

Alberta Children's Hospital Emergency Department Waiting Room and Triage ■ Alberta Health Project: the value of "Going to Gemba" to understand the family experience

Alberta Children's Hospital

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Define the Opportunity

The Alberta Children's Hospital (ACH) Emergency Department's (ED) volume has increased 47% over the last 5 years.

For families, this has translated into periodic line ups out the front door; long waits in a small, crowded waiting room (WR); and challenges for ED triage staff raising patient safety concerns. Compelled to act, the ED staff recognized that in order to do the "right improvements" they needed to understand the staff and family experience in the WR and triage space and "Go to Gemba"

Daily Visits to the Alberta Children's Hospital Emergency Department 2016 N= 243



Build Understanding "Go to Gemba"

"Go to Gemba" means to 'go and observe [in the place where the work is done] ask questions, be respectful'.

The aim is to ensure a comprehensive understanding of current state and root causes before action. This phase and core improvement concept is credited to Toyota Chairman Fugio Cho.

The "QI Detective Day" on April 18, 2016 was designated as a Go to Gemba event at the ACH ED. ACH ED staff, operational leaders, physicians, Calgary Zone (CZ) CQI team members and Human Factors member observed and collected data about patients and families in the space for 14 continuous hours.

Data Collection Scope:

- 1) Capture the patient journey **Start:** The time a family enters the ACH ED sliding entry doors **End:** The time family crosses through the ED intake doors.
- 2) Observe staff interaction with the families

"Current State" Data Collection involved:

- 1) Staff volunteers in waiting room Continuous manual data collection of the family arrivals, waiting room and triage area
- 2) Admitting staff Patient registration manual data
- 3) Humans factors Place-behaviour mapping and
- 4) Parent/Caregiver Survey of their waiting room
- 5) Sunrise Emergency Clinician Accessing ACH ED

Data Collection Results

On the ACH ED QI Detective Day, April 18, 2016, n=241 children accessed emergency care. For 14 hours, over peek times, our team gathered data and observations. Results: The direct observations, data collection (manual and electronic) and later family surveys generated an understanding of the strengths and challenges of the current space and processes leading to effective improvement activities.

Human Factors & General observations Note: The graphic represents some but not all of the information collected **ACH ED Entrance** People choose to sit facing where they can watch the triage, admitting and someone was here charging their device Occupied (rear facing) On this side 8% someone was seated on the floor 67% Seated 15% held a child nildren playing in this area. Similarly, sightlines 86% of the time at least ne person was waiting f help from Triage Table/ Counter 21% of the time space occupied to charge electronic devices 22% of the time an assistive device such as a wheelchair, stroller or car seat was in this 18% of the time someone Human Factors data Collectors getting answers to charging avigate the ACH ED is challenge for families. sensitivity of wheelchair and ?? Where is admitting 'C' families have a hard time locating Restricted" signage over the entry door at the wrong height, 'red at a level where public observe this. "Triage" is not called into the admitting

Total ACH Patient Volume April 18, 2016 (n=241 patients) A data collection template was constructed Discharged n=184 Admitted/Transfer n= 19 Active -19 Left without being collaboratively with the Admitting Sunrise Emergency Clinician (SEC) & CZ Daily Dashboard (Dong Mei Wang) department. **Key observations**: Patients visits by CTAS score: number of patients (percentage of total patients Families struggled with entering and CTAS 3: 126 CTAS 4: 55

ACH ED & Triage Data

ACH Emergency Department April 18, 2016: Cycle

exiting the admitting room doors due to the door lock mechanism and lack of space for stroller inside the admitting room.

Admitting staff assist families by answering a wide

requests to help them re-enter the ED, where do you get

coffee? washroom location, department re-entry etc.

array of questions: E.g. parking, how long is the wait?

Admitting Data

waiting room Microphone sound level to call them into •Things to do – Availability of things to do to keep your chid the admitting room is highly variable. occupied while waiting •Screens – Information on the screens (e.g. TV's, monitors) Admitting staff are interrupted by •Overall – Overall rating of the Emergency Department Waiting caregivers attempting to re-enter the ED. Room area **Admitting Staff data collection** Triage stamp (request) to call from waiting room by admitting staff Family sits down in Admitting to Patient ID bracelet placed 3.33 minutes/seconds What parents liked? TV's. Wifi, Staff and volunteers, Family sits down in admitting chair to chart placed in rack Play area, Fish tank, Coffee and vending machines. 19 minutes What could be improved? Faster care, better communication about the wait, more children activities while **Bedside registration was not checked for 22/26 patients by Triage staff waiting, Improve audio so you can hear who is being called,

Family Survey Data

100 Survey's were completed by ACH ED

Rating the following attributes of the ACH Emergency

•Wait time - Communication regarding the expected wait time

parking information, Need an easier way to get "back inside"

the ED to my child, more food options, improve signage

upon arrival, always have volunteers, larger and more TV

monitors with variable content

•Seating – Ability to obtain a comfortable spot to wait in the

Department related to waiting room experience:

•Signage – Signage to the Emergency room Entrance

families May 5-9th, 2016.

- To improve family wayfinding in the ACH ED.
- 2) To improve Triage 2 space efficiency and functionality
- To improve visibility from Triage 2 to the waiting room space

Act to Improve

- To reduce interruptions for Triage staff.
- To increase seating capacity

Goals

To improve sightlines & audio for families in the ACH ED

Implemented improvements:

- ✓ Color-coding entry doors
- ✓ Signage and 'naming' for triage and admitting rooms
- ✓ Audio upgrade to improve communication with families
- ✓ Updating TV services and content for families
- ✓ Relocating equipment to improve sight lines
- ✓ Addition of a device charging station for families
- ✓ Engaging ACH volunteer services for additional support
- ✓ Redesign and renovation of Triage 2 space
- ✓ Upgrading seating in the waiting room area
- Removal architectural elements to improve sight lines
- ✓ Fish tank upgrade (more colorful fish)
- Long term improvements will focus upon extension of the vestibule area

Lessons Learned and Challenges

QI Detective Day:

- > A valuable reminder of the importance for thorough pursuit of data gathering and 'Go to Gemba' as part of the 'Build Understanding phase'.
- > Helped our team to generate engagement and ensure a comprehensive understanding of current state and root cause before moving to solutions.
- > Staff willingly engaged in data collection and found they were amazed at how much it enhanced their understanding of the family experience and functioning of the waiting room.
- > Staff found the data exercise encouraging and appreciated recognition of their current ACH ED challenges.
- > Including a wide array of stakeholders further enhanced the ACH ED QI teams commitment to finding improvements.
- > Exposure to Human Factors proved to be tremendously valuable and helped generate specific recommendations.
- > Additional testing of the data manual data collection forms for staff would have allowed a few more tweaks to be made before actual use

