Accepting the Challenge to Improve Medication-Reconciliation in Ambulatory Settings

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INTRODUCTION/BACKGROUND:

- CMS defines Medication Reconciliation as the process of identifying the most accurate list of all medications that the patient is taking by comparing the medical record to an external list of medications obtained from a patient, hospital or other provider (e.g., pharmacies).
- Accuracy of patients’ medication list presents a major challenge to all health care providers.
  - Studies report that <25% of medical records have accurate documentation.
  - Literature typically focuses on in-patient settings, with limited emphasis on medication list accuracy in primary care clinics.
- Accuracy of medication reconciliation and documentation has been attributed to multiple human and system factors including:
  - Patient health literacy and social determinants of health.
  - Lack of 2-way communication between pharmacy and physician.
  - Provider knowledge of EHR.
- Primary care clinic workflows.

HYPOTHESIS:

Accuracy of family physician providers’ medication records is limited by their lack of knowledge regarding EHR med-rec features and a clear, logical med-rec clinic workflow.

METHODS: TRAINING TOOLS

- MedRec Work Flow
- EHR MedRec Knowledge Assessment (n=99)
- EPIC, Work Flow & Perception

RESULTS: EPIC, WORK FLOW & PERCEPTION

<table>
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<tr>
<th>Questions linked to key steps in workflow: Overall % correct for the group</th>
<th>Perception Survey</th>
<th>EHR MedRec Knowledge Assessment (n=99)</th>
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<td>60%</td>
<td>59%</td>
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Training Intervention #1: EPIC/EMR

- MA/RNs: 30 min session by EPIC specialist.
- Residents: 45 min interactive session during core curriculum.
- Faculty: 15 min during standing faculty meeting.

Baseline:

- Through an informal provider quiz, EPIC informatics support specialists’ feedback, and work group providers’ self-assessment it was determined that all providers lacked knowledge of EPIC & Workflow.

METHODS: SITES, PARTICIPANTS & TRAINING

- 2 family medicine residency clinics served as primary sites for this project.
  - 1 Urban underserved.
  - 1 All Providers expected to participate: MAs, RNs, Physicians, Pharmacists.

Training:

- Training interventions were provided by project team members: EPIC Informatics Support Specialist, Chief Residents, Faculty, Pharmacists.
- Training occurred at each clinic site using common materials/approach.

METHODS: POST TRAINING ASSESSMENT

All providers completed a 2-part knowledge assessment adapted to their “role” and corresponding EPIC view and individual perception survey.

Knowledge Assessment:

1. EPIC medication related icons including checked box, red push pin, and hospital bed, etc. (6 Items)
2. MedRec Ambulatory Workflow for MA/RN and physician provider (8 items)

Perception Survey:

1. Estimate “percentage of our clinic’s patients (on which) you perceive that proper medication reconciliations are being performed”
2. “MedRec training has positively changed how I reconcile medications with our patients.”

DISCUSSION & NEXT STEPS:

- Improving the accuracy of patient medication records is complex.
- 1st rapid cycle QI project was to assure that all providers are knowledgeable about EHR documentation and established clinical workflows.
  - A brief training intervention improved knowledge re: EPIC MedRec Workflows processes are more difficult to impact.
- Next Steps – Initiate PDSA cycles to:
  - Reinforce workflow.
  - Training for new hires/new resident class for EPIC & Workflow.
  - Identify next phase via fishbone analysis to improve med-rec accuracy.