Part of AlfredHealth

Timely Quality Care

Innovation & Improvement across the patient journey

NSW Whole of Health Program Master Class #9
December 2016

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theAlfred

Overview

- System wide transformational change program
- Strong clinical engagement, support and ownership at local level to imbed the model
- Continuous evolution and spread of model

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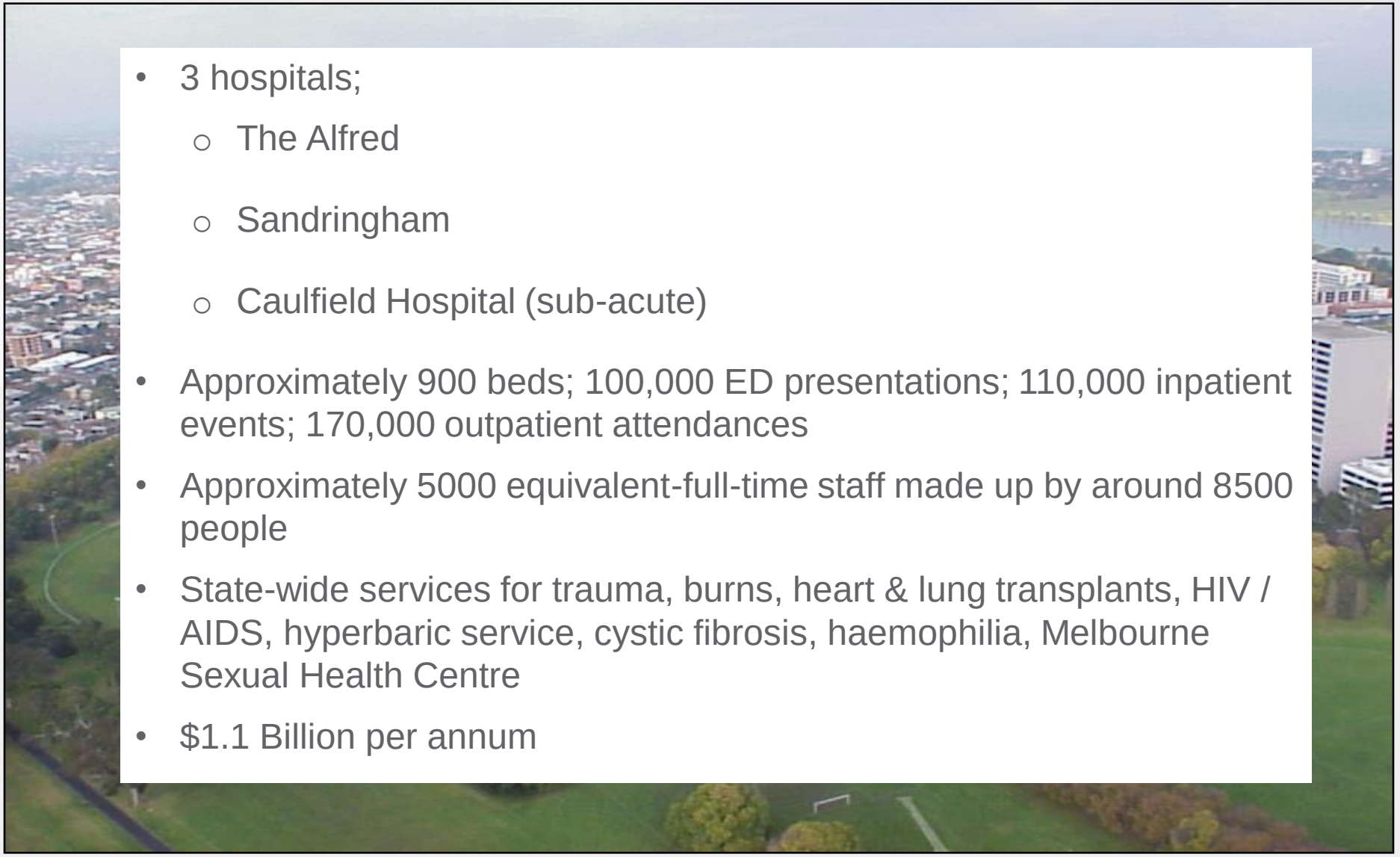


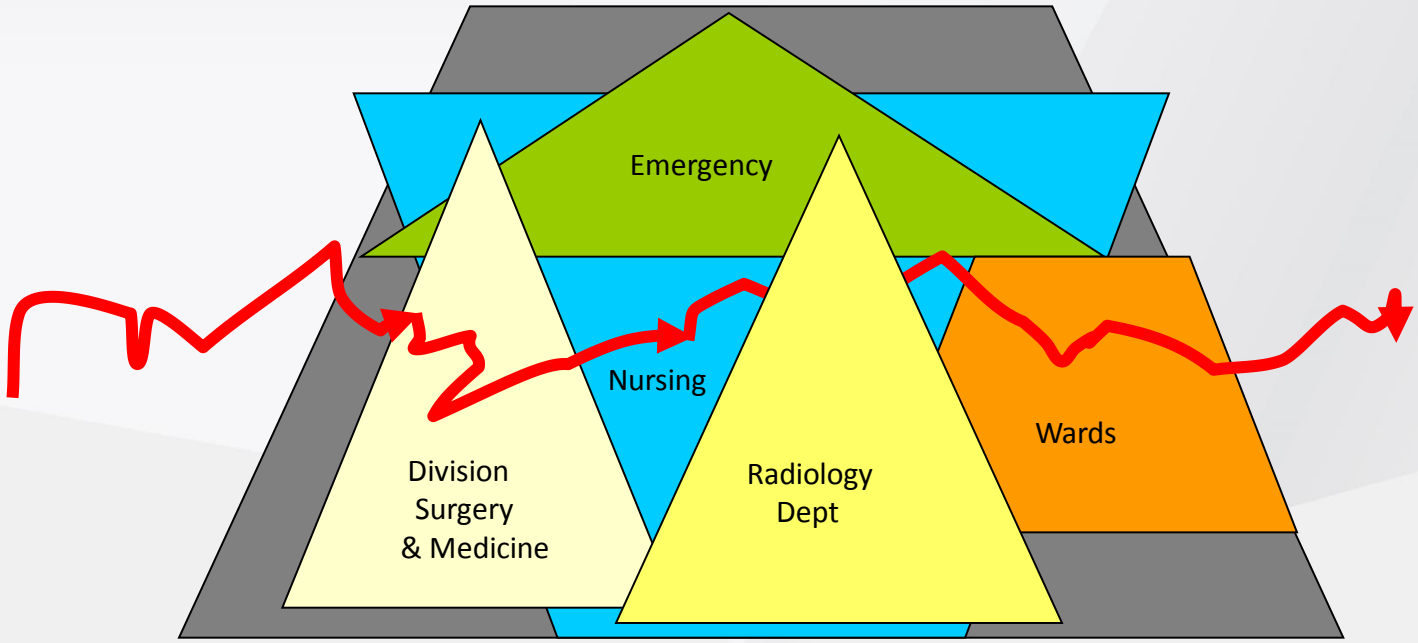
- 3 hospitals;
  - The Alfred
  - Sandringham
  - Caulfield Hospital (sub-acute)
- Approximately 900 beds; 100,000 ED presentations; 110,000 inpatient events; 170,000 outpatient attendances
- Approximately 5000 equivalent-full-time staff made up by around 8500 people
- State-wide services for trauma, burns, heart & lung transplants, HIV / AIDS, hyperbaric service, cystic fibrosis, haemophilia, Melbourne Sexual Health Centre
- $1.1 Billion per annum

Why TQC?

- Emergency Target
- Elective Target
- Financials
- Quality marker

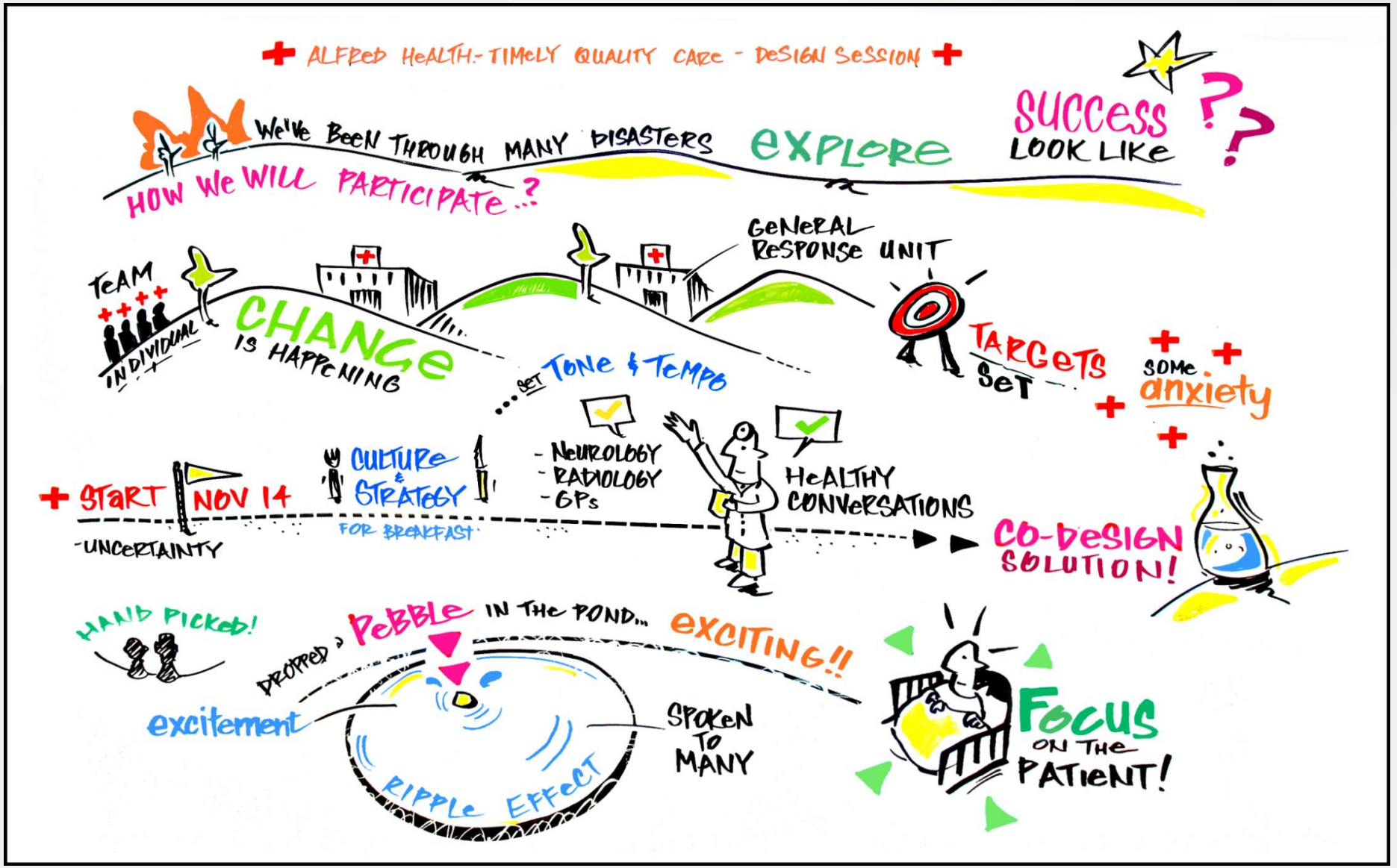
But……It was HARD!

