

Opportunities to Achieve the Quadruple AIM

Clinical Pharmacists Across the Clinically Integrated Network

Joseph Vande Griend, PharmD, FCCP, BCPS, BCGP
Director of Population Health Pharmacy, University of Colorado Health
Clinical Associate Professor, University of Colorado Skaggs School of Pharmacy

Presentation objectives

1. Describe “top of education” practice for clinical pharmacists across the clinically integrated network, including those embedded within primary care clinics, those in UCHHealth community pharmacies, as well pharmacy trainees.
2. For primary care clinics within the clinically integrated network, summarize the current state of clinical pharmacy and other pharmacy resources
3. Identify strategies to incorporate clinical pharmacists as members of the healthcare team to improve healthcare quality, reduce healthcare cost, and increase patient, provider and care team satisfaction

Clinical Pharmacists in Ambulatory Care and Population Health

- Medication regimens are increasingly complex and medication management is an important component of healthcare quality and cost
- Clinical pharmacists are a well documented member of the clinical team that have been proven to improve medication management which leads to improved clinical outcomes and reduce healthcare cost.
- Limited billing opportunities in the fee-for-service model has slowed the integration of clinical pharmacists in primary care. Value-based arrangements provide tremendous opportunity to utilize this highly-trained resource.

Pharmacist interface in primary care

Title	Training	Setting
Clinical Pharmacy Specialist; Faculty at School of Pharmacy	Doctor of Pharmacy Residency training Board certification	Embedded within primary care office; Central care delivery
Outpatient Staff Clinical Pharmacist	Doctor of Pharmacy BSP Pharm	Community pharmacy Central care delivery
PGY2 Ambulatory Care Resident	Doctor of Pharmacy 1 year residency Some board-certified	Embedded within primary care office; Central care delivery • under oversight of faculty, clinical pharmacist
PGY1 Pharmacy Practice Resident	Doctor of Pharmacy	Primary care office, inpatient hospital, community pharmacy
4 th year Doctor of Pharmacy student	PharmD education	All settings as part of 4 th year experiential rotations Supervision required

Clinical Pharmacy Model

POPULATION

Other pharmacy touchpoints

- Local UCHealth retail pharmacies
- Clinical pharmacists in the Medication Access and Renewal Center
- Pharmacist employed by value-based payers



