Pharmacist-Led Transition of Care Best Practices

WSPA Ambulatory Care Academy: Practice Advancement Initiative 2019

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Service Introduction and Rationale

Transitions of care can best be described as the coordination and continuity of healthcare as patients transfer between different locations or different levels of care within the same location. Effective transitions from the hospital to the home setting are as crucial as the patient care provided during the hospital stay. The transition from a community setting to the hospital for acute care is a period when patients are particularly vulnerable to critical medication errors resulting in more complex and extended care. Nearly two thirds of post-discharge adverse drug events in the US are medication related with 29% posing a serious or life-threatening risk, often resulting in preventable emergency department visits and unplanned hospital admissions. 4 While we all try hard to ensure our patients are getting the best care possible often we fall short in the transitional care process with issues such as communication among healthcare providers, patient and caregiver education, preparedness for discharge and lack of provider assessment of patient’s health literacy, medication adherence, financial capabilities and overall access to healthcare.

Pharmacists’ extensive education on evidence-based use of medications and their clinical counseling skills position them as integral patient care providers. In addition to improving communication between providers, pharmacists are trained to communicate with patients and educate them about proper medication use and the importance of adhering to what are often times complex medication regimens. Pharmacists counseling interventions at discharge and continued follow-up activities can reduce serious adverse drug events, use of emergency care and hospital readmissions.

Transition of Care services can take place by pharmacists both in the inpatient setting and the outpatient setting. The workup of patients would be similar however depending on inpatient vs. outpatient the follow-up may be different and the initiation of the service could occur at different times.

Implementation/Workflow Example:

1. Pharmacists workup and review high risk patients either while they are admitted to the hospital, at discharge, or at their follow-up appointment with their primary care provider (or a combination of all of these). Usually this would be based on an algorithm to assess high risk patients either by their disease states (frequently readmitted patients such as heart failure, COPD, diabetes etc), or certain medications they are on (example: blood thinners, insulin, inhalers, opioids/narcotics, antibiotics etc), and/or the number of medications they are on, their age and other risk factors.
2. Pharmacists complete an in-depth medication reconciliation and possible medication optimization. This can be completed both during the inpatient phase, outpatient phase or both.
   - *If in the ambulatory care setting it is helpful to have access to the hospital electronic health record or assess to appropriate discharge information.*
3. Pharmacists review and assess for additional barriers to adequate health and drug adherence (see below).
4. Pharmacists in the outpatient setting or ambulatory care setting can follow-up with patients in clinic. Pharmacists also complete education/counseling on new or discontinued discharge medications at this time.
   - *Pharmacists can provide feedback and recommendations to other clinical pharmacists or physicians if they are working from the inpatient side only.*
5. In the state of Washington pharmacists can bill for their transition of care services.

**Additional Barriers Pharmacists can assess during Transitions**

Besides completing comprehensive medication reconciliation and medication optimization review during this critical time in transitions there are other barriers pharmacists can help address. These barriers also play an integral part in a patient’s overall health and their readmission to the hospital:

**Health Literacy:** Low health literacy is associated with adverse health outcomes, especially during transitions of care. Patients are at increased risk of adverse events in the period following hospital discharge. Ineffective transitions of care can be a significant source of health disparities and communication failures during this time increasing the risk of poorer health outcomes and readmissions.

**Cognitive Function and/or Living Situation:** Without effective interviewing a patient’s cognitive decline can go unnoticed. Patients may live alone or not have supportive caregivers. Patients may require additional assistance from a visiting nurse or other community resources that provide assistance for daily activities in order to maintain healthy and appropriate medication regimens. The ability to recognize the correct medication is essential. Any inability to prepare meals, or phone for refills without assistance is a barrier to understanding medications appropriately. Visual restrictions and quality of hearing as well as dexterity should also be assessed.

**Adherence:** Improved medication adherence reduces hospital readmissions. The pharmacist ensures the patient becomes actively engaged in their own care. Through ongoing counseling, the pharmacist works with patients to make sure they understand instructions, the benefits of the medication, and the downsides associated with non-compliance. With this ongoing relationship, patients become comfortable asking questions and discussing medication therapy-related challenges. Transitions of care programs also work with patients to provide compliance packaging and teach patients ways to remember to take their complex medication regimens.

**Cost:** Medications can be particularly costly for vulnerable patient populations, especially when patients are taking multiple medications each month. Transitions of care programs help assure patients can afford their chronic medications before they leave the hospital, either by referring the to a FQHC 340B
pharmacy, changing medication to something they can afford or enrolling them in a medication assistance program

Transportation: Without adequate transportation to doctor’s offices patient’s often miss important follow-up post-discharge appointments or don’t make it to their pharmacy in time to pick up new medications. Transitions of care programs help assess and encourage patients to make it to these vital appointments and allow patients to understand options about mailing prescriptions or working with the pharmacy to refill them all at the same time.

