Welcome to our presentation!
Please get your phone out and get ready to respond

• To participate you must first join our session.
• You do this by sending a text to this five digit number 22333.
• In the body of the text message, you’ll type Marylyons445.
• You will get a confirmation message that you are now part of my session.
• Now you’re ready to reply to a polling question with your response (A, B, C)...

Polling Question Practice

How many new professional contacts have you made since arriving in Kentucky?

A. None, I’m still recovering from my travels
B. 1-4 Just getting warmed up
C. 5-10 I’m having fun
D. More than 10, I am the life of the party
APN-Led Initiative Creates MVP (Multiple Visit Patient) Care Plans to Decrease Readmissions and Length of Stay

Objectives

• Describe the process for creating a multidisciplinary team to reduce acute hospital utilization for patients with persistent pain or related conditions.
• Define metrics, care planning process & implementation of a multi hospital procedure to provide coordinated care for MVP patients.
• Summarize project outcomes and future direction of MVP program.

Conflict of Interest Disclosure

Pam Bolyanatz, none
Mary Lyons, Mallinckrodt Pharmaceuticals Speaker’s Bureau for non-branded presentation
Polling Question #2

How many of you work at an organization that is concerned about readmissions?
A. Yes, my organization is very concerned
B. No, my organization is not concerned
C. I don’t work at an inpatient facility

So what’s the problem??
Self assessment at home and close to home

- Realization that pain patients frequenting the ED were at risk for misunderstanding & lack of continuity of care
- Interface with Care Coordination who identified increasing readmission rates
- Evaluation of hospital “Top 100” list for hospital ED charges 5/2014-4/2015
  - Top 3 Central DuPage Hospital patients incurred between 102K-126K each
  - Top 3 Delnor Hospital patients incurred between 103K-210K each
- Benchmarking with local hospitals
  - We’re not alone!
  - Care plan templates
  - Framework for patient and provider communications
  - Procedure models
Literature Review

Todd, K., Ducharme, J., et al., 2007
• Pain and Emergency Medicine Initiative (PEMI) study involving 18 academic centers
  across Canada and the United States.
• 50 percent of patient visits had chronic pain as the primary reason for their visit to the
  emergency department.
• Represents the largest percentage of visits to the emergency department for any one
  pathology.

Neighbor, Dance, Hawk, & Kohn, 2011
• As substance use issues increase so does the number of patients utilizing the ED for
  chronic pain management. Given the complex correlation between pain and substance
  use, attention should be given to standardizing a plan of care and facilitating referrals to
  appropriate providers for structured treatment with focus on the patient’s physical as
  well as psychological well-being.

Chang & Yang, 2013
• Substance use disorders (SUD) are a growing health concern, with non-medical usage of
  opiates at an all-time high. In the United States approximately 22% of all deaths are
  related in some way to substance use.

Allen, M, et al., 2014
• Pain management care plans allow ED staff to provide compassionate, comprehensive
  care while balancing risk.
• Patients will be empowered to become less dependent on the healthcare system with
  improved self management.

Utilizing the DMAIC Methodology
Trying to fix a broken process

Define
Team members
Define key terms/goals
High level process map
1st Charter
Scope

Measure
Analyze
Improve
Control

Project Team

Executive Sponsor
• Provides overall guidance and accountability for the project
• Represents the project sponsor (organizational)
• Ensures strategic oversight

Clinical Sponsor
• Accountable for meeting clinical / quality objectives
• Ensures the medical team is engaged
• May be a subject matter expert (SME)

Process Owner
• Accountable for implementing customer and process outputs
• Optimize processes, eliminate waste, and improve decision making

Improvement Leader / PM
• DMAIC methodology expert
• Responsible for using DMAIC to manage the project and complete deliverables
• As project reaches control, manages the process outputs and transitions to the process owner

Team Members
• Makes significant and focused contributions to the timely and successful implementation of the project
• Coordinates with and significantly impact the direction of the project
• May be involved in data collection & analysis
• Connects “voice of the customer” to process owner
### Project Team

