HIMSS Davies Award Site Visit

The LVHN Daily Huddle

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*Agenda*

- **Local Problem**
  - Increased Length of Stay (LOS)
  - Patient movement challenges
  - Ambulance diversions
  - Admitted patients in the Emergency Department (ED)

- **Design and Implementation**
  - Before and after electronic huddle implementation

- **How Health IT was utilized**
  - The LVHN electronic huddle video
  - Live LVHN huddle system demonstration

- **Value Derived**
  - Lessons learned
  - Program improvement metrics
  - Results and next steps
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The Local Problem
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**Background**

- **LVHN Facility Overview**
  - Cedar Crest site has 686 staffed beds
    - 7 high level units
    - 16 medical surgical and low level units
    - 6 pediatric and perinatal units
  - Average Movement
    - 80 Adult and pediatric operating room patients
    - 90 ED admits
    - 100-160 discharges
    - 50 transfers between units
    - 230 beds cleaned

- **LVHN Huddle Background**
  - Response to increased length of stay (LOS)
  - Challenge of constant patient movement
  - Ambulances being directed to other hospitals
  - Over 1300 diversion hours for FY 2015
  - Admitted patients being held in ED
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*Purpose*

- **What is the LVHN huddle?**
  - **Purpose:** enhance patient flow and improve patient experience
  - **Challenges:**
    - Consistent occupancy greater than 90%
    - Balance competing demands

- **Strategy:** daily huddle with leadership from across the facility
  - Focus on patient flow and metrics
  - Transparency of data
  - Real-time problem solving

- **Huddle Members:**
  - Clinical unit leadership
  - Physician leadership
  - Departments: Case management, radiology, respiratory, engineering, clinical engineering, environmental services, security
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“Before” Manual and Paper-Based

- Before electronic dashboard
  - “Bedboard” huddle with units to review census
  - Manually collected data

- Leadership huddle without an electronic dashboard
  - FY 2016 decrease diversion 80%
  - All data manually gathered
  - Transcribed into software for trending
  - No real time details
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*Automated, System-Enabled Huddle*

- Leadership huddle using electronic dashboard
  - Significantly less manual preparation
  - One system: occupancy, ED, OBV patients
  - Review of yesterday – discharges, admits, transfers
  - Status of today – patients awaiting beds in ED, OR schedule
  - Real time throughout day - Detail and trending reports
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Design and Implementation
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- Identify and engage key stakeholders
  - Hospital Leadership with executive sponsors, coincided with other access projects and network goals
- Utilize existing EPIC software foundation
  - Foundation dashboard used as framework and expanded in cooperation with vendor
- Organize dashboard to workflow and key metrics
  - Start with foundational metrics
  - Modify as dashboard use increases
  - Continue modification to meet additional needs
  - Focus on priority metrics and workflow
Clinical leadership organized and prioritized the dashboard metrics

Aligned design with workflow and report out

Sample reports designed by Enterprise Analytics
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*How Healthcare Information Technology was Utilized*
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How IT was Used: Metrics - Discharge Efficiencies

- Prior to dashboard, unable to measure
- Discharge orders placed early = Early discharges
- Early discharges = Early open beds
- Early open beds = Patients not waiting in ED for a bed
- 94% improvement in orders place by 11am
  - 34.75% to 47.37% (data as of 2/2017, continued improvement)
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How IT was Used: Metrics - Discharge Efficiencies

- Leadership huddle for 3 months without electronic dashboard
- Leadership huddle with dashboard beginning November 2015
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How IT was Used: Metrics - Emergency Department Pull Times

- ED Pull times are how soon LVHN patients make it to the inpatient bed
- Lower ED Pull times = less time patients spend waiting in the ED to go to the inpatient bed
- 19.2% improvement
  - 52 minutes to 42 minutes (data as of 2/2017, continued improvement)
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*How IT was Used: Metrics – Intra-Unit Transfers*

- Intra-Unit transfers free up beds in critical care for patients in the ED or OR
- Lower Intra-Unit transfer times = less time patients spend waiting in the ED or PACU to go to the inpatient bed
- 34.3% improvement
  - 99 minutes to 65 minutes (data as of 2/2017, continued improvement)
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Value Derived
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- Lessons learned:
  - “We” concept, no inpatient versus ED
  - Daily review and data transparency
  - Timeliness of data for operations throughout the day
  - Leadership empathy for other’s situations

- Continuing areas of focus:
  - Continuing to focus on pull and intra-unit transfer times
  - Ability to continuously focus on themes identified
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*Program Results*

- Decreased LOS by 5% for all ED patients = 34,200 additional bed hours
- ED LOS for hospitalized patient decreased 3.1% = additional 9,316 bed hours
- Remained on zero diversions, no patient turned away
- Admitted 1,500 more patients than budgeted