

# Quality Improvement through Measurement and Reporting of Performance in New South Wales, Australia

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45 50 55 60 65 70 75 80 85 90 95 100

## Presenter disclosure

- Program name: Bureau of Health Information
- Presenter: Dr Jean-Frederic Levesque
- Relationships with commercial interests: None

## Disclosure of commercial support

- This session has received no commercial support

## Mitigating Potential Bias

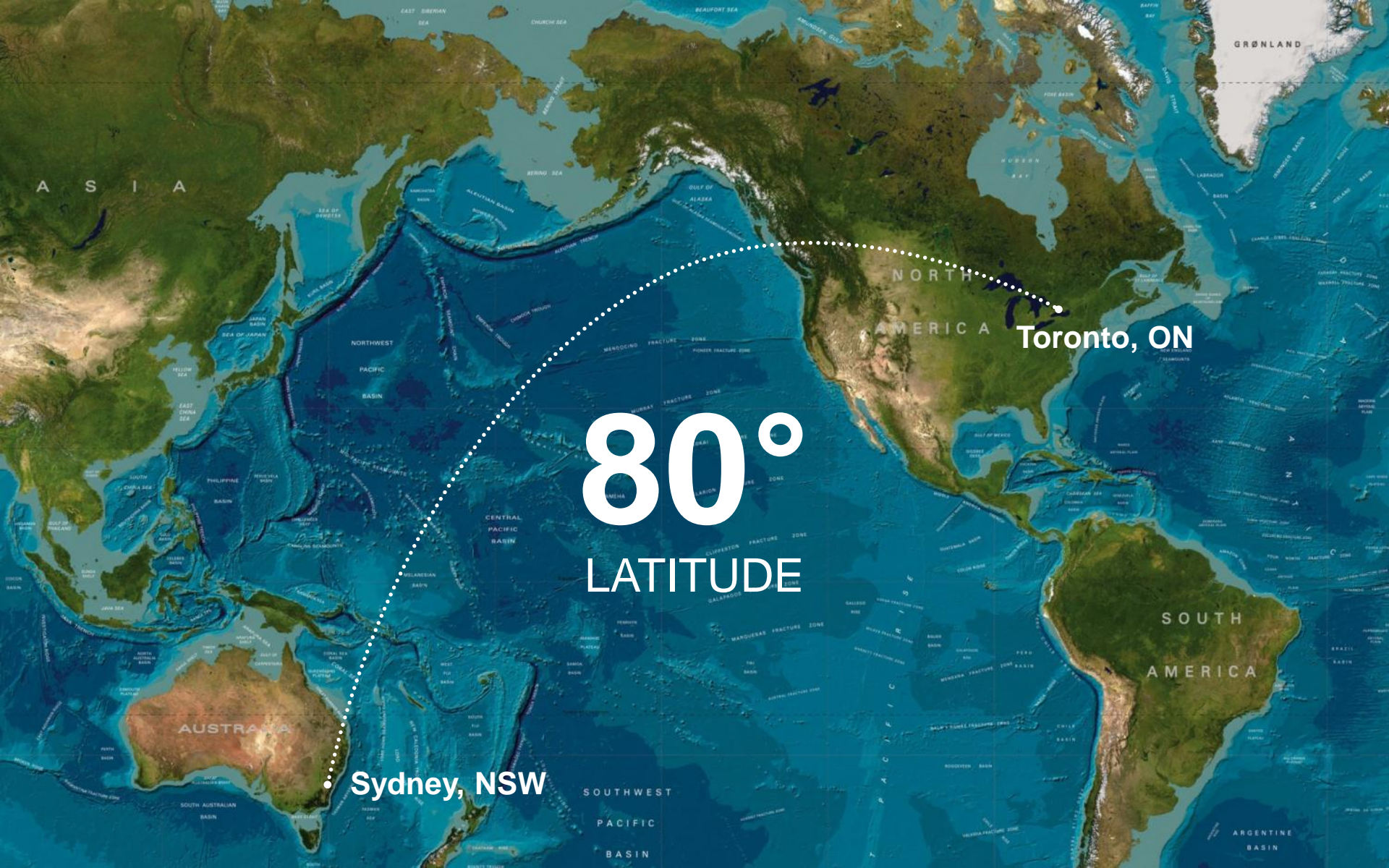
- None

Port-Cartier, QC, Canada



# Sydney, NSW, Australia





ASIA

GRÖNLAND

NORTH  
AMERICA

Toronto, ON

80°  
LATITUDE

SOUTH  
AMERICA

AUSTRALIA

Sydney, NSW

SOUTHWEST  
PACIFIC  
BASIN

ARGENTINE  
BASIN



+



= 80°

# Universal coverage

Low population density

Past and recent migration

Indigenous populations

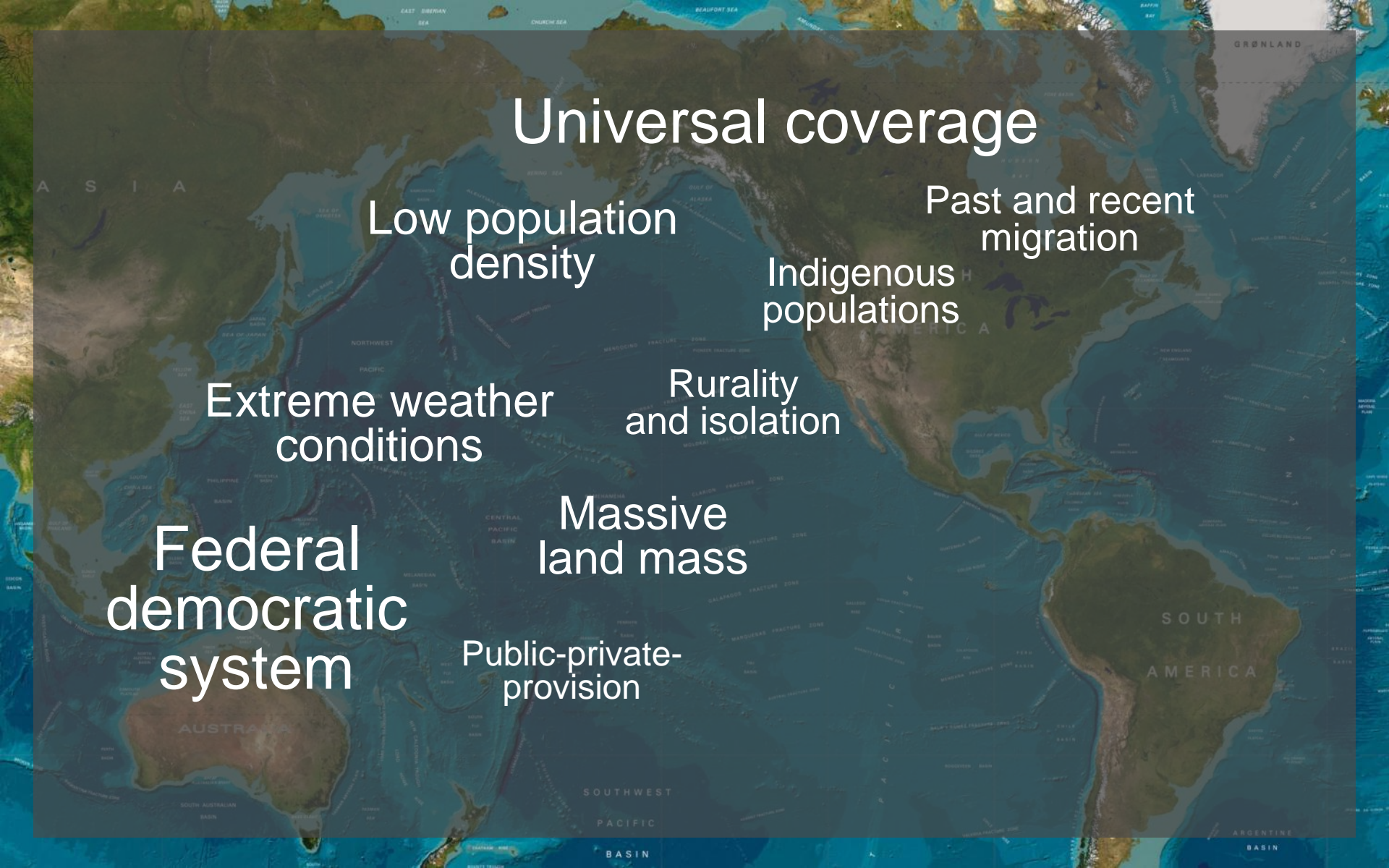
Extreme weather conditions

Rurality and isolation

Federal democratic system

