Maximizing the Impact of Pharmacy Services in Transitions of Care

Ashley Core, PharmD
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Disclosure Statement

• The following individuals have nothing to disclose concerning possible financial or personal relationships with commercial entities (or their competitors) that may be referenced in this presentation:
  • Presenter: Ashley Core, PharmD
Objectives

- Name common barriers encountered in establishing medication reconciliation services
- Describe the potential impact of pharmacy involvement in medication reconciliation and transitions of care (*Pharmacist and Technician*)
- Identify resources that are available to launch or optimize pharmacy services within the transitions of care process
Current State

- Transitions of care\(^1\)
  - “…the movement of patients between health care locations, providers, or different levels of care within the same location as their conditions and care needs change.”
Recognizing the Need

- **National Patient Safety Goal 03.06.01²**
  - “…document and pass along information about patients’ medications; review safe practices for medication reconciliation”

- **Centers for Medicare and Medicaid Services³**
  - “…performs medication reconciliation for more than 50% of transitions of care”

- **Institute for Healthcare Improvement⁴**
  - “…prevent adverse drug events (ADEs) by implementing medication reconciliation”
Role of the Health-System Pharmacist?

- Medication history
- Admission medication reconciliation
- Disease specific counseling
- High risk medication counseling
- Medication therapy management

- Bedside pharmacy services
- Medication access
- Discharge medication reconciliation
- Discharge counseling
- Post discharge phone calls
Potential Impact

- Improved patient safety
  - Fewer admission medication history-related errors
  - Greater accuracy of discharge summary medication lists

- Enhanced patient experience
  - Better understanding of discharge medications

- Cost avoidance
  - Decreased costs/length of stay related to medication errors
  - Reduced emergency department visits
  - Reduced hospital admissions/re-admissions
## Supporting Evidence

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Primary outcome</th>
<th>Intervention(s)</th>
<th>Results</th>
</tr>
</thead>
</table>
| Gleason et al\(^5\) (MATCH) | 2010 | Medication order errors on admission     | • Pharmacist-obtained medication histories  
• Admission medication reconciliation | • 35.9% with order error on admission  
• 85\% of errors originated in medication histories  
• 52.4\% with potential to cause harm without intervention |
| Anderegg et al\(^6\) | 2014 | 30 day readmission rate                  | • Admission and discharge medication reconciliation  
• Expanded clinical pharmacy services, including ED | • 5.5\% decrease in 30 day readmissions in high-risk patients (\(p=0.042\))  
• Projected cost savings = $780,000 |
| Kirkham et al\(^7\) | 2014 | 30 day readmission rate                  | • Bedside medication delivery  
• Follow-up phone calls | • Control group had twice the odds of readmission within 30 days (OR, 1.9; 95\% CI 1.92-19)  
• Six-fold increase in 30 day readmission in patients 65 years or older (OR, 6.05; 95\% CI, 1.92-19) |
| Sanchez et al\(^8\) | 2015 | 30 day readmission or ED visit rate      | • Pharmacist telephone intervention | • Decreased 30 day readmission rate in patients who received pharmacist intervention post discharge (0.277 vs. 0.519, \(p<0.001\)) |
Where to begin?!
ASHP-APhA Best Practices

- "Partnered to assess examples of currently implemented care models that improve patient outcomes by involving pharmacists in medication-related transitions of care…"
- Reviewed “Medication Management in Care Transitions” models from over 80 institutions
- Assessment focused on 3 main criteria:
  - Impact of care transitions model on patient care
  - Pharmacy involvement in the transition process from inpatient to home settings
  - Potential to scale and operationalize the process for implementation by other health systems
- Eight programs distinguished as “Best Practices”
### Common Barriers

