Care Transitions and Reducing Avoidable Readmissions

Care Transitions 201

Thursday, July 14, 2016
4:00 – 5:00 PM ET
The comments made on this call are offered only for general informational and educational purposes. As always, the agency’s positions on matters may be subject to change. CMS’s comments are not offered as and do not constitute legal advice or legal opinions, and no statement made on this call will preclude the agency and/or its law enforcement partners from enforcing any and all applicable laws, rules and regulations. ACOs are responsible for ensuring that their actions fully comply with applicable laws, rules and regulations, and we encourage you to consult with your own legal counsel to ensure such compliance.

Furthermore, to the extent that we may seek to gather facts and information from you during this call, we intend to gather your individual input. CMS is not seeking group advice.
## Agenda

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<th>Time</th>
<th>Session</th>
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<td>4:00-4:05 pm</td>
<td>Welcome and Introductions</td>
<td>Elyse Pegler (Premier)</td>
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<td>4:05-4:45 pm</td>
<td>Care Transitions 201</td>
<td>Jamie Dwyer and Brigid Byrne (Premier)</td>
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<td>4:45-4:55 pm</td>
<td>Q &amp; A</td>
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<td>Wrap-up and Next Steps</td>
<td>Elyse Pegler (Premier)</td>
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Objectives

- Identify the challenges and best practices for conducting medication reconciliation and review in the dialysis center as an integral part of the care transitions process
- Describe how data integration from labs and pharmacies across multiple providers can improve patient care and safety during transitions of care
Meet the Speakers

Jamie Dwyer, MD
Consultant, Population Health, Premier, Inc.
Associate Professor, Vanderbilt University Medical Center
Dr. Dwyer currently serves as the Medical Director of both inpatient and outpatient dialysis services at Vanderbilt Medical Center in Nashville, TN. He is a practicing nephrologist who cares for dialysis patients across the care continuum and is responsible for moving the dialysis practice at Vanderbilt to a more streamlined, integrated system. His clinical expertise focuses on kidney disease but specifically diabetic kidney disease and glomerular lesions, including glomerulonephritis. He also has expertise in the evaluation, management, and prevention of kidney stones.
Meet the Speakers

Brigid Byrne, EdD, ARNP-BC
Director, Clinical Transformation, Premier, Inc.

Dr. Byrne has 35 years of experience in various facets of healthcare operations as a chief operations officer, practitioner, health advisor, medical economist and strategist. In 2013 she joined Premier’s Population Health with expertise in Clinical Integration, Care Management and PCMH service lines. She is a gerontologist with a background in nursing, post-acute/community medical management and experience as a practitioner in neurology, sleep medicine, pain management, occupational and internal medicine.
Care management and transitions go hand in hand

Medication reconciliation and medication review
Polling question #1

• Who in your dialysis center conducts medication reconciliation?
  – Nephrologist
  – Pharmacist
  – Pharmacy technician
  – Nephrology/dialysis nurse
  – Care manager/coordinator
  – Advanced practitioner
  – Medical assistant
  – Other
Polling question #2

• How often do you conduct medication reconciliation?
  – Never
  – New patients only
  – Every treatment
  – Every week
  – Every month
  – After a hospitalization or an ED visit
  – After non-nephrology provider visit
Medication errors are common and preventable

- Incidence rates of adverse drug events (ADEs) range from 2-7 per 100 admissions\(^1\)
- Over half (56%) of medication errors occur during the prescribing process\(^2\)
- 46% of medication errors occur during transitions, admissions, transfer or discharge from a clinical unit or hospital\(^3\)
- Approximately 20% of all ADEs have been attributed to poor communication at transitions and interfaces of care\(^4\)
- Studies report low health literacy among CKD patients as high as 32.7%\(^5\)
- Patients with low health literacy are more likely to misunderstand medication instructions and have difficulty demonstrating correct dosing regimen. Low health literacy is associated with increased healthcare costs and worse health outcomes, including increased mortality.\(^6\)
Dialysis patients are at increased risk for medication errors

