

Quality and safety of care

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Presentation to
VMIA Human Factors Forum
June 2017



Review stimulated by quality scandal

Bacchus Marsh stillborn | Bacchus Marsh Hospital

www.abc.net.au/news/2016-05-05/bacchus-marsh-baby-deaths-case-coroner-releases-findings/7385182

Apps | Google Scholar | Unimelb e-Journal | Qantas flights | Flight | Unimelb library cat | Worldcat | XE - Universal Current | Google | NetBank - Logon | BMO Financial Group | Health Performance C | University of Alberta | Facebook | Globe Genie - Joe Mc | StartPage

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NEWS | LOCATION: Melbourne, Vic | WEDNESDAY 15°C | Currently 13° Feels like 12° MIN 10°

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BREAKING NEWS Counter-terrorism police have arrested two men over an incident in Sydney's south-west.

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Bacchus Marsh Hospital: Coroner finds significant failings in care in baby death cases

By Charlotte King
Updated 5 May 2016, 7:53am

There were significant failings in the obstetric care provided to three babies who died soon after being born at a rural Victorian hospital, the state's coroner has found.

The three baby girls were each born at the Bacchus Marsh maternity unit of the Djerriwarrh Health Service in 2013, but died 24 hours, seven days and 16 days after their births.

Each child, the coroner noted, was their parents' first.

The babies' deaths were only reported to the coroner in 2015, after a cluster of stillbirths and newborn deaths at the hospital were identified by Victoria's Consultative Council of Obstetric and Paediatric Mortality and Morbidity (CCOPMM).

Obstetrics Professor Euan Wallace was recruited by the state's Department of Health and Human Services to examine the cluster, and found seven deaths between 2013 and 2014 could have been avoided.

As the Coroner's Court has no jurisdiction over stillbirths, only the three newborn deaths were investigated.




PHOTO: The Djerriwarrh Health Service was subject to major probe into a series of baby deaths. (ABC News: Guy Stayner)

RELATED STORY: Investigation of health workers over baby deaths expands

RELATED STORY: New probe uncovers seven more baby deaths at Victorian hospital

MAP: Bacchus Marsh 3340

Key points:

- Coroner finds "sub-optimal" care in three newborn death cases
- Misinterpretation of foetal heart monitoring system a common feature in each case

TOP STORIES

- Archbishop accused of silencing same-sex marriage supporters
- Foreign spies behind BOM cyber attack, report shows
- Trump steps up attacks on Republicans, says 'shackles' are off
- Expect rape threats, Gillard warns female politicians
- Former sex workers claim harassment by pro-prostitution groups after speaking out
- Four arrested after bikie taskforce raids in Melbourne
- Hawthorn great Sam Mitchell flags possible West Coast move
- Essendon's Jobe Watson will lose Brownlow, former manager says
- What happens to racing greyhounds after their time on the track is up?
- Live: PM says push to axe plebiscite over mental health fears 'ridiculous'
- Slater and Gordon faces \$250m class action from shareholders
- 'I was in a daze': Bowler behind fatal Hughes delivery recalls match
- Man told wife of sex offences against daughters, chickens: court
- Scientists accidentally stumble on possible way to slow brain's ageing process
- 'I'd rather they take it outside': Snakes caught wrestling in man's home

Previous reviews

VICTORIA
Auditor General
Victoria

VICTORIA
Victorian
Auditor General

Our report used strong language:

- **Because of seriousness of tragedy**
- **Wanted our report not to suffer same fate as previous**

Ordered to be printed
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Ordered to be printed

