Improving Patient Safety Across Michigan and Illinois

Medication Reconciliation

April 20, 2016
Agenda

• Grand Rounds Recap, IHA HEN Cultural Opportunities

• Medication Optimization Overview (Cynosure)

• Care 4 Today (Janssen)

• Medication Reconciliation-Tools, Keys and Tips (Cynosure)

• Q/A
Grand Rounds

SUCCESS

WHAT PEOPLE THINK IT LOOKS LIKE

SUCCESS

WHAT IT REALLY LOOKS LIKE

MHA
Keystone Center
Hospital Engagement Network
MICHIGAN | ILLINOIS

IHA
Illinois Health
and Hospital Association

MHA
Michigan Health & Hospital Association
IHA launched the SCORE Survey informational webinar on March 24th. The SCORE (Safety Culture, Operational Reliability and Engagement) Survey is being offered to 30 Illinois HEN hospitals free of charge in 2016. Insights from SCORE will allow your organization to diagnose your culture and to take explicit actions that drive measurable, sustainable clinical, financial and operational value.

We are asking that hospitals confirm their participation in the month of April. We would encourage you to connect with leadership at your hospital and share the one-pager, slide deck and webinar recording.

If you have any questions regarding the SCORE Survey please email Joshua Proulx (josh@safeandreliablecare.com) or Teresa Baumgartner (TBaumgartner@team-iha.org)
High Reliability

High Reliability Journey-May 3rd Kickoff Webinar

IHA is excited to offer our HEN hospitals the opportunity to begin the journey to become Highly Reliable Organizations (HROs). HRO's are organizations that manage safety hazards extremely well and do so consistently over extended periods of time. High reliability in healthcare signifies that excellent quality of care is consistently delivered for every patient, every time with a commitment to zero preventable harm. To see a video on Why High Reliability Matters click here.

The road to high reliability is an ongoing journey. It’s a commitment to patient safety and the way we deliver quality health care. In support of Illinois hospitals transitioning into HROs, IHA has partnered with the Joint Commission Center for Transforming Healthcare to provide HRO programming and resource support.

We encourage you to engage your C-Suite in this journey and to join us for our HRO kickoff webinar on May 3rd and the Oro™ 2.0 Assessment Introduction on May 11th, both from 9:00-10:00am. Click here for webinar dial-in details. Remember, the Assessment is a required foundational component of HEN participation.
Optimizing medications to reduce readmissions

Pat Teske, RN, MHA
pteske@cynosurehealth.org
"Your condition has no symptoms or health risks, but there is a great new pill for it."
Polypharmacy – sometimes good

• Significant advances in evidence based medicine
• Guidelines from professional organizations are now widely used
• As a result, patients may be on 4-6 meds for one condition
But not always good

- Multiple meds with increasing # of co morbidities
- Direct to consumer advertising
- Multiple prescribers with little communication between them
- Prohibitive cost of prescription meds leading to hoarding of discontinued meds
- Increasing use of OTC, herbals for self treatment
- Lack of knowledge about medications
More then just med rec

Medication Adherence

Medication Management

Medication Reconciliation
Medication Reconciliation

• National Patient Safety Goal – 2005
• Part of IHI’s 100K Lives Campaign
• According to The Joint Commission
  • “a process of comparing the medications a patient is taking (and should be taking) with newly ordered medications, which include the medication name, dose, frequency route and purpose.”
• In the door accuracy
  • Med techs
• Leaving with a clear list
Its impact

- Forty percent of medication errors result from inadequate reconciliation in handoffs during transfer, admission or discharge
  - Of these 20% result in harm
- Cornish and authors completed a study of 151 hospital admissions, which showed 53.9% of those patients had at least one error

Cornish PL. Arch Intern Med. 2005;165:424-429
## Why it is difficult

### Patient challenges
- Lack of knowledge of medications
- Cognitive decline or health literacy challenges
- Activation, loss of control
- Multiple providers & facilities
- Keeping an up to date medication list
- Post discharge issues such as access and affordability

### Organizational challenges
- Workflow issues
- High risk patients require high use of resources
- Lack of integration across continuum of care
- IT issues
- Need for Best Practices
Best practice guiding principles

• One source of truth
• Defining roles and responsibilities in the process
• Integrating medication reconciliation into work flow
• Adapting for various practice settings
What are you doing?

