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Welcome to our Spring Issue

Quarterly e-newsletter for the Denver Health Lean Academy

Issue 2, 2017

We look forward to discussing a variety of useful information, and offering insight into our own Lean journey at Denver Health. Our intent is to provide real life examples that can help guide you on your path of improvement, and we would also love to hear from you.

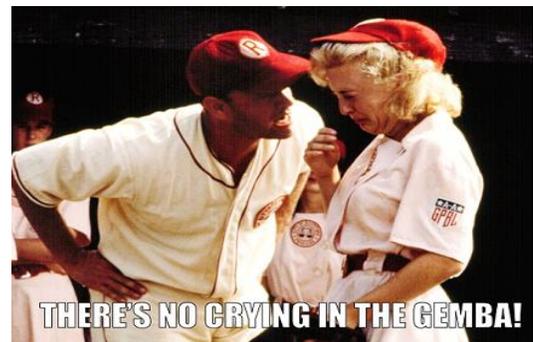
Feel free to share your thoughts and ask questions through our *YOU ASKED, WE ANSWERED* feature and keep the conversation flowing. Enjoy and happy reading!

In This Issue

- A Clinician's View of Lean
- You asked / We Answered

Useful Links

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About Us

Denver Health is one of the first healthcare organizations to successfully adopt Lean as an improvement methodology with quantified success. The Denver Health Lean Academy teaches the methods that we use in a hands-on learning experience suitable for participants at all levels. Denver Health is Colorado's primary safety net institution, providing comprehensive, integrated care for all, regardless of ability to pay.

LEANing Towards Better Patient Outcomes: A Clinician's View of Lean at Denver Health

Sansrita Nepal, MD, Marc Fedo, RN, Sarah Stella, MD, Marisha Burden, MD

The A3 Lean methodology has been successfully implemented in a variety of business and management settings. This approach also serves as a valuable tool to assist healthcare providers seeking to improve hospital systems. At Denver Health, we strive to be the best integrated healthcare system, and Lean is at the center of our culture of constant improvement. Whether working to reduce patient falls and medical errors, or improve care transitions and patient experience, Lean tools are integral to our quality improvement approach.

We have utilized A3 thinking to help us understand how we could improve patient experience with respect to pain control (Figure 1.2). Our goal was to improve patients' perceptions regarding their pain control, while attempting to minimize the use of opioid medications. We began by interviewing thirty hospitalized patients, several staff nurses and patient volunteers. Utilizing their input, we constructed a current state using a fishbone diagram (Figure 1.1). We identified that patients reported a subjective sense that their pain was not being addressed in a timely fashion. On the nursing staff side, we found that patient calls were prioritized on a case-by-case basis rather than by a standardized approach, and that pain was often not perceived as an "emergency" and thus received lower priority in the nurses' workflow.

With this clear understanding of the current state, we designed a future state in which we standardized priorities for pain assessment, making it a priority for all the health care staff. Working with nursing, we were able to successfully pilot several quality improvement initiatives. These included purposeful hourly rounding by nurses and CNA's to address patients' pain, the use of a visual pain board with Wong pain scale, and the design of patient brochures with information on options for non-narcotic pain management and comfort items.

This is just one of many examples of how our clinical teams utilize Lean tools to help address key questions impacting patient care. By prompting a deeper and more nuanced understanding of the current state and a critical review of the contributing factors, A3 Thinking serves as a new set of eyes on tough problems and lead to sustainable solutions rather than superficial fixes.