Dialysis patients in the United States are prescribed an average of 11–12 medications per day and take, on average, 17–25 doses per day. 5-8

The high medication burden results in frequent medication-related problems (MRPs) defined as “undesirable events experienced by the patient that involves, or are suspected to involve, drug therapy and that interferes with achieving the desired goals of therapy”. 9

Readmission rates among ESRD patients are as high at 34%10; medication reconciliation has been shown to reduce readmissions and lengths of stay in dialysis patients. 11-12

65% of MRPs identified in hospitalized dialysis patients were associated with gaps in transfer in medication information between the patients, caregivers, and different health care settings and caregivers 12
Common medication-related problems in dialysis patients

<table>
<thead>
<tr>
<th>Medication-related problems</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indication without drug therapy</td>
<td>Patient is not receiving medication for a diagnosed medical condition</td>
</tr>
<tr>
<td>Drug use without indication</td>
<td>Use of a medication without a valid indication</td>
</tr>
<tr>
<td>Improper drug selection</td>
<td>Medication of choice is not being used</td>
</tr>
<tr>
<td>Subtherapeutic dosage</td>
<td>Patient has a medical problem that is being treated with inadequate dose of the correct medication</td>
</tr>
<tr>
<td>Overdose</td>
<td>Patient has a medical problem that is being treated with too high a dose of the correct medication</td>
</tr>
<tr>
<td>Adverse drug reaction</td>
<td>Drug effects that are unwanted, unpleasant, or harmful</td>
</tr>
<tr>
<td>Drug interaction</td>
<td>Negative effects of drug-drug, drug-disease, or drug-food interaction</td>
</tr>
<tr>
<td>Failure to receive drug</td>
<td>Patient is not receive prescribed medication(s)</td>
</tr>
<tr>
<td>Inappropriate laboratory monitoring</td>
<td>Patient is not undergoing appropriate laboratory test to adequately monitor medication therapy or determine if comorbid conditions are being treated properly</td>
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</table>
The costs of medication-related problems

• Overuse, underuse, or misuse of medications can lead to adverse drug reactions requiring additional physician office visits or hospitalizations, and can result in deterioration of health status and even death\textsuperscript{14}
  – Each year more than 200,000 people die and another 2.2 million are injured because of MRPs

• For every dollar spent on drugs in nursing facilities, $1.33 is consumed in the treatment of drug-related morbidity and mortality, amounting to $7.6 billion for the nation\textsuperscript{12}
Medication reconciliation

The process of creating the most accurate list possible of all medications a patient is taking—including drug name, dosage, frequency, and route and comparing that list against the physician’s admission, transfer, and/or discharge orders, with the goal of providing correct medications to the patient at all transition points. This also includes confirmation of medications being actively filled.

Medication review

A structured, critical examination of a patient’s medicines with the objective of reaching an agreement with the patient about treatment, optimizing the impact of medicines, minimizing the number of medication-relate problems and reducing waste.
Importance of medication reconciliation/review

• Failure to review and reconcile medications during transitions of care accounts for many preventable adverse events

• Medication reconciliation can reduce costs related to adverse drug events including ED visits and hospitalizations/readmissions
  – In patients with stage 5 chronic kidney disease medication-related problems were implicated in nearly 50% of hospitalizations and were the sole reason for 18% of hospitalizations¹⁷
Dialysis center is an ideal site for medication reconciliation/review

• Frequent contact with patients\textsuperscript{17}
  – Hemodialysis patients: typically 3 times a week
  – Peritoneal dialysis patients: at least monthly
  – Dialysis unit becomes the care hub for these patients

• Knowledge of medical history, co-morbidities, and dialysis related medications
  – Patients with chronic kidney disease on dialysis are prescribed an average of 11-12 medications\textsuperscript{5}
Challenges to medication reconciliation/review

• Lack of an accurate initial medication list
  – Multiple sources of data
  – Incomplete data from records and patients

• Low patient health literacy and language preference\textsuperscript{18}
  – Outdated, incomplete list of medications
  – Patients don’t understand why they take each medication and the reason for any changes
  – Patients may not tell their provider about over-the-counter drugs or dietary supplements

• Lack of resources
  – Whose responsibility is it? Nursing staff? Pharmacist?

