

Using the Lightfoot Diagnostic Results to Drive Medical Engagement to Improve Patient Outcomes

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20 min presentation & questions

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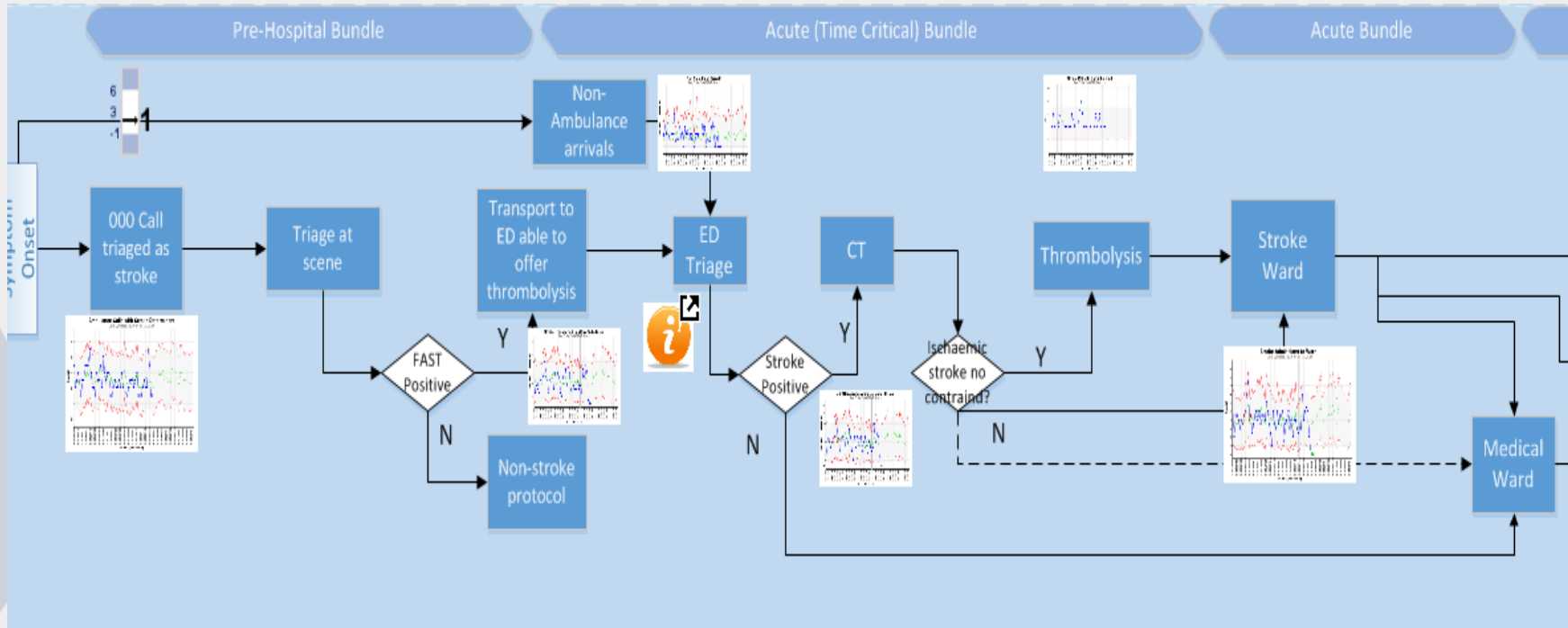
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What is the Lightfoot tool - and why is it different?

- Analytical service improvement tool
- Helps define patient pathways & monitors and reports variation along every step of the process
- highlights bottlenecks, problems, and the impact of interdependencies assisting in seeing where to take action
- Valuable in identifying effectiveness of a process or service, ensuring the sustainability of improvements over time.
- Can pull through various data to test interdependencies



Defining Pathways



What gets the interest of clinicians

- Clinician buy in
 - Validating what Clinicians know but could not define or measure
 - Using their research training in statistical process control (SPC)
- Making the invisible – visible
- Myth busting to deal with the real issues



Is the increasing demand in presentations during winter causing our bed block?

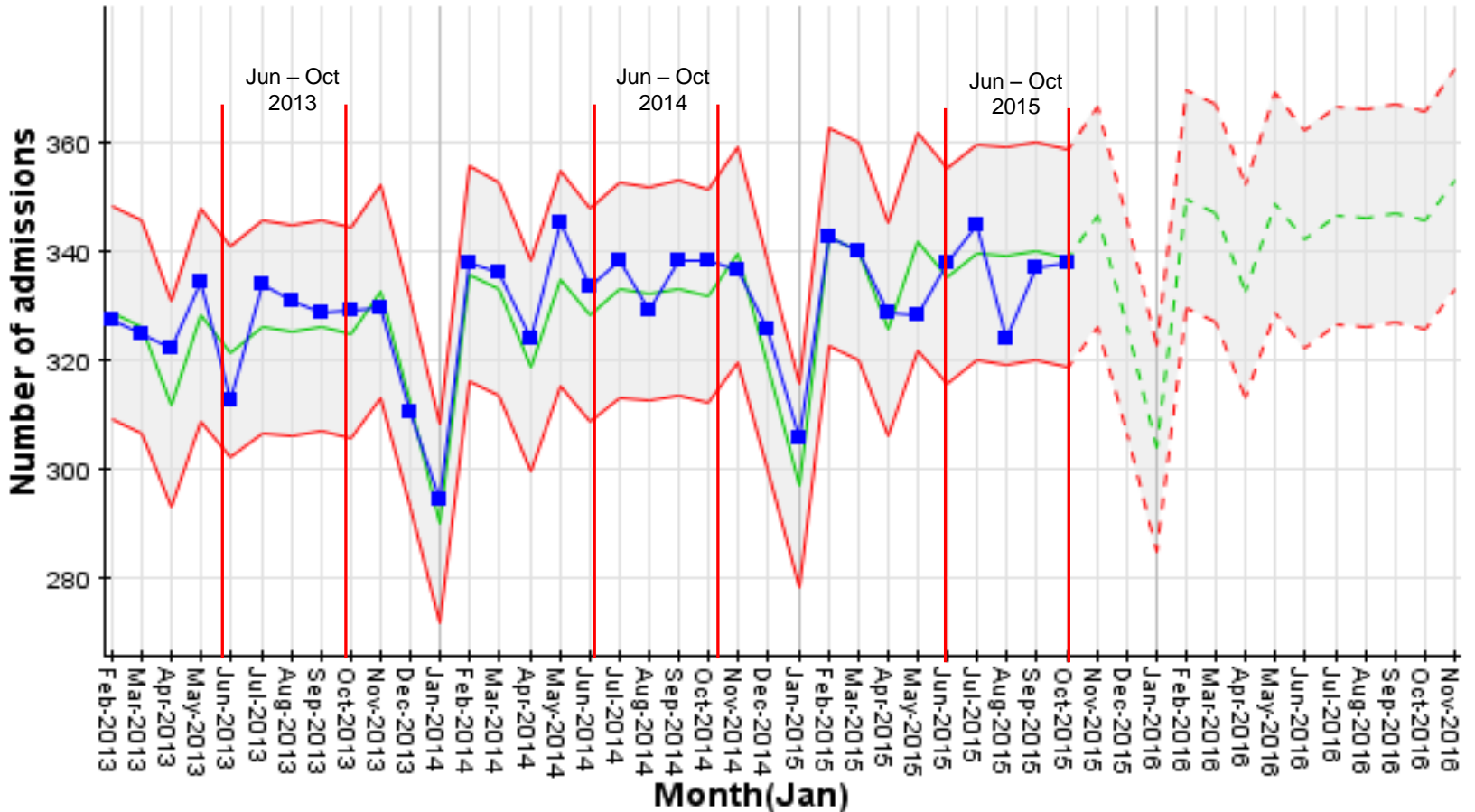
Myth or fact ?