VICTORIAN
GOVERNMENT PRINTER
May 2008

PP No 100, Session 2008-08

PP No. 121, Session 2003-05

nt Safety in Victorian Public Hospitals

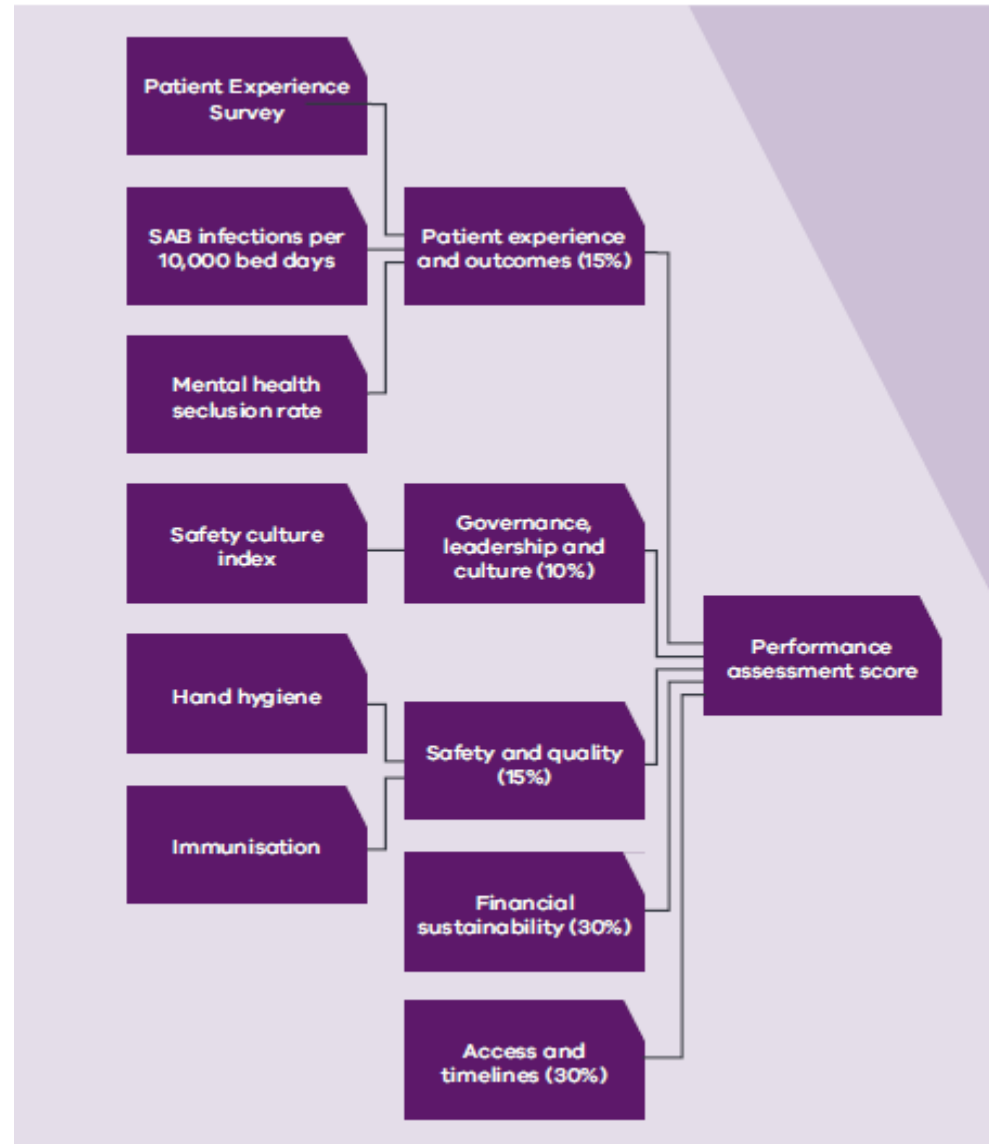


Concerns raised by the Australian Nursing and Midwifery Federation (ANMF)

66. On 17 January 2014, the ANMF wrote to the Director of Nursing at the Bacchus Marsh campus expressing concerns on behalf of its midwife members that the hospital was operating outside the limits of the department's Health Capability Framework, under which it was a level 3 facility, by accepting higher risk deliveries at 34 weeks. The letter also noted that policies did not reflect local capability, that the model of care did not reflect best practice of continuity of care and expressed concern about staffing levels.
67. The letter received a response from the then Director of Nursing to the effect that policies would be updated to reflect that neonates of less than 37 weeks gestation generally would not be admitted unless there were special circumstances; that policies are regularly reviewed and updated; and that staffing was adequate. With respect to the model of care, the response said that "patient allocation does occur, not task allocation as indicated" and noted that there were regular meetings where concerns could be raised and all midwives were aware of processes to escalate any concerns. The response also corrected the ANMF assertion that Djerriwarrh Health Services had an operating surplus of \$1.9 million for the 2012-13 year advising that in fact there was a deficit for that year.
68. This exchange of letters was apparently widely circulated locally and came to the attention of a departmental officer of the Maternity and Newborn Clinical Network who it appears had been approached by the ANMF to undertake some clinical risk assessment. The official from the Maternity and Newborn Clinical Network noted that they would need Djerriwarrh Health Services to invite such a review and could not do it at the request of the ANMF. The correspondence was sent to the maternity services program and the departmental regional office. Evidence produced by the department establishes that the regional office approached the then Chief Executive of Djerriwarrh Health Services and was advised to take it up with the Director of Nursing and Midwifery. The regional office made further inquiries of Djerriwarrh Health Services' Director Clinical Quality and Support Services and the Director of Nursing and Midwifery. In the face of reassurances that the concerns raised by the ANMF were being addressed by the health service, the department took no further action.

Current performance assessment scoring system

What does good look like?



**‘the only thing of real importance
that leaders do is to create and
manage culture’**

The board's responsibility

‘to monitor the performance of the health service to ensure that there are ... effective and accountable systems ... in place **to monitor and improve the quality and effectiveness of health services provided ...; any problems identified with the quality or effectiveness of the health services provided are addressed in a timely manner**; and the ... service continuously strives to improve the quality of the health services it provides and to foster innovation’

Multiple causal factors for safety weaknesses

Hazards

Boards with
right skills ?