Embedded clinical pharmacist
in the primary care team within
high-volume clinics



Patient Care

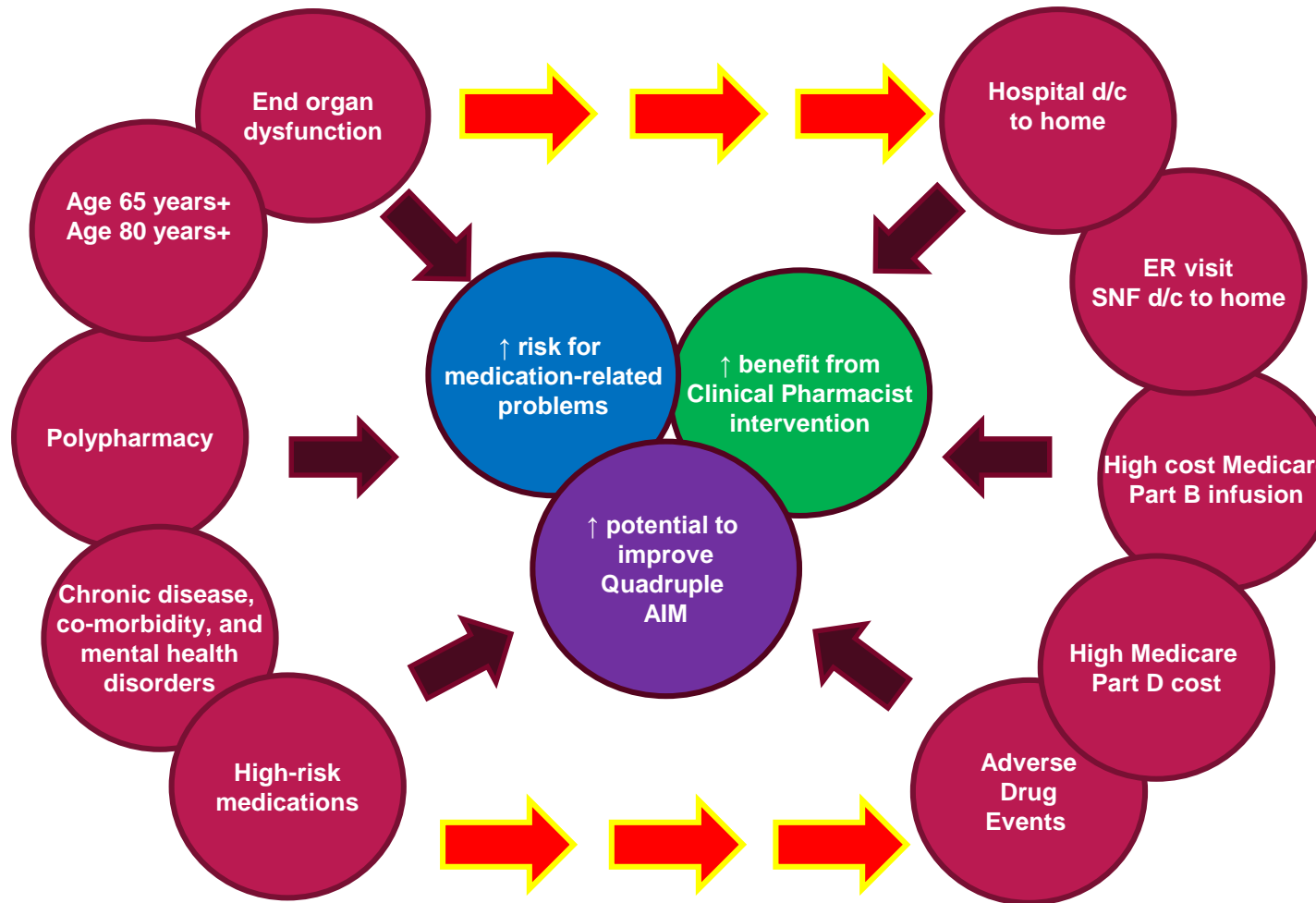


Regional clinical pharmacist
as part of the primary care
team for low-volume clinics

Clinical Pharmacy Patient Stratification

Patient-Specific Factors*

Increased healthcare utilization*



*Patient-specific factors predict healthcare utilization

Medication Management by Clinical Pharmacists

1. Activities that align with overall care management strategy
 - Transitions of care, and Complex patients
2. Adherence to evidence-based standards
3. Targeted interventions to improve quality and reduce cost
4. Medication support for patients, providers, and staff

1. Transitions of Care

- Medication management to identify and resolve adverse drug events that could lead to re-admission
 - Automatic triggers to notify clinical pharmacy of need for medication management
 - Medication consultation for members of the healthcare team

UCHealth Seniors Clinic

- Well established multi-disciplinary transition of care program for high-risk population
- In 1st year (2014-15), clinical pharmacy provided telephonic medication management for 296 patients
 - Each interaction ~ 30-45 minutes
 - 78% with at least 1 medication discrepancy (2.3 per patient)
 - 54.1% required an intervention for a medication known to be high risk for an ADE leading to hospitalization in older adult
 - 13.5% were identified as having a medication problem that if not resolved, was likely to result in an adverse drug event leading to re-hospitalization.

2. Medication management for complex patients

- Medication management to optimize medication regimen
 - Risk stratification to identify patients most likely to have medication-related problems
 - Comprehensive medication review, face-to-face or telephonically in consultation with the prescribing provider

3. Adherence to evidence-based standards

- Collaborative practice agreements to co-manage chronic disease
 - Diabetes, hypertension, cardiovascular
- Limiting high-risk medications in older adults
- Encouraging wellness through preventative therapy, such as vaccinations
- Ensuring cholesterol treatment with statins for patients with diabetes
- Ensuring antiplatelet therapy for patients with clear diagnosis of atherosclerosis

4. Targeted interventions to improve quality and reduce cost

- Brand-generic switch; high-cost generic to lower cost generic switch
- Reduce use of unnecessary medications
 - No medical indication for use, or where the medication has not been shown to be effective for treating the disease or condition in question
- Management of safety warnings, drug-drug interactions, and dosing requirements
- Medication adherence and medication monitoring

5. Medication support for patients and providers

- Patients value additional time and attention, particularly when it is individualized and can help them reduce cost and improve quality
- Clinical pharmacists can serve as a non-biased medication resource for providers and staff
 - Expert medication education
 - Drug information consultation
 - Service as member of quality improvement teams