See Figures Below:

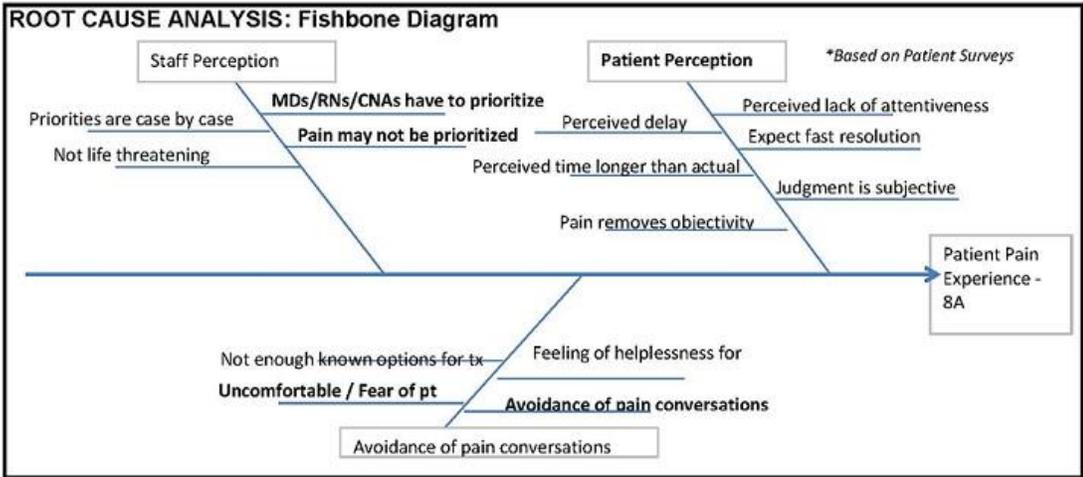


FIGURE 1.2

PROBLEM (REASON FOR ACTION):

- 2014 Strategic Goals for Denver Health: Increase Growth, Secure Financial Stability, Improve Patient Experience
- Patient Experience scores affect hospital reimbursement
- Patient Experience top priority for PII Board

BACKGROUND/MEASUREMENT

CURRENT STATE

ROOT CAUSE ANALYSIS

TITLE: Improving HCAHPS Scores for Pain Control on 8A

TARGET STATE

| | |
|---------------------------|----------|
| BY: 8A Patient Experience | TO: DATE |
|---------------------------|----------|

Patient Oriented

- Standardize priorities
- Communicate specifics (e.g. Meds, times, risk/benefit of pain meds, etc.)
- Joint goals with reasonable expectations (MD, RN, Pt.)
- Education: pain management menu for patients

Staff Oriented

- Hourly, purposeful rounding (Standard Work) = proactive conversation (may result in lower call light volume), allows for planning (ensure)
- MEs engage Patients on Pain-Discuss Pain Expectations w/ Patient using board
- Education around pain management options (One time and as needed)-Teach staff about options, when they do it, where resources are

COUNTERMEASURE

- Update pain management menu with each patient who has the "pain" conversation
- Pilot the pain management board/hourly rounding with 2 nurses on the 8th floor to test for increased patient satisfaction around management
- Implement patient experience report cards (doctors, RNs, attending) distributed by volunteers (pilot random 10 surveys per day)
- Departmental meeting (by MDs) to roll-out pain management pilot efforts to engage in pain discussions

RAPID EXPERIMENT

Pain team, nursing students dropped call lights by 80%

COMPLETION PLAN

| what | who | when | outcome |
|---|---------------------|--------------|--|
| Make Pain Boards | Karen/ Rob | Aug 27, 2014 | Review on 8/27/14 with group |
| MD Scripting | Marsha/ Rob | TBD | |
| 2 RN Pain Board pilot - educate around rounding process | Rob | TBD | Slow roll out - 2 week pilot |
| Update and finalize Pain Board design | Laurel | Sept 3, 2014 | Ready for group finalization and review |
| Engage marketing around pain menu | Amy | JUL | OH pain committee (Marsha will take committee) |
| Disseminate patient experience report card for volunteers to distribute | Marsha/ Rob/ Laurel | TBD | Ready to print and distribute |
| Rob to roll out with physicians during noon conference | Rob | | |

COST

- Pain Board
- \$100 - Spanish Translation
- \$100 - Office Supplies

BENEFIT / WASTE ELIMINATION

- Decrease call lights, waiting times, falls, confusion related to pain management
- Increase/Improve HCAHPS Scores, workforce engagement, patient understanding of pain management

FOLLOW UP / CONFIRMED STATE

- Call light volume will decrease
- Rob to report out after 2 week pilot (1st week of October)

CONFIRMED STATE

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FIGURE 1.1



You Asked? We Answered!