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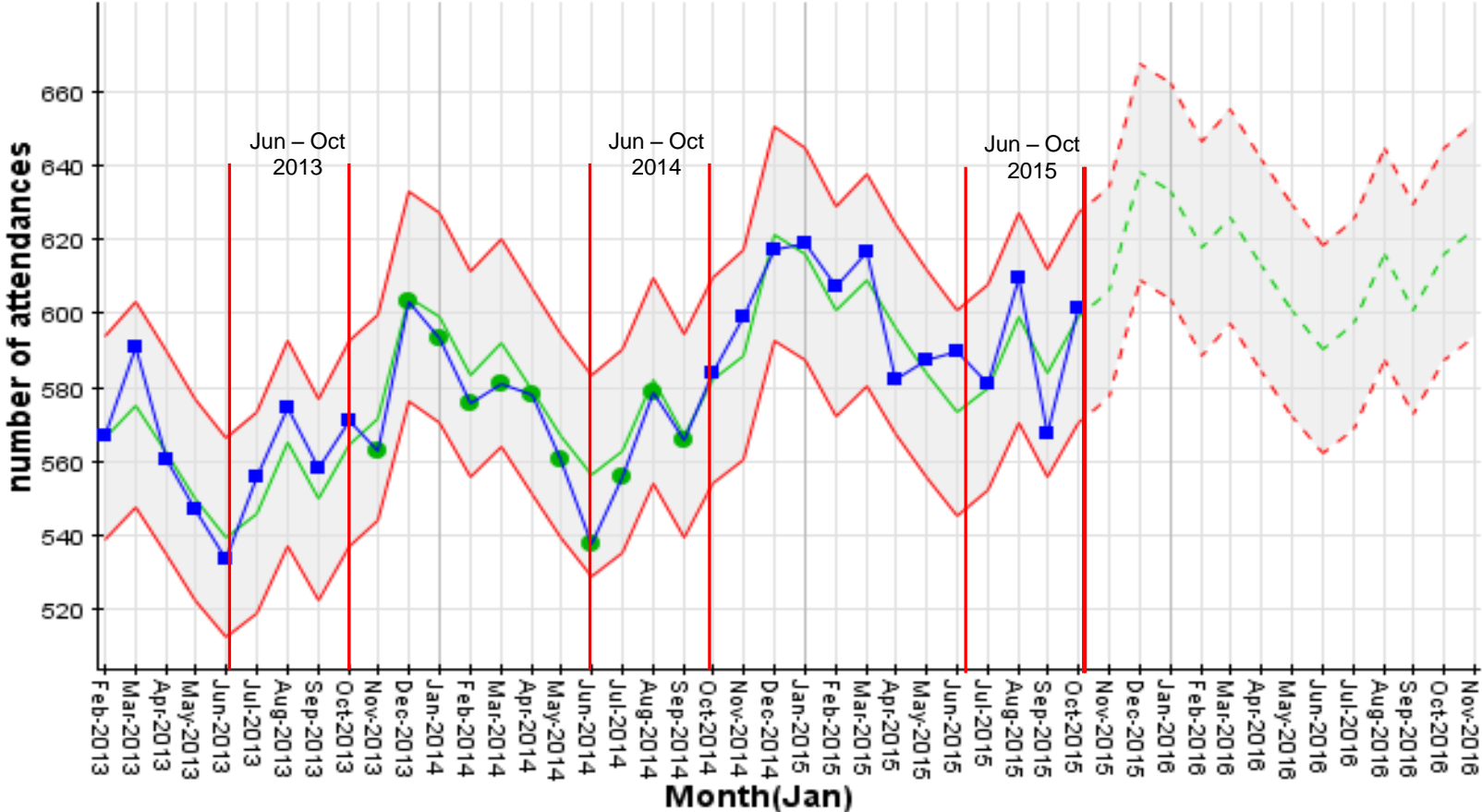
Our average daily inpatient activity is highly predictable and only growing slowly and they do not display any winter peak

