RIH Transitions of Care Collaboration with Coastal Medical To Improve Transitions for Patients Discharged Hospital To Home

Sergio Petrillo, PharmD
Clinical Pharmacist Specialist, Rhode Island Hospital (RIH)
&
Mark Trindade, PharmD
Pharmacist, The Miriam Hospital (TMH)
&
Sarah Thompson, PharmD, CDOE
Director, Clinical Pharmacy Services, Coastal Medical
Key Statistics

- Chronic diseases account for 81% of all hospital admissions, 91% of all prescriptions filled

- Overall, nearly 75% of adults do not follow their doctor’s orders when it comes to taking medicines
  - (i.e., non-adherent: not filling new prescription, taking less than the recommended dose, or stopping the medicine)

- Medication non-adherence is associated with:
  - 5.4 times increased risk of hospitalization, re-hospitalization, or premature death for patients with high blood pressure
  - 2.5 times increased risk of hospitalization for patients with diabetes
  - Economic burden of $100 billion-$300 billion per year

- Approximately 50% of medication errors occur at times of transitions in care
Background

• Center for Medicare and Medicaid Services (CMS) Readmission Reduction Program
  – Affordable Care Act section 3025
    • Goal incentivize hospitals to develop programs to reduce preventable hospital readmissions
    • Penalties assessed based on hospital readmission rate
      – Penalties currently up to 3%
      – Current disease states include PNE, CHF, AMI, COPD, THA, TKA
Center for Medicare and Medicaid Services Shared Savings Program

- Affordable Care Act, Section 3022
  - Goal is to manage all of the healthcare needs for a patient population to reduce costs, improve the patient experience, and improve quality
  - ACO is eligible to receive payments if:
    - ACO meets quality measures and actually achieves savings compared to benchmark year
Background Cont’d

• ASHP Ambulatory Care Summit
  – Advance patient care and optimize pharmacists’ role in ambulatory care settings

• ASHP Advocacy efforts for Bill 4190
  – Recognize pharmacists under SSA as healthcare providers
Strong national recommendations for including pharmacists in the Coordinated Care Model

- Centers for Medicare & Medicaid Services (CMS)
- Medicare Payment Advisory (MedPAC)
- Public Health Services Report to US Surgeon General
- Institute of Medicine (IOM)
- ACCP White Paper on Improving Care Transitions
Patient Perspective: Transitions of Care

- Emergency Department Team
- Medication Reconciliation
- Hospitalist
- Case Management
- Specialists
- Discharge Planning
- Skilled Nursing Facility
- Pharmacy Refills
- Home Services
- PCP follow-up

Emergency Department
Inpatient
Discharge
Pharmacy Coordinated Care Services

- Inpatient
- Ambulatory Care/Medication Therapy Management (MTM)
- Lifespan Pharmacy (retail pharmacy)
- Discharge/Transition of Care
Pharmacy Transitions of Care
“A set of actions designed to ensure the coordination and continuity of health care as patients transfer between different locations or different levels of care within the same location.”

• Examples include but not limited to the following:
  • Transfer within hospital: One unit / area to another
  • Hospital Discharge (D/C) to Home, Skilled Nursing Facility (SNF), Assisted Living Facility (ALF), Hospice, etc

Transition of Care Pharmacy Services at Lifespan

- Transition of Care (TOC) Pharmacy Services
  - Initiated at Lifespan January 2013
  - 1 FTE Clinical Pharmacist Specialist

- FY14 Pharmacists added through United Grant
  - 1.5 FTE RIH
  - 1 FTE TMH

- Targeting patient demographics with high readmission risk
  - COPD, CHF, PNE, AMI, DM and high risk meds

- Collaborative pilot with Coastal Medical
Role of the TOC Pharmacist

• Identify medication related problems (MRPs) to prevent readmission
  – (e.g. ADR, drug interaction, drug allergy, dose reduction or change)

• Provide medication education and teaching

• Minimize barriers related to medication access
  – Close “gaps” occurring during TOC; Hospital to Home

• Collaborate across all areas of healthcare
  – internal and/or external providers where appropriate
TOC Pharmacist Visit

• Prior
  – Comprehensive review of patient history

• During
  – Patient empowerment/engagement

• Post
  – Goal is to ensure / enhance continuity of care
Medication Education and Teaching

• Pharmacists are drug experts
  – Specially trained in medication therapy and counseling
  – Use visual aids, “teach-back” techniques, and motivational interviewing to engage patients
  – Assess what patient knows and understands
    • What is this med for?
    • How do you take this med?
    • What questions can I answer related to your meds?
Minimize Barriers to Medication Access

• Close “gaps” occurring during TOC; Hospital to Home
  • Availability of medication/formulations
  • Insurance issues (e.g. coverage, co-pay)
  • Transportation to pharmacy
Lifespan Pharmacy

• Minimizes potential barriers associated with medication access
  Ex: Availability of medication(s), Formulary issue(s)/ability to run trial claims based upon patient’s prescription coverage

• Improves patient experience and satisfaction

• Works towards closing in on “gaps within healthcare system” and improves patient’s continuum of care

• Convenient

• Delivery to patient bedside
Lifespan Pharmacy
At RIH
New Medication(s) Coverage

• New therapy added during inpatient stay that is to continue outpatient:
  A) High copayment or B) Not be covered by insurance

• RX processed and insurance rejects claim, “NDC not covered”:

• What happens next?

