Transitions of Care

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The author has nothing to disclose.

Objectives

- Discuss current healthcare trends and the need for pharmacists in transitions of care (ToC)
- Explore the role of ToC pharmacists in improving safety, adherence, and reducing emergency room utilization and readmission rates
- Describe common barriers that arise in care transitions and ways to overcome them
Definition

“Coordination and continuity of health care as a patient transfers between different locations or different levels of care in same location.”

Between settings:
Hospital ↔ Sub-acute facility ↔ Home

Within settings:
Emergency Department ↔ ICU ↔ Step-down units


ToC Case

- MJ is a 75 year old HF presenting with abdominal pain in need of surgery

- ALF did not provide medication administration record
- ALF was called and medications verbalized over phone
- Patient is stabilized and transferred to surgery
- Transferred to ICU
  - Given current state, some medications not continued after admission to ICU
  - Patient receiving LR from surgical orders plus other fluids ordered in ICU
  - Transferred to surgery

- Transferred back to ALF
  - Drip that is only given in ICU is left on profile and floor
  - Home med accidentally discontinued
  - Patient is leaving with PPI that was only intended for hospital use while NPO
  - Prescription for new medications for pain control not written
  - Transferred to floor
True/False

- About 50% of all hospital-related medication errors and 20% of all adverse drug events have been attributed to poor communication at care transitions.
  True

Statistics

- 1/5 patients discharged from hospital to home → adverse event (AE) within 3 weeks
- About half of all medication errors are preventable ADEs that occur at ToC
- 20% of patients transitioning between hospitals and nursing homes experience adverse drug events

Cost of Poor Transitions

- Medication errors harm estimated 1.5 million people each year
- Estimated cost of $3.5 billion annually
- Duplicate visits to physicians
- Medication for preventable ailments
- Repeat lab testing
- Prolonged absence from work


Medicare Readmissions

<table>
<thead>
<tr>
<th></th>
<th>7 days</th>
<th>15 days</th>
<th>30 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate of potentially preventable readmissions</td>
<td>5.2%</td>
<td>8.8%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Readmission expenditure in billions</td>
<td>$5</td>
<td>$8</td>
<td>$12</td>
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</tbody>
</table>

Government Programs

- Hospital Readmissions
  - 3% penalty on 30 day readmission
  - 2015 measures: AMI, CHF, pneumonia, COPD, elective total hip arthroplasty, total knee arthroplasty

- Meaningful use
  - Incentives and penalties geared to encourage an electronic universal medical record

Reasons for Poor Transitions

- Not enough patient engagement
- Lack of standard process
- Inadequate transfer of information between settings
ToC Programs

- Improved outcomes and reduced readmissions
- Less expensive utilization of services
- Medication reconciliation as part of medication management
  - Changes of patient care setting
  - Modifications in medication regimens
  - Multiple medications prescribed by different prescribers
- Pharmacists’ patient counseling interventions at discharge and continued follow-up activities can reduce:
  - Serious adverse drug events
  - Use of emergency care
  - Hospital readmissions

Medication management in Care Transitions (MMCT) Project

- 82 program submissions
- Identify and profile best practices that are scalable to support broad adoption
- Outline successful implementation strategies to overcome barriers

Einstein Healthcare Network

- R - validate medication Reconciliation
- E - deliver patient-centered Education
- A - Resolve medication Access
- C - Comprehensive Counseling
- H - Achieve Healthy patient at home who is adherent with medications and without adverse outcomes
- Pharmacist performs all aspects of the Medication REACH consult
- Ambulatory Pharmacy Patient Liaison Empowerment (APPLE) role
Einstein Healthcare Network

- Pharmacist Interventions:
  - Validate medication reconciliation upon discharge
  - Educate patient utilizing customized learning tools
  - Minimize barriers to medication access and adherence

- Multidisciplinary care team involvement
  - Includes patient advocate and navigators of ToC

- Post-discharge counseling calls from pharmacist to address potential medication-related issues
  - 72 hours post discharge and again within 30 days after discharge


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Einstein Healthcare Network

- 30-day inpatient readmission rates

![Bar chart showing readmission rates]

- Patients without insurance are provided medication for first 30 days
- Prescription charges made retroactively
- Barriers: limited staff, justification for more support
- Goal to reduce readmissions by 20% in 2 years

Project Re-Engineered Discharge (RED)
- Developed by Boston University Medical Center
- Virtual patient advocates are currently being tested
- Patients experienced 30% lower rate of hospital utilization at 30 days post discharge
- Readmission or ED visit prevented for every 7.3 subjects receiving intervention
- Savings of $412 per person, 33.9% lower cost when compared to no intervention


Project RED Toolkit
- Begin Implementation at Your Hospital
- Deliver the Re-Engineered Discharge
- Deliver the RED to Diverse Populations
- Conduct a Post-Discharge Follow-up Telephone Call
- Benchmark Your Hospital Discharge Improvement Process
- Understanding and Enhancing the Role of Family Caregivers in the Re-Engineered Discharge

https://www.bu.edu/fammed/projectred/toolkit.html

The Guided Care Model
- Developed at John Hopkins University
- Patients experienced:
  - 24% fewer days in hospital
  - 37% fewer skilled nursing facility days
  - 15% fewer ED visits
  - 29% fewer home health care episodes
- Annual savings of $1,364 per patient