Average daily inpatient admissions



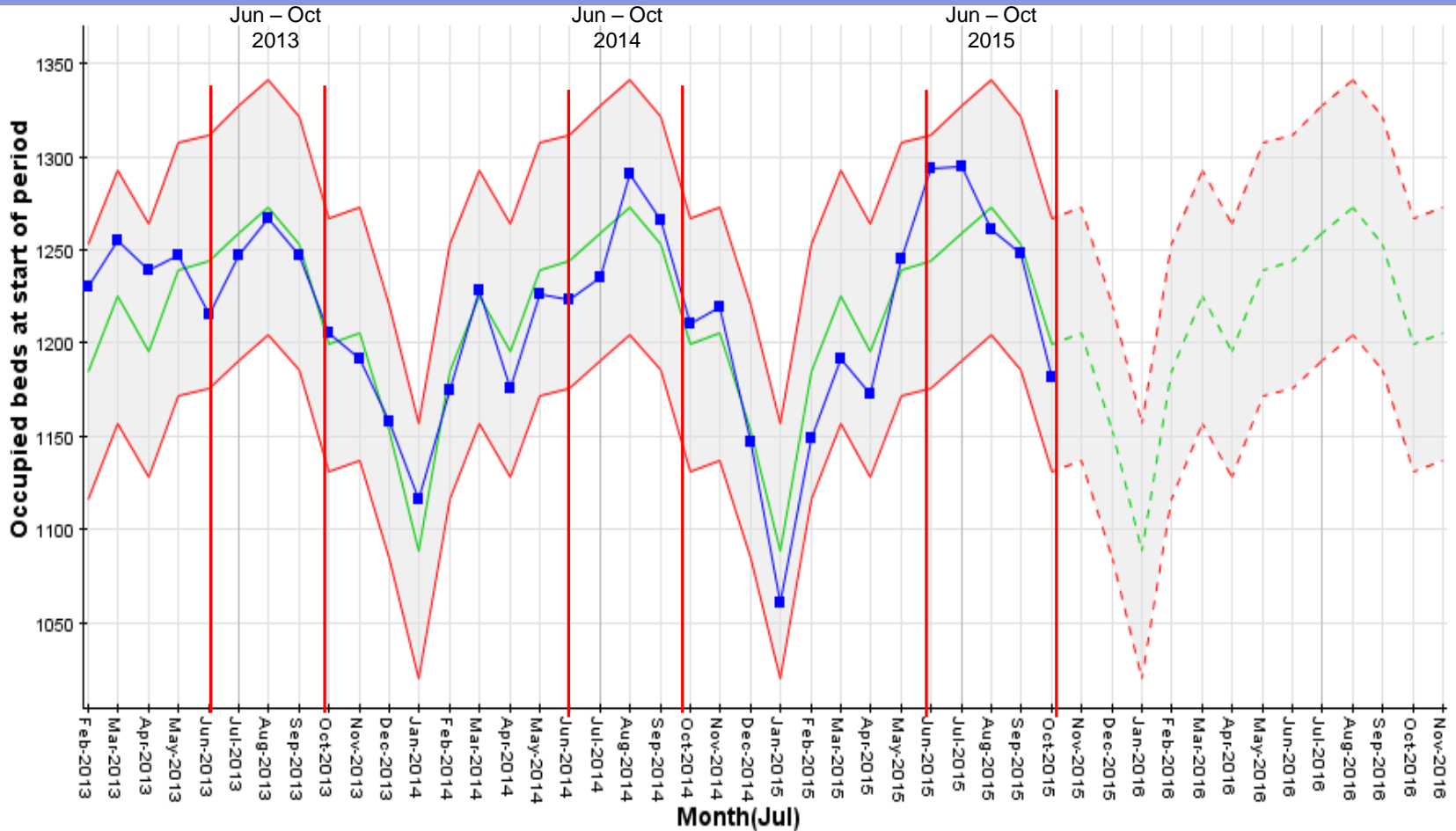
Our daily ED attendances are also highly predictable, are growing at 3-4% per year and are lowest in winter

Average daily ED presentations



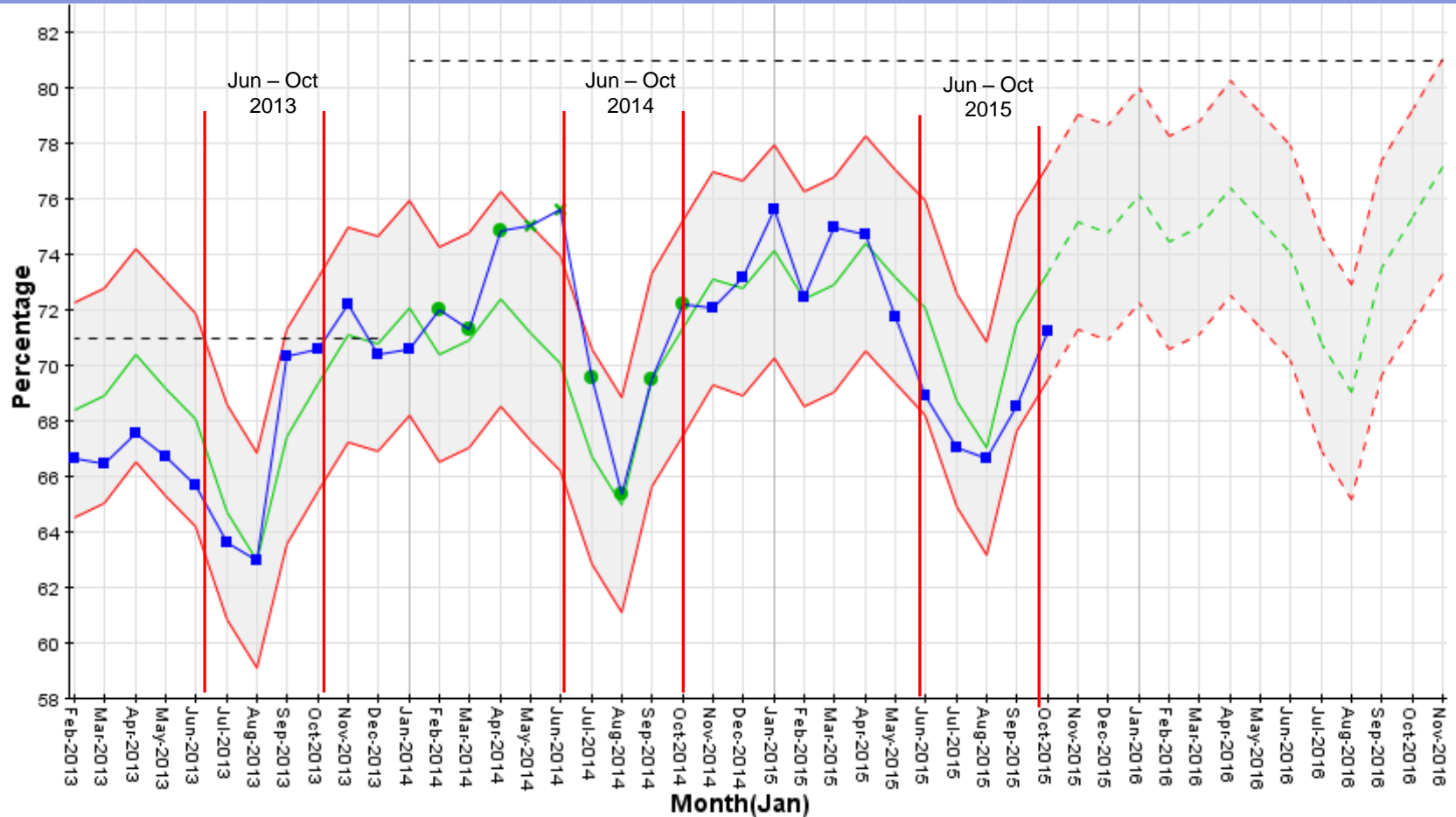
But our Emergency bed occupancy is highly variable and highest during the winter months