• Result: Non-adherence (ie: choose not to fill), delay in therapy, and/or hospital readmission d/t worsening condition and/or lack of a solution
Collaboration

• Collaborate across all areas of healthcare
  – Internal providers
    • MD, RN, CM, SW, nutrition, respiratory
  – External providers as needed
Coastal Medical

• 88 Physicians and 25 NP’s/PA’s, mostly primary care
• 19 offices across RI serve >120,000 patients
• EMR (eClinicalWorks) since 2006
• CCMR Analytics (eClinicalWorks) since 2012
• PCMH since 2009
  – Nurse Care Managers
  – Pharmacists
  – Care Teams
• >80% of patients under shared savings contracts, including Medicare ACO
Coastal’s Vision

The Triple Aim:

– Improve the patient experience of care (including quality and satisfaction)
– Improve the health of a population
– Reduce the per capita cost of health care

Population Health Management

Diagram showing various levels of care: Inpatient Care, Emergency Care, Sub-specialty Care, Primary Care, Post-Acute Care, Home-Based Care, Home, LTC, SNF, Hospice, Palliative Care.
How Does CMS Address Population Health, Quality of Care?

33 quality measures across 4 domains:
- Patient/caregiver experience
- Care coordination and patient safety
- Preventive Health
- Care of at-risk populations (disease management)
ER Communication Program

- Lifespan Hospitals, 80% of Coastal admissions
- Initial discussions 2012
- Identifying Coastal patients
- One number for ED to call 24 hours a day
- Requirement that ED physician speak with Coastal physician
- Joint decision making
Patient Perspective: Transitions of Care

Coastal Medical ED Communication Program

Coastal Medical to Rhode Island Hospital referral

Rhode Island Hospital Transitions of Care Program

Rhode Island Hospital to Coastal Medical Facilitated Communication

Emergency Department Team

Medication Reconciliation

Hospitalist

Specialists

Discharge Planning

Case Management

Coastal Care Management

Skilled Nursing Facility

Pharmacy Refills

Home Services

PCP follow-up

Emergency Department

Inpatient

Discharge
• 25 patient chart review revealed:
  – At Admission:
    • 28% of medications were omitted
    • 24% of home medications continued had a dose discrepancy
  – At Discharge:
    • Average of 1 additional medication per patient
    • 33% of medications listed on the discharge summary had a dose discrepancy at the follow up visit with the Coastal Medical provider
• 18/25 patients were on high risk medications
Coastal Medical Collaboration

• Goal to enhance identification of patients at readmission risk
• Predefined criteria
• Initiated November 2013

• Referrals to RIH Pharmacy TOC Program
  – Made by community nurse care manager
  – Communication sent via secure electronic messaging
    • Includes brief patient history
    • List of current medications prior to admission
Pharmacy Transition of Care Collaboration Pilot Vision

• To improve communication between Coastal Medical and Rhode Island Hospital
  – Better coordination between established programs at both organizations
  – Expand the involvement of Pharmacists in care transitions
  – Support better patient care by leveraging team expertise
Overall RIH/TMH Data

- Jan 14 – Aug 2014
  - 836 patient encounters (568 RIH; 268 TMH)

- Population characteristics

<table>
<thead>
<tr>
<th>Measure</th>
<th>RIH</th>
<th>TMH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age &gt;=65yrs</td>
<td>50%</td>
<td>60%</td>
</tr>
<tr>
<td>Targeted diagnosis</td>
<td>75%</td>
<td>67%</td>
</tr>
<tr>
<td>Avg # chronic conditions</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>&gt;10 meds</td>
<td>53%</td>
<td>50%</td>
</tr>
<tr>
<td>5-9 med</td>
<td>40%</td>
<td>45%</td>
</tr>
<tr>
<td>Avg # meds</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>
Overall RIH/TMH Data

<table>
<thead>
<tr>
<th>Measure</th>
<th>RIH</th>
<th>TMH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total # of patients</td>
<td>399</td>
<td>257</td>
</tr>
<tr>
<td># of encounters</td>
<td>568</td>
<td>268</td>
</tr>
<tr>
<td># of MRPs</td>
<td>408</td>
<td>101</td>
</tr>
<tr>
<td># of pts w/ at least 1 MRP</td>
<td>211</td>
<td>74</td>
</tr>
<tr>
<td>MRP req f/u w LIP</td>
<td>63%</td>
<td>60%</td>
</tr>
<tr>
<td>Level of Teach Back</td>
<td>7/10</td>
<td>8/10</td>
</tr>
<tr>
<td>MRP resulted in possible prevented readmission</td>
<td>26%</td>
<td>20%</td>
</tr>
</tbody>
</table>
Type of MRP Identified