• Need for logistical and cultural change
  – Assigned staff (nurse/pharmacist)

• Need for repeated process redesign
Polling question #3

• Do you confirm that all medications are actively filled?
  – Yes
  – No
Polling question #4

• Do you see medication review for appropriateness (*highly patient individualized*) and dosing being performed by the nephrologist, pharmacist or the nurse practitioner/physician’s assistant at your dialysis center?
  – Yes
  – No
Polling question #5

- Do you ask patients to bring their medications to dialysis for review? If so, how often?
  - Yes, every treatment
  - Yes, monthly
  - Yes, quarterly
  - No, we don’t ask patients to bring their medications to dialysis
  - I don’t know
Discussion question #1

What are the barriers to obtaining an accurate medication list at your ESCO? How have you addressed these barriers?
Best practices for medication reconciliation/review

• Define steps involved and decide who should be responsible for each step
  – Assign responsibility for each step in the process
    • Various team members can do medication reconciliation
      – Nurse
      – Pharmacists
      – Physician
      – Pharmacy technician
      – Any combination of the above
  – Develop a multi-disciplinary approach across the continuum of care
Best practices for medication reconciliation/review

• Utilize information technology to facilitate medication reconciliation and review to support a well-designed process
  – Obtain a complete and accurate list of each patient’s current medications (including name, dosage, frequency, and route)
  – Compare the admission, transfer, and discharge medication order to that list
    • Medication reconciliation at transition points
  – Resolve any discrepancies before an adverse drug event can occur
How do you retrieve medication information from hospital and other systems? Do you interface with the records of the surgeon, pharmacy, radiology?
Discussion question #3

How do you address patient self-medication and self-prescribing (e.g. over-the-counter, herbals, alternative therapies, old medications)?
Data integration from labs and pharmacies across multiple providers
Data integration and care transitions

• Dialysis patients frequently receive care at multiple delivery sites

• It can be difficult to ensure that the patient’s care plan is communicated to the next group of providers
  – No real-time discharge summaries

• Data from labs and pharmacies can enhance care transitions and management providing seamless care for ESRD patients
Discussion question #4

Does your organization own its own lab and pharmacy? Do you have access to that information?
Common challenges for data integration

- Access to EMRs among providers at different care delivery sites
- Multiple data sources and EMR systems
  - Lack of interoperability
- Timeliness of the data
- Inaccurate and/or incomplete data
  - Unstructured data
  - Dictated notes
Best practices and solutions

• Collaboration with other health systems and providers
  – Decrease barriers to access
    • Attaining permissions to EMR
    • Admitting rights at multiple hospitals
      – Contact provider credentialing and/or transitions management office
      – Locate person who is responsible for transitions (many titles)
  – Develop common metrics and data fields
  – Establish a process for sharing information to decrease/eliminate time lag and increase communication
    • Admission notifications
    • Medication lists
    • Discharge summary
Discussion question #5

Where and how do surgeons, etc. receive labs and other information?
Discussion question #6

Which of your ESCO’s health information systems speak to each other?
For those ESCOs who have integrated lab and pharmacy data, what barriers did you face? How did you overcome them?
Q&A
Wrap-up and next steps

• Today’s materials will be posted on the Connect site

• Next CEC Learning System Webinar
  – Best Practices for Reducing Readmissions: August 11, 4:00-5:00 PM EDT
Thank you

• Please feel free to send any follow-up questions to ESCOLearningActivities@mathematica-mpr.com.


15. IHI definition: [http://www.ihi.org/topics/adesmedicationreconciliation/Pages/default.aspx](http://www.ihi.org/topics/adesmedicationreconciliation/Pages/default.aspx).

