Delivering a **Healthy WA**

Safety and Quality Investment for Reform

A handbook for building a safer health care system

Healthy Workforce • Healthy Hospitals • Healthy Partnerships
Healthy Communities • Healthy Resources • Healthy Leadership

HP10487 NOV'07 22422

Department of Health

SQuIRe Implementation Guide

This handbook has been designed by the Office of Safety and Quality in Healthcare to provide health professionals and policy makers across the WA health care system with background information on the WA Safety and Quality Investment for Reform (SQuIRe) Program, and practical advice for Area Health Services and clinicians to set up and implement evidence-based clinical practice improvement programs within WA health services.

Detailed information about the components of the SQuIRe Program and links to the resource kits, tools and measures for each of the eight clinical practice improvement programs are available from the SQuIRe website: www.safetyandquality.health.wa.gov.au/squire

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Acknowledgements

This handbook has been prepared by the following staff in the Office of Safety and Quality in Healthcare on behalf of all the SQuIRe Teams in the WA health care system:

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The Office of Safety and Quality in Healthcare acknowledges and thanks all SQuIRe Teams for their support during the roll-out of the SQuIRe Program across the WA health care system.

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Abbreviations

AMI	Acute Myocardial Infarction
CPI	Clinical Practice Improvement
CVC	Central Venous Catheter
HISWA	Healthcare Infection Surveillance WA
IHI	Institute for Healthcare Improvement
PCI	Percutaneous Coronary Intervention
PDSA	Plan-Do-Study-Act
SQuIRe	Safety and Quality Investment for Reform
VTE	Venous Thromboembolism

1. About Safety and Quality Investment for Reform (SQuIRe) Program

Clinical governance, first established in Western Australia in 2001, is defined as the "systematic and integrated approach to assurance and review of clinical responsibility and accountability that improves quality and safety resulting in optimal patient outcomes."[1] The WA Clinical Governance Framework, comprising four pillars: consumer value, clinical performance and evaluation, clinical risk, and professional development and management, was fully deployed across the WA health care system in 2005. In 2006, the Office of Safety and Quality in Healthcare developed a specific patient safety investment program to build on the frameworks of clinical governance and patient safety.

The Safety and Quality Investment for Reform (SQuIRe) Program was created to strengthen the Department of Health's clinical governance and patient safety management systems, and to ensure the delivery of safe, high quality, evidence-based health care to patients and the WA community. The Office of Safety and Quality in Healthcare and Health Finance Division provide policy and financial support for the SQuIRe Program respectively. The Area Health Services are responsible for the delivery of the SQuIRe Program and clinical care to the WA community. Figure 1 below presents the roles and responsibilities for the implementation of the SQuIRe Program within the WA health care system.

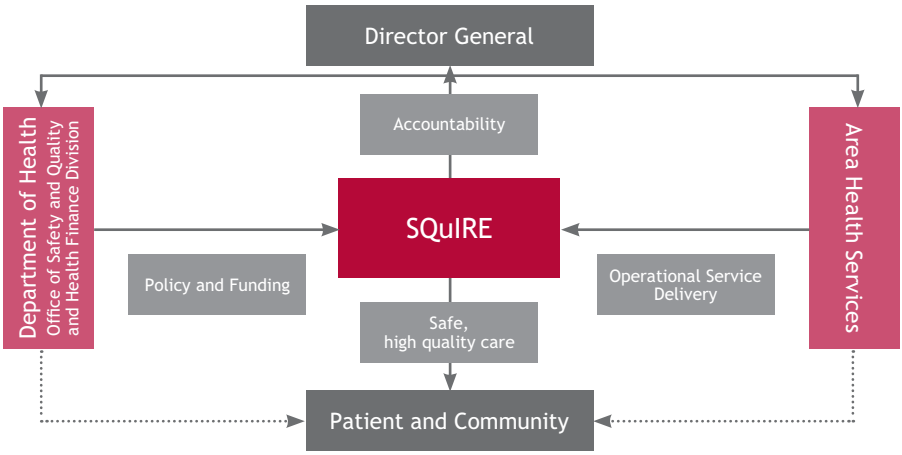

Figure 1. Implementation of the SQuIRe Program within the WA health care system

1 Department of Health (2005). Setting Standards for Making Health Care Better: Implementing Clinical Governance in WA Health Services.

2. Rationale for the SQuIRe Program

To embed the Clinical Governance Framework in the WA health care system and to ensure that health care is safe, effective and responsive, a number of needs were recognised. These include the need for:

- Long term commitment to clinical governance and patient safety and quality at all levels of the WA health care system
- Best practice implementation of clinical governance responsibilities at all levels of the WA health care system
- Standardisation in clinical improvement areas that have an impact on patient safety
- Investment in operational capacity, building on existing safety and quality infrastructure
- Establishment of an organisational culture that is open to learning from errors and adverse events, and free from blame
- Significant investment in systems redesign both within health care facilities and across a range of health care settings to ensure the uptake and wide dissemination of evidence-based safe practice.

3. Objectives of the SQuIRe Program

The SQuIRe Program aims to:

1. Ensure the delivery of safe, high quality, evidence-based health care to patients and the community
2. Improve the efficiency of the WA health care system
3. Reduce the incidence and impact of adverse events and sentinel events in the WA health care system
4. Establish a health care system which supports and encourages staff excellence
5. Provide incentives for the provision of safe health care
6. Ensure that adequate clinical governance and safety management systems are in place in Area Health Services across the WA health care system.

4. Components of the SQuIRe Program

The SQuIRe Program consists of three interdependent tiers, as outlined in the table below.

Tier 1	Laying the Foundation (refer to section 5)
Tier 2	Best-Practice Clinical Care (refer to section 6)
Tier 3	Towards a Common Goal (refer to section 7)

Area Health Services are allocated funds by the Department of Health to implement all three tiers of the SQuIRe Program. For individual health services to access safety and quality funds under the SQuIRe Program they are required to:

- Implement accountability arrangements under the WA Clinical Governance Framework
- Implement policies and procedures across all four pillars of the WA Clinical Governance Framework
- Demonstrate satisfactory compliance with the eight WA Clinical Governance Standards
- Implement the eight mandated evidence-based programs (where appropriate) and support clinical practice improvement at the local level.

5. SQuIRe Tier 1: Laying the Foundation

Tier 1 of the SQuIRe Program requires Area Health Services to implement the WA Clinical Governance Framework at all levels of their respective hospitals/health services.

The Department of Health has developed the WA Clinical Governance Framework to improve accountability across the WA health care system for the delivery of safe and high quality health care to Western Australians. The WA Clinical Governance Framework is congruent with the Department of Health's Strategic Intent 2005-2010, to 'create a healthy WA', and comprises four complementary pillars:

1. Consumer Value

2. Clinical Performance and Evaluation

3. Clinical Risk

4. Professional Development and Management.

The four pillars of clinical governance are housed within a broader organisational system that provides support, direction and accountability to the WA Clinical Governance Framework. This system is illustrated in Figure 2 below.

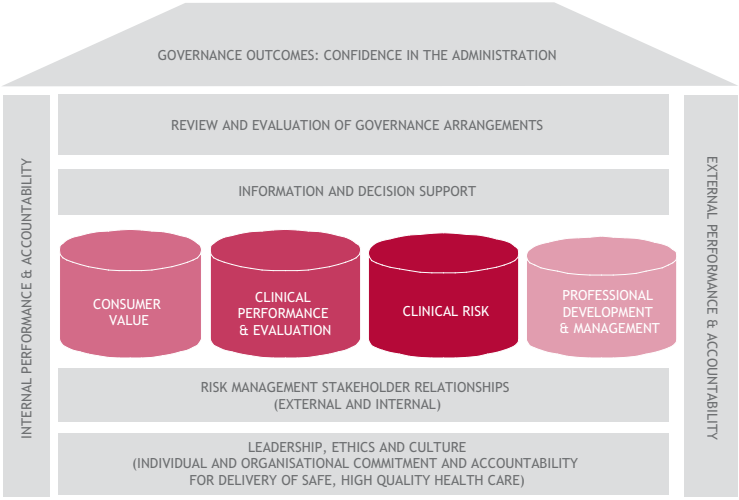

Figure 2. Organisational context of clinical governance[2]

2 Department of Health (2005). Setting Standards for Making Health Care Better: Implementing Clinical Governance in WA health Services.

