

A Fresh Start through ED PIP

After consolidating two hospital sites to a brand new state of the art facility, undergoing a peer review, negative press and new executive leadership, Peterborough Regional Health Centre was ready for change...

CHAPTER 1: The Diagnostic Phase

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Introduction

Emergency Department (ED) overcrowding has long been a struggle for hospitals across Ontario. The ED acts as a gateway to the healthcare system for many people and as such, improving access to care has been a core part of Ontario's healthcare agenda. Over the last few years, health system planners and advisers have come to understand the root causes of the ED overcrowding as a symptom of a larger, system problem. As such, the improvement focus of the hospitals has shifted from ED specific processes to broader clinical process transformations between inpatient care and the ED.

Since hospitals in Ontario have become more accountable for their performance related to ED wait times and ALC days, Peterborough Regional Health Centre has been challenged to meet some of their provincial performance targets. The hospital has been under significant pressure for the last few years from consolidating clinical services from two hospitals into a new single site hospital, undergoing a peer review, fighting hospital deficits or managing through leadership transitions.

In the spring of 2010, Peterborough Regional Health Centre was looking for opportunities to address access and quality issues as well as to begin to shift negative public perceptions from the community in efforts to restore public trust in the hospital.

The hospital Leadership identified the need for change. In addition, the hospital staff knew that change was required. In late 2009, the hospital focus was on what they termed "renew projects" to address efficiencies and process improvement. As part of this effort, a broad audience (including the community and front line staff) was engaged to generate ideas of what needed to change. Over 2,400 suggestions were made, of which over 250 were around bed utilization. Addressing improvements in utilization became a priority within Peterborough's quality improvement strategy.

To address their issues around patient flow and access, PRHC volunteered to participate in Ontario's ED Process Improvement Program (*see sidebar*). The hospital liked the program's use of Lean methodologies and the structured approach that they would follow with their peers across the province.

About ED PIP

The ED Process Improvement Program (ED PIP) is a component of Ontario's ED ALC Wait Time Strategy. ED PIP is designed to support improvements to patient flow and build capabilities within hospitals for long term sustainable change.

ED PIP began in early 2009 with five hospitals in one [Local Health Integration Network \(LHIN\)](#). Two additional waves were undertaken (wave 2: Sep 2009 - May 2010; and wave 3: May 2010 - December 2010 which include the participation of over sixty hospitals across Ontario. Additional waves will kick off in early 2011).

ED PIP uses a Lean improvement approach based on learning from health care transformations in Ontario and globally. Improvement teams in hospitals examine end to end patient flow from arrival in the ED through to discharge from the floors. Each improvement wave lasts approximately 8 months, including five phases (Prepare, Diagnostic, Solution Design, Pilot and Roll out & Control). Hospitals participating in ED PIP have support from expert coaches in health care improvement. The coach focuses on building internal capabilities so that hospitals can lead transformative improvements that can spread and be sustained across their organization. In addition, hospital teams have access to practice experts, regional training forums, an online collaborative tool, and a comprehensive toolkit outlining the ED PIP approach, tools and guidelines.

Case Study Methods

To mirror the core phases of the program, this case study represents the first of four case studies documenting Peterborough's ED PIP journey. Following each of the four program phases¹, key stakeholders will be interviewed to provide insights on the experiences, outcomes and lessons learned specific to each phase. During each phase, the case will examine the following topics of interest:

1. Objectives of the phase
2. Engagement
3. Using evidence to build capability and drive improvement efforts
4. Outcomes and achievements
5. Sustainability
6. Lessons learned

In addition, a final overview will be composed that ties together each of the individual components.

¹ The four core phases of ED PIP are Diagnostic, Solution Design, Pilot, & Control and Roll Out

Diagnostic Phase

The objectives of the Diagnostic Phase are:

- 1. To define the current state through quantitative and qualitative fact based analyses; and*
- 2. To identify issues, understand root causes, and generate and prioritize improvement opportunities*

Engagement

Overall, the culture in the hospital has remained generally positive, despite many of the challenges facing the hospital over the last couple years. The staff at Peterborough Regional Health Centre have historically spent their careers with the hospital and feel invested in the success of the hospital.

The official launch of ED PIP was reinforced by the new CEO, Ken Tremblay, who announced that the Process Improvement Program represents more than just the ED. It needed to include the whole hospital. From PRHC's perspective, they dropped the "ED" and branded their improvement efforts as "PIP". The PIP team stood at the front of a town hall forum wearing racing coveralls supporting the internal branding of PIP with a race car inspired theme – *Faster... Smoother... Better...* The ongoing communication forums around this initiative became branded as *PIP Rallies*.

The medical staff culture in particular has been characterized as collegial and supportive; however, there are historical issues between medical staff and the hospital's administration. The introduction of the new CEO has begun to shift this overall tension.

Overall, PRHC has a stable group of physicians in the ED. This has evolved over the previous few years. Physician leaders in the ED are very committed to change and improvements. Through the diagnostic phase of the program, getting the front line physicians engaged has been a challenge. Like many improvement initiatives, there are a group of physicians who are sceptical and have resisted change. However, Dr. Nancy White (Chief, ED) and Dr. Tom Miller (Medical Director, ED) have made a considerable effort to engage their colleagues through:

- Hosting of an evening information session hosted by the provincial ED PIP physician lead;
- Department meetings which focused on the results of the value stream map;



- Encouraging physicians to review the value stream map with the ED PIP team leads and discuss issues with the ED Chief and the Medical Director;
- Representation of four physicians on the corporate Patient Flow and Access Committee; and
- Leveraging overall corporate communications related promote ED PIP.