Massive land mass

Public-private-provision



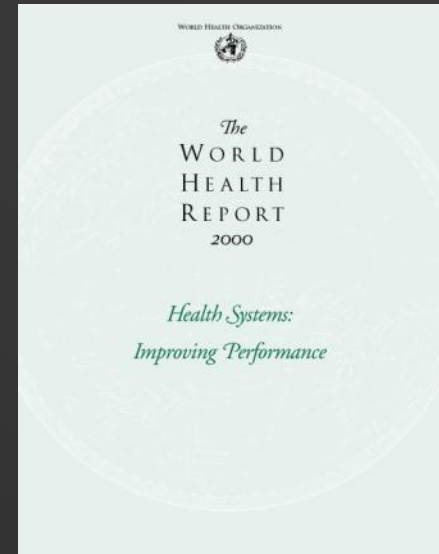
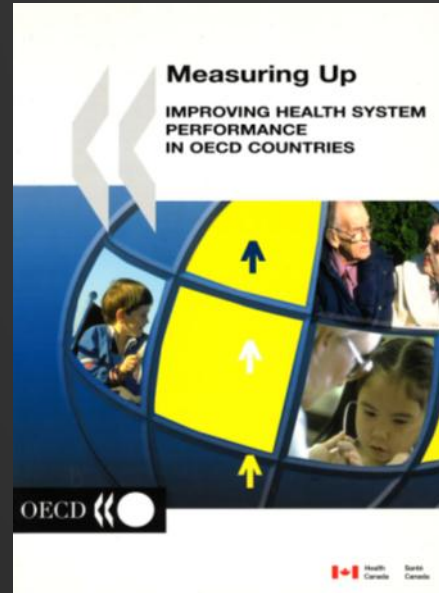
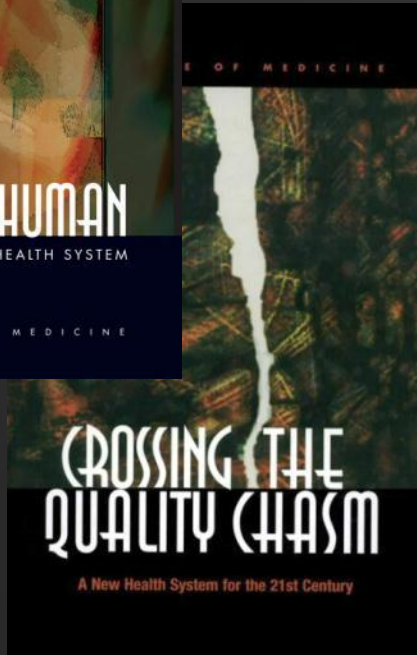
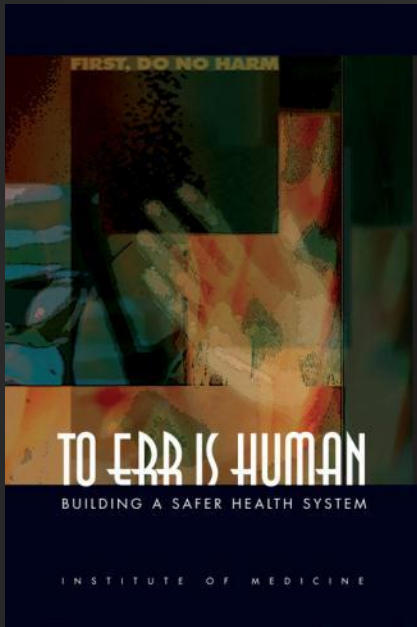
- 1** From measurement to change
- 2** Insights from New South Wales



1

# From measurement to change





“ Performance happens when structures, resources, providers and patients interact in real contexts ”

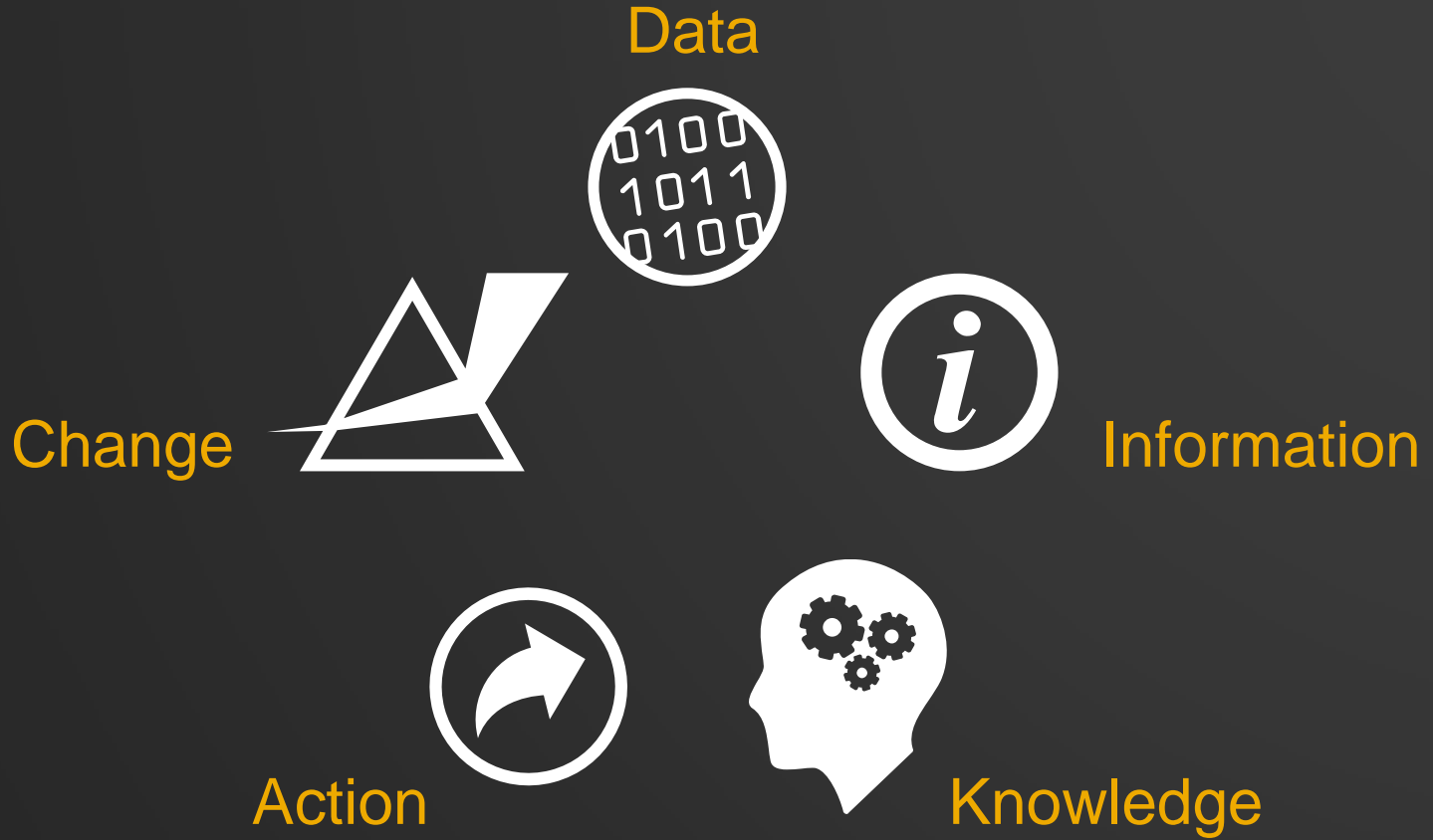
**BHI, Spotlight on Measurement 2013**

“ If actors perform on stage,  
athletes perform on the field,  
surgeons perform in surgical theatres  
and nurses perform at the bedside  
or in community centres ”

**BHI, Spotlight on Measurement 2013**

“ The difference between theory and practice is larger in practice than in theory ”

**Hollnagel, Braithwaite & Wears 2013**





# Data

*Data represents the codification of real phenomena into a form that can be analysed*

