

Transitioning to the Future of Pharmacy



A PRESENTATION FOR HEALTHTRUST
MEMBERS

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NICOLE FLUEGEL, PHARM.D
PGY-1 RESIDENT PHARMACIST
ATLANTIC HEALTH SYSTEM

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- This presenter has no financial relationships with any commercial interests pertinent to this presentation.
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Objectives: Pharmacists

Describe metrics outlined by the Centers for Medicare and Medicaid Services (CMS) regarding quality of care for core disease states

Identify patient characteristics that are predictive of 30-day readmissions and the role of transitions of care pharmacists to impact those characteristics

List resources and strategies to improve access to medications for patients

Objectives: Pharmacy Technicians

Underline the optimal methods and strategies to obtain a gold standard medication history

Identify resources available to improve patient access to medications

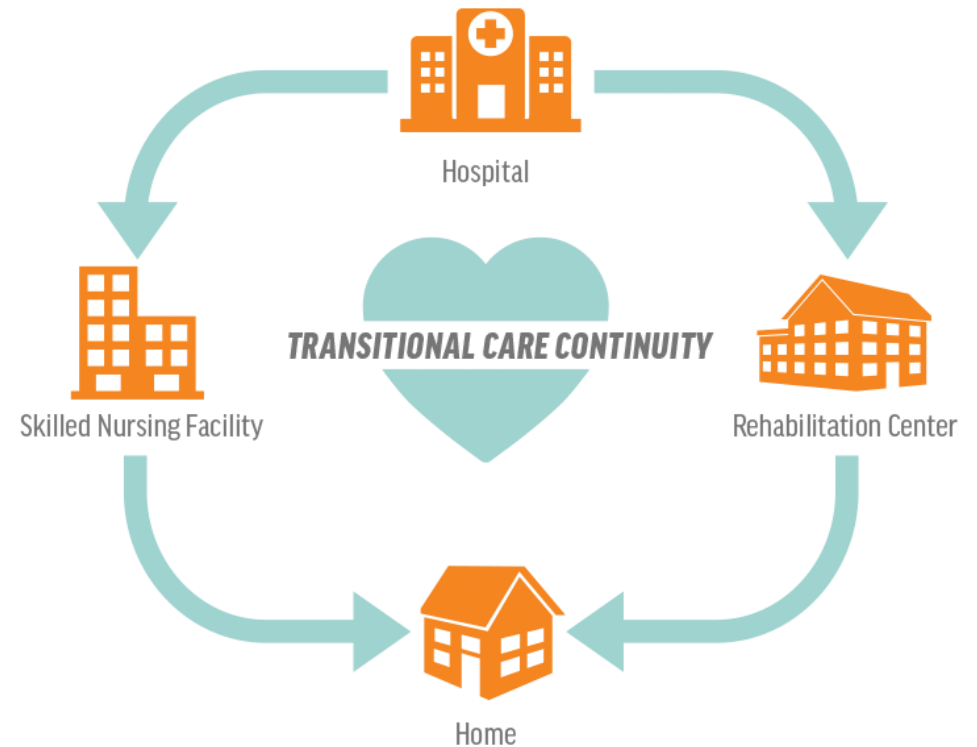


What is Transitions of Care?

Source: <https://nursesadvocates.com/ensuring-safe-transitions-care/>

Facilitating Transitions of Care

- Ensuring **coordination** and **continuity** of care throughout each care setting
- Coordination of care across the health care continuum is crucial to the implementation, management, and evaluation of a patient's treatment plan



Sources: McAuliffe L, et al. *Am J Health-Syst Pharm*. 2018;75:111-9.

Mansukhani RP, et al. *PT*. 2015; 40(10):690-694.

Image obtained from: <https://emaze.com/@ACZCRCQC/palliative-care#!>

Poor Care Transitions

Miscommunication among providers

Confusion regarding treatment plans

Duplicate testing

Medication discrepancies

Missed physician follow-up

Patient dissatisfaction

Poor patient outcomes



Sources: McAuliffe L, et al. *Am J Health-Syst Pharm*. 2018;75:111-9.
Image obtained from: http://www.savvysenior.org/article_20150406.htm

Centers for Medicare & Medicaid Services

Medicare & Medicaid Standards

- The rate of hospital readmissions has become a standard metric of quality of care
- Hospital Readmissions Reduction Program (HRRP)

Created by Section
3025 of Affordable
Care Act

Value-based program
that reduces payments
to hospitals with
excess readmissions

Applies to Medicare
fee-for-service
reimbursement

Readmission rates are
risk-adjusted for
patient mix

Source: Centers for Medicare and Medicaid Services.
<https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Readmissions-Reduction-Program.html>

Medicare & Medicaid Standards

- Centers for Medicare and Medicaid Services invoke **financial penalties** for unplanned 30-day readmissions due to certain high-risk disease states
 - 1) Acute Myocardial Infarction
 - 2) Chronic Obstructive Pulmonary Disease
 - 3) Heart Failure
 - 4) Pneumonia
 - 5) Coronary Artery Bypass Graft Surgery
 - 6) Total Hip/Knee Arthroplasty

Source: Centers for Medicare and Medicaid Services. <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Readmissions-Reduction-Program.html>

Readmission Risk Assessments

MEDCOIN Tool

- Retrospective cohort study conducted by large academic medical center in Providence, Rhode Island (n=690)
- Identified predictors of potentially avoidable 30-day readmissions

Medication Count \geq 10

Comorbidity Count \geq 6

Health Insurance Status at Discharge

Source: McAuliffe L, et al. *Am J Health-Syst Pharm*. 2018;75:111-9.

