

Redesigning Care at the Flinders Medical Centre: Postcards from the Lean edge

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FLINDERS MEDICAL CENTRE



Why Lean?

- The Flinders Medical Centre is a medium sized teaching general hospital in Adelaide, the capital city of South Australia.
- By most standards, it is well equipped, with well trained staff, who had been doing most of what modern, progressive, health care providers know how to do.



Why Lean.

By the winter of 2003, we were close to institutional breakdown.

As the director of Clinical governance for the hospital, I had declared our emergency department to be systematically unsafe; an external review told us it was worse than we had thought.



Why Lean?

- Clearly, we had a problem.
- But what kind of problem?
- We thought it was a problem of capacity.
- But when we added more capacity (more beds) things got worse, not better.
- Actually, we had a problem of vision.



Why Lean?

- We thought we were a High reliability, low risk, pretty efficient organisation.
- Now know that, like almost all other health care providers, we were (and are) a low reliability, high risk, wasteful organisation.



Why Lean?

- We were used to seeing clinical diagnoses, professional skills, and business units.
- We needed to start seeing Processes not Operations, flow not ‘appropriate or inappropriate patients’, value streams not discipline or departmental silos, waste not ‘that’s just how we do it’, and pull, not push.



How did we start to go Lean?

- Being at the end of the world has it's advantages. Not knowing any better, we decided to do it ourselves.
- We needed the knowledge and we wanted to use it our way (and anyway, there wasn't anyone to tell us about Lean Healthcare).



How did we start?

- We came across process mapping on the net.
- We were introduced to Lean thinking via the British NHS Modernisation agency.
- Our first Lean intervention worked so it was ‘on for one and all’.



How do/did we get the knowledge?

- We formed an improvement team including senior managers and clinical facilitators.
- The team got the knowledge from books and local Lean sources.
- And continues to learn ++ from experienced Lean practitioners.



How are we organised?

- Initially, as three streams.
- Each stream has a senior clinician ‘stream leader’ (all are supportive, not all are direct participants).
- We have added two more streams over time (support services and mental health).



What do we do?

- Change in our health care system can only be by agreement- you cant force people to do anything.
- We proceed via a well-defined sequence.
- We can't miss a step.



What do we do?

Step 1-Scoping and Metrics (*burning deck, participation of process owners, how will we know if we are making a difference, institutional and owner specific goals*)

Step 2- Diagnostic phase- absolutely vital: *big-picture mapping (generates engagement) real life tracking (confronts assumptions), value stream identification, value stream mapping (creating Lean vision, making invisible work visible), don't start with the solution.*



What do we do?

Step 3-Intervention: *Identification of value streams central preparatory task.*

Value streams health care- groups of patients (or processes) whose care needs are sufficiently similar for them to be managed together, whatever their clinical diagnosis or discipline base.



What do we do?

- Use mapping, tracking and data analysis (thanks Ian Glenday).
- Over and over again, look for short or long, simple or complex.
- Green stream improvement is counterintuitive.



What do we do

- Interventions come from the ‘muda’:
- Use PDSA.
- *Control the chaos, reduce queues, eliminate waste, create pull systems, begin visual management;*
- *Feel brave and start to tackle standard operating procedures and standardised work (very hard).*



Sharing the knowledge and creating a sustainable change

- Hospitals are very large and complicated places- No amount of communication is enough.
- Making change sustainable, changing the culture, is a long haul.
- Constancy of purpose is hard to find in the highly politicised environment of public health care.