Although the ED physicians have been engaged up front around ED PIP, the inpatient physicians have not been as engaged throughout the diagnostic phase. In fact, the program was without an inpatient physician lead for almost the whole phase due to internal issues not at all relevant to ED PIP. Although there was a missing link around inpatient physician contribution for the diagnostic phase, Dr. Vajid, a general internist/hospitalist was keen to step into this role and brings the enthusiasm needed of a department champion.

The hospital has also officially partnered with the local Community Care Access Centre to ensure that a comprehensive approach was taken to examining patient flow.

Using evidence to build capability and drive improvement efforts

As part of the ED PIP experience, there is a requirement for daily reporting of a number of key metrics. The program provided the hospital with access to the Daily Access Reporting Tool (DART) to monitor progress against key metrics daily. This information served as a focal point to engage management and front line staff and brought credibility to the hospital discussions.

By the end of the diagnostic phase the team seemed to find a rhythm to integrating data into their regular routines, but it was not a smooth journey for PRHC. Just prior to ED PIP being initiated, there were shifts in HR due to a restructuring that made it challenging to solicit the expertise required to implement the DART. As a result, the LHIN provided the hospital with another hospital’s customized template to use (already specified to integrate with their Health Information System –Meditech). Unfortunately it was accompanied by significant challenges in integrating that version into PRHC’s own systems.

Despite the technical challenge, the information from DART and other root cause analyses helped to dispel myths and identify the right areas of opportunity for the teams.

Outcomes and Achievements

One of the biggest challenges to participating in the ED PIP program during the diagnostic phase was balancing the demands from senior leadership looking for quick results with following a carefully structured approach to conducting a two month diagnostic to get closer to the root causes of the issues. The coach and administrative sponsor were helpful in balancing expectations and allowing the team to focus on the diagnostic.

What is Value Stream Mapping?

*Value stream mapping presents a pictorial representation of the flow of materials, people and process information from the beginning to the end. Value Stream Mapping is a **team exercise** – it builds the team and ensures that everyone understands the current “as is” process .*

Once the team was aligned on the diagnostic process, the value stream map (see sidebar) ended up being a great tool to engage a broad group of stakeholders and was used as a foundation. With this tool, the team didn't judge the information; rather they took it at face value and approached issues very objectively.

During the diagnostic phase, the team was able to dispel a number of myths once they uncovered the root cause. For example, they learned that rather than housekeeping being the cause of bed turnover delays (as initially suspected), it was actually due to batching on the floors to better manage workload on their end. As a result of the detailed investigations, the basic communication gaps became apparent to the team. This provided a very solid platform to shift the team into the next phase –solution design.

Although the diagnostic phase is not focused on improving results, there were some noticeable improvements as a result of increased awareness of the issues.

Sustainability

As PRHC undertook their journey in ED PIP, they began to think about sustainability. Given that they understood that ED PIP did not only deal with issues from the ED (but rather represented system flow issues), they internally labelled the program as “PIP”.

The benefits of dedicated team leads were emerging as an essential part of PRHC's early success. Through the introduction of PIP and the learning that the senior team (including the new CEO) went through about Lean Improvement methodology, they commissioned an independent process in parallel to invest in Lean as a corporate priority. What this meant to the organization was identifying key people across the organization to develop their capabilities and knowledge in Lean to be able to sustain the early benefits anticipated with PIP and begin to cascade the improvements across the organization.

In addition, the hospital was no longer thinking about PIP as an isolated project. Existing hospital committee and governance structures were being modified to ensure the right structures were in place to support the success of PIP and be able to support and drive the ongoing improvement needs across the hospital. For example, a new corporate committee was formed – the Patient Flow and Access Committee (PFAC). This group had evolved from a previous committee to address utilization issues across the hospital, but it began to provide support and oversight to PIP. In addition, PIP charters were part of the organization-wide performance improvement plan which had to be signed off by department chiefs, VP's, and medical directors prior to being discussed at their inter-program operations committee (which includes all medical/program directors and senior management) chaired by the CEO and Chief of Staff. This structure emphasizes accountabilities for improvements and through this structure creates ultimate accountability to the quality committee of the board.

Lessons learned

- **Credible data is critical in making the case for change.** If the data analysis does not have rigour, there are opportunities for physicians and others to dispute improvements by arguing that the

improvement approach is not grounded in the right facts. Given the thorough program structure of ED PIP, the case for change had a lot of credibility with key stakeholders.

- **More lead time during the Preparation phase would be helpful** in order to build awareness before launching into the project.
- **Knowledge of the current state is a “quick win”**. It provides a common understanding of issues and removes different assumptions that each individual has about the process. It helps people feel empowered and ready for change.
- **Making people aware of the data collection helps develop credibility** for the outcomes of the diagnostic phase.
- **Team selection is critical**. The skills required may include public speaking, advanced analytical skills, computer skills, facilitation, etc... Participating as a team lead or team member may be a good stretch opportunity, however, there should be a focused plan to help develop these skills.