Hospitals are traditionally organized in vertical structures



But patients make horizontal journeys through our oganisations

An opportunity to TRANSFORM our patient care….



THE 6 PRINCIPLES OF TIMELY QUALITY CARE

PRINCIPLE 1

Patients that present to the E&TC will be assessed, have treatment and investigations initiated and a management plan in place within 60 minutes of arrival.

PRINCIPLE 2

Patients will be discharged from E&TC or admitted to the hospital as decided by the E&TC consultant staff.

PRINCIPLE 3

Patients will be reviewed by the inpatient team within 2 hours of being referred for admission.

PRINCIPLE 4

Patients will be admitted to a bed in the most appropriate clinical place, the first time.

PRINCIPLE 5

Patients will have their investigations, consultations and interventions completed as soon as possible, in order of request and in no longer than 24 hours.

PRINCIPLE 6

Patients will be actively managed to ensure they are only in hospital for as long as is clinically necessary.

TIMELY QUALITY CARE

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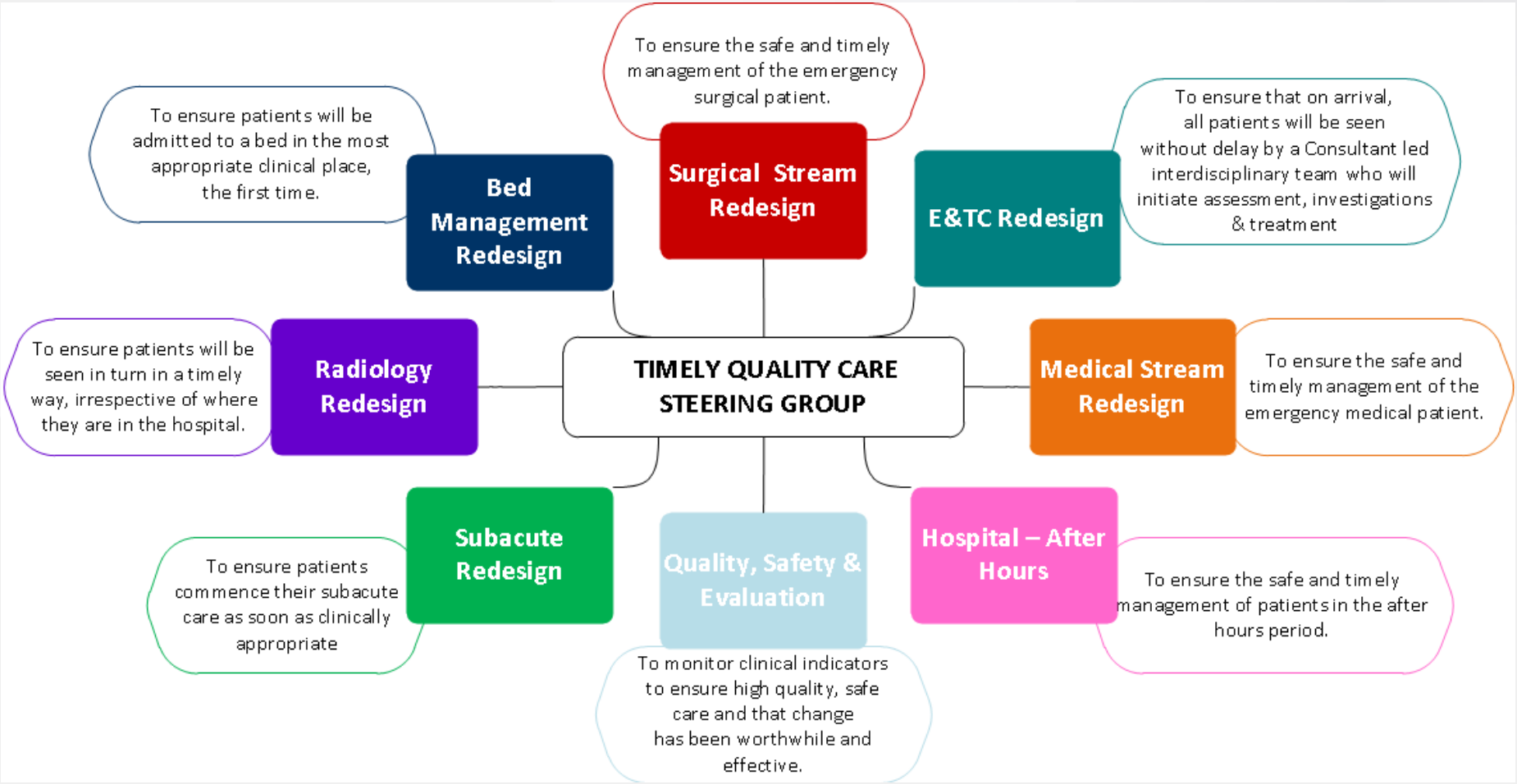
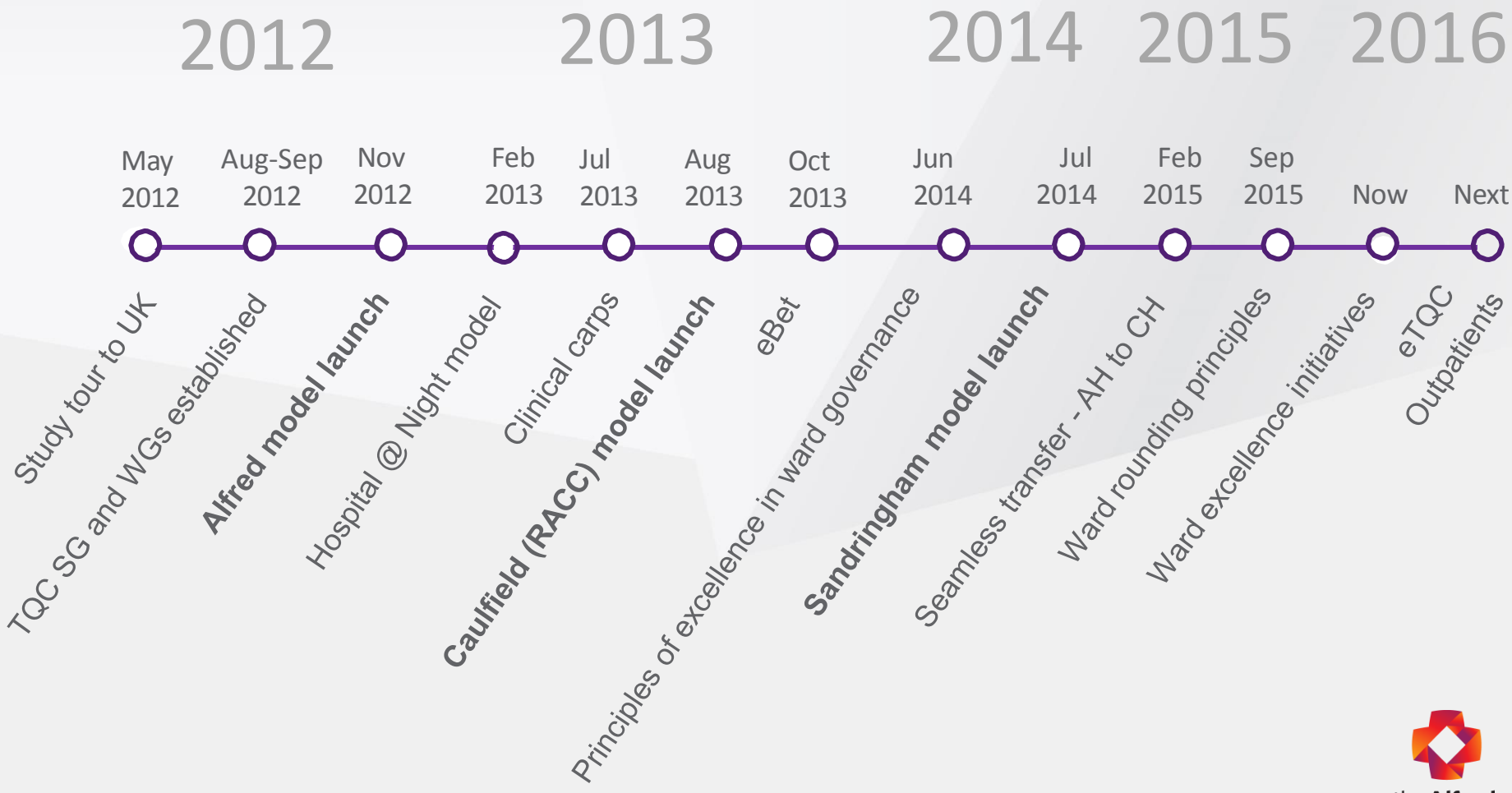
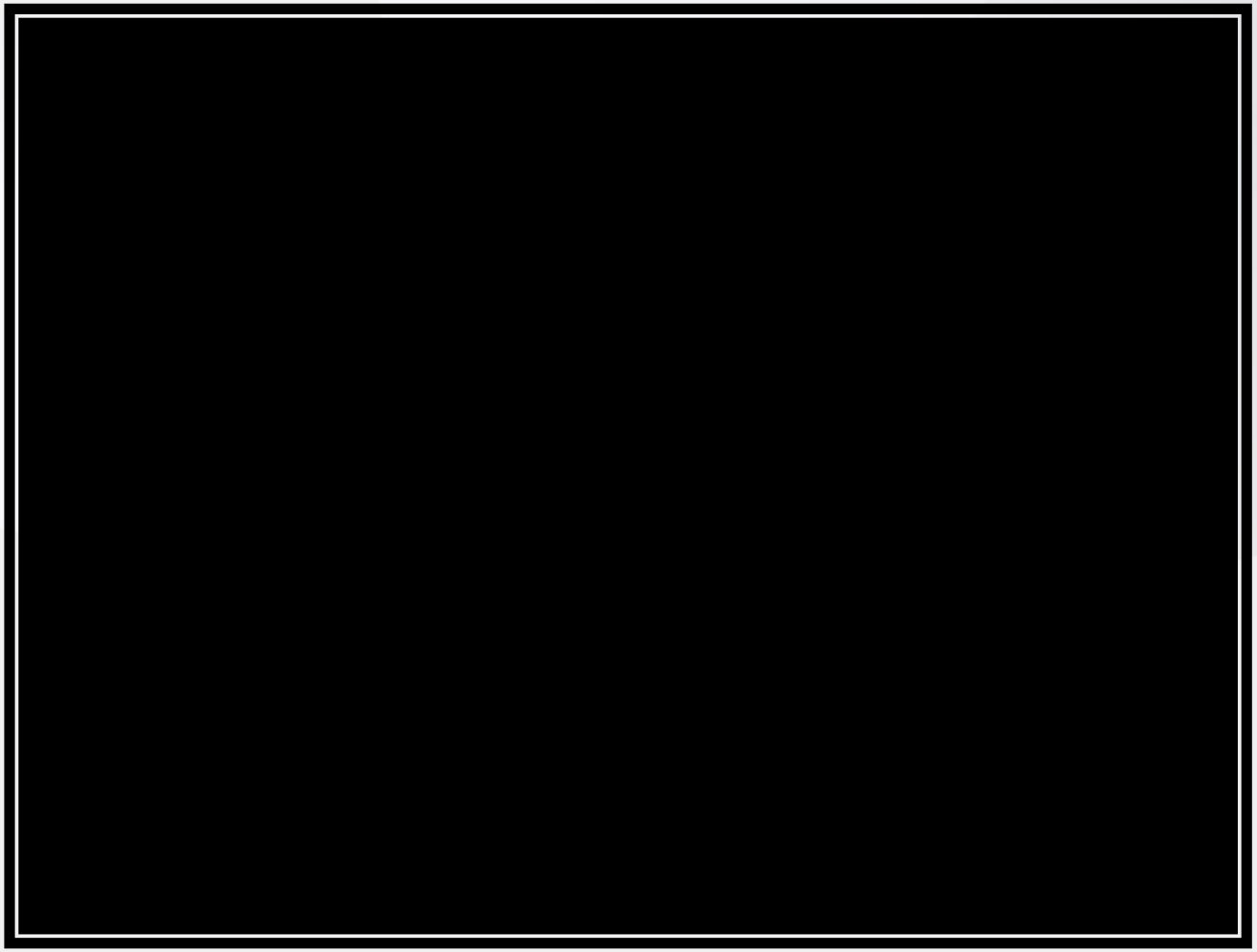
TQC Re-design Programs



