Pharmacist- and Nurse-Managed, Interprofessional, Post-Hospital Discharge Transition of Care Program
Amanda Harrington, Mel L. Nelson, Jennifer Bingham, Kate Johnson, Sandra Leal

The authors have no disclosures to report. For further information, please contact:
Amanda Harrington • harrington@pharmacy.arizona.edu

1 University of Arizona College of Pharmacy HOPE Center, Tucson, AZ; 2 University of Arizona Medication Management Center; 3 SunFarmaRx, Tucson, AZ

PROBLEM

- Transition of care (TOC) occurs across the healthcare spectrum (e.g., between health care providers; within and/or between health systems.1
- Adverse drug events, patient safety, information transfer and provider coordination across sites, are some of the issues that arise during TOC.
- Medication management is central to effective discharge planning and transition of care.3
- Patient-tailored, pharmacist-supported interventions are critical and must include:
  1. medication reconciliation, patient counseling, and medication review at admission; and
  2. collaboration with nurses and primary healthcare providers.3,4

GOAL

- The purpose was to design and implement a multiple touch-point Discharge Comparison (DC) Program to offer high-risk patients personalized, post-discharge consultations with an interprofessional care coordination team.
- The Program goals were to work in tandem with the hospital’s chronic disease coordination (CDC) team to:
  1. Provide a cost-effective, post-hospitalization medication therapy management (MTM) service to patients at high-risk of hospital readmission.
  2. Collaborate with other healthcare providers to deliver a team-based service that offers more coordinated, comprehensive care for the patient; and
  3. Integrate patients into existing client programs and services to support their hospital discharge.

PROGRAM DESCRIPTION

DC Program Initiation

- Eligible patients: (1) were ≥ 18 years of age; and (2) had one of the primary discharge conditions listed in Figure 1.
- The DC Program focused on these high risk medications that patients were taking:
  - Antihypertensives
  - Anticoagulants
  - Beta blockers
  - Corticosteroid (ICS)
- A community hospital CDC team contacts eligible patients within 72 hours of discharge to:
  1. conduct an initial follow-up and update patient’s electronic health record (EHR); and
  2. notify patient of upcoming contact from the DC Program contracted with the hospital.
- CDCD submits eligible patient information via a secure EHR email to DC Program nurse.
- DC Program nurse assigns patient to DC Program pharmacist
  - Table 1 provides a brief overview of disease state interventions. For a more comprehensive description of the interventions, a supplemental handout is available.

DC Program Initiation

<table>
<thead>
<tr>
<th>Week</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Patient is reached and agrees to continue patient’s hospital medications and the additional pharmacist feedback regarding patient medication regimen. Community pharmacies are very responsive to requests to desactivate prescriptions for medications discontinued during patient hospital stays.</td>
</tr>
<tr>
<td>2</td>
<td>Patient reported the DC Program team actively engages and educates while ensuring correct information is communicated to patients and the healthcare team (See Figure 5)</td>
</tr>
<tr>
<td>3</td>
<td>Future Program expansion is imminent to prepare for upcoming changes</td>
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</tbody>
</table>

DC Program Initiation

1st Week Follow Up

- DC Program Pharmacist calls the patient, skilled nursing facility staff and/or family caregiver (2 attempts)
  - The patient is not included in the program if unreachable or declines (n=98)
- Patient is reached and agrees to participate (n=283)
- DC Program Pharmacist conducts week 1 consultation (See Figure 3)
- DC Nurse coordinates patient transitions through the care continuum for (See Figure 3)
- DC Nurse is responsible for health information exchange throughout all care transitions (See Figure 3)
- DC Program Nurse schedules Week 3 consultation appointments
  - Patient is removed from program if readmitted prior to Week 3

