC

Guide for use

Nil

Disaggregation data elements:

Data Element/Data Set

Nil

Data Source

Nil

Guide for use

Nil

Comments:

Nil

Representational attributes

Representation class: Mean (average)

Data type: Monetary amount

Unit of measure: Currency

Format: \$N,NNN

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

Numerator:

- OBM Allocation application

- Oracle 11i financial system.

Denominator:

- NAP DC

Data provider

Numerator:

- System Business Analytics, Information & System Performance, Purchasing and System Performance, WA Department of Health
- Health Service Providers' Finance.

Denominator:

- WAUs: Economic Modelling, Information & System Performance, Purchasing and System Performance, WA Department of Health.
- NAP DC: System Analytics Branch, Information & System Performance, Purchasing and System Performance, WA Department of Health.

Quality statement:

Non-admitted data are being reviewed and further developed in order to improve the consistency and completeness of activity recording and reporting. It is expected that these data will become more robust and reliable over time. As such, care should be taken in reviewing this information.

Accountability attributes

Benchmark:

The state (aggregated) target as approved by the Department of Treasury for average non-admitted cost per weighted activity unit is \$6,864.

Sourced from: 2021-22 Budget Paper No. 2 Volume 1, page 318.

Approved by: Director General, WA Department of Health.

Note: The above target is only relevant to annual reporting and GBS. A different benchmark based on HSPs' service agreements is used for the ongoing performance management of HSPs. Note that particular financial products included in this KPI to acquit the total appropriation of health funding are not included in the calculation of service agreement funding for hospital based services.

Methodology:

Nil

*Further data development/
collection required:*

Nil

Other issues caveats:

Nil

Source and reference attributes

Reference documents:

- Tier 2 Non-Admitted Services Definitions Manual, available at <https://www.ihipa.gov.au>.
- National ABF Operating Model documentation, available at <https://www.ihipa.gov.au>.

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Average cost per bed-day in specialised mental health inpatient services

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0012
<i>Reporting entities/scope:</i>	NMHS, SMHS, EMHS, CAHS, WACHS
<i>Description:</i>	Average cost per bed-day in specialised mental health inpatient services.
<i>Rationale:</i>	Specialised mental health inpatient services provide patient care in authorised hospitals. To ensure quality of care and cost-effectiveness, it is important to monitor the unit cost of admitted patient care in specialised mental health inpatient services. The efficient use of hospital resources can help minimise the overall costs of providing mental health care and enable the reallocation of funds to appropriate alternative non-admitted care.
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	Annual Reports 2021-22: <ul style="list-style-type: none"> • Outcome 1. Public hospital based services that enable effective treatment and restorative healthcare for Western Australians • Service 4. Mental Health Services. • Efficiency

Collection and usage attributes

<i>Population group age from:</i>	All ages.
<i>Population group age to:</i>	All ages.
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$).
	Inclusions: Numerator: <ul style="list-style-type: none"> • From Cost Centres mapped to the following Outcome Based Management (OBM) Programs under Service 4: <ul style="list-style-type: none"> • 7.1 (Acute Inpatient - Mental Health) • 7.2 (Sub-acute Inpatient - Mental Health) • 7.3 (Teaching, Training and Research – Mental Health Inpatient) • 8.1 (Public, Private Partnership - Inpatient Mental Health) • 8.2 (PPP – Teaching, Training and

Research – Inpatient Mental Health).

Include (for all HSPs except NMHS):

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses.
- Internal and External Revenue, defined as (Account L2) :
 - B15000 - External Revenue
 - B42000 - Services to External Health Services & Organisations.

Note that the inclusion of External Revenue acts as an offset against Total Expenditure.

For NMHS only, include:

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses

The above calculation applies to NMHS due to their individual cost centre structure and treatment of external revenue.

Denominator:

Total bed days (occupied beds as at midnight census) of patients in all designated mental health facilities (as listed below).

BedState does not report beds being occupied if patients are on leave from hospital at the time of the census (midnight). Figures include Hospital in the Home – Mental Health.

Facility	Hospital
North Metropolitan Health Service	
Graylands Adult Mental Health Services	Graylands Hospital
Selby Older Adult Mental Health Service	Graylands Hospital
Joondalup Mental Health Unit (excluding the MHOA unit)	Joondalup Health Campus
Sir Charles Gairdner Hospital Mental Health Unit	Sir Charles Gairdner Hospital Mental Health Service (from 20/8/2015 to 5/9/2018) Sir Charles Gairdner Hospital
King Edward Memorial Hospital Mother Baby Inpatient Unit	King Edward Memorial Hospital
Osborne Park Lodge	Osborne Park Hospital
The Frankland/State Forensic Mental Health Services	State Forensic Mental Health Service

South Metropolitan Health Service

Fiona Stanley Hospital Mental Health Inpatient

Fiona Stanley Hospital

Alma Street Centre

Fremantle Hospital

Alma Street Older Adult Mental Health Services

Fremantle Hospital

Mimidi Park Mental Health Unit

Rockingham General Hospital

CAHS

Bentley Adolescent Unit (up to 14 June 2018)

Bentley Hospital and Health Service

PCH Ward 5A Inpatients

Perth Children's Hospital

East Metropolitan Health Service

Moodjar and Yorgum Adult Mental Health Services

Armadale/Kelmscott Memorial Hospital and Health Service

Armadale Mental Health Service for Older People (Banksia ward)

Armadale/Kelmscott Memorial Hospital and Health Service

Armadale Adult Mental Health Rehabilitation Unit (Karri MHU)

Armadale/Kelmscott Memorial Hospital and Health Service

Bentley (Mill Street Centre) Adult Mental Health Services

Bentley Hospital and Health Service

Bentley Older Adult Mental Health Services

Bentley Hospital and Health Service

John Milne Centre

Bentley Hospital and Health Service

East Metropolitan Youth Unit

Bentley Hospital and Health Service

Royal Perth Hospital Mental Health Unit (Ward 2K and MHEC ward from 16 October 2019)

Royal Perth Hospital

St John of God Midland Public Hospital Adult Mental Health Services

St John of God Midland Public Hospital

St John of God Midland Public Hospital Older Adult Mental Health Services

St John of God Midland Public Hospital

WACHS

Albany Mental Health Unit

Albany Hospital

Mabu Liyan Mental Health Unit (Broome Acute Psychiatric Unit)

Broome Hospital

Bunbury Acute Psychiatric Unit

Bunbury Hospital

Kalgoorlie Hospital Mental Health Inpatient Unit

Kalgoorlie Regional Hospital

Exclusions:

Numerator:

Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1').

Financial Products defined as expenditure within the following (Account Level 2):

- A77000 – Depreciation Expenses;
- A77100 – Depreciation Expenses - Leases;
- A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
- A79000 - Amortisation Expenses
- A75000 - Debtors Expenses
- A76000 - Financial Expenses
- A76100 - Financial Expenses – Leases
- A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense

Computation:

Numerator/denominator

Numerator:

Total expenditure for the specialised mental health units.

Numerator data elements:

Data Element/Data Set

[OBM Program Code]

[Cost Centre L5 name]

[Cost Centre Posting Code]

[Account L2 code]

{YTD amount}

Data Source

- OBM Allocation Application
- Oracle 11i Financial System

Guide for use

Nil

Denominator:

Total occupied bed days of patients in specialised mental health units.

Denominator data elements:

Data Element/Data Set

[Hospital Code]

[Ward Code]

[Total Beds Occupied]

[Census Date]

Data Source

BedState

Guide for use

Includes occupied beds (as at midnight census) in all specialised mental health inpatient services (including non-authorised mental health services and Hospital in the Home – Mental Health).

Disaggregation data elements:

Data Element/Data Set

Hospital Code

Data Source

- OBM Allocation Application
- Oracle 11i Financial System
- BedState

Guide for use

Nil

Comments:

Explanatory information for Joondalup Health Campus contract:

- Payments are invoiced on the actual volume (in particular units - Weighted separations, Occasions of Service and Bed days), multiplied by the price for each type of unit under the contract.
- The activity is paid in arrears on the actual volume provided.
- As such, end of year accruals are required for the activity provided in June, or months prior to June, that are not yet invoiced for that year, as this is paid in the following financial year. The majority of this is paid in July.
- Prior year adjustments are also invoiced during the year (when cases are coded).
- Activity, invoicing, coding and other contractual requirements are independently audited.
- End of year adjustments are calculated based on:
 - a. the estimated activity that will be provided in June (note that this estimate is calculated while the activity is taking place before the end of June and before coding is completed)
 - b. any activity that is not coded for months prior to June
 - c. any activity that has not been invoiced for months prior to June
 - d. (for the above three factors the Operator provides their best estimate)
 - e. the Maximum Payment Amount (there are a number of clauses that also can impact on this calculation).

The contractual agreement relates to a reconciliation of the price to the derived price, which occurs in February, and is based on the costs at the benchmark hospitals most recently audited.

Representational attributes

<i>Representation class:</i>	Mean (average)
<i>Data type:</i>	Monetary amount
<i>Unit of measure:</i>	Currency
<i>Format:</i>	\$N,NNN

Indicator conceptual framework

<i>Framework and dimensions:</i>	2021-22 Outcome Based Management Framework
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Data source attributes

<i>Data sources:</i>	Data Source Numerator: <ul style="list-style-type: none"> • OBM Allocation Application • Oracle 11i Financial System. Denominator: <ul style="list-style-type: none"> • BedState. Data provider Numerator: <ul style="list-style-type: none"> • System Business Analytics, Information & System Performance, Purchasing and System Performance, WA Department of Health • Health Service Providers' Finance. Denominator: <ul style="list-style-type: none"> • System Analytics Branch, Information & System Performance, Purchasing and System Performance, WA Department of Health.
<i>Quality statement:</i>	Nil

Accountability attributes

<i>Benchmark:</i>	Individual targets calculated as part of the 2021-22 GBS process for Average cost per bed-day in specialised mental health inpatient services: <table> <tr> <th>Reporting Entity</th><th>Target</th></tr> <tr> <td>NMHS</td><td>\$1,484</td></tr> <tr> <td>SMHS</td><td>\$1,658</td></tr> <tr> <td>EMHS</td><td>\$1,533</td></tr> <tr> <td>CAHS</td><td>\$3,209</td></tr> <tr> <td>WACHS</td><td>\$2,075</td></tr> </table> Sourced from: 2021-22 GBS process. Approved by: Director General, WA Department of Health.	Reporting Entity	Target	NMHS	\$1,484	SMHS	\$1,658	EMHS	\$1,533	CAHS	\$3,209	WACHS	\$2,075
Reporting Entity	Target												
NMHS	\$1,484												
SMHS	\$1,658												
EMHS	\$1,533												
CAHS	\$3,209												
WACHS	\$2,075												
<i>Methodology:</i>	Nil												
<i>Further data development/</i>	Nil												

collection required:

Other issues caveats: Nil

Source and reference attributes

Reference documents: Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Average cost per treatment day of non-admitted care provided by mental health services

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0013
<i>Reporting entities/scope:</i>	NMHS, SMHS, EMHS, CAHS, WACHS
<i>Description:</i>	<p>Average cost per treatment day of non-admitted care provided by public mental health services.</p>
<i>Rationale:</i>	<p>Public community mental health services consist of a range of community-based services such as emergency assessment and treatment, case management, day programs, rehabilitation, psychosocial, residential services and continuing care. The aim of these services is to provide the best health outcomes for the individual through the provision of accessible and appropriate community mental health care. Efficient functioning of public community mental health services is essential to ensure that finite funds are used effectively to deliver maximum community benefit.</p> <p>Public community-based mental health services are generally targeted towards people in the acute phase of a mental illness who are receiving post-acute care. This indicator provides a measure of the cost-effectiveness of treatment for public psychiatric patients under public community mental health care (non-admitted/ambulatory patients).</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	<p>Annual Reports 2021-22:</p> <ul style="list-style-type: none">• Outcome 1: Public hospital based services that enable effective treatment and restorative healthcare for Western Australians• Service 4 – Mental Health Services.• Efficiency

Collection and usage attributes

<i>Population group age from:</i>	All ages.
<i>Population group age to:</i>	All ages.
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$)

Inclusions:

Numerator:

- From Cost Centres mapped to the following Outcome Based Management (OBM) Programs

under Service 4:

- 9.1 (Non-Admitted Patients - Mental Health)
- 10.1 (Mental Health Specific Programs)

Include (for all HSPs except for NMHS):

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
- Internal and External Revenue, defined as (Account L2):
 - B15000 - External Revenue
 - B42000 - Services to External Health Services & Organisations

Note that the inclusion of External Revenue acts as an offset against Total Expenditure.

For NMHS only, include:

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
- The above calculation applies to NMHS due to their individual cost centre structure and treatment of external revenue.

Denominator:

- Community treatment days from public mental health ambulatory care services within the National Minimum Data Set organisations listed below.

Child And Adolescent Health Services

PCH Child And Adolescent Mental Health Service

Specialised Child And Adolescent Mental Health Service

Community Child And Adolescent Mental Health Service

North Metropolitan Health Service

Statewide Specialised Mental Health Service

Stirling Catchment Mental Health Service

Joondalup Catchment Mental Health Service

Lower West Catchment Mental Health Service

Youth Mental Health Service

Womens And Newborn Health Service

South Metropolitan Health Service

Fremantle Mental Health Service

Park Mental Health Service

Fiona Stanley Mental Health Service

East Metropolitan Health Service

Armada Mental Health Service

Royal Perth Hospital (Psychiatry)

Specialised Aboriginal Mental Health Service
 Bentley Mental Health Service
 Midland Mental Health Service
Western Australian Country Health Service (WACHS)
 WACHS ETS Mental Health Service
 Albany Mental Health Service
 Katanning Mental Health Service
 Upper South West Mental Health Service
 Vasse Leeuwin Mental Health Service
 Warren Blackwood Mental Health Service
 Wheatbelt Mental Health Service
 Gascoyne Mental Health Service
 Geraldton Mental Health Service
 Murchison Mental Health Service
 Kalgoorlie Mental Health Service
 Esperance Mental Health Service
 Kimberley Mental Health Service
 Pilbara West Mental Health Service
 Pilbara East Mental Health Service

- Community treatment service types include assessments, counselling and therapy sessions provided by specialised community mental health services, irrespective of whether the client is present at the time of the service contact or the medium by which the contact was delivered.

Exclusions:

Numerator:

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1').
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;
 - A77100 – Depreciation Expenses - Leases;
 - A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
 - A79000 - Amortisation Expenses
 - A75000 - Debtors Expenses
 - A76000 - Financial Expenses
 - A76100 - Financial Expenses – Leases
 - A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance

Expense

Denominator:

- The number of treatment days excludes the service contacts provided to unknown/unregistered clients.

Computation:

Numerator/denominator

Numerator:

Total expenditure on mental health non-admitted care services within the reference period.

Numerator data elements:

Data Element/Data Set

[OBM Program Code]

[Cost Centre L5 name]

[Cost Centre Posting Code]

[Account L2 code]

{YTD amount}

Data Source

OBM Allocation Application

Oracle 11i Financial System

Guide for use

Nil

Denominator:

Total number of community treatment days provided to non-admitted mental health patients within the reference period.

Denominator data elements:

Data Element

[Mental Health Region]

[Organisation]

[Program]

[Service Contact Date]

[Unique Patient Identifier]

Data Source

Mental Health Information Data Collection

Guide for use

Nil

Disaggregation data elements:

Data Element/Data Set

Nil

Data Source

- OBM Allocation Application
- Oracle 11i Financial System
- Mental Health Information Data Collection

Guide for use

Nil

Comments:

- The term 'non-admitted' is used rather than 'ambulatory' care as a more contemporary,

transparent description of the type of care provided. This includes inpatient services providing outreach services to non-admitted patients and community services in-reaching to patients within mental health inpatient and residential services.

- The method for calculation of this indicator is aligned with the national definition provided in *Key Performance Indicators for Australian Public Mental Health Services (2020)*
<https://meteor.aihw.gov.au/content/index.phtml/itemId/720487>
- A treatment day refers to any day on which one or more community service contacts (direct or indirect) are recorded for a consumer during a non-admitted/ambulatory care episode. Multiple service contacts provided by the same mental health organisation on the same day are counted as one treatment day.
- A community service contact is the provision of a clinically significant service by a specialised Mental Health service provider(s) for patients/clients.

Representational attributes

<i>Representation class:</i>	Mean (average)
<i>Data type:</i>	Monetary amount
<i>Unit of measure:</i>	Currency
<i>Format:</i>	\$N,NNN

Indicator conceptual framework

<i>Framework and dimensions:</i>	2021-22 Outcome Based Management Framework
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Data source attributes

Data sources:

Data Source

Numerator:

- OBM Allocation Application
- Oracle 11i Financial System.

Denominator:

- Mental Health Information Data Collection.

Data provider

Numerator:

- System Business Analytics, Information & System Performance, Purchasing and System Performance, WA Department of Health
- Health Service Providers' Finance.

Denominator:

- System Analytics Branch, Information & System Performance, Purchasing and System Performance, WA Department of Health.

Quality statement: Nil

Accountability attributes

Benchmark: Individual targets calculated as part of the 2021-22 GBS process for Average cost per treatment day of non-admitted care provided by public clinical mental health services:

NMHS	\$435
SMHS	\$524
EMHS	\$445
CAHS	\$609
WACHS	\$544

Sourced from: 2021-22 GBS process.

Approved by: Director General, WA Department of Health.

Methodology: Nil

*Further data development/
collection required:* Nil

Other issues caveats: Figures produced within 3 months from the end of the reporting period are subject to change due to lag in data entry.

Source and reference attributes

Reference documents: **Report on Government Services (RoGS) 2021**, Part E, Chapter 13 Mental Health Management
<https://www.pc.gov.au/research/ongoing/report-on-government-services/2021/health>

KPIs for Australian Public Mental Health Services: PI 06 – Average treatment days per three-month community mental health care period, 2020 – (Service level)
<https://meteor.aihw.gov.au/content/index.phtml/itemId/725509>

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

7.2 Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives.

7.2.0 Key effectiveness indicators contributing to Outcome 2

Percentage of transition care clients whose functional ability was either maintained or improved during their utilisation of the Transition Care Program

Identifying and definitional attributes

Metadata item type: Indicator

Synonymous names: Nil

Catalogue identifier: 0014

Reporting entities/scope: DoH

Description: Percentage of transition care clients whose functional ability was either maintained or improved during their utilisation of the Transition Care Program.

Rationale The Transition Care Program is a joint federal, state and territory initiative that aims to optimise the functioning and independence of eligible clients after a hospital stay and enable them to return home or allow time to make decisions on longer term care arrangements, including residential care. Transition Care Program services take place in either a residential or a community setting, including a client's home. A number of care options are available, designed to be flexible in helping meet individual needs. Services may include:

- case management, including establishing community support and services, and where required, identifying residential care options
- medical services provided by a general practitioner
- low intensity therapy such as physiotherapy and occupational therapy
- emotional support and future care planning via a social worker
- nursing support
- personal care
- domestic help
- other therapies as required.

This indicator measures the effectiveness of the Transition Care Program by measuring functional ability improvements in clients utilising the program. Monitoring the success of this indicator can enable improvements in service planning and the development of targeted strategies and interventions that focus on improving the program's effectiveness and ensuring the provision of the most appropriate care to those in need. This enhances the health and wellbeing of Western Australians.

Indicator set: Annual Report 2021-22

Frequency: Annual, by financial year

Outcome area:

Annual Report 2021-22:

- Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives
- Effectiveness

Collection and usage attributes

Population group age from: 16 years (see Comments)

Population group age to: No upper limit

Computation description: [Numerator] divided by [Denominator] multiplied by 100 (expressed as a percentage)

Computation: (Numerator/denominator) x 100

Numerator: Total number of discharges from Transition Care Program service providers contracted by the WA Department of Health where the client either maintained or improved their functional ability during the care period

Numerator data elements: **Data Element/Data Set**
[MBI Result] calculated from [MBI Entry] minus [MBI Exit] (Modified Barthel Index)

Data Source

TCP database

Guide for use

Nil

Denominator: Total number of discharges from TCP service providers contracted by the WA Department of Health

Denominator data elements: **Data Element/Data Set**
[Actual TCP DOD] (Date of Discharge)

Data Source

TCP database

Guide for use

Nil

Disaggregation data elements: **Data Element/Data Set**

Nil

Data Source

Nil

Guide for use

This measure is a statewide indicator as the WA Department of Health (as the Approved Provider) subcontracts the provision of TCP services to non-government organisation (NGO) providers.

Comments: The Modified Barthel Index (MBI) is widely used to assess changes in self-care and mobility activities of daily living. Information is gained from observation and the results are recorded at entry and exit for all

transition care clients.

This indicator compares admission and discharge results from the MBI and determines the percentage of discharges where clients demonstrate maintained or improved MBI results due to utilisation of the TCP.

A greater percentage of transition care clients with stable or improved functional ability than the target would indicate good performance.

While the TCP is typically available to eligible persons over 65 years of age, younger clients may be accepted on a case-by-case basis.

Representational attributes

Representation class: Percentage

Data type: Number

Unit of measure: Person

Format: NNN.N%

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

TCP database (for both numerator and denominator)

Data is provided by the following contracted TCP providers:

- Aegis Aged Care Group – Ascot and Banksia Park
- Amana Living Incorporated TCP – (Bull Creek and Mosman Park)
- Brightwater Care Group – Metro Residential TCP and North Metro Community TCP (Kingsley; Birrallee; Community)
- Carinya Care Services – Carinya of Bicton
- Enrich Living (includes greater Bunbury, Busselton and surrounding districts)
- Juniper Charles Jenkins TCP – Bentley
- Silver Chain – Albany, Denmark and Plantagenet
- WA Country Health Service – Geraldton, Greenough and Chapman Valley
- South West Aboriginal Medical Service – South West region (operational from January 2022)
- Broome Regional Aboriginal Medical Service – Broome region (operational from February 2022)
- Geraldton Regional Aboriginal Medical Service – Geraldton Region (operational from March 2022)

Data provider

Purchasing & Contracting, Resourcing & Purchasing,
Purchasing & System Performance, WA Department of
Health

Quality statement:

Nil

Accountability attributes

Benchmark:

≥ 65%

Sourced from: The target is determined using historical data trends by Purchasing and Contracting Unit, Resourcing and Purchasing.

Approved by: Director General, WA Department of Health

Methodology:

Nil

*Further data development/
collection required:*

Nil

Other issues caveats:

When using the MBI, the following limitations may apply:

- Where a person scores in the lowest categories in most items in the MBI, and in the event of deterioration, there is no possibility to score their function any lower
- The sensitivity to change is limited, and important improvements do not necessarily result in a change in score

Source and reference attributes

Reference documents:

Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Percentage of patients satisfied with patient care at the Quadriplegic Centre

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0015
<i>Reporting entities/scope:</i>	Quadriplegic Centre
<i>Description:</i>	Percentage of patients satisfied with patient care at the Quadriplegic Centre.
<i>Rationale:</i>	<p>The Quadriplegic Centre is a Quality Endorsed Company under International Quality Standard ISO AS/NZS 9001:2015.</p> <p>To ensure compliance with this Quality Standard, the Quadriplegic Centre is audited by external auditors from SAI Global.</p> <p>The patient satisfaction survey is conducted by an independent third party, who is independently contracted on a biennial basis. The policy and procedure is externally audited by SAI Global.</p> <p>The survey is designed to gauge the level of satisfaction with patient care, provide feedback on level of care relative to the National Standards for Disability Services (NSDS) and communicate patients' suggestions and feedback for improvement.</p> <p>The content themes for the survey relate to the NSDS:</p> <ul style="list-style-type: none">• Standard One: Rights• Standard Two: Participation and Inclusion• Standard Three: Individual Outcomes• Standard Four: Feedback and Complaints• Standard Five: Service Access.• Standard Six: Service Management
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Biennial, by financial year
<i>Outcome area:</i>	<p>Annual Reports 2021-22:</p> <ul style="list-style-type: none">• Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives• Effectiveness.

Collection and usage attributes

<i>Population group age from:</i>	18 years.
<i>Population group age to:</i>	No upper limit.

<i>Computation description:</i>	<p>[Numerator] divided by the [Denominator] multiplied by 100 (expressed as a percentage).</p> <p>General notes:</p> <ul style="list-style-type: none"> • The survey consists of 31 closed ended questions (Responses = Yes or No) and one opened ended question for suggested improvements. • The responses to the survey are used to enable production of an accurate correction plan. • The survey responses are captured in an interview. • The survey was last completed in June 2020, with an 83.6% patient satisfaction rate. The next survey is due to be undertaken in June 2022. <p>Inclusions: Total patient population is in scope.</p> <p>Exclusions: Nil</p>
<i>Computation:</i>	[Numerator] / [Denominator] x 100
<i>Numerator:</i>	Sum of 'Yes' responses for all survey participants.
<i>Numerator data elements:</i>	<p>Data Element/Data Set Nil</p> <p>Data Source Refer to Data Source Attributes.</p> <p>Guide for use Nil</p>
<i>Denominator:</i>	31 (total number of possible responses for each survey) multiplied by the number of survey participants.
<i>Denominator data elements:</i>	<p>Data Element/Data Set Nil</p> <p>Data Source Refer to Data Source Attributes.</p> <p>Guide for use Nil</p>
<i>Disaggregation data elements:</i>	<p>Data Element/Data Set Nil</p> <p>Data Source Nil</p> <p>Guide for use Nil</p>
<i>Comments:</i>	<p>Quadriplegic Centre patients are highly dependent individuals with quadriplegia, often with co-morbidity, who:</p> <ul style="list-style-type: none"> • are unable to live independently in the community due to the extent of medical, nursing and personal

care requirements.

Representational attributes

Representation class: Percentage
Data type: Number
Unit of measure: Person
Format: NNN.N%

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

Raw data and summary statistics are provided to the Quadriplegic Centre by an independent third party, who is independently contracted to conduct the survey on a biennial basis.

Data provider

Quadriplegic Centre

Quality statement:

A 4 week time lag is required for surveying, collation of results, analysis and reporting of the survey.

Accountability attributes

Benchmark:

Target: ≥80%

Sourced from: The target was determined using historical data and agreed between the Quadriplegic Centre Chief Executive and the Department of Treasury.

Approved by: Director General, WA Department of Health.

Methodology:

Nil

*Further data development/
collection required:*

Nil

Other issues caveats:

Nil

Source and reference attributes

Reference documents: Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Percentage of people accessing specialist community-based palliative care who are supported to die at home

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0016
<i>Reporting entities/scope:</i>	DoH
<i>Description:</i>	<p>The percentage of people in the Perth metropolitan area accessing Silver Chain community-based palliative care whose wish to die at home was successfully supported.</p>
<i>Rationale:</i>	<p>The preference of the majority of Australians to die in their home and not in a hospital has been well documented. While between 60 and 70 per cent of people state they want to die at home, only about 14 per cent do so.²⁶ In addition to potential distress for patients and families, acute hospital admissions in some patients' final days of life may create avoidable pressures on the hospital system. This is likely to become an increasingly significant issue as the population ages and as an increasing proportion of people live with chronic disease.</p> <p>The WA Department of Health contracts Silver Chain to provide specialist community-based palliative care services in the Perth metropolitan area.</p> <p>This indicator aims to measure the effectiveness of these services in allowing patients to die in the comfort of their home, where it is their wish to do so. A high proportion of people realising their wish to die at home indicates that the service has appropriate strategies in place to provide in-home care appropriate to patients' needs and to avoid unplanned hospital admissions.</p>
<i>Indicator set:</i>	Annual Report 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	<p>Annual Report 2021-22:</p> <ul style="list-style-type: none">• Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives• Effectiveness

²⁶ *Dying Well*, Grattan Institute Report No. 2014-10, September 2014, 2. Available from: <http://grattan.edu.au/wp-content/uploads/2014/09/815-dying-well.pdf>

Collection and usage attributes

Population group age from: All ages

Population group age to: All ages

Computation description: [Numerator] divided by the [Denominator] (expressed as a percentage)

General notes:

- Data are collected by Silver Chain via their patient/client administration system ComCare
- ComCare is a satellite information system for the purposes of collecting non-admitted activity data
- Data are reported monthly to the WA Department of Health (DoH) as patient-level records which are transferred to DoH securely via the DoH's secure file transfer site and incorporated into the Non-Admitted Patient Data Collection (NAP DC)
- Inclusion criteria for this indicator are based on the Silver Chain contract:
 - People living in the Perth metropolitan area who have an active, progressive and advanced disease, who require access to specialist palliative care services
 - Access to services where a medical opinion has been obtained resulting in the client being referred for specialist palliative care
 - Select individual patients (using unique patient identifiers) who have [Silver Chain Service] of HC (Hospice Care) or PAR (Palliative Respite), and [Place of death] recorded and [Desired place of death] of HM (Home) or [Desired place of death at first assessment] of HM (Home) who died in the reporting period.

Inclusions:

Numerator:

- [Silver Chain Service] = HC (Hospice Care) or PAR (Palliative Respite)
- [Patient desired place of death] = HM (Home) OR if [Patient desired place of death] is null, [Patient desired place of death at first assessment] = HM (Home)
- [Place of death] = HM (Home)

Denominator:

- [Silver Chain Service] = HC (Hospice Care) or PAR (Palliative Respite)

- [Patient desired place of death] = HM (Home)
OR if [Patient desired place of death] is null,
[Patient desired place of death at first
assessment] = HM (Home)

Exclusions:

- [Date of death] missing or outside reference period
- [Place of death] missing
- [Patient desired place of death] and [Patient desired place of death at first assessment] are both not equal to HM (Home) (including both being missing)

Computation:

(Numerator/denominator) x 100

Numerator:

Number of people in the Perth metropolitan area who accessed the community palliative care service provided by Silver Chain and who died at home after nominating this as their desired place of death.

Numerator data elements:

Data Element/Data Set

[Silver Chain Service]

[Patient desired place of death]

[Patient desired place of death (at first assessment)]

[Date of death]

[Place of death]

Data Source

NAP DC

Guide for use

A patient's desired place of death is recorded at the time of initial assessment by Silver Chain. This may be subsequently updated if the patient's wishes change. Therefore, [Patient desired place of death] is used where it is not null, otherwise [Patient desired place of death (at first assessment)] is used.

[Place of death] is not recorded if a patient dies after exiting the Silver Chain community palliative care service.

Denominator:

Number of people in the Perth metropolitan area who accessed the community palliative care service provided by Silver Chain and who died (at home or elsewhere) after nominating home as their desired place of death.

Denominator data elements:

Data Element/Data Set

[Silver Chain Service]

[Patient desired place of death]

[Patient desired place of death (at first assessment)]

[Date of death]

Data Source

NAP DC

Guide for use

Nil

Disaggregation data elements: **Data Element/Data Set**

Nil

Data Source

Nil

Guide for use

As Silver Chain provide a metropolitan-wide community palliative care service, it is not appropriate to disaggregate performance by Health Service Provider. Thus, this indicator is reported in the WA DoH annual report only.

Comments:

- Specialist community-based palliative care refers to palliative care undertaken by a professional palliative care team or service with recognised qualifications or accredited training in palliative care, that is provided within a community setting (but not a residential care facility)
- The role of specialist palliative care services includes providing consultation services to support, advise, educate and mentor specialist and non-specialist teams to provide end-of-life and palliative care and/ or to provide direct care to people with complex palliative care needs.
- Recognising that a person is entering the last months or year of life can be difficult to determine. Being able to recognise that a person may be dying can also be difficult, but is an essential requirement for clinicians. Recognising that a person is entering the last months or year of life enables purposeful conversations with people and their families/carers to discuss their preferences and what matters to them.
- While there are some services providing specialist community-based palliative care outside of the Perth metropolitan area, data on these services are not available within the NAP DC
- Recommended to have a 3-month lag in the reference period for the data, to allow sufficient time for data receipt and quality checking.

