Government of Western Australia
Department of Health

A discussion on the future of the National NEAT targets

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The intended outcomes of the NEAT reform

- Improved patient outcomes by improving hospital processes
- Improved consumer experience
- More efficient hospital systems

- Why is this reform ongoingly essential?

Outcomes associated with increased ED LOS and access block

1. Schull MJ, Vermeulen M, Slaughter G, Morrison L, Daly P. Emergency department overcrowding and thrombolysis delays in acute myocardial infarction. Ann Emerg Med 2004; 44: 577-585.
2. Diercks DB, Roe MT, Chen AY, Peacock WF, Kirk JD, Pollack CV, Gibler WB, Smith SC, Ohman M, Peterson ED. Prolonged emergency department stays of non-ST elevation myocardial infarction patients are associated with worse adherence to American College of Cardiology/American heart Association Guidelines for management and increased adverse events. Ann Emerg Med 2007; 50 (5): 489-486.
3. Pines JM, Localio AR, Hollander JE, Baxt WG, Lee H, Phillips C, Metlay JP. The impact of emergency department crowding measures on time to antibiotics for patients with community acquired pneumonia. Ann Emerg Med 2007; 50 (5): 510-516.
4. Richardson DB. Increase in patient mortality at 10 days associated with emergency department overcrowding. Med J Aust 2006; 184: 213-216.
5. Sprivulis PC, Da Silva J, Jacobs IG, Frazer ARL, Jelinek GA. The association between hospital overcrowding and mortality among patients admitted via Western Australian emergency departments. Med J Aust 2006; 184: 208-212.
6. Mowery NT, Dougherty SD, Hildreth AN, Holmes JH, Chang MC, Martin RS, Hoth JJ, Meredith W, Miller PR. Emergency department length of stay is an independent predictor of hospital mortality in trauma activation patients. The Journal of Trauma, Injury, Infections and Critical Care 2011; 70 (6): 1317-1325.
7. Singer AJ, Thode HC, Viccellio P, Pines JM. The association between length of emergency department boarding and mortality. Academic Emergency Medicine 2011; 18: 1324-1329.
8. Plunkett PK, Byrne DG, Breslin T, Bennett K, Silke B. Increasing wait times predict increasing mortality for emergency medical admissions. European Journal of Emergency Medicine 2011; 18: 192-195.
9. Guttman A, Schull MJ, Vermeulen MJ, Stukel TA. Association between waiting times and short term mortality and hospital admission after departure from emergency department: population based cohort stud from Ontario, Canada. BMJ 2011; 342.
10. Geelhoed GC, de Klerk NH. Emergency Department overcrowding, mortality and the 4-hour rule in Western Australia. Med J Aust 2102; 196-122-126.

Clinical outcomes associated with outlying patients

1. Alameda C, Suarez C. Clinical outcomes in medical outliers admitted to hospital with heart failure. European Journal of Internal Medicine 2009; 20: 764-767
2. Xu G, Whitaker E, Hubbard I. Inpatient elderly care: reducing re-admission rates. British Journal of Healthcare Management 2011; 17
3. Perimal-Lewis L, Li JY, Hakendorf PH, Ben-Tovim DI, Qin S, Thompson CH. Relationships between in-hospital location and outcomes of care in patients of a large general medical service. Internal Medicine Journal 2013; 43(6): 712-6
4. Stowell A, Laret PG, Sebbane M, Bobbia X, Boyard C, Grandpierre RG, Moreau A, de La Coussaye JE. Hospital out-lying through lack of beds and its impact on patient outcome. Scandanavian Journal of Trauma, Resuscitation and Emergency Medicine 2013; 21: 17
5. Santamaria JD, Tobin AE, Anstey MA, Smith RJ, Reid DA. Do outlier inpatients experience more emergency calls in hospital? An observational cohort study. Med J Aust 2014; 200 (1): 45-48

The key principles to success in this work

- Consistent political commitment and drive
- A stretch target
- A comprehensive, simultaneous program of reform within individual hospitals and across all sites

The key questions being discussed today

- Is a 90% target safe?
- Is a 90% target worth the investment it will require?
- Is a 90% target achievable?

