

## Quality Assurance Systems in Health Care

*- lessons beyond the pharmacy sector*

Pharmacy Guild Conference  
Chris Baggoley  
3 April 2009

### ▶ ACSQHC

#### Health Ministers Established ACSQHC to:

1. Lead and coordinate safety and quality in health care
2. Advocate for safety and quality and report publicly
3. Recommend national data sets
4. Provide strategic advice to Health Ministers
5. Recommend nationally agreed standards

## ▶ ACSQHC

### Commission Programs

1. Australian Charter of Healthcare Rights
2. Open Disclosure
3. Basic Care Issues
  - Healthcare Associated Infection
  - Patient Identification
  - Medication Safety
  - Clinical Handover
  - Patient at risk
  - Falls Guidelines
4. Tools
  - Accreditation and credentialing
  - Information Strategy

## ▶ Medication Safety Program

### Aim

To improve the safety and quality of medications nationally

### How?

- Building on existing medication safety and quality work
- Working in collaboration with key agencies and organisations involved in national medication safety and quality

## ▶ Literature Review: Extent and cause of medication related problems

• Admissions for ADEs 2006-07	101,003 <sup>1</sup>
• Admissions associated with ADR	1.3% <sup>2</sup>
• ADR during hospital stay	1.2% <sup>2</sup>
• Hospital admissions medication related	2 - 3%
• Oncology admissions associated with ADR	74% <sup>3</sup>
• Overall preventable hospital admissions (medication related & ADRs)	33 – 75%
ADE in patients attending GP	10.4% <sup>4</sup>

1 AIHW Health Report,

2. Carrol R et al Aust Health rev 2003

3. Lau et al Support Care Cancer 2004

4. Miller & Britt MJA 2006

## ▶ National Medicines Scoping Study

### 1. The Patient's Journey through the Health System

- Consumer access to information
- Continuity of care

### 2. Product Safety

- Enhancing post-marketing pharmacovigilance
- Packaging and labelling as contributors to error

## ► National Medicines Scoping Study

### 3. Medication Management Systems

- Systems improvement through standardisation
- Medication distribution systems
- Use of technology to improve medication safety
- Incident monitoring and sharing the lessons

### 4. Healthcare Professionals

- Addressing gaps in practice
- Competencies in safe medicines practice

## ► Australia's Health 2008

Table 9.2: Health status and outcomes indicators

Indicator	Favourable trend	No trend	Unfavourable trend	Other
Health conditions: Incidence of heart attacks	✓			
Health conditions: Incidence of cancer			✓	
Human function: Severe or profound core activity limitation				(a)
Life expectancy and wellbeing: Life expectancy	✓			
Life expectancy and wellbeing: Psychological distress		✓		
Deaths: Potentially avoidable deaths				(a)
Deaths: Infant mortality		✓		
Deaths: Mortality for National Health Priority Area diseases and conditions				
<i>Cancers</i>	✓			
<i>Coronary heart disease</i>	✓			
<i>Cerebrovascular disease</i>	✓			
<i>All injuries</i>	✓			
<i>Falls</i>		✓		
<i>Suicide</i>				(a)
<i>Motor vehicle accidents</i>	✓			

(a) Data unavailable or not comparable.

AIHW

## ► Windows into Safety and Quality in Health Care 2008

### Sentinel events in Australian public hospitals 2005/06 and 2006/07

Sentinel event	Number of occurrences Public hospitals 2005/06	Number of occurrences Public hospitals 2006/07
Procedures involving the wrong patient or body part	66	159 *
Suicide of a patient in an inpatient unit	25	41
Retained instrument or other material after surgery requiring re-operation or further surgical procedure	28	28
Intravascular gas embolism resulting in death or neurological damage	2	3
Haemolytic blood transfusion reaction resulting from ABO incompatibility	1	2
Medication error leading to the death of a patient reasonably believed to be due to incorrect administration of drugs	5	11
Maternal death or serious morbidity associated with labour or delivery	12	13
Infant discharged to the wrong family	0	0

\*The increased incidence of this event in 2006/07 is primarily due to a jurisdiction expanding its definition of 'Procedures involving the wrong patient or body part' to include incidents which occurred outside operating theatres (ie. in dental, diagnostic, radiotherapy, laboratory and other areas).

## Queensland hospitals have worst record for killing, maiming patients, botched operations

By Siobhain Ryan *The Australian* January 30, 2009 12:01am

- Queensland hospitals have worst record
- Kill, maim patients in botched operations
- NSW one of the safest

QUEENSLAND hospitals have the nation's worst published record for killing or maiming their patients through botched operations, medication errors and other mistakes.

And NSW is one of the safest, reporting a third fewer serious errors despite its larger population.