Health Information Exchange

Secure Analytics for Population Health Research and Intelligence

CHeReL – Master Linkage Key



Activity Based Management Portal

Information for Mental Health

HealthStats NSW





# Information

*Data becomes information  
by interpretation*

Hospital  
mortality

Unmet needs

Safety

Adverse  
events

Accessibility

Costs

Resources

Prevalence

Health risks

Satisfaction

Avoidable  
deaths

Disability

Quality of life

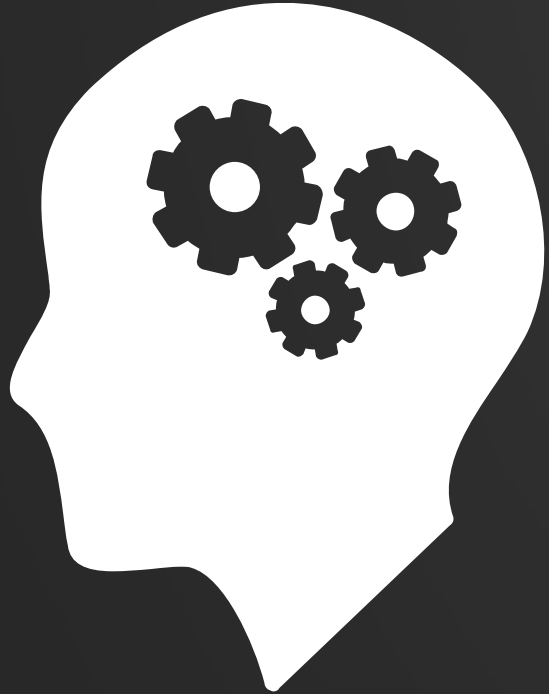
Health literacy

Team climate

Coordination

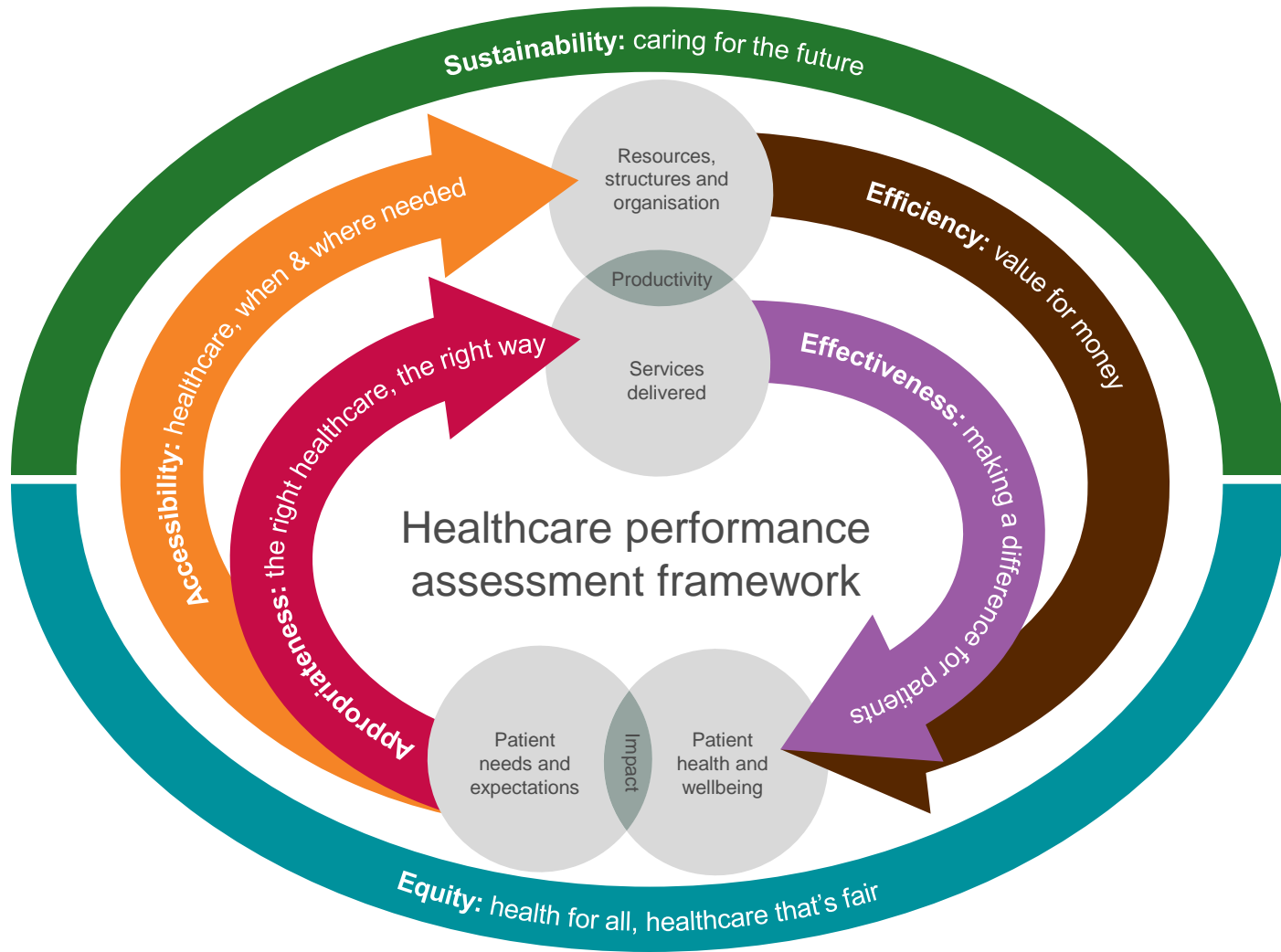
High users

Duplications



# Knowledge

*Knowledge signifies understanding of real things or abstract concepts that data and information have enabled to decipher and analyse*





# Action

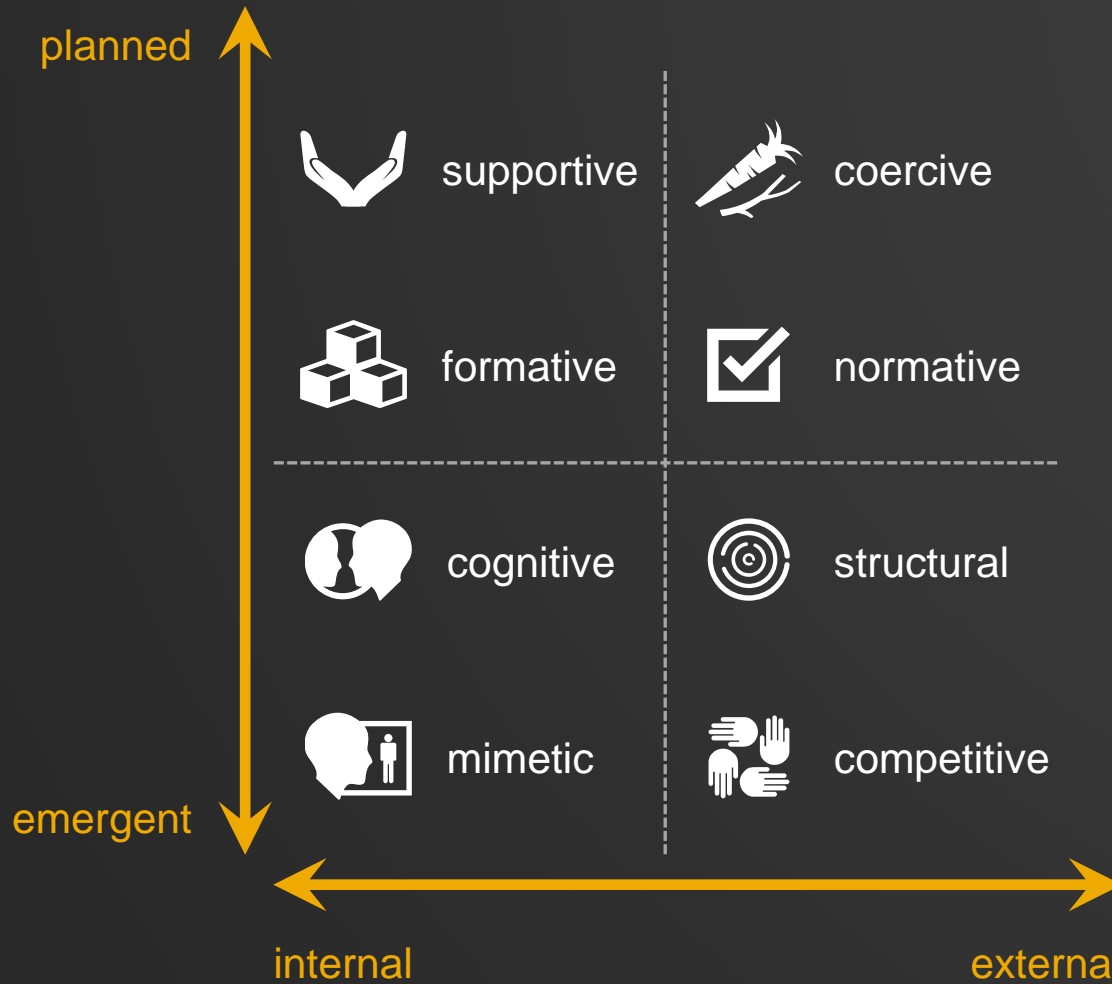
*Knowledge can support action through quality improvement programs and system redesign*

Cross-fertilisation  
Benchmarking  
Contract management  
Regulation  
Peer learning  
Nudge  
Monitoring  
Hug  
Awareness  
Shove  
Continuous education  
Training  
Provider feedback  
Judge  
Self-regulation  
Quality improvement  
Push  
Pay for outcomes  
Peer-pressure  
Monitoring  
Pay for performance  
Incentive



# Change

*Change in performance comes from sustainable modifications of structures, processes and clinical behaviours*





“Multimodal approaches have the biggest impact”

OECD 2002



2

# Insights from New South Wales



Special Commission of Inquiry  
Acute Care Services in NSW Public Hospitals

**Final Report of the  
Special Commission of Inquiry  
Acute Care Services in  
NSW Public Hospitals**

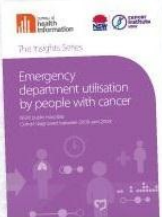
Overview



Peter Garling SC  
27 November 2008



How do people with cancer use hospital emergency departments in NSW?



Our latest Insights Series report analyses almost 200,000 visits by cancer patients to NSW emergency departments and identifies key stages of the journey.

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Latest news

BHI has released the first results of the Emergency Department Patient Survey which looks at the experiences of almost 26,000 patients who visited NSW public hospital emergency departments between April 2013 and March 2014.