• How and who obtains admission medication list?
• How are new medications compared to prior medications?
• How and who prepares the final discharge medication list?
For your Pill Drill you'll go to Room Six Sixty-three,
where a voice will instruct you, "Repeat after me...
This small white pill is what I munch
at breakfast and right after lunch.
I take the pill that's kelly green
before each meal and in between.
These loganberry-colored pills
I take for early morning chills.
I take the pill with zebra stripes
to cure my early evening gripes.
These orange-tinted ones, of course,
I take to cure my charley horse.

"I take three blues at half past eight
to slow my exhalation rate.
On alternate nights at nine p.m.
I swallow pinkies. Four of them.
The reds, which make my eyebrows strong,
I eat like popcorn all day long.
The speckled browns are what I keep
beside my bed to help me sleep.
This long flat one is what I take
if I should die before I wake."
Medication management

• Optimization
  • What is the best medication regime for the patient?
  • Goals:
    • DECREASE complexity
    • DECREASE cost
    • INCREASE adherence
  • By
    • CHECKING FOR duplications/frequency/indications/omissions/doses
    • RESOLVING any issues with physician
What are you doing?

• Describe your medication management efforts?
• How are you funding these efforts?
Medication adherence

Rate of Medication Drop Off – Nearly 1 in 3 Patients Don’t Fill

Adherence? Physicians – alignment, connection w/ PCP to hospitalists (handoff)

100% 50% - 70% 48% - 60% 25% - 30% 15% - 20%
Prescriptions Brought to Pharmacy Picked up Are Taken Properly Are Refilled

Source: IMS
What’s involved

• MEDucation

• Getting the meds
  • Leave with meds – Hospital provides supply
  • Meds-to-beds
  • Transportation to the pharmacy
  • $$$

• Taking the meds
  • System – pill box, scale
  • Post discharge calls for questions and support
Consider criteria

- More than 10 meds
- ‘High Risk’ meds – narrow therapeutic index (digoxin), requiring lab monitoring (coumadin)
- Complex regimen with multiple dose schedules
- Lack of access to medications
- Low health literacy and/or English proficiency
- Physical limitations
- Lack of support structure post discharge
- Frequent readmissions
What are you doing?

• Describe your medication management efforts?
• How are you funding these efforts?
• How do you decide which patients to include?
Questions?
Consumer-facing features
Access...

care4today®
Mobile Health Manager

Agregar medicación

Nombre: Aspirin
Apodo: opcional
Dosis: 1 Tableta
Frecuencia: Diariamente
Intervalo: 1 vez por día
Dosis 1: 12:45 PM

Mensaje recordatorio: Es hora de tomar su medicación
care4today®
Mobile Health Manager
Care4Family®
Care4Charity®

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Adherence Reports

![Adherence Reports](image)

- **Ramey**: 30 Day Adherence 99%
  - April: 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
  - May: 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

- **Diabetes...**: 30 Day Adherence 97%
  - April: 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
  - May: 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

- **Sleep M...**: 30 Day Adherence 100%
  - April: 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
  - May: 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

- **Vitamins**: 30 Day Adherence 100%
  - April: 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
  - May: 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

- **Mike**: 30 Day Adherence 70%
  - April: 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
  - May: 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

- **Icons**:
  - [Taken all doses]
  - [Missed some doses]
  - [Missed all doses]

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Population Health Management
Dashboard: Connecting the Provider and Patient
Medication Reconciliation

Tools, Keys and Tips
Session Objectives

Medication Reconciliation...

✓ **How** → the approach
✓ **What** → the process
✓ **Tools** → the forms
✓ **Keys** → to success
✓ **Tips** → take home advice
While an inpatient, an elderly woman was started on the new anti-hypertensive drug.

She was discharged with a new RX for blood pressure medicine.

After discharge, the woman was seen in one of the hospital’s ambulatory care clinics complaining of severe dizziness.