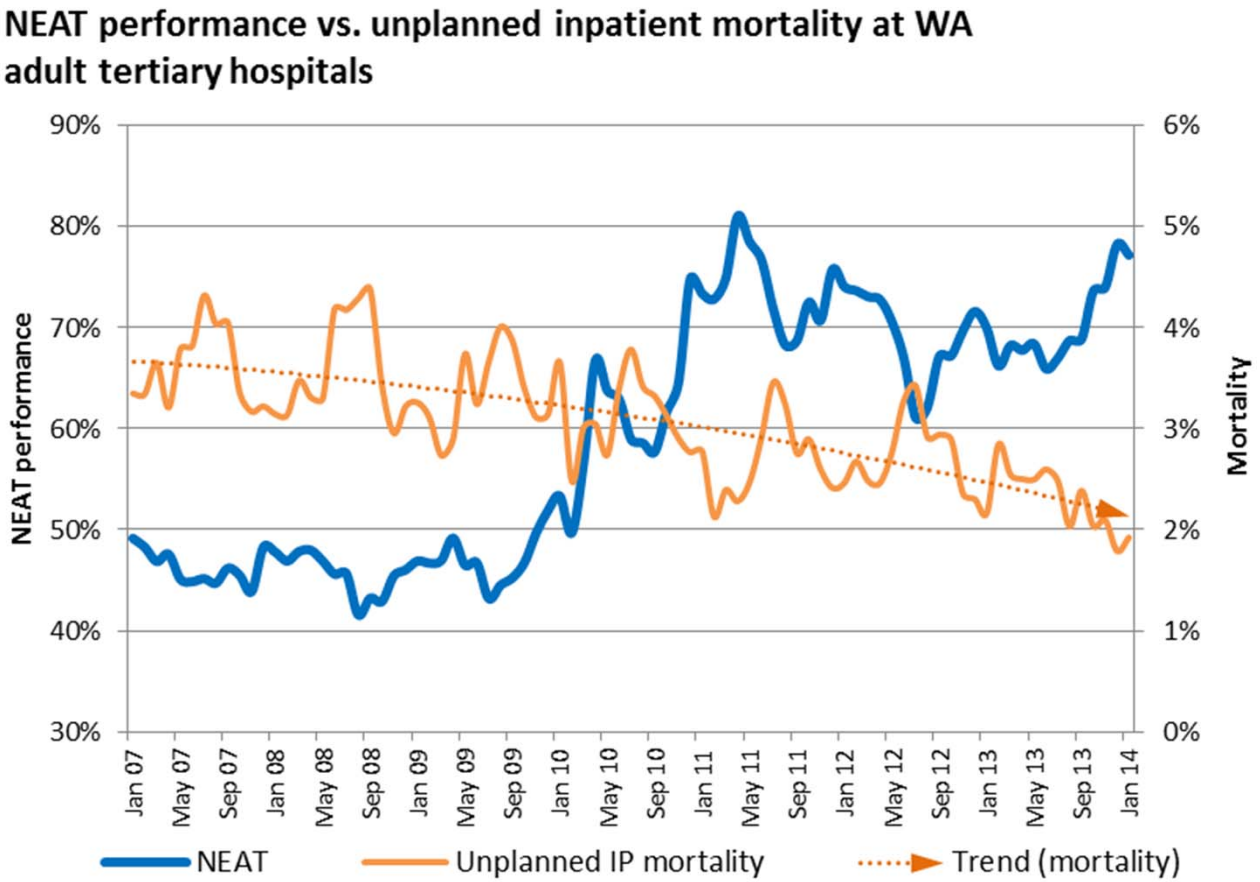
Is there a safety/ quality issue with the current target?

State performance data – comparison of S/Q at baseline v Peak performance of 85%

	May 2011	May 2009
NEAT	peak	46%
Mortality	2.5%	3.7%
Unplanned re-presentations	3.8%	4.3%
Complaints	5.1%	6.1%
MRSA rate	3.5%	4.8%

Summary – adult tertiary hospitals

Is there a safety issue with the current target?