Average Emergency midnight bed occupancy



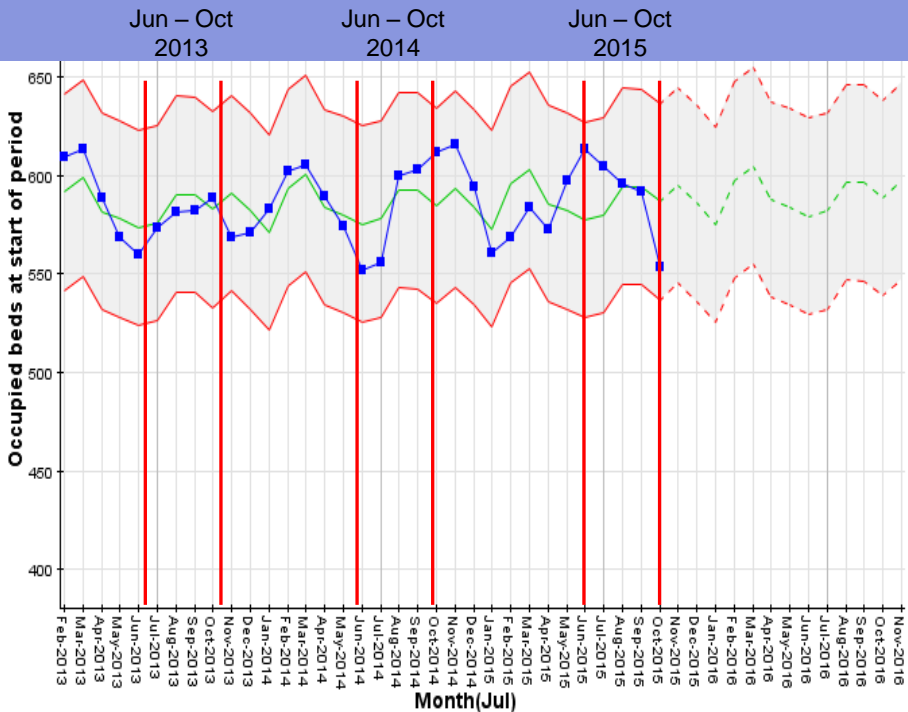
And our ETP performance is closely related to our winter bed occupancy

Monthly ETP performance

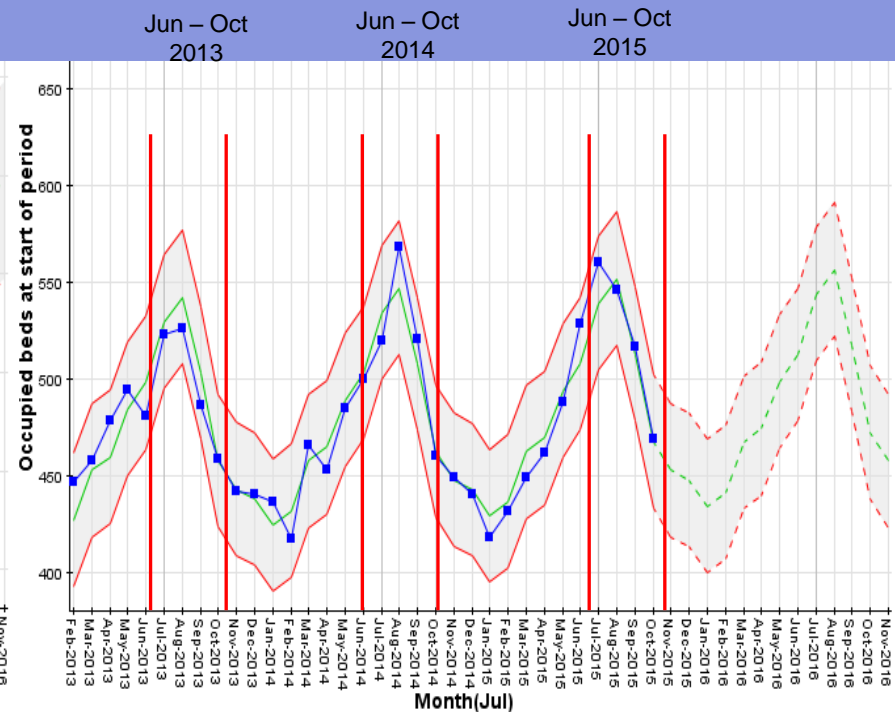


The seasonal peak of bed occupancy over winter is almost entirely accounted for by patients aged over 75

Midnight Emergency bed occupancy Adults 16-74

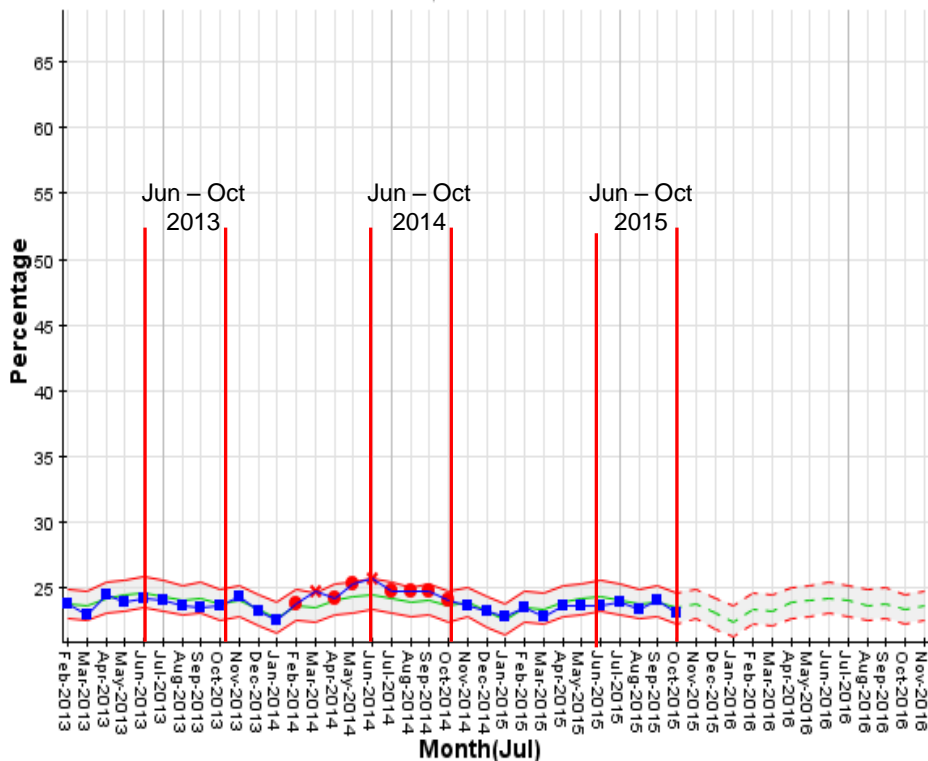


Midnight Emergency bed occupancy Elderly (+75)