The figures, released in a Productivity Commission report, provide a rare state-by-state breakdown of so-called "sentinel events" - the most preventable and potentially deadly mistakes that occur every year in the nation's hospitals, *The Australian* reports.



Mistakes ... of the incidents, Queensland accounted for over a quarter of the national total

► DRAFT SUITE OF SAFETY AND QUALITY INDICATORS (AIHW)

No	Indicator Title	Data Development required and/or additional collection burden	Contemplated for COAG?
20	Staphylococcus aureus (including MRSA) bacteraemia in acute care hospitals	Moderate	<input checked="" type="checkbox"/>
21	Adverse drug events	Moderate	<input checked="" type="checkbox"/>
22	Pressure ulcers in care settings	Major	<input checked="" type="checkbox"/>
23	Falls resulting in patient harm (in a health or aged care setting)	Major	<input checked="" type="checkbox"/>
24	Intentional self-harm in hospitals	Moderate	<input checked="" type="checkbox"/>
25	Complications of anaesthesia	Minimal to none	
26	Accidental puncture/laceration (technical difficulty with procedure)	Minimal to none	
27	Obstetric trauma - third and fourth degree perineal tears acquired during childbirth	Minimal to none	
28	Postoperative respiratory failure	Minimal to none	
29	Postoperative haemorrhage	Minimal to none	

► DRAFT SUITE OF SAFETY AND QUALITY INDICATORS (AIHW)

No	Indicator Title	Data Development required and/or additional collection burden	Contemplated for COAG?
40	Cancer survival	Minimal to none	<input checked="" type="checkbox"/>
41	Continuity of care - discharge planning	Major	
42	Post-discharge community care for mental health patients	Moderate	
43	Functional gain achieved in rehabilitation	Moderate	
44	Enhanced primary care services in general practice	Minimal to none	
45	General practices with a register and recall system for patients with chronic disease	Minimal to none	
46	People with asthma who have a written asthma action plan	Moderate	<input checked="" type="checkbox"/>
47	Management of hypertension in general practice	Major	
48	Management of chronic pain in arthritis and musculoskeletal conditions	Major	
49	Annual cycle of care within general practice for people with diabetes	Minimal to none	<input checked="" type="checkbox"/>
50	End stage kidney disease in people with diabetes	Minimal to none	
51	Lower-extremity amputation in people with diabetes	Minimal to none	

► **Identifying variations in quality of care in Queensland hospitals**

**Use of statistical process control charts**

**Using routine data**

**Starting point for learning and subsequent action to improve quality of care**

Duckett, S. *et al*, MJA, 19 November 2007

► **Identifying variations in quality of care in Queensland hospitals**

**Indicators used**

**Medical**

- Acute myocardial infection
- Heart failure
- Stroke
- Pneumonia

**Psychiatric**

- Depression
- Schizophrenia

Duckett, S. *et al*, MJA, 19 November 2007

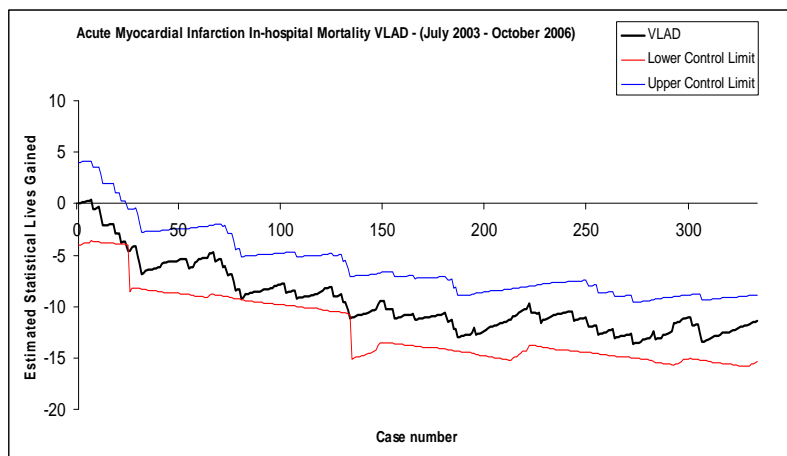
## ► Identifying variations in quality of care in Queensland hospitals

### Variable life adjusted displays

- Calculate probability of particular outcome for each patient
- Adjust for age, sex, selected co-morbidities
- Compare with previous 12 months
- Provide monthly
- Thresholds calculated where chart 'flags'

Duckett, S. *et al*, MJA, 19 November 2007

## ► Variable Life Adjusted Display with control limits



**Medical indicators**

The medical indicators cover in-hospital mortality, complication of surgery, readmission rate and the rate of very long stay patients. Hospital performance for each medical indicator is outlined in the table to the right. Where a hospital's performance against an indicator has been identified as unfavourable, the results of the investigation are provided.

