Learn How Community Partnerships Cut ED Use by 33%

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#IHISummit
Presenter Disclosures

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VP Quality & Risk Management  
St. Joseph's Medical Center

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Director of Emergency Services  
St. Luke's Cornwall Hospital

The presenters have nothing to disclose.
Who is in the room?

- Hospitals
- FQHCs
- PCP’s
- Care Management
- Behavioral Health
- Substance Abuse Providers
- State/Federal Agencies
- Local Government
- Other?
Session Objectives

1) Learn about the NYS DSRIP program and its goal of reducing unnecessary ED and hospital utilization by 25%.

2) Describe the NYS MAX Series Program

3) Learn how innovative community partnerships at two safety net hospitals reduced ED utilization and admissions by 33-88% for cohorts of super utilizer patients
Todays Agenda

- DSRIP Overview:
  - Why? & What?
  - What does creating an “Integrated Delivery System” really mean?

- What is the MAX Series?
- A Tale of Two Super Utilizer Cohorts
What is DSRIP?

- Medicaid Redesign Waiver ($8.4 Billion)
  - Funds earned based on approximately 60 Pay for Performance measures for attributed lives

- Delivery System Reform Incentive Payment (DSRIP) program - Five Years
  - 25 Performing Provider Systems (PPS) in NYS

- Goal: Shift the Payment System
  - “Fee for Service” → “Pay for Performance”
  - Bridge to Future State: VBP Contracts with MCOs
Why DSRIP?

• The system needed to change for sustainability!

• NY State’s Medicaid health care spending per capita: 2X the National Average

• Prevalence of preventable chronic conditions continues to rise

• NY State 50th among states for avoidable hospital use and 40th for ambulatory care-sensitive admissions.
DSRIP Goals

- Reduce unnecessary hospital use (inpatient and ED) by 25% over 5 years
- Create an Integrated Delivery System
- Expand access to Primary Care
- Support integration of Behavioral Health and Primary Care, and Care Management capacity (PCMH)
- Create Communities of Care
- Enable flow of data to support “right level of care at right time” (EHR/ RHIO)
Why is an Integrated Delivery System Important?

- Historically, coordinating care has been challenging
  - Many silos of care (PCP, hospitals, SNF, BH)
- Technology provides an opportunity for sharing of information at the point of care
Integrating Care is Complex
Social Determinants of Healthcare Costs

- Lacks Social Support: 10% higher costs
- Lacks a Primary Care Physician: 12% higher costs
- Has Physical Limitations: 9% higher costs
- Substance Abuse: 89% higher costs
- Financial Distress: 25% higher costs
- Mental Health Diagnosis: 38% higher costs
- 16% Report Unstable Housing Situation
Our Goal: An IDS where . . .

- The right care delivered at the right time
- Information available at the point of care
- Improve quality and eliminate waste
- Address the Social Determinants of Health

The IHI Quadruple Aim

The IHI Triple Aim

Population Health

Experience of Care

Per Capita Cost

Joy in Work
What is the MHVC?
The Montefiore Hudson Valley Collaborative

One of 25 Performing Provider Systems (PPS) in NYS

- 195K Attributed Medicaid lives

A diverse network of providers created to achieve DSRIP goals!

- Hospitals, BH & SU Providers, FQHCs, Primary Care, Health Homes, Care Management, LGUs, CBOs

Spans 7 Hudson Valley counties

- Westchester, Rockland, Orange, Putnam, Ulster, Dutchess, Sullivan

...with membership spanning the care continuum

<table>
<thead>
<tr>
<th>Inpatient</th>
<th>Sub-acute</th>
<th>Ambulatory</th>
<th>Community-based</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 hospital systems</td>
<td>108 entities (incl. SNFs, Nursing Homes, hospice, and assisted living)</td>
<td>746 entities</td>
<td>382 other organizations largely community-based services (e.g. transportation, housing)</td>
</tr>
<tr>
<td>29 FQHCs</td>
<td>51 D&amp;TCs</td>
<td>24 care management</td>
<td>243 behavioral health</td>
</tr>
<tr>
<td>50 physician groups</td>
<td>349 others (SA, etc.)</td>
<td>50 physician groups</td>
<td>349 others (SA, etc.)</td>
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</tbody>
</table>

...
DSRIP is about our patients
Why a MAX Series?