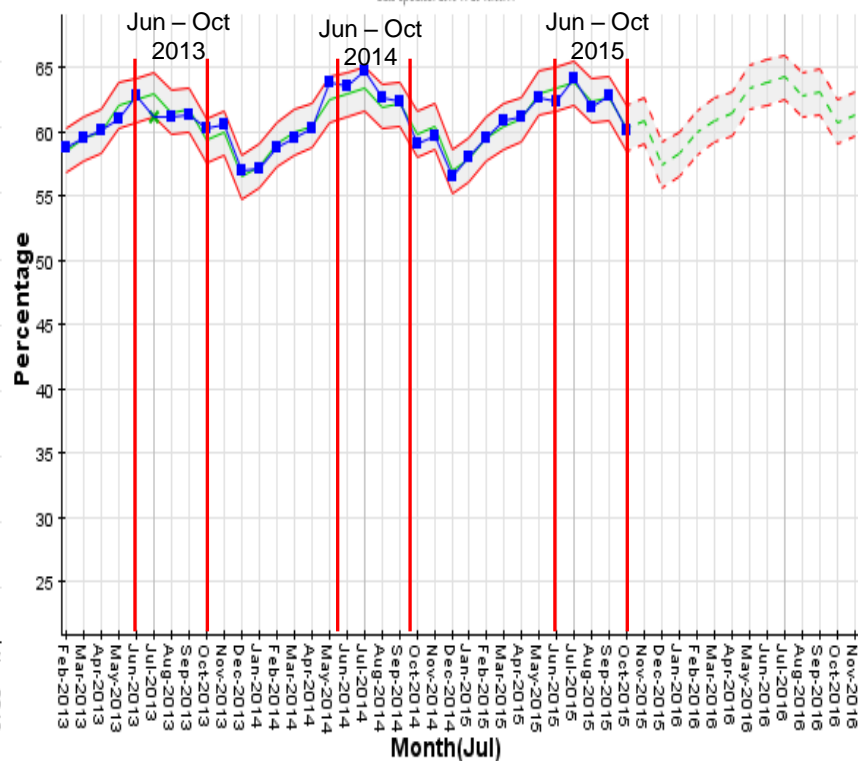


Between June and October the ED admission rate for Adults is similar to the rest of the year at around 25% but the admission rate for elderly patients rises from 56% in summer to 65% in winter

ED admission rate Adults 16-74



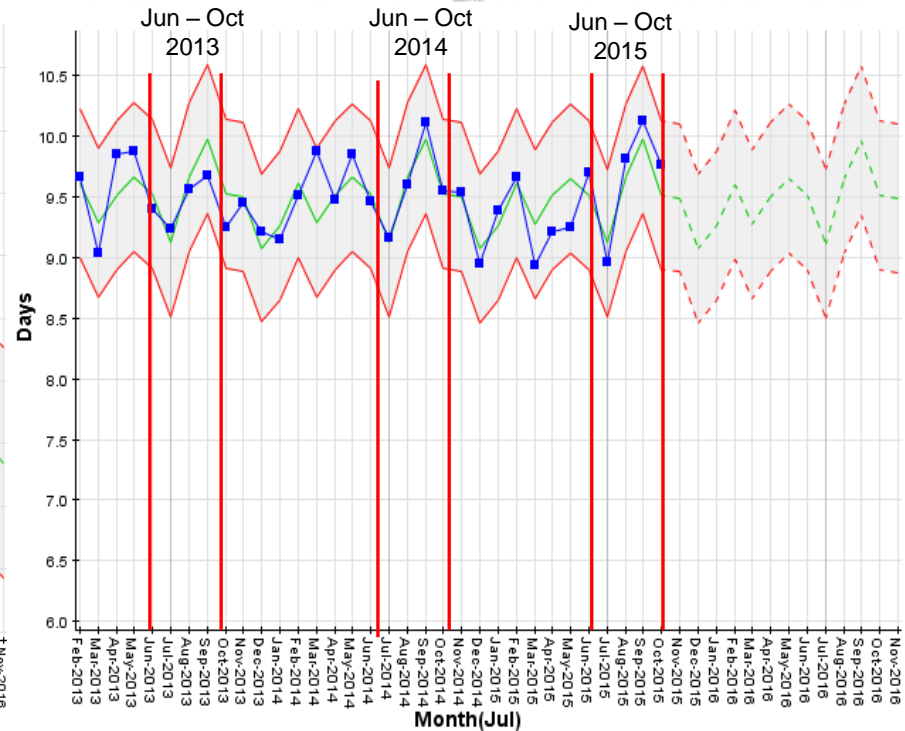
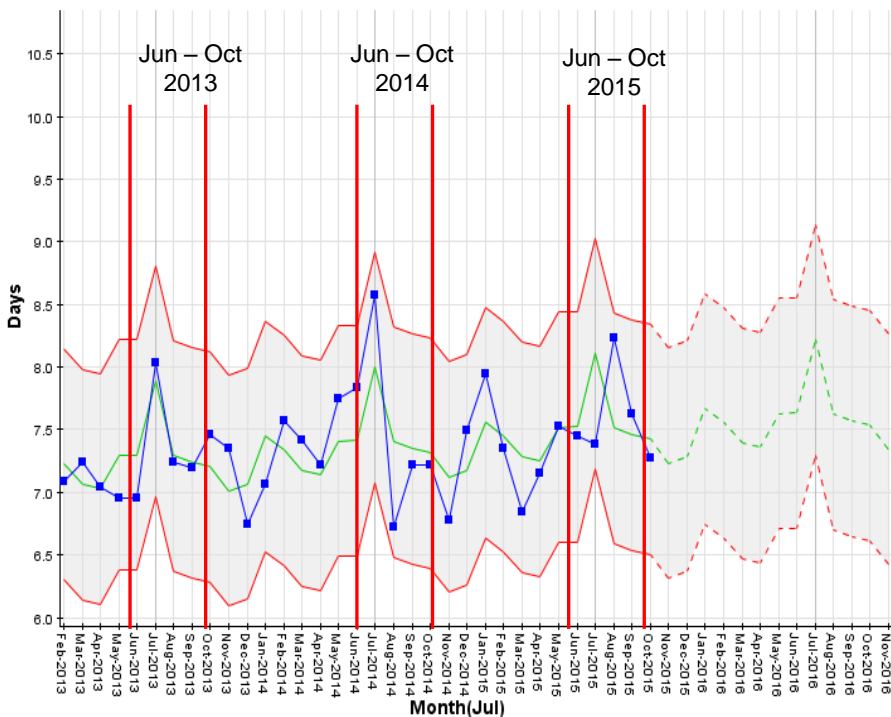
ED admission rate Elderly (75+)



The average length of stay for patients admitted overnight via the ED averages between 7 and 8 days for Adult patients and between 9 and 10 days for Elderly patients and is significantly longer for elderly patients in the winter months

