

Emergency Department Bed Utilization Project

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Aim

By July 31st, 2015

90% of patients triaged to Sub-/Acute
Brought to a bed for assessment
Within 60 minutes of triage.

Change Ideas

Change #1

Transitional Care Area (TCA)

- Goals:** 1) Balance supply-demand
2) Optimize provider-patient interface
- Intervention:** Designated waiting area inside department for fully assessed, stable patients awaiting treatment plans and prior to discharge
- Strategy:** Buy-in from frontline workers initially challenging, but using adaptive leadership and multi-modal communication strategies, staff engagement became strong

Change #2

Streamline Bed Turnaround

- Goals:** 1) Reduce variation
2) Improve communication and workflow
3) Use auditory cues
- Intervention:** Walkie-talkies for use by front-line staff to exchange real-time bed occupancy information
- Strategy:** Performance feedback demonstrating poor turnaround times encouraged staff engagement and understanding

Measures

Measures	Sources of data
OUTCOME: • Triage-to-bed time	Administrative database of ED patient-level data
PROCESS: • Bed turn-around time • Bed idle time	Multiple, sequential spot audits
BALANCING: • Patient and staff satisfaction	Formal and informal surveys and reports

Tests of Change

Transitional Care Area (TCA)

SUCCESSSES

- Leadership and frontline involvement
- Important criteria developed for patient safety
- Logistical improvements that can be re-used



CHALLENGES

- Although feasibility audits encouraging, fewer patients than expected appropriate for TCA
- Workarounds created by staff over years in a culture of 'doing more with less' made TCA challenging to implement over the short run

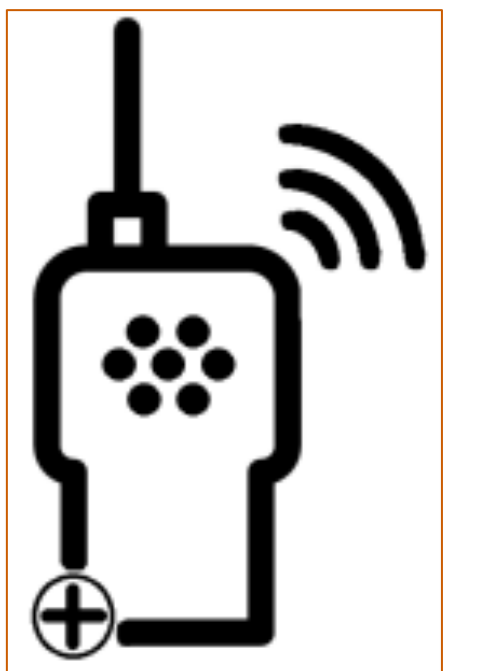
OVERALL

- Cannot overcome cultural challenges on short-term basis
→ Pivot away from intervention for now

Bed Turnaround

SUCCESSSES

- Great uptake and enthusiasm
- Improved inter-disciplinary communication
- Confirmed importance of real-time communication



CHALLENGES

- Sustainability of intervention

OVERALL

- Simple and inexpensive solution to long-lasting issue
→ Implemented as the new normal