Accreditation
system not
risk-based

Dysfunctional
incident
reporting
system

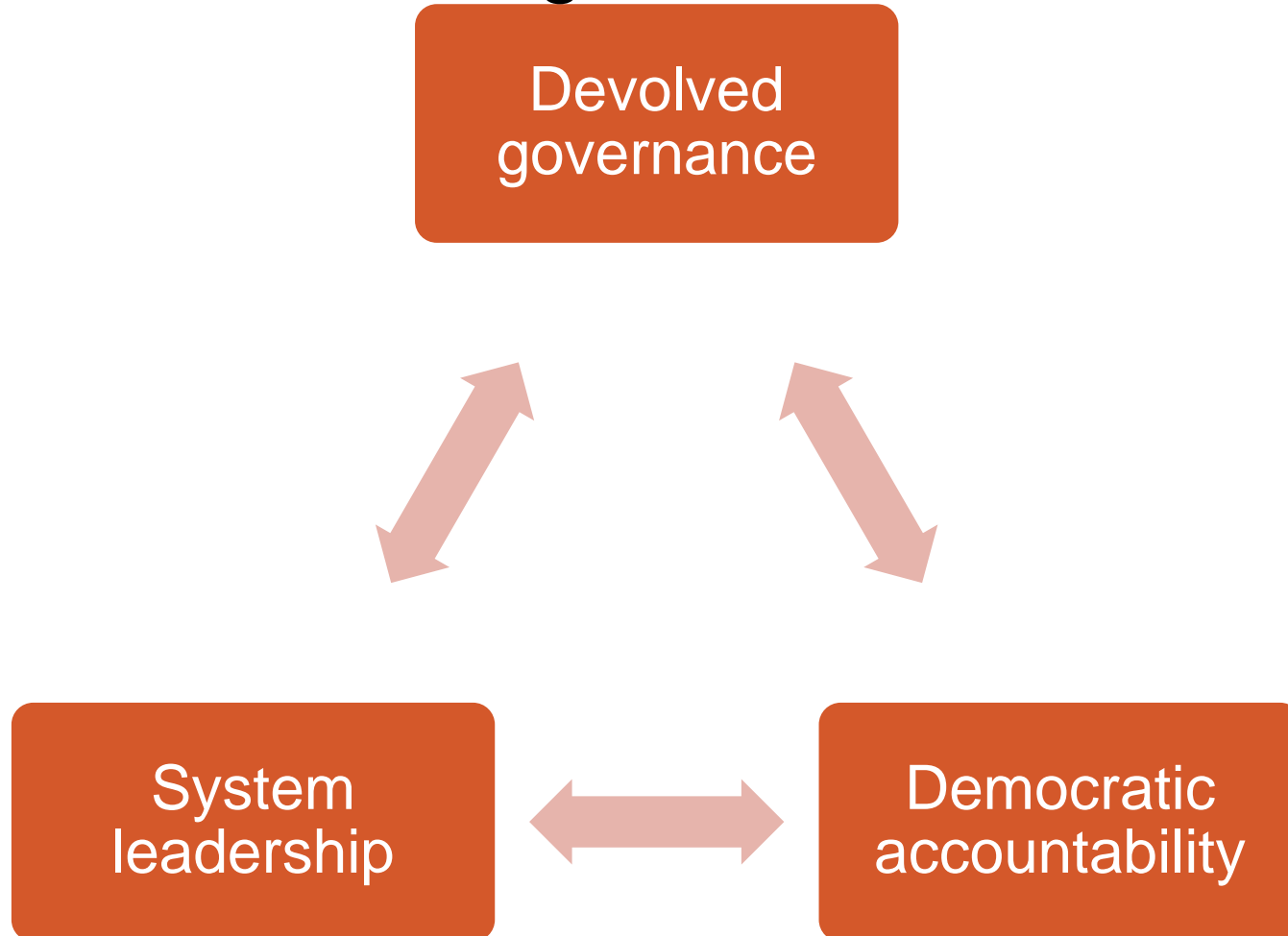
Dysfunctional
safety
monitoring
system

Losses

Focus on
finance

Three functions

All need to be strengthened



Strengthening devolved governance

- Better boards

0	Not experienced	No experience in areas covered by Standard 1. For example, has worked as a clinician outside hospitals but with no experience in clinical governance; or is not a clinician and has no clinical governance experience.
1	Somewhat experienced (Basic)	Somewhat experienced in areas covered by standard 1. This could be demonstrated by membership of a Board safety and quality committee for more than two years, or as a clinician with experience in monitoring and measuring quality of care as part of a previous role.
2	Reasonably experienced (Medium)	
3	Considerably experienced (Intermediate)	Considerable experience in areas covered by Standard 1. This might be demonstrated by chairing the Board safety and quality committee for more than three years, or being a senior clinician with accountability for Divisional quality and safety monitoring and performance.
4	Significantly experienced (Advanced)	
5	Extensively experienced (Expert)	Extensive experience in areas covered by Standard 1 such as in designing a governance system to monitor, review and evaluate all aspects of organisational performance. This could be demonstrated by having taken a lead role in designing the clinical governance system in another organisation.