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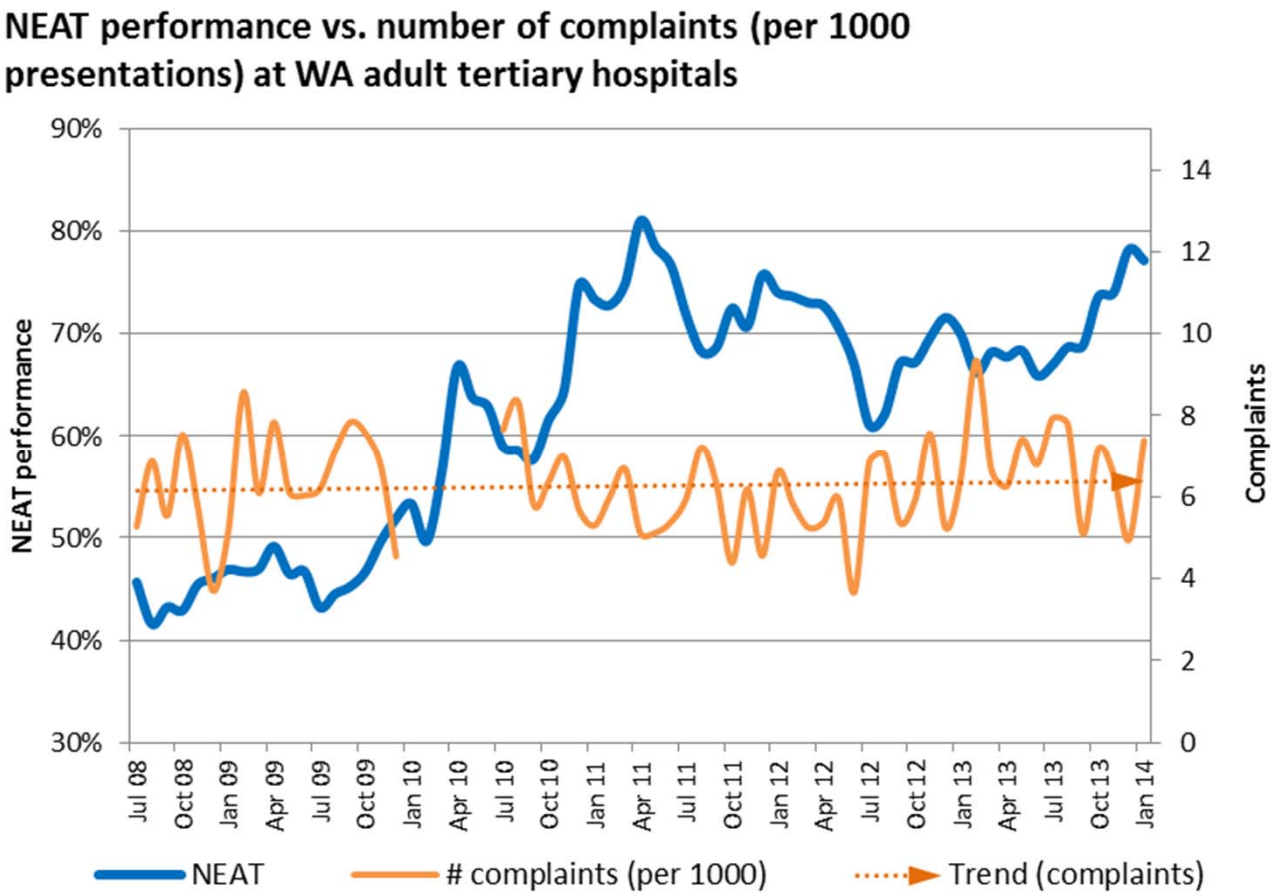