- Drug omission
- Dose/frequency adjustment
- Drug/lab conflict
- Adverse Drug Reaction (ADR)/allergy
- Payer/processor
- Drug-drug interactions
- Drug-disease interactions
- Drug dose limit exceeded
RIH/Coastal Data Outpatient Referrals

- Nov 13 – Aug 14
  - 246 Referrals
    - 60% visited by RIH pharmacist
    - 40% not visited
      - Majority did not meet established criteria
      - Few instances where patient discharged prior to RPh visit
## RIH/Coastal Population Characteristics

<table>
<thead>
<tr>
<th>Measure</th>
<th>Coastal Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age &gt;=65yrs</td>
<td>65%</td>
</tr>
<tr>
<td>Targeted diagnosis</td>
<td>80%</td>
</tr>
<tr>
<td>Avg # chronic conditions</td>
<td>6</td>
</tr>
<tr>
<td>&gt;10 meds</td>
<td>55%</td>
</tr>
</tbody>
</table>
## RIH/Coastal Data

<table>
<thead>
<tr>
<th>Measure</th>
<th>RIH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total # of patients</td>
<td>146</td>
</tr>
<tr>
<td># of MRPs</td>
<td>174</td>
</tr>
<tr>
<td># of pts w/ at least 1 MRP</td>
<td>87</td>
</tr>
<tr>
<td>MRP req f/u w LIP</td>
<td>76%</td>
</tr>
<tr>
<td>Level of Teach Back</td>
<td>7/10</td>
</tr>
<tr>
<td>Identification of MRP resulted in possible readmission</td>
<td>26%</td>
</tr>
</tbody>
</table>
Types of MRP

- Drug omission
- Dose/frequency adjustment
- Drug/lab conflict
- Adverse Drug Reaction (ADR)/allergy
- Payer/processor
- Drug-drug interactions
- Drug-disease interactions
- Drug dose limit exceeded
Successes!

- Elderly female prescribed Xarelto 20mg Daily at discharge
  - ClCr ~30 ml/min (dose too high!)
  - Discharged on Friday afternoon with follow up appointment Monday with Non-Coastal Cardiologist
  - Prevented first dose from reaching patient

- Elderly female with multiple falls
  - Able to start benzodiazepine taper while in hospital
  - PCP follow up in place
Patient admitted with COPD exacerbation

- Patient interview visit demonstrates patient not sure which of their many inhalers to use as “rescue”
- Picture the patient at home, wheezing, can’t breath, using the wrong inhaler, turning blue; family member calls 911; patient is brought in through ED and readmitted
- Taking the time to review inhalers and have patient demonstrate an understanding of when to use which and how may prevent a readmission
Patient admitted with CHF exacerbation

- Patient admitted 4 times in previous 3 months, patient received TOC RPh visit on 2/1/14 and hasn’t been readmitted since
  - Asked patient during visit to show us what meds she is taking
    - Family member provides pt’s medication bottles; it became apparent that two of the meds were the same; 2 other meds were not even filled
  - Patient left with ALL prescribed meds in hand filled by Lifespan Pharmacy and a follow up appointment with pharmacist in Med Primary Care Clinic
  - Follow up phone communication post discharge
Examples

1) Toradol (ketorolac) RX written for 30 day supply (usually limited to a max of 5 day therapy):
   – Action: Discussed with prescriber,
   – Result: Changed to alternative NSAID
   – Possibly prevented readmission d/t dehydration and/or kidney injury

2) Coumadin (warfarin): Many patients not aware of potential drug-drug and/or drug-food interactions
   – May increase risk of bleed

10/29/2014
3) Lovenox (enoxaparin) bridge to Coumadin:
   - Many insurance do not cover Lovenox
   - PCP offices report some patients present 5 days post hospital d/c, and decided not to fill Lovenox at d/c, or get their INR drawn post d/c
   - Significant risk of developing blood clot (MI, stroke, etc)

4) Misconception that certain generic medications are on Walmart $4 generic list
   Ex: At d/c, Patient given RX for antibiotic and explained cost is $4 at Walmart: Patient goes to Walmart, not covered. Patient may choose not to fill
Coastal’s Next Steps

• Patient Phone Calls
  – Post PCP hospital follow up visit phone call by Coastal Pharmacist
• Hospital to SNF transitions
• Hospital, Visiting Nurse, and PCP collaboration
Challenges

- Timely patient identification
- Workflow styles
- Resource availability
- Communication
Questions??

collaboration is everything