The Journey


2012
2013
2014
2015
2016
May 2012
Aug-Sep 2012
Nov 2012
Feb 2013
Jul 2013
Aug 2013
Oct 2013
Jun 2014
Jul 2014
Feb 2015
Sep 2015
Now
Next
Study tour to UK
TQC SG and WGs established
Alfred model launch
Hospital @ Night model
Clinical carps
Caulfield (RACC) model launch
eBet
Principles of excellence in ward governance
Sandringham model launch
Seamless transfer - AH to CH
Ward rounding principles
Ward excellence initiatives
eTQC Outpatients

What It Means



Key Projects

- Emergency Department model of care
- Bed profile remodelling
- After Hours model

Emergency Department Model of Care
Re-thinking ED Practices & Processes

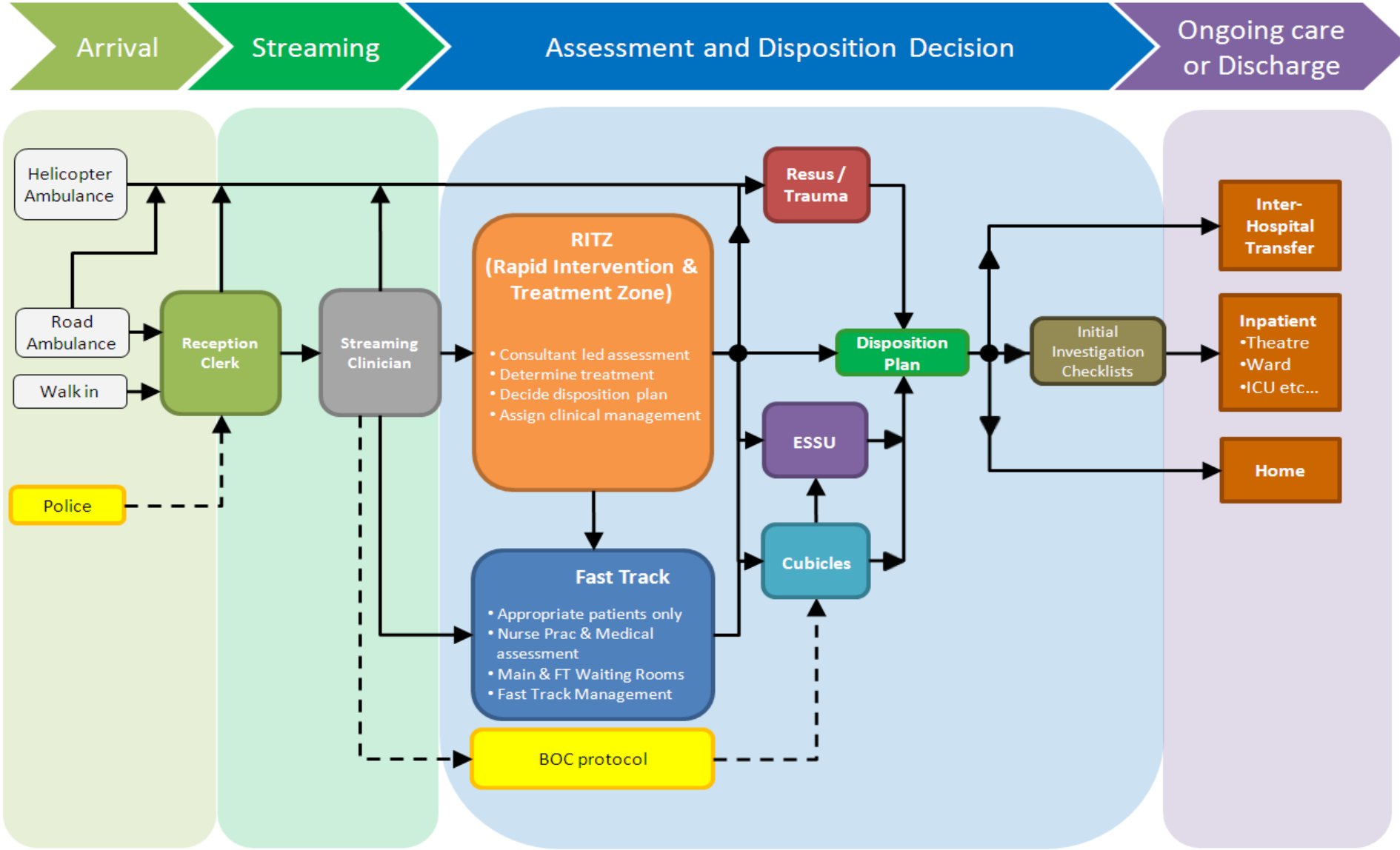
Completely change triage
- Move from triage to streaming model

More timely care to reduce ED occupancy
- Upfront senior clinical decision making
- “Treat in turn” instead of “triage and wait

ED to use their authority to admit
- Reduce need for negotiation & delay

New team structures & treatment areas
- Clarity of Roles & Responsibilities

ED Model of Care Pathway



From Triage to Streaming

- **Timely assessment (30 second maximum)**
- **ATS allocated** (? is it still relevant)
- **Patients streamed to either:**
  - Resus & Trauma:
  - RITZ:
    - Prioritise Cat 2 & AV to front of queue
    - Everyone else treat-in-turn
  - Fast Track:
    - Treat-in-turn

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TIMELY QUALITY CARE

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October 2013

ED Authority & Inpatient Engagement

General Surgery Initial Investigations Checklist

Investigations commenced/completed prior to ward transfer from E&TC
E&TC will order investigations based on the co morbidities of the individual patient
All orders must be accompanied with clinical information justifying the request

E&TC DIAGNOSIS	FBE	U&E	Glu	LFT	INR/APTT	G&S	Ca, Mg, PO4	ABG	CXR	AXR	CT	US	MRI	OTHER / TREATMENT
1. Appendicitis	✓										+/-			
2. Abdominal Pain FI		✓									✓			• If imaging required then non-contrast CT first line (not AXR)
3. Bowel Obstruction		✓									✓			
4. Biliary Colic Acute Cholecystitis				✓								✓		
5. Strangulated Hernia	✓	✓												
6. Abscess/ Haematoma	✓													
7. Acute Pancreatitis	✓	✓		✓	✓		✓				✓	✓		• LDH, AST
8. Laparotomy (inc TRMA)	✓	✓									✓			

KEY: ✓= order unless contraindication (document contraindication where applicable); +/- = order if clinically indicated; (blank) = not routinely required for this presentation
Please refer to Appendix 1.3 for a complete listing of clinical abbreviations.

E&TC Admission Process

Decision to admit

- **Interns & Residents must discuss all patients requiring admission with the E&TC Consultant (Reg overnight) regarding:**
  - Decision to admit
  - Choice of unit
  - Interim orders
  - Actions that need to be completed prior to transfer

Admission phone call

- Hi thanks for calling back.
- I'm…… one of the Emergency……
- I've got a patient who needs admission under ……unit, with……..
- Clinical information – ISBAR format
  - Treatment initiated
  - Pending investigations and results
- Patient will be transferred to ward bed once available if clinically safe

Interim orders

- **Complete E&TC Medical Record**
  - Document inpatient unit plan
- **Complete interim orders**
- **Commence medication record**

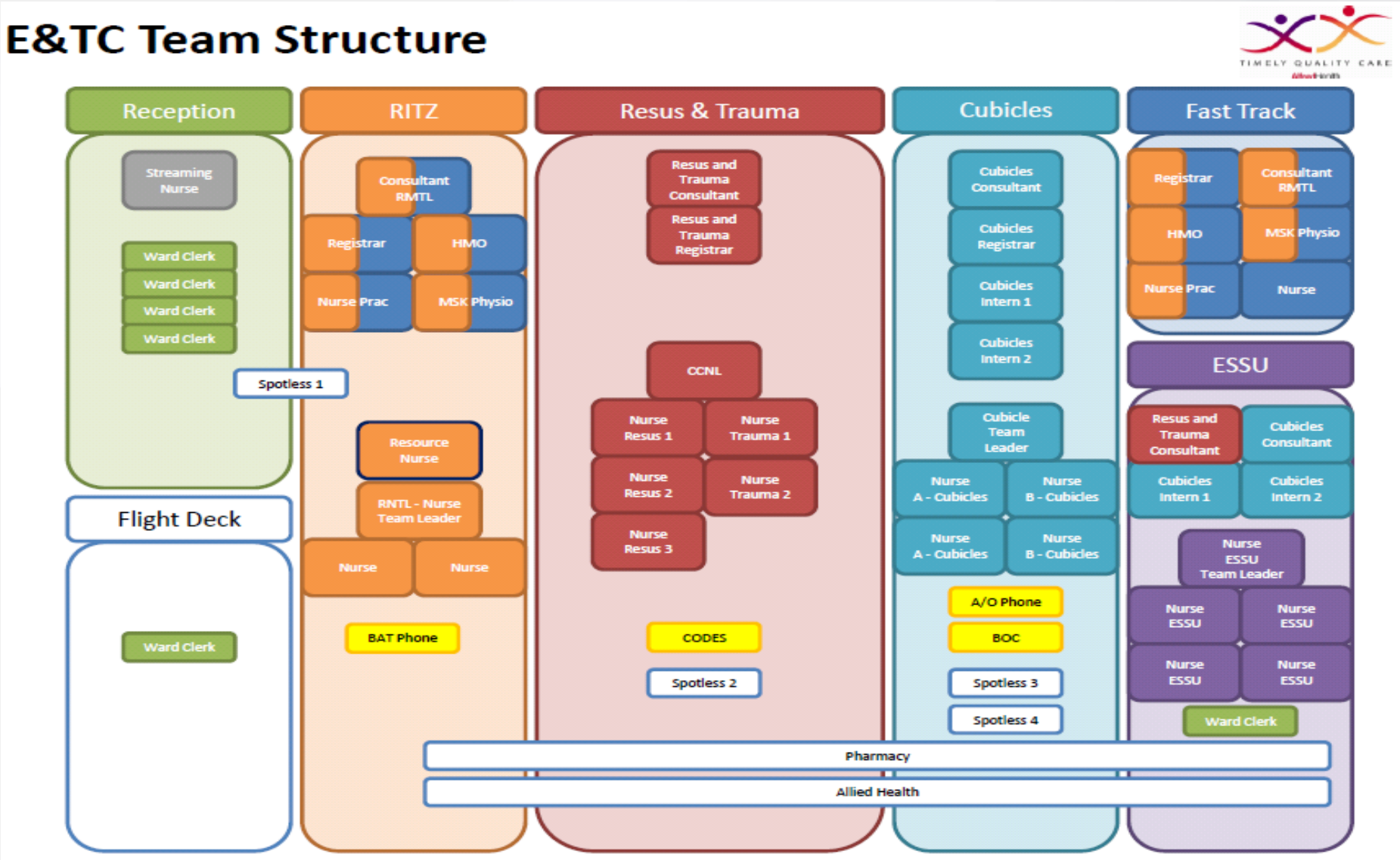
- **Patients meeting clinical review criteria:**
  - Inform E&TC Consultant (Reg overnight) to discuss plan
  - Does not necessarily preclude transfer to ward