Strengthening devolved governance

- Better boards
- Better board reporting
- Better information
 - portal

Predicted probability of patient complaint by number of previous complaints

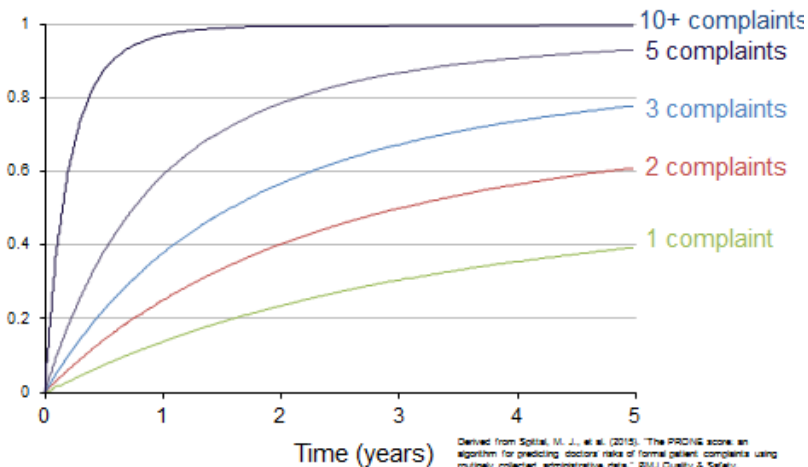


Figure 2: First page of example board safety and quality analytics report

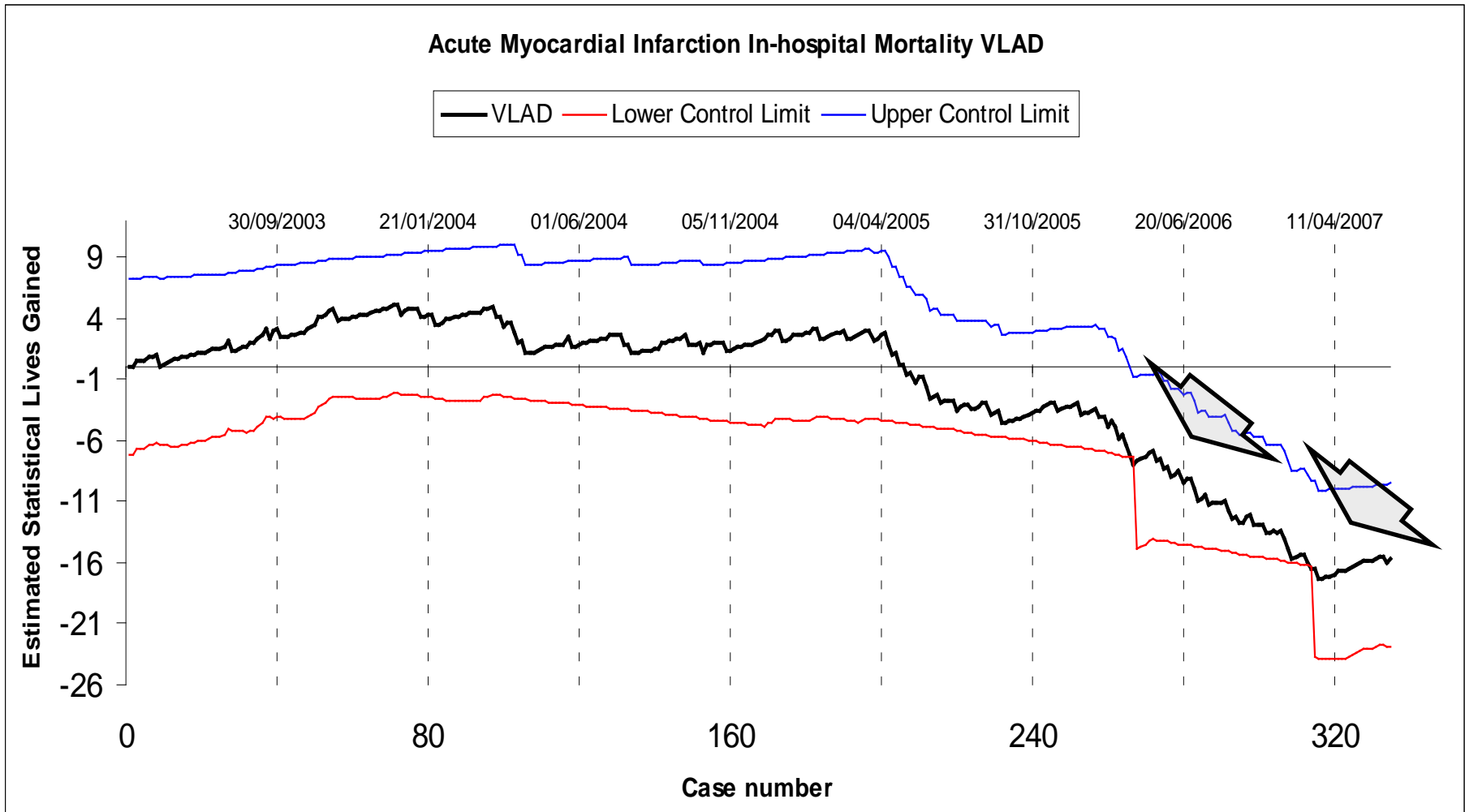
Indicator set	Performance relative to benchmark	Local progress
Comparative quality indicators (VLADs)	<ul style="list-style-type: none"> Far below target on 1 Below target on 5 Near target on 20 Exceeding target on 4 Far exceeding target on 3 	<ul style="list-style-type: none"> Deterioration in 3 No change in 25 Improvement in 5
'Towards zero' safety indicators (ACSQHC hospital-acquired complications)	<ul style="list-style-type: none"> Far below target on 1 Below target on 1 Near target on 10 Far exceeding target on 2 	<ul style="list-style-type: none"> No change in 12 Improvement in 3
'At zero' sentinel events and ISR 1 incidents	<ul style="list-style-type: none"> Two ISR-1 incidents Zero sentinel events 	<ul style="list-style-type: none"> Deterioration in ISR 1s No change in SEs
Maternity indicators	<ul style="list-style-type: none"> Below target on 2 Near target on 3 Exceeding target on 1 	<ul style="list-style-type: none"> No change in 3 Improvement in 2
Capability framework compliance	<ul style="list-style-type: none"> Far below target on 1 Near target on 1 	<ul style="list-style-type: none"> Deterioration in 1 Improvement in 1
Safety culture	<ul style="list-style-type: none"> Near target on 5 Exceeding target on 3 	<ul style="list-style-type: none"> No change in 6 Improvement in 2
Patient experience	<ul style="list-style-type: none"> Below target on 1 Near target on 3 	<ul style="list-style-type: none"> Deterioration in 1 No change in 3
Death in low-vol. DRGs	<ul style="list-style-type: none"> Near target 	<ul style="list-style-type: none"> No change
Mental health indicators	<ul style="list-style-type: none"> Near target on 2 Exceeding target on 1 	<ul style="list-style-type: none"> No change in 2 Improvement in 1
Aged care indicators	<ul style="list-style-type: none"> Below target on 1 Near target on 4 	<ul style="list-style-type: none"> Deterioration in 1 No change in 4
Infection control indicators	<ul style="list-style-type: none"> Near target on 3 Exceeding target on 2 	<ul style="list-style-type: none"> No change in 4 Improvement in 1
Overall performance	<ul style="list-style-type: none"> Far off target on 4 Below target on 10 Near target on 53 Exceeding target on 11 Far exceeding target on 5 	<ul style="list-style-type: none"> Deterioration in 7 No change in 61 Improvement in 15

Strengthened democratic accountability

- Improved transparency
- Improved use of available data

	OLD	NEW
Harm is:	Rare, 'preventable'	Common, 'reducible'
We know of harm by:	Incident reports	Epidemiology of outcomes
We measure harm by:	Counts	Rates (%)
Harm is remedied by changing:	Individuals	Systems
Our objective is:	<i>Blame/apology</i>	Improvement

In-hospital Mortality VLAD



Total incidence of CHADx by major class (Source: VAED for FY 2014-15)

Major class	All Public Hospitals	All Victorian Hospitals	
		All Private Hospitals	
01: Post-procedural complications	34,106	17,808	51,914
02: Adverse drug events	14,858	6,402	21,260
03: Accidental injuries	6,078	2,179	8,257
04: Infections	12,846	2,694	15,540
05: Cardiovascular complications	47,304	17,984	65,288
06: Respiratory complications	23,499	8,737	32,236
07: Gastrointestinal complications	36,815	19,118	55,933
08: Skin conditions	18,196	7,509	25,705
09: Genitourinary complications	27,575	9,753	37,328
10: Hospital-acquired psychiatric states	16,959	5,934	22,893
11: Early pregnancy complications	2,710	757	3,467
12: Labour & delivery complications	76,050	20,600	96,650
13: Perinatal complications	40,458	4,424	44,882
14: Haematological complications	12,994	3,970	16,964
15: Metabolic complications	45,536	10,743	56,279
16: Nervous system complications	4,245	1,429	5,674
17: Other complications	40,535	17,563	58,098
Total	460,764	157,604	618,368

ACSQHC 'Priority complications'	Public Hospitals	Private Hospitals
Pressure injury	5,356	1,605
Falls with Fracture or ICI	362	127
Healthcare Assoc Infection	16,597	5,587
Surgical complications	2,563	1,099
Respiratory complications	2,846	554
Venous Thromboembolism	1,098	429
Renal failure	309	52
GI bleeding	2,099	617
Medication complications	2,017	455
Delirium	7,116	2,588
Incontinence	1,246	415
Malnutrition	1,564	482
Cardiac complications	9,843	4,194
Iatrogenic pneumothorax requiring intercostal catheter	230	74
Total count for all major categories	53,246	18,278

Strengthened democratic accountability

- Improved transparency
- Improved use of available resources
- Improved accreditation



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Preventing and Controlling Healthcare Associated Infections Standard 3

The Preventing and Controlling Healthcare Associated Infections Standard:

Clinical leaders and senior managers of a health service organisation implement systems to prevent and manage healthcare associated infections and communicate these to the workforce to achieve appropriate outcomes. Clinicians and other members of the workforce use the healthcare associated infection prevention and control systems.