In addition to implementing the Clinical Governance Framework, health services are required to measure and demonstrate compliance against the eight WA Clinical Governance Standards below:

1. Accountability - Organisational responsibility for clinical governance is clearly defined at the individual, unit and system levels

2. Policy and Strategy - The organisation has documented policies and strategies for clinical governance and can demonstrate activity consistent with these policies

3. Organisational Structure - Clinical governance policies and strategies have been incorporated into the business structures of the organisation

4. Appropriate Resource Allocation - The organisation provides human and physical resources to lead, implement and support clinical governance activities

5. Communication - The organisation communicates the clinical governance policy and strategy to all staff and other stakeholders

6. Professional Development and Training - All employees, including managers and clinicians, are provided with adequate information, resources, training and professional development to support the organisation's clinical governance activities

7. Measuring Effectiveness - Performance indicators are used at all levels of the organisation to measure and demonstrate the effectiveness of the organisation's clinical governance policy and strategy

8. Independent Assurance - The Chief Executive and Health Service Executive Team receives independent assurance(s), by external review, that a clinical governance system is in place and meets the requirements of this standard

The Clinical Governance Standards were designed to assist managers, clinicians, and other health professionals to develop, implement, monitor and evaluate clinical governance processes and systems within their health services.

A Clinical Governance Standards Assessment Tool has been developed to assist Area Health Services and the WA health care system to measure compliance against these Standards. Area Health Services are encouraged to undertake regular self-assessments to monitor the development and implementation of clinical governance systems and processes across their organisations. The assessment tool is available by e-mailing the Office of Safety and Quality in Healthcare at: safetyandquality@health.wa.gov.au

The Department of Health will also commission periodic organisation-wide performance reviews to verify the implementation of the WA Clinical Governance Framework, compliance with the Clinical Governance Standards across the WA health care system and to evaluate the capacity for the Area Health Services' clinical governance systems and processes to assure the delivery of safe, high quality health care services to the WA community.

6. SQuIRe Tier 2: Best-Practice Clinical Care

Tier 2 of the SQuIRe Program involves applying an integrated approach to the implementation of evidence-based clinical practice improvement initiatives. The Clinical Practice Improvement (CPI) Program consists of eight evidence-based initiatives that have been mandated for implementation (where appropriate) by Area Health Services between 2006 and 2009:

- **Evidence-based clinical practice -**

1. Prevent deep venous thrombosis and venous thromboembolism by regular patient evaluation and application of evidence-based prevention strategies
2. Prevent pressure ulcers by regular patient evaluation and application of evidence-based prevention strategies
3. Deliver evidence-based care for acute myocardial infarction
4. Prevent hospital falls and fall related injuries.

- **Medication reconciliation -**

5. Prevent adverse drug events by implementing medication reconciliation.

- **Infection control practices -**

6. Prevent surgical site infections by implementing standardised evidence-based practice
7. Prevent central line infections by implementing standardised evidence-based practice
8. Prevent transmission of micro-organisms by implementing a comprehensive hospital-wide hand hygiene program.

The eight CPI initiatives were selected as priority patient safety initiatives for the WA health care system following a review of WA administrative databases and clinical incident information sources, including the WA Advanced Incident Management System. Information was also gathered from international and national literature, and best practice programs developed by the:

- Agency for Healthcare Research and Quality
- Australian Commission on Safety and Quality in Health Care - Safer Systems-Saving Lives Campaign

- Canadian Patient Safety Institute - Safer Healthcare Now! Campaign
- Institute for Healthcare Improvement - 100K Lives Campaign and 5 Million Lives Campaign
- World Health Organisation - Global Patient Safety Challenge.

7. SQuIRe Tier 3: Towards a Common Goal

To ensure that best practice becomes the norm within health services, it is imperative that evidence-based clinical practice improvement initiatives are embedded into the organisational culture. As part of Tier 3, the Department of Health will work with Area Health Services to ensure the sustainability of clinical practice improvement initiatives.

8. Implementing Clinical Practice Improvement Initiatives – A Practical Guide

The following chapter provides an overview and practical advice on the implementation of the eight CPI initiatives, as based on the WA experience. Detailed information and resources can be obtained from the SQuIRe website: www.safetyandquality.health.wa.gov.au/squire

8.1. CPI Initiative Measures and Resources

The programs listed below provide detailed measures and 'How-to' guides, from which the eight CPI initiatives have been adapted. These programs provide excellent information, contain invaluable tips, lessons for success, and measurement and data collection tools that can be adapted if desired:

- 5 Million Lives Campaign – click on the 'Materials' tab to access resources page www.ihi.org/IHI/programs/campaign
- Safer Healthcare Now! - click on the 'Resources' tab to access Getting Started Kits www.saferhealthcarenow.ca
- Safer Systems Saving Lives Campaign - click on the 'Interventions' tab to access initiatives and toolkits www.health.vic.gov.au/sssl

Some of these resources may be protected by copyright: ensure all copyright requirements are met prior to their use.

8.2. CPI Initiative Measurement Methods and Tools

Frequent monitoring of the CPI measures should be undertaken to guide the implementation process. For most initiatives, it is suggested that measurements should be conducted monthly, using a sample of a minimum of 15 patients. These measurements can be completed using either retrospective or concurrent data collection. Technical measurement definitions and instructions, and information regarding the inclusions and exclusions of each of the CPI measures can be accessed via the resource toolkits on the websites listed on page 8.

The Safer Healthcare Now! website (www.saferhealthcarenow.ca) also provides easy-to-use calculation worksheets that can be used or adapted, and can be accessed by clicking on the '*Measurement*' tab.

8.3. Clinical Practice Improvement Initiatives

8.3.1. Venous thromboembolism (VTE)

Resources

Useful resources include:

- National Institute of Clinical Studies www.nhmrcgov.au/nics
- The Australia and New Zealand Working Party on the Management and Prevention of Venous Thromboembolism. Prevention of Venous Thromboembolism: Best Practice Guidelines for Australia and New Zealand. 3rd ed. (July 2005).

VTE Measures

- Process Measures
  1. VTE risk assessment
  2. VTE prevention treatment

Ideally, health services should strive to achieve 100% compliance on each of the process measures above.

- Outcome Measure
  3. VTE Incidence

Measure 1: VTE risk assessment

The percentage of patients assessed for VTE risk

Calculation:

$$\frac{\text{Number of patients who received VTE risk assessment}}{\text{Number of patients audited}} \times 100 = \text{Level of Compliance}$$

Measure 2: VTE prevention

The percentage of reviewed patients receiving appropriate VTE prophylaxis

Calculation:

Number of patients receiving appropriate VTE prophylaxis / Number of patients audited	x 100 =	Level of Compliance

Measure 3: VTE incidence

The incidence of VTE related to hospitalisation

Incidence measures the rate over time that patients at risk develop VTE (e.g. 2 VTE per 100 patients at risk per month), and requires continuous measurement of the population being studied.