Representational attributes

Representation class: Percentage

Data type: Number

Unit of measure: Person

Format: NNN.N%

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

NAP DC

Data provider

System Analytics Branch, Information & System Performance, Purchasing & System Performance, WA Department of Health

Quality statement:

Nil

Accountability attributes

Benchmark:

≥76%

Sourced from: There is currently no national target for this indicator. This target is based on available corrected data (from 2018-19 and 2019-20) extracted from the NAP DC.

Approved by: Director General, WA Department of Health

Methodology:

Nil

*Further data development/
collection required:*

Nil

Other issues caveats:

It should be noted that for some people receiving specialist community-based palliative care, death in hospital may be unavoidable despite the provision of specialist community-based palliative care that aligns with best practice.

Additionally, where a patient's wishes change close to their death, it may not be practicable to facilitate their wish to die at home.

Source and reference attributes

Reference documents:

Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Loss of life from premature death due to identifiable causes of preventable disease or injury: (a) Lung cancer; (b) Ischaemic heart disease; (c) Falls; (d) Melanoma; (e) Breast cancer

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Loss of life from premature death due to identifiable causes of preventable disease or injury.
<i>Catalogue identifier:</i>	0017
<i>Reporting entities/scope:</i>	DoH
<i>Description:</i>	Loss of life from premature death due to identifiable causes of preventable disease or injury: (a) Lung cancer; (b) Ischaemic heart disease; (c) Falls; (d) Melanoma; (e) Breast cancer.
<i>Rationale:</i>	<p>This indicator measures the rate of potential years of life lost for the most common causes of premature deaths, which is one of the most important means of monitoring and evaluating the effectiveness, quality and productivity of health systems. The WA health system aims to reduce the loss of life from preventable disease or injury, through the delivery of public health and medical interventions.</p> <p>The rates of potential years of life lost from premature death are measured for lung cancer, ischaemic heart disease, falls, melanoma and breast cancer. These conditions contribute significantly to the burden of disease and injury within the community, and are conditions for which the Department of Health believes premature death should be largely preventable and for which screening or health promotion programs are in place. The data obtained from this key performance indicator assists health system managers to best determine effective and quality targeted promotion and prevention initiatives, which in turn contribute to a reduction in the loss of life from these preventable conditions.</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by calendar year
<i>Outcome area:</i>	Annual Reports 2021-22: <ul style="list-style-type: none"> • Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives • Effectiveness.

Collection and usage attributes

<i>Population group age from:</i>	≥0
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Population group age to:

≤74

Computation description:

Division of the numerator (the potential years of life lost) by the denominator (the Population) results in a potential years of life lost rate. This rate is then age-standardised.

General notes

- The life table method is used to calculate the potential years of life lost.
- Age-standardisation is to the Australian 2001 population. In Australia, the convention followed by the AIHW and the Australian Bureau of Statistics (ABS) is to use the Australian 2001 census data for age-standardisation. Age-standardisation allows the estimates produced for the different time periods and geographical regions (i.e. between the state and the national target) to be compared, as it removes variability in the results that are due to underlying differences in population age structure.

Inclusions:

- Records with ICD-10 codes as the underlying cause of death for the following conditions:
 - Lung cancer: C33.0-C34.9
 - Ischaemic heart disease: I20.0-I25.9
 - Falls: W00.0 to W19.9; or X59 to X59.9 (with any multiple cause of death codes: S02-S02.9, S12-S12.9, S22-S22.9, S32-S32.9, S42-S42.9, S52-S52.9, S62-S62.9, S72-S72.9, S82-S82.9, S92-S92.9, T02-T02.9, T08-T08.9, T10-T10.9, T12-T12.9 or T14.2)
 - Melanoma: C43.0-C43.9
 - Breast cancer: C50.0-C50.9 (females only)
- Lung cancer, ischaemic heart disease, falls and melanoma: only cases who died aged 0-74 years
- Breast cancer: only female cases who died aged 0-74 years
- Only cases who were WA residents at the time of death by year of occurrence.

Exclusions:

Cases aged >74 years at death and non-WA residents who died in WA.

Computation:

[Numerator] divided by [Denominator] age-standardised (expressed as potential years of life lost standardised rate).

Numerator:

Number of potential years of life lost due to each condition (lung cancer, ischaemic heart disease, falls, melanoma and breast cancer) that occurred in the 2020 calendar year.

Potential years of life lost are calculated as: the sum of

the years from age of death to age 74 years, adjusted by all-cause deaths for the likelihood of death from another cause during this period.

Numerator data elements:

Data Element/Data Set

Aggregated number of deaths (by condition and for all -cause deaths) by:

- [Year of Death] and
- [5 year Age Group]

Data Source

Cause of Death by Unit Record File by year of occurrence from the ABS.

Guide for use

Nil

Denominator:

WA Estimated Resident Population

Denominator data elements:

Data Element/Data Set

WA Estimated Resident Population by:

- [Year] and
- [5 year Age Group].

Data Source

- Estimated Resident Population for 2011-2020 as provided by Epidemiology Directorate, Public and Aboriginal Health Division, WA Department of Health

Guide for use

- The Estimated Resident Population estimates from the Epidemiology Directorate are based on data provided by the Australian Bureau of Statistics (ABS).

Disaggregation data elements:

Data Element/Data Set

Nil

Data Source

Nil

Guide for use

This measure is a statewide indicator for WA. The Epidemiology Directorate does not recommend further disaggregating this key performance indicator. Disaggregation results in small numbers that may result in potential issues with data quality and patient confidentiality.

Comments:

The methodology used to process the data for this performance indicator is consistent between years.

Historical data for this indicator is refreshed with each submission to maintain internal consistency within each submission. Therefore, caution should be taken when comparing results across years provided in different reports.

Representational attributes

<i>Representation class:</i>	Rate
<i>Data type:</i>	Number
<i>Unit of measure:</i>	Potential years of life lost per 1,000 person-years
<i>Format:</i>	N.NN

Indicator conceptual framework

<i>Framework and dimensions:</i>	2021-22 Outcome Based Management Framework
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Data source attributes

<i>Data sources:</i>	Data Source Numerator: Cause of Death Unit Record File 2010-2019 custom report from the ABS Denominator: WA Estimated Resident Population Data provider Epidemiology Directorate, Public and Aboriginal Health Division, WA Department of Health
<i>Quality statement:</i>	<p>Death information for this performance indicator comes from the Cause of Death Unit Record File, which combines data and information from the Australian Coordinating Registry, the Registries of Births, Deaths and Marriages, the Coroners, the National Coronial Information System and the Victorian Department of Justice and Community Safety.</p> <p>The coding of the cause of death in the Causes of Death Unit Record File is conducted nationally by the ABS, which results in a time lag of up to two years in reporting death data.</p> <p>The data used in this indicator are subject to revisions. From 2008 the ABS has revised the process of coding the cause of death from coronial cases to allow for revisions based on the coroner's findings. The cause of death coding for the most recent year of data available is considered preliminary, which is revised in the release the following year, and then finalised the year after that. In addition, changes to ICD-10 coding practices over time and updates to the Estimated Resident Population occur. To overcome this, historical data for this indicator are refreshed with each submission.</p>

Accountability attributes

<i>Benchmark:</i>	a) Lung cancer: TBD b) Ischaemic heart disease: TBD c) Falls: TBD d) Melanoma: TBD e) Breast cancer: TBD
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Sourced from: Targets are set each year by the Epidemiology Directorate, Public and Aboriginal Health Division, WA Department of Health.

Targets are based on national figures from the most recent revised National potential years of life lost/1,000 population estimates, derived from data provided by the ABS.

The targets for this KPI are calculated by the Epidemiology Directorate at the same time the data is calculated for annual reporting; that is for the 2021-22 Annual Report, 2019 national potential years of life lost (targets) are provided in June 2022.

Methodology:

Nil

*Further data development/
collection required:*

Nil

Other issues caveats:

Although not all cases of these conditions will be avoidable, it is very difficult to assess what proportion was avoidable without an extensive review of the literature.

Although the WA Department of Health has programs specifically targeted at reducing the impact of these diseases and injuries, not all of the reduction in potential years of life lost can be attributed to these programs, as other influences outside of the Department's jurisdiction may be contributing factors. It is also important to note that positive impacts of health promotion programs on health outcomes can only be realised over the long term.

Minor methodological improvements and updates to death data mean that figures are not directly comparable with previous reports. As such, comparative data is presented for 10 years (the current year of calculation plus the previous 9 calendar years).

Deaths are extracted by year of occurrence, to account for deaths occurring late in a year that may not be registered until the following year. Coding of the cause of death is conducted nationally by the ABS, which results in a time lag of up to 2 years in reporting death data. Also, from 2008 the ABS has revised the process of coding the cause of death from coronial cases to allow for revisions based on the coroner's findings. The cause of death coding for 2020 is considered preliminary, for 2019 considered revised and for 2018 and earlier considered final. The Epidemiology Directorate recommends comparing the national target with the same year of state data (i.e. 2019) to ensure the most meaningful comparison and the use of revised data. For the 2021-22 annual report, revised data will be available for 2019.

Source and reference attributes

Reference documents:

Report on Government Services (ROGS) Part E Health, Health Sector Overview, Indicator – Potentially avoidable deaths.

<https://www.pc.gov.au/research/ongoing/report-on-government-services/2021/health>

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Percentage of fully immunised children (a) 12 months; (b) 2 years; (c) 5 years

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Childhood immunisation
<i>Catalogue identifier:</i>	0018
<i>Reporting entities/scope:</i>	DoH
<i>Description:</i>	<p>For Aboriginal and non-Aboriginal children:</p> <ul style="list-style-type: none">a) Percentage of children fully immunised in the 12- <15month age-cohort, as registered on the Australian Immunisation Register (AIR)b) Percentage of children fully immunised in the 24- <27month (2 years) age-cohort, as registered on the AIRc) Percentage of children fully immunised in the 60- <63 month (5 years) age-cohort, as registered on the AIR.

Rationale: In accordance with the National Partnership Agreement on Essential Vaccines, the WA health system aims to minimise the incidence of major vaccine preventable diseases in Australia by sustaining high levels of immunisation coverage across Western Australia, with equity of access to vaccines and immunisation services. Immunisation is a simple, safe and effective way of protecting people against harmful diseases before they come into contact with them in the community. Immunisation not only protects individuals, but also others in the community, by reducing the spread of disease. Without access to immunisation, the consequences of illness are likely to be more disabling and more likely to contribute to a premature death.

This indicator measures the percentage of fully immunised children that have received age-appropriate immunisations in order to facilitate the effectiveness of strategies that aim to reduce the overall incidence of potentially serious disease.

<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by calendar year
<i>Outcome area:</i>	Annual Reports 2021-22: <ul style="list-style-type: none">• Outcome 2. Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives• Effectiveness.

Collection and usage attributes

<i>Population group age from:</i>	12 months
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Population group age to:

<63 months

Computation description:

[Numerator] divided by [Denominator], multiplied by 100 (expressed as a percentage).

General notes

The cohort method is used for calculating coverage at the population level (national and state/territory). Each cohort is defined by date of birth in 3-month age groups (i.e. 12 to <15 month age cohort, 24 to <27 month age-cohort, 60 to <63 month age-cohort). Cohort immunisation status is assessed per quarter at:

- a) 12 months of age for vaccines due to be given up to 6 months
- b) 24 months of age for vaccines due to be given up to 18 months
- c) 60 months of age for vaccines due to be given up to 4 years.

Note: only immunisations given on or before the 1st, 2nd and 5th birthdays are considered.

'Fully immunised' for children in the above age groups refers to vaccine antigens required at these age points to be considered fully vaccinated for Australian Government Department of Health coverage calculations: <https://beta.health.gov.au/health-topics/immunisation/immunisation-throughout-life/immunisation-for-children>.

Data is stratified by Aboriginal and non-Aboriginal population and summarised by total metropolitan Public Health Units (PHUs), total WACHS PHUs and WA total.

For metropolitan and country area figures, the AIR PHU-level reports for the four quarters comprising data from the relevant calendar year are combined to produce an annual coverage figure.

For state figures, the AIR state level reports for the four quarters comprising data from the relevant calendar year are combined to produce an annual coverage figure.

Inclusions:

- Children who are registered for Medicare.
- Only those immunisation services a child has received up to 12 months, 2 years and 5 years of age.
- Immunisations provided by suitably trained and qualified persons permitted to administer vaccines, including DoH nurses and registered medical practitioners.

Exclusions:

- Non-WA residents.
- Children who are not registered with Medicare.

Computation:

(Numerator/denominator) x 100

<i>Numerator:</i>	<p>The number of children registered on the AIR and assessed as fully immunised in the:</p> <ul style="list-style-type: none"> a) 12-<15 month age-cohort b) 24-<27 month age-cohort c) 60-<63 month age-cohort.
<i>Numerator data elements:</i>	<p>Data Element/Data Set [Person—date of birth, DDMMYYYY] [Service contact—service contact date, DDMMYYYY] [Indigenous indicator]</p> <p>Data Source Australian Immunisation Register quarterly coverage reports provided to WA Health. Equivalent data is reported at: https://www.health.gov.au/health-topics/immunisation/childhood-immunisation-coverage</p> <p>Guide for use Nil</p>
<i>Denominator:</i>	<p>Total number of children registered on the AIR in the:</p> <ul style="list-style-type: none"> a) 12-<15 month age-cohort b) 24-<27 month age-cohort c) 60-<63 month age-cohort. <p>Stratified by Aboriginal population and non-Aboriginal population.</p>
<i>Denominator data elements:</i>	<p>Data Element/Data Set Person—date of birth, DDMMYYYY</p> <p>Data Source Australian Immunisation Register quarterly coverage reports provided to WA Health. Equivalent data can be viewed at: https://www.health.gov.au/health-topics/immunisation/childhood-immunisation-coverage</p> <p>Guide for use Nil</p>
<i>Disaggregation data elements:</i>	<p>Data Element/Data Set Person – Aboriginal status Person – Address</p> <p>Data Source See Numerator and/or Denominator.</p> <p>Guide for use The data is collected based on children’s residential postcodes and aggregated to PHU region:</p> <ul style="list-style-type: none"> • Metropolitan <ul style="list-style-type: none"> ○ North Metropolitan PHU ○ South Metropolitan PHU ○ East Metropolitan PHU • Country

- Goldfields PHU
- Great Southern PHU
- South West PHU
- Wheatbelt PHU
- Midwest PHU
- Pilbara PHU
- Kimberley PHU
- State (Metropolitan plus country PHUs).

Comments:

- The proportion of Aboriginal and non-Aboriginal children who are considered fully immunised are calculated by the AIR. This data is provided to the Communicable Disease Control Directorate, Western Australian Department of Health.
- Immunisation service providers are required to send details of all vaccinations given to the AIR.
- Medicare registration includes the postcode of residence of each child.
- Individuals enrolled in Medicare are automatically included on the AIR. Individuals who are not registered for Medicare are not included in AIR quarterly coverage reports used to produce this KPI.
- This KPI also aligns to the strategic policy document of the WA Health Immunisation Strategy 2016-2020. http://ww2.health.wa.gov.au/Articles/F_I/Immunisation-strategy-2016

Representational attributes

<i>Representation class:</i>	Percentage
<i>Data type:</i>	Number
<i>Unit of measure:</i>	Person
<i>Format:</i>	NNN.N%

Indicator conceptual framework

<i>Framework and dimensions:</i>	2021-22 Outcome Based Management Framework
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Data source attributes

Data sources:

Data Source

Australian Immunisation Register
AIR data is used as it is the only collection representative of all service providers including general practitioners, public immunisation clinics and others.

Data provider

Communicable Disease Control Directorate, Public and Aboriginal Health Division, WA Department of Health.

Quality statement:

The number of children in the population should be taken into account when interpreting rates, and changes over time.

These data are the most reliable indicator available for

immunisation coverage rates at a population level and use the standard national definition.

Without the ability to view the entire WA population level data at an individual level or to remove children who are no longer residing in the state, complete accuracy of the data cannot be ensured. Data cleansing does occur at AIR to ensure records are complete; however, a failure to capture vaccinations that have been given overseas or that have not been reported by an immunisation provider may lead to inaccuracies in coverage data.

Accountability attributes

<i>Benchmark:</i>	<p>≥ 95% (all age cohorts)</p> <p>Sourced from: Immunise Australia Program, Australian Government Department of Health.</p> <p>https://federalfinancialrelations.gov.au/agreements/health-services-national-partnership-agreement-essential-vaccines</p> <p>AIR coverage data can be viewed at: https://beta.health.gov.au/topics/immunisation/childhood-immunisation-coverage.</p> <p>As the target for this KPI is aligned to national agreements, the target will be updated in accordance with changes at the national level.</p>
<i>Methodology:</i>	Nil
<i>Further data development/ collection required:</i>	Nil
<i>Other issues caveats:</i>	This indicator is reported by calendar year to allow for late notification of immunisations to be registered on the AIR.

Source and reference attributes

<i>Reference documents:</i>	<p>National Partnership on Essential Vaccines https://www.aihw.gov.au/reports/immunisation/npev-performance-report-2019-20/summary</p> <p>Australian Technical Advisory Group on Immunisation (ATAGI) website https://www.health.gov.au/committees-and-groups/australian-technical-advisory-group-on-immunisation-atagi</p> <p>Australian Immunisation Handbook, Australian Government Department of Health, Canberra https://immunisationhandbook.health.gov.au/</p> <p>Australian Immunisation Register https://www.humanservices.gov.au/organisations/health-professionals/services/medicare/australian-immunisation-register-health-professionals</p> <p>Immunise Australia Program, National Immunisation</p>
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Program Schedule
<https://www.health.gov.au/health-topics/immunisation/immunisation-throughout-life/national-immunisation-program-schedule>

WA Immunisation Strategy
http://ww2.health.wa.gov.au/Articles/F_I/Immunisation-strategy-2016

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Percentage of 15 year olds in Western Australia that complete their HPV vaccination series

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	HPV vaccination rates for 15 year olds
<i>Catalogue identifier:</i>	0019
<i>Reporting entities/scope:</i>	DoH
<i>Description:</i>	<p>The percentage of male and female Western Australians aged 15 years that have completed their human papilloma virus (HPV) vaccination series</p>
<i>Rationale:</i>	<p>This indicator measures uptake of the human papilloma virus (HPV) vaccination among youth, which is the most effective public health intervention for reducing the risk of developing HPV-related illnesses, including cervical cancer.</p> <p>HPV is a common virus that affects both females and males and is associated with HPV-related illnesses including cancer of the cervix. HPV vaccination can significantly decrease the chances of people developing HPV-related illnesses. As HPV is primarily sexually transmitted both males and females should have the HPV vaccine, preferably before they become sexually active. Providing vaccination at 14 years and under is also known to increase antibody persistence.</p> <p>The HPV vaccine is provided free in schools to all males and females in years 7 under the Western Australian school-based immunisation program. General practitioners, community health clinics and central immunisation clinics also offer vaccination to maximise coverage of older adolescents or those who opted out of the school program.</p> <p>This indicator measures the effectiveness of the Western Australian health system's delivery of vaccination programs and health promotion strategies in maximising the proportion of adolescents who have completed the HPV vaccination series.</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by calendar year
<i>Outcome area:</i>	<p>Annual Reports 2021-22:</p> <ul style="list-style-type: none">• Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives• Effectiveness.

Collection and usage attributes

<i>Population group age from:</i>	15 years of age (defined as those turning 15 during the 2021 calendar year).
<i>Population group age to:</i>	15 years of age (defined as above).
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as percentage).

General notes:

Inclusions:

- Males and females who turned 15 years of age by 31st December of the reporting year.

Exclusions

- Non-WA residents.
- Individuals who were not 15 years of age by 31st December of the reporting year.

<i>Computation:</i>	(Numerator/denominator) x 100
<i>Numerator:</i>	Notified number of males and females (reported separately) who were 15 years of age by 31 st December, registered on the Australian Immunisation Register (AIR) and considered fully vaccinated for HPV.

<i>Numerator data elements:</i>	Data Element/Data Set [Person – sex] [Person – date of birth] [Service contact – service contact date] [HPV dose 1 completion date] [HPV dose 2 completion date]
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Data Source

AIR database

Guide for use

Males and females reported separately

<i>Denominator:</i>	All WA males and females who turned 15 years of age in the 2021 calendar year and were registered in the AIR.
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<i>Denominator data elements:</i>	Data Element/Data Set [Person – sex] [Person – date of birth]
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Data Source

AIR

Guide for use

Males and females reported separately.

<i>Disaggregation data elements:</i>	Data Element/Data Set Person – sex Person – Aboriginal status Person – address
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Data Source

See Numerator and/or Denominator.

Guide for use

- This KPI relates to a statewide service for WA, therefore this indicator is only reported for DoH.
- Results are reported by gender (male/female), location (metropolitan/non-metropolitan) and Aboriginal status (Aboriginal/non-Aboriginal).
- This data is the most reliable indicator available for HPV vaccine coverage in WA. All vaccination providers report each given dose to the AIR database.
- This indicator is based on 15-year-olds who are registered on the AIR. All individuals enrolled in Medicare are automatically registered on the AIR.

*Comments:***Representational attributes**

<i>Representation class:</i>	Percentage
<i>Data type:</i>	Number
<i>Unit of measure:</i>	Person
<i>Format:</i>	NNN.N%

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes*Data sources:***Data Source**

AIR database

Data provider

Communicable Disease Control Directorate (CDCD), Public and Aboriginal Health Division, WA Department of Health.

Data from the AIR is provided to the CDCD by Services Australia.

Quality statement:

Only those individuals registered on the AIR can be monitored. All individuals enrolled in Medicare are automatically registered on the AIR.

This data is the most reliable indicator available for HPV vaccine coverage in WA. While all doses given outside of schools (i.e. at GP practices) should be reported into the AIR database, any failure to submit the necessarily records will result in under-reporting.

Accountability attributes*Benchmark:*

Target: Females \geq 80%; Males \geq 80%

Sourced from:

- There is no national or state target for this indicator.

- The Australian Institute of Health and Welfare (AIHW) report *Australia's Health 2020 in brief* reported that 80% of females and 76% of males turning 15 in 2017 were fully immunised against HPV.
- The National Partnership on Essential Vaccines (NPEV) includes a performance benchmark for HPV coverage by age 15 and the reference period is from the 1st January to the 31st December of each calendar year. The first year of assessment was 2018.
- *Healthy People 2020*, Objectives IID-11.4 and IID-11.5 (Target = 80.0%), Office of Disease Prevention and Health Promotion, US Department of Health and Human Services.

Approved by: Director General, WA Department of Health.

Methodology: Nil

*Further data development/
collection required:* Nil

Other issues caveats: Only those individuals registered on the AIR can be monitored.
School students are typically vaccinated in Years 7 but full immunised status is determined in the year the student turns 15. This aligns with national reporting by the AIHW and NPEV.
Note that a change to the HPV dosing schedule in 2018 may impact comparability of data across years.

Source and reference attributes

Reference documents: **Australia's health 2020** (AIHW):
<https://www.aihw.gov.au/reports-data/australias-health>
National Partnership on Essential Vaccines:
<https://www.aihw.gov.au/reports/immunisation/npev-performance-report-2018-19/contents/summary>

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Rate of women aged 50 – 69 years who participate in breast screening

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0020
<i>Reporting entities/scope:</i>	NMHS
<i>Description:</i>	Rate of women aged 50 – 69 years who participate in breast screening.
<i>Rationale:</i>	<p>BreastScreen Australia aims to reduce illness and death resulting from breast cancer through organised screening to detect cases of unsuspected breast cancer in women, thus enabling early intervention which leads to increased treatment options and improved survival. It has been estimated that breast cancer detected early is considerably less expensive to treat than when the tumour is discovered at a later stage. Mass screening using mammography can improve early detection by as much as 15-35%.²⁷</p> <p>High rates reported against this KPI will reflect the efficient use of the physical infrastructure and specialist staff resources required for the population-based breast cancer screening program. High rates will also be an indication of a sustainable health system as early detection reduces the cost to hospital services at the later stages of a patient's journey.</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, for most recent 2 calendar years
<i>Outcome area:</i>	Annual Reports 2021-22: <ul style="list-style-type: none">• Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives• Effectiveness.

Collection and usage attributes

<i>Population group age from:</i>	50 years
<i>Population group age to:</i>	69 years
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as percentage).
	General notes: <ul style="list-style-type: none">• Age is calculated as the age of the date of first

27 Elixhauser A, Costs of breast cancer and the cost-effectiveness of breast cancer screening, Int J Technol Assess Health Care. 1991; 7(4):604-15. Review.

attendance of the screening episode selected.

- Australian Bureau of Statistics (ABS) data is used to estimate resident female population (Australian Demographic Statistics; Catalogue 3101.0). This value will represent the estimated population at the midpoint of the reference period.

Inclusions:

- Count is of individual women, not screening episodes.
- If a woman has been screened more than once in a 24 month period, then only the last screening episode is to be counted.
- Both symptomatic and asymptomatic women are counted in the numerator.

Exclusions:

BreastScreen WA will screen all women over the age of 40 years however some women are better managed in other services like the high risk clinics operating at tertiary hospitals.

Computation:

(Numerator/denominator) x 100

Numerator:

Number of individual WA women aged 50 – 69 years screened by BreastScreen Western Australia.

Numerator data elements:

Data Element/Data Set

[Age at screening]
[Date of screen]
[Sequence number]
[Client ID]

Data Source

BreastScreen WA register
Data provider: Manager, Information and System Performance, BreastScreen WA.

Guide for use

Women who screen more than once in the reporting period have only their last screen included in the numerator.

Denominator:

Estimated number of women aged 50 – 69 years resident in WA.

Denominator data elements:

Data Element/Data Set

[Average Estimated Resident Population]

Data Source

ABS publication 3101.0 - Australian Demographic Statistics.
Data provider: Epidemiology Directorate, Aboriginal and Public Health Division, WA Department of Health.

Guide for use

Average Estimated Resident Population for women aged

50-69 years for the two year period (if available). Where the most up-to-date Estimated Resident Population figure is unavailable from the ABS, earlier estimates may be used.

Disaggregation data elements: **Data Element/Data Set**

Nil

Data Source

Nil

Guide for use

The budget for BreastScreen WA is received by NMHS, so only NMHS will report this KPI in their Annual Report.

Comments:

- This measure counts women screened within a 24 month period, as it is recommended that women in the relevant cohort attend free screening biennially.
- National Australian Standard definitions of the target cohort for breast screening participation rates were increased to 50 – 74 years from 50 – 69 years in mid-2014. However, the national target remains applicable only to the 50 – 69 years cohort. Until updated target information is available nationally, the WA health system breast screening participation rate indicator will utilise the 50 – 69 years cohort.
- Participation rate data is available May/June each year for the previous calendar year.

Representational attributes

Representation class: Rate

Data type: Number

Unit of measure: Person

Format: NNN.N%

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

Numerator:

BreastScreen WA register

Denominator:

ABS publication 3101.0 - Australian Demographic Statistics.

Data provider

Numerator:

Data and Information Services, BreastScreen WA, North Metropolitan Health Service (NMHS).

Denominator:

Epidemiology Directorate, Public and Aboriginal Health,

Quality statement: WA Department of Health.
BreastScreen WA has an extensive quality assurance program on all aspects of data collection and reporting. This is in response to service accreditation requirements in providing quality screening and assessment care. The comprehensive quality assurance program addresses quality issues including service management, staff training, data audit, case review, data verification and service improvement. Review of the National Accreditation Standards and the Quality Improvement plan is provided by the State Quality Committee.

Accountability attributes

Benchmark: Target: Participation of women aged 50 – 69 years who participated in screening in the most recent 24 month period $\geq 70\%$.
Sourced from: The source of this target is the National Accreditation Standards Annual Data Report measure 1.1.1(b). This target is applicable for all women in the age cohort, regardless of indigenous, socio-economic or linguistic status.
Approved by: Director General, WA Department of Health.

Methodology: Nil

Further data development/ collection required: Nil

Other issues caveats: Nil

Source and reference attributes

Reference documents: **Report on Government Services (RoGS) 2021**
Volume E: Health, Chapter 10 Primary and community health, 10.7 Key performance indicator results – ‘Participation for women in breast cancer screening’ (Participation in BreastScreen Australia screening programs — women aged 50–74 years (24 month period))
<https://www.pc.gov.au/research/ongoing/report-on-government-services/2021/health/primary-and-community-health>

Australian Institute of Health and Welfare (AIHW) website - breast cancer screening participation rates
<https://www.aihw.gov.au/reports-data/health-welfare-services/cancer-screening/overview>

BreastScreen WA Annual Data Report to BreastScreen Australia

National Accreditation Standards Annual Data Report measure 1.1.1(b)
<https://www.health.gov.au/sites/default/files/documents/2019/09/breastscreen-australia-national-accreditation->

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Response times for emergency road-based ambulance services (Percentage of priority 1 calls attended to within 15 minutes in the metropolitan area)

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0021
<i>Reporting entities/scope:</i>	DoH
<i>Description:</i>	Percentage of priority 1 calls attended to within 15 minutes in the Perth metropolitan area by the contracted service provider.

Rationale: To ensure Western Australians receive the care and medical transport services they need, when they need it, the Department of Health has entered into a collaborative arrangement with a service provider to deliver emergency road-based patient transport services to the Perth metropolitan area. This collaboration ensures that patients have access to an effective and rapid response ambulance service to ensure the best possible health outcomes for patients requiring urgent medical treatment.

Response times for emergency patient transport services have a direct impact on the speed with which a patient receives appropriate medical care and can provide a good indication of the effectiveness of road-based patient transport services. It is understood that adverse effects on patients and the community are reduced if response times are decreased.

This indicator measures the timeliness of attendance by a patient transport vehicle and crew within the Perth metropolitan area to patients with the highest need (dispatch priority 1) of emergency medical treatment. Through surveillance of this measure over time, the effectiveness of emergency road-based patient transport services can be determined. This facilitates further development of targeted strategies and improvements to operational management practices aimed at ensuring optimal restoration to health for patients in need of emergency medical care.

Indicator set: Annual Report 2021-22

Frequency: Annual, by financial year

Outcome area: **Annual Report 2021-22:**

- Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives

- Service 6: Public and Community Health Services
- Effectiveness

Collection and usage attributes

Population group age from: All ages

Population group age to: All ages

Computation description: [Numerator] divided by the [Denominator] multiplied by 100 (expressed as a percentage)

Inclusions:

- Dispatch Priority 1 incidents requiring emergency attention
- Metropolitan Perth emergency road-based transport

Exclusions:

- Country road-based patient transport services

Computation: (Numerator/denominator) x 100

Numerator: [Total priority 1 metropolitan cases attended to by patient transport service] - [Priority 1 metropolitan incidents attended to > 15 minutes by patient transport service]

Numerator data elements:

Data Element/Data Set

Reported contracted activity

Data Source

Contracted service provider's monthly and annual reports provided to the WA Department of Health

- Report to the Department of Health Monthly Report
- Report to the Department of Health Annual Report (which is not published but available in August each year)

Guide for use

N/A

Denominator: Total number of dispatch priority 1 cases attended to in the Perth metropolitan area by the patient transport service

Denominator data elements:

Data Element/Data Set

Reported contracted activity

Data Source

Contracted service provider's monthly and annual reports provided to the WA Department of Health

- Report to the Department of Health Monthly Report
- Report to the Department of Health Annual

Report

Guide for use

Nil

Disaggregation data elements: **Data Element/Data Set**

Nil

Data Source

Nil

Guide for use

Nil

Comments:

The Priority Allocation associated with an incident can change throughout the course of the incident. The calculation of this KPI is based only on priority 1 instances where the original Priority Allocation is a Priority 1 (initial call to communications centre).

The equivalent Report on Government Services (RoGS) indicators define response times as the time between the arrival of the first responding ambulance resource at the scene of an emergency code 1 incident, and the initial receipt of the call for an emergency ambulance at the communications centre.

Urban centre response times applied for each jurisdiction's capital city boundaries are based on the Australian Bureau of Statistics Urban Centres Localities structure.