Escalation

If resistance from inpatient unit

- **Remind that decision rests with E&TC Consultant**
- **Inpatient unit may refer on to another unit if they wish**
- **Inform that further escalation will occur to**
  - E&TC and Inpatient Consultants
  - E&TC Director
  - Hospital Executive

Roles & Responsibilities



Bed Profile Re-modelling

- Unit utilisation review
  - Reallocation of home unit wards
  - Ward re-profiling (reduction of multi-day beds)
  - Re-distribution of Nursing EFT
  - Separation of emergency & elective streams
  - Medical workforce roster re-profiling
- Admission bed concept
  - <100% occupied hospital
  - Matching capacity to demand at peak flow periods
  - Flow on the day
- ‘Flex’ bed concept

After Hours Model

Limited measurement, poor knowledge

0

REPORTS

on Medical Nightly Activity

fter Hours Care

CARE PROGRESSION:

on & support;

24/7.

A

Risk

Isolated

Failure to escalate

Unsupported & Unsupervised

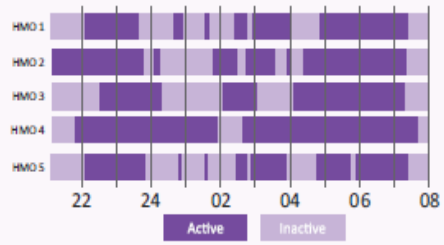
Lonely ...

NO

- Feedback
- Training
- Supervision

Inequitable workload

Overnight tracking

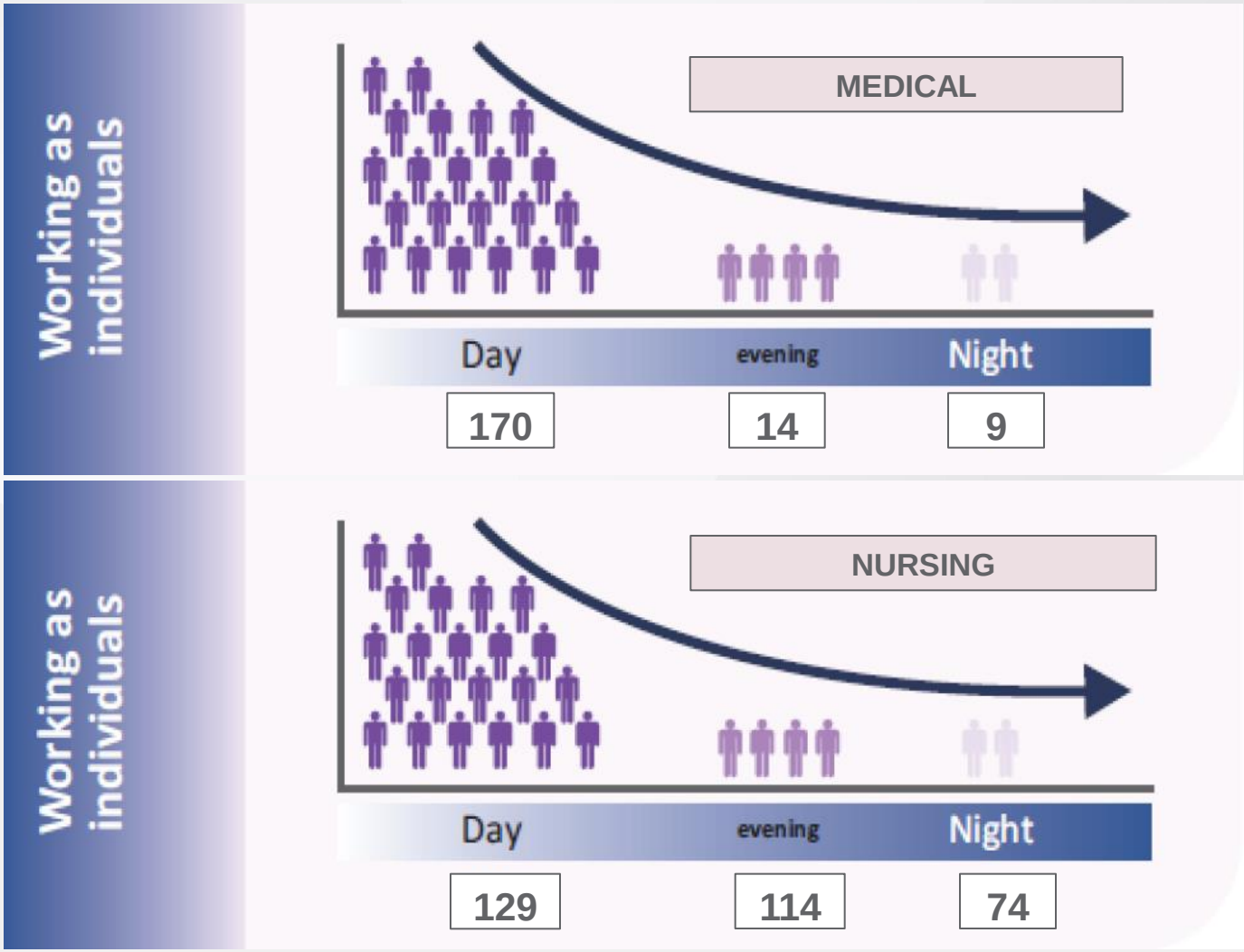


Mindset: Maintain Care

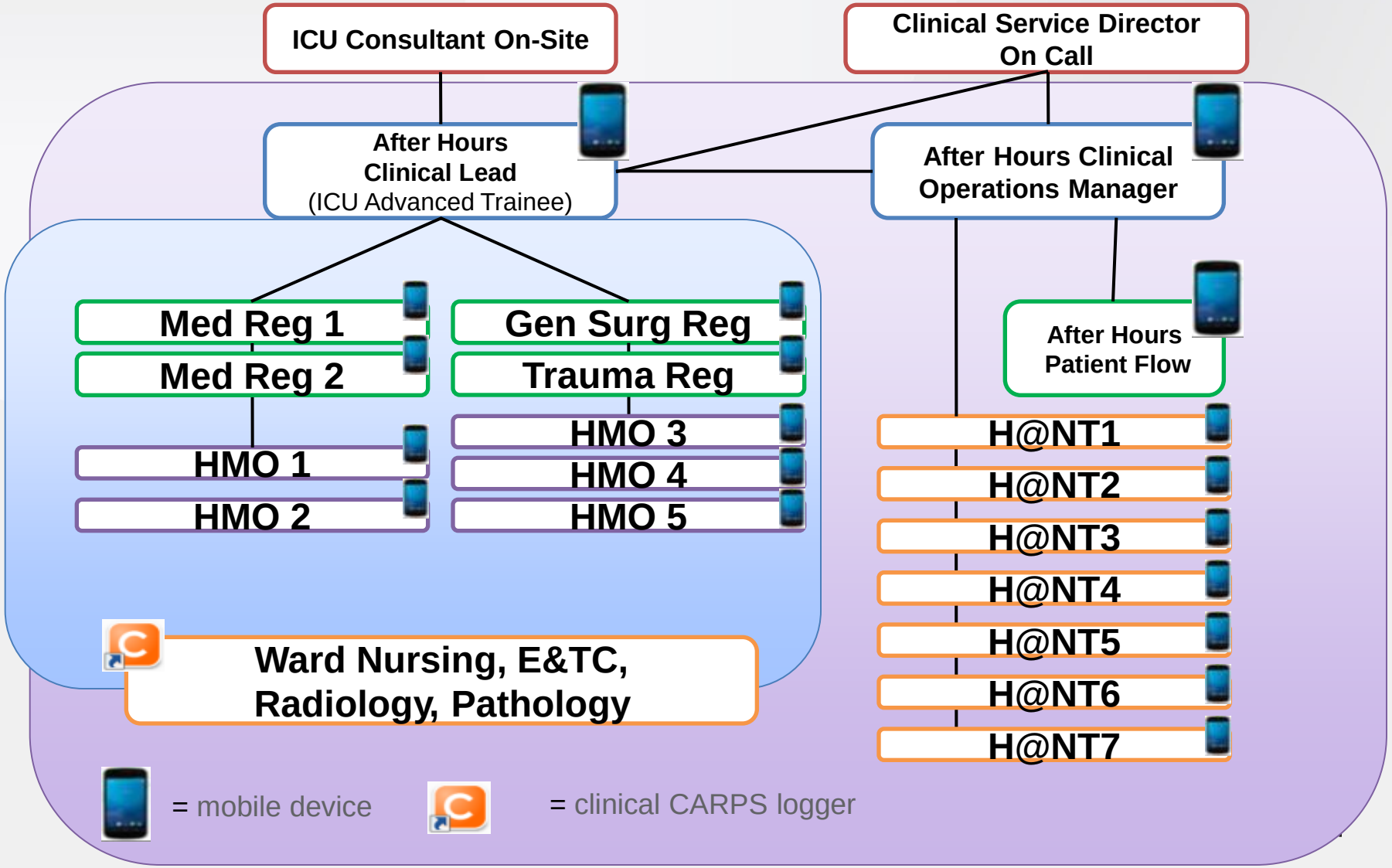
Emergency admissions stay in ED until the morning