Strategies to improve medication management

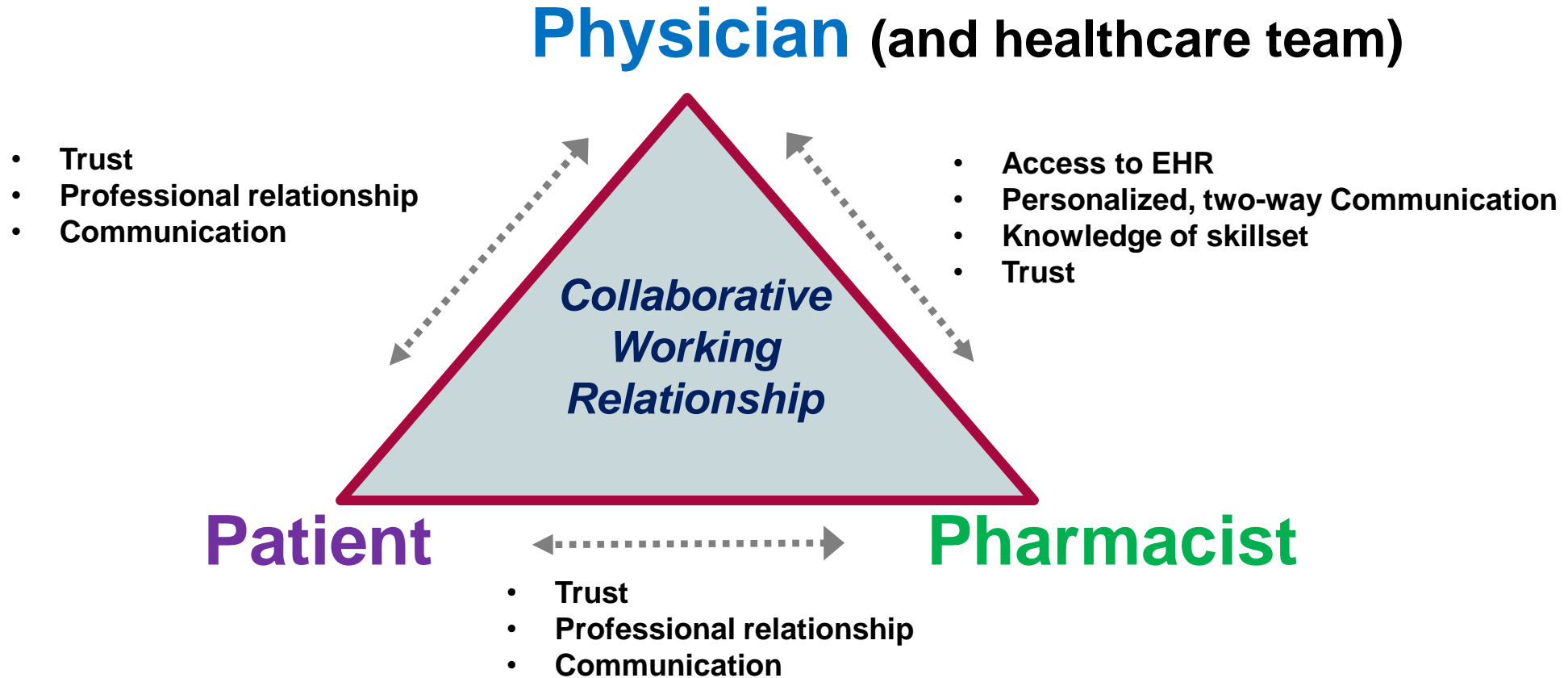
Some strategies work better than others

- **Less than 50% acceptance:** Offsite MTM service or community pharmacy utilizing fax
- **55% to 90% acceptance:** hospital, long-term care, primary care

8 key elements for effective collaboration between pharmacist and physician¹

- 1) Pharmacist with clinical experience
- 2) Pharmacist-patient relationship
- 3) Access to EHR
- 4) Patient interview by the pharmacist
- 5) Patient referral from PCP
- 6) Face-to-face meeting with pharmacist and PCP to discuss
- 7) Action plan to implement recommendations
- 8) Follow-up

Optimizing the pharmacist interaction in the healthcare team



- All UCHealth pharmacists have access to the EPIC electronic health record and patient relationship
- All UCHealth clinical pharmacist specialists have access to the EPIC electronic health, patient relationship, and have an established collaborative working relationship with the primary care team

Activities to date...

1. Completed baseline assessment
 - Existing resources to begin developing targeted interventions, but limited resources engaged in collaborative practice, or complex medication management during care transitions
2. Pharmacy infrastructure to contribute to the Quadruple AIM – *Clinical Pharmacy Workgroup*
 - Representatives from UCHHealth North, UCHHealth South, UCH Department of Pharmacy, CU Medicine, University of Colorado Skaggs School of Pharmacy, and UCHHealth Population Health
3. Implementing targeted aspirin intervention for MSSP patients with atherosclerosis
 - Known quality metric that can be improved for all patients with atherosclerosis
 - Engaging pharmacists across all settings within the Clinically Integrated Network
4. Identifying other targeted interventions, such as brand-generic for value-based programs
5. Gap analysis for resources to further support existing and future opportunities