Dear Denver Health,

My organization has decided to create Visual Management Boards as part of our Lean Management System, and I've been charged with leading the initiative. Unfortunately, I'm struggling with how to get started and what to display on the boards. Where should I begin? Can you share some best practices for Visual Management?

Signed,

"Wanting to Visually Manage"

We Answered!

Dear *"Wanting to Visually Manage"*,

Congrats on leading the initiative at your organization to utilize "Visual Management"! Use of *Visual Management* is a central component of a robust Lean Management System. It will help your leaders and frontline staff to identify and surface information that will lead to better problem solving

While it can be difficult to get the ball rolling, and for your boards to feel like they are a management tool, it's important to remember that *Visual Management* is an umbrella term that includes the use of visual management boards (e.g. "Strategy Deployment" and "Daily Management") and visual cues (e.g. Andon Systems).

At Denver Health we started by developing *Strategy Deployment Boards*. This type of board ensures alignment with strategic initiatives, helps to demonstrate performance outcomes, and illustrates performance improvement activities (see Figure 2.1). We have since added *Daily Management Boards* as part of our organization's *Visual Management* system (see Figure 2.2). These boards are used to measure key processes that represent the work being done on a daily basis in various areas (i.e. good vs. bad days). While the boards are distinct from one another, the information on them should be aligned. Some of the management tools that you may use on both boards are: Run Charts, Paretos, A3s, and even simple tracking mechanisms (like tick marks) which are taught in our [Lean Academy workshops](#).

When thinking about what information and tools you want to display, include frontline staff in the process. Engaging your staff at the boards creates shared ownership for what is on the board, and is crucial to the success of your visual management system. Another way to engage your team is to