The Intention of this Standard is to:

Prevent patients from acquiring preventable healthcare associated infections and effectively manage infections when they occur by using evidence-based strategies.

Context:

It is expected that this Standard will be applied in conjunction with Standard 1, 'Governance for Safety and Quality in Health Service Organisations' and Standard 2, 'Partnering with Consumers'.

Criteria to achieve the Preventing and Controlling Healthcare Associated Infections Standard:

Governance and systems for infection prevention, control and surveillance

Effective governance and management systems for healthcare associated infections are implemented and maintained.

Infection prevention and control strategies

Strategies for the prevention and control of healthcare associated infections are developed and implemented.

Managing patients with infections or colonisations

Patients presenting with, or acquiring an infection or colonisation during their care are identified promptly and receive the necessary management and treatment.

Antimicrobial stewardship

Safe and appropriate antimicrobial prescribing is a strategic goal of the clinical governance system.

Cleaning, disinfection and sterilisation

Healthcare facilities and the associated environment are clean and hygienic. Reprocessing of equipment and instrumentation meets current best practice guidelines.

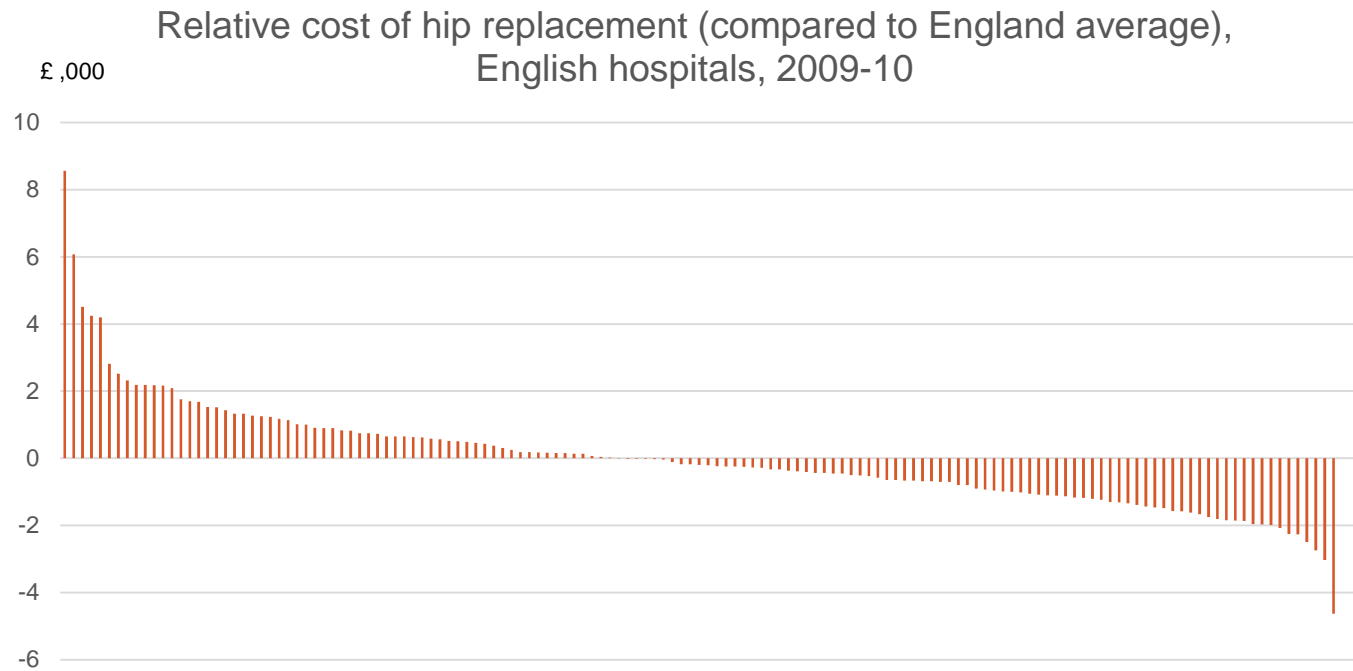
Communicating with patients and carers

Information on healthcare associated infections is provided to patients, carers, consumers and service providers.

Strengthened system leadership

- Strengthened clinical engagement
 - Clinical networks
- Strengthened department
- Strengthened oversight
 - See board report