The results are available at a state, local health district, hospital peer group and individual hospital level (for 76 NSW public hospitals).

[Read more.](#)



“ The public reporting of information about the health system and hospital performance is essential for the future of NSW Health.

It is the single most important driver (or lever) for the creation of public confidence in the health system, engagement of clinicians, improvement and enhancement of clinical practice and cost efficiency. ”

**Garling Report**

# Wait times lag behind

## Hunter hospitals miss state targets

By ASHLEIGH GLEESON



THE Hunter's busiest hospitals have again fallen below the state target for emergency department wait times after a jump in patient demand, new data shows.

At John Hunter Hospital, 61 per cent of patients left the emergency department within four hours in the three months to December 2014, maintaining the figure achieved in the same period the previous year despite an extra 700 patients. It meant the hospital, which saw 18,280 people over the quarter, again fell below the NSW target of 81 per cent of patients leaving emergency in four hours.

Maitland Hospital cleared 66 per cent in the four-hour window, despite also facing increased demand, while Calvary Mater and Belmont hospitals made slight improvements in 2015.

The waiting times were not helped by the 6600 people who attended the four emergency departments for non-urgent matters like minor cuts or abrasions. And 23,000 patients attended for semi-

urgent issues like earaches or sprained ankles.

Hunter New England's acting director of acute operations, Karen Kelly, said that people attending for non-urgent matters put a strain on staff trying to treat more serious conditions.

She also noted a number of changes implemented to make emergency departments more efficient.

"At John Hunter Hospital the emergency team, with the support from staff and services across the hospital, has been working hard to improve performance and embed the long-lasting changes which will lead to continued good results in the emergency department," Ms Kelly said.

The information was contained in the Bureau of Health Information's Hospital Quarterly, which also looks at elective surgery waiting times.

The report, issued on Wednesday, showed improvements were made with John Hunter

Hospital's ear, nose and throat surgeries, which recorded a 40 per cent drop in patients waiting for operations at the end of last year compared with December 2013.

Hospital general manager Debbie Bradley said three doctors were appointed to work exclusively in the ear, nose and throat outpatient clinic, along with an ear, nose and throat visiting medical officer surgeon.

The report also showed the total hip replacement average wait times at John Hunter had blown out to 166 days, almost double that in 2013.

Ms Kelly pointed out that it should receive that kind of surgery in 365 days.

"Demand for orthopaedic services in Hunter New England Health is high," she said.

"Strategies have been implemented to help manage this demand, including distributing patients across specialist hospitals that have capacity to provide care sooner."

That figure is an improvement on the September quarter, when 67 per cent of people left the district's EDs within the four-hour benchmark.

BHI chief executive Dr Jean-Frederic Levesque said more than 636,000 people visited emergency departments throughout NSW from October to December.

He said the total time patients spent in the emergency depart-

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### HOSPITAL REVIEW

## New data reveals surgeries on rise

By LYNN ROBERTS

ARMIDALE Hospital has lifted its game, with all elective surgeries performed on time between April and June this year.

In all, 238 operations were performed, steady for general surgery but also for gynaecology, orthopaedics and orthopaedic procedures.

Comparatively, Tenterden Base Hospital recorded a 58 per cent success rate in conducting elective surgery on time.

Wagga Wagga Base Hospital, similar in size to Armidale, could only achieve a 57 per cent success rate for performing elective surgeries on time.

The data was published on Wednesday by the NSW health department.

It published quarterly updates of NSW public hospital performance.

"The results are testament to the hard work of doctors and ... hospital staff

Health Minister Jillian Skinner said across the state, there had been a two per cent increase in the number of patients admitted to public hospitals, with Armidale Hospital experiencing a 1 per cent rise.

That meant 32 more patients sought surgery at Armidale compared with that time last year.

Most patients needed elective

surgery to remove cataracts, 175 operations, followed by knee replacements (54), hip replacements (26) and 12 cataract operations.

In all, 2312 patients were admitted for surgery at Armidale Hospital, with most admitted for day surgery.

Patients needing overnight care stayed an average four days at the hospital.

Also, 5732 people sought emergency surgery, with those being treated within eight minutes of arriving at hospital.

"Demand for hospital services continues to grow and it is the innovation and inspired work being done on the frontline which is ensuring patients are receiving quality, timely health care," Mrs Skinner said.

## Health report shows consistent turnaround improvement

LISA WACHSMUTH

PATIENTS have had shorter waiting times at hospital emergency departments across the Illawarra and Shoalhaven in the past quarter, according to new figures.

Almost 40,000 people visited EDs across the health district from October to December 2014 with 71 per cent leaving within four hours, according to the Bureau of Health Information's (BHI) Hospital Quarterly Report.

That figure is an improvement on the September quarter, when 67 per cent of people left the district's EDs within the four-hour benchmark.

BHI chief executive Dr Jean-Frederic Levesque said more than 636,000 people visited emergency departments throughout NSW from October to December.

He said the total time patients spent in the emergency depart-

ment was the shortest recorded for any October to December quarter over the past five years.

"Despite more patients visiting emergency departments, the report shows patients are spending less time in the emergency department overall," Dr Levesque said.

That was true at the individual hospitals throughout the Illawarra Shoalhaven.

At Wollongong Hospital, 71 per cent of patients left the ED within four hours in the December quarter, compared with 68 per cent in the previous quarter.

Seventy per cent of those presenting to Shellharbour Hospital ED left within the timeframe.

In October to December, as opposed to the 65 per cent of patients doing so from July to September.

At Shoalhaven Hospital the figure for the latest quarter was 61 per cent, compared with 59 per cent in the September quarter.

"Under Labor in 2010, just 47 per cent of patients were leaving the emergency department at Wollongong Hospital in four hours - it is now 71 per cent," NSW Health Minister Jillian Skinner said.

"This is a remarkable improvement, mirrored by many local hospitals, which demonstrates patients in the Illawarra are receiving best care under the Baird government."

"It is fantastic to see hospitals like Wollongong making this progress now as the improvements will only continue when the \$106 million redevelopment of the hospital is complete."

There were more than 54,000 elective surgeries performed across NSW in the past quarter, with 97 per cent on time.

# Long wait for improvement

## Hospitals lifting emergency response

MATT BAMFORD

WAITING times for serious cases in emergency departments can be up to three times longer in some Sydney hospitals than others, a quarterly performance review to be released today reveals.

The Bureau of Health Information found the state's most efficient hospital for category 2 cases from arrival at emergency to treatment was St Vincent's in Darlinghurst with an average of just four minutes.

Comparatively, the same category emergency patients in the Shire can wait up to 13 minutes for urgent treatment at Sutherland Hospital.

Category 2 patients are classed on the Australasian Triage Scale as those with imminently life-threatening injuries, in severe pain or needing time-critical treatment such as chest pain, severe burns or psychotic behaviour. Category 2 patients should begin treatment within 10 minutes of presenting at emergency departments.

The report found that overall, between April and June this year, more than 600,000 patients attended emergency departments — a 3 per cent rise on the same period last year and the highest recorded

for the quarter in two years. Of those, more than 168,000 were admitted to emergency, a 5 per cent increase on the same time last year.

The report showed the state's public hospitals were doing better across the board, with 72 per cent of patients leaving emergency departments within four hours — a

6 per cent improvement from April to June 2013.

Bureau of Health Information chief executive Dr Jean-Frederic Levesque said for those patients with more common injuries, like sprained ankles, waiting times had dropped across the state.

"There has been improvements for triage categories four and five, for whole of NSW, Category five has gone from 147 minutes (average wait) a year ago down to 133 minutes," Dr Levesque said.

Waiting times for elective surgery were on target, with 97 per cent of patients receiving surgery within the recommended time period and every patient needing urgent surgery receiving it on time.

"Hospitals have improved against most performance measures," Dr Levesque said.



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22 May 2015  
[Click here for further information](#)

**Palliative Care Week**  
24 - 30 May 2015

Feature Campaign

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*the one best to make a difference*



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6 May - Applications for the 2015 Exec. CLP cohort are now open

**Continuity of Medicines**  
9 Mar - The Medication Reconciliation Toolkit is now available





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#### The Clinical Supervision Training Space

A training portal where new, intermediate and advanced clinical supervisors can access training resources to suit their needs. [Read more](#)

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HETI supports education and training for excellent health care across the NSW Health system. We work to ensure that world-class education and training resources are available to support the full range of roles across the public health system including patient care, administration and support services.

HETI's mission is to improve the health of NSW and the working lives of NSW Health staff through education and training.