DC Program Initiation

2nd Week Follow Up

- DC Program Pharmacist calls the patient, skilled nursing facility staff and/or family caregiver (2 attempts)
  - The patient is not included in the program if unreachable or declines
- Patient is reached and agrees to continue participation
- DC Program Pharmacist conducts week 3 consultation (See Figure 3)
- DC Program Nurse is responsible for health information exchange (HIE) between patients and the healthcare team (See Figure 5)
- DC Program Nurse tracks all week 1 interventions that have been accepted by providers and patients
- DC Program Nurse maintains integrity of data

DC Program Initiation

3rd Week Follow Up

- DC Program Pharmacist calls the patient, skilled nursing facility staff and/or family caregiver (2 attempts)
  - The patient is not included in the program if unreachable or declines
- Patient is reached and agrees to continue participation
- DC Program Pharmacist conducts week 3 consultation (See Figure 3)
- DC Program Nurse is responsible for health information exchange (HIE) between patients and the healthcare team (See Figure 5)
- DC Program Nurse tracks all week 1 interventions that have been accepted by providers and patients
- DC Program Nurse maintains integrity of data

Table 1: Chronic Disease Coordination (CDC) Team Perceptions of Arizona Community Pharmacists

<table>
<thead>
<tr>
<th>Week</th>
<th>Activities</th>
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</table>
| 1    | • Reminds patient to attend: 
  - Follow up with physician regarding discharge medications and patient’s knowledge of medications
  - Follow up on:
    - Laboratory appointment(s)
    - Post cardiac catheterization
    - Post coronary artery bypass graft
    - Post myocardial infarction |
| 2    | • Patient reported the DC Program team actively engages and educates while ensuring correct information is communicated to patients and the healthcare team (See Figure 5) |
| 3    | Future Program expansion is imminent to prepare for upcoming changes |

Table 1: Chronic Disease Coordination (CDC) Team Perceptions of Arizona Community Pharmacists

- To date, 283 of the 381 eligible patients (74% participation rate), have elected to participate in the DC Program.
- Team approach to care provision and multiple patient touch points are portrayed as major contributors to the high participation rate.
- Patient, provider, and hospital CDC team feedback regarding the DC Program is overwhelmingly positive. (See Program Feedback section below)

Observations

- To date, 283 of the 381 eligible patients (74% participation rate), have elected to participate in the DC Program.
- Team approach to care provision and multiple patient touch points are portrayed as major contributors to the high participation rate.
- Patient, provider, and hospital CDC team feedback regarding the DC Program is overwhelmingly positive. (See Program Feedback section below)

Program Feedback

- Patients reported the DC Program team actively engages and educates while addressing their concerns.
- Providers and medical assistants expressed appreciation for being informed of patient hospitalizations and the additional pharmacist feedback regarding patient medication regimens.
- Community pharmacies are very responsive to requests to desactivate prescriptions for medications discontinued during patient hospital stays.

Hospital Chronic Disease Coordination (CDC) Team Perceptions

- Due to positive patient experience, the hospital has extended the DC Program beyond the pilot period, until 2019.
- CDC benefited from increased communication and care continuity with outside providers

Future Program Expansion & Evaluation

- Future Program expansion is imminent to prepare for upcoming changes
  - Organizations must prepare now to initiate services similar to the DC Program given that medication reconciliation post-discharge will be a 2019 Medicare star rating per the 2016 Centers for Medicare and Medicaid Services Call Letter.4
  - System interoperability and access to HIE or EHIS will continue expanding to facilitate communication for transitions of care, ultimately leading to better patient care and outcomes.
  - TOC services post-discharge are an important element, yet more comprehensive, ongoing services are needed to prevent or lower readmissions that may be supported by chronic care management (CCM) service codes.
  - CCM codes create an opportunity for service sustainability to enhance care coordination and address potentially foreseeable issues before they become more costly.
- Future Program analysis is warranted to evaluate:
  - The effectiveness of medication therapy management (MTM) services in preventing hospital readmissions for high-risk patients at 30 days; and
  - Patients’ total healthcare expenditures before and after receiving MTM services.

REFERENCES