Code 1 incidents are those requiring at least one immediate response under lights and sirens.

Measures in RoGS are provided for the 50th and 90th percentile, however this effectiveness indicator differs in that it provides a percentage of all calls attended.

Representational attributes

Representation class: Percentage

Data type: Number

Unit of measure: Episode

Format: NNN.N%

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

Contracted service provider's monthly and annual reports provided to the WA Department of Health

- Report to the Department of Health Monthly Report
- Report to the Department of Health Annual

Report

Data is provided as raw figures and a percentage by the contracted service provider.

Data provider

- Purchasing & Contracting Unit, Resourcing & Purchasing, Purchasing & System Performance, WA Department of Health

Quality statement: Nil

Accountability attributes

Benchmark: ≥90%
Sourced from: This target is specified in the service agreement with the contracted service provider.
The target value is provided by the WA Department of Health's contract manager each reporting year.
Approved by: Director General, WA Department of Health

Methodology: Nil

*Further data development/
collection required:* Nil

Other issues caveats: Nil

Source and reference attributes

Reference documents: Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Response times for emergency air-based patient transport services (Percentage of emergency air-based inter-hospital transfers meeting the state-wide contract target response time for priority 1 calls)

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0022
<i>Reporting entities/scope:</i>	WACHS
<i>Description:</i>	Percentage of emergency air-based inter-hospital transfers meeting the state-wide contract target response time for priority 1 calls.
<i>Rationale:</i>	<p>To ensure Western Australians receive the care and medical transport services they need, when they need it, WA Country Health Service (WACHS) has entered into a contractual relationship to deliver emergency air-based patient transport services to the WA public. This collaboration ensures that patients have access to an effective aeromedical and inter-hospital patient transfer service to ensure the best possible health outcomes for patients requiring urgent medical treatment through rapid response.</p> <p>Response times for patient transport services have a direct impact on the speed with which a patient receives appropriate medical care and provide a good indication of the efficiency and effectiveness of patient transport services. It is believed that adverse effects on patients and the community are reduced if response times are reduced.</p> <p>Through surveillance of this measure over time, the effectiveness of patient transport services can be determined. This facilitates further development of targeted strategies and improvements to operational management practices aimed at ensuring optimal restoration to health for patients in need of urgent medical care.</p>
<i>Indicator set:</i>	Annual Report 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	<p>Annual Reports 2021-22:</p> <ul style="list-style-type: none"> • Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives • Effectiveness.

Collection and usage attributes

Population group age from: All ages.

Population group age to: All ages.

Computation description: [Numerator] divided by the [Denominator] multiplied by 100 (expressed as a percentage).

General notes

Contract target patient response time for priority 1 calls is defined as the average flight time from the nearest air base to the sending hospital airstrip (including taxi, take-off and landing) plus one hour and 15 minutes for flight preparation.

Data is provided to WACHS as a percentage by the contracted service provider.

Inclusions:

- Flight priority 1 patients
- WA inter-hospital transfers from a:
 - Private hospital to a public hospital
 - Public hospital to a private hospital
 - Public hospital to a public hospital, nursing home or psychiatric hospital, including both admitted patients and those who are non-admitted patients treated in public emergency departments prior to transfer.
- Eligible patients transferred from the Kimberley region to and from the Royal Darwin Hospital, as contracted under a service agreement with the Northern Territory government.

Exclusions:

- Transfers from a hospital that is co-located with an air base
- Transfer to or from outpatient services
- Private patients transferred between private facilities
- Repatriation-transfer of a patient to their home (including interstate)
- Primary evacuation which is patient assessment, treatment and transfer prior to the assessment and care at a health facility. Primary evacuation is provided under funding arrangements with the Australian Government Department of Health and Ageing.

Computation: (Numerator/denominator) x 100

Numerator: Number of Priority 1 inter-hospital transfers meeting the target contract patient response time for Priority 1 calls.

Numerator data elements: **Data Element/Data Set**

Nil

	<p>Data Source Service agreement performance reports provided to WACHS: quarterly timeliness indicator report.</p> <p>Guide for use Data is provided as a percentage by the contracted service provider.</p>
<i>Denominator:</i>	Total number of Priority 1 emergency air-based inter-hospital transfers completed.
<i>Denominator data elements:</i>	<p>Data Element/Data Set Refer to Data Source</p> <p>Data Source Service agreement performance reports provided to WACHS: quarterly timeliness indicator report.</p> <p>Guide for use Data is provided as a percentage by the contracted service provider.</p>
<i>Disaggregation data elements:</i>	<p>Data Element/Data Set Nil</p> <p>Data Source Nil</p> <p>Guide for use The service contract is managed by WACHS as a statewide service and will only be reported by WACHS.</p>
<i>Comments:</i>	<p>Calls are assigned a priority (1 to 3) by the service provider, to ensure that conflicting flight requests are dealt with in order of medical need and to allow operations coordinators to task aircraft and crews in the most efficient means possible to meet these needs. The priority system in place is as follows:</p> <ul style="list-style-type: none"> • Flight Priority 1 is assigned by the Authorising Doctor to a potential life-threatening problem in a location without adequate facilities and where the Patient condition is time-critical. • Flight Priority 2 is assigned by the Authorising Doctor to an urgent medical problem where some stabilisation and treatment is possible locally but the Patient must be moved promptly. • Flight Priority 3 is assigned by the Authorising Doctor to a non-urgent medical condition requiring transfer to another facility for treatment.
Representational attributes	
<i>Representation class:</i>	Percentage
<i>Data type:</i>	Number
<i>Unit of measure:</i>	Episode

Format: NNN.N%

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework.

Data source attributes

Data sources:

Data Source

Service agreement performance reports provided to WACHS: quarterly timeliness indicator report (data for the report is sourced from the service provider).

Data provider

Business Performance WACHS.

Quality statement:

The data is reviewed by WACHS Contracts and validated against a full dataset that is provided by RFDS.

The response time from receipt of the call to the departure of the aircraft incorporates delays in the transport provider's system, including the time taken to assess the flight and assign a priority, the time taken to task the crew, and the time taken for the crew to prepare for the flight and take off.

Accountability attributes

Methodology:

Nil

Benchmark:

≥80%

Sourced from: This target is as specified in the Service Agreement between WACHS and the service provider.

The target value is provided by the contracted service provider (contract manager) each reporting year.

Approved by: Director General, WA Department of Health.

*Further data development/
collection required:*

Nil

Other issues caveats:

Nil

Source and reference attributes

Reference documents:

Service Agreement: Aeromedical Interhospital Patient Transport Services (WACHS2016353), 28 September 2016 to June 2021²⁸

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

²⁸ Note the Aeromedical Interhospital Patient Transport Services Service Agreement has been extended to 30 June 2022 and the ≥80% target remains in place for the 2021-22 reporting period.

Percentage of PathWest test results available to Emergency Departments within the required timeframe (in lab to validated time): (a) Haemoglobin (40 minutes); (b) Potassium (40 minutes); (c) Troponin (50 minutes)

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	PathWest turnaround times
<i>Catalogue identifier:</i>	0023
<i>Reporting entities/scope:</i>	PathWest Only selected public hospitals with emergency departments and on-site PathWest laboratories are in scope for this KPI – refer to <i>Comments</i> section for a full list of hospitals.
<i>Description:</i>	The percentage of pathology tests completed by PathWest on samples from Emergency Departments (EDs) that have results validated and available within the target time, for haemoglobin, potassium and troponin.
<i>Rationale:</i>	<p>PathWest is the main provider of pathology services within the WA health system, servicing all public hospitals in Western Australia.</p> <p>Turnaround times for pathology tests are widely used as an indication of overall pathology service performance. In an Emergency Department, timely availability of pathology test results is crucial for accurate diagnosis and commencement of appropriate treatment. Improvements in pathology turnaround times can also impact the overall functioning of EDs by reducing the length of patient episodes and improving throughput²⁹.</p> <p>This performance indicator is based on three indicators produced by the Australian Council on Healthcare Standards (ACHS). The selection of these specific tests is due to their critical role in diagnosing potentially life-threatening conditions in an emergency setting.</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	<p>Annual Reports 2021-22:</p> <ul style="list-style-type: none"> • Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives • Effectiveness.

²⁹ Kaushik et al (2018). Reduction in laboratory turnaround time decreases emergency room length of stay. *Open Access Emergency Medicine: OAEM*, 10, 37–45. <http://doi.org/10.2147/OAEM.S155988>

Collection and usage attributes

Population group age from: All

Population group age to: All

Computation description: [Numerator] divided by the [Denominator], multiplied by 100 (expressed as a percentage)

Inclusions

SOFT LIS

All completed pathology requests received by PathWest from in-scope hospitals, where:

- [v_s_lab_clinic].[type] = E (denotes an Emergency Department as the ordering ward)
- [v_p_lab_test_result].[test_id] =
 - a) HGBR (Haemoglobin)
 - b) POT (Plasma Potassium) or
 - c) 'TROP','TROP1','TROP2','TROP3','TROP4','TROP5' (Troponin I)
- Note that the list of test codes may change/expand over time
- [v_p_lab_test_result].[state] = 'Final' (include only completed tests)
- [v_p_lab_test_result].[test_performing_location] in ('RPLB', 'AKLB', 'FSLB', 'RKLB', 'QELB', 'PQLB', 'ALLB', 'BYLB', 'KELB', 'GHLB', 'KGLB') (only Health Service Provider Reporting performing labs)
- substr(v_p_lab_order.ordering_clinic_id,1,2) = v_s_lab_location.performing_lab_id (performing lab is at same site as the requesting ward)
- v_p_lab_ordered_test.cancelled_flag = 0 (include only non-cancelled)
- not exists (select 1 from v_p_lab_cancellation where v_p_lab_cancellation.test_result_aa_id = v_p_lab_test_result.aa_id) (include only orders without cancelled results)
- v_p_lab_ordered_test.is_oaddon = 'N' (include tests that are not added on)
- v_p_lab_ordered_test.redundant_flag = 0 (include tests that are not flagged as redundant tests)
- v_p_lab_test_result.not_report_test = 'N' (tests that are not flagged as not reportable)

ULTRA LIS

All completed pathology requests received by PathWest from in-scope hospitals, where:

- [Patient_type] = E (denotes a request from Emergency Department)
- [Result item] =

- a) Hb (Haemoglobin)
- b) K+ (Plasma Potassium) or
- c) Tl, t2, AMO or AIY (Troponin I)

Exclusions

SOFT LIS

- ISTAT tests and Point of Care testing
- Requests made prior to the implementation of SOFT (the new Laboratory Information System)
- [v_p_lab_ordered_test].bill_type != 1 (bills only orders)
- cast([v_p_lab_test_result].collect_dt as timestamp) <= cast([v_p_lab_test_result].test_dt as timestamp) (invalid time interval; specimens resulted before they were collected).
- [v_p_lab_ordered_test].ordering_dt and [v_p_lab_test_result].test_dt are not null (invalid time intervals)
- substr([v_p_lab_ordered_test].[parent_order], 1, 1) != 'A' (orders which have parent order, indicating recurring orders)

ULTRA LIS

- ISTAT tests and Point of Care testing
- Requests made prior to the implementation of a Single Unify Database (SUD)
- [Request Panel Status] = X (cancelled) or H (standing orders pending)
- Add on testing (additional tests requested after the sample is received – i.e. [Added (date)] = NULL)
- Records with invalid time values (i.e. resulted before being received).
- Referred samples (requested at one site but performed at another – i.e. [Lab_registering] ≠ [Lab_performing])
- Alpha <> '/' (item/test not performed)

Computation:

(Numerator/denominator) x 100

Numerator:

Total number of Emergency Department pathology tests resulted and available within the required timeframe – i.e.:

a) Haemoglobin: ≤ 40 minutes

b) Plasma Potassium: ≤ 40 minutes

c) Troponin: ≤ 50 minutes

The calculation to determine if a test is resulted and available within the timeframe = [resulted] time minus [received] time (SOFT LIS) or [resulted] time minus [serviced] time (ULTRA LIS). [registered] is substituted when [serviced] is unavailable.

Numerator data elements:

Data Elements

Ultra

[indicator]
[hospital]
[patient_type]
[lab]
[lab_perform]
[serviced]
[registered]
[added]
[resulted]

Soft

[indicator]
[hospital]
[patient_type]
[lab]
[lab_perform]
[received]
[resulted]

Data Sources

SCC Soft, Laboratory Information Systems, via the PathWest Data Warehouse.

ULTRA Laboratory Information System, via PathWest data warehouse.

Guide for use

Nil

Denominator:

Total number of Emergency Department pathology tests completed at in-scope hospitals for:

- a) Haemoglobin
- b) Potassium
- c) Troponin

Denominator data elements:

Data Element/Data Set

Ultra

[indicator]
[hospital]
[patient_type]
[lab]
[lab_perform]
[serviced]
[registered]
[added]
[resulted]

Soft

[indicator]
 [hospital]
 [patient_type]
 [lab]
 [lab_perform]
 [received]
 [resulted]

Data Source

SCC Soft Laboratory Information Systems, via the PathWest Data Warehouse.

ULTRA Laboratory Information System, via PathWest data warehouse.

Guide for use

Nil

Disaggregation data elements: **Data Element/Data Set**

[indicator]
 [hospital]

Data Source

SCC Soft Laboratory Information Systems, via the PathWest Data Warehouse.

ULTRA Laboratory Information System, via PathWest data warehouse

Comments:

- For PathWest's internal reporting on this indicator, data exceeding an upper bound to the turnaround time calculation is excluded. The default upper threshold is 1,440 minutes for Plasma Potassium and Haemoglobin, and 600 minutes for Troponin.
- This KPI is based on ACHS indicators which are specific to pathology requests from Emergency Departments only. Due to the inconsistent classification of emergency activity in smaller regional hospitals (i.e. Public acute groups C and D³⁰); these sites are excluded from this KPI.
- Peel Health Campus, St John of God Midland Public Hospital and Joondalup Health Campus are out of scope as PathWest does not provide routine pathology services for these hospitals.
- Hospitals in scope for this KPI are:

EMHS:

Royal Perth Hospital, Armadale-Kelmscott District

³⁰ As defined by the Australian Institute of Health and Welfare's *Australian hospital peer groups* at <https://www.aihw.gov.au/getmedia/79e7d756-7cfe-49bf-b8c0-0bbb0daa2430/14825.pdf.aspx?inline=true>.

Memorial Hospital

SMHS:

Fiona Stanley Hospital, Rockingham Hospital

NMHS:

Sir Charles Gairdner Hospital, King Edward Memorial Hospital for Women

CAHS:

Perth Children's Hospital, Princess Margaret Hospital (historical data prior to 10 June 2018 only)

WACHS:

Albany Hospital, Bunbury Hospital, Geraldton Hospital, Kalgoorlie Hospital

- Tests which require offsite transport are not in scope due to the impact of transport time on overall turnaround time.
- The timeframe relevant to this KPI ("in lab" to "validated" time) commences when the pathology sample is received in the laboratory and ends when the test result is available to the requesting party. In Ultra, the available time is calculated by the "resulted" time minus the "serviced" time (or "registered" when "serviced" is unavailable). This reflects the difference (in minutes) between when the specimen is received (in the lab) and the time the result is first reported.
- In Soft, the equivalent of "in lab" to "validated" time points are [received] to [resulted].
- Point-of-care testing (POCT) is often performed within EDs to expedite clinical decision making. Although this is supported by PathWest through provision and maintenance of equipment, only laboratory-tested samples are in scope for this indicator.
- All tests within the cohort are 'auto-validated' and are available for review in iSoft Clinical Manager (iCM) immediately after the item is result. Consequently 'resulted' and 'validated' are synonymous.

Representational attributes

<i>Representation class:</i>	Percentage
<i>Data type:</i>	Number
<i>Unit of measure:</i>	Episode
<i>Format:</i>	NNN.N%

Indicator conceptual framework

<i>Framework and dimensions:</i>	2021-22 Outcome Based Management Framework.
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Data source attributes

<i>Data sources:</i>	Data Source As per numerator and denominator data elements
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Data provider

Manager, Business Information and Performance,
PathWest

Quality statement:

This performance indicator is based on three indicators produced by the Australian Council on Healthcare Standards (ACHS). The selection of these specific tests is due to their critical role in diagnosing potentially life-threatening conditions in an emergency setting.

Turnaround time for in-lab to validated time for Haemoglobin, Potassium and Troponin I is defined and reported nationally in the ACHS Clinical Indicator Report (Pathology Version 4.1):

<https://www.achs.org.au/programs-services/clinical-indicator-program/acir-australasian-clinical-indicator-report/>

LIS downtime may delay the transmission of results from instruments to Ultra and impact on the resulted time. Results are available to be provided to clinicians but may show an extended TAT.

Instrument down time due to instrument, power or IT issues will affect TATs and operational issues may delay the in-lab receipt time.

Accountability attributes

Benchmark:

Target:

- Haemoglobin: 88%
- Plasma Potassium: 67%
- Troponin I: 74%

Sourced from: ACHS Pathology Peer Group Reports (Aggregate of results from all participating Australian Principal Referral hospitals, as defined by the AIHW) in the 2016 and 2017 calendar years. Note that prior to this, Troponin was not included in ACHS reporting).

Approved by: Director General, WA Department of Health

Methodology:

Nil

Further data development/ collection required:

Nil

Other issues caveats:

A new Laboratory Information System (SCC Soft) was implemented during the 2020 calendar year, meaning data in the 2020-21 reporting year is sourced from two different systems to report the indicator. From 2020-21 onwards, the indicator is reported from SCC Soft only.

Source and reference attributes

Reference documents:

**Australian Council on Healthcare Standards (ACHS)
Clinical Indicator User Manual 2016, v4.1**
**ACHS Australasian Clinical Indicator Report 2010-2017,
19th Edition, Pathology Clinical Indicators v4.1**
<https://www.achs.org.au/programs-services/clinical->

[indicator-program/acir-australasian-clinical-indicator-report/](#)

Australian hospital peer groups, AIHW 2015

<https://www.aihw.gov.au/getmedia/79e7d756-7cfe-49bf-b8c0-0bbb0daa2430/14825.pdf>

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Percentage of PathWest Pathology Quality Assurance Program results within an acceptable range

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Indicator type:</i>	Progress Measure
<i>Synonymous names:</i>	PathWest test quality
<i>Catalogue identifier:</i>	0024
<i>Reporting entities/scope:</i>	<p>PathWest</p> <p>All 27 PathWest laboratories that participate in the Royal College of Pathologists Australia (RCPA) Quality Assurance Programs (QAP).</p>
<i>Registration status:</i>	WA Department of Health, Standard
<i>Description:</i>	<p>The percentage of pathology QAP test results that are within the acceptable range defined by the RCPA.</p>
<i>Rationale:</i>	<p>PathWest is the statewide provider of public pathology services within the WA health system, servicing all public hospitals in Western Australia. PathWest performs over 10 million test panels per year.</p> <p>Pathology testing is used to:</p> <ul style="list-style-type: none">• diagnose 70% of all diseases and 100% of cancers• predict susceptibility to disease• prevent disease by identifying risk factors in patients that can be modified• determine patient prognosis• identify the presence or absence of infection• monitor disease, identifying whether treatments are effective, and• personalise treatment to achieve the best clinical outcomes. <p>Tests that fail quality assurance may produce erroneous results. Inaccurate results can lead to misdiagnosis and mistreatment of patients and delays in diagnosis or treatment, leading to increased morbidity or mortality.</p> <p>PathWest is enrolled in a number of external Quality Assurance Programs to meet their mandatory accreditation requirements. The RCPA has the most extensive Quality Assurance Program in Australasia that has over 1,000 submissions from laboratories.</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	<p>Annual Reports 2021-22:</p> <ul style="list-style-type: none">• Outcome 1: Public hospital based services that enable effective treatment and restorative

healthcare for Western Australians

- Effectiveness

Quality statement: Nil

Collection and usage attributes

Population group age from: All

Population group age to: All

Computation description: [Numerator] divided by [Denominator] multiplied by 100 (expressed as percentage).

Inclusions

Every PathWest laboratory is enrolled in the RCPA Quality Assurance Program although the specific enrolments vary by laboratory and specialty or discipline. The laboratories are:

- Albany
- Armadale
- Bentley
- Broome
- Bunbury
- Busselton
- Carnarvon
- Collie
- Derby
- Esperance
- Fiona Stanley Hospital
- Fremantle
- Geraldton
- Kalgoorlie
- Karratha
- Katanning
- Kununurra
- Manjimup
- Merredin
- Narrogin
- Northam
- Osborne Park
- King Edward Memorial Hospital
- Port Hedland
- QEII Medical Centre
- Rockingham
- Royal Perth

Details of enrolments by laboratory are contained within each discipline's Standard Operating Procedure (SOP).

Exclusions

	Nil.
<i>Computation:</i>	(Numerator/denominator) x 100
<i>Numerator:</i>	<p>Number of test results received from the RCPA QAP that fall within the RCPA defined acceptable range for these tests.</p> <p>[Due Date] must fall within the reporting period for the test to be included.</p>
<i>Numerator data elements:</i>	<p>Data Elements</p> <p>[Specialty] [Participant No] [Program] [Cycle] [Survey] [Due date] Specimens] {Total number of test results passed}</p> <p>Data Source RCPA Quality Assurance Program Final Reports</p> <p>Guide for use Nil</p>
<i>Denominator:</i>	Total possible score for test results received from the RCPA during the reporting period.
<i>Denominator data elements:</i>	<p>Data Element/Data Set</p> <p>[Specialty] [Participant No] [Program] [Cycle] [Survey] [Due date] Specimens] {Total possible score}</p> <p>Data Source RCPA Quality Assurance Program Final Reports</p> <p>Guide for use The denominator is the aggregate of total possible scores for test results that meet the target results or are within the limits of performance as determined by the RCPA QAP.</p>
<i>Disaggregation data elements:</i>	<p>Data Element/Data Set Nil</p> <p>Data Source RCPA Quality Assurance Program Final Reports</p> <p>Guide for use For annual reporting purposes, this KPI is reported at entity level only, therefore disaggregation is not required.</p>

Comments:

- Quality Assurance Programs are provided for all disciplines of pathology and are developed with assistance from professional bodies and with significant input from participating laboratories.
- Based on analysis of 2018 data, PathWest submits QAP tests to the RCPA for at least 90% of the pathology tests performed by PathWest.
- RCPA distributes QAP material according to an annual timetable. Frequency depends on the program (e.g. Fortnightly, monthly, quarterly, annually). More common tests have a QAP cycle twice a month and esoteric tests may have only 1 cycle per annum. QAP material is distributed to each of PathWest's 27 laboratories, however some sites have more than 1 instrument that performs a test and the laboratory must submit a result for every analyser producing test results.
- The RCPA evaluates performance against the specifications for all participants and for all instrumentation and methodologies. The acceptable variance for quantitative analysis is determined as having a coefficient of variation within the 90th percentile of all nationally enrolled laboratories. The acceptable variance for qualitative analysis is concordance with the RCPA's defined result for the control sample.
- Each RCPA QAP final report provides a peer comparison of the PathWest results against other Pathology services using the same testing platform and reagents / test method. Where an interpretive comment or diagnostic comment is being compared, PathWest's result is compared with the target diagnosis or consensus result that is determined by the RCPA QAP.
- For qualitative results (e.g. Anatomical Pathology) RCPA indicates that PathWest's result is either concordant or discordant.
- QAP results are used by PathWest to assess the precision and accuracy of test results based on the RCPA's acceptable result variance of their control sample and by comparison to analytical performance specifications set by the RCPA. Failed QAP result(s) prompt the laboratory to check internal quality control and internal processes to identify if patient results may also have been affected.
- Only results received up to and including June 30 will be included.

Representational attributes

<i>Representation class:</i>	Percentage
<i>Data type:</i>	Number
<i>Unit of measure:</i>	Test
<i>Format:</i>	NNN.N%

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

RCPA Quality Assurance Program Final Reports

Frequency

Annually, by financial year

Data provider

Director, Business Intelligence & Performance, PathWest

Accountability attributes

Methodology: Nil

Formulae: Nil

Reporting requirements: Refer to indicator set

Accountability: Health Service Act 2016

Benchmark: Target: 100.0%

Sourced from: Target agreed with Department of Treasury
Approved by: Director General, WA Department of Health

*Further data development/
collection required:* Nil

Other issues caveats: This benchmark is an aspirational target to drive performance improvements.

Source and reference attributes

Reference documents: RCPA Pathology Clinical Indicator User Manual 2015, 7th edition.

[RCPA QAP 2020 Product Catalogue](#)

PathWest SOP for:

- Anatomical Pathology
- Biochemistry and Toxicology
- Diagnostic Genomics
- Haematology
- Immunology
- Microbiology

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Percentage of (a) adults and (b) children who have a tooth retreated within six months of receiving initial restorative dental treatment

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0025
<i>Reporting entities/scope:</i>	NMHS
<i>Description:</i>	<p>The percentage of (a) adults and (b) children who have a tooth retreated within six months of receiving initial restorative dental treatment.</p>
<i>Rationale:</i>	<p>This KPI is used to assess, compare and determine the potential to improve dental care for WA clients. This KPI represents the growing recognition that a capacity to evaluate and report on quality is a critical building block for system-wide improvement of healthcare delivery and patient outcomes.</p> <p>A low unplanned retreatment rate suggests that good clinical practice is in operation. Conversely, unplanned returns may reflect:</p> <ul style="list-style-type: none">• less than optimal initial management• development of unforeseen complications• treatment outcomes that have a direct bearing on cost, resource utilisation, future treatment options and patient satisfaction. <p>By measuring and monitoring this KPI, the level of potentially avoidable unplanned returns can be assessed in order to identify key areas for improvement (i.e. cost-effectiveness and efficiency, initial treatment and patient satisfaction). This KPI is nationally reported in the Australian Council on Healthcare Standards Oral Health Indicators³¹. Its inclusion provides opportunity for benchmarking across jurisdictions.</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, for previous financial year
<i>Outcome area:</i>	<p>Annual Reports 2021-22:</p> <ul style="list-style-type: none">• Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives• Effectiveness.

³¹ <https://www.achs.org.au/programs-services/equip6/equip6-oral-health-services/>

Collection and usage attributes

<i>Population group age from:</i>	a) Adults – 18 years b) Children – Zero
<i>Population group age to:</i>	a) Adults – No upper limit b) Children – 17 years
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as %).

General notes:

- Information taken from Oral Health Clinical Indicator User Manual v4.0, The Australian Council on Healthcare Standards – Adults CI 1.1: Restorative treatment – teeth retreated within 6 months; Children CI 3.1: Restorative treatment (children) – teeth retreated within 6 months.
- The calculation will be performed in its entirety by the DHS.
- The average is calculated across two 6 month periods (previous financial year) to produce an annual report KPI.
- Permanent Teeth/Dentition and Secondary Teeth/Dentition:
 - Describes the teeth notated as FDI code 11-18, 21-28, 31-38, and 41-48
 - General common usage 'Adult Teeth', Permanent and Secondary Teeth or dentition are interchangeable terms
 - This document uses Permanent to describe these specific teeth.
- The following common dental terms are interchangeable: Deciduous Teeth/Dentition and Primary Teeth/Dentition
 - Describes the teeth notated as FDI code 51-55, 61-65, 71-75 and 81-85
 - General common usage 'Baby Teeth', 'Deciduous' and 'Primary Teeth' are interchangeable terms
 - This document uses 'Deciduous' to describe these specific teeth.

Inclusions:

- Only procedures performed by 'in-house' public sector staff are included in the denominator, but retreatments performed by undergraduate and postgraduate students are counted in the numerator.
- Private sector contracted retreatment work is included in the numerator.
- For children - retreatment refers to any treatment provided to the same tooth or for the same condition within the study period and includes:

- Repeat of the same treatment, e.g. replacement of any filling on either deciduous or permanent tooth for a child (less than 18yrs).
- For adults - Retreatment refers to any treatment provided to the same tooth or for the same condition within the study period and includes:
 - Repeat of the same treatment, e.g. replacement of an amalgam restoration.
- Australian Dental Association (ADA) item codes applicable to the Oral Health Indicator set, Service item numbers – 8th & 9th Edition ADA Item Code

For both **numerators**:

511,512,513,514,515,521,
522,523,524,525,526,531,532,
533,534,535,536,541,542,543,
544,545,551,552,553,554,
555,556,572,586,587,588,412,414,
415,419,311,314,
322,323,324. Step-down fee codes where multiple treatments are provided in the same visit: 311a, 314a, 322a, 323a, 324a.

- ADA item codes applicable to the Oral Health Indicator set, Service item numbers – 8th & 9th Edition ADA Item Code

For both **denominators**:

511,512,513,514,515,
521,522,523,524,525,
531,532,533,534,535,
541,542,543,544,545,
551,552,553,554,555,
586,587,588.

Exclusions:

- Public sector work where the initial treatment is provided by undergraduate and postgraduate students is excluded from the initial count (denominator) but included in any retreatments (numerator).
- Private sector contracted work is excluded from the initial count (denominator).

Computation:

(Numerator/denominator) x 100

Numerator:

Adults:

- (a) Total number of permanent teeth retreated within 6 months of an episode of restorative treatment, across two 6 month reporting periods.

Children:

- (b) Total number of teeth retreated within 6 months of

an episode of restorative treatment, across two 6 month reporting period.

Note: Retreatments performed by undergraduate and postgraduate students and private clinicians working under subsidy schemes are included in the numerator.

Numerator data elements:

Data Element/Data Set

[Patient ID]
[Treatment Date]
[Treatment Code]
[Tooth Code]
[Operator Code]
[Clinic Code]

Data Source

Dental Information Management Patient Management System (DenIM PMS).

Guide for use

Nil

Denominator:

Adults:

Total number of permanent teeth restored, across two 6 month reporting periods.

Children:

Total number of teeth restored, across two 6 month reporting periods.

Note: Initial treatment items provided by undergraduate and postgraduate students and private clinicians working under subsidy schemes are to be excluded from the denominator.

Denominator data elements:

Data Element/Data Set

[Patient ID]
[Treatment Date]
[Treatment Code]
[Tooth Code]
[Operator Code]
[Clinic Code]

Data Source

DenIM PMS

Guide for use

Nil

Disaggregation data elements:

Data Element/Data Set

DenIM Clindicator1.1. report extract (adults)
DenIM Clindicator3.1. report extract (children)

Data Source

See Numerator and/or Denominator.

Guide for use

This statewide service is provided by the DHS.

The budget for the DHS is received by NMHS, so only NMHS will report this KPI in their Annual Report.

Comments: DHS is the primary (but not sole) provider of public general dental services in Western Australia.

Re-restoration, endodontic treatment or extraction after placement of dental fillings (restorations) may cause patient inconvenience and decrease patient satisfaction. As well, they decrease cost effectiveness and efficiency.

Representational attributes

Representation class: Percentage

Data type: Number

Unit of measure: Person

Format: NNN.NN%

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source
DenIM PMS

Data provider
DHS, NMHS

Quality statement: Data is collected and reported in accordance with the definitions set out in the Oral Health v4.0 Clinical Indicator User Manual, The Australian Council on Healthcare Standards.

The collection of patient record-level data through the statewide DenIM system allows unique identification of public patients and each individual tooth being retreated across both public and private sector dental providers. Clinical audits to verify this data are conducted by senior clinical managers as part of a regular quality assurance process.

A long lag period (6 months) is required to allow for re-treatments to occur, and then additional time is required for data transfer and quality checking. There may be delays of up to 3 months in the collection of data due to processing of manual claims from external private clinics. Delays may also be experienced in submission of itemised activity reports from external outreach services.

This long lag necessitates the use of previous financial year rather than latest financial year or previous calendar year data for this KPI (i.e. 2020-21 data is reported in the 2021-22 reporting year).