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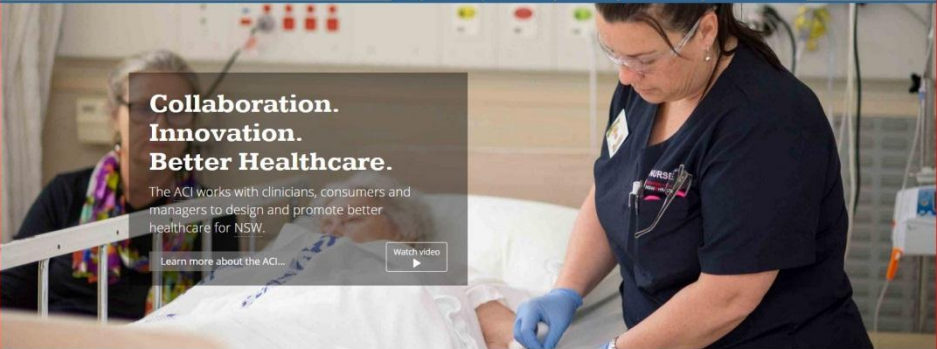


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# Collaboration. Innovation. Better Healthcare.

The ACI works with clinicians, consumers and managers to design and promote better healthcare for NSW.

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Working together to lessen the impact of cancer



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## Quit and stay quit.

See the Aboriginal Quit Smoking mini series produced in partnership with NITV.

### iCanQuit

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- Canrefer: Cancer referrals
- eviQ: Cancer treatments online
- Research grants
- Cancer statistics
- Cancer notifications
- Centre for Health Record Linkage

#### Services for the public

- Breastscreen NSW
- Cervical screening



#### Debunking breast screening myths

An initiative to increase awareness about the importance of regular



#### Paving the way for improved detection and treatment of mental illness in people with cancer



#### Artwork inspiring women to breast screen for good health

The Cancer Institute NSW this week unveiled artwork created by women



# Aligning measurement with incentives

The example of hospital timeliness performance measures



Figure 28

Percentage of patients leaving the emergency department within four hours, by mode of separation, July to September 2015






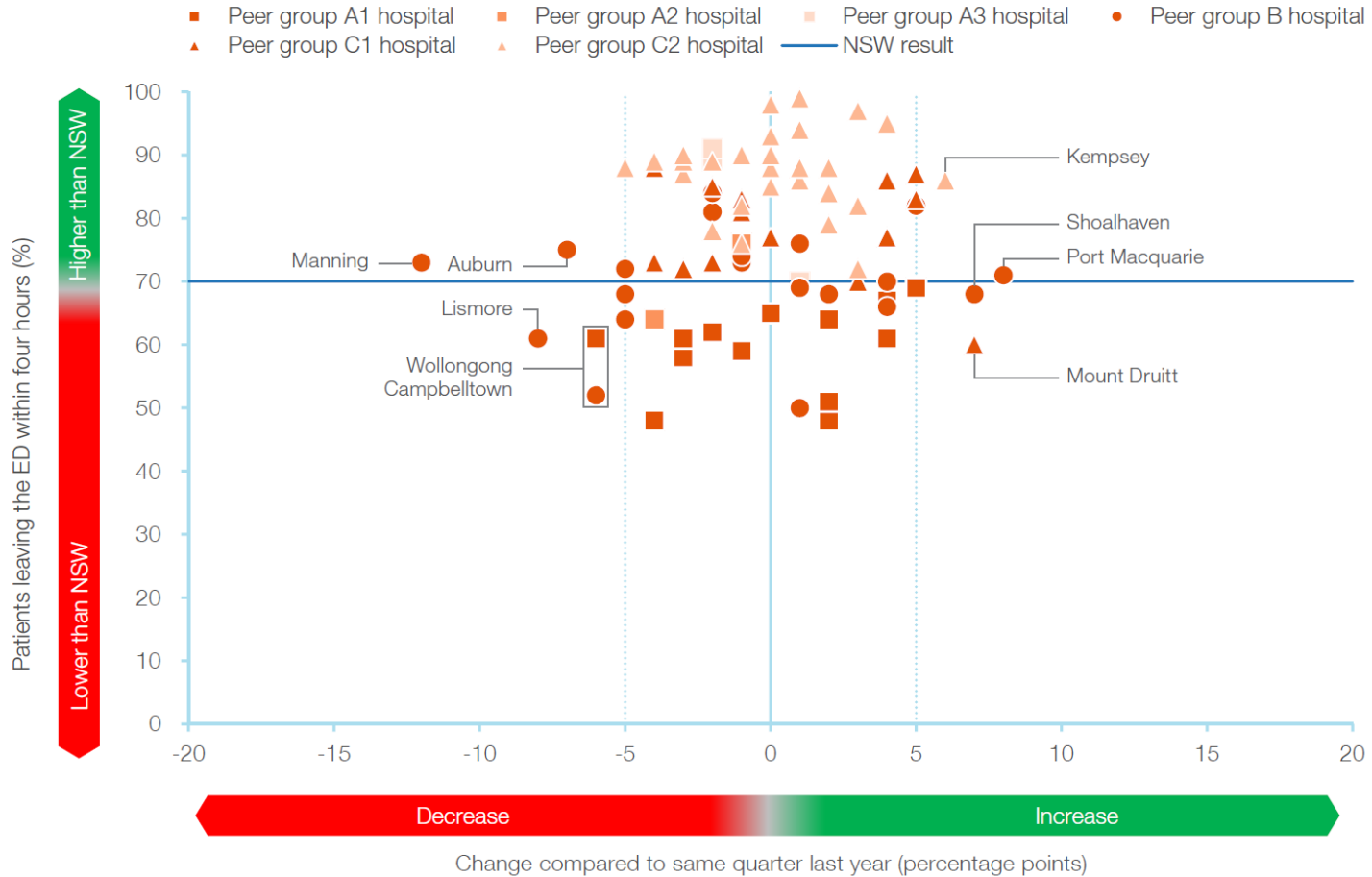
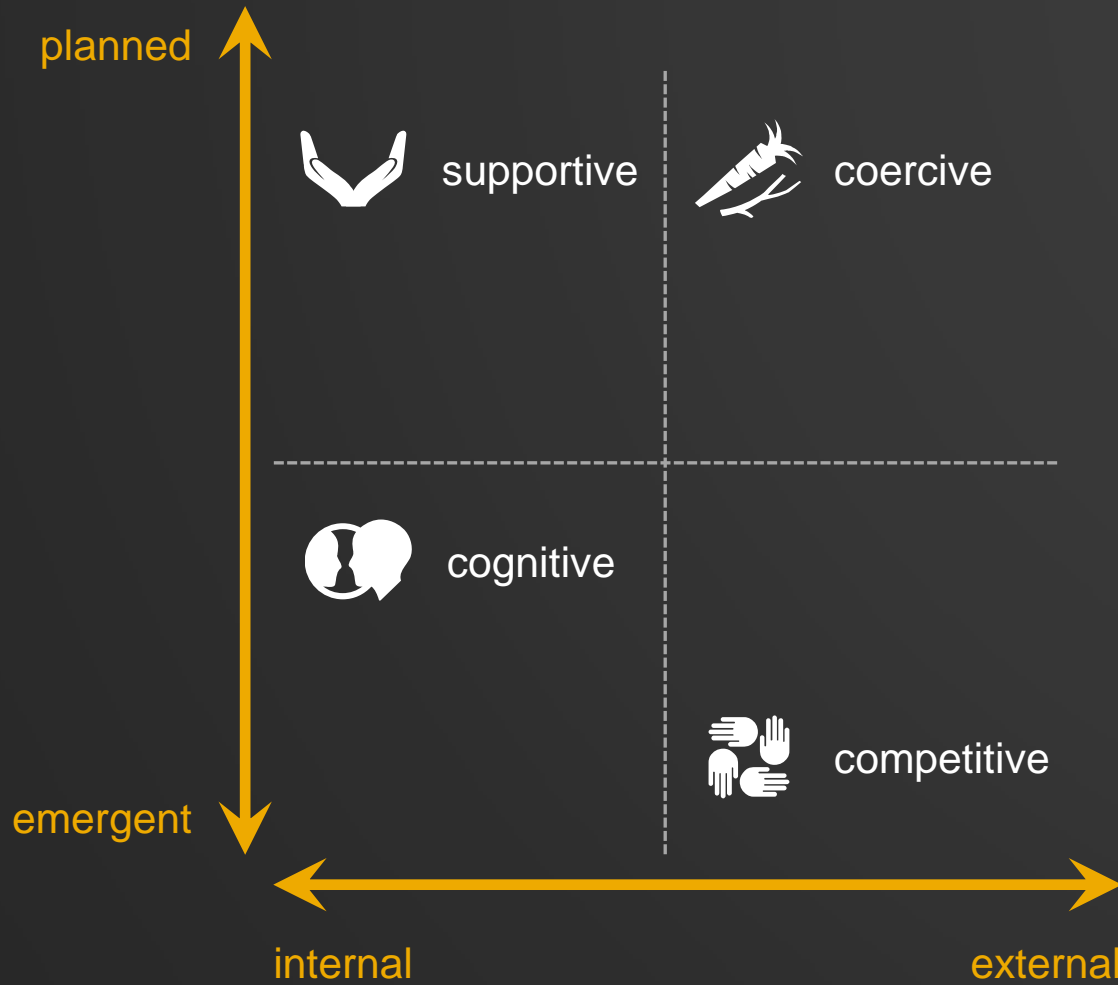
		This quarter	Same quarter last year	Percentage point change since one year ago
All ED presentations		70%	71%	-1
Treated and discharged		84%	84%	unchanged
Treated and admitted		36%	38%	-2
Left without, or before completing, treatment		89%	90%	-1
Transferred to another hospital		43%	43%	unchanged