"it can wait until the day team"

The Challenge



The Model


ICU Consultant On-Site
Clinical Service Director On Call
After Hours Clinical Lead (ICU Advanced Trainee)
After Hours Clinical Operations Manager
Med Reg 1
Med Reg 2
HMO 1
HMO 2
Gen Surg Reg
Trauma Reg
HMO 3
HMO 4
HMO 5
After Hours Patient Flow
H@NT1
H@NT2
H@NT3
H@NT4
H@NT5
H@NT6
H@NT7
Ward Nursing, E&TC, Radiology, Pathology
= mobile device
= clinical CARPS logger

Communication

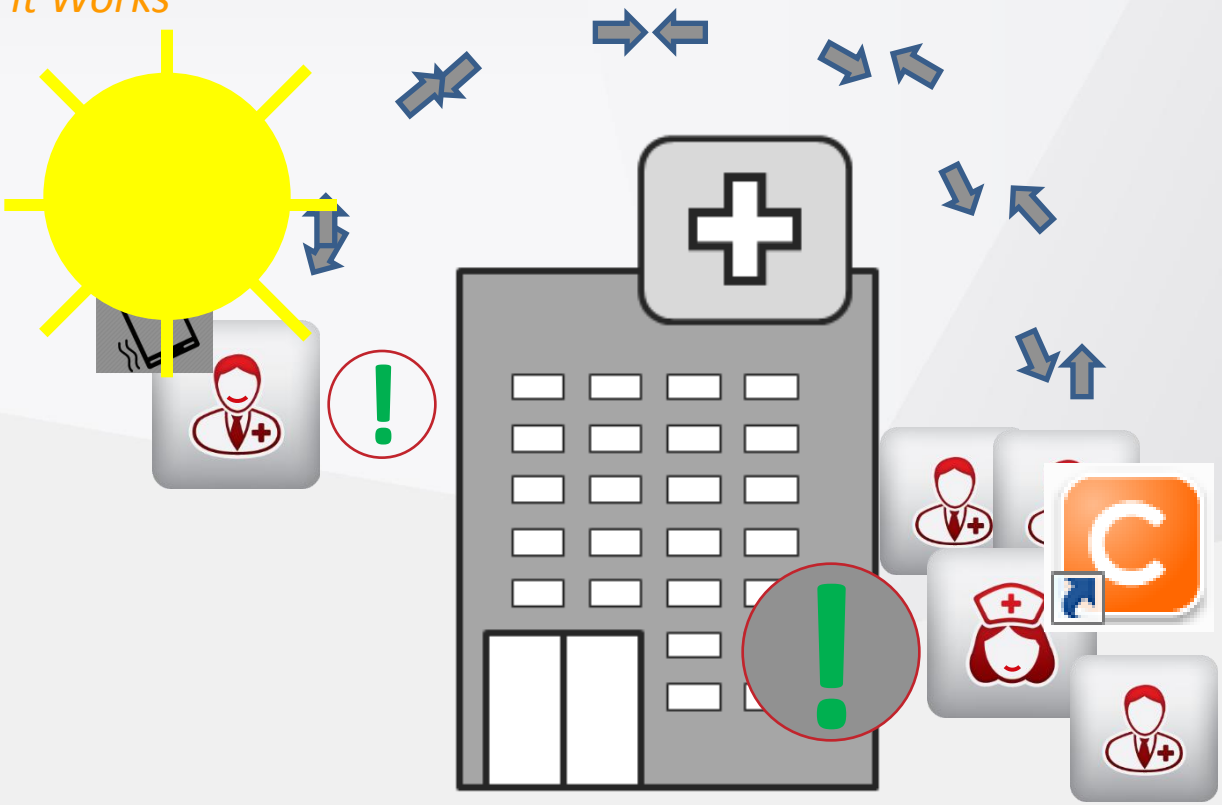
CLINICAL CARPS

From any PC

to Mobile Devices

NOT for CODES

How it Works



Identification
- Patient Name
- Patient DOB
- Patient UR

Situation/Background
- Care Option
- Comments
- Clinical Priority

Assessment/Recommendation
- Ward
- Unit
- [illegible]
- Role
- Contact Number

Patient Needs Care!

Monitoring

- Daily CEO Dashboard
- Daily & weekly TQC Reporting
- Weekly TQC Steering committee
  - Engagement of clinicians
  - Interdisciplinary
  - Strategic and day-to-day
  - Sustainability
  - Whole of organisation

Monitoring – Weekly Data set

Hospital Wide Indicators	Week Beginning 14-Nov	21-Nov	53 Week Trend	53 Week Median	Min	Max
1. E&TC Presentations	1314	1461 ↑		1219	1095	1461
2. % E&TC Patients <= 4 Hours (81%)	80% ●	79% ●		77%	66%	87%
3. % E&TC Patients Non-Admit <= 4 Hours (95%)	95% ●	92% ●		92%	84%	97%
4. % E&TC Patients Admitted <= 4 Hours (70%)	70% ●	68% ●		67%	50%	80%
5. % E&TC Patients Admitted <= 4 Hours (Excl. ESSU)	37%	40%		38%	14%	62%
6. % ED Patients Admitted to ESSU <= 4 Hours	96%	91%		93%	88%	98%
7. % E&TC Patients Admitted	59%	53%		59%	53%	64%
8. % E&TC Patients Admitted (Excl. ESSU)	26%	24%		27%	24%	31%
9. % of E&TC Patients Did Not Wait	2.4%	3.5%		2.5%	1.3%	4.4%
10. % Urgent E&TC Representation < 24 hrs post E&TC Discharge	1.3%	1.0%		1.0%	0.4%	2.1%
11. E&TC Patients Seen Within Time (80%)	83% ★	74% ●		74%	63%	86%
12. # E&TC Patients Admitted to Ward (9pm to 7am)	93	95		92	58	115
13. Deaths per 1000 Separations	7.0	11		8.3	3.6	14
14. % Multiday Discharges Readmitted via E&TC < 30 Days	14%	12%		11%	8.5%	15%
15. Number of Unit Transfers	30	50		61	30	96
16. Number of E&TC Admissions Discharged < 24 hrs	398 ↑	347		322	223	398
17. Number of E&TC Admissions Discharged < 24 hrs Excl ESSU	26	31		28	15	50
				Ave	Min	Max
18. Average Multiday LOS (Emergency Type Patients)	6.0	5.8		6.3	5.2	8.0

Monitoring - Move to whole of organisation

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TIMELY QUALITY CARE

<4 Hr Admits	70%	67%	3	69%	37	76%		73%	
<4 Hr Non Admits	95%	93%	2	94%	31	88%	5	85%	145
>24 Hr in ED	0	0		0		0		0	
Attendances	N/A	199		5,284		101		2,624	
Triage seen in time	80%	78%	5	79%	29	94%		71%	229
Ambul H/O < 40 min	90%	86%	2	78%	116	82%	1	74%	26

Long Stay Patients	27/11/16	Median
ALF # Long Stays >=7 Days	211	195
ALF # Long Stays >=15 Days	107	87
ALF # Long Stays >=31 Days	46	30
CGMC # Long Stays >=31 Days	64	70

Elective Surgery	ALF	SDMH
Cat 1 Admit <= 30	100%	
Cat 2 Admit <= 90	88%	100%
Cat 3 Admit <=365	100%	100%
HIPs	6	

Summary

A significant increase in ED presentations across both AH and SH as a result of Mondays 'thunderstorm asthma' event. Over the Monday & Tuesday an additional 280 patients were seen, however, a majority were in the non-admitted stream, with approximatley only 10 patients requiring admission.
Most admission beds were 'flexed' at the Alfred on Monday and Tuesday, resulting in another week of high occupied multi-day beds.
Although ICU admissions were well below median for the week, the acuity resulted in a reduced number of patients suitable for ward transfer on a daily basis, with ICU running above profile from Monday through to Saturday. There were also some changes to the elective program on Friday due to ICU capacity.
General medicine admissions were constant through the week, with a total of 111 admissions.
Long stay numbers spiked towards the end of the week and continue to remain high with particular focus required on the >15 and >31 day LOS patients .
The changes to the bed profile, as discussed last week, were commenced last Wednesday and a data set to monitor performance of these beds on a daily and weekly basis has been established.

Sandringham had excellent in-patient capacity from Wednesday onwards. Discharges were consistent on a day to day basis, well over the normal and with up to 20 vacant beds at times, beds were flexed down on a shift by shift basis.
Short stay utilisation remains efficient with 149 admissions.

Caulfield data is inconsistent, with CPU following up.
Total discharges across all programs were above avergae and resulted in excellent access to sub-acute.
The aged care re-admissions jumped last week and is currently be looked at in more detail.

38.	Avg Daily Multiday beds Occupied (inc ESSU & AAU)	489 ↑	483 ↑	467	374	489
40.	Avg Daily Discharges - Weekend	65	51	53	42	67
43.	# of Long Stay Patients Currently Admitted (>=15 Days)	107 ↑	107 ↑	87	63	108
44.	# of Long Stay Patients Currently Admitted (>=31 Days)	45 ↑	46 ↑	30	19	46
50.	# of Transfers to Caulfield from The Alfred	58	68	53	40	72
74.	CardioResp # of ICU Admissions	51	47	57	41	77
81.	GenMed # of Emergency Admissions	90	111	84	59	111

Caulfield Hospital	14-Nov	21-Nov	Median	Min	Max
1. # of Discharges	96	102	85	54	107
16. Aged Unplanned Readmissions to Alfred Health <= 28 days	9	17 ↑	8	1	19

Sandringham Hospital	14-Nov	21-Nov	Median	Min	Max
1. Total ED Presentations (ED & UCC)	786	944 ↑	774	646	944
34. SSOU # of Admissions to	154 ↑	149 ↑	97	60	172
44. Avg Daily Multiday beds Occupied (inc SSOU)	20 ↑	20 ↑	15	12	20

Evaluation

Timely Quality Care — Evaluation Framework

OBJECTIVE: For all patients to receive timely, high quality care consistent with their clinical needs

EQUITY / ACCESS

- Time to be seen in ED
- Patients in ED that 'did not wait'
- Ambulance turnaround times and arrivals
- ED Occupancy
- % of elective patients seen within time by category
- Hospital initiated postponements of elective surgery

EFFECTIVENESS

QUALITY

- Patient satisfaction / experience
- % of patients seen by ED consultant led team within 60 mins
- Time from arrival in ED to management plan documented
- % of patients admitted or discharged from ED within 4hrs of arrival to ED
- % of patients seen by inpatient unit within 2hrs of admission to ward
- % of outliers
- Number of patient transfers between units
- Number of ED patients discharged within 24hrs of admission
- % of radiological investigations conducted within 24hrs of referrals
- % of procedures conducted within 24hrs of referral
- % of operations conducted within 24hrs of referral
- % of consultations conducted within 24hrs of referral
- Wait time for transfer from Alfred to Caulfield