Number of new VTE events occurring > 48 hours after hospital admission in the selected patient population each month / Number of patients in the patient population admitted to hospital for > 48 hours each month	x 100 =	VTE Rate per 100 admissions per month

8.3.2. Pressure ulcers

Resources

- WoundsWest is a 3-year statewide project aiming to improve patient outcomes and achieve significant cost savings through the implementation of evidence-based wound management across WA. The key components of the project are:
  1. Annual prevalence surveys
  2. Development and implementation of evidence-based guidelines and education and competency based assessment for all wound categories
  3. Electronic wound imaging, documentation system and remote referral
  4. Centralised data repository.
- WoundsWest will provide expert support and facilitation directly to teams participating in this CPI target through the project's development of protocols, tools, evidence-based guidelines and education packages for all wound categories designed specifically for WA health care facilities.
- The WoundsWest Project can be contacted at woundswest@health.wa.gov.au

  Further information is also available on the website: www.health.wa.gov.au/WoundsWest

Pressure Ulcer Measures

- Process Measures
  1. Pressure ulcer risk assessment
  2. Application of appropriate pressure ulcer prevention strategies

Ideally, health services should strive to achieve 100% compliance on each of the process measures above.

- Outcome Measure
  3. Prevalence of pressure ulcers

Measure 1: Pressure ulcer risk assessment

The percentage of patients for whom all components of proper pressure ulcer admission assessment were performed and documented. This includes both the use of an agreed-upon risk assessment tool and skin assessment to identify existing pressure ulcers

Inclusions, exclusions and definitions can be obtained from IHI 5 Million Lives Campaign Prevent Pressure Ulcers How-to Guide – **Element 1**

Risk Assessment Tools:

- Teams should use a validated risk assessment tool (e.g. Braden, Norton)
- Additional educational material and information regarding risk assessment and the use of risk assessment tools is available from Module 2 of the *Pressure Ulcer Basics* education package of the Victorian Government Department of Human Services: www.health.vic.gov.au/pressureulcers/education (Ensure all copyright requirements are met before using this resource).

Calculation:

$$\frac{\text{Number of reviewed patients who received an agreed risk assessment}}{\text{Number of reviewed patients}} \times 100 = \text{Level of Compliance}$$

Measure 2: Pressure ulcer prevention strategies

The percentage of patients identified as at risk for pressure ulcers for whom all components of proper pressure ulcer care were performed and documented in the calendar day prior to review

Inclusions, exclusions and definitions can be obtained from IHI 5 Million Lives Campaign Prevent Pressure Ulcers How-to Guide – **Elements 3 - 6**

Calculation:

$$\frac{\text{Number of at-risk patients receiving the appropriate prevention strategies}}{\text{Number of patients identified as being at risk}} \times 100 = \text{Level of Compliance}$$

Measure 3: Prevalence of pressure ulcers

The percentage of patients that have a pressure ulcer at the time of the survey

Inclusions, exclusions and definitions can be obtained from IHI 5 Million Lives Campaign Prevent Pressure Ulcers How-to Guide

Measurement Methods and Tools:

Prevalence is a widely used outcome measure for pressure ulcer tracking, and many WA hospitals already have experience in pressure ulcer prevalence surveys.

Monthly prevalence measurement is not required, but teams may choose to do prevalence surveys quarterly (or at a frequency appropriate to resource availability) to evaluate progress toward this goal.

For hospitals that do not have an existing prevalence survey program in place, prevalence survey tools can be accessed from the Victorian Government Health Information website:

www.health.vic.gov.au/qualitycouncil/pub/improve/state.htm

(Ensure all copyright requirements are met before using this resource).

Prevalence measures the proportion of patients in hospital at a particular point in time with a pressure ulcer. Measuring the incidence of hospital-acquired pressure ulcers, (i.e. the proportion of admitted patients that develop a pressure ulcer during a particular time period, e.g. two new pressure ulcers occurring per 100 admissions per quarter), may be more meaningful in highlighting pressure ulcer care improvement, but is likely to be more resource intensive.

Incidence measurement on a monthly basis is optional for WA CPI teams, but is strongly encouraged. A minimum of 50 at-risk patients each month should be included in a sample to estimate incidence.

8.3.3. Acute myocardial infarction (AMI)

Resources

The Cardiovascular Health Network in WA has extensive knowledge and expertise in this area. For all queries relating to the Cardiovascular Health Network, contact the Clinical Networks Support Unit:

Email: HealthPolicy@health.wa.gov.au

Website: www.healthnetworks.health.wa.gov.au/cardio

AMI Measures

The following measures should be used to monitor success of the change process:

- Process Measures
  1. Early administration of aspirin
  2. Timely initiation of reperfusion
  3. Discharge medication regimen
  4. Complete care

Ideally, health services should strive to achieve 100% compliance on each of the process measures above.

- Outcome Measure
  5. AMI Mortality

Measure 1: Early administration of aspirin

The percentage of AMI patients who received an aspirin before or within 24 hours of hospital arrival

Inclusions, exclusions and definitions can be obtained from Safer HealthCare Now! Getting Started Kit: Improved Care for Acute Myocardial Infarction How-to Guide – **Process Measure 1**.

Measure 2: Timely initiation of reperfusion

Measure 2(a): Percutaneous Coronary Intervention (PCI)

The percentage of AMI patients who received percutaneous coronary intervention (PCI) within 90 minutes of hospital arrival.

Inclusions, exclusions and definitions can be obtained from Safer HealthCare Now! Getting Started Kit: Improved Care for Acute Myocardial Infarction How-to Guide – **Measure 4.0-B pg 50**.

Calculation:

Eligible AMI patients who received PCI within 90 minutes of hospital arrival / Eligible AMI patients who received PCI	x 100 =	Level of Compliance

Measure 2(b): Thrombolytic Agent

The percentage of AMI patients who received thrombolytic therapy within 30 minutes of hospital arrival.

Inclusions, exclusions and definitions can be obtained from Safer HealthCare Now! Getting Started Kit: Improved Care for Acute Myocardial Infarction How-to Guide – **Measure 4.0-B pg 41**.

Calculation:

Eligible AMI patients who received thrombolytic therapy within 30 minutes of hospital arrival / Eligible AMI patients who received thrombolytic therapy	x 100 =	Level of Compliance

Measure 3: Discharge medication regimen

The percentage of AMI patients who are prescribed the following medication regimen (unless contraindicated) at hospital discharge:

- Aspirin
- Beta blocker
- Statin
- ACE inhibitor/Angiotensin-Receptor Blocker (ARB) - if systolic dysfunction

Inclusions, exclusions and definitions can be obtained from Safer Systems Saving Lives Improving Care for Acute Myocardial Infarction Toolkit – **Discharge Care Measure** (excluding Component 5).

Measure 4: Complete Care

The percentage of AMI patients who have received all three appropriate AMI evidence-based elements (early aspirin, timely reperfusion, discharge medication regimen) or have been documented as contraindicated. If one element is missing, the patient did not receive complete care.

Inclusions, exclusions and definitions can be obtained from Safer HealthCare Now! Getting Started Kit: Improved Care for Acute Myocardial Infarction How-to Guide – **Outcome Measure 1**.

Measure 5: AMI mortality

The percentage of AMI patients who died during their hospital admission

Inclusions, exclusions and definitions can be obtained from Safer HealthCare Now! Getting Started Kit: Improved Care for Acute Myocardial Infarction How-to Guide – **Outcome Measure 2**.

Measurement Methods and Tools:

Monthly measurements should include all patients who died.

If practical, retrospective sampling using coding data can be used, as suggested in the Safer Healthcare Now! AMI How-to Guide - **Measure 8, pg 78-80**.