- Rapid Cycle Continuous Improvement Program
- Highly structured approach and coaching
- Facilitate system integration
- Frontline providers engaged in redesign
- Data utilization
- Focus on sustainability
Focus on What You Can Do!
Use data to guide your work

- Medicaid Accelerated Exchange (MAX Series)
  - Modeled on IHI Rapid Cycle Improvement Collaborative
  - Focus on Super utilizers in ED and Admitted
  - Use data to drive improvement and make decisions
  - 6 months

- No Additional Resources

- Ground Rules
  - Participate in coaching calls
  - Focus on What you CAN do, not on the barriers
MAX Series:
St. Joseph’s- Who we are

2 Campus - Acute care hospital and Free Standing Psychiatric Hospital, Emergency Department, Psychiatric Emergency receiving hospital
• Patient Centered Medical Home
• Health Home Service
• ACT Team for County
• Opioid and outpatient practices, Methadone Centers
• Residential services with 1200 supportive housing units in 5 boroughs
St. Luke’s Cornwall Hospital is a vital access provider and not for profit hospital dedicated to serving the healthcare needs of the Hudson Valley Region. With two main campuses in Newburgh and Cornwall NY, SLCH is touches the lives of more than 250,000 people each year.

- SLCH’s Newburgh campus includes a verified Level III Trauma Center
- Our Cornwall campus is a comprehensive outpatient center including cardiac and pulmonary rehabilitation and physical therapy services in partnership with Burke Rehabilitation Hospital
- SLCH provides high quality, comprehensive inpatient and outpatient services to the community including Cardiac, Oncologic, Orthopedic, Otolaryngology, and many more.
Looking through a different lens

Number of patients that were inpatient admissions (not number of inpatient admissions)

Number of patients that were ED visits (not total # visits)

Number of patients with more than 4 IP Admissions

Number of patients with more than 10 ED visits
Analysis: What we learned

Venn Diagram

Venn Diagrams are a useful tool for determining if your IP high utilizers are the same as your ED utilizers.

| Inpatient Super Utilizers were not the same as ED Super Utilizers |
|---------------------------------------------------------------|---------------------------------------------------------------|
| Unique Patients that meet IP Admission Criteria            | Unique Patients that meet ED Visits Criteria                  |
| Unique Patients that meet both IP Admission and ED Visit Criteria | Unique Patients that meet neither                             |
“Right –Sizing” Super utilizer definition

Goal:
• Three to four patients per day in house
• Sufficient population to develop and test processes
• Not too much to overwhelm and challenge resources

Percent of total patients with greater than 4 admissions in one year

<table>
<thead>
<tr>
<th>Maximum Number of Admissions</th>
<th>0%</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
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<tbody>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>50%</strong></td>
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<td></td>
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<tr>
<td>6</td>
<td></td>
<td>9%</td>
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<td>8</td>
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<td>5%</td>
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<td>2%</td>
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</table>
Not Individuals, cohorts

- Overwhelming distribution of medical as compared to psychiatric admissions for super utilizers

Common diagnoses and secondary diagnoses:
- Behavioral Health: Schizophrenia, Mood disorder
- Substance Abuse
- End Stage Renal Disease
- Social Challenges: Homelessness, substance abuse, etc.
## Baseline Data

### Top Social Challenges

Top social challenges (homelessness, substance abuse, etc.) prevalent within your identified cohort.