SAFETY

- MET calls
- Hospital Standardised Mortality Ratio
- Deaths per 1000 separations
- Unplanned hospital readmissions
- Unplanned urgent ED representations
- Unplanned transfers from sub-acute to acute
- % of ambulance handover within 40 mins

EFFICIENCY

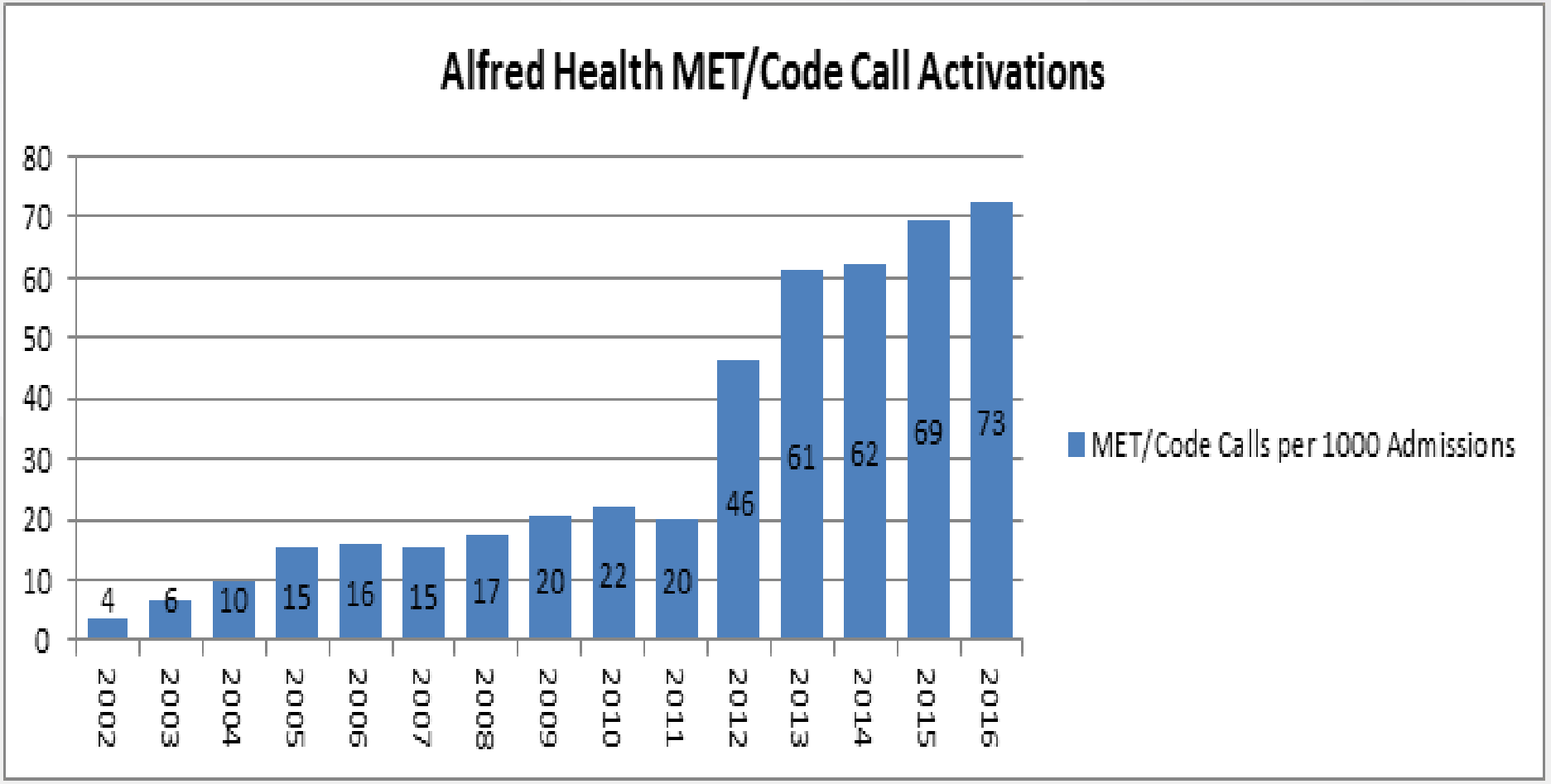
ACTIVITY

- Number of ED presentations
- Number of admissions (program area and service)
- Number of discharges (weekday and weekend)
- Number of elective surgeries
- Length of stay (average, long stay (>7, >15, >31 days), by program area and service)
- Relative stay index
- Bed occupancy
- Number of investigations
- Number of patient transfers between sites (incl. direct transfers)
- Short stay unit usage (number, percentage and LOS)
- Number of ambulance presentations
- Use of Urgent Care Centre (Sandringham)