Accountability attributes

Methodology: Nil

Benchmark:

a) Adults: < 7.7%

b) Children: < 2.6%

Sourced from: Australian Council on Healthcare Standards Oral Health Indicators – Interstate Comparative Results (national peer average for the reporting period 2016/17. National peer average included WA, QLD, VIC, TAS and SA).

Approved by: Director General, WA Department of Health.

**Further data development/
collection required:**

Nil

Other issues caveats:

Nil

Source and reference attributes

Reference documents:

Oral Health Clinical Indicator User Manual v4.0, The Australian Council on Healthcare Standards.

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Percentage of eligible school children who are enrolled in the School Dental Service program

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0026
<i>Reporting entities/scope:</i>	NMHS
<i>Description:</i>	<p>The percentage of eligible school-children who are enrolled in the School Dental Service (SDS) program.</p>
<i>Rationale:</i>	<p>Early detection and prevention of dental health problems in children can ensure better health outcomes and improved quality of life throughout the crucial childhood development years and into adult life. While dental disease is common in children, it is largely preventable through population based interventions and individual practices such as personal oral hygiene, better diet and regular preventive dental care.</p> <p>The School Dental Service program ensures early identification of dental problems and, where appropriate, provides treatment. By measuring the percentage of school-children enrolled, the number of children proactively involved in publicly funded dental care can be determined in order to gauge the effectiveness of the program. This in turn can help identify areas that require more focused intervention and prevention and health promotion strategies to help improve the dental health and well-being of children.</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	<p>Annual Reports 2021-22:</p> <ul style="list-style-type: none">• Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives• Effectiveness.

Collection and usage attributes

<i>Population group age from:</i>	5 years
<i>Population group age to:</i>	16 years
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as %).

General notes:

- All school children aged 5 to 16 or until the end of year 11 (whichever comes first) who attend a Western Australian Department of Education

recognised school are eligible for the SDS. A parent/guardian is required to consent to dental examination and screening of their child in the SDS program.

Inclusions:

- Children eligible for the SDS Program.

Exclusions:

- Eligible school children where parental/guardian consent has been refused or withdrawn.
- Any service provided through the Oral Health Centre of Western Australia (OHCWA) and other hospital-run dental facilities (e.g. Perth Children's Hospital).

Computation:

(Numerator/denominator) x 100

Numerator:

Number of school children enrolled in the SDS program.

Numerator data elements:

Data Element/Data Set

DHS DenIM SDS Enrolment extract:

[School Grade]

[SDS Enrolled Students]

Data Source

DenIM PMS

Guide for use

Reported from DHS SDS enrolment figures in June of each financial year (post SDS annual data entry intake).

Denominator:

The number of children eligible for the SDS.

Denominator data elements:

Data Element/Data Set

[School students]

[School Level (Grade)]

Data Source

Department of Education of WA

Guide for use

Provided by Department of Education in March of each financial year (post census).

The Department of Education conducts a student census at the beginning of each semester. Census is the broad term used for the coordinated collection of various data at a particular point in time. The census data includes details and statistics related to public and independent public schools, students and staff with school and student data gained from Catholic and independent schools.

DHS is provided student numbers data collected from the first semester collection held at the end of the second full week of Term 1.

<i>Disaggregation data elements:</i>	Data Element/Data Set Nil Data Source Nil Guide for use DHS is a publicly funded statewide service. This KPI is reported at State level in the NMHS annual report.
<i>Comments:</i>	DHS is the primary (but not sole) provider of public general dental services in Western Australia. ‘Enrolled in program’ - Where a parent/guardian has consented to dental examination and screening of their child in the SDS program.

Representational attributes

<i>Representation class:</i>	Percentage
<i>Data type:</i>	Number
<i>Unit of measure:</i>	Person
<i>Format:</i>	NNN.N%

Indicator conceptual framework

<i>Framework and dimensions:</i>	2021-22 Outcome Based Management Framework
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Data source attributes

<i>Data sources:</i>	Data Source Refer to Numerator and Denominator Data provider DHS, NMHS
<i>Quality statement:</i>	The collection of the SDS patient record-level data through the statewide DenIM system allows unique identification of public patients being treated throughout Western Australia. Clinical audits to verify this data are conducted by senior clinical managers as part of a regular quality assurance process. To ensure consistency, the SDS enrolment data and Department of Education school census data should always be sourced from the same calendar year.

Accountability attributes

<i>Benchmark:</i>	Rate of enrolment: ≥78%. There are no established National or WA state-based targets for this indicator. The target was developed using WA historical data (2018 to 2020). Sourced from: DHS NMHS. Approved by: Director General, WA Department of Health.
<i>Methodology:</i>	Nil

*Further data development/
collection required:* Nil

Other issues caveats: Nil

Source and reference attributes

Reference documents: Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Percentage of eligible people who accessed Dental Health Services

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0027
<i>Reporting entities/scope:</i>	NMHS
<i>Description:</i>	<p>The percentage of eligible people who accessed DHS.</p> <p>Eligible people are defined as those who hold a current Pension Concession Card (Centrelink) or Health Care Card.</p>
<i>Rationale:</i>	<p>Oral health, including dental health, is fundamental to overall health, wellbeing and quality of life, with poor oral health likely to exist when general health is poor and vice versa. This makes access to timely dental treatment services critical in reducing the burden of dental disease on individuals and communities, as it can enable early detection, diagnosis and the use of preventive interventions rather than extensive restorative or emergency treatments.</p> <p>To facilitate equity of access to dental health care for all Western Australians, dental treatment services (including both emergency care and non-emergency care) are provided through subsidised dental programs to eligible people in need. This indicator measures the level of access to these subsidised dental health services by monitoring the proportion of all eligible people receiving the services.</p> <p>Measuring the use of dental health services provided to eligible people can help identify areas that require more focused intervention and prevention and health promotion strategies to help ensure the improved dental health and wellbeing of Western Australians with the greatest need.</p>
<i>Indicator set:</i>	Annual Report 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	<p>Annual Reports 2021-22:</p> <ul style="list-style-type: none">• Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives• Effectiveness.

Collection and usage attributes

<i>Population group age from:</i>	0 years
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<i>Population group age to:</i>	No upper limit
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as %).
	General notes: Nil
	Inclusions: Eligible people are defined as those who hold a current Pension Concession Card (Centrelink) or Health Care Card. Eligible people who access a public dental service or receive treatment through a participating private dental practitioner. Australian Government funded dental health services activity provided through the Child Dental Benefits Schedule is included.
	Exclusions: Australian Government funded dental health services provided through the National Partnership Agreement. Services provided through the Oral Health Centre of Western Australia (OHCWA) and other hospital run dental facilities (e.g. Perth Children's Hospital).
<i>Computation:</i>	(Numerator/denominator) x 100
<i>Numerator:</i>	Number of individual/unique people who accessed DHS.
<i>Numerator data elements:</i>	Data Element/Data Set DenIM annual report extract: [Scheme] [Treatment Payment Date] [Financial Year] [Adult Patients] Data Source DHS DenIM database Guide for use Nil
<i>Denominator:</i>	Number of Pension Concession Card (Centrelink) and HealthCare Card holders in Western Australia.
<i>Denominator data elements:</i>	Data Element/Data Set [State] [Payment recipients] [Payment type] Data Source Department of Social Services (DSS), Australian Government Payment Demographic Data https://data.gov.au/dataset/dss-payment-demographic-data Guide for use Nil

<i>Disaggregation data elements:</i>	Data Element/Data Set Nil Data Source Nil Guide for use DHS is a publicly funded statewide service. This KPI is reported at State level in the NMHS annual report.
<i>Comments:</i>	DHS is the primary (but not sole) provider of public general dental services in Western Australia.
Representational attributes	
<i>Representation class:</i>	Percentage
<i>Data type:</i>	Number
<i>Unit of measure:</i>	Person
<i>Format:</i>	NNN.N%
Indicator conceptual framework	
<i>Framework and dimensions:</i>	2021-22 Outcome Based Management Framework
Data source attributes	
<i>Data sources:</i>	Data Source Numerator: DHS DenIM database Denominator: Services Australia "DSS Demographics" report downloaded from webpage https://data.gov.au/dataset/dss-payment-demographic-data
	Data provider DHS, NMHS
<i>Quality statement:</i>	<p>This KPI measures the access to State Government funded public dental services by eligible individuals seeking this service. Patients who receive services funded under the National Partnership Agreement (NPA) on Public Dental Services for Adults are excluded from this count. There are significant external factors which may lead to fluctuations in this indicator from year to year, including economic climate, disease incidence levels, public dental funding levels, dental workforce levels and access to facilities.</p> <p>There may be delays of up to 3 months in the collection of data due to processing of manual claims from external private clinics at completion of each course of subsidised treatment. This is mitigated by totalling the number of patients based on the financial year in which claims from external providers are processed rather than the date of treatment. Delays may also be experienced in</p>

submission of activity from some external outreach services.

Accountability attributes

Benchmark: Target: $\geq 15\%$
The target was developed using WA historical data.
Sourced from: DHS NMHS.
Approved by: Director General, WA Department of Health.

Methodology: Nil

*Further data development/
collection required:* Nil

Other issues caveats: Nil

Source and reference attributes

Reference documents: Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Percentage of patients who access emergency services at a small rural or remote Western Australian hospital and are subsequently discharged home

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0028
<i>Reporting entities/scope:</i>	WACHS
<i>Description:</i>	<p>The percentage of patients who access emergency services at a small rural or remote Western Australian hospital and have an outcome of discharged home.</p>
<i>Rationale:</i>	<p>Small country hospitals provide emergency care services, residential aged care services and limited acute medical and minor surgical services in locations close to home for country residents and the many visitors to the regions.</p> <p>This indicator measures whether small rural and remote hospital emergency services provide the level of care required to meet the needs of the community. Accessing health services with the outcome of returning home (where clinically justified) is indicative of effective service delivery.</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	<p>Annual Reports 2021-22:</p> <ul style="list-style-type: none">• Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives• Effectiveness

Collection and usage attributes

<i>Population group age from:</i>	All ages.
<i>Population group age to:</i>	All ages.
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as percentage).

Inclusions

- {Presentation Date} and {Presentation Time} are valid, not missing and within the reference period
- [Discharge Date] and [Discharge Time] are not missing and are valid.
- [Triage Category] = 1 (Resuscitation) or 2 (Emergency) or 3 (Urgent) or 4 (Semi-urgent) or 5 (Non-urgent)

Included sites are:

Goldfields

Laverton Hospital, Leonora Hospital, Norseman Hospital

Great Southern

Denmark Hospital, Gnowangerup Hospital, Kojonup Hospital, Plantagenet Hospital, Ravensthorpe Hospital

Kimberley

Fitzroy Crossing Hospital, Halls Creek Hospital, Wyndham Hospital

Midwest

Dongara Health Centre, Exmouth Hospital, Kalbarri Health Centre, Meekatharra Hospital, Morawa Hospital, Mullewa Hospital, North Midlands Hospital, Northampton Hospital

Pilbara

Onslow Health Service, Paraburdoo Hospital, Roebourne Hospital, Tom Price Hospital

South West

Augusta Hospital, Boyup Brook Hospital, Bridgetown Hospital, Donnybrook Hospital, Harvey Hospital, Nannup Hospital, Pemberton Hospital

Wheatbelt

Beverley Hospital, Boddington Hospital, Bruce Rock Hospital, Corrigin Hospital, Dalwallinu Hospital, Dumbleyung Hospital, Goomalling Hospital, Kellerberrin Hospital, Kondinin Hospital, Kununoppin Hospital, Lake Grace Hospital, Narembeen Hospital, Quairading Hospital, Southern Cross Hospital, Wagin Hospital, Wongan Hills Hospital, Wyalkatchem Hospital, York Hospital.

Exclusions

- Patients with the following [Disposal Code] (from both numerator and denominator)
 - Did not wait (4)
 - Left at Own Risk (5)
 - Dead on Arrival (6)
 - Deceased (7)
 - Unknown (9)
 - Admitted from HATH (12)
 - Returned to HITH (14)
 - Returned to RITH (15)
 - Returned to HATH (16)
 - Transferred from HITH (17)
 - Transferred from RITH (18)
 - Discharged after Admission (19)
 - Reversal (20)

	<ul style="list-style-type: none"> • {Presentation Date} and/or {Presentation Time} are missing or invalid • [Discharge Date] and/or [Discharge Time] are missing or invalid
<i>Computation:</i>	(Numerator/denominator) x 100
<i>Numerator:</i>	Number of presentations to emergency services in small rural hospitals who have been discharged home i.e. (Departed under their own care).
<i>Numerator data elements:</i>	<p>Data Element/Data Set</p> <p>[Establishment Code] {Presentation Date} {Presentation Time} [Arrival Date] [Arrival Time] [Triage Date] [Triage Time] [Discharge Date] [Discharge Time] [Disposal Code] [Triage Category]</p> <p>Data Source Emergency Department Data Collection (EDDC)</p> <p>Guide for use Nil</p>
<i>Denominator:</i>	The total number of triaged Emergency Services presentations in Small Rural Hospitals.
<i>Denominator data elements:</i>	<p>Data Element/Data Set</p> <p>[Discharge Date] and [Discharge Date] [Disposal Code] [Triage Category]</p> <p>Data Source Emergency Department Data Collection (EDDC)</p> <p>Guide for use Nil</p>
<i>Disaggregation data elements:</i>	<p>Data Element/Data Set</p> <p>Nil</p> <p>Data Source</p> <p>Nil</p> <p>Guide for use An aggregated result for WACHS will be reported.</p>
<i>Comments:</i>	<ul style="list-style-type: none"> • WACHS Service Agreement includes hospitals that under the current Independent Hospital Pricing Authority definition are treated as small rural

hospitals.³²

- Small rural hospitals are block funded and do not receive activity based funding. For this reason, small rural hospitals are excluded from service lines 1 – 3 of the proposed Outcome Based Management Framework.
- WACHS operates within the WA Health Clinical Service Framework and WACHS Emergency Care Capability Framework for delivery of emergency department services.
- Small rural hospitals within WACHS provide a range of services including emergency department services, outpatient services, inpatient services and aged care services. This may vary site-to-site depending on staffing profiles, clinic service framework and hospital classification.

Representational attributes

<i>Representation class:</i>	Percentage
<i>Data type:</i>	Number
<i>Unit of measure:</i>	Person
<i>Format:</i>	NNN.N%

Indicator conceptual framework

<i>Framework and dimensions:</i>	2021-22 Outcome Based Management Framework
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Data source attributes

<i>Data sources:</i>	Data Source EDDC
	Data provider Emergency Department Data Collection, Information and System Performance Directorate, Purchasing and System Performance Division, WA Department of Health.
<i>Quality statement:</i>	<p>Due to the rapid ED work environment and patient care being the main priority of ED staff, the source data systems are not always robust in terms of completeness of mandatory and logical date/time fields' data values.</p> <p>The procedure for the collection and management of statewide ED data into the Emergency Department Data Collection (EDDC) does not include a complete comprehensive data quality/audit process. However, a Quality Assurance Program, known as the Edits program, has been established at four metropolitan</p>

³² P34, <https://www.ihipa.gov.au/sites/default/files/minisite/static/8601/pricing-framework-2020-21/index.html>

EDs, initially focusing on 23 critical errors primarily related to National ABF and National Minimum Data Set (NMDS) data submissions. This program will be rolled-out across the state and additional errors examined in due course.

Due to the migration from HCARE to webPAS between November 2012 and April 2017, data from this period will have been sourced from either HCARE or webPAS. Caution should be exercised in the interpretation of data spanning across these two source systems.

Accountability attributes

Benchmark:

Target: 85.0%

Sourced from: This target is the average result for the five previous financial years excluding the current financial year (i.e. for the 2021-22 financial year, the five previous financial years used to calculate the target are 2016-17, 2017-18, 2018-19, 2019-20, 2020-21)

Approved by: Director General, WA Department of Health.

Methodology:

Nil

Further data development/ collection required:

Please note that work is underway to reduce the number of ED attendances that do not have a valid Episode End Status / Disposal code.

Other issues caveats:

Nil

Source and reference attributes

Reference documents:

Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

7.2.1 Efficiency indicators within Outcome 2

Average cost of a transition care day provided by contracted non-government organisations/service providers

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0029
<i>Reporting entities/scope:</i>	DoH
<i>Description:</i>	Average cost of a transition care day provided by non-government organisation/service providers contracted by the Department of Health.
<i>Rationale:</i>	<p>The Transition Care Program is a joint federal, state and territory initiative that aims to optimise the functioning and independence of eligible clients after a hospital stay and enable them to return home or allow time to make decisions on longer term care arrangements, including residential care. Transition Care Program services take place in either a residential or a community setting, including in a client's home.</p> <p>The Transition Care Program is tailored to meet the needs of the individual and aims to facilitate a continuum of care for eligible clients in a non-hospital environment.</p>
<i>Indicator set:</i>	Annual Report 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	<p>Annual Report 2021-22:</p> <ul style="list-style-type: none"> • Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives • Service 5: Aged and continuing care services • Efficiency

Collection and usage attributes

<i>Population group age from:</i>	16 years (see Comments)
<i>Population group age to:</i>	No upper limit
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$)
	<p>Inclusions:</p> <p>Numerator:</p> <ul style="list-style-type: none"> • From DoH cost centres mapped to the following DoH Outcome Based Management (OBM) Programs under Service 5, Sub-service 11. Aged and Continuing Care Services: <ul style="list-style-type: none"> ○ 11.3 (Transition Programs) <p>Include:</p>

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
- Recoup Revenue, defined as (Account L2):
 - B15000 - External Recoups
 - B42000 - Services to External Health Services & Organisations

Note that the inclusion of Recoup Revenue acts as an offset against Total Expenditure.

Denominator:

- Transition Care Program care days delivered

Exclusions:

Numerator:

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1')
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;
 - A77100 – Depreciation Expenses - Leases;
 - A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
 - A79000 - Amortisation Expenses
 - A75000 - Debtors Expenses
 - A76000 - Financial Expenses
 - A76100 - Financial Expenses – Leases
 - A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense

Computation:

Numerator/denominator

Numerator:

Total accrued expenditure for delivery of WA Department of Health Transition Care program 11.3 (Transition Programs)

Numerator data elements:

Data Element/Data Set

[OBM Program Code]
 [Cost Centre L5 name]
 [Cost Centre Posting Code]
 [Account L2 code]
 {YTD amount}

	Data Sources OBM Allocation application Oracle 11i financial system Guide for use Nil
<i>Denominator:</i>	Total Transition Care Program care days delivered
<i>Denominator data elements:</i>	Data Element/Data Set Service provider reports and [TCP LOS] (Length of Stay) Data Source Transition Care Program database Guide for use Nil
<i>Disaggregation data elements:</i>	Data Element/Data Set Nil Data Source Nil Guide for use Purchasing & Contracting manages these contracts on a statewide basis, hence disaggregation is not applicable and this indicator is only reported by DoH.
<i>Comments:</i>	Cost centres allocated to this indicator, as well as the proportion allocated, are subject to change. While the Transition Care Program is typically available to eligible persons over 65 years of age, younger clients may be accepted on a case-by-case basis.
Representational attributes	
<i>Representation class:</i>	Mean (average)
<i>Data type:</i>	Monetary amount
<i>Unit of measure:</i>	Currency
<i>Format:</i>	\$N,NNN
Indicator conceptual framework	
<i>Framework and dimensions:</i>	2021-22 Outcome Based Management Framework
Data source attributes	
<i>Data sources:</i>	Data Source Numerator: OBM Allocation application Oracle 11i financial system Denominator: Transition Care Program database Data is provided by the following contracted Transition

Care Program providers:

- Aegis Aged Care Group – Ascot and Banksia Park
- Amana Living Incorporated TCP – (Bull Creek and Mosman Park)
- Brightwater Care Group – Metro Residential TCP and North Metro Community TCP (Kingsley; Birralee; Community)
- Carinya Care Services – Carinya of Bicton
- Enrich Living (includes greater Bunbury, Busselton and surrounding districts)
- Juniper Charles Jenkins TCP – Bentley
- Silver Chain – Albany, Denmark and Plantagenet
- WA Country Health Service – Geraldton, Greenough and Chapman Valley
- South West Aboriginal Medical Service – South West region (operational from January 2022)
- Broome Regional Aboriginal Medical Service – Broome region (operational from February 2022)
- Geraldton Regional Aboriginal Medical Service – Geraldton Region (operational from March 2022)

Data provider

Numerator:

System Business Analytics, Information & System Performance, Purchasing & System Performance, WA Department of Health

Denominator:

Purchasing & Contracting, Resourcing & Purchasing, Purchasing & System Performance, WA Department of Health

Quality statement:

Nil

Accountability attributes

Benchmark:

Target: \$318

Sourced from: 2021-22 WA Budget Statements. Budget Paper No. 2, Volume 1, page 320.

Approved by: Director General, WA Department of Health

Methodology:

Nil

*Further data development/
collection required:*

Nil

Other issues caveats:

Nil

Source and reference attributes

Reference documents: Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Average cost per bed-day for specified residential care facilities, flexible care (hostels) and nursing home type residents

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0030
<i>Reporting entities/scope:</i>	WACHS
<i>Description:</i>	Average cost per bed-day for specified residential care facilities, flexible care (hostels) and nursing home type residents.
<i>Rationale:</i>	WACHS provides long-term care facilities for rural patients requiring 24 hour nursing care. This healthcare service is delivered to high and low dependency residents in nursing homes, hospitals, hostels and flexible care facilities, and constitutes a significant proportion of the activity within WACHS jurisdictions, where access to non-government alternatives is limited.
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	Annual Reports 2021-22: <ul style="list-style-type: none">• Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives• Service 5: Aged and Continuing Care Services.• Efficiency

Collection and usage attributes

<i>Population group age from:</i>	All ages
<i>Population group age to:</i>	All ages
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$).

General notes:

The allocation of accrued expenditure is to be calculated in accordance with the KPI financial distribution model agreed by WACHS Finance Managers.

Inclusions:

Numerator:

- From cost centres mapped to the following Outcome Based Management (OBM) Programs under Service 5:
 - 11.5 Residential and respite care

Include:

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
- Internal and External Revenue, defined as (Account L2):
 - B15000 - External Revenue
 - B42000 - Services to External Health Services & Organisations.

Note that the inclusion of Internal and External Revenue acts as an offset against Total Expenditure.

Denominator:

- Care type is Flexible Care (Multi-Purpose Sites), Aged Care or Boarder; or
- Patient Type is Boarder, Nursing Home Type or Resident; or
- Team is Care Awaiting Placement or PAACS (Patient Awaiting Aged Care Services), or contains the word 'respite' or 'hostel'.

Contributing sites:

Goldfields

Laverton Hospital, Leonora Hospital, Norseman Hospital.

Great Southern

Denmark Hospital, Gnowangerup Hospital, Katanning Hospital, Kojonup Hospital, Plantagenet Hospital, Ravensthorpe Hospital.

Kimberley

Wyndham Hospital, Fitzroy Crossing Hospital, Halls Creek Hospital.

Midwest

Carnarvon Hospital, Dongara Health Centre, Exmouth Hospital, Kalbarri Health Centre, Meekatharra Hospital, Morawa Hospital, Mullewa Hospital, Northampton Hospital, North Midlands Hospital.

Pilbara

Karlarra House Aged Care, Newman Hospital, Paraburdoo Hospital, Roebourne Hospital, Tom Price Hospital, Onslow Health Service.

South West

Augusta Hospital, Boyup Brook Soldiers Memorial Hospital, Bridgetown Hospital, Collie Hospital, Donnybrook Hospital, Harvey Hospital, Margaret River Hospital, Nannup Hospital, Pemberton Hospital, Warren Hospital.

Wheatbelt

Beverley Hospital, Boddington Hospital, Bruce Rock Memorial Hospital, Corrigin Hospital, Dalwallinu Hospital,

Dumbleyung Memorial Hospital, Goomalling Hospital, Kellerberrin Hospital, Kondinin Hospital, Kununoppin Hospital, Lake Grace Hospital, Merredin Hospital, Moora Hospital, Narembeen Memorial Hospital, Quairading Hospital, Southern Cross Hospital, Wagin Hospital, Wongan Hills Hospital, Wyalkatchem-Koorda and Districts Hospital, York Hospital.

Exclusions:

Numerator:

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1').
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;
 - A77100 – Depreciation Expenses - Leases;
 - A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
 - A79000 - Amortisation Expenses
 - A75000 - Debtors Expenses
 - A76000 - Financial Expenses
 - A76100 - Financial Expenses – Leases
 - A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense

Denominator:

- Borders in Residential Aged Care facilities.

Computation:

Numerator/denominator

Numerator:

Total accrued expenditure for WACHS residential care services relating to Program 11.5 Residential and respite care.

Numerator data elements:

Data Element/Data Set

[OBM Program Code]
 [Cost Centre L5 name]
 [Cost Centre Posting Code]
 [Account L2 code]
 {YTD amount}

Data Sources

- OBM Allocation application
- Oracle 11i financial system

Guide for use

Program 11.5 is defined in the OBM Allocation

	application.
<i>Denominator:</i>	Total number of occupied bed-days for WACHS residential care services.
<i>Denominator data elements:</i>	<p>Data Element/Data Set Occupied Bed-Day</p> <p>Data Source Occupied Bed-Day (OBD) Data Warehouse sourced from Patient Administration System.</p> <p>Guide for use Nil</p>
<i>Disaggregation data elements:</i>	<p>Data Element/Data Set Nil</p> <p>Data Source Nil</p> <p>Guide for use This is a statewide service provided by WACHS only to rural and remote populations in WA, hence disaggregation is not applicable.</p>
<i>Comments:</i>	<p>WACHS residential care services include:</p> <ul style="list-style-type: none"> • high dependency care - permanent and respite; • low dependency care - permanent and respite; • nursing home type care in hospital; • hostel care; and • flexible care.
Representational attributes	
<i>Representation class:</i>	Mean (average)
<i>Data type:</i>	Monetary amount
<i>Unit of measure:</i>	Currency
<i>Format:</i>	\$NNN
Indicator conceptual framework	
<i>Framework and dimensions:</i>	2021-22 Outcome Based Management Framework
Data source attributes	
<i>Data sources:</i>	<p>Data Source</p> <p>Numerator: OBM Allocation application Oracle 11i financial system.</p> <p>Denominator: OBD Data Warehouse.</p> <p>Data provider</p> <p>Numerator:</p> <ul style="list-style-type: none"> • Information and System Performance Directorate,

Purchasing and System Performance Division,
WA Department of Health

- WACHS Finance.

Denominator:

- Business Performance, WACHS.

Quality statement:

The Patient Administration System (PAS) records all admissions to dedicated residential care facilities, flexible care hostels and nursing homes which result in occupied bed days (OBDs).

Bed day information is captured through the PAS as a calculation of days residents have been in a dedicated care facility. OBDs are validated at time of data extraction to verify the correct split between residential care and acute bed days.

Accountability attributes

Benchmark:

Target: \$409

Sourced from: 2021-22 WA Budget Statements. Budget Paper No. 2, Volume 1, page 320.

Approved by: Director General, WA Department of Health.

Methodology:

Nil

*Further data development/
collection required:*

Nil

Other issues caveats:

Nil

Source and reference attributes

Reference documents:

Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Average cost per bed-day for WA Quadriplegic Centre specialist accommodation

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0031
<i>Reporting entities/scope:</i>	Quadriplegic Centre
<i>Description:</i>	Average cost per bed-day for WA Quadriplegic Centre specialist accommodation.
<i>Rationale:</i>	This KPI measures how efficiently the WA Quadriplegic Centre delivers its entire suite of services to its clients, whilst at the same time recognising best practice standards and in a manner that maintains quality care for all clients.
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	Annual Reports 2021-22: <ul style="list-style-type: none">• Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives.• Service 5: Aged and Continuing Care Services.• Efficiency.

Collection and usage attributes

<i>Population group age from:</i>	18 years
<i>Population group age to:</i>	No upper limit
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$)

Inclusions:

Numerator:

- From cost centres mapped to the following Outcome Based Management (OBM) Programs under Service 5:
 - 11.8 (Quadriplegic Centre – Inpatient Services)

Include:

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
- Recoup Revenue, defined as (Account L2):
 - B15000 - External Recoups
 - B42000 - Services to External Health Services &

Organisations

Note that the inclusion of Recoup Revenue acts as an offset against Total Expenditure.

Denominator:

Quadriplegic Centre's occupied bed days.

Exclusions:

Numerator:

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1').
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;
 - A77100 – Depreciation Expenses - Leases;
 - A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
 - A79000 - Amortisation Expenses
 - A75000 - Debtors Expenses
 - A76000 - Financial Expenses
 - A76100 - Financial Expenses – Leases
 - A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense

Computation:

Numerator/denominator

Numerator:

Quadriplegic Centre's total accrued expenditure for the nominated period related to Program 11.8 (Quadriplegic Centre – Inpatient Services).

Numerator data elements:

Data Element/Data Set

[OBM Program Code]
[Cost Centre L5 name]
[Cost Centre Posting Code]
[Account L2 code]
{YTD amount}

Data Sources

- OBM Allocation application
- Oracle 11i financial system

Guide for use

Program 11.8 is defined in the OBM Allocation application.

Denominator:

Quadriplegic Centre's total occupied bed days for the

	nominated period.
<i>Denominator data elements:</i>	Data Element/Data Set Nil Data Source Daily census records maintained in a spreadsheet. Guide for use Includes all patients who were inpatients at the Quadriplegic Centre during the year.
<i>Disaggregation data elements:</i>	Data Element/Data Set Nil Data Source Nil Guide for use This service is specific to the Quadriplegic Centre only, hence disaggregation is not applicable.
<i>Comments:</i>	<p>Quadriplegic Centre patients are highly dependent individuals with quadriplegia, often with co-morbidity, who:</p> <ul style="list-style-type: none"> • require post injury rehabilitation are unable to live independently in the community due to the extent of medical, nursing and personal care requirements.
Representational attributes	
<i>Representation class:</i>	Mean (average)
<i>Data type:</i>	Monetary amount
<i>Unit of measure:</i>	Currency
<i>Format:</i>	\$N,NNN
Indicator conceptual framework	
<i>Framework and dimensions:</i>	2021-22 Outcome Based Management Framework
Data source attributes	
<i>Data sources:</i>	Data Source Numerator: <ul style="list-style-type: none"> • OBM Allocation application • Oracle 11i financial system. Denominator: Daily census records maintained in a spreadsheet. Data provider Quadriplegic Centre.
<i>Quality statement:</i>	Nil
Accountability attributes	
<i>Benchmark:</i>	Target: \$1,067

Sourced from: 2021-22 WA Budget Statements. Budget Paper No. 2-Volume 1, page 320.

Approved by: Director General, WA Department of Health.

Methodology: Nil

*Further data development/
collection required:* Nil

Other issues caveats: Nil

Source and reference attributes

Reference documents: Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Average cost per home-based hospital day of care and occasion of service

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0032
<i>Reporting entities/scope:</i>	DoH
<i>Description:</i>	Average cost per home-based hospital day of care and occasion of service.
<i>Rationale:</i>	<p>Home-based hospital services have been implemented as a means of ensuring patients have timely access to effective healthcare. These services aim to provide safe and effective medical care for WA patients in their homes, where they may otherwise require a hospital admission.</p> <p>The Department of Health has entered into collaborative arrangements with service providers to provide home-based hospital services that may be delivered as in-home acute medical care, measured by days of care, or as post-discharge, acute or sub-acute medical and nursing intervention, delivered as occasions of service.</p>
<i>Indicator set:</i>	Annual Report 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	Annual Report 2021-22: <ul style="list-style-type: none">• Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives• Service 5: Aged and continuing care services• Efficiency

Collection and usage attributes

<i>Population group age from:</i>	All ages
<i>Population group age to:</i>	All ages
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$)

General notes:

- Hospital At The Home (HATH) is a hospital substitution program providing acute care for patients in their home environment that would otherwise be provided at a public hospital (not an emergency service). Services are provided 24 hours per day, 7 days a week in the Perth metropolitan area. This service component is measured in days of care.