<table>
<thead>
<tr>
<th>#</th>
<th>Social Challenge</th>
<th>Patients</th>
<th>IP Admissions</th>
<th>ED Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Homeless</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Substance Abuse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Dialysis Therapy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Undocumented Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Lack of Support System</td>
<td></td>
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</tbody>
</table>
Ongoing Monitoring Decisions

- All payer sources
- Selected to monitor static population as opposed to dynamic
- Weekly report via email
- Monthly tracking of master list
Step 1: Patient Identification
A cross section of patients who presented to the Emergency Department at least 6 times and were admitted to the inpatient setting a minimum of 3 times over the past 12 months
Target population: Patients with 6+ ED visits and 3+ IP admissions in a 12 month period (Jan. ’15 – Dec. ‘15)

Action Team role types: IT Analyst, Case Managers, Care Transitions, ED Nurses, ED Physician, PPS Administration, Primary Care Representatives, Mental Health Services
## A Tale of Two Super Utilizer Cohorts

### Target Population

<table>
<thead>
<tr>
<th>St. Joe’s</th>
<th>St. Luke’s</th>
</tr>
</thead>
</table>
| **4 or more inpatient admissions** | **3 or more IP Admissions**  
**6 or more ED visits** |
| **125** Inpatient Super Utilizers (Many on Dialysis) | **91** Outpatient Super Utilizer Cohort |

### Baseline Data

<table>
<thead>
<tr>
<th>2015 Baseline Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hospital</strong></td>
</tr>
<tr>
<td><strong>909</strong> ED Visits</td>
</tr>
<tr>
<td><strong>637</strong> IP Admissions</td>
</tr>
<tr>
<td><strong>11.2%</strong> Referred to CM</td>
</tr>
</tbody>
</table>

### Intervention

<table>
<thead>
<tr>
<th>2016</th>
</tr>
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<tbody>
<tr>
<td><strong>Health Home and Case Management Team Intervention</strong></td>
</tr>
<tr>
<td><strong>6 months (2016)</strong></td>
</tr>
</tbody>
</table>

**ED Care Manager from local FQHC connects patient to PCP (6 Months)**
Step 2: The Team
Step 2: The Team

Front line clinicians, leaders, administrators, analysts and community partners.

Representatives from the following departments:

- Emergency Department
- Nursing
- IT
- Case Management
- Care Transitions
- Community Based Organizations
MAX Series:
St. Luke’s-Cornwall / Cornerstone/Access/Horizon Health

Report Out Presentation
Team From the Start

Clinical and Medical Staff Leadership - Medical Director, ED Director, Psychiatry, Family Medicine, Residents, Nurse Leaders, Discharge Nurse

Case Management - Case Managers, Social Workers, Utilization Management, Psychiatric Social Work

Health Home (Supportive Care Coordination)

Outpatient Services - Outpatient Psychiatry, Family Health Center

Community Organizations – Assisted Living, Group Home, Hemodialysis
Step 2: The Intervention
**Intervention**

**Patient Identification:** “Super utilizer” status triggered team intervention on patient presentation to the organization. *Integration of care coordination in alert system decreased patients “lost to follow up”.*

- Developed real time visual alert to identify patients presenting with 10 ED visits or 4 or more inpatient admissions.
- EMR alert specific to caregiver role.
- Email box notification to primary care, psychiatry, and home health with notification of ED visit or inpatient admission.
- Ongoing tracker developed for weekly review of cumulative visits, key drivers, and care planning meetings.
Management: Focused on “Do something Different”, SOP not working

- Established weekly, multidisciplinary case conference meetings patients.
- Focused on the “true reason” for presentation to hospital. Social determinates of care often superseded medical needs.
- Created specific care pathways for sub-groups of patients: uninsured, hemodialysis, assisted living/long term care, substance abuse/psychiatry.
**Intervention**

*Integration of Care: Changed thinking to patients are complicated not necessarily complex*

- Partnered with local agencies to manage sub-groups of patients, including dialysis centers.
- Connected patients to behavioral health services by increasing communication with the psychiatric services.
- Transitioned from episodic care to coordinated care planning with outside agencies and the Health Home.
Intervention

Community Collaboration: Community Paramedicine

- Pilot program focused on transitional needs for select population
- In hospital meeting
- Home visit
- Contact with primary care physician
Graduation from Program

Unstable in Community ➔ Stable in Community
Process Improvements

PATIENT IDENTIFICATION
- Flag in EMR
- Real time alert

PLANNING
- **Assess** social and behavioral health needs
- **Engage** patient in “different way”
- Use **motivational interviewing**

MANAGEMENT
- Care Transitions team **provides follow up and support** post-discharge
- External “quarterback” **manages care** in the community

FOLLOW UP
- **Definitely connect** patients to critical social services and support in the community
- **Case conference** to continually improve strategies for persistent super users
Step 3: Drivers of Utilization
Step 3: Drivers of Utilization

Why are these patients coming to the ED so frequently?