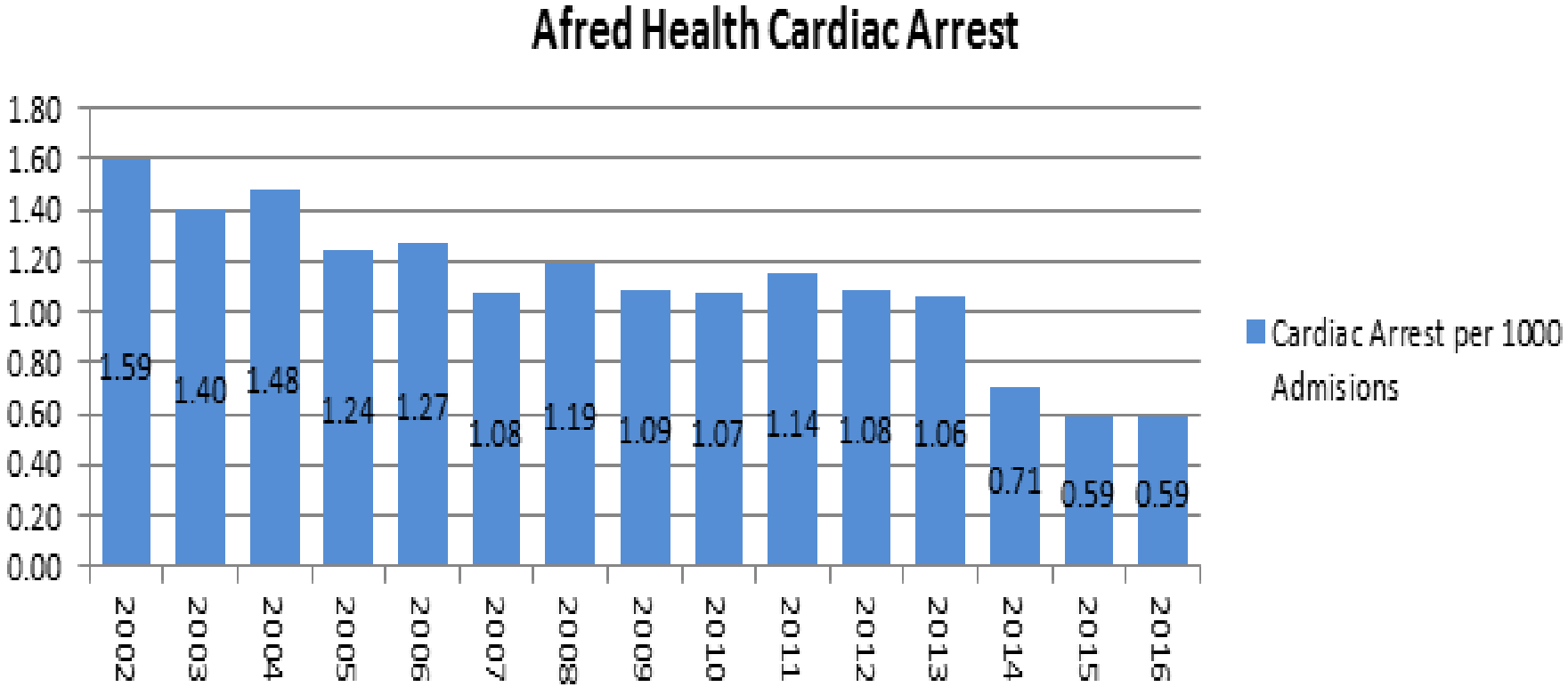
ORGANISATIONAL LEARNINGS

- Staff satisfaction
- Patient outcome and quality metrics

Quality – MET Calls

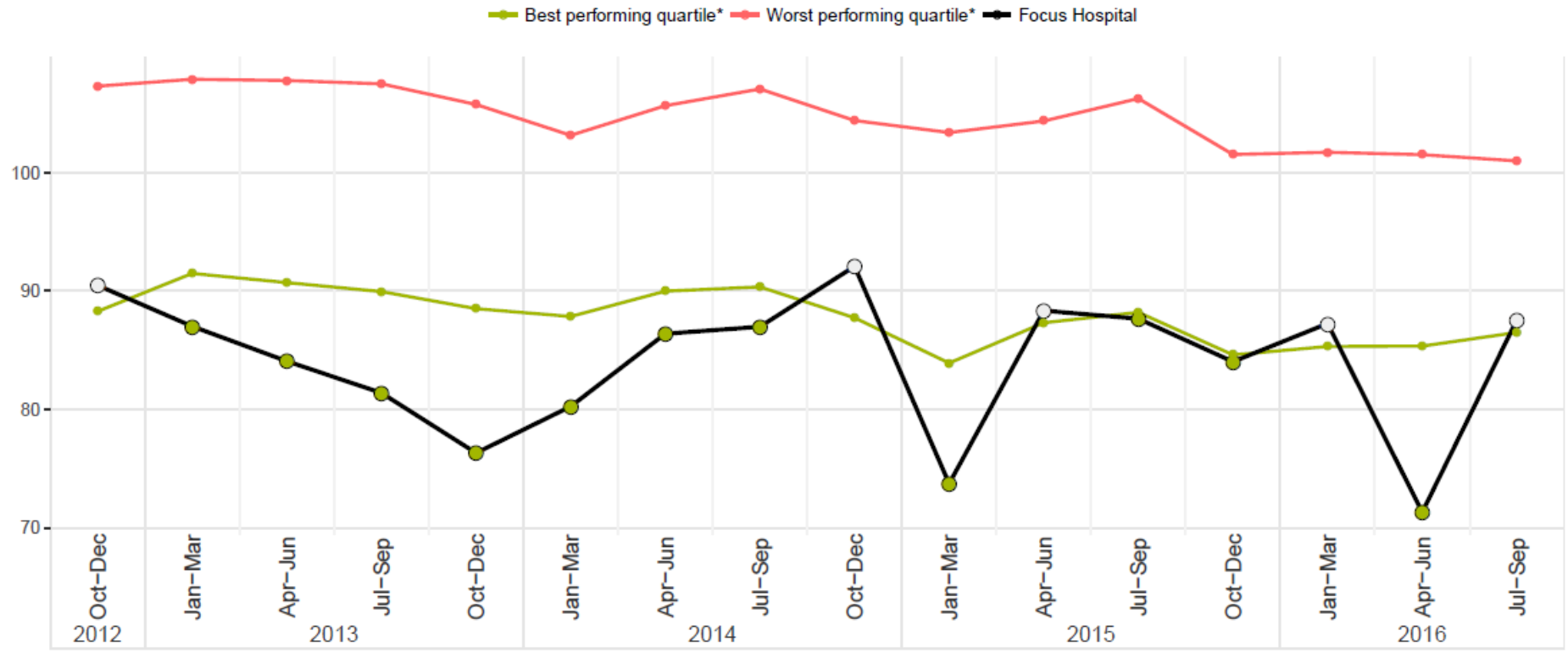


Quality - Cardiac Arrest

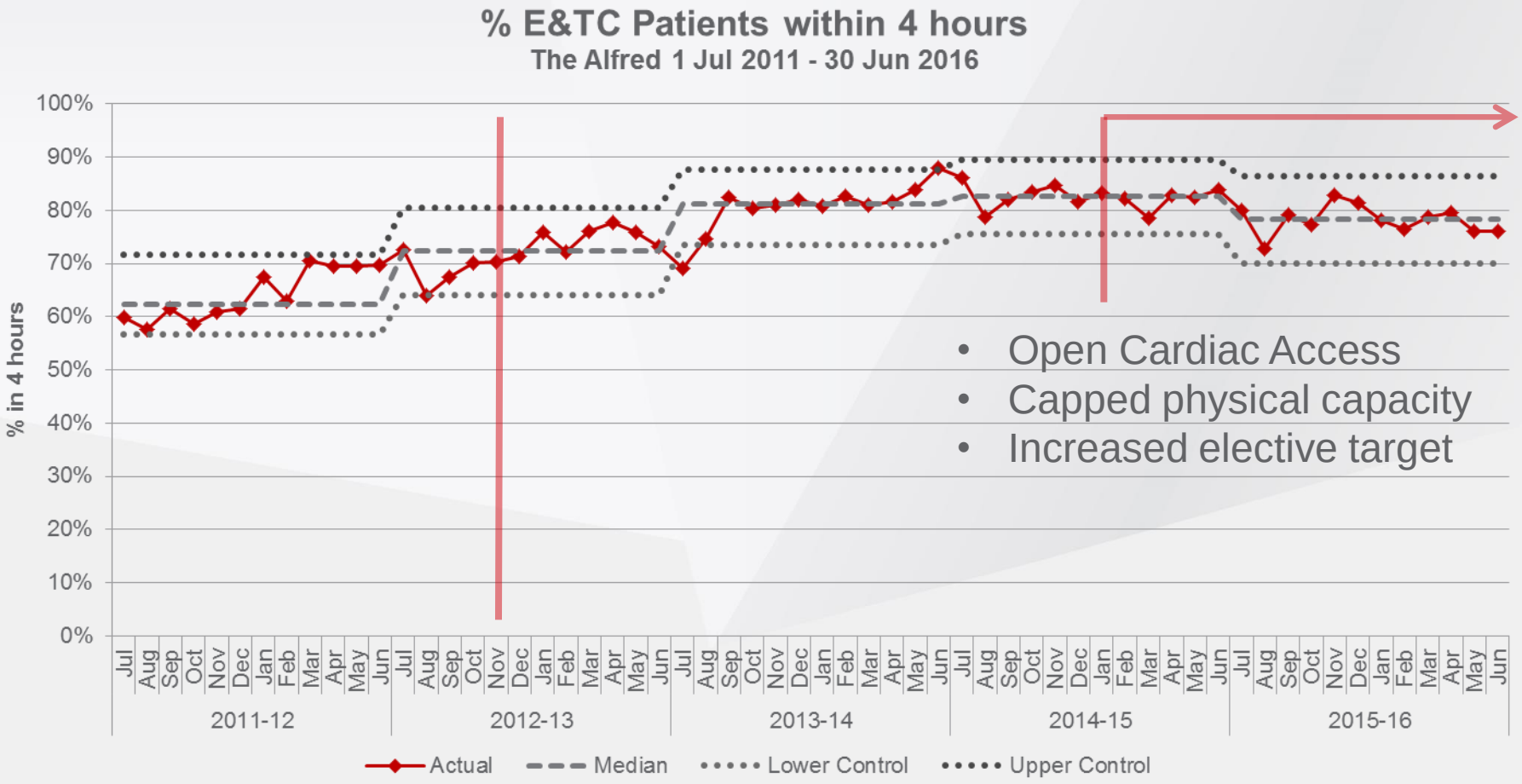


Quality – HSMR (Health round table)

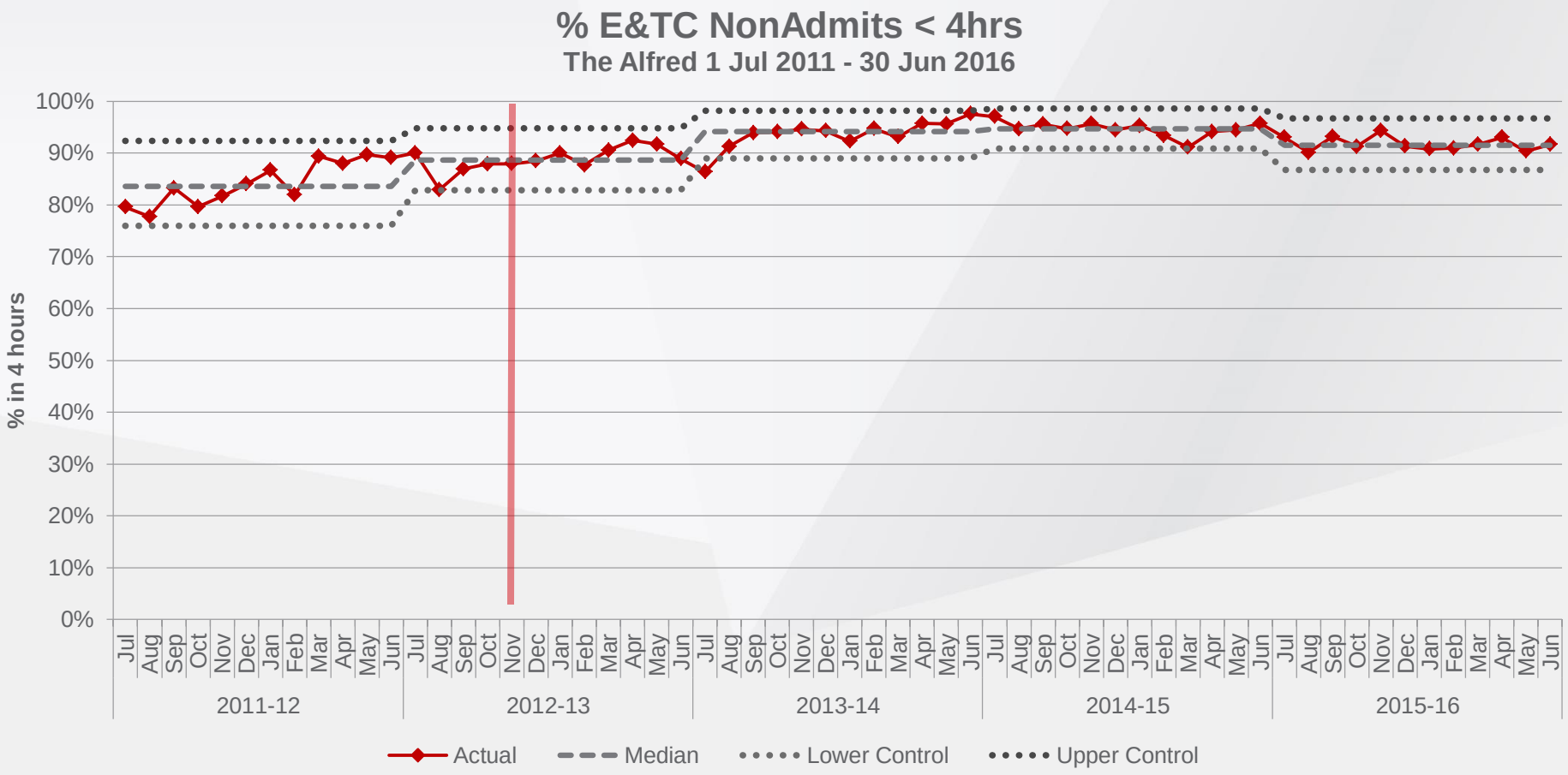
1.1 – Hospital Diagnosis Standardised Mortality Ratio (HDxSMR)



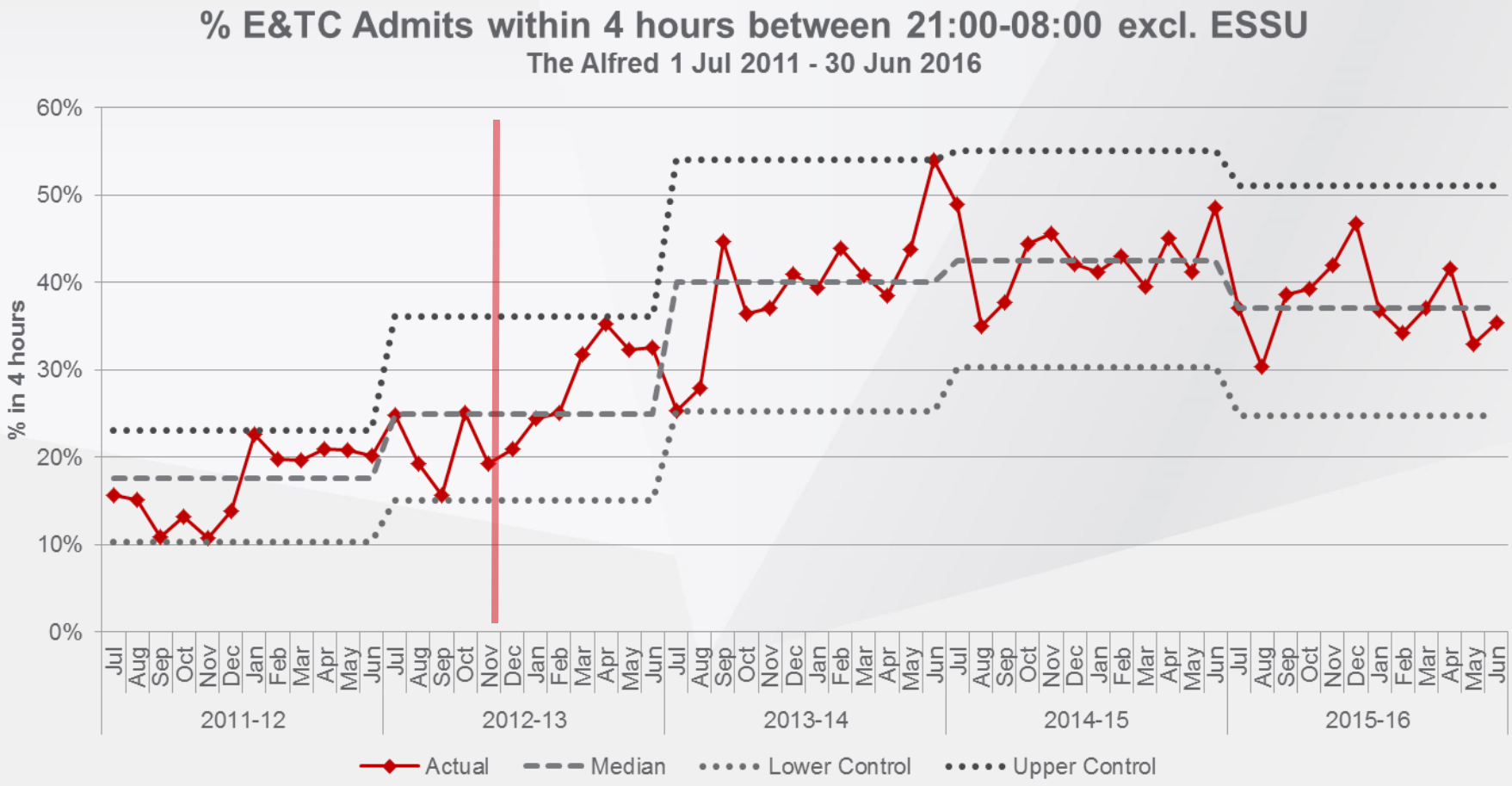
NEAT


% E&TC Patients within 4 hours
The Alfred 1 Jul 2011 - 30 Jun 2016
% in 4 hours
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun
2011-12
2012-13
2013-14
2014-15
2015-16
Actual
Median
Lower Control
Upper Control
• Open Cardiac Access
• Capped physical capacity
• Increased elective target