WA Country Health Service: Additional measures (6 & 7)

The WA Country Health Service has mandated the following measure to replace **MEASURE 2: TIMELY INITIATION OF REPERFUSION**

The percentage of eligible AMI patients receiving thrombolytic therapy within 60 minutes of hospital arrival

$$\frac{\text{Number of eligible AMI patients who received thrombolytic therapy within 60 minutes of hospital arrival}}{\text{Number of eligible AMI patients who received thrombolytic therapy}} \times 100 = \text{Level of Compliance}$$

Measure 6: Optimal assessment

The percentage of patients presenting with chest pain who receive optimal assessment to ensure timely access to the 'bundle of care' for the treatment of AMI

6A. The percentage of patients presenting with chest pain who are allocated Triage ≥ 2

6B. The percentage of patients presenting with chest pain who have an ECG performed within 5 minutes

6C. The percentage of patients presenting with chest pain who receive cardiac monitoring – continuous cardiac monitoring is desirable, if available

6D. The percentage of patients presenting with non-ST-elevation who have documented assessment of high, intermediate or low risk non-ST-segment-elevation Acute Coronary Syndrome (ACS)

6E. The percentage of patients presenting with chest pain who have serum Troponin level as part of the initial assessment.

Number of patients presenting with chest pain who receive optimal assessment

$$\frac{\text{(Triage} \geq 2\text{, ECG} \leq 5\text{ mins, continuous cardiac monitoring, documented assessment of risk and serum Troponin)}}{\text{Number of patients presenting to hospital with chest pain}} \times 100 = \text{Level of Compliance}$$

Measure 7: GP follow-up at discharge

The percentage of patients who have confirmed GP follow-up at hospital discharge

$$\frac{\text{Number of patients with AMI who have a confirmed GP follow-up at discharge}}{\text{Number AMI patients discharged during the reporting period}} \times 100 = \text{Level of Compliance}$$

8.3.4. Falls prevention

Resources

- The WA Falls Network
  www.clinicalnetworks.health.wa.gov.au/fallsprevention
- Australian Commission on Safety and Quality and Quality in Health Care www.safetyandquality.gov.au
- Stay on your Feet Project resources www.stayonyourfeet.com.au
- The National Falls Prevention for Older People Plan
  (National Public Health Partnership)
  www.dhs.vic.gov.au/nphp/publications/sipp/fallplan.pdf
- Clinical Governance Standards for Falls Prevention in Western Australian Health Services www.safetyandquality.health.wa.gov.au/squire

Falls Measures

- Process Measures
  1. Falls-risk assessment
  2. Falls-prevention interventions

Ideally, health services should strive to achieve 100% compliance on each of the process measures above.

- Outcome measure
  3. Incidence of falls reported via AIMS or other incidence monitoring systems

Fall Definition:

An incident that results in a person coming to rest inadvertently on the ground or floor or other lower level.

Patients to be targeted for this initiative:

- All patients aged 65 years and over
- Younger people at increased risk of falling, such as those with:
- A history of falls
- Neurological conditions

- Cognitive problems
- Depression
- Lower limb (leg) arthritis
- Acute infections
- Haematological/oncological conditions
- Visual impairment.

Measure 1: Falls risk assessment

The percentage of patients assessed using a falls-risk assessment tool

Calculation:

$$\frac{\text{Number of patients who received a falls risk assessment}}{\text{Number of patients reviewed}} \times 100 = \text{Level of Compliance}$$

Measure 2: Falls-prevention interventions

Section 4 of the National Guidelines for Preventing Falls and Harm from Falls in Older People (available from the Australian Commission on Safety and Quality in Health Care website www.safetyandquality.gov.au) lists the following standard fall-prevention strategies as the minimum acceptable and expected standards that all hospitals should incorporate into routine practice:

1. Screening or assessment of all older people for risk of falling
2. Education and discussion of fall-prevention risks and strategies with all staff, older people and their carers
3. Recording fall-prevention education of staff, older people and their carers
4. Establishing a person's mobility status, and ensuring that they can mobilise safely. This can be done by:
    - Performing a mobility assessment in accordance with local manual handling guidelines
    - Communicating to staff the parameters of the older person's mobility status using written, verbal and visual communication

- Locating walking aids on the side of the bed that the person prefers to exit from and where possible assigning a bed that allows the person to exit from their preferred side
- Supervising or assisting the person if required
- Ensuring that while mobilising, the person wears fitted non-slip footwear—the person should be discouraged from mobilising in socks, surgical stockings or slippers
- Ensuring that familiar equipment used in the home environment is brought with them, including correct spectacles

5. Encouraging participation in functional activities and exercise programs
6. Establishing a plan of care to maintain bowel and bladder function
7. Instructing older people how to use their medications safely when they are being discharged or transferred between facilities
8. Making the environment safe by ensuring that:
   - The bed is at the appropriate height for the person and the wheels/brakes are locked when the bed is not in transit
   - The room is kept free from clutter or spills
   - Adequate lighting is supplied and based on the person's needs (particularly at night)
   - The person knows where their personal possessions are and that he/she can safely access them
   - Floor surfaces are clean and dry
9. Orientating the person to the bed area, room, ward/unit facilities and how they can obtain assistance
10. Instructing and ensuring that older people understand how to use care aids prior to them being prescribed
11. Having a policy in place to minimise the use of restraints and bedside rails
12. Considering vitamin D supplementation with calcium as a routine management strategy in ambulatory older people or if a person lives in a residential aged care facility. If a person sustains a low-trauma fracture, management of osteoporosis should be considered.

Measure 2(a): All Falls-Prevention Interventions

The percentage of patients identified as being a high risk to falling who have ALL appropriate falls-prevention interventions in place

Calculation:

Number of patients observed having all appropriate falls prevention strategies in place / Number of at risk patients reviewed	x 100 =	Level of Compliance

Measure 2(b): Selected Falls-Prevention Interventions

The percentage of appropriate falls-prevention strategies that are in place for each patient at the time of audit.

Calculation:

Number of falls-prevention strategies that are in place at the time of audit / Total number of prevention strategies which should be in place	x 100 =	% Proportion Result

Measure 3: Falls incidence

The incidence of falls occurring in the health care institution

This is a key outcome measure and relates to Standard 7 in the WA Falls Standards (available from www.safetyandquality.wa.gov.au/squire)

Incidence Calculation:

Number of falls in specified time period / Number of occupied bed days	x 1000 =	Incidence of Falls per 1000 bed days

Further Analysis:

The WA Falls Standards also specify annual calculation by each organisation of the rate (not incidence) of inpatient falls using the following indicator definition:

Number of inpatients over 65 years of age who fall / Total number of inpatients over 65 years of age	x 100 =	Rate of Falls

Strategy Implementation				
Criteria	Audit Activity	Yes	No	N/A
Patient is wearing blue wristband.	Examine patient's wrist for presence of blue band.			
Call bell is within reach.	Examine bed-space. Bed should be at a level so that the patient can sit and touch the floor.			
Bed is at appropriate height.	Examine bed-space and determine if call-bell can be accessed safely and independently by this patient.			
Bed rails are being used appropriately.	Determine if bed rails should be up or down for this patient and observe if they are positioned accordingly.			
Bed area is free of clutter.	Examine bed-space. There should be adequate access for the patient with required mobility aids.			
Patient has been reviewed by a physiotherapist.	Determine whether physiotherapy assessment is required for this patient and review integrated notes for evidence of this assessment.			
Mobility aid is within reach.	Determine whether a mobility aid is required for this patient and observe whether this aid is within reach of the patient.			
Patient's table and belongings are within reach.	Observe bed-space to determine whether the patient can safely and independently access their table and belongings (May include phone, lunch, water jug, magazines, glasses etc).			
Appropriate footwear is available.	Determine if footwear is required for that patient, observe what footwear is available and determine if it is appropriate (e.g. non-slip surface, low heel, secure fit).			
Appropriate continence aids have been provided.	Determine what continence aids are appropriate for this patient and observe patient, bed-space space and bathroom for presence of these aids (may include pad or IDC in-situ, urinal or commode at bedside, over-toilet frame in bathroom).			
Appropriate sensory aids are available.	Determine what sensory aids are required and observe patient and bed-space for availability of these aids (may include hearing aids, glasses).			
Lying/Standing BP has been assessed.	Determine if the patient requires regular lying/ standing BP to be monitored and review observation chart for evidence of this assessment.			
Other appropriate falls prevention strategies. List: _____ _____ _____	Determine any other appropriate falls prevention strategies that should be in place at the time of audit and observe for the implementation of these strategies, (e.g. Assist with mobility if walking at time of audit, use of shower chair if in shower at time of audit).			
Are all appropriate falls prevention strategies in place?	**If one or more questions regarding strategy implementation have been answered NO appropriate strategies are deemed not to be in place.**			

Figure 3. Royal Perth Hospital Audit Tool – Auditing Falls Prevention Interventions

Acknowledgements: FRAT Audit Tools kindly provided by Royal Perth Hospital.