- Post-Acute Care (PAC) provides nursing and/or allied health services to patients in the immediate post-discharge period from a public hospital, HATH episode or Priority Response Assessment (PRA). Services are provided 24 hours per day, 7 days a week in the Perth metropolitan area. This service component is measured in occasions of service.
- PRA services provide advanced clinical assessment and intervention for acute care patients with chronic health conditions within 4 hours of a referral being received for patients referred by General Practitioners (GPs).
- Hospital Discharge Support (HDS) is a program of up to 6 weeks of home support, primarily involving personal support and allied health services at home. Referrals are taken 24 hours per day, 7 days a week across the State. This service component is measured in occasions of service.
- Complex Nursing (CN) services are provided via referrals from GPs or hospital-based doctors and provide services for clients who may otherwise need to access public hospital services (principally wound care). Referrals are accepted 24 hours per day, 7 days a week across the State. This service component is measured in occasions of service.

Inclusions:

Numerator:

- From DoH cost centres mapped to the following Outcome Based Management programs under Service 5, Sub-service 11. Aged and Continuing Care Services:
 - 11.4 (Home Care Programs - (a) days of care)
 - 11.10 (Home Care Programs - (b) occasions of service)

Include:

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
- Internal and External Revenue, defined as (Account L2):
 - B15000 - External Revenue
 - B42000 - Services to External Health Services & Organisations

Note that the inclusion of Internal and External Revenue acts as an offset against Total Expenditure

Denominator:

- Total of days of HATH care
- Total of occasions of PAC/PRA/HDS/CN services

Exclusions:

Numerator:

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1')
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;
 - A77100 – Depreciation Expenses - Leases;
 - A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
 - A79000 - Amortisation Expenses
 - A75000 - Debtors Expenses
 - A76000 - Financial Expenses
 - A76100 - Financial Expenses – Leases
 - A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense

Computation:

Numerator:

Numerator/denominator

- a) Total delivered HATH expenditure (Program 11.4 – Home Care Programs - (a) days of care)
- b) Total delivered PAC/PRA/HDS/CN expenditure (Program 11.10 – Home Care Programs - (b) occasions of service)

Numerator data elements:

Data Element/Data Set

[OBM Program Code]
[Cost Centre L5 name]
[Cost Centre Posting Code]
[Account L2 code]
{YTD amount}

Data Sources

OBM Allocation application
Oracle 11i financial system.

Guide for use

Programs 11.4 and 11.10 are defined in the Outcome Based Management allocation application

<i>Denominator:</i>	a) Total HATH days of care b) Total number of occasions of PAC/PRA/HDS/CN services
<i>Denominator data elements:</i>	Data Element/Data Set Nil Data Sources Report on Home Hospital Services (Home Hospital HDS report) – provided by contractor to contract manager on a monthly basis. Guide for use Nil
<i>Disaggregation data elements:</i>	Data Element/Data Set Nil Data Source Nil Guide for use Nil
<i>Comments:</i>	<ul style="list-style-type: none"> Days of care are defined in the contract as the number of days where a patient has received one or more occasions of care. HATH patients receive contact in the form of an occasion of care at least five days in a week by clinical staff providing acute care intervention. The occasion of care must be either a face-to-face visit or phone call with significant clinical content and is recorded in the patient record. A leave day is any day with no service events. Leave days are not counted as days of care. Commercial in-confidence precludes specifying individual contract details at reporting, including the name of the organisation(s) and the expenditure values. Cost centres allocated to this indicator, as well as the proportion allocated, are subject to change.

Representational attributes

<i>Representation class:</i>	Mean (average)
<i>Data type:</i>	Monetary amount
<i>Unit of measure:</i>	Currency
<i>Format:</i>	\$NNN

Indicator conceptual framework

<i>Framework and dimensions:</i>	2021-22 Outcome Based Management Framework
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Data source attributes

<i>Data sources:</i>	Data Sources Numerator:
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OBM Allocation application

Oracle 11i financial system

Denominator:

Report on Home Hospital Services (Home Hospital HDS report) – provided by contractor to contract manager on a monthly basis.

Data provider

Numerator:

System Business Analytics, Information & System Performance, Purchasing & System Performance, WA Department of Health

Denominator:

Purchasing & Contracting Unit, Resourcing & Purchasing, Purchasing & System Performance, WA Department of Health

Quality statement:

Nil

Accountability attributes

Benchmark:

Target:

- Day of care: \$301
- Occasion of service: \$145

Sourced from: 2021-22 WA Budget Statements. Budget Paper No. 2, Volume 1, page 320.

Approved by: Director General, WA Department of Health

Methodology:

Nil

*Further data development/
collection required:*

The term 'occasions of service' is currently used in the service contract. Further development of the contract is required to align with the National Health data dictionary in replacing 'occasions of service' with 'service events'.

Other issues caveats:

Nil

Source and reference attributes

Reference documents:

Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Average cost per client receiving contracted palliative care services

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0033
<i>Reporting entities/scope:</i>	DoH
<i>Description:</i>	Average cost per client receiving contracted palliative care services.
<i>Rationale:</i>	<p>Palliative care is an approach that improves the quality of life of individuals, including their family/carer, facing problems associated with life-threatening illness/condition, through the prevention and relief of suffering. Palliative care recognises the person and the importance and uniqueness of their family/carer. It serves to maximise the quality of life and considers physical, social, financial, emotional, and spiritual distress. Such distress not only influences the experience of having a life-limiting illness but also influences treatment outcomes.</p> <p>In addition to palliative care services that are provided through the public health system, the Department of Health has entered into collaborative arrangements with service providers to provide palliative care services for those in need.</p>
<i>Indicator set:</i>	Annual Report 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	<p>Annual Report 2021-22:</p> <ul style="list-style-type: none"> • Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives • Service 5: Aged and continuing care services • Efficiency

Collection and usage attributes

<i>Population group age from:</i>	All ages (see Comments)
<i>Population group age to:</i>	All ages
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$)

General notes:

- Effective palliative care requires a broad multidisciplinary approach and may be provided in hospital or at home. The services include nursing and medical services at home, respite care, care

in designated inpatient palliative care facilities and community care and support.

- The WA Department of Health currently contract palliative care services from the following providers, who comprise the total activity data for this measure:
 - Silver Chain Group – Palliative Care - statewide (WA Department of Health)
 - St John of God Health Care Inc [Murdoch] - south metropolitan area (South Metropolitan Health Service)
 - St John of God Health Care [Bunbury] - southwest region (WA Country Health Service)
 - Bethesda Hospital (non-hospital component) - north metropolitan area (North Metropolitan Health Service)

Inclusions:

Numerator:

- From cost centres mapped to the following Outcome Based Management (OBM) programs under Service 5, Sub-service 12. Palliative & Cancer Care Services:
 - 12.2 (Contracted Palliative & Cancer Care Services)

Include:

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
- Internal and External Revenue, defined as (Account L2):
 - B15000 - External Revenue
 - B42000 - Services to External Health Services & Organisations

Note that the inclusion of Internal and External Revenue acts as an offset against Total Expenditure.

Denominator:

- Number of clients who have received contracted palliative care services during the reporting period.
 - Silver Chain Group: Unique patients who have [Silver Chain Service] of HC (Hospice Care), who received at least one active day of care during the reporting period. Inclusion criteria for this indicator are based on the Silver Chain contract.
 - St John of God Health Care [Bunbury]: Unique clients who have [Claim Type] of Public and [Care Type] of Palliative.
 - St John of God Health Care Inc [Murdoch]: Unique clients as per supplementary data provided with contract reporting.
 - Bethesda Hospital (non-hospital component): Episodes of care are

determined by total bed days divided by average length of stay, as per contract reporting. Total bed days include pre-purchased bed days and annual bed days.

Exclusions:

Numerator:

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1')
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;
 - A77100 – Depreciation Expenses - Leases;
 - A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
 - A79000 - Amortisation Expenses
 - A75000 - Debtors Expenses
 - A76000 - Financial Expenses
 - A76100 - Financial Expenses – Leases
 - A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense

Denominator:

- Silver Chain Group: bereavement clients are not included
- St John of God Health Care Inc [Murdoch]: activity for patient transport services is not included
- Bethesda Hospital: ABF funded hospital activity is not included

Computation:

Numerator/denominator

Numerator:

Total expenditure for delivery of contracted palliative care and other expenditure supporting service delivery

Numerator data elements:

Data Element/Data Set

[OBM Program Code]

[Cost Centre L5 name]

[Cost Centre Posting Code]

[Account L2 code]

{YTD amount}

Data Sources

- OBM Allocation application
- Oracle 11i financial system

	<p>Guide for use</p> <p>Nil</p>
<i>Denominator:</i>	Number of clients who have received contracted palliative care services during the reporting period
<i>Denominator data elements:</i>	<p>Data Element/Data Set</p> <p>Silver Chain Group:</p> <p>[SILVER CHAIN SERVICE] [PATIENT IDENTIFIER] [APPOINTMENT DATES]</p> <p>St John of God Health Care Inc [Bunbury]:</p> <p>[UR] [ADMISSION_DATE] [DISCHARGE_DATE] [CLAIM_TYPE] [CARE_TYPE]</p> <p>St John of God Health Care Inc [Murdoch]:</p> <p>[URN] [DISCHARGE DATE]</p> <p>Data Sources</p> <ul style="list-style-type: none"> • Silver Chain Group: NAP DC • St John of God Health Care Inc [Murdoch]: Supplementary data from monthly contract activity reports. • St John of God Health Care [Bunbury]: annual activity report. • Bethesda Hospital: monthly contract activity reports. <p>Guide for use</p> <ul style="list-style-type: none"> • A client is considered a public patient, inclusive of the patient's family members or carers accessing support services. Support services provided to family members or carers of the patient are in scope for this indicator, however these recipients are not counted as separate clients to the patient.
<i>Disaggregation data elements:</i>	<p>Data Element/Data Set</p> <p>Nil</p> <p>Data Source</p> <p>Nil</p> <p>Guide for use</p> <p>Nil</p>
<i>Comments:</i>	<ul style="list-style-type: none"> • Contracted palliative care includes both admitted and non-admitted services, and can include support and therapy services and patient transfer services. • Palliative care services include support and therapy services which can be provided to the patient and their family members or carers. Support and therapy services can be delivered independent of the patient.

- The cost of delivering admitted patient care is inclusive of support and therapy services provided to the patient and their family members or carers.
- St John of God Health Care Inc [Murdoch] and St John of God Health Care [Bunbury] provide palliative care services to admitted public patients over 18 years of age.
- St John of God Health Care Inc [Murdoch] provide patient transport services. The cost for patient transport services is captured in the expenditure for this indicator. The activity for patient transport is not included.
- The indicator does not capture contracted palliative care services that are funded on an ABF basis.

Representational attributes

<i>Representation class:</i>	Mean (average)
<i>Data type:</i>	Monetary amount
<i>Unit of measure:</i>	Currency
<i>Format:</i>	\$N,NNN

Indicator conceptual framework

<i>Framework and dimensions:</i>	2021-22 Outcome Based Management Framework
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Data source attributes

Data sources:

Data Sources

Numerator:

- OBM Allocation application
- Oracle 11i financial system

Denominator:

- Silver Chain Group: NAP DC
- St John of God Health Care Inc [Murdoch]: supplementary data provided with monthly contract activity reports
- St John of God Health Care [Bunbury]: annual activity report
- Bethesda Hospital: monthly contract activity reports

Data providers

Numerator:

- System Business Analytics, Information & System Performance, Purchasing & System Performance, WA Department of Health

Denominator:

- System Analytics Branch, Information & System Performance, Purchasing & System Performance, WA Department of Health (Silver Chain Group – Palliative Care)
- SMHS Contract Management, South Metropolitan

Health Service (St John of God Health Care Inc [Murdoch])

- Clinical Contracts Management, WA Country Health Service (St John of God Health Care [Bunbury])
- NMHS Contract Management, North Metropolitan Health Service (Bethesda Hospital)

Quality statement:

Activity data reported by Bethesda Hospital under this indicator is estimated using total bed days and average length of stay, which likely results in a slight overcount of unique clients given some patients receive more than one episode of care.

Accountability attributes

Benchmark:

Target: \$8,487

Sourced from: 2021-22 WA Budget Statements. Budget Paper No. 2, Volume 1, page 320.

Approved by: Director General, WA Department of Health

Note: The 2020-21 Budget was recast to ensure comparability following recognition of an error in calculation.

Methodology:

Nil

*Further data development/
collection required:*

Nil

Other issues caveats:

Nil

Source and reference attributes

Reference documents:

Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Average cost per day of care for non-acute admitted continuing care

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0034
<i>Reporting entities/scope:</i>	DoH
<i>Description:</i>	Average cost per day of care for non-acute admitted continuing care delivered by contracted non-government organisations.
<i>Rationale:</i>	<p>The goal of non-acute care is the prevention of deterioration in the functional and health status of patients, such as adults with a complex disability.</p> <p>Non-acute care is usually provided in a hospital while patients are awaiting placement into residential care, waiting for the services they will need at home to be organised or for vital modifications to be made to their homes, or when requiring respite care.</p> <p>Non-acute care is also provided in purpose-built facilities where patients with complex care needs receive support to optimise their physical and psychological functioning in order to maximise their ability to enter long term supported accommodation or return to their own home.</p>
<i>Indicator set:</i>	Annual Report 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	<p>Annual Report 2021-22:</p> <ul style="list-style-type: none"> • Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives • Service 5: Aged and continuing care services • Efficiency

Collection and usage attributes

<i>Population group age from:</i>	All ages (see Comments)
<i>Population group age to:</i>	All ages (see Comments)
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$)
	<p>General notes:</p> <ul style="list-style-type: none"> • Non-acute care facilities in the non-government sector offer residential care type services for adults with a complex disability who are unable to access a permanent care placement in an Australian Government funded residential aged care facility or where their care needs exceed what can be provided in a normal home environment.

- In some facilities, specialist rehabilitation and restorative care services are provided to improve functional ability associated with activities of daily living and enhance the quality of life for the person.

Inclusions:

Numerator:

- From DoH cost centres mapped to the following Outcome Based Management (OBM) Programs under Service 5, Sub-service 11. Aged and Continuing Care Services:
- 11.11 (Continuing Care - Non-acute admitted) Include
- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
- Internal and External Revenue, defined as (Account L2):
 - B15000 - External Revenue
 - B42000 - Services to External Health Services & Organisations

Note that the inclusion of Internal and External Revenue act as an offset against Total Expenditure.

Denominator:

- Long stay adults with a complex disability

Exclusions:

Numerator:

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1')
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;
 - A77100 – Depreciation Expenses - Leases;
 - A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
 - A79000 - Amortisation Expenses
 - A75000 - Debtors Expenses
 - A76000 - Financial Expenses
 - A76100 - Financial Expenses – Leases
 - A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense

<i>Computation:</i>	Numerator/denominator
<i>Numerator:</i>	Total accrued expenditure for delivery of non-acute admitted continuing care (OBM program 11.11 - Continuing Care - Non-acute admitted)
<i>Numerator data elements:</i>	<p>Data Element/Data Set [OBM Program Code] [Cost Centre L5 name] [Cost Centre Posting Code] [Account L2 code] {YTD amount}</p> <p>Data Source</p> <ul style="list-style-type: none"> • OBM Allocation application • Oracle 11i financial system <p>Guide for use Program 11.11 Continuing Care - Non-acute admitted is defined in the OBM Allocation application</p>
<i>Denominator:</i>	Total number of days of care delivered by contracted service for long stay adults with a complex disability
<i>Denominator data elements:</i>	<p>Data Element/Data Set Nil</p> <p>Data Source Contract manager provides activity data from contractor report titled 'Long Stay Younger Patients Outcomes Report'</p> <p>Guide for use Nil</p>
<i>Disaggregation data elements:</i>	<p>Data Element/Data Set Nil</p> <p>Data Source Nil</p> <p>Guide for use Nil</p>
<i>Comments:</i>	<ul style="list-style-type: none"> • In addition to the non-acute admitted continuing care services that are delivered by the public health system, the WA Department of Health has entered into collaborative arrangements with service providers to provide continuing care for non-acute patients. • Contracted services reported in this indicator are currently provided to persons aged 18-65 years. • Cost centres allocated to this indicator, as well as the proportion allocated, are subject to change. • Commercial in-confidence precludes specifying individual contract details at reporting, including the

name of the organisation(s) and the expenditure values.

Representational attributes

Representation class: Mean (average)
Data type: Monetary amount
Unit of measure: Currency
Format: \$NNN

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

Numerator:

- OBM Allocation application
- Oracle 11i financial system

Denominator:

- Contract manager provided activity data from contractor report titled 'Long Stay Younger Patients Outcomes Report'

Data provider

Numerator:

- System Business Analytics, Information & System Performance, Purchasing & System Performance, WA Department of Health

Denominator:

- Purchasing & Contracting, Resourcing & Purchasing, Purchasing & System Performance, WA Department of Health

Quality statement: Nil

Accountability attributes

Benchmark: Target: \$799
Sourced from: 2021-22 WA Budget Statements. Budget Paper No. 2, Volume 1, page 320.
Approved by: Director General, WA Department of Health

Methodology: Nil

Further data development/ collection required: Nil

Other issues caveats: Nil

Source and reference attributes

Reference documents: Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Average cost to support patients who suffer specific chronic illness and other clients who require continuing care

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0035
<i>Reporting entities/scope:</i>	DoH
<i>Description:</i>	Cost of supporting patients who suffer specific chronic illness and other clients who require continuing care.
<i>Rationale:</i>	<p>Chronic conditions pose a significant burden on the healthcare system in Western Australia. Most chronic conditions do not resolve spontaneously and require ongoing treatment, health care and support. As such, the Government has identified several chronic conditions that require health service support to people with long term chronic conditions to optimise their quality of life (refer to National Strategic Framework for Chronic Conditions³³).</p> <p>In addition, ongoing care and support is also required for those who have a complex disability, which aims to improve their health and well-being. To achieve this, the Department of Health has entered into collaborative arrangements with service providers to deliver residential, community and respite care.</p>
<i>Indicator set:</i>	Annual Report 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	Annual Report 2021-22: <ul style="list-style-type: none">• Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives• Service 5: Aged and continuing care services• Efficiency

Collection and usage attributes

<i>Population group age from:</i>	All ages
<i>Population group age to:</i>	All ages
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$)

³³ Available at: <https://www.health.gov.au/resources/publications/national-strategic-framework-for-chronic-conditions>

General notes:

This indicator accounts for the cost of infrastructure, resource management, policy, governance, workforce, and information systems provision. A lower result indicates greater technical efficiency in governing and sustaining activities to ensure those with chronic illness or long-term disability are appropriately supported.

Inclusions:

Numerator:

- From cost centres mapped to the following Outcome Based Management (OBM) Programs under Service 5, Sub-service 11. Aged and Continuing Care Services, Program 11.12 (Continuing Care - Chronic illness and other clients)
Include:
 - Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
 - Internal and External Revenue, defined as (Account L2):
 - B15000 – External Revenue
 - B42000 - Services to External Health Services & Organisations

Note that the inclusion of Internal and External Revenue act as an offset against Total Expenditure.

Denominator:

- WA people with profound or severe core activity limitation, moderate or mild core activity limitation, or long term health condition but no reported disability

Exclusions:

Numerator:

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1')
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;
 - A77100 – Depreciation Expenses - Leases;
 - A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
 - A79000 - Amortisation Expenses
 - A75000 - Debtors Expenses
 - A76000 - Financial Expenses
 - A76100 - Financial Expenses – Leases
 - A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease

- Expenses
- 372801 – Low-Value Lease Expenses
- 372802 – Variable Lease Expenses
- 372803 – Lease Maintenance Expense

Denominator:

N/A

Computation:

Numerator/denominator

Numerator:

Total accrued expenditure on supporting chronically ill and those requiring continuing care (OBM program 11.12 - Continuing Care - chronic illness and other clients)

Numerator data elements:

Data Element/Data Set

[OBM Program Code]

[Cost Centre L5 name]

[Cost Centre Posting Code]

[Account L2 code]

{YTD amount}

Data Source

- OBM Allocation application
- Oracle 11i financial system

Guide for use

Program 11.12 is defined in the Outcome Based Management Allocation application.

Denominator:

Estimated number of people in WA with profound or severe core activity limitation, moderate or mild core activity limitation or long term health condition but no disability.

[% of people with profound or severe core activity limitation + % of people with moderate or mild core activity limitation] + [% people with long term health condition but no disability] multiplied by [WA Population estimates].

Population used for 2021-22 financial year is the projected population for the 2021 calendar year.

Denominator data elements:

Data Element/Data Set

See Denominator

Data Source

- Population data applied to the Australian Bureau of Statistics Survey of Disability, Ageing and Carers: Summary of Findings – 2018 (SDAC)
- Estimated Resident Populations for 2016–2020 as provided by the Epidemiology Directorate, Public and Aboriginal Health Division, WA Department of Health.
- Projection of 2022 population by Epidemiology Directorate, Public and Aboriginal Health Division,

WA Department of Health.

Guide for use

- The SDAC is conducted every three years and results are released the following year.
- The Estimated Resident Population estimates from the Epidemiology Directorate are based on data provided by the Australian Bureau of Statistics (ABS).
- 2021 population is projected based on prior years' population numbers.

Disaggregation data elements:

Data Element/Data Set

Nil

Data Source

Nil

Guide for use

Purchasing & Contracting, WA Department of Health manages these contracts on a statewide basis, hence disaggregation is not applicable and this indicator will only be reported by DoH.

Comments:

- Cost centres allocated to this indicator, as well as the proportion allocated, are subject to change.
- Coding of long-term health conditions:
 - The code list used for the 2018 Survey of Disability, Ageing and Carers was the same as that used in previous surveys. Some conditions could not always be reported at the full level of detail and were therefore grouped together under broader categories. Conditions were categorised for the Survey of Disability, Ageing and Carers based on the International Classification of Diseases: 10th Revision (ICD-10).
 - The majority of reported long-term health conditions were automatically coded to a list of approximately 1,000 health conditions, within the computer-assisted personal interview. Those conditions that could not be automatically coded at the time of data collection were reviewed on a case by case basis by ABS employees during post-collection editing.

Representational attributes

Representation class: Mean (average)

Data type: Monetary amount

Unit of measure: Currency

Format: \$NN.NN

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

Numerator:

- OBM Allocation application
- Oracle 11i financial system

Denominator:

- ABS Survey of Disability, Ageing and Carers: Summary of Findings – 2018
<https://www.abs.gov.au/statistics/health/disability/disability-ageing-and-carers-australia-summary-findings/latest-release>.
- Estimated Resident Populations for 2016–2020 as provided by the Epidemiology Directorate
- Projection of 2021 population

Data provider

Numerator:

- System Business Analytics, Information & System Performance, Purchasing & System Performance, WA Department of Health.

Denominator:

- Epidemiology Directorate, Public & Aboriginal Health Division, WA Department of Health.

Quality statement:

Nil

Accountability attributes

Benchmark:

Target: \$25

Sourced from: 2021-22 WA Budget Statements. Budget Paper No. 2, Volume 1, page 320.

Approved by: Director General, WA Department of Health

Methodology:

Nil

*Further data development/
collection required:*

Nil

Other issues caveats:

Nil

Source and reference attributes

Reference documents:

Disability, Ageing and Carers, Australia: Summary of Findings methodology:

<https://www.abs.gov.au/methodologies/disability-ageing-and-carers-australia-summary-findings/2018>

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Average cost per person of delivering population health programs by population health units

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0036
<i>Reporting entities/scope:</i>	NMHS, SMHS, EMHS, CAHS, WACHS
<i>Description:</i>	Average cost per person of delivering population health programs by population health units.
<i>Rationale:</i>	<p>Population health units support individuals, families and communities to increase control over and improve their health.</p> <p>Population health aims to improve health by integrating all activities of the health sector and linking them with broader social and economic services and resources as described in the WA Health Promotion Strategic Framework 2017–2021. This is based on the growing understanding of the social, cultural and economic factors that contribute to a person's health status.</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	Annual Report 2021-22: <ul style="list-style-type: none">• Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives• Service 6: Public and Community Health Services.• Efficiency

Collection and usage attributes

<i>Population group age from:</i>	CAHS: ≥ 0 years All other Health Service Providers: ≥19 years
<i>Population group age to:</i>	CAHS: < 19 years All other Health Service Providers: no upper age limit.
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$).

Inclusions:

Numerator:

- From cost centres mapped to the following Outcome Based Management (OBM) programs under Service 6, Sub-service 13. Public Health Services:

- 13.1 (Health Promotion, Primary Care, Education and Research)
- 13.2 (Health Protection and Screening Services).

Include (for all HSPs except for NMHS):

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
- Recoup Revenue, defined as (Account L2):
 - B15000 - External Recoups
 - B42000 - Services to External Health Services & Organisations.

Note that the inclusion of External Revenue acts as an offset against Total Expenditure.

For NMHS only, include:

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses

The above calculation applies to NMHS due to their individual cost centre structure and treatment of external revenue.

Denominator:

Included health regions (aggregated from SA2s):

- SMHS
- NMHS
- EMHS
- CAHS
- WACHS: Goldfields, Great Southern, Kimberley, Midwest, Pilbara, South West, Wheatbelt.

Exclusions:

Numerator:

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1')
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;
 - A77100 – Depreciation Expenses - Leases;
 - A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
 - A79000 - Amortisation Expenses
 - A75000 - Debtors Expenses
 - A76000 - Financial Expenses
 - A76100 - Financial Expenses – Leases
 - A780000 - Other Asset Expenses, except for Accounts:

- 372800 – Short-Term Lease Expenses
- 372801 – Low-Value Lease Expenses
- 372802 – Variable Lease Expenses
- 372803 – Lease Maintenance Expense

Computation:

Numerator/denominator

Numerator:

Total accrued expenditure allocation per Population Health Unit from Health Service Provider programs 13.1 (Health Promotion, Primary Care, Education and Research) and 13.2 (Health Protection and Screening Services).

Numerator data elements:

Data Element/Data Set

[OBM Program Code]
[Cost Centre L5 name]
[Cost Centre Posting Code]
[Account L2 code]
{YTD amount}

Data Sources

Numerator:

- OBM Allocation application
- Oracle 11i financial system.

Guide for use

Program 13.1 and 13.2 are defined in the OBM Allocation application.

Denominator:

Projected Estimated Resident Populations of health services containing the population health unit.

Population used for 2021-22 Financial Year is the projected population for the 2021 calendar year.

Denominator data elements:

Data Element/Data Set

WA Estimated Resident Populations by:

- [Year]
- [5 year Age Group]

Data Source

- Estimated Resident Populations for 2016 – 2020 as provided by the Epidemiology Directorate, Public and Aboriginal Health Division, WA Department of Health.
- Projection of 2021 population by Epidemiology Directorate, Public and Aboriginal Health Division, WA Department of Health.

Guide for use

- Estimated Resident Population estimates from the Epidemiology Directorate are based on data provided by the Australian Bureau of Statistics (ABS).
- 2021 population is projected based on prior years'

population numbers.

Disaggregation data elements:

Data Element/Data Set

Establishment (Hospital) Identifier

Data Source

See Numerator and/or Denominator

Guide for use

Nil

Comments:

Population Health Units function within area boundaries defined by Statistical Area Level 2 units.

Representational attributes

Representation class:

Average (mean)

Data type:

Monetary amount

Unit of measure:

Currency

Format:

\$NNN

Indicator conceptual framework

Framework and dimensions:

2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

Numerator:

- OBM Allocation application
- Oracle 11i financial system

Denominator:

- Estimated Resident Populations for 2016 – 2020 as provided by Epidemiology Directorate, Public and Aboriginal Health Division, WA Department of Health
- Projection of 2021 population

Data provider

Numerator:

- System Business Analytics, Information and System Performance Directorate, Purchasing and System Performance Division, WA Department of Health
- Health Service Providers' Finance

Denominator:

- Epidemiology Directorate, Public and Aboriginal Health Division, WA Department of Health
- Australian Bureau of Statistics

Quality statement:

Nil

Accountability attributes

Benchmark:

Individual targets:

Reporting Entity	Target
NMHS	\$57
SMHS	\$17
EMHS	\$32
CAHS	\$235
WACHS	\$245

Sourced from: 2021-22 GBS process.

Approved by: Director General, WA Department of Health.

Methodology:

Nil

*Further data development/
collection required:*

Nil

Other issues caveats:

Nil

Source and reference attributes

Reference documents:

Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Cost per person of providing preventative interventions, health promotion and health protection activities that reduce the incidence of disease or injury

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0037
<i>Reporting entities/scope:</i>	DoH
<i>Description:</i>	Cost per person of providing preventive interventions, health promotion and health protection activities that reduce the incidence of disease or injury.
<i>Rationale:</i>	In order to improve, promote and protect the health of Western Australians it is critical that the WA health system is sustainable by providing effective and efficient care that best uses allocated funds and resources. The delivery of effective targeted preventive interventions, health promotion and health protection activities aims at reducing disease or injury within the community and fostering the ongoing health and wellbeing of Western Australians.
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	Annual Reports 2021-22: <ul style="list-style-type: none">• Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives• Service 6: Public and community health services• Efficiency

Collection and usage attributes

<i>Population group age from:</i>	All ages
<i>Population group age to:</i>	All ages
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$).

General notes:

- Cost centres allocated to this KPI, as well as the proportion allocated, are subject to change. Changes are on advisement from Health Support Services, Financial Services and Financial Reporting (Analytics and Performance Reporting).

Inclusions:

Numerator:

- From DoH cost centres mapped to the following

DoH Outcome Based Management (OBM)
Programs under Service 6, Sub-service 13. Public
Health Services:

- 13.1 (Health Promotion, Primary Care, Education and Research)
- 13.2 (Health Protection and Screening Services)

Include:

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
- Recoup Revenue, defined as (Account L2):
 - B15000 - External Recoups
 - B42000 - Services to External Health Services & Organisations.

Note that the inclusion of external revenue acts as an offset against Total Expenditure.

Denominator:

- Estimated resident population for WA.

Exclusions:

Numerator:

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1')
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;
 - A77100 – Depreciation Expenses - Leases;
 - A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
 - A79000 - Amortisation Expenses
 - A75000 - Debtors Expenses
 - A76000 - Financial Expenses
 - A76100 - Financial Expenses – Leases
 - A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense

<i>Computation:</i>	Numerator/denominator
<i>Numerator:</i>	Total illness prevention, health promotion and protection activity expenditure (including salary and on-costs) incurred by the DoH (Programs 13.1 - Health Promotion, Primary Care, Education and Research, and 13.2 - Health Protection and Screening Services).
<i>Numerator data elements:</i>	<p>Data Element/Data Set [OBM Program Code] [Cost Centre L5 name] [Cost Centre Posting Code] [Account L2 code] {YTD amount}</p> <p>Data Source</p> <ul style="list-style-type: none"> • OBM Allocation application • Oracle 11i financial system <p>Guide for use Programs 13.1 and 13.2 are defined in the OBM Allocation application.</p>
<i>Denominator:</i>	<p>Estimated Residential Population 2016-2020.</p> <p>Population used for 2021-22 Financial Year is the projected population for the 2021 calendar year.</p>
<i>Denominator data elements:</i>	<p>Data Element/Data Set WA Estimated Resident Population by: [Year] [5 year Age Group]</p> <p>Data Source</p> <ul style="list-style-type: none"> • Estimated Resident Populations for 2016 – 2020 as extracted by the Epidemiology Directorate, Public and Aboriginal Health Division, WA Department of Health. • Projection of 2021 population by Epidemiology Directorate, Public and Aboriginal Health Division, WA Department of Health. <p>Guide for use The Estimated Resident Population estimates from the Epidemiology Directorate calculator are based on data provided by the Australian Bureau of Statistics (ABS). 2021 population is projected based on prior years' population numbers.</p>
<i>Disaggregation data elements:</i>	<p>Data Element/Data Set Nil</p> <p>Data Source Nil</p> <p>Guide for use Statewide indicator that applies to the System Manager</p>

only, hence disaggregation is not applicable.

