

# Qualitative results from a patient flow improvement pilot project to improve Emergency Department waiting times

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# Acknowledgements

## *Funding from:*

- Ontario Ministry of Health and Long-term Care (MOHLTC).
- Canadian Health Services Research Foundation (CHSRF):  
*Research, Exchange and Impact for System Support (REISS) Grant*
- CIHR Applied chairs in Health Services & Policy Research Program.
- ★ Health professionals; organizational change facilitators/consultants; decision makers; and ICES research team.

# Outline

- Background
- Qualitative evaluation:
  - ▶ Intervention profile;
  - ▶ Results;
  - ▶ Implications for decision makers.

# Background

- Ontario's ER/ALC Strategy (2008)
  - ▶ Reducing the time patients spend in emergency rooms (ER) is a complex issue that **requires improvements throughout the entire health system.**
    - Providing Ontarians appropriate and accessible healthcare alternatives;
    - Increasing **capacity and improving performance within the ER using a hospital-wide approach;**
    - Speeding the flow of patients from the ER by addressing community-based and local LHIN care solutions for ALC patients.

# Background

Vol. 11 No. 3 2008



Healthcare Quarterly, 11(3) 2008: 38-49

## **Creating Sustained Improvements in Patient Access and Flow: Experiences from Three Ontario Healthcare Institutions**

Hugh MacLeod, Bob Bell, Ken Deane and Carolyn Baker

- Hospital case studies:
    - ▶ St. Joseph's Health Centre (SJHC), Toronto;
    - ▶ London Health Sciences Centre (LHSC) – University Hospital;
    - ▶ University Health Network (UHN) - Toronto General and Toronto Western.
  
  - ▶ The three pillars of sustainable transformation/Advice for other hospitals.
- ★ Absence of independent evaluation.

# Objectives

- To evaluate the pilot intervention model; and identify key success factors to guide the development of a broader patient flow improvement program: *The Ontario Emergency Department Process Improvement Program (ED-PIP)*.
- Pilot evaluation methods.

## Pilot

- ▶ Ontario city population ~ 157,857 (2006);
- ▶ Regional academic referral centre for trauma, surgery, medicine, psychiatry, and pediatrics;
- ▶ Single, large volume (> 70,000) ED staffed by full-time ED MDs;
- ▶ **Problem:** long-standing ED overcrowding.

# Intervention Design

## Intervention Foundations:

- ▶ Team assignments (ED, Admissions, Discharge); and front-line staff engagement.
- ▶ Decision Support – Daily Patient Flow metrics.
- ▶ Patient flow diagnostics.
- ▶ Applied “lean” framework:  
Value stream mapping: *ER presentation through to discharge*; and other LEAN tools.

## 9-week Solution Implementation

- ▶ Development of ‘actions plans’  
40 separate ‘solution pilot’ interventions, implemented in 4 phases:
  - i. Preparation (leadership, team charter, resources, evaluation metrics);
  - ii. Education & staff orientation;
  - iii. Pilot-implementation and monitoring; and
  - iv. Post-pilot evaluation and reporting.

# Qualitative Evaluation

## Method:

- In-person focus-groups:
  - ▶ ED, Admissions & Discharge teams; (n =23); and
  - ▶ 1:1 executive (n=3) interviews.

## Analysis:

- Grounded theory design:
  - ▶ Identifying and coding (manual) positive and negative references to program implementation and sustainability.

# RESULTS

## Key Success Factors

- Dedication of resources: A hospital-wide approach requires a hospital-wide focus.
- Change experts with health system expertise and commitment to shared learning: External support and team building.
- Integrated communication strategies between intervention teams and across organization. Planning in silos produces disjointed efforts.
- Visible senior leadership support and engagement of IT/Decision Support throughout the process.

## Importance of external constraints

*“It’s hard to improve flow in the system when there’s really no flex or give in the system. Our main purpose is to make things clear and transparent and reduce the conflict among the floors and the registration team.”*

-Intervention team member

# RESULTS

## Lessons Learned

- Improved communication, change culture and capacities (collaboration & coordination).
- Transparency of patient flow processes.
- Improved concordance between General Medicine wards, the ED, and the Registration team. Patient flow became a valuable system-wide goal.
- Importance of qualitative evaluation.

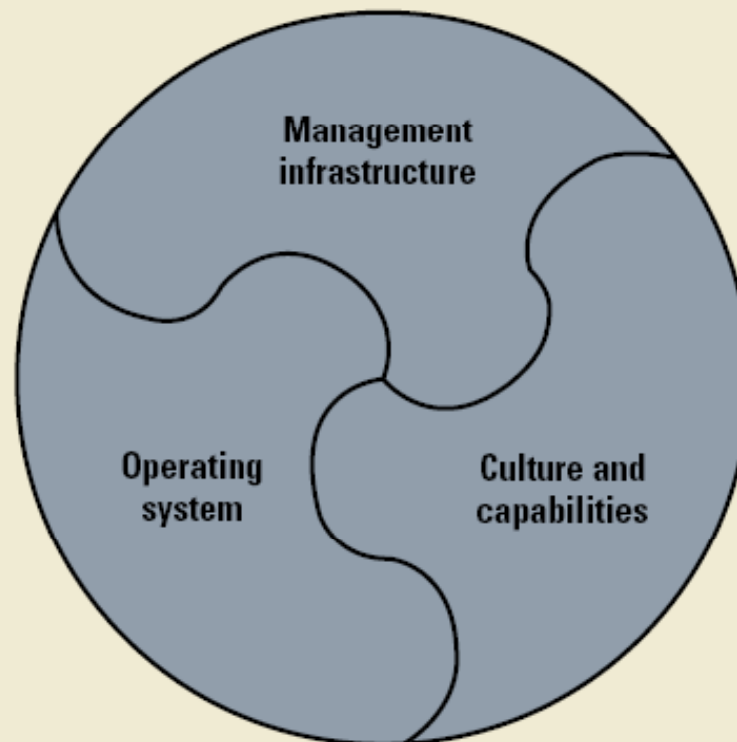
# Implications for design of the Ontario ED-PIP