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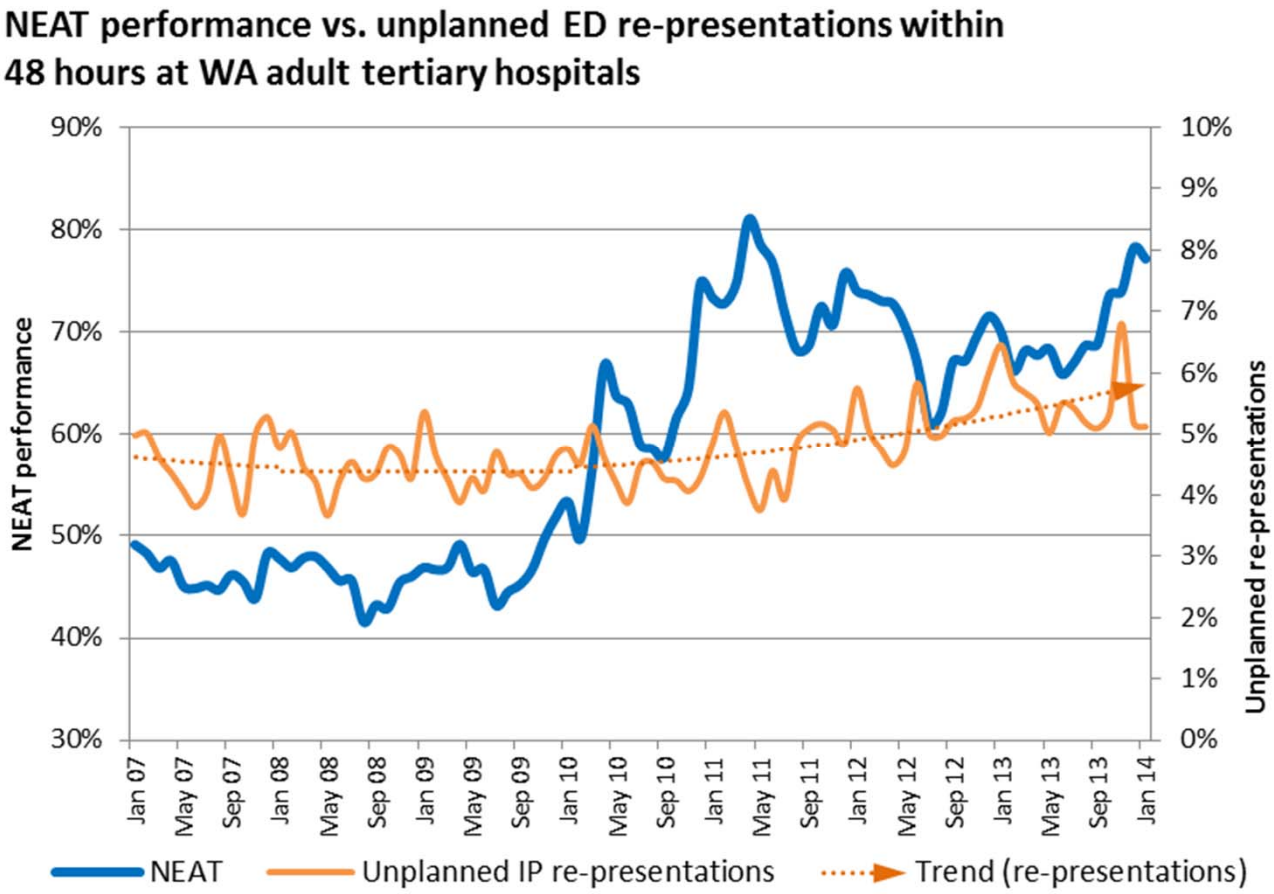
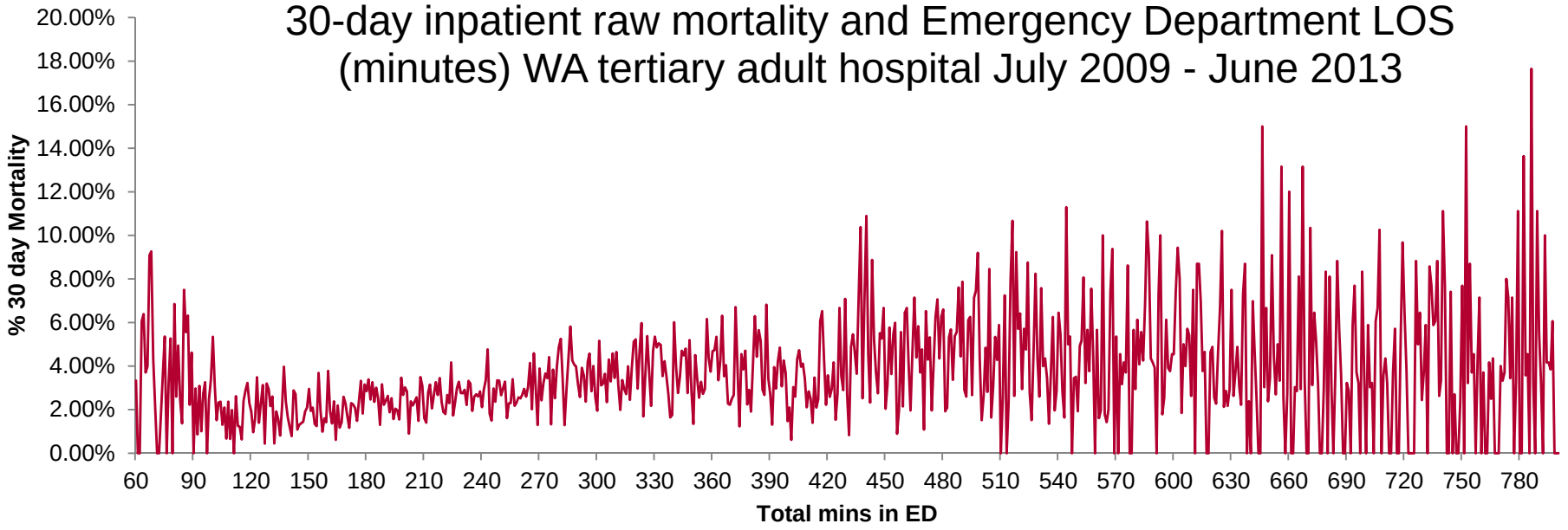