Figure 32

Percentage of patients leaving the emergency department within four hours and percentage point change since same quarter last year, hospitals by peer group, July to September 2015





# Aligning measurement with quality assessment programs

The examples of mortality and returns to acute care





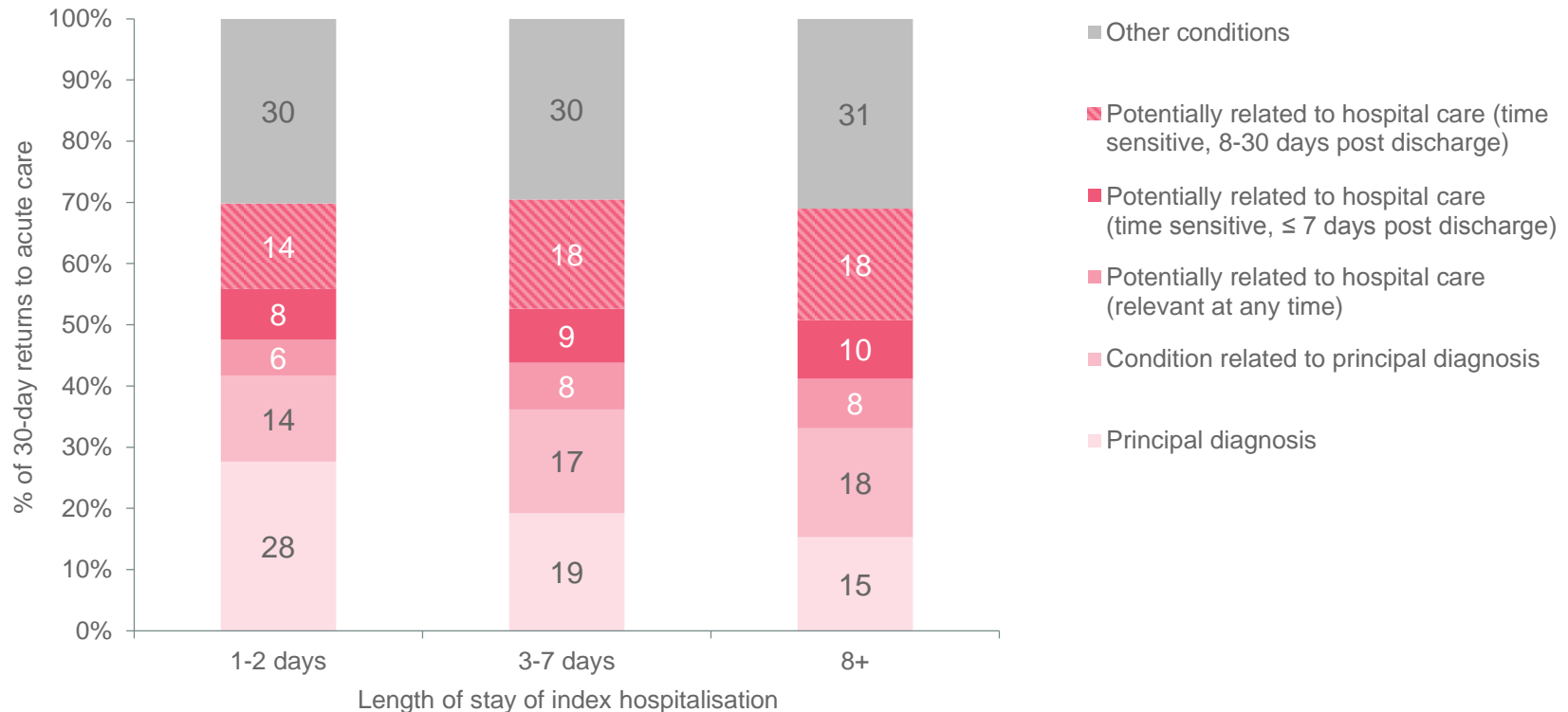
# 30-day mortality following hospitalisation – hospital outliers

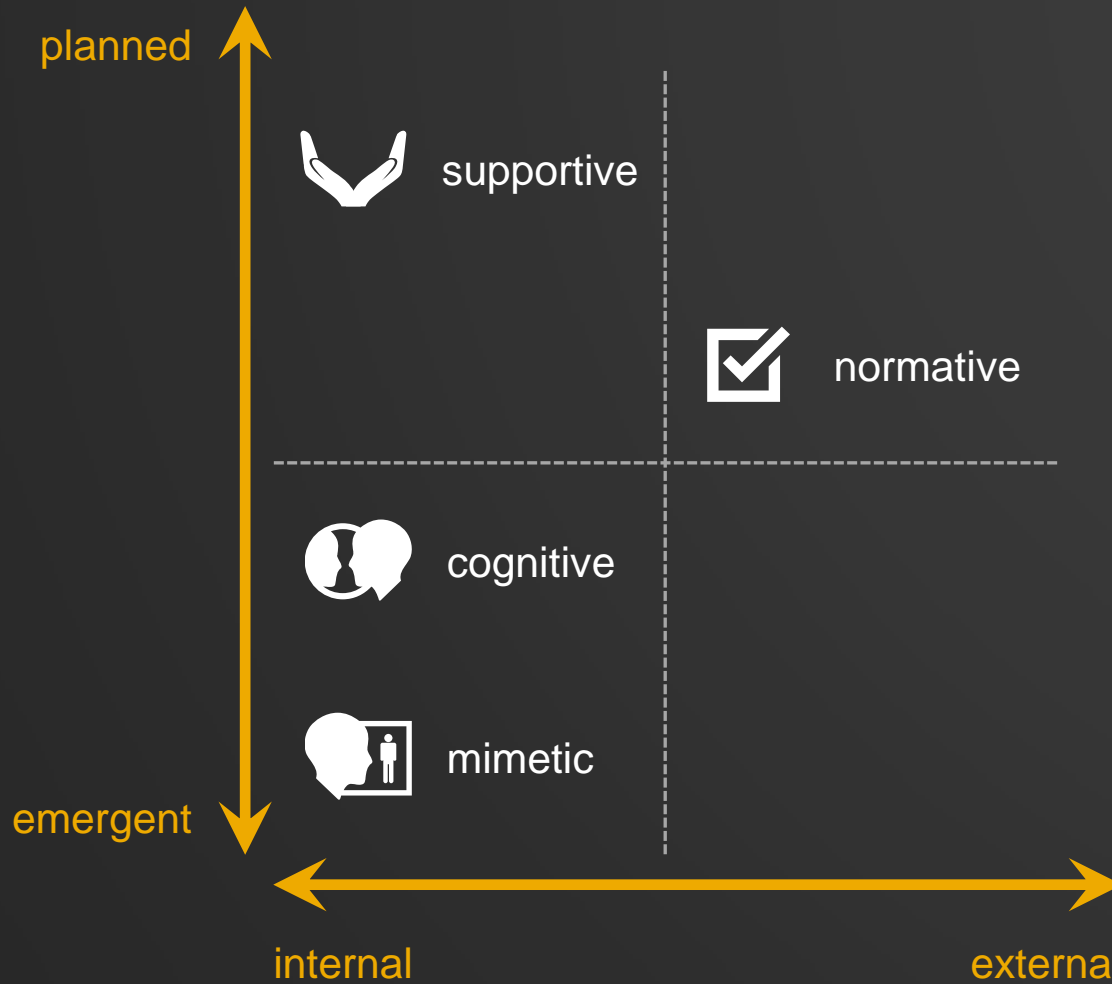
Figure 14: Ischaemic stroke 30-day risk-standardised mortality ratio, NSW public hospitals, July 2009 – June 2012 <sup>Δμ</sup>



# Pneumonia

Length of stay of index hospitalisation and return to acute care by principal diagnosis category, NSW public hospitals, July 2009 – June 2012