<table>
<thead>
<tr>
<th>Executive Sponsor</th>
<th>Sponsors</th>
<th>Clinical Sponsor</th>
<th>Process Owner</th>
<th>Improvement Leader / PM</th>
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<tbody>
<tr>
<td>Provides overall guidance and accountability for the project&lt;br&gt;• Addresses project challenges (organizational)&lt;br&gt;• Provides strategic oversight</td>
<td>• Accountable for creating clinical consensus on guidelines, and other clinical decisions&lt;br&gt;• Accountable for managing, controlling, and measuring project outputs and improvements&lt;br&gt;• May also be a Subject Matter Expert (SME)</td>
<td>• Accountable for ensuring, controlling, and measuring project outputs and improvements&lt;br&gt;• May also be a Subject Matter Expert (SME)</td>
<td>• DMAIC methodology expert&lt;br&gt;• Accountable for using DMAIC to manage the project and complete deliverables&lt;br&gt;• As project results control, manages the project outputs and improvements to the Process Owner</td>
<td>• Makes significant and focused contributions to the timely and successful implementation of the project&lt;br&gt;• Coordinates views and significantly impact the direction of the project&lt;br&gt;• May be involved in data collection &amp; analysis&lt;br&gt;• Consider “fresh eyes”</td>
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## Project Team

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<tr>
<td>• Provides overall guidance and accountability for the project • Directs overall project decisions (organizational) • Creates project scope and vision</td>
<td>• Accountable for timely and successful implementation of the project • Drives project teams • Serves as subject matter expert</td>
<td>• Accountable for creating clinical consensus on key processes and project decisions</td>
<td>• Accountable for implementing, conducting, and measuring project outputs and outcomes • May also be a subject matter expert (SME) in the project team</td>
<td>• DMAIC methodology expert • Accountable for using DMAIC to manage the project and coordinate with stakeholders</td>
<td>• Makes significant and focused contributions to the timely and successful implementation of the project • Provides significant and focused contributions to the direction of the project • May be involved in data collection &amp; analysis <em>Consider “fresh eyes”</em></td>
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### Utilizing the DMAIC Methodology

**Trying to fix a broken process**

#### Define
- Team members
- Define key terms & goals
- High level process map
- 1st Charter

#### Measure
- Defining outcome & process metrics
- Operational definitions
- Data collection plan
- Procedure development

#### Analyze

#### Improve
- Individual patient review
- Process analysis
- Ongoing identification of MVPs
- Ongoing Charter updates

#### Control
Utilizing the DMAIC Methodology

Define
- Team members
- Define key terms/goals
- High level process map

1st Charter

Measure
- Define outcome & process metrics
- Operational definitions
- Data collection plan
- Data analysis
- Individual patient weekly & prn review
- Process analysis
- Ongoing identification of MVPs

Analyze
- Defining outcome & process metrics
- Operational definitions
- Data collection plan
- Ongoing Charter updates
- Procedure development
- Ongoing Charter development

Improve
- Generating solutions/interventions
- Engaging executive sponsor support
- Developing system & community partners
- Applying evidence based guidelines

Control
- Ongoing metrics & monitoring
- Developing a sustainable plan
- Partnering with Analytics to develop automated reports & data analysis
- Dissemination of project plan, progress & possibilities

Chart: Multiple Visit Patient Care Planning

Project Overview
Problem Statement: Frequent emergency department & hospital admissions for pain and/or symptom related conditions create financial, throughput & system resource strains on the healthcare system as evidenced by review of the Crimson Top 100 patient list, admission data & staff referrals for Delnor and CDH.

Goal/Benefit: Ensure patient access to the appropriate level of care through a coordinated care evaluation and creation of an individualized care plan for patients with persistent pain or other related conditions/symptoms, thereby reducing ED visits and/or hospitalizations by 25% annually for patients with MVP care plans.

Scope: Patients who have presented to the West Region EDs or have been hospitalized 3 times per year within the last 6 months for the same or similar pain diagnosis. Individual exceptions may apply.

