Lean Healthcare Summit

Lean Practice and Value Streams

Operating Theatre Utilisation

discussion workshop 26 June 2007

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Overview of presentation

- Practical approach with examples based on Clatterbridge Hospital rapid improvement workshop May 2006
- Defining our problem
- Understanding our patient's journey
- Finding our green stream
- Lessons learnt

B.U.P.A.
MURRAYFIELD
WHIFFS BOX
"TARR FOR MAKIN ME BETTER"
(WITH - APOLOGIES!)
Jeannie
1991

Aim

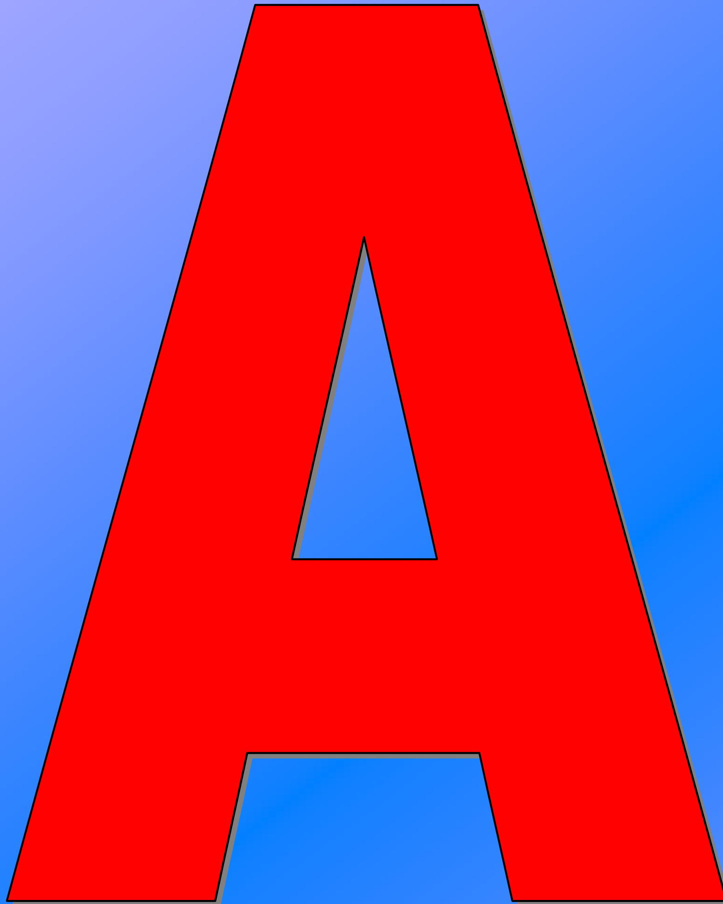
To improve the quality
of the patient's journey

Consider ….

Have you ever met a surgeon who doesn’t want to operate?

How often have you met a surgeon frustrated that he can’t get his case to theatre?

Where is the problem?



- Porters?
- Anaesthetists?
- Theatre staff?
- Surgeons?
- Management?

- Solution?
  - More staff, more time, more resources……..

Value stream map

Get down to the shop floor and walk the walk

Understand sequence of events

- Referral & OPA
- Pre-op assessment
- Admission
- Theatre
- Recovery & return to ward
- Discharge
- Follow up

The Glenday Sieve

% Cumulative activity	% “task” Range
50%	6%
95%	50%
99%	70%

Clatterbridge green stream

• LA & GA cystoscopy	26%
• hip/knee replacement & ‘scopes	9%
• hernias & vvs	7%
• lumps & bumps	4%
• lower GI endoscopy	3%
• carpal tunnel	3%

4.2% of procedures account for 52% of throughput

Agree green list rules

- 'Green' or 'green start' lists printed on green paper
- Identify start, break and finish times
- No changes to order of list
- 4 weeks notice of list cancellations
- Standardise equipment
- Daily co-ordinators meeting

Orthopaedic example

- Rules
  - Tuesday all day list CGH
  - 4 primary knee replacements
  - 8.30 start in anaesthetic room, 17.00 finish
  - breaks and lunch to be taken flexibly to allow continuous working
  - list co-ordinated by Mr Parkinson/Margaret Hill x 4365