Transition of Care Interview Tools

- **DRAW: Pharmacist Drug Adherence Work-Up Tool:**
  
  [https://www.colorado.gov/pacific/sites/default/files/DC_CD_Adherence-Screening-DRAW_Million-Hearts.pdf](https://www.colorado.gov/pacific/sites/default/files/DC_CD_Adherence-Screening-DRAW_Million-Hearts.pdf)

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<table>
<thead>
<tr>
<th>PATIENT INFO: Name ___________________________ Age ______ ☐ Male ☐ Female METHOD OF WORK-UP: ☐ In Person ☐ Over the Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directions: Choose four of the patient’s medications where adherence may be a problem. For each medication, ask each question, and check the circle for a “YES” response. For each YES, consider the suggested actions using the guides on the next page. Take action and document it in the space provided.</td>
</tr>
<tr>
<td>Pharmacist initials __________________ Date of work-up ___________ How long did this DRAW work-up take? ______ (minutes)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PATIENT INTERVIEW</th>
<th>YES</th>
<th>SUGGESTED ACTIONS</th>
<th>ACTION TAKEN OR PLAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Please tell me how you take your medication every day.</td>
<td>☐</td>
<td>Verify adherence; Identify any discrepancies; Add to their knowledge.</td>
<td>☑</td>
</tr>
<tr>
<td>2. Do you feel like you have too many medications or too many doses per day?</td>
<td>☐</td>
<td>Reduce number of meds per day by stopping/changeing medications; Simplify regimen.</td>
<td>☑</td>
</tr>
<tr>
<td>3. Do you sometimes forget to take your medication on routine days?</td>
<td>☐</td>
<td>Adherence aid, alarm or specialized packaging; Med calendar; Memory aid; Rule out anticholinergic meds.</td>
<td>☑</td>
</tr>
<tr>
<td>4. Do you forget on non-routine days such as weekends or when traveling?</td>
<td>☐</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Are you concerned that your medication is not helping you?</td>
<td>☐</td>
<td>Patient education; Guided counseling.</td>
<td>☑</td>
</tr>
<tr>
<td>6. Do you feel that you do not need this medication?</td>
<td>☐</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Have you had any side effects?</td>
<td>☐</td>
<td>Guided counseling; Switch medications; Symptom management; Adjust regimen.</td>
<td>☑</td>
</tr>
<tr>
<td>8. Are you concerned about side effects?</td>
<td>☐</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Is the cost of this medication too much?</td>
<td>☐</td>
<td>Switch to less costly medication; Cost reduction strategy.</td>
<td>☑</td>
</tr>
<tr>
<td>PHARMACIST:</td>
<td></td>
<td>Rule out anticholinergics; Discuss with other area providers; Referral to assistance resources; Recommend or support medication assistance including aids and/or caregivers.</td>
<td>☑</td>
</tr>
<tr>
<td>FOLLOW-UP:</td>
<td></td>
<td>Plan a follow-up; Discuss at next refill, follow-up phone call, face-to-face visit.</td>
<td>☑</td>
</tr>
</tbody>
</table>

  1. How sure are you that you need medications to treat your health problems?
  2. How sure are you that you can take your medication every day as prescribed when you are at home?
  3. When you are at home, how often do you skip doses of your medications or stop taking your medications?
  4. How difficult is it for you to pay for your medications?
  5. How often do you experience adverse effects from your medications?

**Common Barriers of Transitions of care models (ASHP-APhA Medication Management in Care Transitions Best Practices)**

**Financial Resources**

- Finances are often needed to assist with staffing requirements and electronic health records for workflow.
- Awardees from ASHP-APhA were able to overcome financial barriers by justifying their programs as self-sustaining and often revenue generating.
- Many programs have also increased discharge prescription capture and documented decreased readmissions and decreased hospital stay.

**Staffing Resources**

- Creative use of resources is a key element to success for many programs to overcome staffing issues.
- Many programs have embraced a multidisciplinary approach by utilizing pharmacy students and residents whenever possible. Also incorporating pharmacy technicians in parts of the workflow can alleviate some of the burden off staff pharmacists.

**Electronic Transfer of Patient Information**

- Time spent on documentation of pharmacist interventions can become more cumbersome and has shown to double or triple when separate systems are required for tracking and auditing of services.
- Some programs have found it to be a challenge in ambulatory care settings to gain and retain access to outside hospital EHR systems and have adequate training regarding a different system.
- Information sharing in programs in Minnesota (which has a state-wide network allowing providers to view patient records) has improved quality and efficiency in transition of care.