Her PCP figured out that she was taking the blood pressure medicine prescribed in the hospital on top of an earlier prescription she’d been using at home for the same thing.
Key #1

Find and tell the stories....
....They exist
....They’re powerful
....They’ll engage people
Recognition

- IHI Mentor Hospital since 2006
- IHI Innovation Award Winner (Dec 2007)
- Agency for Healthcare Research & Quality (AHRQ) Innovation Exchange (www.ahrq.org)
- Published case study in Joint Commission Resources’ Medication Reconciliation Toolkit for Implementing NPSG 8
Improve Medication Safety

Reduce rates of unreconciled medications

Implement an effective admission, discharge and transfer reconciliation process

*Model for Improvement Source: Institute for Healthcare Improvement (IHI)*
## Med Reconciliation Timeline

<table>
<thead>
<tr>
<th>Year</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month</td>
<td>JAN</td>
<td>FEB</td>
<td>MAR</td>
</tr>
</tbody>
</table>

**Pilot unit (4A)**
- Admission Reconciliation Implemented
- Transfer Reconciliation Implemented
- Discharge Reconciliation Implemented

**Medicine units**
- ICU/IMCU
- Transfer Rec live (all areas)
- Pediatrics unit

**Surgical units**
- IMCU/ICU
- Psychiatry units

**KEY:**
- Admission Reconciliation Implemented
- Transfer Reconciliation Implemented
- Discharge Reconciliation Implemented

**OB unit**
- Pilot unit (4A)
- ICU/IMCU
- Medicine Unit (4B)
- Surgical Unit
- Psychiatry Unit
- Pediatrics unit
- OB Unit
Tip #1

Segment pieces of the improvement process in bite size increments.

- Allows for small scale tests of change
- Allows for customization where necessary
- Improves likelihood of success
MR Project Team

- Physician champion (Internist)
- Resident
- Nursing champion (Medicine unit staff RN)
- Pharmacists (2) Pharmacy Tech (1)
- Clinical Informaticist (RN)
- Forms expert
- Nursing rep for every service
- MD rep for every service
- Leader
Key #2

Multi-disciplinary team

- Physician champion essential
- Typically, pharmacy, nursing and medical staff
Tip #2

Short (45 minutes) weekly team meetings that start and end on time

- Progress made weekly
- Decisions revisited only if agreed upon unanimously
- Maintains momentum
- Promotes engagement
- People show up!!
Measurement

**Outcome Measures**

- % unreconciled meds (Goal = 0%)
- % of patients with ALL meds reconciled (Goal = 100%)

**Process Measure**

- % Compliance with use of the forms/process (Goal = 100%)
Results

• Reduced rates of unreconciled home medications…
  …from 26% to 1% on ADMISSION
  …from 23% to 4% on DISCHARGE

• Reduced rates of unreconciled medications…
  …from 12% to 4% on TRANSFER

• Improvement has been sustained.
Tip #3

Test measurement tool thoroughly

- insures that the data collection process will produce the information you are seeking
Tip #4

“Measurement is for learning, not for judgment”

“Use data to generate light not heat!”

- Use data to learn where your process is failing
- Data collection should be frequent, small samples
Use “What’s-In-It-For-Me” (WIFM) approach in workflow design

- Admitting MD → new process was less work (med list doubles as an order form)
- Admitting MD → eAMROF was less work (pre-populated list meant less writing)
- Admitting RN → new process was less work (stopped capturing a med list from scratch)
Key #4

Customize where necessary; Standardize where possible

- Allows for unique workflows
- Promotes buy-in from staff

Examples → Peds, OB
Key #5

Make it easy for staff to use the new process & difficult or impossible to use the old process

- Key for achieving high compliance with use of the process

Example → Attached Admission Med Rec form as page 1 of all admit order forms already in use (manual at first then via forms vendor)
Transfer Reconciliation

• Electronically printed form contains list of all active meds as of that moment in time.
• Provider uses form to order medications on transfer within the facility.
• Process being used 99% of the time.
Key #6

Use “What’s In-It-For-Me” (WIFM) approach in workflow design

- Receiving RN → Less work (no more “continue previous meds)

Harness Informal Champions

- Receiving RN → Constant reminders to physicians who didn’t use the new process
Discharge Reconciliation

• Electronically printed form contains list of all pre-admit meds and active inpatient meds as of discharge.
• Provider uses form to order discharge meds
• Patient is provided with a “patient friendly” list of discharge medications.
• Copy of list is sent to next provider of care.
Key #7

Identify & Mitigate Failures

- Admission reconciliation failure causes discharge reconciliation failure
- Develop workflows to identify key failure points so they can be fixed immediately

Example ➔ Daily report in Pharmacy for identifying admitted patients w/o admit med rec performed
Next Steps

• Register for the May 18th Risk Assessments webinar.

• Let us know what topic areas you would like to focus on this Summer!

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May 18th-Risk Assessments

Email: IllinoisHEN@IHAstaff.org