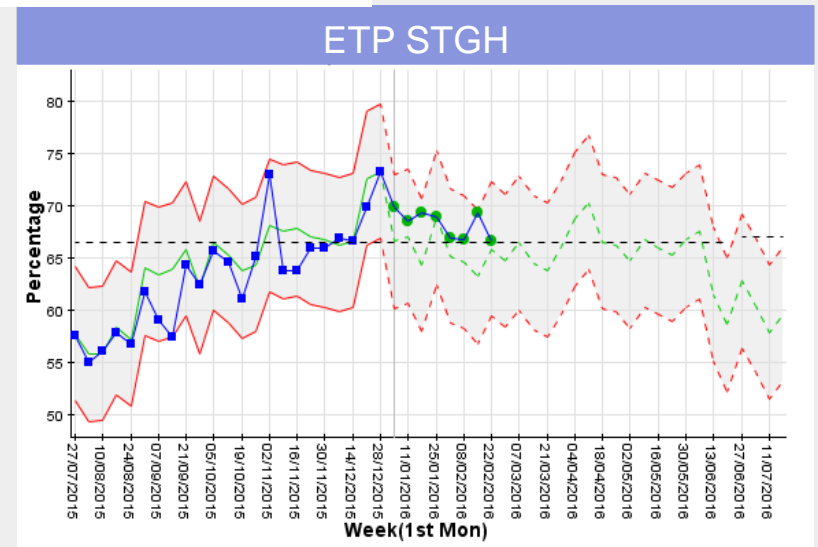
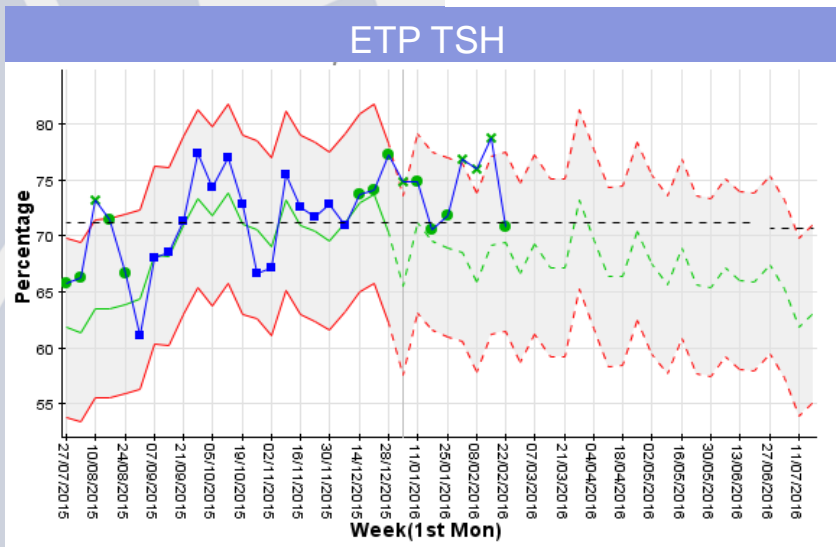
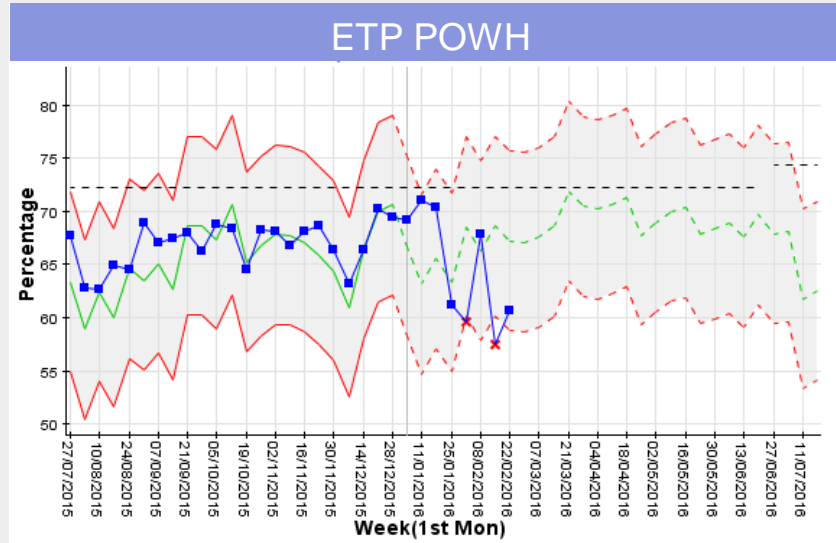
Emergency length of stay for overnight admissions Adults 16-74

Emergency length of stay for overnight admissions Elderly (75+)

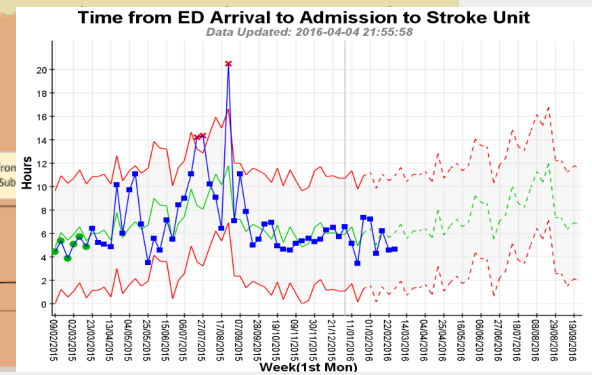
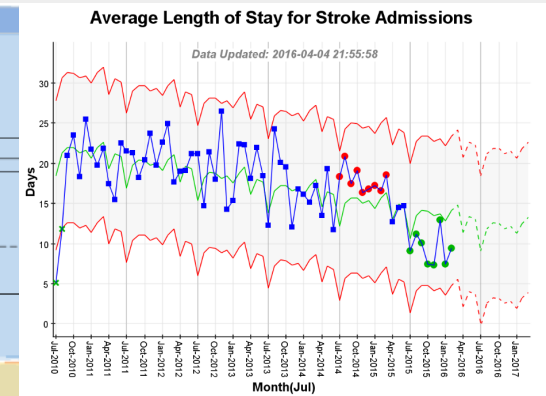
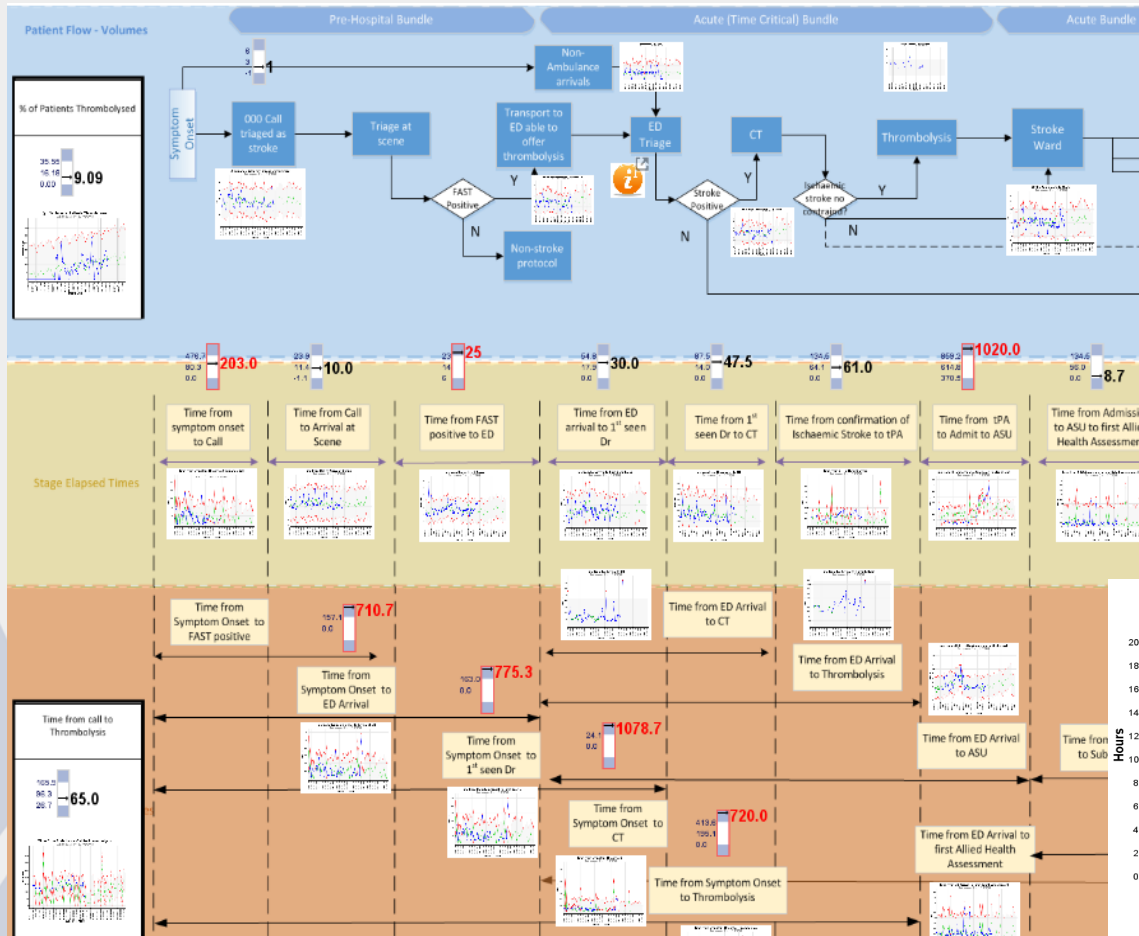