- Implementation period, pace and resources (Dedicated staff secondment)
- Program transparency (Intensive Training week).
- Engagement of Sr. Leadership (Forums).
- Regional Networks (LHIN engagement, Forums).
- Local versus 'Toolkit' solution pilots.
- Diversification of evaluative metrics for assessment of solution pilot effectiveness (qualitative and hospital surveys incorporated).
- Physician engagement strategy.
- Sustainability vision and enablement.

# Three pillars of sustainable transformation

- Clearly defined roles and performance expectations
- Improved visual management
- Frequently measured and widely shared operational metrics
- Clearly defined Key Performance Indicators (KPIs) and accountability

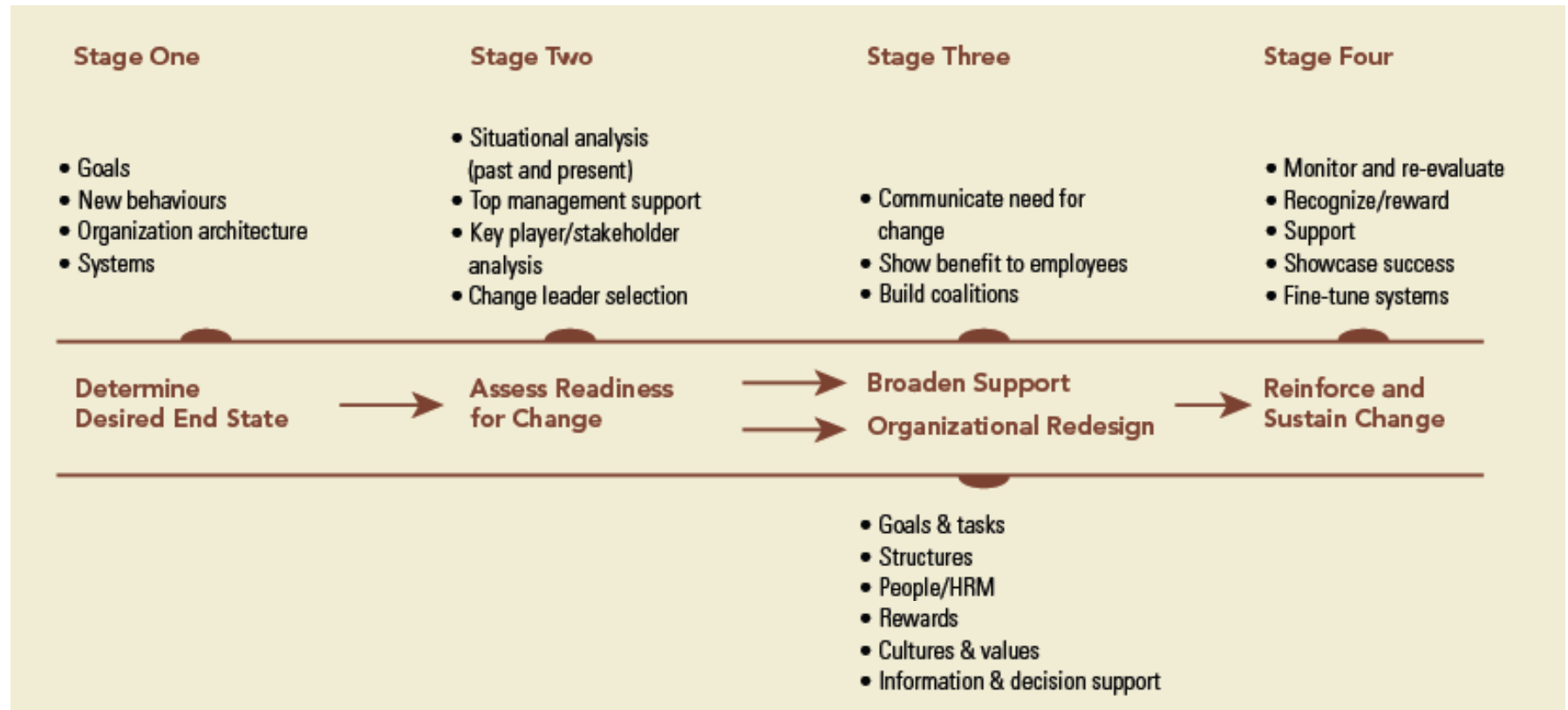
- Standardized and optimized processes
- Non-value-added activities eliminated
- Improved equipment availability
- Better workspace organization
- Staffing adjusted to demand



- Engagement of staff and physicians in problem solving
- High willingness to continuously improve operations

*MacLeod H, et al., (2008) Healthcare Quarterly Vol.1 (3)*

# Transforming Healthcare Organizations



*Golden, B (2006) Healthcare Quarterly Vol.10, special issue*