Unadjusted Mortality for RPH

Hours in ED	Cases	Avg Hosp LOS	%Thirty Day Mort
0-4	56,247	4.2	**2.4%**
4-8	49,566	4.7	**3.6%**
8-12	12,145	5.0	**4.5%**
12 +	12,145	5.1	**3.8%**
Total	**130,103**	**4.6**	**3.2%**



Our conclusion on the safety/quality issue

- We have seen no evidence of an adverse trend in safety and quality as NEAT performance has improved.
- We have seen a significant association between reduced ED LOS and decrease in mortality.
- A target of 90% is likely to result in performance in the mid to high 80s.
- This performance has been achieved in WA without a negative impact on S/Q.
- We can see no case to be made for reducing the target on these grounds.

The Cost v Benefit question

- Difficult to extrapolate to an aspirational target
- The corollary to this question however is that inefficient hospitals with increased access block and outliers have increased LOS and patient complication rates that increase costs. The NEAT reform directly addresses these issues.

Investment

- In most cases well considered redesign does not rely on significant economic investment to be successful

- The bulk of investment should be in resourcing change management skills, not capital works or FTE creation

Can states realistically expect to meet the 90% target?

- WA currently around 82.5% (tertiary sites 78-80%)
- Bell UK team recently identified 6-8% easily achieved with attention to detail.
- So, yes, absolutely.

What do the staff think?

Site Briefings Exercise

Summary of 4 visit sites responses to group exercise asking: **"What is the impact on the system when 4 hour performance is at....?".** Approximately 200 staff completed the exercise with multiple responses.
Red Comments tend to denote negative, amber neutral and green positives.
It is particularly important to pay attention to staff comments in red above 85%. The rationale and reasons behind these should be explored with relevant individuals or staff groups

80% **85%** **90%**

- ***Impact on system?***
- Poor quality of care
- Less safe
- Poor patient satisfaction/ frustrated patients/ complaints

- Ramping
- Blockages/ breach reports
- Inefficient/ Misdirected

- Low staff morale
- Under pressure/ Disappointed
- Frustrating

- Busy
- Usual
-
- Balanced

- ***Impact on system?***
- Improved outcomes and experience
- Improved quality of care
- Safe
- Satisfied patients

- Streamlined/Good flow/Efficient
- Calm
- Proactive

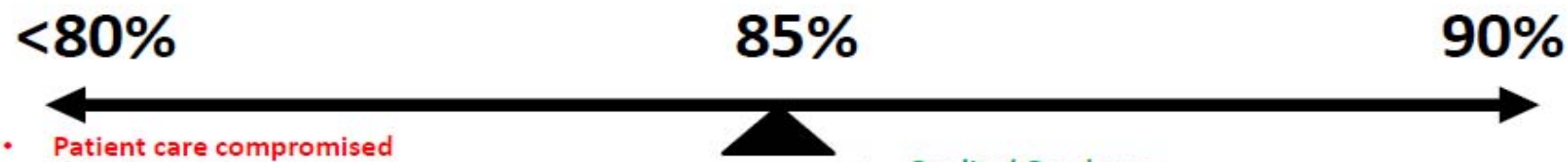
- Rewarding for staff/increase morale
- Teamwork