Social Determinates of Health:
1. Do you have a place to live?
2. Can you afford you electricity bill?
3. Do you have access to 3 healthy meals a day?
4. Do you have access to medical transportation?
5. Do you feel safe at home?
Process

1  2  3 ...

1  2  3
Process

- Social Determinants of Health assessment was completed after the first ED visit post patient identification
- Patient met the Care Transitions Coordinator
- Care Transitions Coordinator developed a plan of care
- Care Transitions Coordinator worked with the patient on obtaining the established goals
Care Transitions Coordinator performed weekly, or more frequently as needed, follow ups

If the patient presented to the ED, the Care Transitions Coordinator would meet with them to how things were going
### Impact

**March 2016 – September 2016**

<table>
<thead>
<tr>
<th>62 Patients presented</th>
</tr>
</thead>
<tbody>
<tr>
<td>47 Patients engaged</td>
</tr>
<tr>
<td>“Quarterbacks” identified for 89 of 91 Patients</td>
</tr>
<tr>
<td>33 Patients connected to services</td>
</tr>
<tr>
<td>Including: PCP, Health Home, Hospice, Horizon, HVCS, Drug Rehab, Asthma Coalition</td>
</tr>
</tbody>
</table>

**Hospital Utilization**

*Note: Only includes patients with an Index visit and at least 90 days of post-index visit data*

<table>
<thead>
<tr>
<th></th>
<th>Before 3 mo. Pre-Index Visit</th>
<th>After 3 mo. Post-Index Visit</th>
<th>%Δ</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ED Visits</strong></td>
<td>118</td>
<td>119</td>
<td>1%</td>
<td>-29%</td>
</tr>
<tr>
<td><strong>IP Admissions</strong></td>
<td>43</td>
<td>12</td>
<td>-72%</td>
<td>-100%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>161</td>
<td>131</td>
<td>-19%</td>
<td>-43%</td>
</tr>
</tbody>
</table>

*Calculations are based on self-reported data from Action Team*
Team Expansion

- The SLCH Care Transitions team consists of 2 RNs
- Point of Entry Case Managers
- Care Management Organizations
- There are 6 care management organizations in the Newburgh area that provide case workers to co-manage patients to further address the patients’ social needs
New Process

- POE Case Managers perform social determinates of health assessment

- The POE Case Manager determines if increased utilization is clinical or social in nature

- If social in nature, refers to community based organization

- If clinical in nature, refers to SLCH Care Transition Team
A Side Note

Food Insecurity

The Food Bank of the Hudson Valley

- SLCH food pantry
- Mobile Canteen
- The Living Room
Positive Graduation
Positive Graduation

- Patients who met their goals established
- Reduce ED utilization
Negative Graduation

- Plan of care established
- Patient continued to utilize ED
- Followed for at least 90 days
Plan of Care Negatively Graduated

- Patient presented to ER
- Perform medical screening to ensure not sick
- Discharge from ED within 45 minutes
- If at any point the patient would like to engage in the process – the patient will be referred to a care manager
Sustainability
Sustainability

- Change the cohort qualifiers:
  - 6 ED visits within the last 90 days
- A new cohort will be established every 90 days
SLCH ED Care Triage
DSRIP Review

Trend of decreased visits is 2.67%

Cohort 2 Visit Data: N=58
6 Or More ED Visits
11/16-1/17
POE CM
Decrease of 45%

Cohort 3 Visit Data: N=25
6 or More ED Visits
3/2017-8/2017
POE CM
Decrease of 48.0%
A Tale of Two Super Utilizer Cohorts