Excludes: Patients with terminal conditions such as cancer, ETOH dependency, drug overdose/suicide attempts

System Capabilities / Deliverables:
- Multidisciplinary assessment, evaluation and creation of an individualized care plan that will be placed in the Media section of the EMR as communicated in the "FYI" Flag area. Ongoing evaluation & modification of plan based on discussion on a monthly or as needed basis.

Resources Required:
- Dedicated Care Coordinator, Social Worker, Pain Management APN, ED physician leadership and/or inpatient hospitalist or PCP to endorse care plans and other specialists as needed. Financial and outcome analysis support.

Last Update: 4/27/2016
Scope of MVP Team/Project

- **Scope includes**
  - Patients who have presented to the West Region EDs or have been hospitalized 3 times per month within the last 6 months for the same or similar pain diagnosis
- **Scope excludes**
  - Patients with terminal conditions such as cancer.
  - ETOH dependency
  - Drug overdose/suicide attempts
- Individual exceptions may apply at the discretion of the MVP Team

---

How do we know we’re making a difference?

- **Outcome Metric(s):**
  Reduce ED visits and/or hospitalizations (for the same condition) for patients with MVP team interventions by 25% annually

- **Process Metric(s):**
  Care plan creation, ongoing evaluation and assessment of compliance (patient and caregivers) with plan

---

MVP Individual “Root Cause Analysis”

- **Who?**
  - In depth psychosocial evaluation
- **What?**
  - The same pain complaint on a frequent basis
  - A flare or exacerbation of pain
  - A new acute pain complaint
  - A patient with substance use disorder
- **Why?**
  - Unrelieved symptoms such as nausea
  - Co-morbid diagnoses
- **When?**
  - Is there a pattern to their visits?
Evolution of a System Procedure for MVP Care Planning

Referrals are made via multiple methods to the MVP Work Group.

- Evaluation by MVP Work Group
- Medical alert “FYI” flag added to the EMR for communication to team
- Review the patient history of system encounters
- Review patient's medical, social & psychological history
- Review the IL Prescription Monitoring Program (ILPMP)
- Complete MVP Care Planning Assessment
- Contact the patient's PCP and/or pain specialist
- Medical alert “FYI” flag added to the EMR for communication to team

Care Plan Communication

FYI Flag

This care plan is intended to supplement, rather than substitute for professional judgement and may be changed based on individual needs.
Introductory Patient Letter

Our goal at Northwestern Medicine is to provide excellent care to you throughout our health system. Excellent care means that we evaluate your condition and offer appropriate treatment in a kind, respectful, efficient and caring manner.

The Center for Disease Control (CDC) and many states have developed guidelines for patients with chronic pain. The focus is to make sure that patients with chronic pain receive safe and effective pain care from their Primary Care Provider or a Pain Specialist. We at Northwestern Medicine support the CDC recommendations.

We’re concerned that receiving care in these settings may not be in your best interest. Our goal is to help you receive the coordinated care that your chronic pain condition requires in the appropriate setting. Therefore, our clinical team at Northwestern Medicine has reviewed your records and has some important recommendations to assist you in managing your chronic condition.

We understand living with and managing a chronic pain condition can be very challenging. Most patients find that a combination of different types of treatments are needed to improve pain relief and increase activity. Our clinical team will meet with you to discuss your treatment options and if needed create a care plan to coordinate your care within our health system and with community providers.
Go Live!

52 yo female with chronic HA with psychiatric comorbidities, many years of hospital overuse.

MVP Team Intervention: PCP established, scheduled appointments in OPIC for hydration & non opioid HA treatment. Established psychiatric providers, social support & Al-Anon referral

Central DuPage Care Plan

<table>
<thead>
<tr>
<th>Visits</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>March</th>
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2015-2016

1st Intervention Care Plan Initiated
CDH Individual Patient Outcome Data

Delnor Individual Patient Outcome Data

Delnor MVP Process Impact Metric

MVP Intervention vs No Intervention
### Individual Financial Outcome Data 2015-16 (CDH and Delnor)