8.3.5. Medication reconciliation

Resources

Medication reconciliation is a key component of the WA Pharmaceutical Review Policy (March 2007), available from: www.safetyandquality.health.wa.gov.au

Medication Reconciliation Measures

The following measures should be used to monitor success of the change process:

- Process measures
  1. Compliance with the Medication Reconciliation Process on Admission
  2. Compliance with Medication Reconciliation on Discharge or Transfer

Ideally, health services should strive to achieve 100% compliance on the process measures above.

Measure 1: Compliance with the medication reconciliation process on admission

The percentage of patients who received the full three steps of the medication reconciliation process on admission

Reconciliation Process on Admission:

Medication reconciliation on admission is the formal process of:

1. Medication history – obtaining a complete and accurate medication history of each patient's current home medications (details to include generic medication name, dosage, frequency and route)
2. Confirmation – confirming with the patient and (where possible) a second source of information that the details obtained in the medication history are correct
3. Reconciliation – comparing the clinician's admission orders to the medication history and ensuring that any discrepancies are brought to the attention of the prescriber and, if appropriate, changes are made to the orders.

Calculation:

Number of patient records with the full three steps of medication reconciliation on admission documented	x 100 =	Level of Compliance
Number of patient records reviewed		

Measure 1(a): Medication History

The percentage of patients for whom a medication history is obtained

Medication History – *"The recording of all medications (including over the counter medications and complementary therapies) a patient is taking at the time of hospital admission or presentation. It includes recording previous adverse drug reactions and allergies and any other recently ceased or changed medications".*

Department of Health (WA). Pharmaceutical Review Policy, March 2007.

Measure 1(b): Confirmation

The percentage of patients whose medication history is confirmed with both the patient and a second source of information

Confirmation – "Further to obtaining a medication history from the patient (or carer), one other source should be consulted to confirm the patient's current medications. This source should ideally be the patient's general practitioner, or alternatively, the community pharmacist, carer or family members".

Department of Health (WA). Pharmaceutical Review Policy, March 2007.

Measure 1(c): Reconciliation

The percentage of patients whose medications have had reconciliation documented on admission

Reconciliation – "Comparing the clinician's admission orders to the medication history, and ensuring that any discrepancies are brought to the attention of the prescriber and, if appropriate, changes are made to the orders and documented".

Department of Health (WA). Pharmaceutical Review Policy, March 2007.

MEASURE 2: MEDICATION RECONCILIATION ON DISCHARGE OR TRANSFER

The percentage of patients who receive the full process of medication reconciliation upon discharge or transfer

Reconciliation Process on Discharge or Transfer:

Medication reconciliation on discharge or transfer is the formal process of:

1. Reconciliation – comparing the clinician's discharge or transfer orders to the medication history and ensuring that any discrepancies are brought to the attention of the prescriber and, if appropriate, changes are made to the orders.
2. Medication liaison – ensuring that frequent and accurate communication about the patient's medications occurs between all clinicians involved in the patient's care and relevant information is also communicated to the patient and/or carer.

Calculation:

$$\frac{\text{Number of patient records with medication reconciliation upon discharge or transfer documented}}{\text{Number of patient records reviewed}} \times 100 = \text{Level of Compliance}$$

Measure 2(a): Reconciliation

The percentage of patients whose medications have had reconciliation documented upon discharge or transfer

Reconciliation – "Comparing the clinician's transfer and/or discharge orders to the medication history, and ensuring that any discrepancies are brought to the attention of the prescriber and, if appropriate, changes are made to the orders and documented".

Department of Health (WA). Pharmaceutical Review Policy, March 2007.

Measure 2(b): Liaison

The percentage of patients whose medication information is communicated between all members involved in the patient's care upon discharge or transfer.

Liaison – "Ensuring that medication information is communicated between all members involved in the patient's care, including the patient (or carer)".

Department of Health (WA). Pharmaceutical Review Policy, March 2007.

8.3.6. Surgical site infections (SSI)

Resources

- Healthcare Infection Surveillance WA (HISWA) has extensive knowledge and expertise in this area. For all queries relating to HISWA email: HISWA@health.wa.gov.au
- WA Therapeutics Advisory Group Surgical Antibiotic Prophylaxis Guidelines: www.watag.org.au (click on: Publications and Guidelines > Clinical Guidelines > Surgical Antibiotic Prophylaxis Guidelines)
- Therapeutic Guidelines: Antibiotic. Version 13, 2006 – access via Clinical Information Access online (CIAO) or your local online Health library.

SSI Measures

- Process Measures

1. Appropriate use of prophylactic antibiotics
   a. Antibiotics within 1 hour before incision
   b. Appropriate selection of antibiotics consistent with national guidelines
   c. Discontinuation of prophylactic antibiotics within 24 hours after surgery
2. Appropriate hair removal
3. Perioperative normothermia for colorectal surgery
4. Perioperative euglycaemia for cardiothoracic Surgery

Ideally, health services should strive to achieve 100% compliance on each of the process measures above.

- Outcome Measure

5. Surgical site infection rate

Measure 1: Appropriate use of prophylactic antibiotics

Measure 1(a): Appropriate timing of antibiotics

The percentage of surgical patients with prophylactic antibiotic administrations within 60 minutes prior to surgical incision

Inclusions, exclusions and definitions can be obtained from QualityNet Specifications Manual – (click on: Hospitals > Specifications Manual > Choose Version) **Section 2.4 SCIP-Inf-1**

Measure 1(b): Appropriate Selection of Antibiotics

The percentage of surgical patients receiving prophylactic antibiotics consistent with WA guidelines

Inclusions, exclusions and definitions can be obtained from QualityNet Specifications Manual – (click on: Hospitals > Specifications Manual > Choose Version) **Section 2.4 SCIP-Inf-2**

Measure 1c: Appropriate Prophylactic Antibiotic Discontinuation

The percentage of surgical patients whose prophylactic antibiotics were discontinued within 24 hours after surgery end time

Inclusions, exclusions and definitions can be obtained from QualityNet Specifications Manual – (click on: Hospitals > Specifications Manual > Choose Version) **Section 2.4 SCIP-Inf-3**

Measure 2: Appropriate hair removal

The percentage of surgical patients with appropriate surgical site hair removal

Note:

- It is inappropriate to remove surgical site hair by shaving
- It is appropriate to remove surgical site hair with clippers or depilatory
- It is appropriate not to remove surgical site hair.