**Target Population**

- **St. Joe’s Target Population**
  - Patients with 4 or more inpatient admissions
  - 125 Patients
  - Inpatient Super Utilizers (Many on Dialysis)

- **St. Luke’s Target Population**
  - 3 or more IP Admissions
  - 6 or more ED visits
  - 91 Outpatient Super Utilizer Cohort

**Baseline Data**

- **2015 Baseline Data**
  - Hospital
  - 909 ED Visits
  - 637 IP Admissions
  - 11.2% Referred to CM

- **2016**
  - Hospital
  - 1,226 ED Visits
  - 492 IP Admissions

**Intervention**

- **2016**
  - Health Home and Case Management Team Intervention 6 months (2016)
  - ED Care Manager from local FQHC connects patient to PCP (6 Months)
Outcomes
Outcomes

ED visits and inpatient re-admissions were compared for the same patients - at least 90 days pre and at least 90 days post intervention. For those patients:

- ED visits decreased by 28%
- Inpatient admissions/readmissions decreased by 71%
- Overall acute visits decreased by 37%
- Engagement with the Medical Health Home team increased by 36%
MAX Series: St. Joseph’s Hospital
Multidisciplinary “Action” Team

Target Population
- Patients with 4 or more inpatient admissions
- Inpatient Super Utilizers (Many on Dialysis)

2015 Baseline Data
- Hospital
  - 909 ED Visits
  - 637 IP Admissions
  - 11.2% Referred to CM

2016
- Health Home and Case Management Team
- Intervention
  - 6 months (2016)

OUTCOME DATA
- 125 Cohort of High Utilizers
- 87 pts (70%) Presented to ED
- 28 pts (32%) Engaged by Care Manager
- 19 pts (21%) Connected to Social Services
- Connected Back to Dialysis Center

- 20% ED Visits
- 88% Admissions

3x (280%) Engagement with Care Coordination Team
January 2016 through January 2017

12 Month Evaluation

<table>
<thead>
<tr>
<th></th>
<th>Patients with 4 or more inpatient Admissions</th>
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<tbody>
<tr>
<td>Number of Patients</td>
<td>125</td>
</tr>
<tr>
<td>Inpatient Admissions</td>
<td>637</td>
</tr>
<tr>
<td>% Same from Previous Year Cohort</td>
<td>--</td>
</tr>
<tr>
<td>% Same from previous year engaged in program</td>
<td></td>
</tr>
<tr>
<td>% total engaged in Program Cohort</td>
<td></td>
</tr>
</tbody>
</table>
MAX Series: St. Luke’s Cornwall/Cornerstone
Multidisciplinary “Action” Team

Target Patient Population

High Utilizer Cohort

3 or more IP Admissions
6 or more ED visits

Baseline Data

2015

Hospital

1,226 ED Visits
492 IP Admissions

Food Insecurity identified
Hospital Food Bank established

Intervention

ED Care Manager from local FQHC connects patient to PCP site (6 Months)

2015

Outcomes

ED Utilization (by cohort group)

45-48%

2016
Key Takeaways

- Super Utilizers need more than clinical services; they have social and behavioral health issues that need to be addressed through appropriate service connection.

- In depth data analysis was integral to identifying common themes among the population, which were not previously appreciated, and served as the basis for intervention.

- Electronic notification enabled rapid intervention of multiple disciplines at different points in care.

- Rapid cycle improvement efforts centered on “doing something different” and the need to break the existing pattern of utilization.

- The team approach yielded a better understanding of multidisciplinary strengths and broke down a previously silo’d departmental approach.
Questions

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Kathleen Sheehan, RN, BSN, MSN
KSHEEHAN@slchospital.org
IHI Campaign: “What Matters to You?”

Let’s Flip Healthcare from . . .

“What’s the matter?”

to

“What matters to you?”

-- Maureen Bisognano

Goal Before: Clinician Directed

- Monitor weight
- No SALT!!

Future Goal: Patient Guided

- Able to join ROMEO (Retired Old Men Eating Out) group for lunch once a week