Comments: Nil

Representational attributes

Representation class: Average (mean)

Data type: Monetary amount

Unit of measure: Currency

Format: \$NNN

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

Numerator:

- OBM Allocation application
- Oracle 11i financial system.

Denominator:

- Estimated Resident Populations for 2016 - 2020 as extracted by the Epidemiology Directorate, Public and Aboriginal Health Division, WA Department of Health.
- Projection of 2021 population by Epidemiology Directorate, Public and Aboriginal Health Division, WA Department of Health.

Data provider

Numerator:

- System Business Analytics, Information and System Performance Directorate, Purchasing and System Performance Division, WA Department of Health.

Denominator:

- Epidemiology Directorate, Public and Aboriginal Health Division, WA Department of Health.
- Australian Bureau of Statistics

Quality statement: Nil

Accountability attributes

Benchmark:

Target: \$149

Sourced from: 2020-21 WA Budget Statements. Budget Paper No. 2, Volume 1, page 321.

Approved by: Director General, WA Department of Health.

Note: The 2021-22 budget target of \$149 is substantially higher than the 2020-21 budget target of \$62 due to costs related to the COVID-19 pandemic and remapping of cost centres to more accurately align functions to

programs.

Methodology: Nil

*Further data development/
collection required:* Nil

Other issues caveats: Nil

Source and reference attributes

Reference documents: Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Average cost per breast screening

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0038
<i>Reporting entities/scope:</i>	NMHS
<i>Description:</i>	Average cost per breast screening.
<i>Rationale:</i>	Breast cancer remains the most common cause of cancer death in women under 65 years. Early detection through screening and early diagnosis can increase the survival rate of women significantly. Breast screening mammograms are offered through BreastScreen WA to women aged 40 years and over as a preventive initiative.
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	Annual Reports 2021-22: <ul style="list-style-type: none">• Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives• Service 6: Public and community health services.• Efficiency

Collection and usage attributes

<i>Population group age from:</i>	40 years.
<i>Population group age to:</i>	No upper limit
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$).
	General notes: Nil
	Inclusions: Numerator: <ul style="list-style-type: none">• From cost centres mapped to the following Outcome Based Management (OBM) Programs under Service 6:<ul style="list-style-type: none">• 13.3 (BreastScreen WA) Include: <ul style="list-style-type: none">• Total Expenditure, defined as (Account L5)• AAA300 - Total Expenses Denominator: <ul style="list-style-type: none">• Statewide screenings at BreastScreen WA.

Exclusions:**Numerator:**

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1')
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;
 - A77100 – Depreciation Expenses - Leases;
 - A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
 - A79000 - Amortisation Expenses
 - A75000 - Debtors Expenses
 - A76000 - Financial Expenses
 - A76100 - Financial Expenses – Leases
 - A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense

Computation:

Numerator/denominator

Numerator:

Total accrued expenditure of breast screening program 13.3 - BreastScreen WA.

*Numerator data elements:***Data Element/Data Set**

[OBM Program Code]

[Cost Centre L5 name]

[Cost Centre Posting Code]

[Account L2 code]

{YTD amount}

Data Source

OBM Allocation application

Oracle 11i financial system

Guide for use

Program 13.3 is defined in the OBM Allocation application.

Denominator:

Total number of breast screenings at BreastScreen WA.

*Denominator data elements:***Data Element/Data Set**

[Client ID]

[Screening Date]

Data Source

Mammography Screening Register, Breast Screen WA.

Guide for use

Nil

Disaggregation data elements: **Data Element/Data Set**

Nil

Data Source

Nil

Guide for use

Indicator reported at Statewide level for 40+ age cohort in NMHS annual report. No disaggregation.

Comments:

- Data is extracted by the BreastScreen WA Data Manager and NMHS Finance and Business Services.
- BreastScreen WA has an extensive quality assurance program on all aspects of data collection and reporting. This is in response to service accreditation requirements in providing quality screening and assessment care. The comprehensive quality assurance program addresses quality issues including service management, staff training, data audit, case review, data verification and service improvement.

Representational attributes

Representation class: Average (mean)

Data type: Monetary amount

Unit of measure: Currency

Format: \$NNN

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

Numerator:

OBM Allocation application

Oracle 11i financial system.

Denominator:

Mammography Screening Register.

Data provider

Numerator:

System Business Analytics, Information and System Performance, Purchasing and System Performance, WA Department of Health

Health Service Providers' Finance.

Denominator:

BreastScreen WA, North Metropolitan Health Service.

Quality statement:

BreastScreen WA has operated a successful program since 1989. It operates screening services from eleven fixed sites and four mobile units. It provides breast assessment in four assessment centres of which one is located in a regional area (Bunbury).

Performance indicators in screening services are well established and a comprehensive data dictionary of data elements and performance indicators is published by BreastScreen Australia.

BreastScreen WA has an extensive quality assurance program on all aspects of data collection and reporting. This is in response to service accreditation requirements in providing quality screening and assessment care. The comprehensive quality assurance program addresses quality issues including service management, staff training, data audit, case review, data verification and service improvement.

Accountability attributes

Benchmark:

Target: \$144

Sourced from: 2021-22 WA Budget Statements. Budget Paper No. 2, Volume 1, page 321.

Approved by: Director General, WA Department of Health.

Methodology:

Nil

*Further data development/
collection required:*

Nil

Other issues caveats:

Nil

Source and reference attributes

Reference documents:

Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Cost per trip for road-based ambulance services, based on the total accrued costs of these services for the total number of trips

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0039
<i>Reporting entities/scope:</i>	DoH
<i>Description:</i>	Cost per trip for road-based patient transport (which is contracted to external providers), based on the total accrued costs of these services for the total number of trips.
<i>Rationale:</i>	To ensure Western Australians receive the care and ambulance services they need, when they need it, the Department of Health has entered into collaborative arrangements with service providers to deliver road-based patient transport services in WA. This collaboration ensures that patients have access to effective and rapid response ambulance services to ensure the best possible health outcomes for patients requiring medical treatment.
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	Annual Report 2021-22 <ul style="list-style-type: none">• Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives• Service 6: Public and community health services• Efficiency

Collection and usage attributes

<i>Population group age from:</i>	All ages
<i>Population group age to:</i>	All ages
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$)
Inclusions:	
Numerator:	<ul style="list-style-type: none">• From cost centres mapped to the following Outcome Based Management (OBM) programs under Service 6, Sub-service 15. Patient Transport Services:<ul style="list-style-type: none">○ 15.1 (Emergency Road Based Ambulance Services)

Include:

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
- Internal and External Revenue, defined as (Account L2):
 - B15000 – External Revenue
 - B42000 - Services to External Health Services & Organisations

Note that the inclusion of External Revenue acts as an offset against Total Expenditure.

Denominator:

Road-based transport services trips

Exclusions:

Numerator:

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1')
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;
 - A77100 – Depreciation Expenses - Leases;
 - A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
 - A79000 - Amortisation Expenses
 - A75000 - Debtors Expenses
 - A76000 - Financial Expenses
 - A76100 - Financial Expenses – Leases
 - A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense

Computation:

Numerator/denominator

Numerator:

Total accrued expenditure under contract for this service.

Numerator data elements:

Data Element/Data Set

[OBM Program Code]

[Cost Centre L5 name]

[Cost Centre Posting Code]

[Account L2 code]

{YTD amount}

Data Source

- OBM Allocation application

- Oracle 11i financial system

Guide for use

Program 15.1 is defined in the OBM Allocation application

Denominator: Total number of road-based transport services trips

Denominator data elements: **Data Element/Data Set**
Reported contracted activity

Data Source

Contracted service providers' monthly and annual reports provided to the WA Department of Health

- Report to the Department of Health Monthly Report
- Report to the Department of Health Annual Report

Guide for use

Nil

Disaggregation data elements: **Data Element/Data Set**
Nil

Data Source

Nil

Guide for use

Nil

Comments: The costs for these contracts may be calculated based on a funding model which is partly fixed as base funding, with additional variable funding calculated from the volume of services provided.

Representational attributes

Representation class: Mean (average)

Data type: Monetary amount

Unit of measure: Currency

Format: \$NNN

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources: **Data Source**
Numerator:

- OBM Allocation application
- Oracle 11i financial system

Denominator:

Monthly and annual contract performance reports

Data provider

Numerator:

- System Business Analytics, Information & System Performance, Purchasing & System Performance, WA Department of Health

Denominator:

- Purchasing & Contracting Unit, Resourcing & Purchasing, Purchasing & System Performance, WA Department of Health

Quality statement: Nil**Accountability attributes**

Benchmark: Target: Cost per trip \$523
 Sourced from: 2021-22 WA Budget Statements. Budget Paper No. 2, Volume 1, page 321.
 Approved by: Director General, WA Department of Health

Methodology: Nil*Further data development/
collection required:* Nil*Other issues caveats:* Nil**Source and reference attributes***Reference documents:* Nil**Registry management attributes***Version control:*

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Cost per trip of patient emergency air-based transport, based on the total accrued costs of these services for the total number of trips

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0040
<i>Reporting entities/scope:</i>	WACHS
<i>Description:</i>	Cost per trip of patient emergency air-based country transport, based on the total accrued costs of these services for the total number of trips.
<i>Rationale:</i>	To ensure Western Australians in rural and remote areas receive the care they need, when they need it, strong partnerships have been forged within the healthcare community through a collaborative agreement between WA Country Health Service and the contracted service provider. This collaboration ensures that patients in rural and remote areas have access to an effective emergency air-based transport service that aims to ensure the best possible health outcomes for country patients requiring urgent medical treatment and transport services.
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	Annual Reports 2021-22: <ul style="list-style-type: none">• Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives• Service 6: Public and community health services.• Efficiency

Collection and usage attributes

<i>Population group age from:</i>	All ages.
<i>Population group age to:</i>	All ages.
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$).

General notes:

Nil

Inclusions:**Numerator:**

- Total cost of contracted country emergency air services, derived from cost centres mapped to the following Outcome Based Management (OBM) Programs under Service 6:
 - 15.2 (Emergency Air Based Services)

Include:

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
- Recoup Revenue, defined as (Account L2):
 - B15000 - External Recoups
 - B42000 - Services to External Health Services & Organisations.

Note that the inclusion of Recoup Revenue acts as an offset against Total Expenditure.

Denominator:

- Country patient emergency air-based transport trips.

Exclusions:**Numerator:**

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1')
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;
 - A77100 – Depreciation Expenses - Leases;
 - A77200 - Service Concession Assets -Depreciation & Amortisation Expenses
 - A79000 - Amortisation Expenses
 - A75000 - Debtors Expenses
 - A76000 - Financial Expenses
 - A76100 - Financial Expenses – Leases
 - A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses

- 372803 – Lease Maintenance Expense

Denominator:

- Repatriation flights.

Computation:

Numerator/denominator

Numerator:

Total accrued expenditure for the contracted service provider (Program 15.2 - Emergency Air Based Services).

Numerator data elements:

Data Element/Data Set

[OBM Program Code]
[Cost Centre L5 name]
[Cost Centre Posting Code]
[Account L2 code]
{YTD amount}

Data Sources

- OBM Allocation application
- Oracle 11i financial system

Guide for use

Program 15.2 is defined in the OBM Allocation application.

Denominator:

Total number of country patient emergency air-based transport trips.

Denominator data elements:

Data Element/Data Set

Service agreement performance reports provided to WACHS.

Data Source

Data for the above report is sourced from activity reports provided by the service provider.

Guide for use

Nil

Disaggregation data elements:

Data Element/Data Set

Nil

Data Source

Nil

Guide for use

This is a statewide service provided by WACHS to rural and remote populations in WA hence disaggregation is not applicable.

Comments:

Emergency air-based transport is provided based on the clinical needs of the patient, and to ensure the best patient outcomes for rural and remote populations. As such, any decline in the usage of this service (i.e. reduced number of trips) does not

necessarily reflect a decrease in efficiency.

Representational attributes

Representation class: Mean (average)

Data type: Monetary amount

Unit of measure: Currency

Format: \$N,NNN

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

Numerator:

- OBM Allocation application
- Oracle 11i financial system.

Denominator:

- Service agreement performance reports provided to WACHS: Quarterly Timeliness Indicator report.

Data provider

Numerator:

- System Business Analytics, Information & System Performance Directorate, Purchasing and System Performance Division, WA Department of Health
- Health Service Providers' Finance.

Denominator:

- Business Performance, WACHS.

Quality statement:

Air-based performance data is reviewed on receipt by WACHS Contracts and Finance departments and validated against invoices and available information.

Accountability attributes

Benchmark:

Target: \$7,384

Sourced from: 2021-22 WA Budget Statements. Budget Paper No. 2, Volume 1, page 321.

Approved by: Director General, WA Department of Health.

Methodology:

Nil

*Further data development/
collection required:*

Nil

Other issues caveats:

Nil

Source and reference attributes

Reference documents: Service Agreement: Aeromedical Interhospital Patient Transport Services (WACHS2016353), 28 September 2016 to June 2021³⁴

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

³⁴ Note the Aeromedical Interhospital Patient Transport Services Service Agreement has been extended to 30 June 2022 and remains in place for the 2021-22 reporting period.

Average cost per trip of Patient Assisted Travel Scheme (PATs)

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0041
<i>Reporting entities/scope:</i>	WACHS
<i>Description:</i>	Average cost per trip of Patient Assisted Travel Scheme (PATs).
<i>Rationale:</i>	<p>The WA health system aims to provide safe, high-quality healthcare to ensure healthier, longer, and better quality lives for all Western Australians.</p> <p>PATs provides a subsidy towards the cost of travel and accommodation for eligible patients travelling long distances to seek certain categories of specialist medical services. The aim of PATs is to help ensure that all Western Australians can access safe, high-quality healthcare when needed.</p>
<i>Indicator set:</i>	Annual Report 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	<p>Annual Reports 2021-22:</p> <ul style="list-style-type: none">• Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives• Service 6: Public and community health services.• Efficiency

Collection and usage attributes

<i>Population group age from:</i>	All ages.
<i>Population group age to:</i>	All ages.
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$).
	<p>General notes:</p> <p>The allocation of accrued expenditure is to be calculated in accordance with the KPI financial distribution model agreed by WACHS Finance Managers.</p> <p>Inclusions:</p> <p>Total expenditure and number of trips includes all approved trips where the first appointment for the trip falls within the defined period.</p> <p>Numerator:</p> <ul style="list-style-type: none">• From cost centres mapped to the following Outcome Based Management (OBM) Programs under Service 6, Sub-service 15. Patient Transport Services:<ul style="list-style-type: none">• 15.3 (Patients Assisted Travel Scheme)

Include:

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
- Recoup Revenue, defined as (Account L2):
 - B15000 - External Recoups
 - B42000 - Services to External Health Services & Organisations

Note that the inclusion of Recoup Revenue acts as an offset against Total Expenditure.

Includes all patient and related escort expenditure, including accommodation and travel.

Denominator:

- Number of PATS supported trips, which includes travel by private car, public transport and air.

Exclusions:

Numerator:

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1')
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;
 - A77100 – Depreciation Expenses - Leases;
 - A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
 - A79000 - Amortisation Expenses
 - A75000 - Debtors Expenses
 - A76000 - Financial Expenses
 - A76100 - Financial Expenses – Leases
 - A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense

Computation:

Numerator/denominator

Numerator:

Total PATS accrued expenditure for the financial year.

Numerator data elements:

Data Element/Data Set

[OBM Program Code]

[Cost Centre L5 name]

[Cost Centre Posting Code]

[Account L2 code]

{YTD amount}

Data Source

- OBM Allocation application
- Oracle 11i financial system

	Guide for use Nil
<i>Denominator:</i>	Number of PATS trips during the reporting period (2021-22 financial year).
<i>Denominator data elements:</i>	Data Element/Data Set Episode Data Source Secure Health Record Exchange (SHaRE) PATS On Line Guide for use Nil
<i>Disaggregation data elements:</i>	Data Element/Data Set Nil Data Source Nil Guide for use This is a statewide service provided by WACHS to rural and remote populations in WA hence disaggregation is not applicable.
<i>Comments:</i>	Nil
Representational attributes	
<i>Representation class:</i>	Mean (average)
<i>Data type:</i>	Monetary amount
<i>Unit of measure:</i>	Currency
<i>Format:</i>	\$NNN
Indicator conceptual framework	
<i>Framework and dimensions:</i>	2021-22 Outcome Based Management Framework
Data source attributes	
<i>Data sources:</i>	Data Source Numerator: <ul style="list-style-type: none"> • OBM Allocation application • Oracle 11i financial system. Denominator: <ul style="list-style-type: none"> • Secure Health and Record Exchange (SHaRE). Data provider Numerator: <ul style="list-style-type: none"> • System Business Analytics, Information and System Performance Directorate, Purchasing and System Performance Division, WA Department of Health • WACHS Finance. Denominator: <ul style="list-style-type: none"> • Patient Assisted Travel Scheme, WACHS.
<i>Quality statement:</i>	The SHaRE database is the online recording system for PATS claims received by the organisation. This is accessible by PATS clerks and Coordinators and the Program Manager,

PATS for data entry, and by HSS for data extracts and reports.

Accountability attributes

Benchmark:

Target: \$505

Sourced from: 2021-22 WA Budget Statements. Budget Paper No. 2, Volume 1, page 321.

Approved by: Director General, WA Department of Health.

Methodology:

Nil

*Further data development/
collection required:*

Nil

Other issues caveats:

Nil

Source and reference attributes

Reference documents:

Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Average cost of pathology services per test

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Indicator type:</i>	Progress Measure
<i>Synonymous names:</i>	Pathology cost per test
<i>Catalogue identifier:</i>	0042
<i>Reporting entities/scope:</i>	PathWest Laboratory Medicine WA
<i>Registration status:</i>	WA Department of Health, Standard
<i>Description:</i>	Average cost for PathWest Laboratory Medicine WA (PathWest) to deliver clinical pathology services to WA health, per test panel.
<i>Rationale:</i>	<p>PathWest is the main provider of pathology services within the WA health system, servicing all public hospitals in Western Australia and providing a number of public health functions.</p> <p>The purpose of this indicator is to provide a longitudinal measure of the financial efficiency of PathWest in the delivery of clinical and health pathology services (excluding forensic services) across WA.</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	Annual Reports 2021-22:

- Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives
- Service 7: Pathology Services
- Efficiency

Collection and usage attributes

<i>Population group age from:</i>	All
<i>Population group age to:</i>	All
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$)
<i>Computation:</i>	Numerator/denominator (Expressed as \$)

Inclusions:

Numerator

- From Cost Centres mapped to the following Outcome Based Management (OBM) Program under Service 7:
 - anbe17.2: PathWest Clinical Pathology Services

Include:

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses

- External Recoup Revenue*, defined as (Account L2):
 - B15000 - External Recoups
 - B42000 - Services to External Health Services & Organisations
- Own source revenue*, defined as (Account L2)
 - B35000 – Other Revenue
 - B20000 Specific Grants – Commonwealth
 - B22000 Other Specific Grants excepting revenue received from DoH for services provided
 - B36000 Net Income From Sundry Activities

*Note that the inclusion of external revenue acts as an offset against Total Expenditure incurred for non-clinical services.

Denominator:

All Ultra and Soft SCC line items representing pathology test counts excluding forensic biology, food and waters and other non-clinical pathology activities.

Exclusions

Numerator:

Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1')

Financial Products defined as expenditure within the following (Account Level 2):

- A77000 – Depreciation Expenses;
- A77100 – Depreciation Expenses - Leases;
- A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
- A79000 - Amortisation Expenses
- A75000 - Debtors Expenses
- A76000 - Financial Expenses
- A76100 - Financial Expenses – Leases
- A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense

Denominator:

Ultra: Test panels that were cancelled or not completed

Soft SCC: Tests that were cancelled or not completed

Numerator:

Total accrued expenditure of PathWest cost centres relating to delivery of clinical pathology activities within the WA health

system.

Numerator data elements:

Data Elements

[OBM Program Code]
[Cost Centre L5 name]
[Cost Centre Posting Code]
[Account L2 code]
{YTD amount}

Data Source

- OBM Allocation Application
- Oracle 11i Financial System

Guide for use

Nil

Denominator:

Count of test panels analysed by PathWest, excluding forensic biology, forensic pathology, Food and Waters and other non-clinical activity.

Denominator data elements:

Data Element/Data Set

[Test Count]

Data Source

Ultra; SCC Soft, and Anatomical Pathology Laboratory Information Systems, via the PathWest Data Warehouse.

Guide for use

Nil

Disaggregation data elements:

Data Element/Data Set

Nil

Data Source

Nil

Guide for use

Nil

Comments:

The numerator excludes by definition any expenditure not classified under Service 17.2, PathWest Clinical Pathology Services. For example, expenditure related to non-clinical activity (i.e. forensic biology, forensic pathology, research/restricted cost centres and other non-clinical pathology activities).

Financial data will be extracted from the General Ledger after it closes each month.

Note that PathWest's Ultra Laboratory Information System (LIS) has been retired. A period of transition to the new system (SCC Soft) was completed in October 2020. The total test count from Soft will be different to Ultra as more departments use Soft compared to Ultra which will result in a higher test count. This will be offset by a consolidation to the test structures in Soft which has resulted in a lower test count.

Representational attributes

Representation class: Mean (average)

Data type: Monetary amount

Unit of measure: Currency

Format: \$NN.NN

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

See Numerator and Denominator

Frequency

Annual Reports: Annually, by financial year

Data provider

PathWest Finance & Business Performance

Quality statement:

Changes to the accounting standards and practices can alter expenditure allocated to the cost centres.

Adjustments to leave provision calculations can significantly alter expenditure.

Posting errors may result in non-PathWest expenditure being included in the GL.

Accountability attributes

Benchmark:

Target: \$25

Sourced from: 2021-22 WA Budget Statements. Budget Paper No. 2 – Volume 1, page 322.

Approved by: Director General, WA Department of Health

Methodology:

Nil

*Further data development/
collection required:*

Nil

Other issues caveats:

Nil

Source and reference attributes

Reference documents: Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Average cost per patient visit of WA Health provided dental health programs for (a) school children and (b) socio-economically disadvantaged adults

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0043
<i>Reporting entities/scope:</i>	NMHS
<i>Description:</i>	The average cost per patient visit of WA health system provided dental health programs for (a) school-children and (b) socio-economically disadvantaged adults.
<i>Rationale:</i>	<p>Early detection and prevention of dental health problems in children can ensure better health outcomes and improved quality of life throughout the crucial childhood development years and into adult life. The School Dental Service program ensures early identification of dental problems and, where appropriate, provides treatment.</p> <p>Dental disease places a considerable burden on individuals and communities. While dental disease is common, it is largely preventable through population-based interventions, and individual practices such as personal oral hygiene and regular preventive dental care. Costly treatment and high demand on public dental health services emphasises the need for a focus on prevention and health promotion.</p>
<i>Indicator set:</i>	Annual Report 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	Annual Reports 2021-22: <ul style="list-style-type: none"> • Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives • Service 8: Community Dental Health Services • Efficiency

Collection and usage attributes

<i>Population group age from:</i>	a) Children – 5 Years b) Adults – 18 years
<i>Population group age to:</i>	a) Children – 17 years b) Adults – No upper limit.
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$).

Inclusions:

Numerator:

- From Cost Centres mapped to the following Outcome Based Management (OBM) Programs under Service 8:
 - 19.1 (Community Dental Health - (a) school children)
 - 19.2 (Community Dental Health - (b) socio-economically disadvantaged adults).

Include:

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses

Denominator:

Contributory sites for

- a) school children: SDS Clinics
- b) socio-economically disadvantaged adult patients:
 - Government Dental Clinics
 - Country Patients Dental Subsidy Scheme
 - Metropolitan Patients Dental Subsidy Scheme.

Inclusions for

- a) school children: Completed child non-specialist services
- b) Socio-economically disadvantaged adult patients: Completed adult non-specialist services.

Exclusions:

Numerator:

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1')
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;
 - A77100 – Depreciation Expenses - Leases;
 - A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
 - A79000 - Amortisation Expenses
 - A75000 - Debtors Expenses
 - A76000 - Financial Expenses
 - A76100 - Financial Expenses – Leases
 - A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense

- Services provided through the Oral Health Centre of Western Australia (OHCWA) and other hospital run dental facilities (e.g. Perth Children's Hospital).

Denominator:

Exclusions for:

- a) school children:
 - Specialist child dental services.
 - Commonwealth funded services
 - Services provided through the Oral Health Centre of Western Australia (OHCWA) and other hospital run dental facilities (e.g. Perth Children's Hospital)
- b) socio-economically disadvantaged adult patients:
 - Incomplete non-specialist treatments
 - Specialist adult dental services
 - Commonwealth funded services.

Computation:

Numerator/denominator

Numerator:

- a) Total accrued expenditure of school dental program (Program 19.1 - Community Dental Health - (a) school children).
- b) Total accrued expenditure of adult non-specialist program (Program 19.2 - Community Dental Health - (b) socio-economically disadvantaged adults).

Numerator data elements:

Data Element/Data Set

[OBM Program Code]
 [Cost Centre L5 name]
 [Cost Centre Posting Code]
 [Account L2 code]
 {YTD amount}

Data Source

OBM Allocation Application
 Oracle 11i Financial System

Guide for use

Programs 19.1 and 19.2 are defined in the Outcome Based Management (OBM) Allocation Application.

Denominator:

- a) Number of visits provided by the school dental program.
- b) Number of visits provided by the adult dental programs.

Denominator data elements:

Data Element/Data Set

DenIM annual report extract:
 [Scheme]
 [Datatype]
 [FinancialYear]

[NPA]
[Adult]
[Patient Visits]

Data Source

DHS DenIM database

Guide for use

Nil

Disaggregation data elements:

Data Element/Data Set

Adult (disaggregated into adults and children)

Data Source

DHS DenIM database

Guide for use

The Dental Health Service is a statewide service. This KPI is reported in the NMHS annual report.

Comments:

Dental Health Services is the primary (but not sole) provider of public general dental services in Western Australia.

Representational attributes

Representation class: Mean (average)

Data type: Monetary amount

Unit of measure: Currency

Format: \$NNN

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

Numerator:

OBM Allocation Application
Oracle 11i Financial System.

Denominator:

DHS DenIM database.

Data provider

Numerator:

- System Business Analytics, Information & System Performance, Purchasing and System Performance, WA Department of Health
- NMHS Finance.

Denominator:

Corporate Services, Dental Health Service, NMHS.

Quality statement:

The collection of the patient record-level data through the statewide DenIM system allows identification of each public patient visit throughout Western Australia. Clinical

audits to verify this data are conducted by senior clinical managers as part of a regular quality assurance process.

Patient visit counts for services provided through the private sector subsidy schemes are derived from (i) the number of different dates of the services (treatment items) recorded and (ii) estimates of the number of clinical stages in construction of any denture items recorded.

There may be delays of up to 3 months in the collection of data due to processing of manual claims from external private clinics at completion of each course of subsidised treatment. This is mitigated by totalling the number of patient visits based on the financial year in which claims from external providers are processed rather than the date of treatment. Delays may also be experienced in submission of activity from some external outreach services.

Accountability attributes

Benchmark:

Target:

(a) Average cost per school child patient visit: \$235

(b) Average cost per adult patient visit: \$321

Sourced from: 2021-22 WA Budget Statements. Budget Paper No. 2-Volume 1, page 322.

Approved by: Director General, WA Department of Health.

Methodology:

Nil

*Further data development/
collection required:*

Nil

Other issues caveats:

Nil

Source and reference attributes

Reference documents:

Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Average cost per rural and remote population (selected small rural hospitals)

Identifying and definitional attributes

Metadata item type: Indicator

Synonymous names: Nil

Catalogue identifier: 0044

Reporting entities/scope: WACHS

Description: Average cost per rural and remote population (selected small rural hospitals).

Rationale: The WA health system aims to provide safe, high-quality healthcare to ensure healthier, longer, and better quality lives for all Western Australians.

The Independent Hospital Pricing Authority's (IHPA) key role is to determine the annual National Efficient Price (NEP) and National Efficient Cost (NEC) for Australian public hospital services. The NEC is used when activity levels are not sufficient for funding based on activity, such as in the case of small rural hospitals. In these cases, services are funded by a block allocation based on size and location. Public hospitals are block funded where there is an absence of economies of scale that mean some services would not be financially viable under Activity Based Funding.

Small rural hospitals provide access to essential services for rural and remote communities. These hospitals have relatively low patient activity and have high fixed costs therefore it is appropriate to measure efficiency based on population numbers as opposed to unit of patient activity.

Indicator set: Annual Reports 2021-22

Frequency: Annual, by financial year

Outcome area: **Annual Reports 2021-22:**

- Outcome 2: Prevention, health promotion and aged and continuing care services that help Western Australians to live healthy and safe lives
- Service 9: Small rural hospital services
- Efficiency

Collection and usage attributes

Population group age from: All ages.

Population group age to: All ages.

Computation description: [Numerator] divided by [Denominator] (expressed as \$).

Contributing Sites:

Goldfields

Laverton Hospital, Leonora Hospital, Norseman Hospital

Great Southern

Denmark Hospital, Gnowangerup Hospital, Kojonup Hospital, Plantagenet Hospital, Ravensthorpe Hospital

Kimberley

Fitzroy Crossing Hospital, Halls Creek Hospital, Wyndham Hospital

Midwest

Dongara Health Centre, Exmouth Hospital, Kalbarri Health Centre, Meekatharra Hospital, Morawa Hospital, Mullewa Hospital, North Midlands Hospital, Northampton Hospital

Pilbara

Onslow Health Service, Paraburdoo Hospital, Roebourne Hospital, Tom Price Hospital

South West

Augusta Hospital, Boyup Brook Hospital, Bridgetown Hospital, Donnybrook Hospital, Harvey Hospital, Nannup Hospital, Pemberton Hospital

Wheatbelt

Beverley Hospital, Boddington Hospital, Bruce Rock Hospital, Corrigin Hospital, , Dalwallinu Hospital, Dumbleyung Hospital, Goomalling Hospital, Kellerberrin Hospital, Kondinin Hospital, Kununoppin Hospital, Lake Grace Hospital, Narembeen Hospital, Quairading Hospital, Southern Cross Hospital, Wagin Hospital, Wongan Hills Hospital, Wyalkatchem Hospital, York Hospital.

Inclusions:

Numerator:

- From cost centres mapped to the following Outcome Based Management (OBM) Programs under Service 9, Sub-service 20. Block Funded Small Rural Hospitals:

- 20.1 (Block Funded Small Rural Hospitals)

Include:

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
- Recoup Revenue, defined as (Account L2):
 - B15000 - External Recoups
 - B42000 - Services to External Health Services & Organisations

Note that the inclusion of Recoup Revenue acts as an offset against Total Expenditure.

Denominator:
Rural and remote (i.e. non metropolitan) WA Estimated Resident Population.

Exclusions:

Numerator:

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1')
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;
 - A77100 – Depreciation Expenses - Leases;
 - A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
 - A79000 - Amortisation Expenses
 - A75000 - Debtors Expenses
 - A76000 - Financial Expenses
 - A76100 - Financial Expenses – Leases
 - A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense

Computation:

Numerator/denominator

Numerator:

Total accrued annual expenditure for selected small rural hospitals (Program 20.1 - Block Funded Small Rural Hospitals).

Numerator data elements:

Data Element/Data Set

[OBM Program Code]

[Cost Centre L5 name]

[Cost Centre Posting Code]

[Account L2 code]

{YTD amount}

Data Source

- OBM Allocation application
- Oracle 11i financial system

Guide for use

Program 20.1 is defined in the OBM Allocation application.

Denominator:

Estimated Resident Population for rural and remote (i.e. non-metropolitan) WA.

Population used for 2021-22 Financial Year is the projected population for the 2021 calendar year.

