BUSINESS IMPROVEMENT GROUP

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A DIFFERENT KIND OF EMERGENCY ROOM

Part 2

Abstract

We can guarantee our Lean Care Track system will fix these problems, but you must change the system…

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A Different Kind of Emergency Room – Part 2

- Do your patients wait for hours to see the doctor?
- Are your patients left without being seen (LWBS) metric >1%?
- Is your patient satisfaction low?
- Do you routinely use nursing protocols in the ED?

We can guarantee our Lean Care Track system will fix these problems, but you must change the system.

Traditional ED

At one time or another, we have all experienced going to an Emergency Room or in hospital speak emergency department (ED). In a typical ED model, you, the patient, enters what we call a "room-based" model. After being greeted and registered, you will typically wait for triage and then wait for a room. Eventually, you will be escorted to a room. Once there, all contact and treatment come to you, the patient.

ED's use an acuity scale from 1 to 5. 1 is high (very sick – chest pain) to 5 (a hangnail). In this traditional model for non-emergent patients (3, 4, 5), the waits can be devastating, with many times patients waiting 2 to 5 hours or more. In this model, the provider is the 5th step or maybe even the 8th step of the process.

This model functions fine until the ED runs out of rooms. This can be due to high patient arrivals in one hour or with boarding patients waiting to be admitted. Once that happens, and the rooms are full, you the patient waits, and waits, and waits.

In this traditional model, we measure the time from when you first arrive until you are moved to the ED room and then from the ED room to when the provider sees you. We call the overall metric door to doctor time (D2D). Typical data shows the providers see 1.4 to 2.0 patients an hour in this model, and additional data shows that the hospital norm is 45-60 minutes average for door to doctor time but can be much longer at peak times.

Protocols

Hospitals attempt to improve the overall time by using "protocols" at triage. This is an initial pre-treatment based on presenting symptoms. They may do blood draws, x-rays, etc.... based on pre-approval from the providers. Our data reveals that 50% of the time, protocols are incomplete, a wrong protocol to the symptom, or not what the provider needs.

Adding Beds

Hospitals will also try to add more beds. This is an expensive and ordinarily flawed solution. The metrics will improve until once again run out of beds. This is because the underlying system wasn't changed. Now the problem gets worse because you have more beds!

Fast Tracks

Hospitals add what is called fast tracks or express tracks, to speed up the process for some patients. This model sorts low acuity patients (4's & 5's) at triage and moves them to the front of the fast track line. Because, in theory, they can be treated simply & quickly. As a result, the level 3 patients (i.e., belly pain) suffer as they watch the really sick (1 & 2) patients and (4 &5's) patients get

treated right away while they wait... and wait... The fast tracks, which is a similar model to free-standing urgent care centers, utilize this room-based model. Again, this model works well until the rooms fill up. Have you ever waited over an hour to see a doctor at an urgent care center or fast track at a hospital? This is why.

The Business Improvement Group (BIG) 'Lean' ED Care Track Solution

We asked ourselves: Why do patients come to the ED? The answer is, "To see the doctor." So we move the doctor up in the process. In our Lean Care Track model, all patients are 'fast' tracked. (other than level 1 extremely critical and some high level 2's). Patients are seen in a first-in-first-out (FIFO) order.

The critical components in our model are:

- A quick registration & triage in parallel <1 minute
- Patients are then moved to one of two doctor exam rooms where they see the doctor.

After seeing the doctor, the patient goes to an area we called perform care where a nurse carries out the provider's orders. From there, the patient may go to x-ray, or they are moved to an area (results waiting) where they wait in hospital recliners.

The model focuses on making the provider's time as efficient as possible while increasing safety, quality, and reduced waiting time for the patient. We have learned that patients do not mind being moved through the process as long as they see progress being made.

Results

- Our door to provider time is typically less than 10 to 15 minutes with high volume EDs averaging around 20 to 25 minutes average. Our best case is 5 to 7 minutes.
- Our LWBS is close to zero, but we can guarantee less than 1%
- LOS drops by 10% or more
- ED Visits typically increase by 10%
- Doctor-patient ratio usually is 3 to 4 or more per hour – the best case has been 6 to 8.

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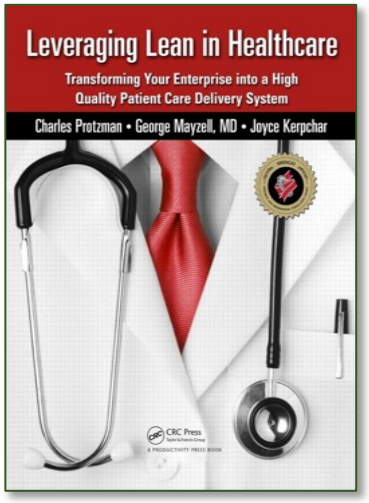
For more details check out the "Leveraging Lean in Healthcare," Winner of a 2013 Shingo Research and Professional Publication Award

This practical guide for healthcare executives, managers, and frontline workers provide the means to transform your enterprise into a High-Quality Patient Care Business Delivery System. Designed for continuous reference, its self-contained chapters are divided into three primary sections:

- Defines what Lean is and includes some interesting history about Lean not found elsewhere.
- Describes and explains the application of each Lean tool and concept organized in their typical order of use.
- Explains how to implement Lean in various healthcare processes—providing examples, case studies, and valuable lessons learned



This book will help to take you out of your comfort zone and provide you with new ways to extend value to your customers. It drives home the importance of the Lean Six Sigma journey. The pursuit of continuous improvement is a journey with no end. Consequently, the opportunities are endless as to what you and your organization can accomplish.

Forty percent of the authors' profits from this book will be donated to help the homeless through two Baltimore charities.

Praise for the book:

… well-timed and highly informative for those committed to creating deep levels of sustainable change in healthcare.
– Peter B. Angood, MD, FACS, FCCM, Senior Advisor – Patient Safety, in *National Quality Forum*

… the most practical and healthcare applicable book I have ever read on LEAN thinking and concepts.
– Gary Shorb, CEO, Methodist Le Bonheur Healthcare

… well written … an essential reference in the library of all healthcare leaders interested in performance improvement.
– Lee M. Adler, DO, VP, Quality and Safety Innovation & Research, Florida Hospital, Orlando; Associate Professor, University of Central Florida College of Medicine

… a must-read for all Leadership involved in healthcare. … I can see reading this book over and over.
– Brigit Zamora, BSN, RN, CPAN, CAPA, Administrative Nurse Manager, Florida Hospital, Orlando