**LEGEND**  
 Hospital v State: satisfactory ✓  
 Hospital v State: favourable ★  
 Hospital v State: unfavourable ●  
 Hospital v State: indicator not applicable □

PEER GROUP	HOSPITAL	MEDICAL						
		AMI IN HOSPITAL MORTALITY	AMI READMISSION	AMI LONG STAY	HEART FAILURE IN HOSPITAL MORTALITY	HEART FAILURE READMISSION	HEART FAILURE LONG STAY	STROKE IN HOSPITAL MORTALITY
PRINCIPAL, REGIONAL AND SPECIALISED	CAIRNS BASE HOSPITAL	✓	✓	✓	✓	✓	✓	✓
	GOLD COAST HOSPITAL	✓	✓	✓	✓	✓	✓	✓
	MATER CHILDRENS PUBLIC HOSPITAL	✓	✓	✓	✓	✓	✓	✓
	MATER MOTHERS PUBLIC HOSPITAL	✓	✓	✓	✓	✓	✓	✓
	NAMBOUR GENERAL HOSPITAL	✓	✓	✓	✓	✓	✓	✓
	PRINCESS ALEXANDRA HOSPITAL	✓	✓	✓	✓	✓	✓	✓
	ROYAL BRISBANE AND WOMENS HOSPITAL	✓	✓	✓	✓	✓	✓	✓
	ROYAL CHILDRENS HOSPITAL	✓	✓	✓	✓	✓	✓	✓
	THE PRINCE CHARLES HOSPITAL	★	✓	✓	★	✓	✓	★
	THE TOWNSVILLE HOSPITAL	★	✓	✓	✓	✓	✓	✓
	BUNDABERG BASE HOSPITAL	✓	✓	✓	✓	✓	✓	✓
	CABOURET HOSPITAL	✓	✓	✓	✓	✓	✓	✓
	HERVEY BAY HOSPITAL	✓	✓	✓	✓	✓	✓	✓
	IPSWICH HOSPITAL	✓	●	✓	✓	✓	✓	★
	LOGAN HOSPITAL	✓	✓	✓	✓	✓	✓	✓
	MACKEY BASE HOSPITAL	✓	✓	✓	✓	✓	✓	✓
	MARYBOROUGH HOSPITAL	✓	✓	✓	✓	✓	✓	✓
MATER ADULTS PUBLIC HOSPITAL	✓	✓	✓	✓	✓	✓	✓	
MOUNT ISA BASE HOSPITAL	✓	✓	✓	✓	●	✓	✓	
QUEEN ELIZABETH II JUBILEE HOSPITAL	✓	✓	✓	✓	✓	✓	✓	
REDCLIFFE HOSPITAL	✓	✓	✓	✓	✓	✓	✓	
REDLAND HOSPITAL	✓	✓	✓	✓	✓	✓	✓	
ROCKHAMPTON HOSPITAL	✓	✓	✓	✓	✓	✓	✓	
TOOWOOMBA HOSPITAL	✓	✓	✓	✓	✓	✓	✓	
MEDIUM AND SMALL	ATHERTON HOSPITAL							
	AVR HOSPITAL							
	BEAULIEBERT HOSPITAL							
	BILELGA HOSPITAL							
	BOWEN HOSPITAL							
	CALOUNDRA HOSPITAL				✓	✓	✓	✓
	CHARTERS TOWERS HOSPITAL							✓
	COLLINGSVILLE HOSPITAL							✓
	COOKTOWN HOSPITAL							✓
	DALBY HOSPITAL				✓	✓	✓	✓
	EMERALD HOSPITAL							✓
	GLADSTONE HOSPITAL				✓	✓	✓	✓
	GOONDIWINGI HOSPITAL							✓
	GRINPHE HOSPITAL				✓	✓	✓	✓
	INGHAM HOSPITAL				✓	✓	✓	✓
	INNISFAIL HOSPITAL				✓	✓	✓	✓
	JOYCE PALMER HEALTH SERVICE							✓
YINGAROY HOSPITAL				✓	✓	✓	✓	
LONGREACH HOSPITAL							✓	
MARSEBA HOSPITAL				✓	✓	✓	✓	
MOSSMAN HOSPITAL							✓	
PROSERPINE HOSPITAL							✓	
ROMA HOSPITAL				✓	✓	✓	✓	
ST GEORGE HOSPITAL							✓	
STANTHORPE HOSPITAL				✓			✓	
THURSDAY ISLAND HOSPITAL							✓	
TULLY HOSPITAL							✓	
WARWICK HOSPITAL				✓	✓	●	✓	
YEPPOON HOSPITAL				✓	✓	✓	✓	