- The pattern of planned and unplanned admissions is stable and predictable
- Overall ED presentations are highest in summer and lowest in winter, but the opposite is the case for elderly patients
- Elderly patients aged over 75 are a small proportion of ED presentations but account for the whole of the winter capacity problems
- The length of stay for admitted Emergency patients is excessively long and increases in the winter months
- A focus on changing the pathway for a relatively small number of elderly patients will have a disproportionately large effect on the overall flow and capacity within the system

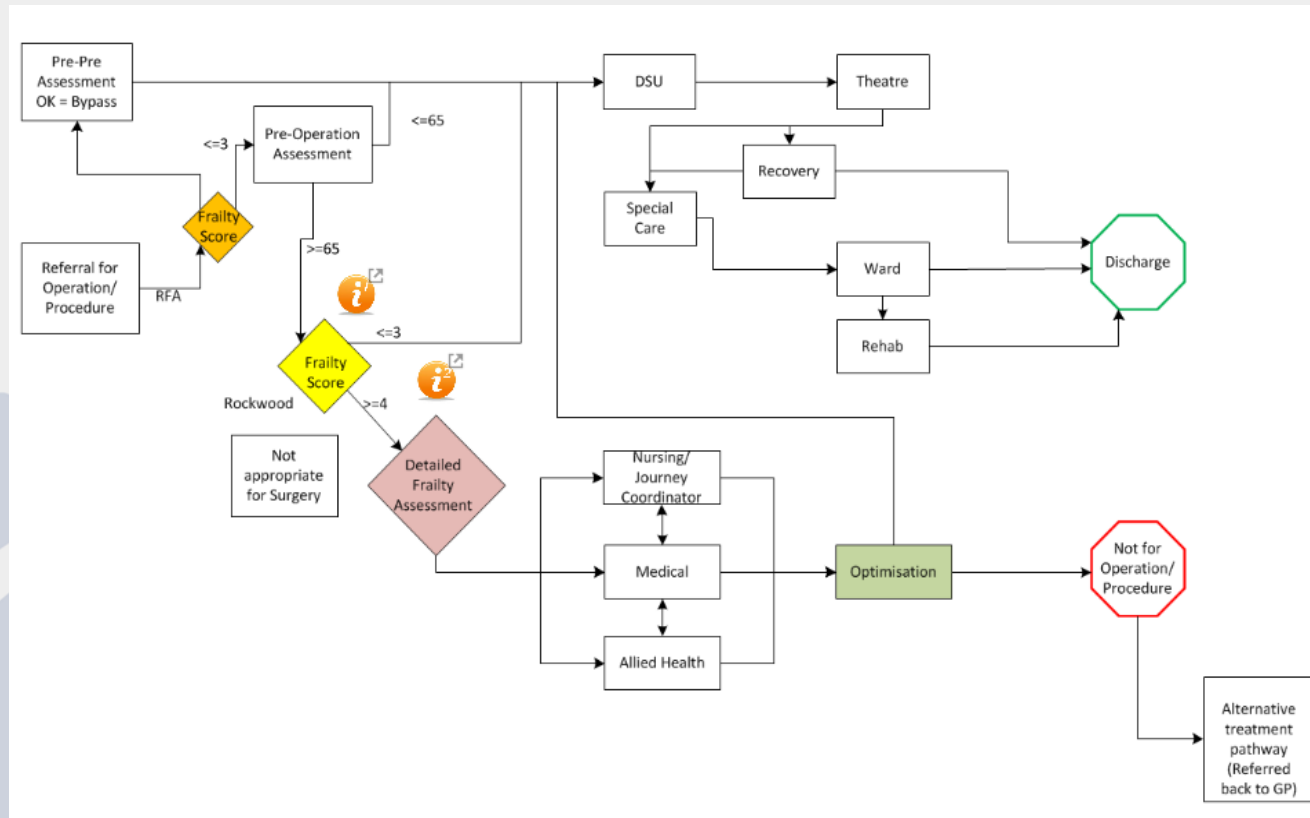
Opportunity for prediction



More than just control charts- unwarranted clinical variation

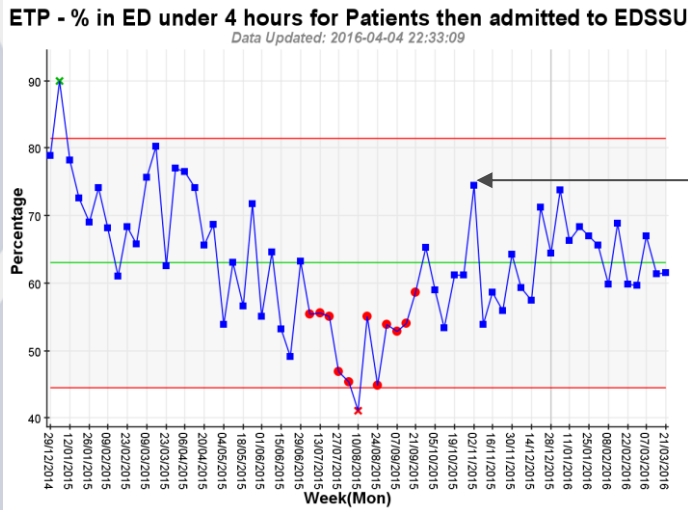
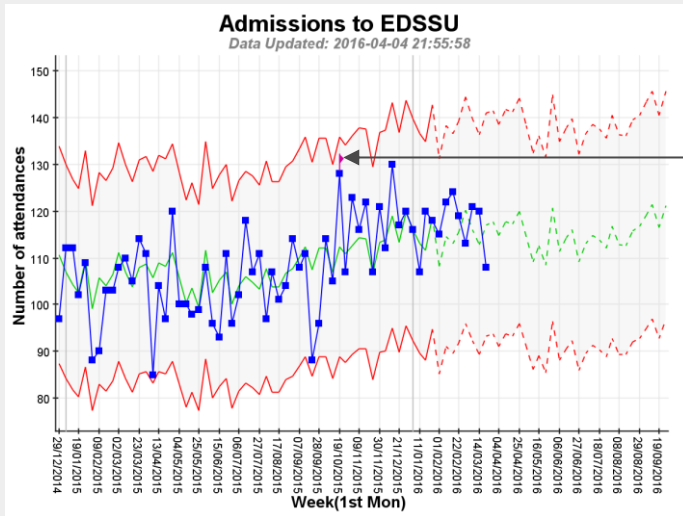


Its model for service improvement that allows clinicians to understand and map their pathway



Flags Tests of Change and tracking what works

- Commencement of the EDSSU Value Stream aimed at using capacity differently
- Understanding the barriers to EDSSU utilization in the context of the move to the new ED



- The outcome measure:
ETP for EDSSU:48%-72%



The opportunities

- Linking strategic imperatives and a focus on:
 - Person centered health and care service
 - Unscheduled Care
 - Integrated Care
 - Unwarranted Clinical Variation
- Governance and letting the clinicians decide (ownership and investment)
- Debunking the assumption of what we thought we knew



The value streams and test of change