Inclusions, exclusions and definitions can be obtained from QualityNet Specifications Manual – (click on: Hospitals > Specifications Manual > Choose Version) **Section 2.4 SCIP-Inf-6**

Measure 3: Perioperative normothermia for patients undergoing colorectal surgery

The percentage of colorectal surgical patients with normothermia (36.0 - 38.0C) in post-anesthesia care unit

Inclusions, exclusions and definitions can be obtained from QualityNet Specifications Manual – (click on: Hospitals > Specifications Manual > Choose Version) **Section 2.4 SCIP-Inf-7**

Measure 4: Perioperative euglycaemia for patients undergoing cardiothoracic surgery

The percentage of major cardiac surgical patients with controlled postoperative glucose

Inclusions, exclusions and definitions can be obtained from QualityNet Specifications Manual – (click on: Hospitals > Specifications Manual > Choose Version) **Section 2.4 SCIP-Inf-4**

Measurement Methods and Tools:

- Glucose can be measured using finger sticks, glucometers or in a laboratory. The patient doesn't have to be fasting
- Preoperative measurement of glucose will support the implementation of this measure
- Tighter glycaemic control than specified as a minimum may be ideal, but is likely to only be possible in an intensive care unit setting.

Measure 5: Surgical site infection rate

The rate of post-operative infection at the surgical site in patients undergoing surgery

Post-operative Surveillance:

- The duration or type of post-discharge surveillance is not mandated but should be consistent over time to allow measurement of improvement.
- Nationally endorsed surveillance definitions should be used for this measure, as stipulated in the Australian Council on Healthcare Standards (ACHS) Infection Control indicators, which have been developed and endorsed by the Australian Infection Control Association (AICA) National Advisory Board.

- As the primary goal of this target is reduction of each institution's own infection rate, surveillance has to be managed with the appropriate resource allocation determined by each hospital. Hence, each hospital may nominate a particular type(s) of surgery to monitor prospectively.
- Prospective surveillance of patients following a specific type of clean surgery is likely to be the most effective strategy, building on existing programs where possible.
- Types of surgery suitable to include in such a surveillance program will vary between hospitals, but ideally should target specific types of clean surgery (NNIS I or II – defined in Figure 4 below), undertaken in relatively large volume and considering the length of inpatient stay for follow-up to detect infections. Examples include, but are not limited to, hip or knee arthroplasty, cardiac bypass grafting surgery, laminectomy, colectomy, caesarean section. Infection control expertise will be vital in these considerations.

Class I/Clean	An infected operative wound in which no inflammation is encountered and the respiratory, alimentary, genital, or uninfected urinary tract is not entered. In addition, clean wounds are primarily closed and, if necessary, drained with closed drainage. Operative incisional wounds that follow nonpenetrating (blunt) trauma should be included in this category if they meet the criteria.
Class II/Clean-Contaminate	An operative wound in which the respiratory, alimentary, genital, or urinary tracts are entered under controlled conditions and without unusual contamination. Specifically, operations involving the biliary tract, appendix, vagina, and oropharynx are included in this category, provided no evidence of infection or major break in technique is encountered.
Class III/Contaminated	Open, fresh, accidental wounds. In addition, operations with major breaks in sterile technique (e.g. open cardiac massage) or gross spillage from the gastrointestinal tract, and incisions in which accute, nonpurulent inflamation is encountered are included in this category.
Class IV/Dirty-Infected	Old traumatic wounds with retained devitalized tissue and those that involve existing clinical infection or perforated viscera. This definition suggests that the organisms causing postoperative infection were present in the operative field before the operation.

Taken from the Guidelines for Prevention of SSI (National Nosocomial Infections Surveillance System (NNIS)
Gamer, J. S. and Simmons, B. P.

Figure 4. NNIS Surgical Wound Classification

Measurement Methods and Tools:

- A trained infection control professional should ideally collect or oversee continuous prospective collection of data for this measure, as interpretation is required.
- Technical support for infection control staff in relation to this measure will be available from staff at Healthcare Infection Surveillance WA (HISWA).
- Infections detected within 30 days of operation, (or a year in the presence of surgical implant) can be included as stipulated in the ACHS definition.
- Risk index stratification (e.g. NNIS risk index 0-3) or separation into superficial/deep organ space infections is optional for this measure.

8.3.7. Central venous catheter associated infections (CVC)

CVC Measures

- Process Measures
  1. Compliance with the central line bundle:
  a. Hand hygiene
  b. Maximal barrier precautions on insertion
  c. Chlorhexidine skin antisepsis
  d. Optimal site selection
  e. Daily review of necessity and prompt removal of unnecessary lines.

Ideally, health services should strive to achieve 100% compliance on the process measure above.

- Outcome Measure
  2. Rate of central line associated blood stream infections

Measure 1: Compliance with the central line bundle

The percentage of patients with central lines who receive all five elements of the central line bundle:

1. Hand hygiene
2. Maximal barrier precautions
3. Chlorhexidine skin antisepsis
4. Optimal site selection
5. Daily review of central line necessity.

Inclusions, exclusions and definitions can be obtained from IHI 5 Million Lives Campaign Prevent Central Line Infections How-to Guide – **pg 6-19**

Measure 2: Central line associated bloodstream infection rate

Central-line associated bloodstream infection rate per 1000 catheter days

Inclusions, exclusions and definitions can be obtained from IHI 5 Million Lives Campaign Prevent Central Line Infections How-to Guide

The definition stipulated in the Healthcare Infection Surveillance WA (HISWA) manual should be used to classify CVC associated bloodstream infections. This is consistent with nationally endorsed definitions. The definition specifically refers to the ICU setting, but in principle can be applied for other patient groups.

Measurement Methods and Tools:

A trained infection control professional should collect data for this measure, as interpretation is required. The use of the infection control practitioner's current data collection system is acceptable. Continuous collection of infection rates is essential. This is likely to only be possible in well-defined clinical units such as ICU where it is possible to collect catheter day data. Sampling measures to calculate catheter day data may also be used if desired.

This measure should be converted to the rate of infections in proportion to the total number of days that patients had CVCs.

8.3.8. Hand hygiene

Resources

- Debug: www.debug.net.au/handhygiene.html
- Champion Hand Washer Hospital Campaign: www.henrythehand.com
- World Health Organisation: www.who.int/patientsafety/en/; or www.who.int/patientsafety/events/05/HH_en.pdf

Hand Hygiene Measures

- Process Measures

1. Hand hygiene knowledge assessment survey
2. Correct use of hand rub, gloves and handwashing practices
3. Bed spaces with appropriate hand hygiene products
4. Compliance with recommended hand hygiene practices

All of the four process measures should be measured at least monthly, and ideally health services should strive to achieve 100% compliance on each measure.

- Outcome Measure

5. Health care associated MRSA infection rate.

Measure 1: Hand hygiene knowledge assessment survey

The percentage of health care workers (regardless of position) who answer all five questions correctly on a standardised hand hygiene knowledge assessment survey

Inclusions, exclusions and definitions can be obtained from IHI 5 Million Lives Campaign Improving Hand Hygiene How-to Guide – **Component 1**

Calculation:

$$\frac{\text{Number of health care workers who answer all five questions correctly}}{\text{Number of health care workers assessed}} \times 100 = \text{Level of Compliance}$$

Measure 2: Correct use of hand rub, gloves and handwashing practices

The percentage of health care workers who perform all three hand hygiene procedures correctly

The crucial three procedures in hand hygiene:

Particular aspects of recommended hand hygiene practices that can be easily and objectively measured are listed below. Further aspects of correct practice from the WHO guidelines can be incorporated if appropriate.

1. HANDWASHING:

- Wash hands with soap and water, maintain contact with soap for at least 15 seconds, covering all surfaces (palm, back of hand, fingers, fingertips and fingernails), rub with friction
- If the tap is hand-operated, use paper towel to turn off the faucet
- Dry hands with fresh paper towel.