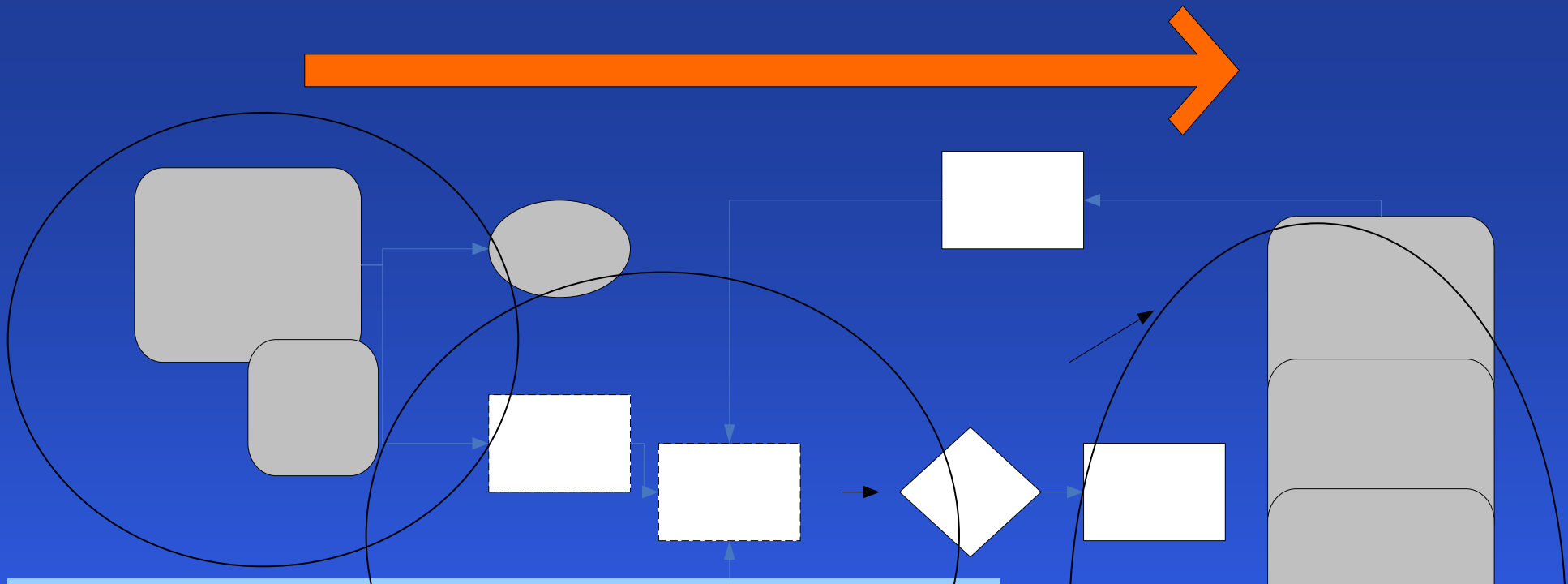


A whistle-stop tour of what we have done.

We have concentrated on our burning deck, the adult emergency patient journey from arrival through to discharge.