- Uncovering Frailty as an issue: 80% of these patients are spread over 12 specialities, with 25% under aged care.
- Testing that measuring frailty and intervening early makes a difference to the outcome of care.
 - Introduction of Frailty assessment in high risk patient groups (Elective/Scheduled care)
 - Early assessment and planning around social care with a frailty CNC
 - General Medicine as the physician of first resort in the management of high risk/vulnerable patients

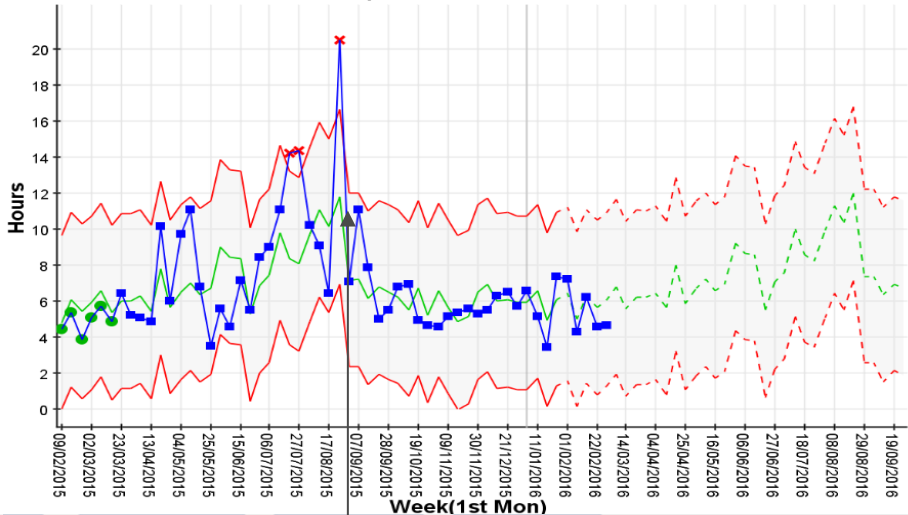


The value streams and test of change

Stroke: Unwarranted Clinical Variation and real time tracking of clinical variation against the Stroke Pathway to improve outcomes

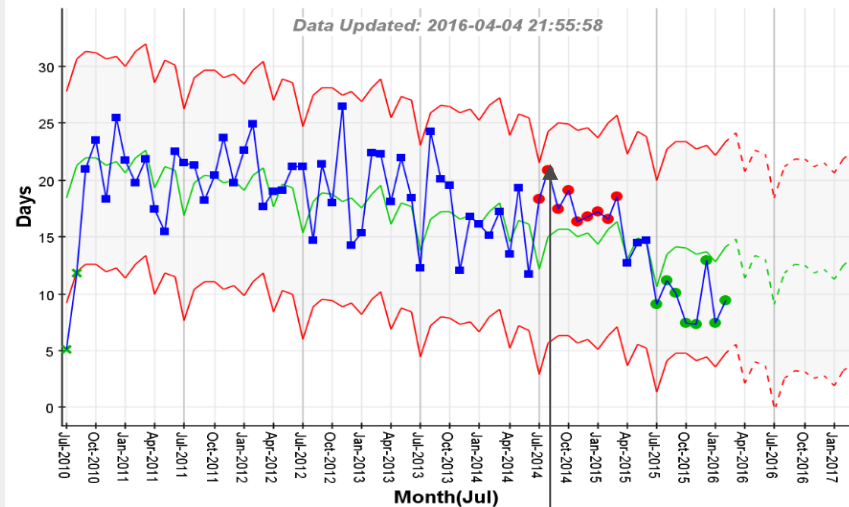
Time from ED Arrival to Admission to Stroke Unit

Data Updated: 2016-04-04 21:55:58



Average Length of Stay for Stroke Admissions

Data Updated: 2016-04-04 21:55:58



Stroke value stream commenced



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The value streams and test of change

Unscheduled Care: EDSSU:

- using the capacity differently: latent capacity
- Introduction of EDSSU Nurse led discharge



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Future direction

- Expanding pilot to other facilities/services within SESLHD
 - Prince of Wales, Sutherland and Mental Health Services
- Building capacity and capability
 - Improvement consultants, performance analysts, planners and skilled leadership in Lightfoot
- Monitoring outcomes against those currently predicted and building an evidence base for change
- Continued development of clinical engagement and leadership