# Aligning measurement with clinical guidelines

The example of clinical performance measures



# ED use at the end of life – NSW

## Patterns of ED visits near the end of life



One in 5 people with cancer died within a year of diagnosis

Of those who died



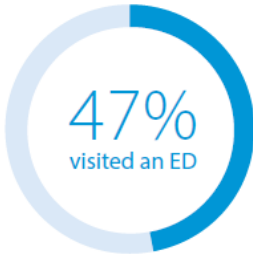
in the last **180 days** of life

Of those who died



in the last **90 days** of life

Of those who died

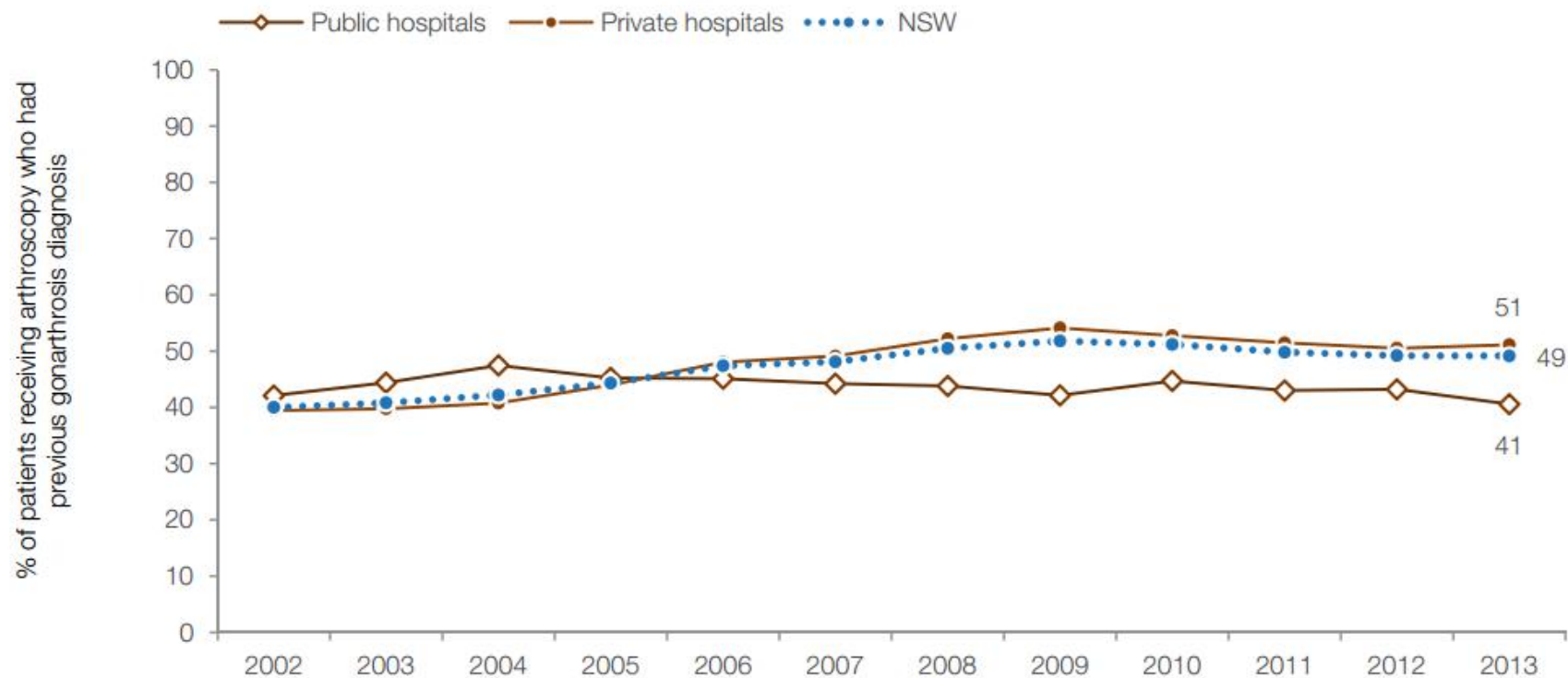


in the last **30 days** of life

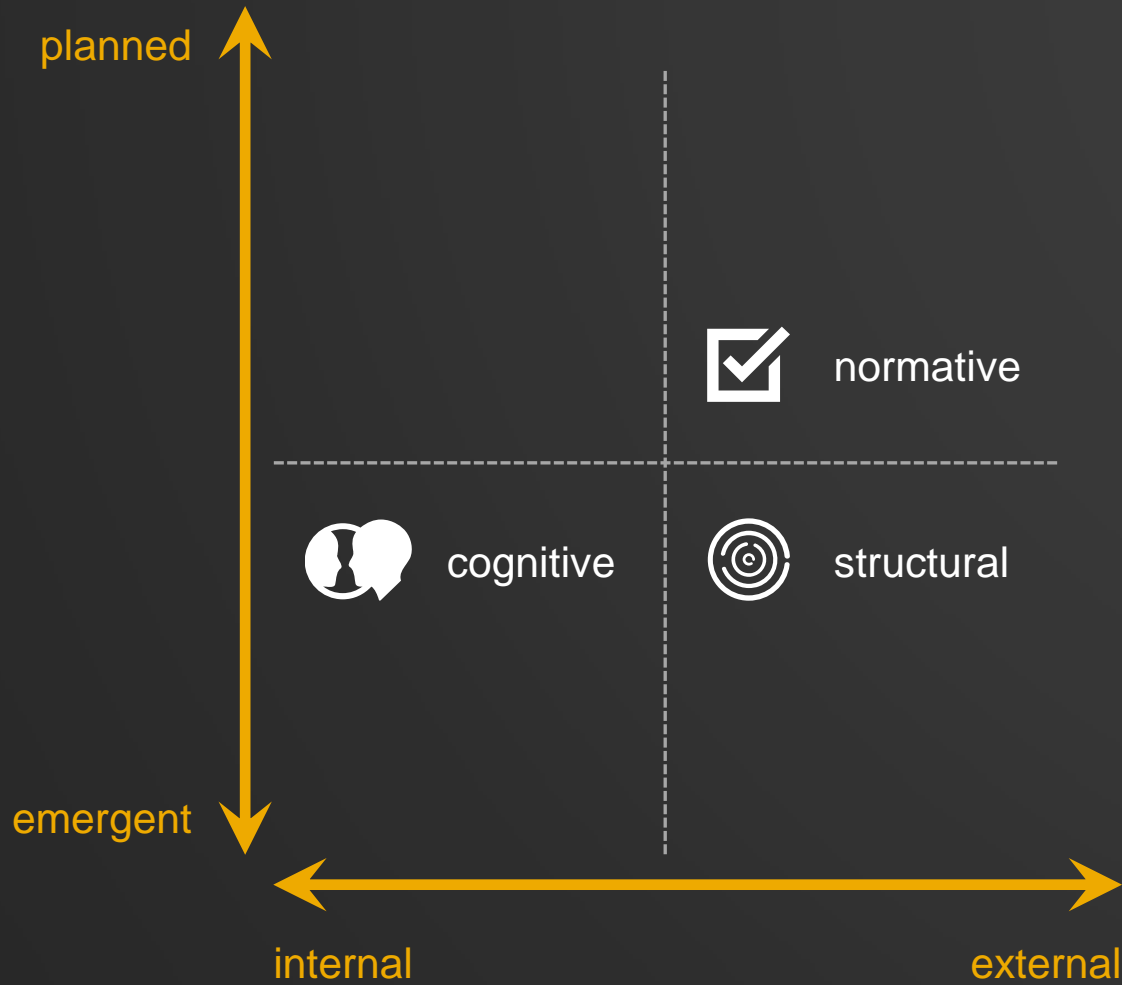
Figure 4.19



### Percentage of knee arthroscopy procedures provided to patients with an osteoarthritis diagnosis, public and private hospitals, NSW 2002 to 2013



Source: NSW Ministry of Health, extracted from SAPHaRI, Centre for Epidemiology and Evidence, NSW (BHI Analysis).