- **% Change Average Monthly Charges per Patient**
  - $50\%$ to $-82\%$
  - $-96\%$ to $-95\%$
  - $-89\%$ to $-77\%$
  - $60\%$ to $-65\%$
  - $-80\%$ to $-83\%$
  - $-29\%$ to $-21\%$
  - $-100\%$ to $-92\%$
  - $194\%$ to $79\%$
  - $83\%$ to $-92\%$

### Summary of Overall Financial Outcome Data 2015-16 (CDH and Delnor)

- **Overall Average Charges/Month**
  - Pre-intervention: $\$22,679.79$
  - Post-intervention: $\$11,544.62$
  - $49\%$ Decrease

### Barriers

- **Patient**
  - Lack of insight
  - Judgement by healthcare professionals
  - Pre-existing maladaptive behaviors
  - Psychiatric Co-morbid

- **Caregiver**

- **System**

- **Societal**

---

*Note: The image contains graphs and charts illustrating the financial outcomes and barriers.*
Barriers

- Patient
  - Education to ED and PCP providers
  - Misconceptions, previous negative interactions
  - Labor/time intensive process to individualize Care Plans & ongoing (sometimes weekly) follow up with providers & patients

- Caregiver
  - Lack of referral sources for mental health providers to address co-morbid psychiatric conditions
  - Lack of referral sources to addictionologists & treatment for Substance Use Disorder
  - Limited dedicated resources

- System
  - Opioid phobia
  - Lack of family support
  - Judgment for chronic conditions limiting

- Societal
  - Payer source
  - Stigma
  - Lack of family support
  - Judgment for chronic conditions limiting
Polling Question

Which barrier do you feel is the most challenging and impacts your ability to care for your Multiple Visit Patients?

- Patient
- Caregiver
- System
- Societal

In Summary - Progress to date

- Delnor begins Patient Care Plans led by CC & Pain APN
- CDH creates Care Planning Management Team
- Refined process for patient identification & care planning
- Collaborate to refine NW Region process
- Implementation of care plans at CDH & Delnor
- Ongoing care plans at Delnor
- Development of MVP Procedure, patient & provider letters & care guidelines
- Tracking patient and system outcomes
- Feb. 15 / Mar-April. 15 / April. 2015 / June, 2016 / Sept. 14 / Oct. 2015
Next steps for growth & sustainability

1. Celebrate Success
2. Additional FTE for Care Coordination
3. Automated patient identification based on system utilization
4. Financial cost avoidance data
5. Readmission data after MVP team intervention
6. Partner with area hospital “MVP” teams
7. Development of evidence based care plans on common diagnoses
   - Migraine Order Set (In Progress)
   - Sickle Cell Crisis
   - Cyclic Vomiting
   - Opioid use disorder and withdrawal protocol
   - Back pain

Thank you to our teams!

Central DuPage Hospital
- Carol Tulley, Co-Chair Professional Development Specialist
- Pam Nuss, Manager Care Coordination
- Dan Dukeler, BHS Counselor
- Connie Grotenhuis, Social Worker
- Katherine Ball, Chaplain, Ethics Committee
- Joe Merrynash, RN, Emergency Department
- Dr. Tom Ewerson, Emergency Dept Director
- Dr. Stephen Graham, Emergency Dept Physician

System Support
- Cori Zacher, VP Outpatient Services/Exec. Sponsor
- Jeannine Harvell, Director of Care Coordination
- Kim Czaruk, Director Patient Care Services
- Michael DeCrescenzo, Senior Analytics Consultant

Delnor Hospital
- Sherri Johnson, Co-Chair Care Coordinator
- Jana Hossli, Social Worker
- Kelly Ryan, Manager Care Coordination
- Dr. Eric Nolan, Psychiatrist
- Dr. Brian Dukelae, Emergency Dept Physician
- Fran Strong APN, Emergency Dept
- Emily Rowell, CMS Care Coordinator
- Richard Watts, Chaplain, Ethics Committee

References/Resources
- http://www.assessment.org/Border/Substance
- http://www.selectpine.org/PublicPolicy/No351031109
- https://www.icsi.org/guidelines__more/catalog_guidelines_and_more/catalog_guidelines/catalog_neurological_guidelines/pain/
Thank You!

Contact us at:
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Mary.lyons@nm.org