Denominator data elements:

Data Element/Data Set

WA Estimated Resident Populations (rural and remote) by:

- [Year]
- [5 year Age Group]

Data Source

- Estimated Resident Populations for 2016 – 2020 as provided by the Epidemiology Directorate, Public and Aboriginal Health Division, WA Department of Health.
- Projection of 2021 population by Epidemiology Directorate, Public and Aboriginal Health Division, WA Department of Health.

Guide for use

- The Estimated Resident Population estimates from the Epidemiology Directorate are based on data provided by the Australian Bureau of Statistics (ABS). The 2021 population is projected based on prior years' population numbers.

Disaggregation data elements:

Data Element/Data Set

Nil

Data Source

Nil

Guide for use

Reported by WACHS only, hence further disaggregation is not applicable.

Comments:

- Small rural hospitals are block funded and do not receive activity based funding. For this reason, small rural hospitals are excluded from Service Lines 1–3 of the OBM Framework.
- Rural and remote population is defined by the Australian Institute of Health and Welfare (AIHW) as all areas outside major cities, which aligns with the non-metropolitan population estimates used for this KPI.
- It is not possible to accurately estimate the specific population serviced by the in-scope block funded hospitals, due to non-alignment of SA2s and hospital catchments and provision of services by these hospitals to non-residents.
- Small rural hospitals within WACHS provide a range of services including emergency department services, outpatient services, inpatient services and aged care services. This may vary site-to-site depending on staffing profiles, clinic service framework and hospital classification.

Representational attributes

Representation class: Mean (average)

Data type: Monetary amount

Unit of measure: Currency

Format: \$NNN

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

Numerator:

OBM Allocation application
Oracle 11i financial system.

Denominator:

- Estimated Resident Populations for 2016 – 2020 as provided by the Epidemiology Directorate
- Projection of 2021 population

Data provider

Numerator:

System Business Analytics, Information and System Performance, Purchasing and System Performance, WA Department of Health

Health Service Providers' Finance.

Denominator:

Epidemiology Directorate, Public and Aboriginal Health Division, WA Department of Health.

Quality statement:

Nil

Accountability attributes

Benchmark:

Target: \$469

Sourced from: 2021-22 Budget Statements. Budget Paper No. 2, Volume 1, page 323.

Approved by: Director General, WA Department of Health.

Methodology:

Nil

Further data development/ collection required:

Nil

Other issues caveats:

Nil

Source and reference attributes

Reference documents:

Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

7.3 Outcome 3: Strategic leadership, planning and support services that enable a safe, high quality and sustainable WA health system

7.3.0 Key effectiveness indicators contributing to Outcome 3

Proportion of stakeholders who indicate the Department of Health to be meeting or exceeding expectations of the delivery of System Manager functions

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0045
<i>Reporting entities/scope:</i>	DoH
<i>Description:</i>	Proportion of stakeholders who indicate the Department of Health to be meeting or exceeding their expectations in the delivery of System Manager functions.
<i>Rationale:</i>	<p>The Department of Health, in supporting a System Manager function, sets the vision and direction for the WA health system, as well as providing executive oversight of strategic decision making, identifying health system priorities, and guiding, overseeing and managing the statewide health system. This includes the delivery of government priorities and responding to the emerging and current needs of the Western Australian community. Overall, the aim is to ensure the delivery of high quality, safe and timely health services.</p> <p>This indicator measures stakeholders' perceptions of the Department of Health and its delivery of services as a System Manager.</p>
<i>Indicator set:</i>	Annual Report 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	<p>Annual Report 2021-22:</p> <ul style="list-style-type: none"> • Outcome 3: Strategic leadership, planning and support services that enable a safe, high quality and sustainable WA health system • Effectiveness

Collection and usage attributes

<i>Population group age from:</i>	Not applicable
<i>Population group age to:</i>	Not applicable
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as percentage)
	<p>General notes:</p> <ul style="list-style-type: none"> • The survey is conducted through Computer Assisted Telephone Interviews (CATI) • Respondents are requested to rate 11 System Manager functions using the following Likert scale:

- 1 = well below expectations
- 2 = somewhat below expectations
- 3 = met expectations
- 4 = somewhat above expectations
- 5 = well above expectations
- N/A = Not applicable
- System Manager functions assessed using the Likert scale include:
 - a) Issue of binding policy frameworks to set standards and ensure a consistent approach in health service provision
 - b) Stewardship of the public health system
 - c) Budget and resource allocation process
 - d) Strategic direction and leadership on behalf of the WA public health system
 - e) Management of performance data and analysis of performance trends and issues
 - f) Performance management including performance monitoring and evaluation in line with Service Agreement requirements
 - g) Advice and support to Health Service Providers and other relevant service recipients
 - h) Management of system wide industrial relations
 - i) Regulation of WA health system
 - j) overseeing, monitoring and promoting improvements in the safety and quality of health services
 - k) Advising and assisting the Minister for Health in the development & implementation of system-wide planning (e.g. COVID, SHR)
- A section to capture respondent's comments/feedback is also included in the survey
- Responses are not weighted
- A Likert scale rating of ≥ 3 (i.e. Likert scale rating of 3, 4 or 5) chosen by a respondent against a System Manager function indicates expectations have been met or exceeded.
- The survey is conducted on an annual basis, preferably in the third or fourth quarter of the relevant financial year. The information collection period has been chosen as it is considered that respondents will have had sufficient contact with the WA Department of Health during the reporting period, and will be able to respond accurately to the request for client satisfaction feedback

Inclusions:

Service provided	Responsible Department / statutory authority	Accountable authority
Health services in accordance with Service Agreements with the Director General including funding, performance measures and operational targets	North Metropolitan Health Service (NMHS)	Chief Executive, Health Service Board Chair
	South Metropolitan Health Service (SMHS)	Chief Executive, Health Service Board Chair
	East Metropolitan Health Service (EMHS)	Chief Executive, Health Service Board Chair
	Child and Adolescent Health Service (CAHS)	Chief Executive, Health Service Board Chair
	WA Country Health Service (WACHS)	Chief Executive, Health Service Board Chair
	Health Support Services (HSS)	Chief Executive, Health Service Board Chair
	PathWest Laboratory Medicine WA	Chief Executive, Health Service Board Chair
	Quadriplegic Centre	Chief Executive
Commission health services in accordance with Service Agreements with the Director General	Mental Health Commission	Mental Health Commissioner

Exclusions:

Nil

Computation:

(Numerator/denominator) x 100

Numerator:

[Sum of all respondents' responses for all functions (a-k) with a rating of ≥3 (met or exceeded expectations)]
(excluding the N/As)

Numerator data elements:

Data Element/Data Set

Nil

Data Source

CATI

Guide for use

Survey items with a response of N/A are not included in

	the calculation of the indicator
<i>Denominator:</i>	[Sum of valid responses (a-k)] (excluding the N/As)
<i>Denominator data elements:</i>	Data Element/Data Set Nil Data Source CATI Guide for use Nil
<i>Disaggregation data elements:</i>	Data Element/Data Set Nil Data Source Nil Guide for use Nil
<i>Comments:</i>	Nil
Representational attributes	
<i>Representation class:</i>	Percentage
<i>Data type:</i>	Number
<i>Unit of measure:</i>	Percentage
<i>Format:</i>	NNN.N%
Indicator conceptual framework	
<i>Framework and dimensions:</i>	2021-22 Outcome Based Management Framework
Data source attributes	
<i>Data sources:</i>	Data Source Numerator: CATI Denominator: CATI Data provider Corporate Services, Office of the Director General, WA Department of Health
<i>Quality statement:</i>	<p>The dataset was collected for the first time in 2017-18; however, a significant change to the methodology in 2018-19 means results are not comparable between these years.</p> <p>Identifiable data are not accessible as they are considered confidential and are destroyed within 3 months of data collection.</p>
Accountability attributes	

Benchmark: Target: ≥85%
 This indicator was established and reported for the first time in 2017-18. The target is considered aspirational and was developed based on a jurisdictional review of targets and performance results of agencies with similar or comparative Effectiveness Survey indicators. Approved by: Director General, WA Department of Health

Methodology: Nil

Further data development/ collection required: Nil

Other issues caveats: Nil

Source and reference attributes

Reference documents: Nil

Registry management attributes

Version control:	Version number	Approval date	Approved by	Comments
	1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Percentage of responses from WA Health Service Providers and Department of Health who are satisfied or highly satisfied with the overall service provided by Health Support Services

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	The percentage of HSS clients who are satisfied or highly satisfied with the overall service provided by HSS.
<i>Catalogue identifier:</i>	0046
<i>Reporting entities/scope:</i>	Health Support Services (HSS)
<i>Description:</i>	The percentage of responses from WA Health Service Providers (HSPs) and WA Department of Health who are satisfied or highly satisfied with the overall service provided by Health Support Services.
<i>Rationale:</i>	This KPI aligns to the role of HSS in providing support services to both the Department and HSPs. It reports the satisfaction levels with services delivered to the Department and HSPs. On an annual basis, Tier 1 representatives are provided with a survey to complete which includes a series of questions gauging satisfaction levels across key service delivery areas. Responses per service area are tallied to measure the extent to which the expectations of service delivery by HSS were met.
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	Annual Reports 2021-22: <ul style="list-style-type: none"> • Outcome 3: Strategic leadership, planning and support services that enable a safe, high quality and sustainable WA health system • Effectiveness.

Collection and usage attributes

<i>Population group age from:</i>	No age limitations applied.
<i>Population group age to:</i>	No age limitations applied.
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as percentage).
	General notes: <ul style="list-style-type: none"> • The survey is directed to Tier 1 officers in Health Service Providers and the WA Department of Health • The survey is conducted annually.

Inclusions:

- Health Service Provider Chief Executives (including Quadriplegic Centre Chief Executive)
- WA Department of Health Director General.

Exclusions:

- Customers not considered to be Health Service Providers or WA Department of Health as listed in the inclusions.

Computation: (Numerator/denominator) x 100

Numerator: The total count of satisfied or highly satisfied survey ratings received from participants in response to the question regarding overall satisfaction with HSS Services.

Numerator data elements:

Data Element/Data Set

Health Service Provider Chief Executives (including Quadriplegic Centre Chief Executive) and WA Department of Health Director General who completed and returned the survey with ratings of satisfied or highly satisfied.

Data Source

Responses to the survey, as received by HSS using Survey Monkey tool.

Guide for use

The numerator is calculated by totalling the number of satisfied or highly satisfied responses for the question regarding satisfaction with the services provided by HSS as a whole received from all survey participants. Clients rate HSS services according to the following rating scale: Highly Unsatisfied, Unsatisfied, Neither Satisfied or Unsatisfied, Satisfied, Highly Satisfied.

Denominator: Total count of survey ratings received from participants in response to the question regarding overall satisfaction with HSS Services.

Denominator data elements:

Data Element/Data Set

Health Service Provider Chief Executives (including Quadriplegic Centre Chief Executive) and WA Department of Health Director General who completed and returned the survey.

Data Source

Responses to the survey.

Guide for use

The denominator will be calculated by counting the number of responses for the question regarding satisfaction with the services provided by HSS as a whole received from all survey participants. Clients rate HSSs services according to the following rating scale: Highly Unsatisfied, Unsatisfied, Neither Satisfied or

Unsatisfied, Satisfied, Highly Satisfied.

Disaggregation data elements: **Data Element/Data Set**

Nil

Data Source

Nil.

Guide for use

This is an indicator that applies to Health Support Services only, hence disaggregation is not applicable.

Comments:

- Participants are given approximately two weeks to complete and submit the survey. Reminders to complete the survey may be sent to participants during the data collection period.
- Insufficient surveys returned will impact on the representativeness of the results.

Representational attributes

Representation class: Percentage

Data type: Number

Unit of measure: Survey responses

Format: NNN.N%

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

See Numerator and/or Denominator

Data provider

Health Support Services

Quality statement: Nil

Accountability attributes

Benchmark: Target: $\geq 66\%$

There is no national target for this KPI.

Approved by: Director General, WA Department of Health.

Methodology: Nil

*Further data development/
collection required:* Nil

Other issues caveats: Nil

Source and reference attributes

Reference documents: Nil

Registry management attributes*Version control:*

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

7.3.1 Key efficiency indicators within Outcome 3

Average cost of Public Health Regulatory Services per head of population

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0047
<i>Reporting entities/scope:</i>	DoH
<i>Description:</i>	Average cost of Public Health Regulatory Services per head of population.
<i>Rationale:</i>	<p>The Department of Health performs system wide regulatory functions including the regulation of food safety, vector control, waste water management, tobacco licensing, radiation safety and medicines and poisons in order to promote health in the community; prevent disease before it occurs; and manage risks to human health, whether natural or man-made.</p> <p>This indicator measures the Department's ability to regulate these functions in an efficient manner and aligns with a key provision of the <i>Public Health Act 2016</i> to consolidate and streamline regulatory tools to regulate any given risk to public health.</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	Annual Reports 2021-22: <ul style="list-style-type: none">• Outcome 3: Strategic leadership, planning and support services that enable a safe, high quality and sustainable WA health system• Service 10: Health System Management – Policy and Corporate Services.• Efficiency

Collection and usage attributes

<i>Population group age from:</i>	All ages.
<i>Population group age to:</i>	All ages.
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$).

General notes:

- The numerator is based on accrued expenditure as determined using the DoH General Ledger as per the Oracle 11i financial system.
- Regulatory services include:
 - Management of the framework for risk management and enforcement for the Food

Act 2008 including the development and review of national food policy and food standards, and surveillance, audits and assessments of food businesses for compliance with the Food Act Food Regulations 2009 and the Australia New Zealand Food Standards Code.

- Support of the Radiological Council and management of the implementation of the Radiation Safety Act including the issuing of licences, registrations and temporary permits.
- Radiation safety surveillance for premises where radiation and/or radiation producing equipment is used to monitor and enforce compliance with the Radiation Safety Act, subsidiary legislation and standards.
- Management of public health-related risk, associated with the delivery of safe drinking water, disposal and management of wastewater, treatment and beneficial use of recycled water, the design, management and use of aquatic facilities, the safe use of recreational waters and the beneficial use of biosolids.
- Management of compliance and enforcement of the Tobacco Products Control Act 2006 and associated regulations to reduce the incidence of illness and death related to the use of tobacco products.
- Management of licensing under the Tobacco Products Control Act 2006.
- Management of licensing and registration under the Health (Pesticides) Regulations.
- Leading the management, research and risk assessment of chemical and biological health hazards in WA.
- Administration and management of the Health (Pesticides) Regulations 2011 including the development of State policy, guidelines, compliance activities and industry training.
- Administration and management of the Health (Asbestos) Regulations 1992 including the development of State and National policy and guidelines and implementation in association with other State agency legislation.
- Provide advice and comply with requirements under MOU agreement with Department Water Environmental Regulation Contaminated Sites Act 2003.

- Management of the implementation of the Medicines and Poisons Act 2014 and Medicines and Poisons Regulations 2016 including the issue of licences, permits and authorities to prescribe controlled drugs and ensure compliance with the Act and Regulations.
- Support of the Mortality Committees under the Health (Miscellaneous Provisions) Act 1911, including reviewing all reported anaesthetic, maternal, perinatal and infant deaths.

Inclusions:

Numerator:

- Cost centres mapped to the following Outcome Based Management (OBM) Programs under Service 10 Health System Management – Policy and Corporate Services, Sub-service 22 Policy Services:
 - 22.1 (Public Health Regulatory Unit)
- Include:
- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
 - Internal and External Revenue, defined as (Account L2):
 - B15000 - External Revenue
 - B42000 - Services to External Health Services & Organisations
- Note that the inclusion of External Revenue acts as an offset against Total Expenditure.

Denominator:

- Total Estimated Resident Population in Western Australia (WA).

Exclusions:

Numerator:

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1')
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;
 - A77100 – Depreciation Expenses - Leases;
 - A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
 - A79000 - Amortisation Expenses
 - A75000 - Debtors Expenses
 - A76000 - Financial Expenses
 - A76100 - Financial Expenses – Leases

- A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense

Computation:

Numerator/denominator

Numerator:

Total accrued expenditure for Public Health Regulatory Services.

Numerator data elements:

Data Element/Data Set

[OBM Program Code]
 [Cost Centre L5 name]
 [Cost Centre Posting Code]
 [Account L2 code]
 {YTD amount}

Data Source

- OBM Allocation application
- Oracle 11i financial system

Guide for use

Note that total expenditure includes resources received free of charge (RRFOC) provided by PathWest.

Denominator:

Total estimated population numbers in WA
 Population used for 2021-22 Financial Year is the projected population for the 2021 calendar year.

Denominator data elements:

Data Element/Data Set

WA Estimated Resident Population by:
 [Year]
 [5 year Age Group]

Data Source

- Estimated Resident Populations for 2016 – 2020 as extracted from the Epidemiology Directorate calculator, Epidemiology Directorate, Public and Aboriginal Health Division, WA Department of Health
- Projection of 2021 population by Epidemiology Directorate, Public and Aboriginal Health Division, WA Department of Health.

Guide for use

The Estimated Resident Population estimates from the Epidemiology Directorate are based on data provided by the Australian Bureau of Statistics (ABS).

The 2021 population is projected based on prior years' population numbers.

<i>Disaggregation data elements:</i>	Data Element/Data Set Nil Data Source Nil Guide for use Statewide indicator that applies to the system manager only, hence disaggregation is not applicable.
<i>Comments:</i>	In 2020-21, the apportionment of cost centre expenditure associated with the delivery of public health regulatory services was reviewed to more accurately align functions to programs.
Representational attributes	
<i>Representation class:</i>	Mean (average)
<i>Data type:</i>	Monetary amount
<i>Unit of measure:</i>	Currency
<i>Format:</i>	\$N.NN
Indicator conceptual framework	
<i>Framework and dimensions:</i>	2021-22 Outcome Based Management Framework
Data source attributes	
<i>Data sources:</i>	Data Source Numerator: <ul style="list-style-type: none"> • OBM Allocation application • Oracle 11i financial system. Denominator: <ul style="list-style-type: none"> • Estimated Resident Populations for 2016 – 2020 as extracted by the Epidemiology Directorate. • Projection of 2021 population. Data provider Numerator: <ul style="list-style-type: none"> • System Business Analytics, Information and System Performance Directorate, Purchasing and System Performance Division, WA Department of Health • Health Service Providers' Finance. Denominator: <ul style="list-style-type: none"> • Epidemiology Directorate, Public and Aboriginal Health Division, WA Department of Health.
<i>Quality statement:</i>	Nil
Accountability attributes	
<i>Benchmark:</i>	Target: \$6 Sourced from: 2021-22 WA Budget Statements. Budget

Paper No. 2, Volume 1, page 324.

Approved by: Director General, Department of Health.

Methodology: Nil

*Further data development/
collection required:* Nil

Other issues caveats: Nil

Source and reference attributes

Reference documents: Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Average cost for the Department of Health to undertake System Manager functions per Health Service Provider full time equivalent

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0048
<i>Reporting entities/scope:</i>	DoH
<i>Description:</i>	The total cost for DoH, per Health Service Providers (HSP) full-time equivalent (FTE), to undertake the System Manager role of providing strategic leadership, planning and support services to health service providers.
<i>Rationale:</i>	<p>The Department of Health, in supporting the System Manager, sets the vision and direction for the WA health system. It also provides executive oversight of strategic decision making, identifies health system priorities, and guides, oversees and manages the statewide health system. This includes the delivery of government priorities and responding to the emerging and current needs of the Western Australian community. Overall, the aim is to ensure the delivery of high quality, safe and timely health services.</p> <p>This indicator measures the efficiency with which the Department of Health undertakes its role in supporting the System Manager.</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	<p>Annual Reports 2021-22:</p> <ul style="list-style-type: none"> • Outcome 3: Strategic leadership, planning and support services that enable a safe, high quality and sustainable WA Health system • Service 10: Health System Management – Policy and Corporate Services. • Efficiency

Collection and usage attributes

<i>Population group age from:</i>	All ages.
<i>Population group age to:</i>	All ages.
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$ per FTE).

General notes:

- The numerator is based on accrued expenditure as determined using the DoH General Ledger (GL) as per the Oracle 11i financial system.
- Denominator is based on average actual paid month to date full-time equivalent (FTE) from the WA Health Human Resources Data Warehouse.

Inclusions:

Numerator:

- From cost centres mapped to the following Outcome Based Management (OBM) Programs under Service 10, Sub-service 22 Policy Services:
 - 22.2 (System Manager Functions)

Include:

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
- Internal and External Revenue, defined as (Account L2):
 - B15000 - External Revenue
 - B42000 - Services to External Health Services & Organisations (recoveries)

Note that the inclusion of External revenue acts as an offset against Total Expenditure.

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1').

Denominator:

- Health service providers and health support service FTE at:
 - Child and Adolescent Health Service
 - East Metropolitan Health Service
 - Health Support Services
 - North Metropolitan Health Service
 - South Metropolitan Health Service
 - WA Country Health Service
 - PathWest
- WA DoH FTE that provide a Public Health Regulatory function (i.e. CCs 0150015; 0150034; 0150044; 0150052; 0150092; 0150514; 0150746; 0150747; 0151644; 0151980; 0152961; 0152967; 0154022).

Exclusions:

Numerator:

- COVID related expenditure aligned to program 13.2
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;

- A77100 – Depreciation Expenses - Leases;
- A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
- A79000 - Amortisation Expenses
- A75000 - Debtors Expenses
- A76000 - Financial Expenses
- A76100 - Financial Expenses – Leases
- A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense

Denominator:

- WA DoH FTE against cost centres mapped to Program 22.2 – System Manager Functions (includes agency staff and PH staff CCs 0150372; 0152973; 0150028) and salaried officer staff (cost centres prefix '011')
- Quadriplegic Centre
- QEII Medical Centre

Mental Health Commission.

Computation:

Numerator/denominator

Numerator:

Total expenditure assigned to Service 10, Sub-service 22 (Program 22.2 – System Manager Functions) for the financial year.

Numerator data elements:

Data Element/Data Set

[OBM Program Code]

[Cost Centre L5 name]

[Cost Centre Posting Code]

[Account L2 code]

{YTD amount}

Data Source

- Oracle 11i Financial system
- OBM Allocation application

Guide for use

Nil

Denominator:

The average of all twelve actual paid month to date FTE.

Denominator data elements:

Data Element/Data Set

Nil

Data Source

WA Health Human Resources Data Warehouse.

Guide for use

Month to date FTE is calculated on the last day of each month of the relevant financial year from data warehouse snapshots and averaged over the entire twelve months to correspond with the same monthly dates from which the expenditure was calculated for the relevant financial year.

FTE is calculated as the monthly average FTE and is the average hours worked during a period of time divided by the relevant pay award Full Time Hours for the same period. Hours include ordinary time, overtime, all leave categories, public holidays, time off in lieu and workers compensation.

FTE includes WA health system staff and agency staff. FTE figures provided are based on actual (paid) month to date FTE.

Disaggregation data elements: **Data Element/Data Set**

Nil

Data Source

See Numerator and/or Denominator.

Guide for use

This is a statewide indicator that applies to the System Manager only, hence disaggregation is not applicable.

Comments:

As some public health regulatory functions are not defined as System Manager functions, for the purposes of this KPI staff employed in specific public health regulatory roles are included in the count of HSP FTE. In 2020-21, expenditure associated with the delivery of System Manager functions were reviewed resulting in cost centre reallocation.

Representational attributes

Representation class: Mean (average)

Data type: Monetary amount

Unit of measure: Currency

Format: \$N,NNN

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

Numerator:

- OBM Allocation application
- Oracle 11i financial system.

Denominator:

- WA Health Human Resources Data Warehouse.

Data provider

- System Business Analytics, Information and System Performance, Purchasing and System Performance, WA Department of Health.

Quality statement: Nil

Accountability attributes

Benchmark: Target: \$5,337
Sourced from: 2021-22 WA Budget Statements. Budget Paper No. 2, Volume 1, page 324.
Approved by: Director General, WA Department of Health.

Methodology: Nil

*Further data development/
collection required:* Nil

Other issues caveats: Nil

Source and reference attributes

Reference documents: Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	
1.1	19 May 2022	Nicholas Webb, A/Director, Budget Strategy, Purchasing and System Performance	Correction to KPI 48 exclusions to clarify removal of financial products in line with approved change to all efficiency KPIs.

Average cost of Accounts Payable services per transaction

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0049
<i>Reporting entities/scope:</i>	HSS
<i>Description:</i>	<p>Average cost for HSS to deliver Accounts Payable (AP) services to Health Service Providers per invoice line processed. Services include:</p> <ul style="list-style-type: none">• Processing Invoices• Processing Reimbursements• Managing Staff Travel and Expense Claims and• Processing Spectacle Subsidy Scheme Claims.
<i>Rationale:</i>	<p>This KPI aligns to the role of HSS as a Health Service Provider (HSP) prescribed in the <i>Health Services Act 2016</i> (WA) s.34 in ensuring 'the operations of the health service provider are carried out efficiently, effectively and economically'.</p> <p>This KPI captures the role of HSS in delivering transactional finance services to HSPs in an efficient manner.</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	<p>Annual Reports 2021-22:</p> <ul style="list-style-type: none">• Outcome 3: Strategic leadership, planning and support services that enable a safe, high quality and sustainable WA health system• Service 10: Health Support Services• Efficiency

Collection and usage attributes

<i>Population group age from:</i>	Not applicable.
<i>Population group age to:</i>	Not applicable.
<i>Computation description:</i>	<p>[Numerator] divided by the [Denominator] (expressed as \$).</p> <p>Inclusions:</p> <p>Numerator:</p> <ul style="list-style-type: none">• From Cost Centres mapped to the following Outcome Based Management (OBM) Programs under Service 11:<ul style="list-style-type: none">• 23.1 (Finance Accounts Payable Services).

Include:

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
- Recoup Revenue, defined as (Account L2):
 - B15000 - External Recoups
 - B42000 - Services to External Health Services & Organisations

Note that the inclusion of Recoup Revenue acts as an offset against Total Expenditure.

Denominator:

All Accounts Payable invoice lines that are processed through Oracle Financials and iPharmacy (both by AP – Finance & AP – Supply) during the reporting period specified are included when calculating the Denominator.

The following Non-Health Entities are included in the transactions:

- Quadriplegic Centre
- Health and Disability Services Complaints Office (HaDSCO)
- Mental Health Commission.

Exclusions:

Numerator:

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1')
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;
 - A77100 – Depreciation Expenses - Leases;
 - A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
 - A79000 - Amortisation Expenses
 - A75000 - Debtors Expenses
 - A76000 - Financial Expenses
 - A76100 - Financial Expenses – Leases
 - A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense

<i>Computation:</i>	Numerator/denominator (Expressed as \$).
<i>Numerator:</i>	<p>Total of accrued expenditure assigned to Service Line 10 (Health Support Services), Program 23.1 (Finance Accounts Payable Services) for Staffing & OGS, either directly or indirectly associated with delivering the following Accounts Payable services to the WA health system for the reporting period specified:</p> <ul style="list-style-type: none"> • Processing Invoices; Visiting Medical Practitioner (VMP), ORACLE & iPHARM) • Processing Petty Cash and other Reimbursements • Managing Staff Travel & Expense Claims • Processing Spectacle Subsidy Scheme Claims.
<i>Numerator data elements:</i>	<p>Data Element/Data Set [OBM Program Code] [Cost Centre L5 name] [Cost Centre Posting Code] [Account L2 code] {YTD amount}</p> <p>Data Source</p> <ul style="list-style-type: none"> • OBM Allocation Application • Oracle 11i Financial System • HSS Costing & Pricing Model <p>Guide for use Nil</p>
<i>Denominator:</i>	The total count of invoice lines processed for customers during the reporting period specified.
<i>Denominator data elements:</i>	<p>Data Element/Data Set Number of AP Invoice Lines Processed</p> <ul style="list-style-type: none"> • Period (Date) • Cost Centre • Site/Location • AP Invoice# • Count of AP Invoice Lines <p>Number of Accounts Payable Invoice Lines Processed (ORACLE & iPHARM)</p> <ul style="list-style-type: none"> • Period (Date) • Cost Centre • Site/Location • AP Invoice# • Count of AP Invoice Lines <p>Data Source</p> <ul style="list-style-type: none"> • Oracle Financials

- iPharmacy

Guide for use

Nil

Disaggregation data elements: **Data Element/Data Set**

Nil

Data Source

Nil.

Guide for use

This is an indicator that applies to Health Support Services only, hence disaggregation is not applicable.

Comments:

Nil

Representational attributes

Representation class: Mean (average)

Data type: Monetary amount

Unit of measure: Currency

Format: \$N.NN

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

See Numerator and/or Denominator

Data provider

Numerator:

- System Business Analytics, Information & System Performance, Purchasing and System Performance, WA Department of Health
- Health Support Services.

Denominator:

Health Support Services.

Quality statement:

Nil

Accountability attributes

Benchmark:

Target: \$6

Sourced from: 2021-22 WA Budget Statements. Budget Paper No. 2-Volume 1, page 325.

Approved by: Director General, WA Department of Health.

Methodology:

Nil

*Further data development/
collection required:*

Nil

Other issues caveats:

Nil

Source and reference attributes

Reference documents: Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Average cost of payroll and support services to Health Support Services' clients

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0050
<i>Reporting entities/scope:</i>	HSS
<i>Description:</i>	<p>Average cost for HSS to deliver Payroll and Support Services to HSS clients. Services include:</p> <ul style="list-style-type: none"> • Recruitment & Appointment • Establishment & Employee Data Management • Payroll • Time & Attendance • Workers Compensation • Terminations • Casual Nursing Pool • Client Support.
<i>Rationale:</i>	<p>As a WA health system 'shared services' organisation, HSS performs a range of employment and payroll services on behalf of Health Service Providers (HSPs) and the Department. This indicator measures the efficiency of HSS to provide the continuum of 'hire to retire' workforce services to HSS clients.</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	<p>Annual Reports 2021-22:</p> <ul style="list-style-type: none"> • Outcome 3: Strategic leadership, planning and support services that enable a safe, high quality and sustainable WA health system • Service 10: Health Support Services • Efficiency

Collection and usage attributes

<i>Population group age from:</i>	Not applicable.
<i>Population group age to:</i>	Not applicable.
<i>Computation description:</i>	[Numerator] divided by the [Denominator] (expressed as \$).

Inclusions:

Numerator:

- From Cost Centres mapped to the following Outcome Based Management (OBM) Programs under Service 11:

- 23.2 (Human Resources Services)

Include:

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
- Recoup Revenue, defined as (Account L2):
 - B15000 - External Recoups
 - B42000 - Services to External Health Services & Organisations

Note that the inclusion of Recoup Revenue acts as an offset against Total Expenditure.

Denominator:

All WA health system employees who incur FTE (via Alesco or Lattice) during the reporting period specified are included. The following Non-Health Entities are included in the total FTE:

- Health and Disability Services Complaints Office (HaDSCO)
- Mental Health Commission.

Exclusions:

Numerator:

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1')
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;
 - A77100 – Depreciation Expenses - Leases;
 - A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
 - A79000 - Amortisation Expenses
 - A75000 - Debtors Expenses
 - A76000 - Financial Expenses
 - A76100 - Financial Expenses – Leases
 - A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense

Denominator:

- As the Quadriplegic Centre does not use WA Health Payroll systems (Lattice or Alesco), these staff are not included in the FTE count.

Computation:

Numerator/denominator (Expressed as \$).

Numerator:

Total accrued expenditure assigned to Service Line 10 (Health Support Services), Program 23.2 (Human Resources Services) for Staffing & OGS, either directly or indirectly associated with delivering the following Payroll and

Associated Support Services to the WA health system for the reporting period specified:

- Recruitment & Appointment (Alesco & Lattice)
- Establishment & Employee Data Management (Alesco & Lattice)
- Processing Payroll (Alesco, Lattice & RoStar)
- Processing Time & Attendance (Alesco, Lattice & RoStar)
- Workers Compensation (Alesco & Lattice)
- Processing Terminations
- Managing a Casual Nursing Pool (NurseWest)
- Providing Client Support (Client Liaison Officers, Help Desk).