# Aligning measurement with public expectations

The example of patient surveys





# AAPS – Variation in results by local health district

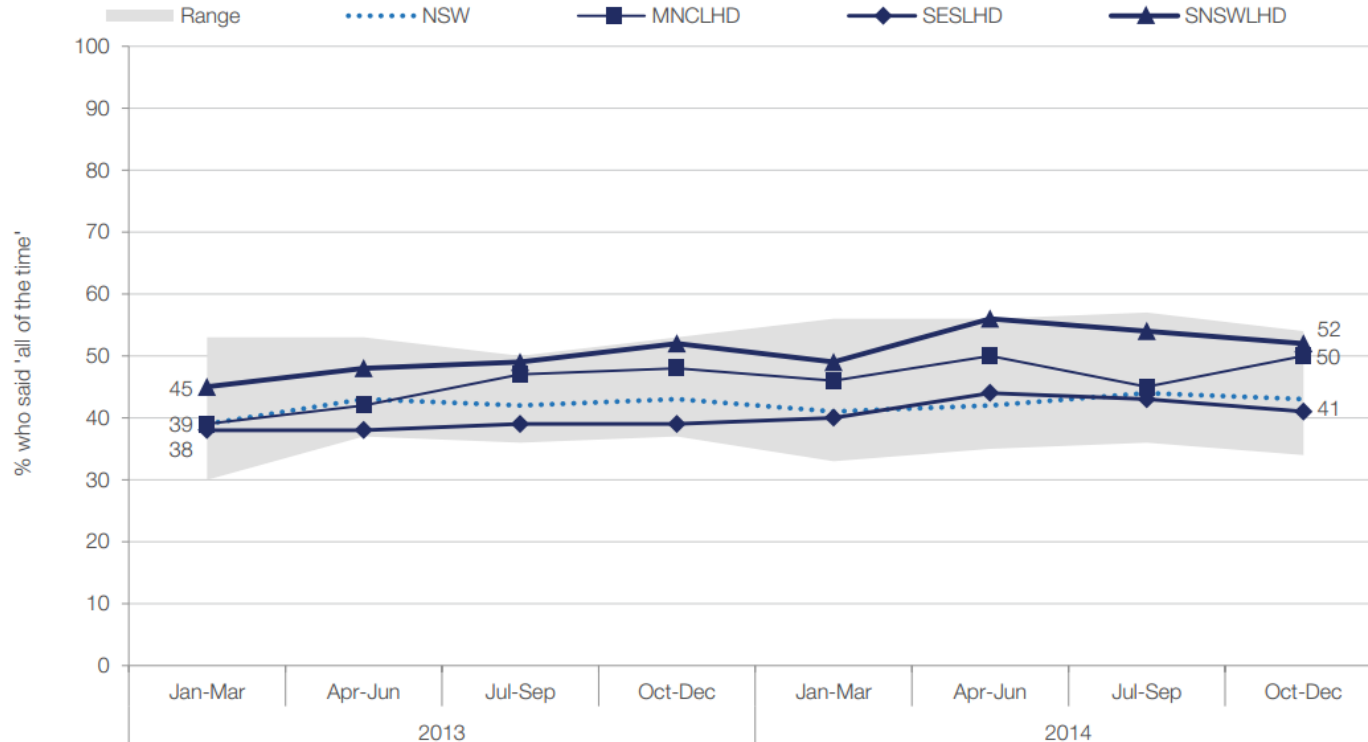


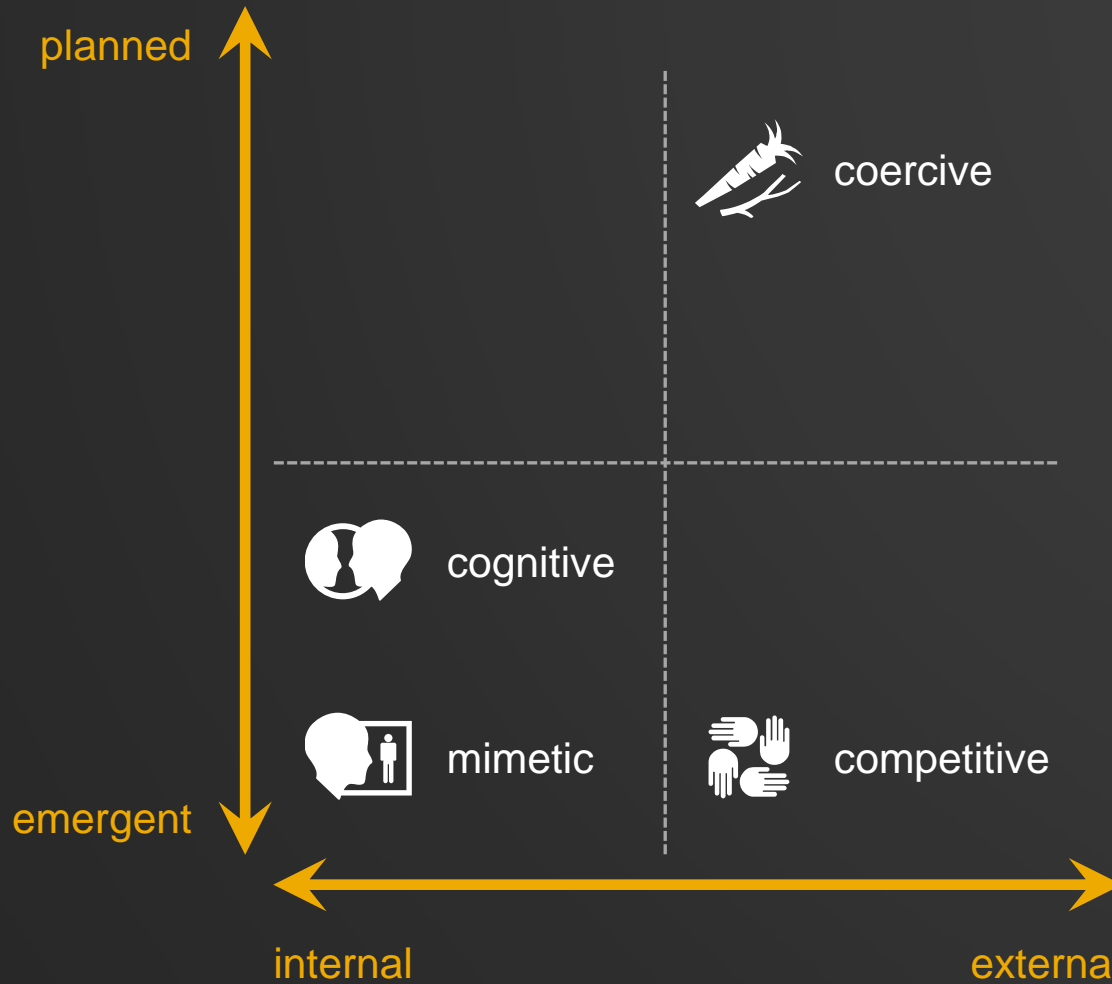
■ Significantly higher than NSW
 ■ Significantly lower than NSW
 ■ No significant difference

# AAPS – time trends

Example graphs illustrating time trends in the percentage of most positive responses, NSW and LHDs with significant trends

If you needed assistance, were you able to get a member of staff to help you within a reasonable timeframe?





# Concluding remarks

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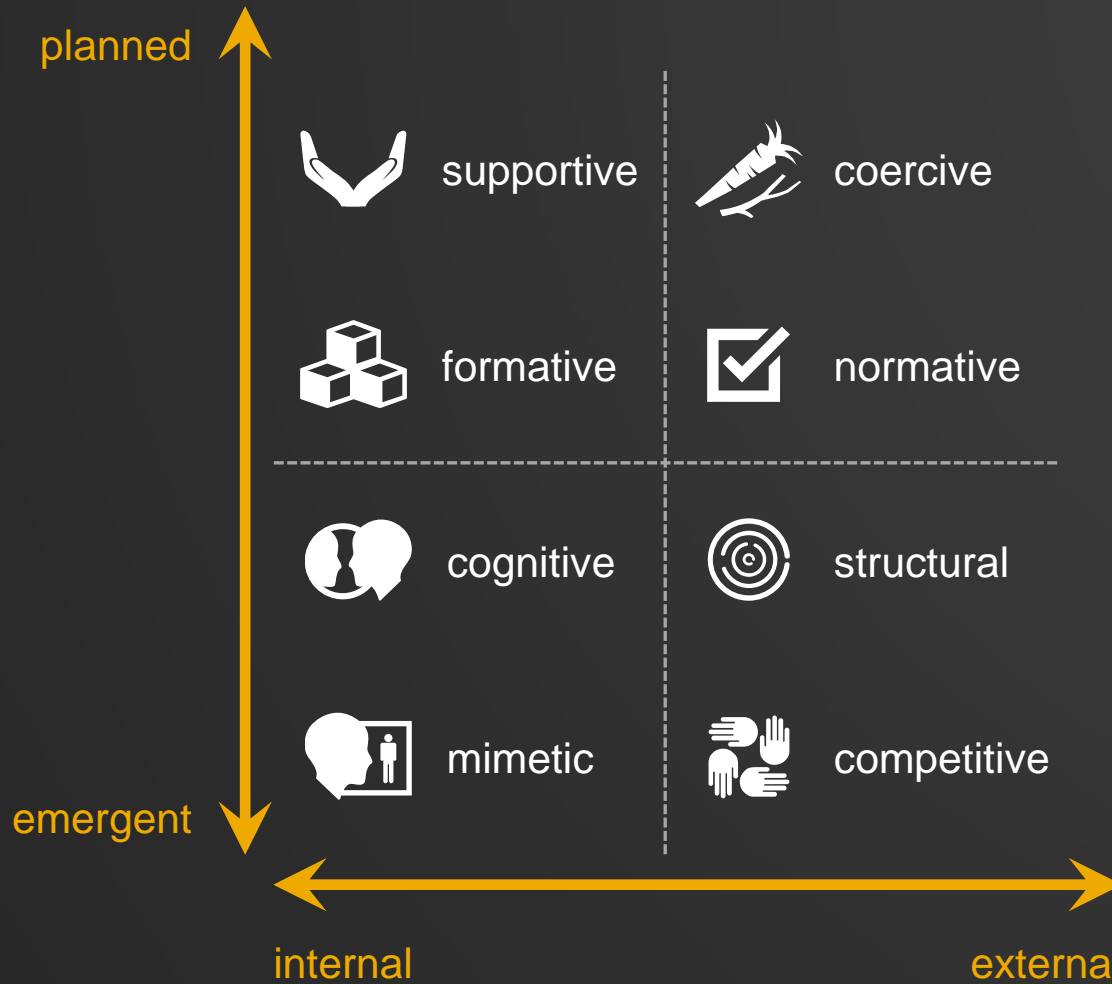
85

90

95

100





“ Multiple organisations can create confusion and impose burdens on stakeholders ”

“ No organisation can use all levers all the time...some levers are synergistic, some are in tension ”



“ Splitting and overlapping responsibilities enable emulation, competition and diversity and brings resilience ”

Thank you!  
Merci!