Queensland Health Annual Report 2007-08

## ► Pay for Performance

Success depends on:

- Who gets incentive
- Quantum of incentive
- Cost of compliance
- Relevance of measures to providers practice
- Comprehensibility of data
- Need for patient cooperation
- Non-financial results for provider

## ► Essay

### Pay for performance in Australia: Queensland's new Clinical Practice Improvement Payment

Consensus approach: consulting clinicians

Seven Initiatives chosen:

- Mental Health** - Community follow-up for schizophrenia
- Recording of antipsychotic injection
- Acute stroke** - Antiplatelet treatment in 48 hours
- Swallowing screen in 24 hours
- Emergency Dept** - Discharge home with communication to GP for over 65
- Discharge Medication Information** - Completed and recorded
- Chronic lung diseases** - Endorsed standard rehabilitation program

Duckett, S. BMC Health Services Research 2008. 8-72

#### Clinical Practice Improvement Payments

District	\$ received for the CPIP Indicators Jan-Mar 2008
Cairns and Hinterland	52,240
Central Queensland	45,240
Central West	550
Fraser Coast	28,420
Gold Coast	98,575
Mackay	43,180
Mater	20,000
Mt Isa	1,900
Northside	194,445
Princess Alexandra	107,190
Royal Brisbane and Women's	44,845
Royal Children's	5,750
South West	2,350
Southside	85,355
Sunshine Coast	143,760
Toowoomba	45,285
Townsville	50,100
West Moreton	42,325
Torres Strait	100
Wide Bay	55,540
<b>Total</b>	<b>1,067,150</b>

Queensland Health Annual Report 2007-08

▶ ACSQHC

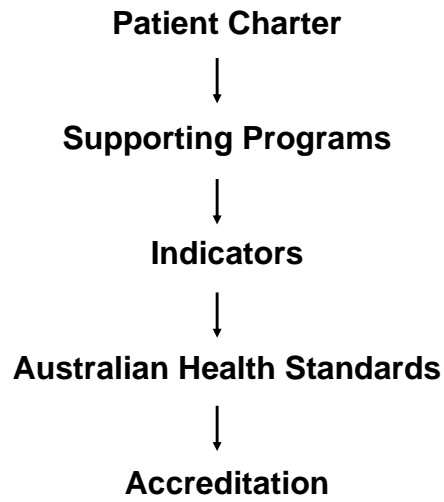
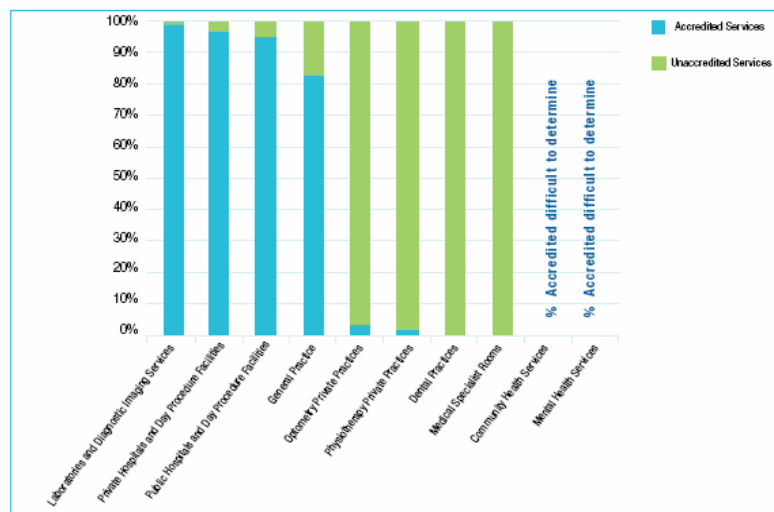


Figure 8.4: Proportion of health services accredited, by health service type, as at January 2008



## ▶ ACSQHC and Health Ministers' Decisions: 2008

### Initiative: Accreditation of Healthcare Facilities (April 2008)

#### Decisions

- Endorsed the recommendations for implementation of reforms to safety and quality accreditation
- ACSQHC to develop Phase 1 model

#### Moving Forward

- Final Report on the Review of National Safety and Quality Accreditation Standards Feb 2008 is available on ACSQHC website
- Research underway on:
  - Short notice surveys
  - Surveyor participation
  - Patient journey
- Development of preliminary Australian Healthcare Standards initially in:
  - Healthcare Associated Infection
  - Medication Safety
  - Patient Identification
  - Clinical Handover
- National coordination of accreditation
- Mapping of regulation to mandate Australian Health Standards and the expansion of accreditation to high risk areas