<table>
<thead>
<tr>
<th>Buy In</th>
<th>Staffing</th>
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<tbody>
<tr>
<td>Organization</td>
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<td>Administration</td>
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<td>Medical and nursing staff</td>
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<td>Qualifications</td>
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<td>Training</td>
<td></td>
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<td>Coverage hours</td>
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<table>
<thead>
<tr>
<th>Financial Resources</th>
<th>Communication</th>
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<tbody>
<tr>
<td>Staff</td>
<td></td>
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<tr>
<td>Computers</td>
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<tr>
<td>Office Space</td>
<td></td>
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<tr>
<td>EHR capabilities</td>
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<td>Method for information transfer</td>
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</table>
Key Characteristics

- **Started out small**
  - Pilot programs

- **Launched strategic services**
  - Medication reconciliation = key component
  - Considered the needs of the institution
  - Targeted specific patient population(s)

- **Worked within their means**
  - Restructured current staff
  - Utilized pharmacist-extenders
  - Grant funding
Key Characteristics

- Regularly collected and reported data
  - Focused on cost-saving initiatives
  - Medication safety
  - Patient satisfaction scores

- Looked for opportunities to collaborate
  - Multi-disciplinary care teams
  - Schools of pharmacy and medicine

- Innovated to expand services
  - Expanded roles for technicians, residents, interns
  - Pharmacotherapy clinic
  - Bedside prescription delivery
### Appendix A. Key Attributes of Programs Demonstrating Best Practices in Medication Management in Care Transitions

<table>
<thead>
<tr>
<th></th>
<th>Einstein Healthcare Network</th>
<th>Froedtert Hospital</th>
<th>Hennepin County Medical Center</th>
<th>Johns Hopkins Medicine</th>
<th>Mission Hospitals</th>
<th>Sharp Healthcare</th>
<th>University of Pittsburgh School of Pharmacy and Medical Center</th>
<th>University of Utah Hospitals and Clinics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Structured and consistent processes for communication between inpatient pharmacists and outpatient pharmacists</strong></td>
<td>X</td>
<td>X</td>
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<tr>
<td><strong>Structured and consistent processes for communication between pharmacists and other health care providers (i.e., identified point of contact at each transition point)</strong></td>
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<tr>
<td><strong>Ability for outpatient organization to view inpatient data or inpatient organization to view outpatient data</strong></td>
<td>X</td>
<td>X</td>
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<td><strong>Ability to overcome barriers</strong></td>
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<td><strong>Documentation of improved Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) score</strong></td>
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<td><strong>Documentation of reduced readmissions</strong></td>
<td>X</td>
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<td><strong>Documentation of sustained impact on patient care (patients followed at least 30 days post discharge)</strong></td>
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<td>Model has innovative process for transition referrals</td>
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<td>Model has innovative process for transitioning patients based on disease state</td>
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<td>Model utilizes pharmacy personnel (i.e., pharmacy technicians, student pharmacists, and pharmacy residents) in innovative ways</td>
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<td>Model uses risk stratification tool to identify patients</td>
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<td>Model has documented return on investment</td>
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<td>Model has structured way of enrolling patients into patient assistance programs</td>
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<td>Model has large network of community partners</td>
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<td>Model represents Medication Management in Care Transitions in an accountable care organization</td>
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Site Specific Considerations

- Needs of the organization
- Current process in place
- Available staff to be allocated
- Process for educating staff
- Patient population to be targeted
- EHR capabilities
- Metrics
Creating a Plan for Success

- Identify the need(s) of the patients, institution, C-suite
- Recognize and devise a plan to overcome barriers
- Use available resources to launch strategic service(s)
- Collect data to show impact to fund future service(s)
Available Resources

- ASHP-APhA Medication Management in Care Transitions Best Practices
- Transitions of Care Coalition: Care Transition Bundle, Seven Essential Intervention Categories
- Re-engineered Discharge (RED) Toolkit
- Medications at Transitions and Clinical Handoffs (MATCH) Toolkit for Medication Reconciliation
References


References


Assessment

- All of the following are common barriers encountered during implementation and/or expansion of pharmacy services within a transitions of care program, EXCEPT:

  a. Buy in from hospital leadership
  b. Financial resources
  c. Excess available staff
  d. Method for timely and consistent communication