One dimensional view of good/poor performance

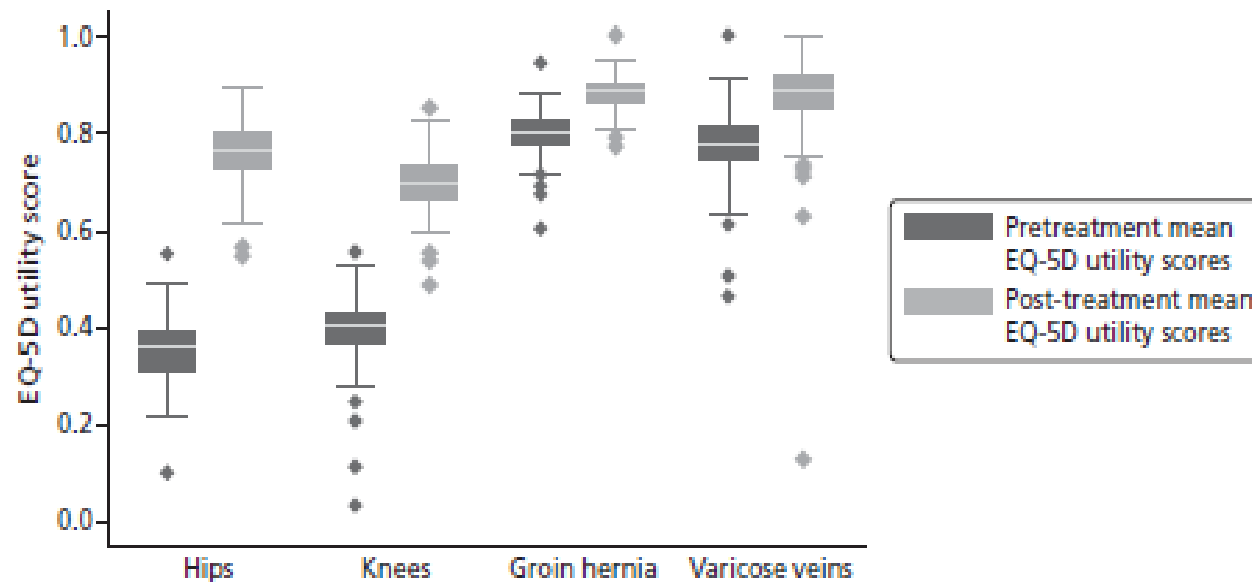


Broader measurement of outcomes

Patient Reported Outcome Measures (PROMs)

They can be generic (EQ5-D or condition specific)

In England collected for



Welcome to After my Surgery

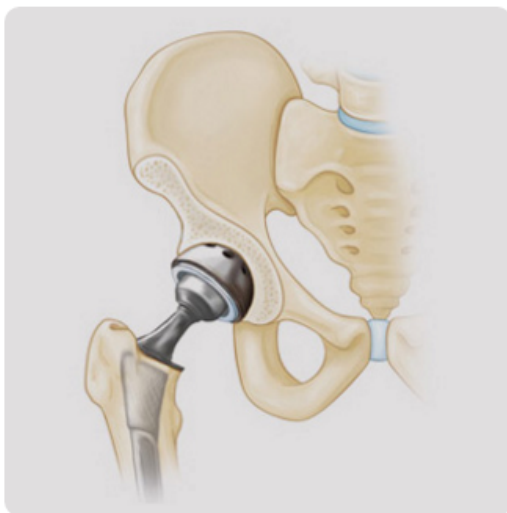
Are you considering a hip, knee or hernia operation?

Having an operation is a big decision and it is natural to wonder how you will feel after surgery. Will you be able to walk without problems and do the shopping again? Will you be free of pain?

Many people in this situation would like to know how patients before them have benefited from surgery. This website shows you what thousands of NHS patients have said about their own experience. You can use it to see how patients of your age with similar health problems felt after they had their operation.

You can use this tool at home or in your local GP surgery. You can print your results and discuss them with your family, friends and your doctor.

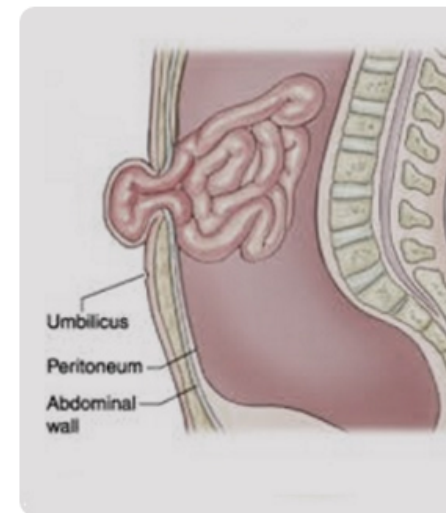
Please start by selecting an operation below. If you would like to learn more about how our calculator works, please click [How it works](#) above.



[Hip replacement](#)



[Knee replacement](#)



[Groin hernia operation](#)

About you

Please provide some personal information and a description of how you feel today. This information allows the calculator to compare you to similar patients who already had surgery.

Your data will be treated confidentially and will only be used for this purpose. No information will be saved anywhere.

Your Age

Please Enter in Years:

Your Gender

Male

Female

How long have you had symptoms related to this condition?

Less than 1 Year

1-5 Years

6-10 Years

More than 10 Years

By placing a tick in one box in each group below, please indicate which statements best describe your own health state today.

Mobility

I have no problems in walking about

I have some problems in walking about

Your Results

This figure shows how 100 patients like you felt six months after their operation, compared to how they felt before surgery. The patients are similar to you in terms of their age, gender and how they felt before having surgery.

Please note that these results only provide an indication of the likely outcome of your surgery.

There may also be a number of other things you may wish to know about, for example how long you will need to be in hospital for or what may happen if you do not have surgery. We recommend that you discuss these results with your surgeon.