MEDCOIN Tool

MEDCOINS Scoring Tool for Risk Assessment of Readmission

Step 1: Medication Count

- Number of medications at discharge: _____
- o If ≥ 10 medications: **1 point**

Box 1

Step 2: Chronic Condition Count

- Number of chronic conditions at discharge: _____
- o If ≥ 6 conditions: **2 points**

Box 2

Step 3: Health Insurance Coverage

- Type of health insurance (circle one): None Public^a Private
- o If None: **2 points**
- o If Public: **3 points**

Box 3

Add the numbers in Box 1, Box 2, and Box 3 to calculate the MEDCOINS score, enter into box below,^b and determine risk category using table:

MEDCOINS

Points	Risk Category	Estimated Risk (%) of Readmission
0–1	Low	5.7
2–4	Moderate	13.2
5–6	High	22.5

^aPublic health insurance includes Medicare, Medicaid, or a combination of both.

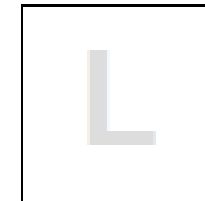
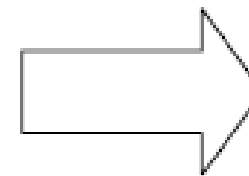
^bMaximum score, 6 points

LACE Index: Scoring Tool for Risk Assessment of Hospital Readmission

Step 1. Length of Stay

Length of stay (including day of admission and discharge): _____ days

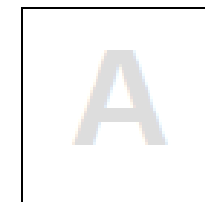
Length of stay (days)	Score (circle as appropriate)
1	1
2	2
3	3
4-6	4
7-13	5
14 or more	7



Step 2. Acuity of Admission

Was the patient admitted to hospital via the emergency department?

If yes, enter "3" in Box A, otherwise enter "0" in Box A



LACE Index: Scoring Tool for Risk Assessment of Hospital Readmission

Step 3. Comorbidities

Condition (definitions and notes on reverse)	Score (circle as appropriate)	
Previous myocardial infarction	+1	<p>If the TOTAL score is between 0 and 3 enter the score into Box C. If the score is 4 or higher, enter 5 into Box C</p> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto; text-align: center; line-height: 40px; font-size: 24px;">C</div>
Cerebrovascular disease	+1	
Peripheral vascular disease	+1	
Diabetes without complications	+1	
Congestive heart failure	+2	
Diabetes with end organ damage	+2	
Chronic pulmonary disease	+2	
Mild liver or renal disease	+2	
Any tumor (including lymphoma or leukemia)	+2	
Dementia	+3	
Connective tissue disease	+3	
AIDS	+4	
Moderate or severe liver or renal disease	+4	
Metastatic solid tumor	+6	
TOTAL		

**LACE Score Risk of Readmission:
> 10 = High Risk**

Step 4. Emergency department visits

How many times has the patient visited an emergency department in the six months prior to admission (not including the emergency department visit immediately preceding the current admission)? _____

Enter this number or 4 (whichever is smaller) in Box E

E

Pharmacist & Technician Roles

Pharmacist & Technician Roles

Risk Factor	Strategies
Medications	Medication Reconciliation Medication Histories Medication Education
Comorbidities	Disease State Education
Health Insurance Status	Access to Medications

Source: Erickson AK. *Pharmacy Today*. 2016;22(4):34-37.

Medication Reconciliation

- Named as a National Patient Safety Goal by Joint Commission
- Defined as creating an accurate list of medications patient is taking



- Can be performed at admission, transfer, and/or discharge
- Opportunities for pharmacists:
 - Examine medical appropriateness and patient-centeredness

Sources: Rose AJ, et al. *JAMA*. 2017;317(20):2057-2058.