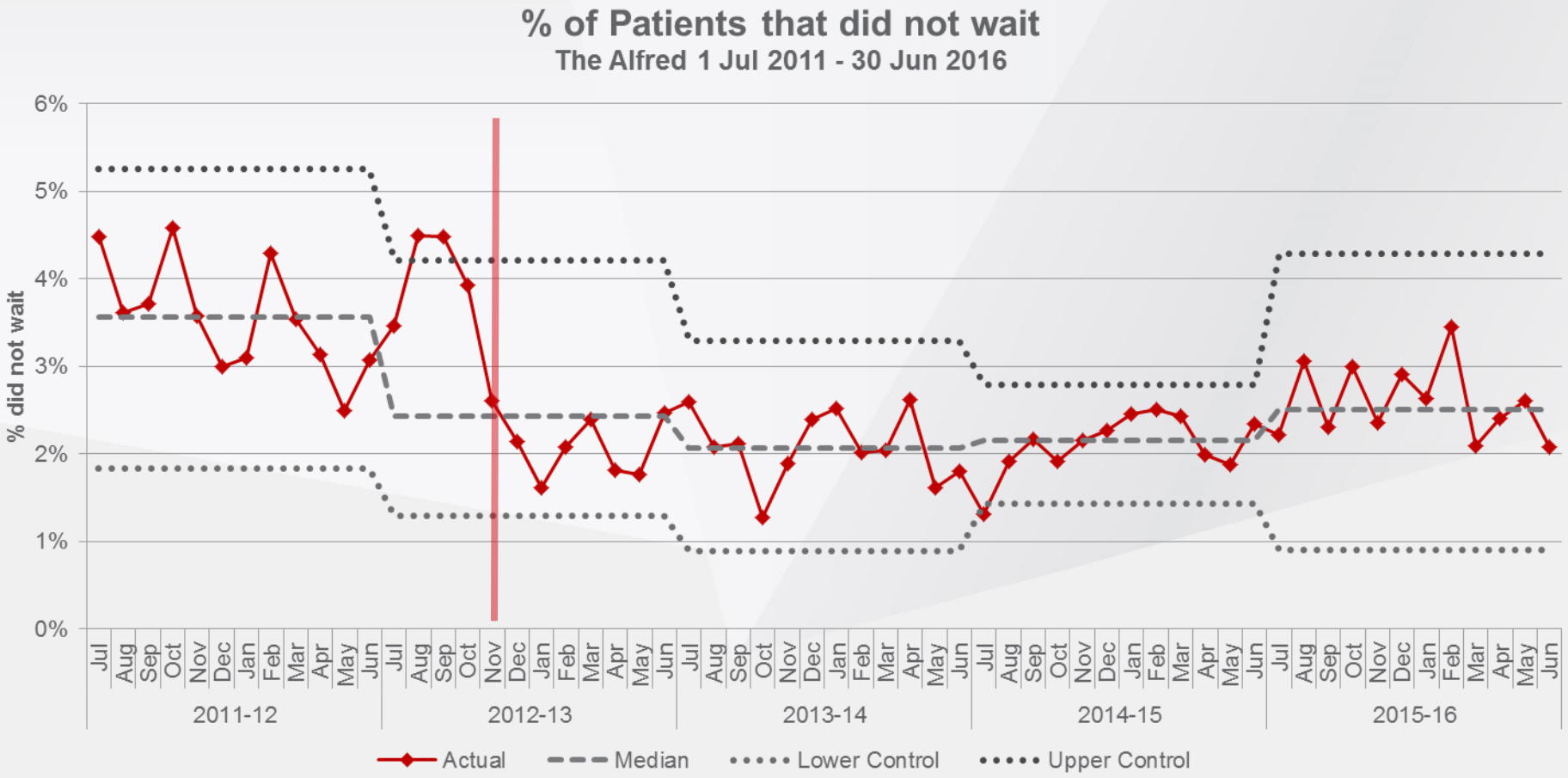
Non-Admit Stream



Admit Stream (after hours)



Patient ‘Did Not Waits’



Key Learnings

- ‘Whole of Hospital’ to ‘Whole of Organisation’
- Clinician Engagement and ownership of change
  - Acceptance of need to change/reform
- Emphasis on quality of care – ‘focus on the patient’
- Mindset from ‘maintenance’ to ‘progression’ of care
- System must be able to rapidly respond
- Design over resources

With Hindsight

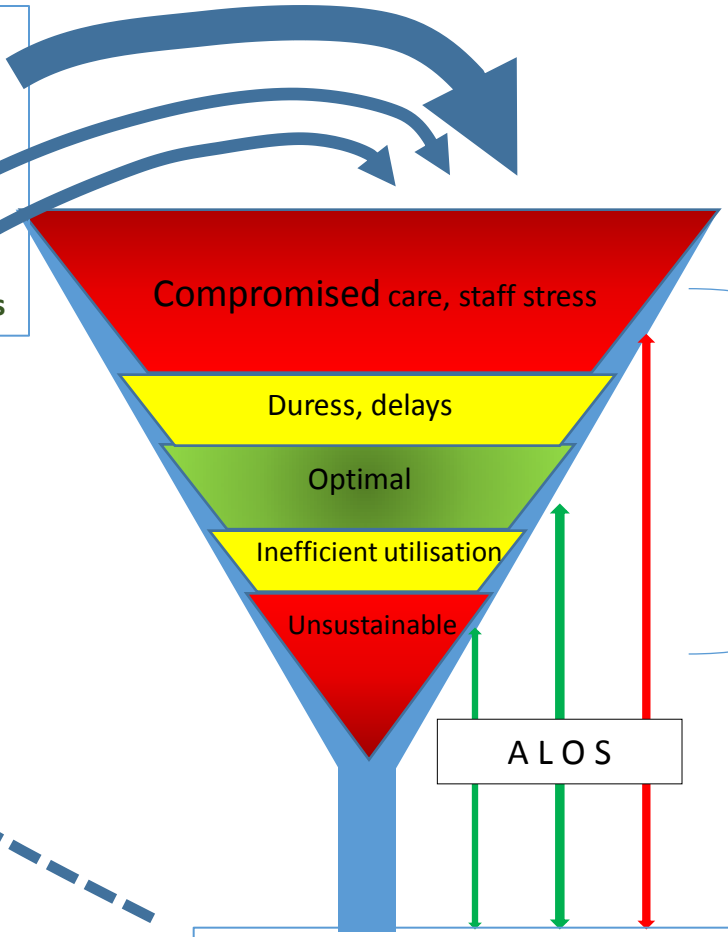
- Ward leadership teams
  - Ward governance principles (shared responsibility)
- Capability training
  - The ‘field’ versus the ‘boardroom’
- Evaluation against the principles

Our Challenges

- Winter
- On-boarding
- Continuous improvement

Seeing flow as a funnel

ADMISSIONS
- Community
  - *New patients
  - Existing patients
- ***Readmissions**
- Transfers
  - Within Alfred Health
  - ***From other hospitals**



DETERMINANTS
- Patient Factors
- Processes of care
  - ***Quality waste**
  - ***Efficiency waste**
- ***Business decisions**

Readmissions

*Other Hospital

TRANSFERS OF CARE
- Community
  - Home +/- services or HITH/Gem@home/MATS/HARPcomplex care
  - Supported accommodation
  - Nursing home
- Other hospital
  - Caulfield aged care and rehabilitation
  - External
  - Hospice
- Deceased

***modifiable factors**

How hard are we working (really)?

Are the answers to these two questions the same?

1. Are we working at the upper end of our sustainable work rate?
2. Are we improving our work processes and environment as quickly as we could be?

3rd & 4th question

3. *What relative proportion of our total investment/energy is occurring in 1 vs 2 above?*
4. *What is our role as leaders in influencing this balance?*

Business viewpoint

The Patient

Clinical staff viewpoint

Greater investment in process improvement

Improved Care Processes

Better resource utilisation

Greater case throughput

Stronger financial position

Raring to go

Better patient experience and outcomes

Engaged staff

Less variability and inefficiency

Attract and retain the best staff

(Most) Waiting is Waste

Waiting

- For assessment process to commence (to be seen)
- For a decision regarding
  - Diagnosis
  - Prognosis
  - Treatment plan
- For an investigation to be
  - Performed
  - Reported
  - Interpreted in context of that patient
- For a procedure to be performed
- To assess response to treatment/recovery

(Most) Waiting is Waste

Waiting Type	Factors influencing the wait duration	Patient consequences	Staff consequences	Organisational consequence
Waiting for assessment	Process/staff factors	Anxiety/Disease Progression/Deterioration	Stress	$$ quality waste
Waiting for investigation or response to referral	Process/staff factors	Anxiety/Disease Progression/Deterioration	Frustration/loss of control of process	$$ quality and efficiency waste
Waiting for decision	Process/staff factors	Anxiety/Disease Progression/Deterioration	Stress	$$$ quality and efficiency waste
Waiting for response to Rx/recovery	Patient factors/process factors	Anxiety, necessary step	Necessary step, what we are here for	Necessary step
Waiting for transport	Patient/process/family factors	Frustration	Frustration	$ efficiency waste

The challenge

- What does the funnel look like in your space?
- Where are the modifiable waits?
  - Rate limiting steps and their root causes
- What is required to address the waits so that we stay in the green zone as much as possible?
  - What data do you need?
  - Show us a business case.

Conclusion

- For patient care and clinical staff to thrive (and for the benefit of the organisation) there is no alternative other than to continuously improve the care we provide.

- There is an imperative to ensure that the processes involved in our business decisions is continuously improved.