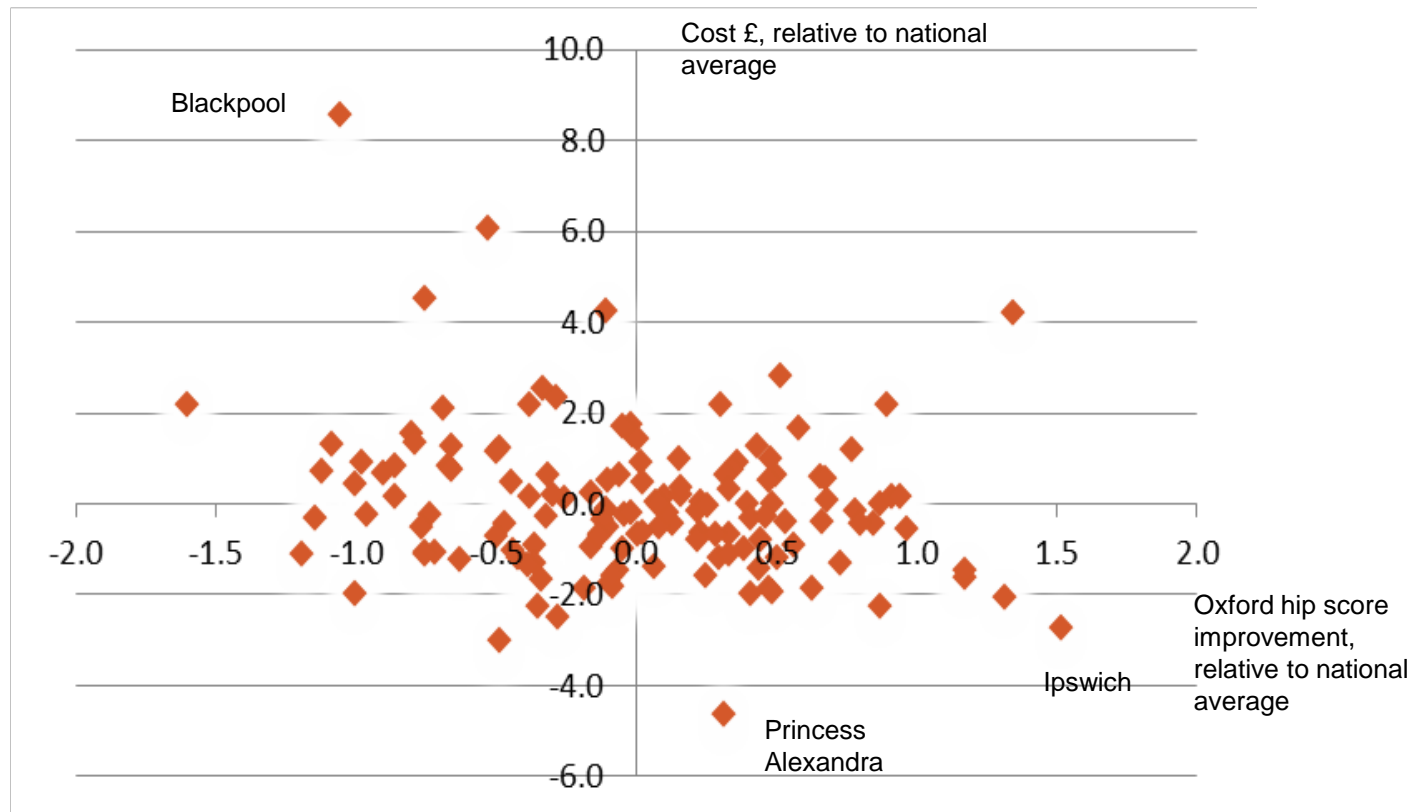
You can print these results by clicking on the button below. You can also change your answers.

If you would like to learn more about how we calculated these results please click on *How it works* above.

How 100 patients like you felt after surgery



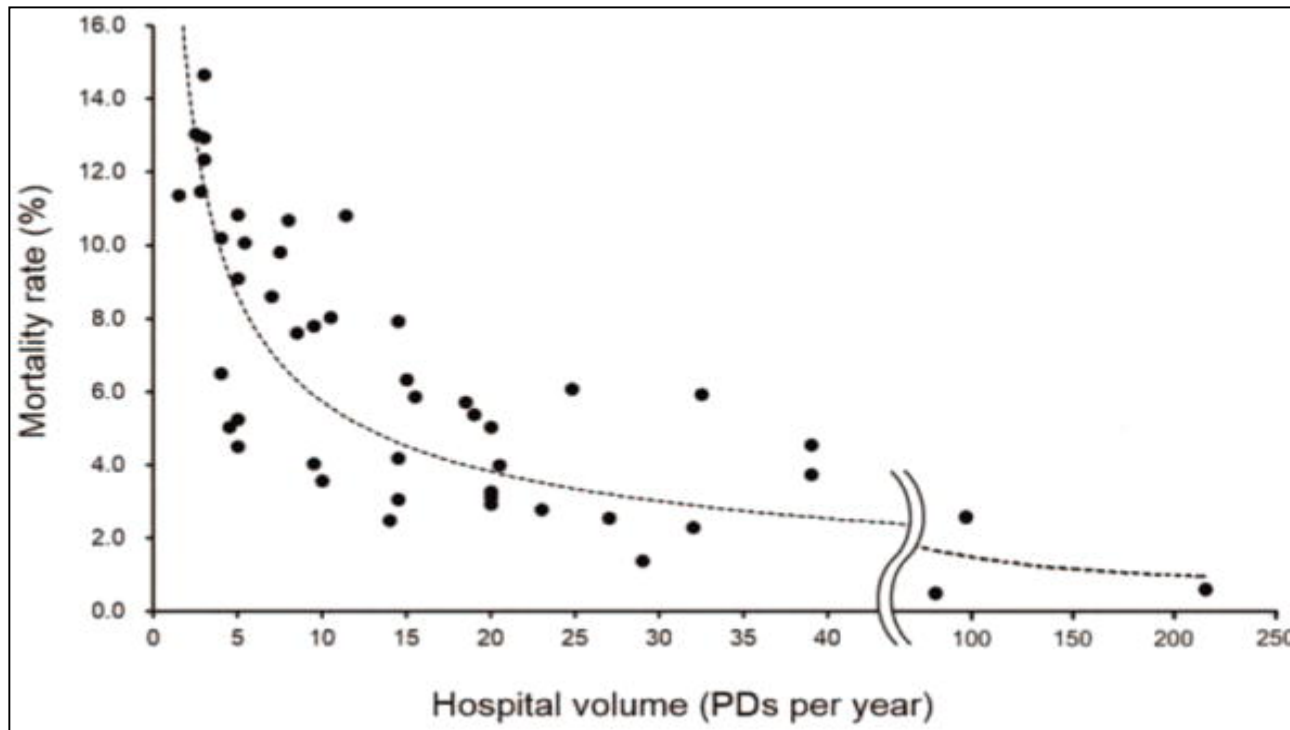
How should the outcomes of care influence payment?