**Communication**

- Accurate and timely communication is a critical component of preventing harm.
• Awardees from ASHP-APhA reported hindrances in communication of several levels of operation including barriers between:
  ▪ Pharmacists and providers
  ▪ Inpatient and outpatient partners
  ▪ Inpatient and outpatient pharmacists
  ▪ Pharmacists and patients/caregivers
  ▪ Pharmacists and administrative leadership

• Communication of patient information is only one challenge. Organization-wide education and awareness of the need for these pharmacist-led services in transition of care remains a barrier for some institutions.

Difficulty Developing Partnerships with Inpatient or Outpatient Partners

• Many programs have reported challenges in identifying and securing partnerships beyond the immediate organization, especially in the ambulatory care space.

Keys to Success

Multidisciplinary Support

• Transitioning patients from acute hospital environments to home or assisted living facilities involves collaboration of many health care professionals. Collaboration and communication that was effective and efficient was evident in all successful models for the ASHP-APhA Best Practice winners.

• Many existing models have pharmacists serving as the director of the program, this highlights the importance of a medication use expert in this process.

Effective Integration

• Successful programs have relied on pharmacists but also on effective integration of student pharmacist interns, pharmacy residents, and pharmacy technicians.

• Entire pharmacy teams should be adequately trained on elements of medication management in transitions of care including medication reconciliation, prior authorization, documentation, communication, and data management.

• Reassessment of job responsibilities was a common element in many successful programs.

• Educational resources and training opportunities in collaboration with colleges of pharmacy have also played an important role in addressing the needs of patients during care transitions.

• Some pharmacy schools have added rotations for student interns while others have developed postgraduate residency programs to support and enhance specialized training of newly degreed pharmacists.

Data Available to Justify Resources

• Solid data collection and the ability to systematically review applicable metrics.
- Readmissions
- Length of stay
- Emergency department visits
- Medication-related problems at medication reconciliation
- Disease-specific metrics
- Patient satisfaction

Electronic Patient Information and Data Transfer Between Inpatient and Outpatient Partners

- Successful programs require a secure and efficient transfer of patient information between inpatient and outpatient partners, either for e-prescribing, EHR access, the ability to reach prescribers quickly and/or billing options.

Strong Partnership Network

- When community partners are secured, a larger pool of resources are available for shared responsibility. Pharmacy partnerships involved hospital pharmacy departments, community pharmacies, regional pharmacy chains, ambulatory pharmacy services and clinics, health clinic pharmacies, home infusion pharmacies and many others. Other resources in the community were also found to be helpful such as referrals to behavioral health programs, homeless outreach programs, area agencies on aging, etc. The alignment of resources is a keystone in providing a unified approach to patient care.

Evaluation and Continued Quality Improvement

- Evaluation and continued quality improvement of transition of care programs is always a key to success as different metrics could need to be assessed, different resources identified, more communication required, etc.

Preliminary Education and Resources

1. [https://www.ashp.org/Pharmacy-Practice/Resource-Centers/Transitions-of-Care](https://www.ashp.org/Pharmacy-Practice/Resource-Centers/Transitions-of-Care)

A TOC pharmacist intervention improved the quality and safety of care across both inpatient and ambulatory settings for high risk cardiovascular patients. A total of 516 medication discrepancies were identified and corrected. 244 recommendations for therapeutic optimization were provided with 81% provider acceptance and 100% patient satisfaction rate.
5. **Ni W. Impact of Pharmacy-Based Transitional Care Program on Hospital Readmissions.** *AJMC Journal.* 2017. 23(3).

Hospital 30-day readmission was reduced by 28% and hospital 180-day readmission was reduced by 31.9%.


Development of a team-based intervention was associated with a significant reduction in hospital readmissions. This method could be implemented in other primary care offices with team-based care. The 30 day readmission rate decreased from 14.2% in the usual care group to 5.3% in the intervention group.


Hospital follow-up visits coordinated by the multidisciplinary team decreased 30-day hospital readmission rates compared with follow-up visits by a physician-only team. Patients seen by the multidisciplinary team had a 30-day readmission rate of 14.3% compared with 34.3% by the physician-only team. Interventions completed during the visits, included addressing nonadherence, initiating a new medication, and discontinuing a medication were all statistically different between groups with the multidisciplinary team completing these interventions more frequently.

8. **Guidance for Use of Transitional Care and Chronic Care Management CPT Codes.** Pharmacy HIT Collaborative Workgroup 1. Spring 2019