2. ALCOHOL-BASED HAND HYGIENE PRODUCT (RUB, GEL, OR FOAM):

- Use enough to cover all surfaces, (palm, back of hand, fingers, fingertips, and fingernails) rub until dry (at least 15 seconds).

3. REMOVE GLOVES USING CORRECT TECHNIQUE:

- Carefully, so as not to contaminate the hands with a contaminated glove surface.

Calculation:

$$\frac{\text{Number of health care workers correctly performing all hand hygiene procedures}}{\text{Number of health care workers reviewed}} \times 100 = \text{Level of Compliance}$$

Measure 3: Bed spaces with appropriate hand hygiene products

The percentage of bed spaces at which there are clean gloves in appropriate sizes and dispensers for alcohol-based hand rub/gel/foam.

Inclusions, exclusions and definitions can be obtained from IHI 5 Million Lives Campaign Improving Hand Hygiene How-to Guide – **Measure 3**

Specifications:

- Includes all bed spaces from the selected area
- Gloves in at least two sizes should be available and readily accessible
- Alcohol-based product dispensers must be present, accessible at the point of care, not empty, functional and deliver the correct volume of product.

Calculation:

Number of bed spaces with correct access to hand hygiene products / Total number of bed spaces	x 100 =	Level of Compliance

Measure 4: Compliance with recommended hand hygiene practices

The percentage of patient encounters in which there is compliance by health care workers with all components of appropriate hand hygiene and glove practices

Standard:

Health care workers should clean their hands according to recommendations listed in the CDC Guidelines for Hand Hygiene in Health-Care Settings. These guidelines are further clarified in the WHO Patient Safety Guidelines on Hand Hygiene in Healthcare: www.who.int/patientsafety/events/05/HH_en.pdf

Measurement Methods and Tools:

Compliance is measured via direct observation by a trained observer (preferably independent), using a standardised procedure and form, for periods of 20-30 minutes at least once a month (may be more frequent if the resources are available), aiming to include as many opportunities as practical in the chosen audit period.

Calculation:

Number of patient encounters in which all hand hygiene components were performed correctly / Number of patient encounters in the observation period	x 100 =	Level of Compliance

Measure 5: Health care associated MRSA infection rate

The rate of new health care associated MRSA infections per 10 000 occupied bed days

The definition and methodology for this measure are the same as those specified by HISWA in the monthly KPI report. Clarification and additional information is available from HISWA: HISWA@health.wa.gov.au

Measurement Methods and Tools:

A trained infection control professional should collect this information to provide to the CPI team, as interpretation is required. For interpretation of this measure as an indicator of success, it is important to remember that while other hand hygiene improvement campaigns have successfully reduced this outcome, this has not yet been proven in WA, which has a unique MRSA epidemiology.

8.4. Steps to Implementing the Clinical Practice Improvement Program

Implementation of clinical practice improvement initiatives involve the following steps:

1. Establish the need for undertaking the project
2. Define the scope of the project you are undertaking, including the goals and objectives of the project
3. Establish clinical governance leadership and accountability structures at all levels of the organisation
4. Establish a project team and identify relevant stakeholders – obtain buy-in and support at the executive level
5. In consultation with the project team, establish timelines, work-plans, deliverables and performance measures to indicate achievement of objectives
6. Develop resources and promotional material to implement the project
7. Implement the Model for Improvement using the *Plan Do Study Act* (PDSA) methodology (refer to section 8.4.6)
8. Continuously measure progress and make the necessary changes to strategies and work-plans to achieve success.

8.4.1. Establish need for the project

There is a significant body of literature available that provides health care organisations with a rationale to prioritise which clinical practices to implement to maximise the delivery of safe, quality health services.

Before undertaking a clinical practice improvement initiative, it is recommended that health services have a clear understanding of the scope of the current problem and rationale for undertaking the initiative. In order to establish the need for the clinical practice improvement initiative, the following issues should be reviewed:

- Prevalence of the problem targeted by the practice
- Severity of the problem targeted by the practice
- The current utilisation of the practice

- Evidence of the efficacy and/or effectiveness of the practice
- The practice's potential for harm
- Data on cost, if available
- Implementation issues.[3]

8.4.2. Define the scope of the project

Defining the scope of the project involves:

- Identifying what you are trying to accomplish
- Setting clear aims and objectives for the project
- Identifying the strategies and changes that will be introduced during the project
- Establishing the measures that will enable you to tell if the changes have lead to improvement.

8.4.3. Establish clinical governance leadership and accountability structures at all levels of the organisation

Health Service Chief Executives, Regional Directors and Health Service Managers must ensure that the responsibility for implementing, maintaining, monitoring and evaluating clinical governance policies is clearly defined at the individual, unit and system level.

The clinical governance accountability structure should address the following questions:

- Who will be affected by the policy?
- Are there special groups whose needs must be addressed in implementation?
- Who is responsible for implementation of the policy?
- Who will pay the costs associated with implementation?
- Who will enforce the policy once it is implemented?

3 Agency for Healthcare Research and Quality (AHRQ). "Making Healthcare Safer" eleven "Clear Opportunities for Safety Improvement" (http://www.ahrq.gov/clinic/ptsafety/summary.htm).

- Who will review the effectiveness of the policy?

8.4.4. Establish a project team and identify relevant stakeholders – obtain buy-in and support at the executive level

The Office of Safety and Quality in Healthcare recommends that health services use the following steps from John Kotter's change model[4] to assist them to establish the project team and to obtain buy-in and support at the executive level:

- **Build the guiding team** - get the right people in place with the right emotional commitment, and the right mix of skills and levels
- **Get the vision right** - get the team to establish a simple vision and strategy, focus on emotional and creative aspects necessary to drive service and efficiency
- **Communicate for buy-in** - involve as many people as possible, communicate the essentials, simply, and appeal and respond to people's needs. De-clutter communications - make technology work for you rather than against you.

8.4.5. Establish timelines, work-plans, deliverables and performance measures

Health Service Executives and SQuIRe Team Leaders should develop an action plan for implementing the CPI initiatives across their respective health service organisations. The action plan should identify responsible officers, key activities and milestones with dates for completion. All stages in the action plan should be monitored against agreed milestones and outcomes.

The following questions 'who, what, when, where, why and how' should be asked at all levels of the implementation process:

4 Kotter JP (1995). Leading Change. Harvard Business School Press.

WHO ■ Who is responsible for implementation of the project? ■ Who will pay the costs associated with implementation? ■ Who will be affected by the project? ■ Are there special groups whose needs must be addressed in implementation?	**WHEN** ■ When will the project come into effect? ■ Are there critical dates? ■ When will the project be reviewed? ■ Will there be a 'sunset date' built into the implementation?
■ Who will enforce the project once it is implemented? ■ Who will review the effectiveness of the project?	**WHERE** ■ Where is the service or facility located? ■ Are there special regional needs for implementation?
WHAT ■ What will it cost to implement the project? ■ What are the salaries and wages for implementation and on-going operation? ■ What are the printing and publicity needs? ■ What are the recurrent (operating) costs? ■ What is needed for review of the project? ■ What sanctions apply for non-compliance with the project? ■ What other processes will achieve the desired objective?	**WHY** ■ Why was this project developed? ■ Why is this the best way to address the project issue?
	HOW ■ How will the project manifest itself (project instruments)? ■ How have similar projects worked in other places? ■ How will the project be enforced?

8.4.6. Implement change using the IHI Model for Improvement

For a health service to successfully reach a campaign goal, the change that is to be initiated must be accepted and supported by all relevant members of the organisation, and an improvement must be seen.

The Model for Improvement, developed by the IHI, is a recognised approach for successfully implementing change. The Model provides a framework for developing, testing and implementing change, and consists of two parts. The first is the 'thinking' part, and consists of three questions fundamental for guiding the implementation of change. These questions are:

1. What are we trying to accomplish? – refine the AIM of the project
2. How will we know that a change is an improvement? - use appropriate MEASURES
3. What changes can we make that will result in improvement? - identify CHANGES required to achieve the desired results.