Results

Triage-to-bed Time

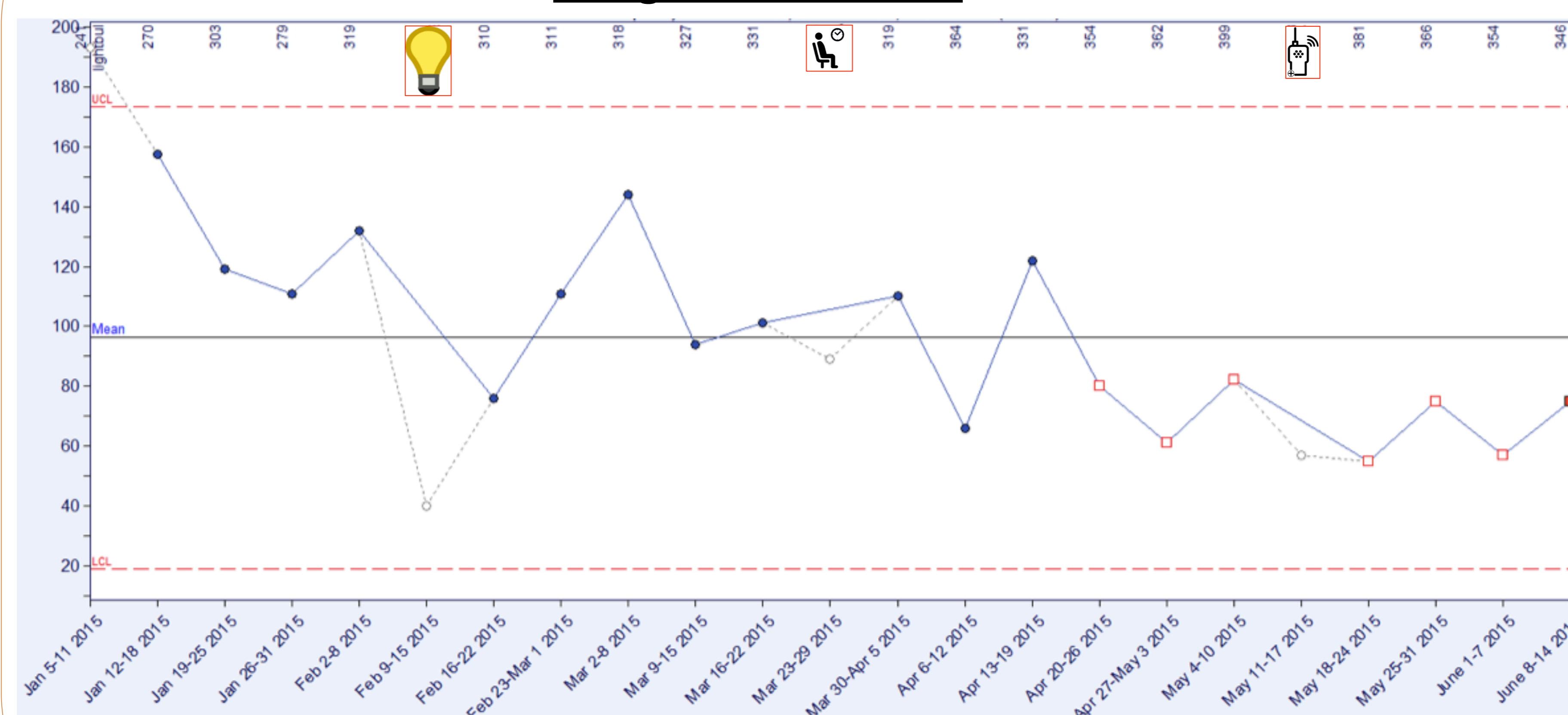
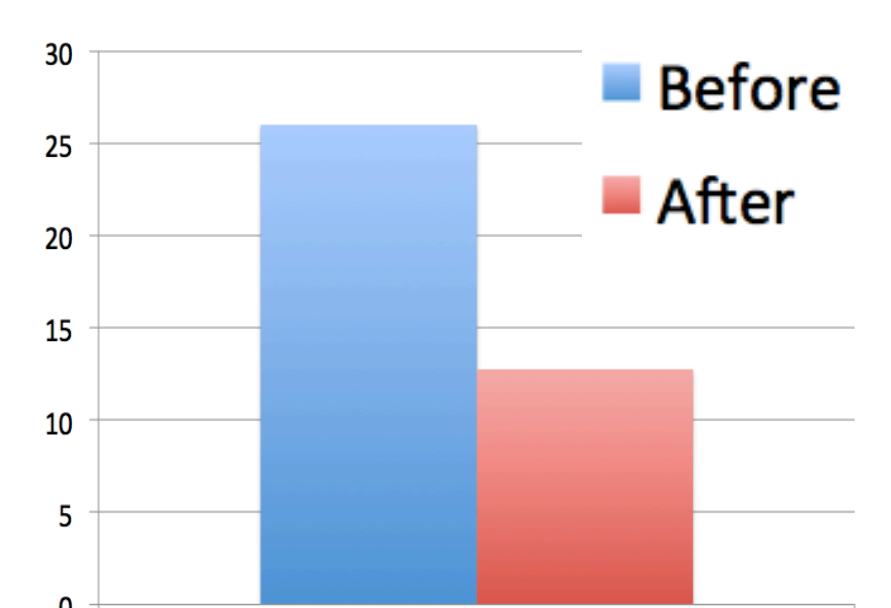


Figure 1. Stewart control chart of weekly 90th percentile of triage-to-bed time; special cause variation identified at weeks 14 through 21 (open red squares). Light bulb = time of conception of project; patient in chair = time of TCA testing; walkie-talkie = changes re: bed turnaround times tested.

Bed Idle Time



Time that beds stayed empty and clean between successive patients before and after the introduction of walkie-talkies.

Organizational Enablers

RESOURCES

- Trivial resources for TCA
- Minimal cost of walkie-talkies

PEOPLE

- Enthusiastic and open-minded frontline staff
- Openness to change, including new ways of working, and understanding of delayed success
- Commitment to proper evaluation

CULTURE

- Pro: support of leadership enabled larger-scale and rapid changes
- Con: culture of 'workarounds to improve patient care' prevented TCA success

SYSTEM

- Institutional & governmental administrative priority (wait times in ED) informed & influenced entire project

Lessons Learned

- Balancing priorities is constant challenge: e.g., institutional/provincial deliverables at odds with public health crises (i.e. Ebola virus) and city-wide planning (i.e. Toronto Pan-Am Games)

- Staff engagement crucial for success, but not sufficient to drive culture change

SUSTAINABILITY

- Degree of gains maintained through continued communication with frontline staff (e.g., emails, morning 'huddles')
- Successes due to Hawthorne effect and initial enthusiasm have been hard to sustain

SPREAD

- Plan for spread includes second institutional ED site (Toronto General Hospital, Canada)