Numerator data elements:

Data Element/Data Set

[OBM Program Code]
[Cost Centre L5 name]
[Cost Centre Posting Code]
[Account L2 code]
{YTD amount}

Data Source

- OBM Allocation Application
- Oracle 11i Financial System
- HSS Costing & Pricing Model

Guide for use

Nil

Denominator:

The total sum of WA Health FTE for the reporting period specified

Denominator data elements:

Data Element/Data Set

COS (Costings) FTE Metrics - Summary

- Period Name
- Financial Year
- Cost centre L5 Description - <All>
- Account L2 Long Name - <All>
- MTD FTE

Data Source

- WA Health Human Resources Data Warehouse (COS FTE Metrics – Summary)

Guide for use

For monthly reporting, the total sum of WA Health FTE for the reporting period specified is divided by 12 to distribute the FTE across the 12 months of the year. Monthly data is aggregated to produce the financial year data values.

Disaggregation data elements:

Data Element/Data Set

Nil

Data Source

Nil.

Guide for use

This indicator applies to Health Support Services only, hence disaggregation is not applicable.

Comments:

Nil

Representational attributes

Representation class: Mean (average)

Data type: Monetary amount

Unit of measure: Currency

Format: \$N,NNN

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

See Numerator and/or Denominator

Data provider

Numerator:

- System Business Analytics, Information & System Performance, Purchasing and System Performance, WA Department of Health
- Health Service Providers' Finance.

Denominator:

- Health Support Services.

Quality statement:

Nil

Accountability attributes

Benchmark: Target: \$913

Sourced from: 2021-22 WA Budget Statements. Budget Paper No. 2-Volume 1, page 325.

Approved by: Director General, WA Department of Health.

Methodology: Nil

*Further data development/
collection required:* Nil

Other issues caveats: Nil

Source and reference attributes

Reference documents: Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Average cost of Supply Services by purchasing transaction

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Synonymous names:</i>	Nil
<i>Catalogue identifier:</i>	0051
<i>Reporting entities/scope:</i>	HSS
<i>Description:</i>	<p>Average cost for HSS to deliver Supply Services to Health Service Providers by purchasing transaction. Services include:</p> <ul style="list-style-type: none">• Purchasing• Warehousing & Distribution• Data Management & Reporting• Procurement• Client Support.
<i>Rationale:</i>	<p>This indicator measures the efficiency of HSS in their provision of the above supply chain services to Health Service Providers (HSPs).</p>
<i>Indicator set:</i>	Annual Reports 2021-22
<i>Frequency:</i>	Annual, by financial year
<i>Outcome area:</i>	<p>Annual Reports 2021-22:</p> <ul style="list-style-type: none">• Outcome 3: Strategic leadership, planning and support services that enable a safe, high quality and sustainable WA health system• Service 10: Health Support Services.• Efficiency

Collection and usage attributes

<i>Population group age from:</i>	Not applicable.
<i>Population group age to:</i>	Not applicable.
<i>Computation description:</i>	<p>[Numerator] divided by the [Denominator] (expressed as \$).</p> <p>Inclusions:</p> <p>Numerator:</p> <p>From Cost Centres mapped to the following Outcome Based Management (OBM) Programs under Service 11:</p> <ul style="list-style-type: none">• 23.3 (Supply Services) <p>Include:</p> <ul style="list-style-type: none">• Total Expenditure, defined as (Account L5)<ul style="list-style-type: none">○ AAA300 - Total Expenses• Recoup Revenue, defined as (Account L2):<ul style="list-style-type: none">○ B15000 - External Recoups

- B42000 - Services to External Health Services & Organisations.

Note that the inclusion of Recoup Revenue acts as an offset against Total Expenditure.

Denominator:

- Catalogue (pre-set data) and Non-Catalogue (not available via pre-set data) Purchase Order lines that are processed through Oracle during the reporting period specified are included.

The following Non-Health Entities are included in the transactions:

- Quadriplegic Centre
- Health and Disability Services Complaints Office (HaDSCO)
- Mental Health Commission.

Exclusions:

Numerator:

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1')
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;
 - A77100 – Depreciation Expenses - Leases;
 - A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
 - A79000 - Amortisation Expenses
 - A75000 - Debtors Expenses
 - A76000 - Financial Expenses
 - A76100 - Financial Expenses – Leases
 - A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense
- All Primary and Secondary costs that are attributed to the Accounts Payable team in Supply (included in KPI 54).

Denominator:

- Inventory Purchase Orders i.e. purchase orders for items shipped to the State Distribution Centre and the PathWest storeroom at QE2
- Purchase Orders for WA Country Health Services (WACHS).

Computation:

Numerator/denominator (Expressed as \$).

Numerator: Total accrued expenditure assigned to Service Line 10 (Health Support Services), Program 23.3 (Supply Services) for Staffing & OGS, either directly or indirectly associated with delivering the following Supply services to the WA health system for the reporting period specified:

- Purchasing (On-Catalogue & Off-Catalogue)
- Warehousing & Distribution
- Data Management & Reporting
- Facilitating Procurement Processes
- Developing, implementing & managing Whole of Health system contracts
- Providing Client Support (on-site Supply Operations, off-site and Procurement support & advice).

Numerator data elements: **Data Element/Data Set**
 [OBM Program Code]
 [Cost Centre L5 name]
 [Cost Centre Posting Code]
 [Account L2 code]
 {YTD amount}

Data Source

- OBM Allocation Application
- Oracle 11i Financial System
- HSS Costing & Pricing Model

Guide for use
 Nil

Denominator: The total number of Purchase Order Lines (On-Catalogue & Off-Catalogue distributions) processed through the Oracle Financial System during the reporting period specified, excluding inventory orders and iPharmacy purchase orders (iPharmacy orders are non-Oracle transactions)

Denominator data elements: **Data Element/Data Set**
 PO Purchase Order Distribution - Extract - Driver Data report (Customised version).

- Catalogue type
- Account Code
- Entity
- Cost Centre
- Purchase Order Number
- Purchase Order Line
- Source Requisition

Data Source

- Oracle Financials (PO Purchase Order Distribution - Extract - Driver Data report (HSS Customised version))

Guide for use

PO Purchase Order Distribution - Extract - Driver Data report (HSS Customised version)

1. Condition - Exclude Inventory Account <> 931101
2. Custom field - 'Catalogue Type' added
3. Parameter - SELECT Entity(s) = All entities except WACHS entities (Entity Code <> 080,180)

Parameter - SELECT Creation Date From & To = monthly reporting period.

Disaggregation data elements: **Data Element/Data Set**
Nil

Data Source

Nil

Guide for use

This indicator applies to Health Support Services only, hence disaggregation is not applicable.

Comments: Nil

Representational attributes

Representation class: Mean (average)

Data type: Monetary amount

Unit of measure: Currency

Format: \$NN.NN

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

See Numerator and/or Denominator

Data provider

Numerator:

- System Business Analytics, Information & System Performance, Purchasing and System Performance, WA Department of Health
- Health Service Providers' Finance.

Denominator:

- Health Support Services.

Quality statement: Nil

Accountability attributes

Benchmark:

Target: \$39

Sourced from: 2021-22 WA Budget Statements. Budget Paper No. 2-Volume 1, page 325.

Approved by: Director General, WA Department of Health.

Methodology: Nil

*Further data development/
collection required:* Nil

Other issues caveats: Nil

Source and reference attributes

Reference documents: Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Average cost of providing ICT services to Health Support Services' clients

Identifying and definitional attributes

Metadata item type: Indicator

Synonymous names: Nil

Catalogue identifier: 0052

Reporting entities/scope: HSS

Description: Average cost for HSS to deliver Information and Communications Technology (ICT) services to HSS clients. Services include:

- General ICT Support Services
- Purchasing ICT Products
- Applications Management Services
- ICT Core Foundation Support Services
- Business partnering and Consulting Services
- Standards, Policy and Governance.

Rationale: Providing information management, ICT governance and enterprise architecture to enable appropriate access, management and sharing of patient information, corporate and health system data is crucial in delivering a highly functioning health system.

This indicator measures the ability of HSS to deliver the above ICT services to its customers in an efficient manner.

Indicator set: Annual Reports 2021-22

Frequency: Annual, by financial year

Outcome area: **Annual Reports 2021-22:**

- Outcome 3: Strategic leadership, planning and support services that enable a safe, high quality and sustainable WA health system
- Service 10: Health Support Services.
- Efficiency

Collection and usage attributes

Population group age from: Not applicable.

Population group age to: Not applicable.

Computation description: [Numerator] divided by the [Denominator] (expressed as \$).

Inclusions:

Numerator:

- From Cost Centres mapped to the following Outcome Based Management (OBM) Programs

under Service 11:

- 23.4 (Information Technology Services)

Include:

- Total Expenditure, defined as (Account L5)
 - AAA300 - Total Expenses
- Recoup Revenue, defined as (Account L2):
 - B15000 - External Recoups
 - B42000 - Services to External Health Services & Organisations

Note that the inclusion of Recoup Revenue acts as an offset against Total Expenditure.

Denominator:

All WA health system employees who incur FTE (via Alesco or Lattice) during the reporting period specified are included when calculating the denominator.

The following Non-Health Entities are included in the total FTE:

- Health and Disability Services Complaints Office (HaDSCO)
- Mental Health Commission.

Exclusions:

Numerator:

- Capital expenditure, defined as Capital Works entity codes (i.e. starting with a '1')
- Financial Products defined as expenditure within the following (Account Level 2):
 - A77000 – Depreciation Expenses;
 - A77100 – Depreciation Expenses - Leases;
 - A77200 - Service Concession Assets - Depreciation & Amortisation Expenses
 - A79000 - Amortisation Expenses
 - A75000 - Debtors Expenses
 - A76000 - Financial Expenses
 - A76100 - Financial Expenses – Leases
 - A780000 - Other Asset Expenses, except for Accounts:
 - 372800 – Short-Term Lease Expenses
 - 372801 – Low-Value Lease Expenses
 - 372802 – Variable Lease Expenses
 - 372803 – Lease Maintenance Expense

Denominator:

- As the Quadriplegic Centre does not use WA

Health Payroll systems (Lattice or Alesco), these staff are not included in the FTE count.

Computation:

Numerator/denominator (Expressed as \$).

Numerator:

Total accrued expenditure assigned to Service Line 10 (Health Support Services), Program 23.4 (Information Technology Services), for Staffing & OGS either directly or indirectly associated with delivering the following ICT services to the WA health system for the reporting period specified:

- General ICT Support Services (Service Desk, Field Support, End User Computing, Account Management, Remote Access, Email)
- Purchasing ICT Products
- Applications Management Services
- ICT Core Foundation Support Services (WAN/ LAN, Telecommunications, Data Centre, Database admin/application/web hosting, Infrastructure expansion)
- Business partnering and Consulting Services
- Standards, Policy and Governance.

Numerator data elements:

Data Element/Data Set

[OBM Program Code]
[Cost Centre L5 name]
[Cost Centre Posting Code]
[Account L2 code]
{YTD amount}

Data Source

- OBM Allocation Application
- Oracle 11i Financial System
- HSS Costing & Pricing Model

Guide for use

Nil

Denominator:

The total sum of WA Health FTE for the reporting period specified.

Denominator data elements:

Data Element/Data Set

COS (Costings) FTE Metrics - Summary

- Period Name
- Fin Year
- Cost centre L5 Description - <All>
- Account L2 Long Name - <All>
- MTD FTE

Data Source

- WA Health Human Resources Data Warehouse (COS FTE Metric – Summary)

Guide for use

For monthly reporting, the total sum of WA Health FTE for the reporting period specified is divided by 12 to distribute the FTE across the 12 months of the year. Monthly data is aggregated to produce the financial year data values.

Disaggregation data elements: **Data Element/Data Set**

Nil

Data Source

Nil

Guide for use

This indicator applies to Health Support Services only, hence disaggregation is not applicable.

Comments: Nil

Representational attributes

Representation class: Mean (average)

Data type: Monetary amount

Unit of measure: Currency

Format: \$N,NNN

Indicator conceptual framework

Framework and dimensions: 2021-22 Outcome Based Management Framework

Data source attributes

Data sources:

Data Source

See Numerator and/or Denominator

Data provider

Numerator:

- System Business Analytics, Information & System Performance, Purchasing and System Performance, WA Department of Health
- Health Service Providers' Finance.

Denominator:

- Health Support Services.

Quality statement: Nil

Accountability attributes

Benchmark:

Target: \$4,313

Sourced from: 2021-22 WA Budget Statements. Budget Paper No. 2-Volume 1, page 325.

Approved by: Director General, WA Department of Health.

Methodology: Nil

*Further data development/
collection required:* Nil

Other issues caveats: Nil

Source and reference attributes

Reference documents: Nil

Registry management attributes

Version control:

Version number	Approval date	Approved by	Comments
1.0	2 May 2022	Assistant Director General, Purchasing and System Performance	

Appendix A

Indicator template business rules

Indicator technical name

Identifying and definitional attributes

<i>Metadata item type:</i>	Default as 'Indicator'. METeOR defines an indicator as a statistical measure used to describe the progress or performance of the health or welfare system. This may be linked to a population or a number related to the provision of goods and services-output.
<i>Synonymous names:</i>	Provide a synonymous name the Indicator is known by. This may be 'Nil'.
<i>Catalogue identifier:</i>	Provide the unique identifier used by the Department of Health. This is in the format NNNN, e.g. 0001.
<i>Reporting scope/entities:</i>	List the specific entities which are measured against this indicator.
<i>Description:</i>	Provide a short description of the indicator.
<i>Rationale:</i>	Provide a designation or description of the application environment or discipline in which an indicator is applied or from which it originates, as well as a justification for inclusion of the indicator. This should be concise and preferably not dated.
<i>Indicator set:</i>	Provide a single or multi-word designation assigned to a set of indicators. In METeOR this appears in the heading for each indicator.
<i>Frequency:</i>	Specify the frequency at which the indicator is reported and if relevant, the reporting period (e.g. financial year, calendar year, latest 2 calendar years).
<i>Outcome area:</i>	Outcomes should be strategic, high level and observable, expressed in clear, measurable and achievable terms. Several outcome areas may be identified for each objective. This should include Outcomes Based Management outcomes and/or alignment to WA Health Strategic Priorities and/or Enablers.

Collection and usage attributes

<i>Population group age from:</i>	Provide contextual information about a subgroup of people of interest, such as the provision of health and welfare services are delivered in context of economic, social and cultural populations. Specifically, denote the age at which investigation commences.
<i>Population group age to:</i>	Provide contextual information about a subgroup of people of interest, such as the provision of health and welfare services are delivered in context of economic, social and cultural populations. Specifically, denote the age at which investigation ceases.
<i>Computation description:</i>	Provide the plain text description of the formulae used to calculate an indicator.

	This should include inclusions and exclusions.
<i>Computation:</i>	Provide a group of symbols that make a formal mathematical statement.
<i>Numerator:</i>	Provide a description of the number above the line in a fraction showing how many of the parts indicated by the denominator are taken. The numerator may also be used to represent a count, rather than a fractional representation. In this case the denominator should be left blank.
<i>Numerator data elements:</i>	<p>Data Element/Data Set Specify a set of data elements used to calculate the numerator.</p> <p>Data Source Specify a specific data set, database and reference from where data are sourced.</p> <p>Guide for use Specify information such as the methods of data collection including census, sample survey, and administrative by-product. This may be 'Nil'.</p>
<i>Denominator:</i>	Provide a description of the number below the line in a fraction.
<i>Denominator data elements:</i>	<p>Data Element/Data Set Specify a set of data elements used to calculate denominator.</p> <p>Data Source Specify a specific data set, database and reference from where data are sourced.</p> <p>Guide for use Specify information such as the methods of data collection including census, sample survey, and administrative by-product. This may be 'Nil'.</p>
<i>Disaggregation data elements:</i>	<p>Data Element/Data Set Specify a set of data elements used to calculate disaggregated items.</p> <p>Data Source Specify a specific data set, database and reference from where data are sourced. This may be 'See Numerator and/or Denominator'.</p> <p>Guide for use Specify information such as the methods of data collection including census, sample survey, and administrative by-product.</p>
<i>Comments:</i>	Provide any additional information that adds to the understanding of the metadata item. This may be 'Nil'.
Representational attributes	
<i>Representation class:</i>	Specify the class of representation of an indicator, e.g. Rate, Percentage, Ratio, Count, etc.
<i>Data type:</i>	Specify a set of distinct values, characterised by properties of those values and by the operations on those values, e.g.

<i>Unit of measure:</i>	Monetary amount, Coded category, etc. Specify the unit used in the measurement of the indicator such as 'Person', etc.
<i>Format:</i>	Specify a template for the presentation of values, including specification and layout of permitted characters, the maximum and minimum size, and precision. It is not a template for electronic data transmission or storage.

Indicator conceptual framework

<i>Framework and dimensions:</i>	<p>A conceptual framework monitors progress or outcomes of a particular system and broader determinants of performance of a system in improving the services provided for target populations over time. Many frameworks comprise a number of tiers to best describe a system or sector.</p> <p>A conceptual framework can be used to support benchmarking for system improvement and facilitate use of data at the service unit level for benchmarking purposes. It reflects the service process through which service providers transform inputs into outputs and outcomes in order to achieve desired objectives.</p> <p>This may be 'Nil'.</p>
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Data source attributes

<i>Data sources:</i>	<p>Data Source</p> <p>The data source is a specific data set, database and reference from where data are sourced. This field is automatically generated by METeOR and lists all data sources employed by the indicator from the numerator, denominator and disaggregated items.</p> <p>Data provider</p> <p>Specify the data provider from which the data is sourced.</p>
<i>Quality statement:</i>	Provide a statement of multiple quality dimensions for the purpose of assessing the quality of the data for reporting against the Indicator or Data Source.

Accountability attributes

<i>Benchmark:</i>	Specify a standard, or point of reference, against which things can be compared, assessed, measured or judged.
<i>Methodology:</i>	Describe where the methodology was sourced from.
<i>Further data development/ collection required:</i>	Describe whether the data specifications for an indicator are interim or long term. Planned data development such as changes to definitions and methodology indicate the indicator is an interim specification. This may be 'Nil'.
<i>Other issues caveats:</i>	Specify any additional information required to interpret the data, or any other issues or caveats which do not fit in the other fields in the template. This may be 'Nil'.

Source and reference attributes

<i>Reference documents:</i>	<p>Significant documents that contributed to the development of the item, but which were not direct sources for content.</p> <p>This may be 'Nil'.</p>
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Registry management attributes

<i>Version control:</i>	Version number	Approval date	Approved by	Comments
	1.0	DD/MM/YYYY	TBC	First version endorsed.

Appendix B

WA health system 2021-22 OBM Framework – Internal Management Sub-Service View

Current as at March 2022

Key:

	ABF Funded Services
	Non Hospital and Block Funded Services

Outcomes	Service	Sub-Services	Programs
Outcome 1: Public hospital based services that enable effective treatment and restorative healthcare for Western Australians	1. Public Hospital Admitted Services The provision of healthcare services to patients in metropolitan and major rural hospitals that meet the criteria for admission and receive treatment and/or care for a period of time, including public patients treated in private facilities under contract to the WA health system. Admission to hospital and the treatment provided may include access to acute and/or subacute inpatient services, as well as hospital in the home services. Public Hospital Admitted Services includes teaching, training and research activities provided by the public health service to facilitate development of skills and acquisition or advancement of knowledge related to admitted services. This Service does not include any component of the Mental Health Services reported under Service four "Mental Health Services".	01. Public Hospital Admitted Services	1.1 Acute Inpatient Activity
			1.2. Sub-acute Inpatient Activity
			1.3. Teaching, Training and Research Funding - Inpatient
		02. Public, Private Partnership - Admitted Services	2.1. Public, Private Partnership - Inpatient Activity
			2.2 PPP- Teaching, Training and Research - Inpatient
	2. Public Hospital Emergency Services The provision of services for the treatment of patients in emergency departments of metropolitan and major rural hospitals, inclusive of public patients treated in private facilities under contract to the WA health system. The services provided to patients are specifically designed to provide emergency care, including a range of pre-admission, post-acute and other specialist medical, allied health, nursing and ancillary services. Public Hospital Emergency Services includes teaching, training and research activities provided by the public health service to facilitate development of skills and acquisition or advancement of knowledge related to emergency services. This Service does not include any component of the Mental Health Services reported under Service four "Mental Health Services".	03. Public Hospital Emergency Department Services	3.1 Emergency Department Activity
			3.2 Teaching, Training and Research - Emergency Department
		04. Public, Private Partnership - Emergency Department Services	4.1 Public, Private Partnership - Emergency Department Activity
			4.2 PPP- Teaching, Training and Research - Emergency Department
	3. Public Hospital Non-Admitted Services The provision of metropolitan and major rural hospital services to patients who do not undergo a formal admission process, inclusive of public patients treated by private facilities under contract to the WA health system. This Service includes services provided to patients in outpatient clinics, community based clinics or in the home, procedures, medical consultation, allied health or treatment provided by clinical nurse specialists. Public Hospital Non-Admitted Services includes teaching, training and research activities provided by the public health service to facilitate development of skills and acquisition or advancement of knowledge related to non-admitted services. This Service does not include any component of the Mental Health Services reported under Service four "Mental Health Services".	05. Public Hospital - Non-admitted Services	5.1 Non-admitted Activity
			5.2 Teaching, Training and Research - Non-admitted
		06. Public, Private Partnership - Non-admitted Services	6.1 Public, Private Partnership - Non-admitted Activity
			6.2 PPP - Teaching, Training and Research - Non-admitted Activity
	4. Mental Health Services The provision of inpatient services where an admitted patient occupies a bed in a designated mental health facility or a designated mental health unit in a hospital setting; and the provision of non-admitted services inclusive of community and ambulatory specialised mental health programs such as prevention and promotion, community support services, community treatment services, community bed based services and forensic services. This Service includes the provision of statewide mental health services such as perinatal mental health and eating disorder outreach programs as well as the provision of assessment, treatment, management, care or rehabilitation of persons experiencing alcohol or other drug use problems or co-occurring health issues. Mental Health Services includes teaching, training and research activities provided by the public health service to facilitate development of skills and acquisition or advancement of knowledge related to mental health or alcohol and drug services. This service includes public patients treated in private facilities under contract to the WA health system.	07. Public Hospital - Inpatient Mental Health Services	7.1 Acute Inpatient Mental Health
			7.2 Sub-acute Inpatient - Mental Health
			7.3 Teaching, Training and Research - Mental Health Inpatient
		08. Public, Private Partnership - Inpatient Mental Health Services	8.1 Public, Private Partnership - Inpatient Mental Health
			8.2 PPP - Teaching, Training and Research - Mental Health Inpatient
		09. Public Hospital - Non-Admitted Mental Health Services	9.1 Non-Admitted Patients - Mental Health
		10. Mental Health Specific Services	10.1 Mental Health Specific Programs

5. Aged and Continuing Care Services The provision of aged and continuing care services and community based palliative care services. Aged and continuing care services include programs that assess the care needs of older people, provide functional interim care or support for older, frail, aged and younger people with disabilities to continue living independently in the community and maintain independence, inclusive of the services provided by the WA Quadriplegic Centre. Aged and Continuing Care Services is inclusive of community based palliative care services that are delivered by private facilities under contract to the WA health system, which focus on the prevention and relief of suffering, quality of life and the choice of care close to home for patients.	11. Aged and Continuing Care Services	11.1 Aged Care Assessment Teams (ACAT) 11.2 Home and Community Care (HACC) 11.3 Transition Programs 11.4 Home Care Programs – (a) days of care 11.5 Residential and respite care 11.6 Private & NGO Aged Care Contracts 11.7 Complex and Long Stay Programs 11.8 Quadriplegic Centre – Inpatient Services 11.9 Quadriplegic Centre – Community Services 11.10 Home Care Programs – (b) occasions of service 11.11 Continuing Care - Non-acute admitted 11.12 Continuing Care - Chronic illness and other clients
	12. Palliative & Cancer Care Services	12.1 Palliative & Cancer Care Services 12.2 Contracted Palliative & Cancer Care Services
6. Public and Community Health Services The provision of healthcare services and programs delivered to increase optimal health and wellbeing, encourage healthy lifestyles, reduce the onset of disease and disability, reduce the risk of long-term illness as well as detect, protect and monitor the incidence of disease in the population. Public and Community Health Services includes public health programs, Aboriginal health programs, disaster management, environmental health, the provision of grants to non-government organisations for public and community health purposes, emergency road and air ambulance services, services to assist rural based patients travel to receive care, and state wide pathology services provided to external WA Agencies.	13. Public Health Services	13.1 Health Promotion, Primary Care, Education and Research 13.2 Health Protection and Screening Services 13.3 BreastScreen WA
	14. Special Purpose Services	14.1 Specific Renal Programs 14.2 Blood Contract Programs 14.3 Friend In Need - Emergency (FINE) Programs 14.4 Other non-admitted programs
	15. Patient Transport Services	15.1 Emergency Road Based Ambulance Services 15.2 Emergency Air Based Services 15.3 Patient Assisted Transport Service (PATs) 15.4 Other transport services
	16. Aboriginal Health Services	16.1 Aboriginal Health
	17. Pathology Services	17.1 PathWest services for customers external to the WA health system 17.2 PathWest Clinical Pathology Services
	18. Oral Health Care WA	18.1 Oral Health Care WA
	19. Community Dental Health	19.1 Community Dental Health – (a) school children 19.2 Community Dental Health – (b) socio-economically disadvantaged adults
	20. Block Funded Small Rural Hospitals	20.1 Block Funded Small Rural Hospitals
	21. RFR and Other Commonwealth Funding	21.1 RFR and Other Commonwealth Funding
	22. RFR and Other Commonwealth Funding	22.1 RFR and Other Commonwealth Funding
7. Pathology Services		
8. Community Dental Health Services Dental health services include the school dental service (providing dental health assessment and treatment for school children); the adult dental service for financially, socially and/or geographically disadvantaged people and Aboriginal people; additional and specialist dental; and oral healthcare provided by the Oral Health Centre of Western Australia to holders of a Health Care Card. Services are provided through government funded dental clinics, itinerant services and private dental practitioners participating in the metropolitan, country and orthodontic patient dental subsidy schemes.		
9. Small Rural Hospital Services Provides emergency care & limited acute medical/minor surgical services in locations 'close to home' for country residents/visitors, by small & rural hospitals classified as block funded. Include community care services aligning to local community needs.		

Outcome 3: Strategic leadership, planning and support services that enable a safe, high quality and sustainable WA Health System	10. Health System Management - Policy and Corporate Services The provision of strategic leadership, policy and planning services, system performance management and purchasing linked to the statewide planning, budgeting and regulation processes. Health System Policy and Corporate Services includes corporate services inclusive of statutory financial reporting requirements, overseeing, monitoring and promoting improvements in the safety and quality of health services and system wide infrastructure and asset management services.	22. Policy Services	22.1 Public Health Regulatory Unit
			22.2 System Manager Functions
	11. Health Support Services The provision of purchased health support services to WA health system entities inclusive of corporate recruitment and appointment, employee data management, payroll services, workers compensation calculation and payments and processing of termination and severance payments. Health Support Services includes finance and business systems services, IT and ICT services, workforce services, project management of system wide projects and programs and the management of the supply chain and whole of health contracts.	23. Health Support Services	23.1 Finance Accounts Payable Services
			23.2 Human Resources Services
			23.3 Supply Services
			23.4 Information Technology Services

Appendix C

WA health system 2021-22 OBM Framework – Internal Management Efficiency KPI Program View

Current as at March 2022

Please note that entities may have budget and expenditure related to the OBM Programs but do not report the KPI related to the program. Refer to Addendum 1 of the *Outcome Based Management Policy*.

KPI Number	Efficiency KPIs	Program number	Program
9	Average admitted cost per weighted activity unit	1.1	Acute Inpatient Activity
		1.2	Sub-acute Inpatient Activity
		1.3	Teaching, Training and Research Funding - Inpatient
		2.1	Public, Private Partnership - Inpatient Activity
		2.2	PPP - Teaching, Training and Research - Inpatient
10	Average emergency department cost per weighted activity unit	3.1	Emergency Department Activity
		3.2	Teaching, Training and Research - Emergency Department
		4.1	Public, Private Partnership - Emergency Department Activity
		4.2	PPP - Teaching, Training and Research - Emergency Department
11	Average non-admitted cost per weighted activity unit	5.1	Non-admitted Activity
		5.2	Teaching, Training and Research - Non-admitted
		6.1	Public, Private Partnership - Non-admitted Activity
		6.2	PPP - Teaching, Training and Research - Non-admitted Activity
12	Average cost per bed-day in specialised mental health inpatient services	7.1	Acute Inpatient Mental Health
		7.2	Sub-acute Inpatient - Mental Health
		7.3	Teaching, Training and Research - Inpatient Mental Health
		8.1	Public, Private Partnership - Inpatient Mental Health
		8.2	PPP - Teaching, Training and Research - Inpatient Mental Health
13	Average cost per treatment day of non-admitted care provided by mental health services	9.1	Non-Admitted Patients - Mental Health
		10.1	Mental Health Specific Programs
29	Average cost of a transition care day provided by contracted non-government organisations/service providers	11.3	Transition Programs
30	Average cost per bed-day for specified residential care facilities, flexible care (hostels) and nursing home type residents	11.5	Residential and respite care
31	Average cost per bed-day for WA Quadriplegic Centre inpatient services	11.8	Quadriplegic Centre - Inpatient Services
32	Average cost per home-based hospital day of care and occasion of service	11.4	Home Care Programs - (a) days of care
		11.10	Home Care Programs - (b) occasions of service
33	Average cost per client receiving contracted palliative care services	12.2	Contracted Palliative & Cancer Care Services
34	Average cost per day of care for non-acute admitted continuing care	11.11	Continuing Care - Non-acute admitted
35	Average cost to support patients who suffer specific chronic illness and other clients who require continuing care	11.12	Continuing Care - Chronic illness and other clients

36	Average cost per person of delivering population health programs by population health units	13.1	Health Promotion, Primary Care, Education and Research
		13.2	Health Protection and Screening Services
37	Cost per person of providing preventative interventions, health promotion and health protection activities that reduce the incidence of disease or injury	13.1	Health Promotion, Primary Care, Education and Research
		13.2	Health Protection and Screening Services
38	Average cost per breast screening	13.3	BreastScreen WA
39	Cost per trip for road-based ambulance services, based on the total accrued costs of these services for the total number of trips	15.1	Emergency Road Based Ambulance Services
40	Cost per trip of patient emergency air-based transport, based on the total accrued costs of these services per for the total number of trips	15.2	Emergency Air Based Services
41	Average cost per trip of Patient Assisted Travel Scheme (PATS)	15.3	Patient Assisted Transport Service (PATS)
42	Average cost of pathology services per test panel	17.2	PathWest Clinical Pathology Services
43	The average cost per patient visit of WA Health provided dental health programs for (a) school children and (b) socio-economically disadvantaged adults	19.1	Community Dental Health - (a) school children
		19.2	Community Dental Health - (b) socio-economically disadvantaged adults
44	Average cost per rural and remote population (selected small rural hospitals)	20.1	Block Funded Small Rural Hospitals
47	Average cost of Public Health Regulatory per head of population	22.1	Public Health Regulatory Unit
48	Average cost for the Department of Health to undertake System Manager functions per Health Service Provider full-time equivalent	22.2	System Manager Functions
49	Average cost of Accounts Payable services per transaction	23.1	Finance - Accounts Payable Services
50	Average cost of payroll and support services to Health Support Services' clients	23.2	Human Resources Services
51	Average cost of Supply Services by purchasing transaction	23.3	Supply Services
52	Average cost of providing ICT services to Health Support Services' clients	23.4	Information Technology Services



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