John Hopkins Model

- Patients is screened by bedside nurse to determine risk level for readmission
- Patient receives tailored multidisciplinary intervention
  - Pharmacist:
    - Clarifies medication history
    - Reconciles medications in the EHR
    - Provides recommendations to patient's physician if discrepancies are identified
  - Student pharmacists assist with medication reconciliation services
    - Patient and family medication history interviews
    - Contact community pharmacies to clarify home medication list


John Hopkins Model

- Technical and distributive task delegated to technicians
- Post-discharge phone call vs. home-based medication reconciliation visit
- Communication with patient’s PCP and reconciled list of medications faxed to patient’s community pharmacy
- Barriers: cost justification, training

ToC Pharmacy Program at WKBH

- ED pharmacist collects medication history
- Admitting MD uses medication list for admission orders
- Pharmacist reviews medication reconciliation for intra-facility transitions
- Discharge reconciliation, Rx review, and patient counseling by intern or pharmacist
- Piloting follow up phone calls & retail pharmacy reconciliation
West Kendall Baptist Hospital
ToC Study

Counseled Patients: 66

Interventions Identified

- 34% Reduced Expenditure
- 66% Reduced Expenditure
- 2% Reduced Expenditure
- 1% Reduced Expenditure
- 1% Reduced Expenditure

Table 1
Medication problems identified (n=161)

<table>
<thead>
<tr>
<th>Medication problems identified (n=161)</th>
<th>Patient reporting adherence (n=133)</th>
<th>Patient reported non-adherence (n=28)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient reported taking too many medications</td>
<td>5%</td>
<td>21%</td>
</tr>
<tr>
<td>Patient believes medication is not working</td>
<td>0.7%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Misunderstanding of instructions</td>
<td>36%</td>
<td>36%</td>
</tr>
<tr>
<td>Forgetfulness</td>
<td>21%</td>
<td>21%</td>
</tr>
<tr>
<td>Patient believes medication is not needed</td>
<td>18%</td>
<td>18%</td>
</tr>
<tr>
<td>Unable to obtain medication</td>
<td>32%</td>
<td>32%</td>
</tr>
<tr>
<td>Patient reported barriers to adherence</td>
<td>14%</td>
<td>43%</td>
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</tbody>
</table>

Post Discharge Follow Up Phone Calls

Discrepancy (40%)
Accurate (60%)
**Assisted Living Facilities (ALF)**

- High risk population for medication related adverse events
  - Dementia
  - Multiple medications
  - Lack of trained staff
- Florida law regarding ALFs and medications
  - Staff must be certified to assist

**ALF Pilot**

- West Kendall Baptist Hospital and ALF ToC medication management pilot
- 2:1 matched control ALF patients
- Data collected:
  - Interventions performed at discharge
  - Discrepancies from discharge medication list and ALF-MAR
  - Discrepancies identified upon reconciliation with patient's community pharmacy

**T/F**

- The person responsible for administering medications at an ALF must be a certified nurse in the state of Florida.

  **False**
Role of Community Rx

- MTM and disease management
- Update pre-admission medication list to hospitals
- Determine insurance coverage of discharge medications
- Reconcile post hospital discharge list with retail pharmacy profile
- Adherence
  - Autorefill and MTM

Role of Pharmacy Techs

- Identifying patients for enrollment
- Medication hx
- Phone calls to patients
- Filling outpatient prescriptions
- Filling discharge prescriptions
- Delivering medications
- Logistics + admin with MTM
- Information transfer
- Facilitating outpatient prescription filling
- Billing issues
- Immunizations admin

T/F

- Community pharmacists are limited from becoming involved in a patient’s transition of care by HIPAA.
  
  False
Barriers to Pharmacy ToC

- Finance – return on investment
- Staffing – expansion, weekends
- Transfer of data
- Communication
- Developing relationships

Opportunities

- Identify medication related factors attributed to admission and resolve them
- Optimize medication regimen
  - Cost and outcome
- Patient education
  - Recognize and address barriers
  - Empower patients
- Stratify risk and match discharge process to patient need

Innovation

- Pharmacist position similar to consultant pharmacist in nursing home models
- Patient medication lists
  - There’s an app for that
- Automatic electronic data transfer
- Pharmacist prescribing at discharge
Resources

- National Committee for Quality Assurance
  www.nccqa.org
- National Transitions of Care Coalition
  www.ntocc.org
- Center for Medicare and Medicaid Services
  www.cms.gov
- Partnership for Patients
  www.healthcare.gov
- Transitional Care Model
  www.transitionalcare.info
- The Care Transitions Program
  www.caretransitions.org

References

- Alliance for Aging, Inc. Community based care transitions (CCTP).

Questions