Street, A., et al. (2014) 'Variations in outcome and costs among NHS providers for common surgical procedures: econometric analyses of routinely collected data', *Health Services and Delivery Research*, 2(1),

Issue of low volume

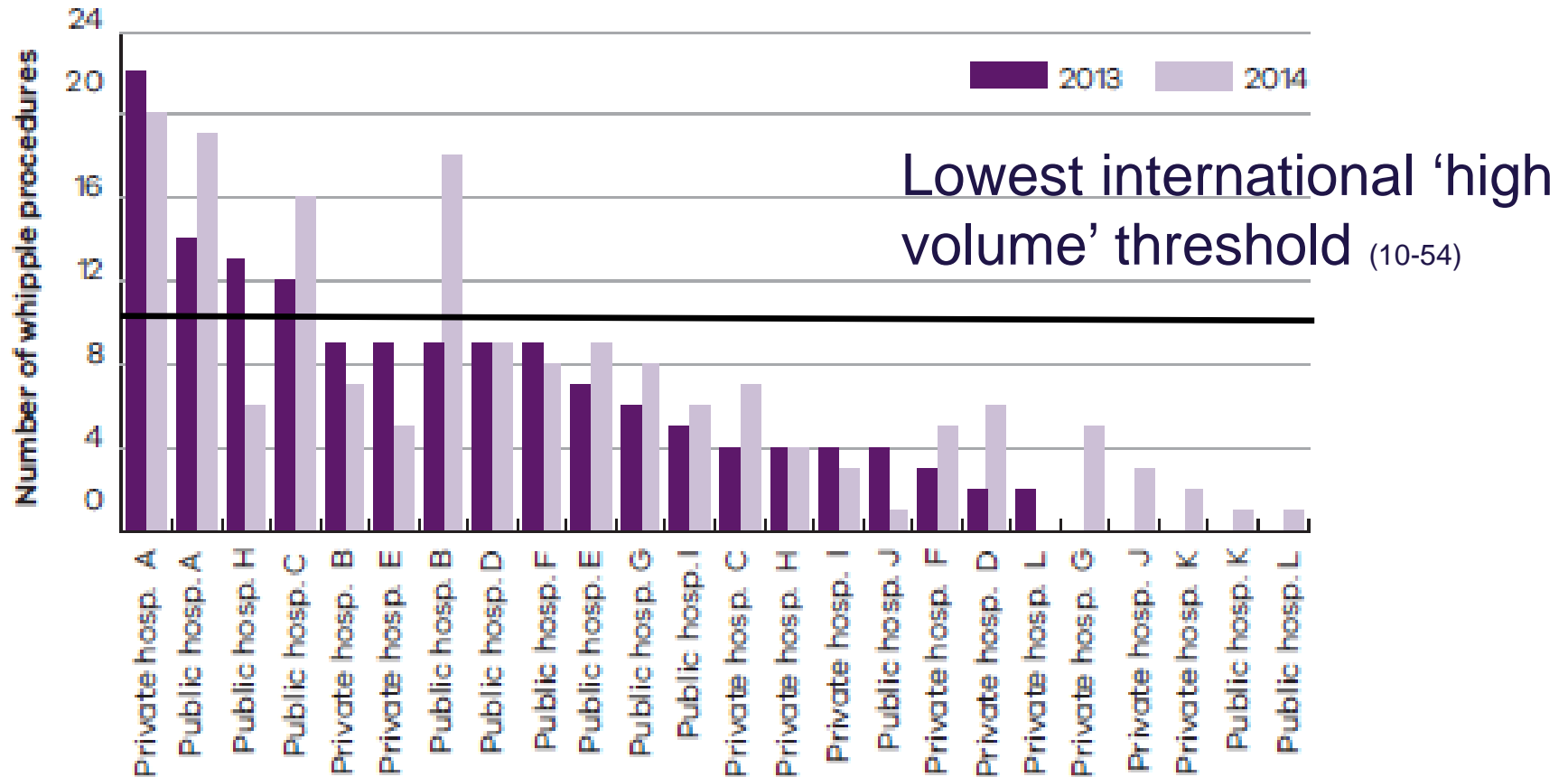
FIGURE 3 . Scatter plot of hospitals according to the median values of each included hospital group and postoperative mortality rates. PD indicates pancreaticoduodenectomy.



Effect of Hospital Volume on Surgical Outcomes After Pancreaticoduodenectomy: A Systematic Review and Meta-analysis.
 Hata, Tatsuo; Motoi, Fuyuhiko; MD, PhD; Ishida, Masaharu; MD, PhD; Naitoh, Takeshi; MD, PhD; Katayose, Yu; MD, PhD; Egawa, Shinichi; MD, PhD; Unno, Michiaki; MD, PhD
 Annals of Surgery. 263(4):664-672, April 2016.
 DOI: 10.1097/SLA.0000000000001437

Using data to examine hospitals doing low volumes (Pancreaticoduodenectomy example)

Figure 4: Many hospitals are performing very low volumes of whipple procedures



Of 20 hospitals < 10, 4 rural

Knowing what and knowing whether

Clinicians

- What clinical practice will minimise risks (for given benefit)
- Implementing agreed treatment well

Clinical leaders

- What good systems of practice look like and are implemented
- Whether clinicians providing appropriate care
- Whether outcomes are \approx peers/benchmark and responding if not

CEO

- Whether clinical leaders know whether ...
- Whether clinical leaders are responding appropriately

Boards

- Whether systems are in place so that all other accountabilities are working

Department

- Whether hospitals have systems in place

Key themes for safety and quality reform

1. Fostering a **culture** of continuous improvement and clinical excellence in the health sector, including by engaging and empowering clinicians in reform.
2. Strengthening **oversight** of both safety issues and clinical governance by the Department, so that warning signs are detected and acted upon in a timely manner.
3. Improving **governance** of hospitals, so that the public can be confident that all hospitals - big and small, public and private - are delivering safe care.
4. Advancing **transparency** within the health sector, so that communities can verify that their local hospital is rapidly identifying and rectifying important defects in care when they arise.

And thanks to all who
contributed to review

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<https://www2.health.vic.gov.au/hospitals-and-health-services/quality-safety-service/hospital-safety-and-quality-review>

**When is right time
to evaluate
impact?**