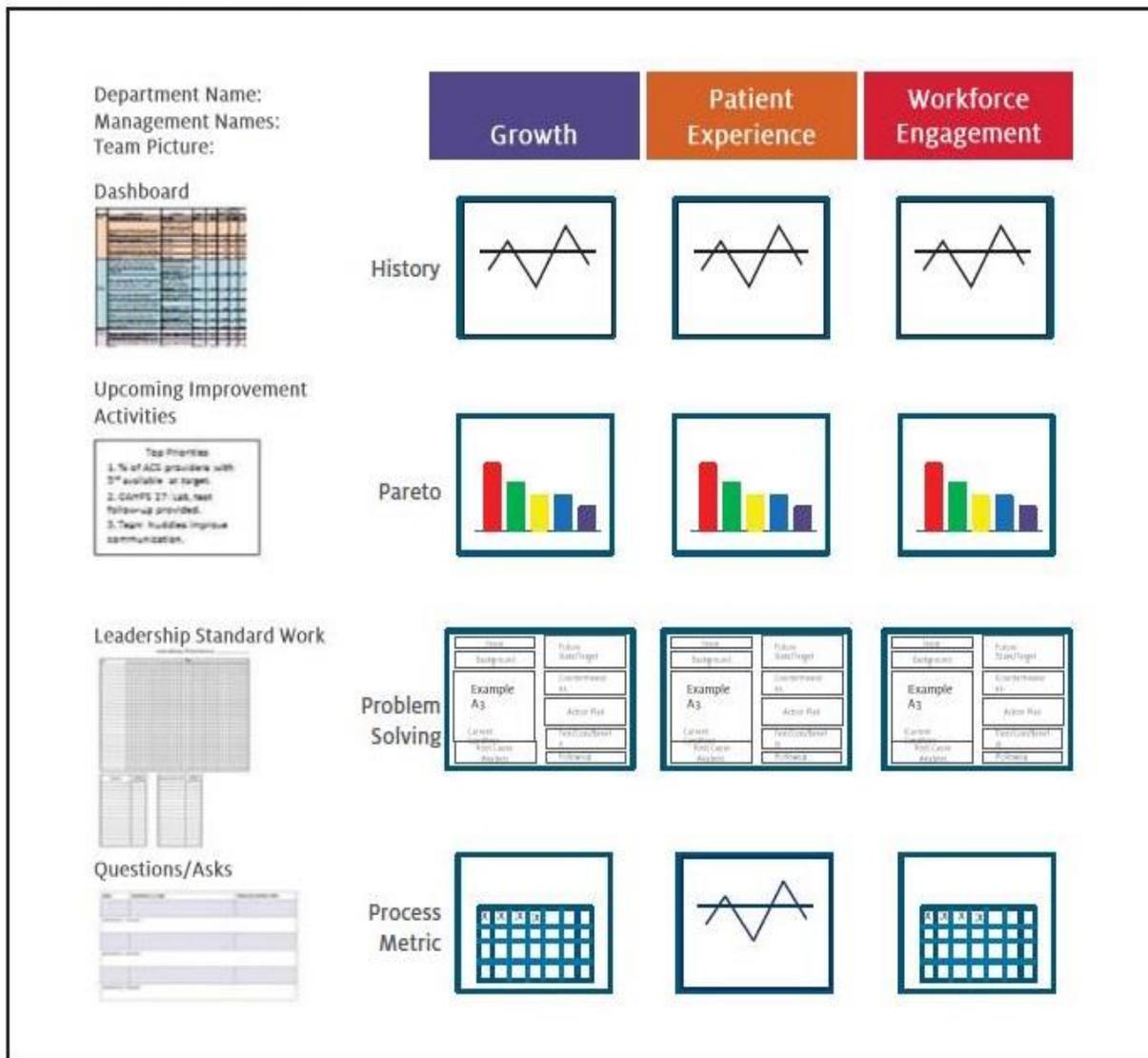
gather around the boards on a regular basis (e.g. “Daily Huddles”) and encourage taking turns speaking at the board. Soon enough your team will begin to see *Visual Management* as a group effort!

Keep in mind that there is no such thing as a perfect board. What you put on the board will evolve over time. Keep it simple at first. Begin with things that your team is already monitoring and reviewing. Stick with it and as time goes on, your *Visual Management* system will come to life and become something that everyone refers to on a regular basis for status updates in your department.

Signed,

YAWA (*You Asked We Answered*)

Strategy Deployment Board (Figure 2.1)



Daily Management Board (Figure 2.2)

Transfers out of ICU Goal: < 60 minutes

| Date | Time bed received | Time pt. left Dept. | Transfer Time | Staff Member |
|------|-------------------|---------------------|---------------|--------------|
| 6/2 | 9:00 AM | 11:00 AM | 120 | MS |
| 6/2 | 10:30 AM | 1:00 PM | 150 | AM |
| 6/3 | 12:00 PM | 1:30 PM | 90 | CR |
| 6/4 | 10:00 AM | 10:45 AM | 45 | MD |
| 6/4 | 12:30 PM | 3:00 PM | 150 | KK |
| 6/7 | 3:00 PM | 6:00 PM | 180 | KS |
| 6/9 | 9:00 AM | 9:50 AM | 50 | AM |
| 6/11 | 10:30 AM | 11:15 AM | 45 | CR |
| 6/11 | 12:00 PM | 12:40 PM | 40 | MD |
| 6/13 | 10:00 AM | 11:15 AM | 75 | MS |
| 6/14 | 12:30 PM | 1:25 PM | 55 | AM |
| 6/15 | 3:00 PM | 4:10 PM | 70 | CR |

What Questions Do YOU Have?

Click [HERE](#) to submit your inquiry and be featured in an upcoming issue of our eNewsletter!

Thank you for taking the time to check out this issue, see you again soon!