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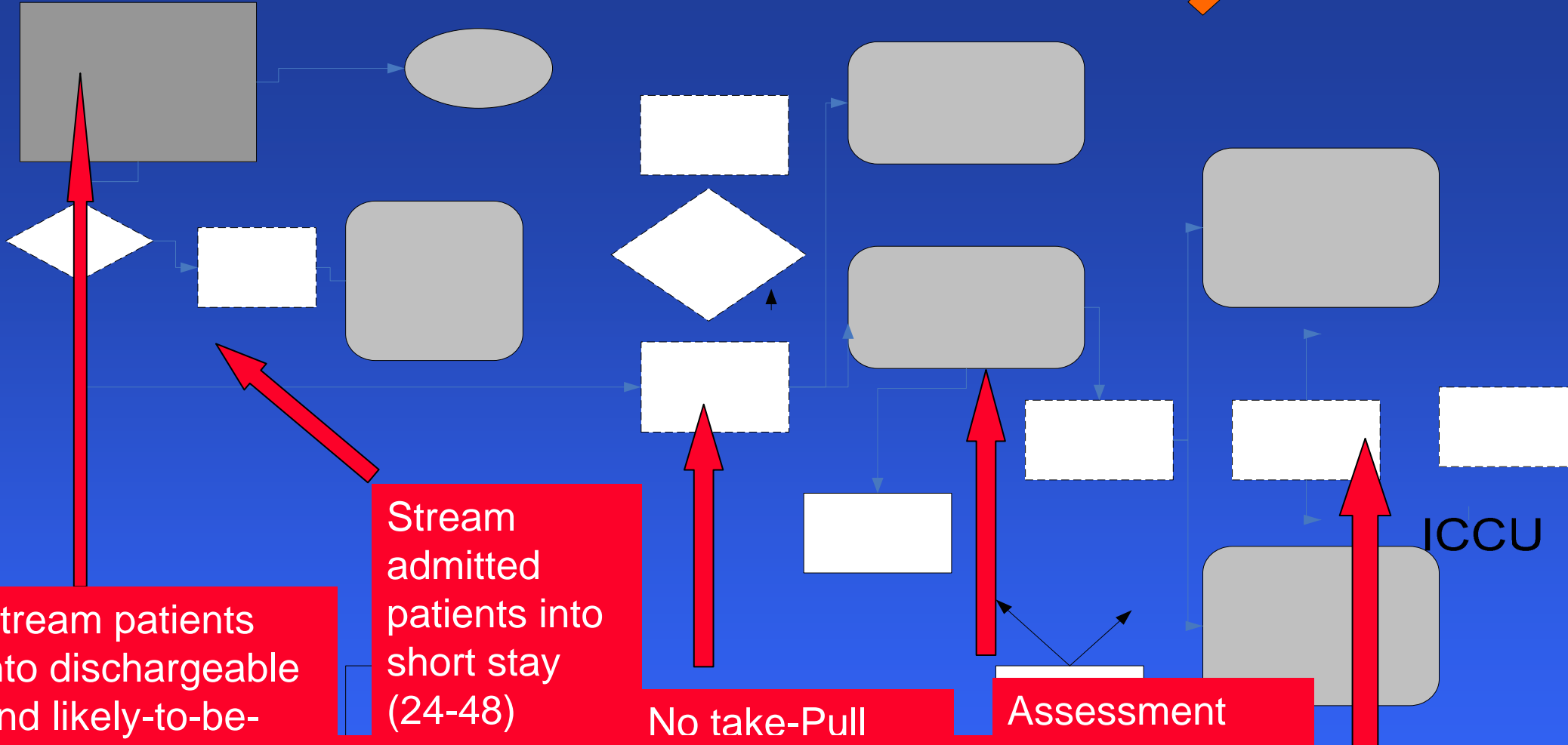


Complex queues related to 5 clinical priorities processing, increasing n

Failure demand by "take" s rotation between teams ge congestion, requires centra dispatcher who over-rides needs.

Loss of ward differentiation causes excessive motion and transportation of staff, patients and supplies

ED



Stream patients into dischargeable and likely-to-be-admitted. Use Redesign Processes with broad impact-pharmacy FIFO for both services, access to endoscopy, CSSD, begin 5S in medication rooms.

Stream admitted patients into short stay (24-48)

No take-Pull

Assessment

Load ling een units at 8am

Short stay (24-48 hours)/Long

Has it made any difference?

- The hospital has pulled back from the brink.
- Serious adverse events have been more than halved.
- Hospital mortality is declining.
- We are off the front page!



With the same infrastructure and appropriate staffing levels;

- This winter 15-20% more work in our Emergency Department and wards.
- ED more acceptable- quicker care, fewer (but still too many) long delays.
- Turnover in the wards is more rapid (20% growth in admissions, but only 7% growth in Occupied bed days).
- The surgeons are happier.
- Staffing is reasonably stable and we are coming in on budget.



What have learned about lean?

1. Health care is a high risk, low first time quality industry (an adverse event occurs in 16% of hospital separations, 4% of which are fatal).
2. Health care workers try very hard to do a good job.
3. Acknowledging the gap between health care and modern service and manufacturing is still very challenging for all of us.



What have learned about lean?

- Healthcare is not different.
- Everything about Lean is relevant to our health care industry.
- Lean can save healthcare.
- It can produce the same degree of change as seen elsewhere.



What have learned about lean?

- At Flinders, we are in the middle of the beginning.
- It sure ain't easy!