Co-ordinators meeting

- Identify issues disrupting flow through theatre on previous working day

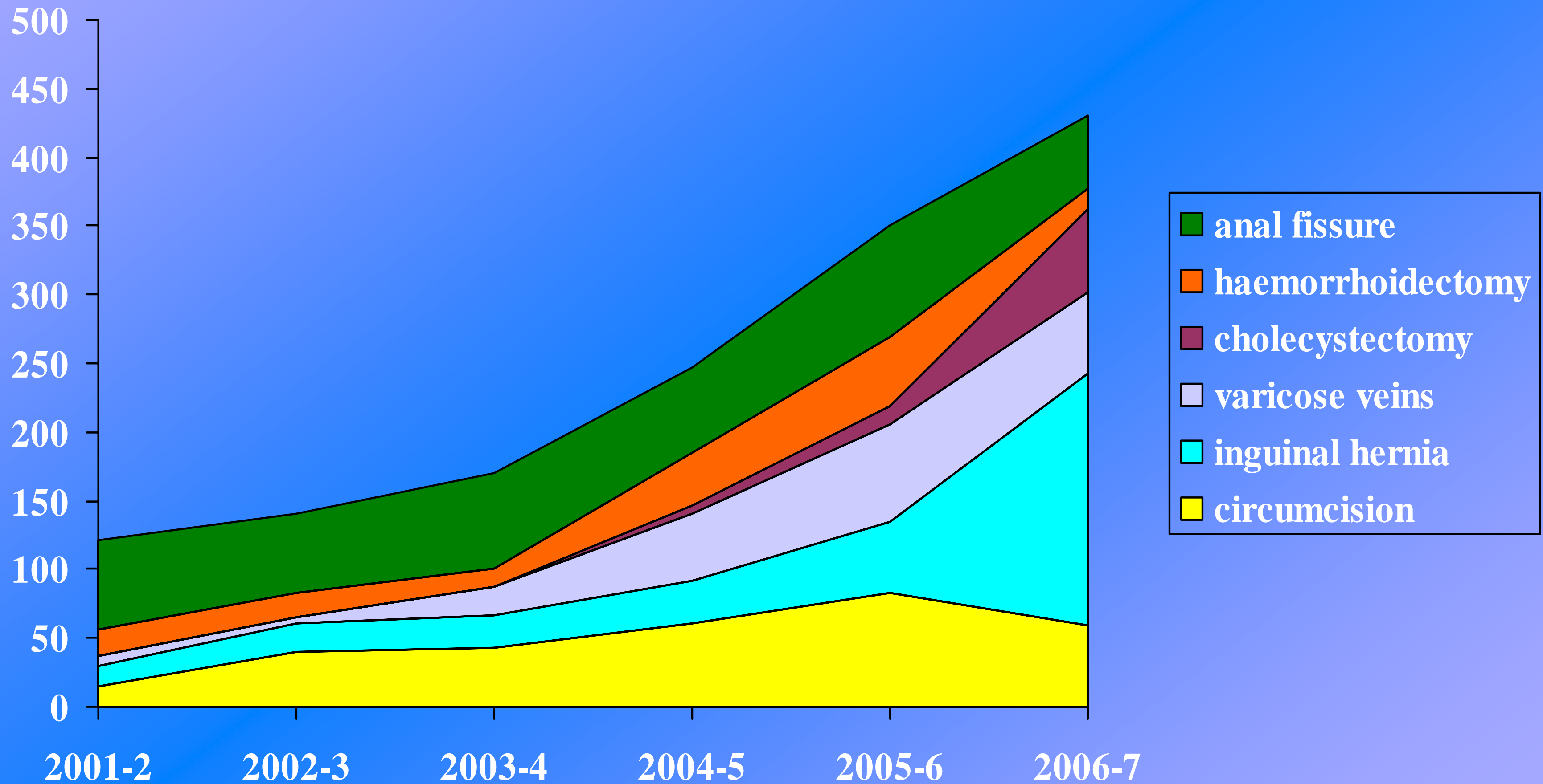
- Predict and aim to prevent issues which might arise today

- Knowledge shared

Results in other areas

- Pre-op assessment streamlined
  - ECGs and bloods done in department
  - 29% increase in same day assessment
  - orthopaedic pre-op review clinic transferred to ward area

Day unit throughput increased by 33%



Day unit changes

- Day unit throughput increased by 33%
  - LAs separated from GAs
  - beds replaced by trolleys
  - in patient beds reduced
  - national move to increase day cases

Ward changes

- In patient ward flip
  - 28% reduction in bed base
  - £147k yearly savings

Niggles

59 issues identified as fixable

74% fixed 26% actioned

Need a mechanism to identify problems

No problems means problems

Problems lead to opportunities

Impact

- Improved performance and efficiencies
- Identifying and eliminating bottle necks
- Improved communication between teams
- Predictable scheduling and theatre lists
- Highlights capability and capacity opportunities
- Less firefighting, less confusion, less uncertainty
- Improved morale
- Do more with less

Lessons learnt

- Committed team to progress actions
- All day lists need all day staff
- New surgeons and new lists set up as green
- Prospectively measure theatre utilisation and publish
- Work with early adopters, don’t waste time on laggards

Future?

- Every member of the team valued
- Annualised hours
- More flexible working
- Pooled waiting lists for common conditions
- Less inventory on shelves
- Niggles considered normal
- Continuous process - never finished