The second part of the Model for Improvement is the 'doing' part, and is made up of the *Plan, Do, Study, Act* (PDSA) cycle. Once it has been decided what exactly needs to be achieved, the PDSA cycle can be used to test out ideas from question three above. The objective of the PDSA cycle is to test changes on a small scale, and incrementally gather information about the success of the change. The PDSA cycle also reduces the risk of a major impact if something goes wrong.

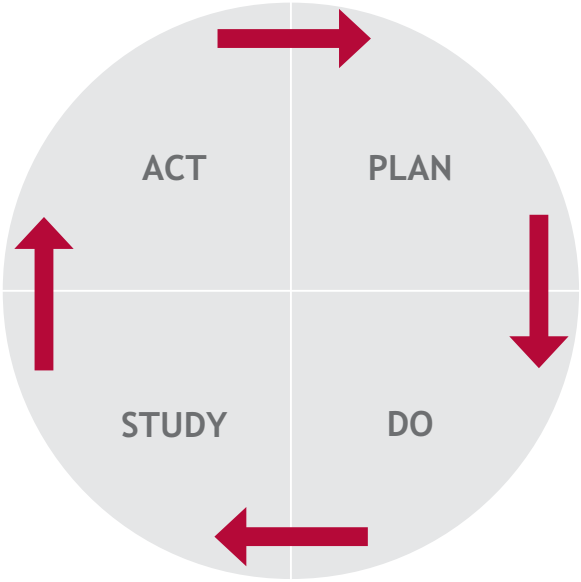

Figure 5. Plan-Do-Study-Act Cycle[5]

5 New South Wales Department of Health (2002). The Clinicians Toolkit for Improving Patient Care.

The PDSA cycle provides a four-step framework to assist health services to implement the clinical practice improvement initiatives:

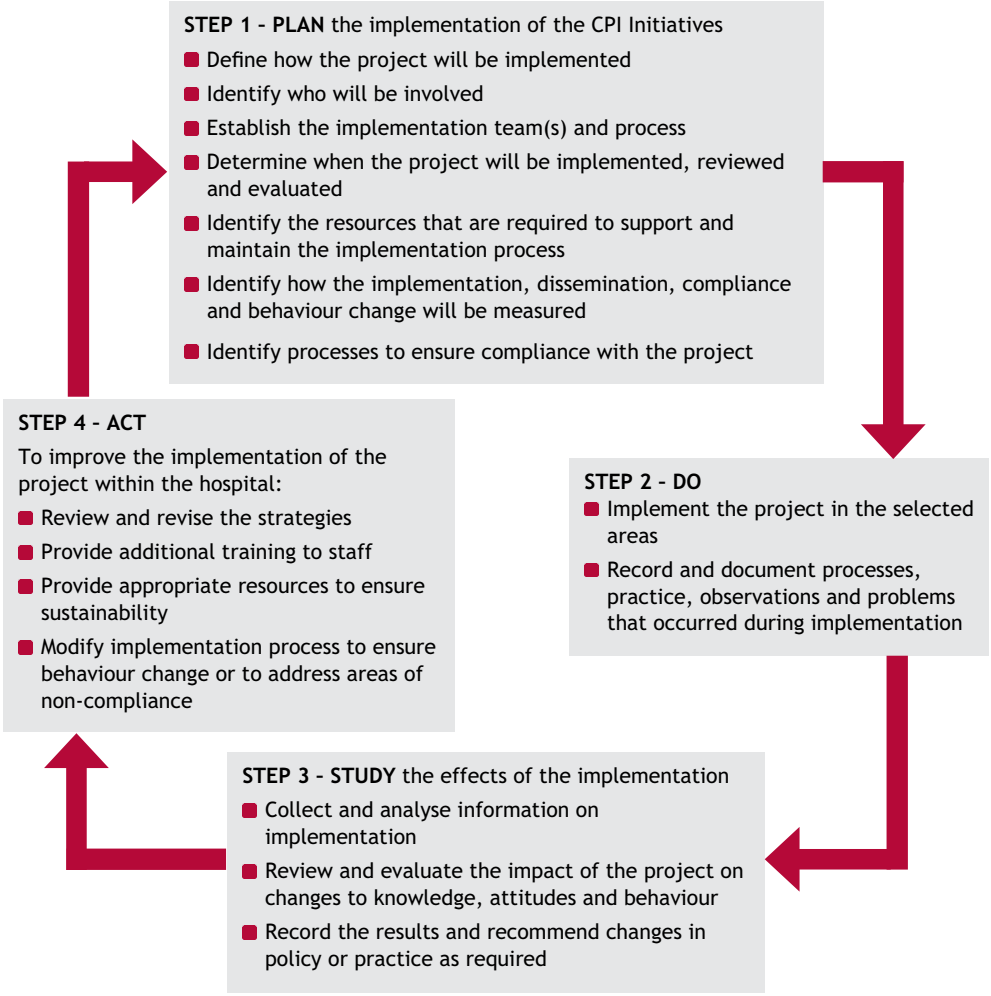

Figure 6. Implementing a project using the Plan-Do-Study-Act Cycle[6]

With the Model for Improvement approach, conducting small tests of change allows team members to learn quickly what works, or how projects need to be refined before full implementation.

6 Western Australian Department Drug and Alcohol Office (2005). The Western Australian Alcohol and Other Drug Sector Quality Framework.

8.4.7. Measure progress

Measurement and evaluation is a major part of the SQuIRe Program. Health services should measure and evaluate the organisation's clinical governance processes and systems to ensure compliance with the clinical governance policies and strategy. In addition, the implementation and effectiveness of each of the eight clinical practice improvement strategies should be monitored and evaluated using the process and outcome measures defined in section 8.3.

The objective of the measurement and evaluation process is to ensure that clinical governance policies are disseminated widely at all levels of the health service and are used by health service staff to facilitate shared learning and to foster continuous improvement.

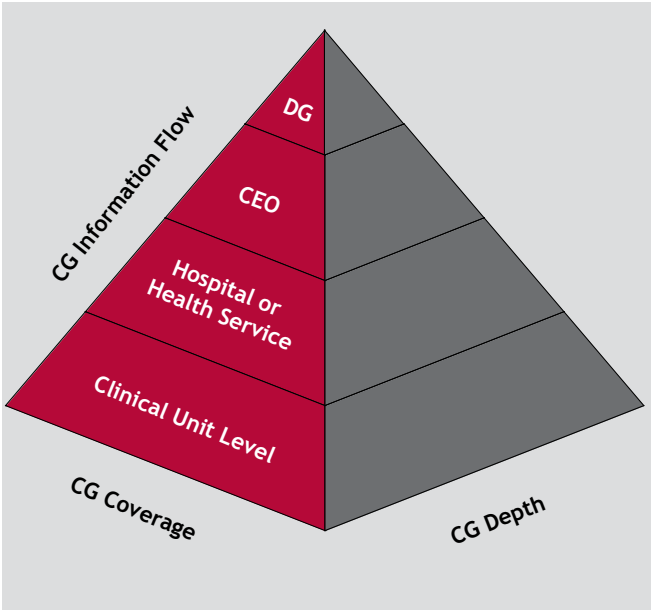

Figure 7. Measurement of health service clinical governance performance

Further information about the components of the SQuIRe Program and links to resources, toolkits and measures for each of the eight clinical practice improvement programs are available from the SQuIRe website: www.safetyandquality.health.wa.gov.au/squire

Contact the Office of Safety and Quality in Healthcare should you have any comments or feedback regarding this SQuIRe handbook:

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