- Lucky/good day - doesn't happen often

- Increased clinical risk
- Risk of Increased admission rate
- Busy/ Stretched staff
- Patients may be moved too quickly

Country Hospitals Exercise

Summary of responses to group exercise asking: **"What is the impact on the system when 4 hour performance is at....?".** Approximately 20staff completed the exercise with multiple responses. Red Comments tend to denote negative, amber neutral and green positives. It is particularly important to pay attention to staff comments in red above 85%. The rationale and reasons behind these should be explored with relevant individuals or staff groups



- Patient care compromised
- Variable
- Waste of time
- Disempowered/ Dissatisfied
- Chaos
- Under scrutiny/ Relentless pressure
- Stress
- Frustrated/ De-valued/ low morale
- Ineffective/ Slow
- Tribal warfare – teams at war
- < 75% very worrying
- < 75% uncomfortable
- < 75% frightening

- 80% School zone – speed limits
- < 75% where is the problem
- < 75% why

- Getting there
- Patient benefits show
- Sense of improvement and success

- Quality/ Good care
- Safe
- Effective/ Efficient/
- Should feel automatic streamlined
- Consolidating improving outcomes
- Functioning at maximum efficiency
- Sweet spot

- Elation
- Job satisfaction
- Good communication
- Encouraging – builds on positive environment

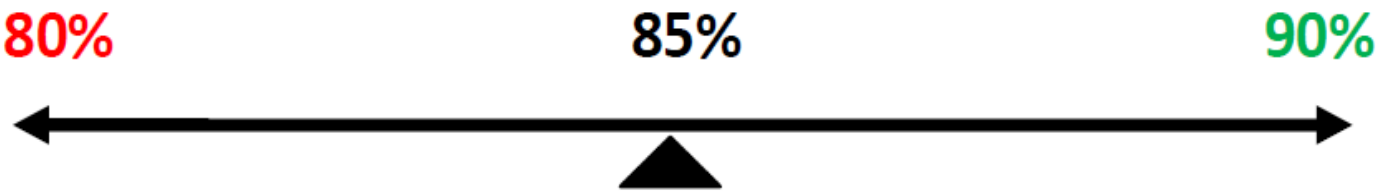
- 85% - Cruising speed limit
- 85% - Gains being made

- Don't know!

- Internally stressed/ stress shifts to hospital workflow

District Hospitals Exercise

Summary of responses to group exercise asking: **"What is the impact on the system when 4 hour performance is at....?".** Approximately 20staff completed the exercise with multiple responses. Red Comments tend to denote negative, amber neutral and green positives. It is particularly important to pay attention to staff comments in red above 85%. The rationale and reasons behind these should be explored with relevant individuals or staff groups



Impact on system?

- Poor patient care
- Poor patient outcomes
- Dangerous
- Inequitable access
- Busy/ Chaos/ Confusion
- Inefficient/ Block/ Going in circles
- Waiting

- Frustrated/ Disappointed
- Stressful

- Ok patient care

- Starting to move

Impact on system?

- Efficient/ Smooth
- Safe
- Eureka

- Achievement/ Successful
- Satisfied/ Rewarding/ Positive place to work
- Free to value add
- Easy day

- Getting by
- Coping ok

- Rushed
- Struggling

Where do we go with this reform?

- Why has the improvement slowed in WA?
- The big difference between the UK approach and ours.
- This is the next difficult step and opportunity.

Should the target be smarter?

- Could NEAT be measured differently, particularly with reference to the admitted stream?
- Should different hospital peer groups have different targets?
- This would be the important work of a NEAT review panel. It is timely for this work to begin now.

Summary

- Don’t drop the target, but let’s make it smarter and better distinguish between admission and discharge streams.
- Considering the national performance, it is also reasonable to consider reviewing the current incremental target ‘slope’ linked to reward funding if there is the political will to continue to incentivise this work.

Summary

- There is still a huge reform opportunity here to create true whole of hospital accountability for access to care and capacity generation.
- This is only really starting now in WA after five years of 4 hr rule/ NEAT reform.