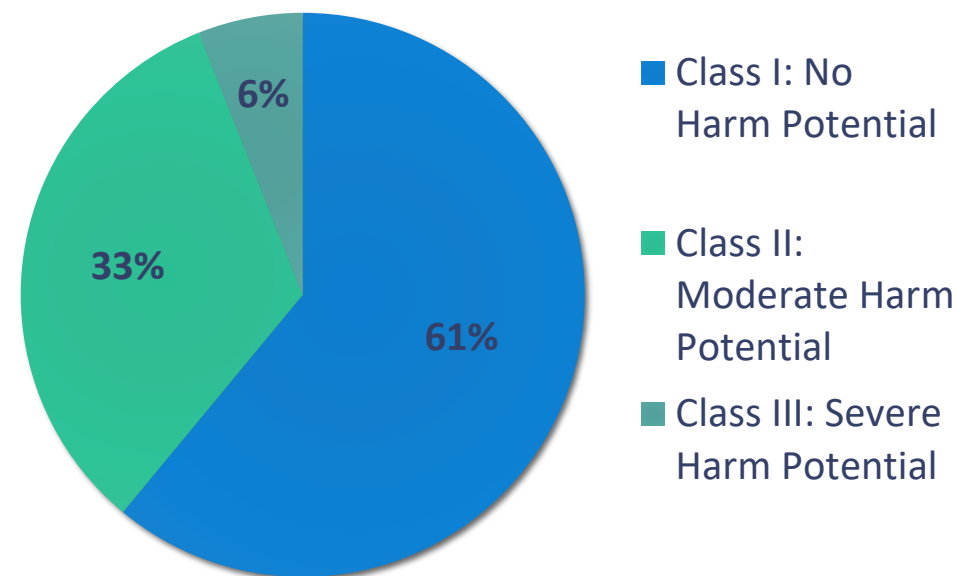
Institute for Healthcare Improvement. <http://www.ihc.org/Topics/ADEsMedicationReconciliation/Pages/default.aspx>.

Agency for Healthcare Research and Quality. <https://psnet.ahrq.gov/primers/primer/1/medication-reconciliation>.

Medication Reconciliation

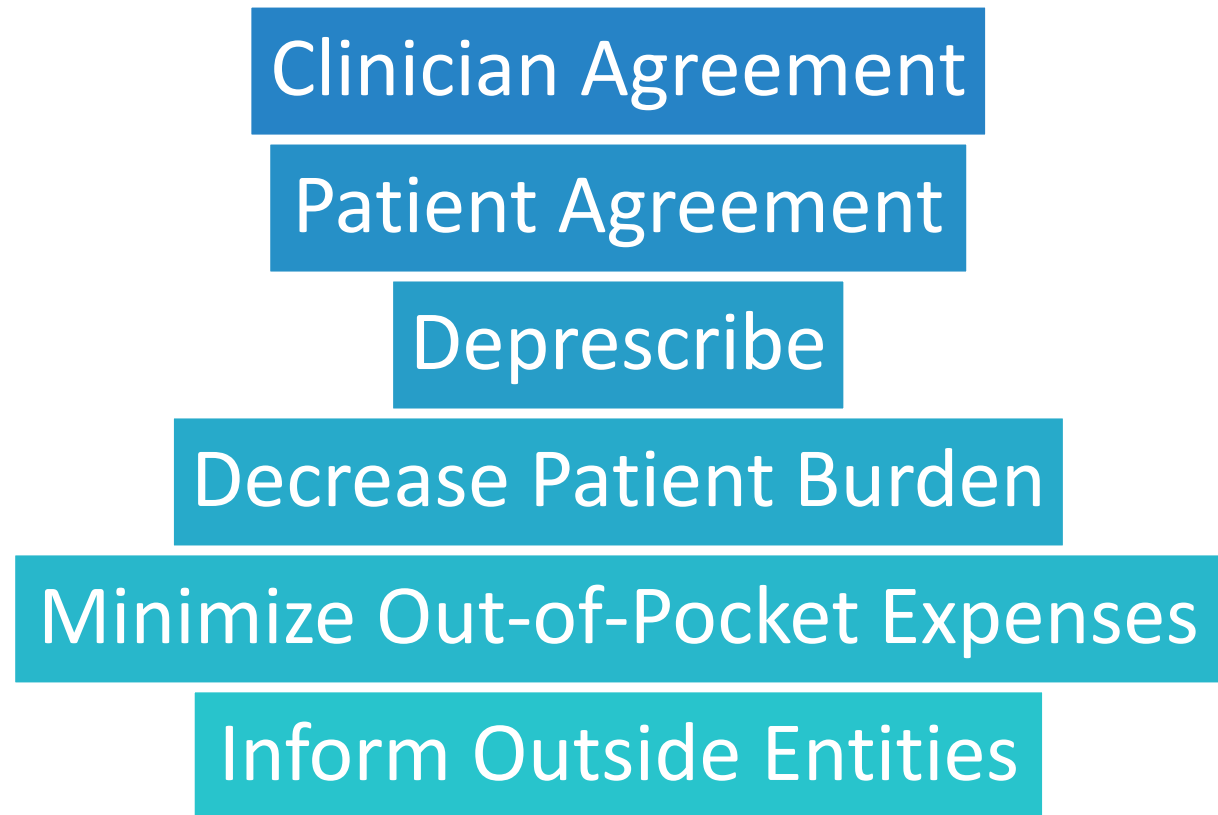
- Potential discharge medication list errors:
 - Inadvertently omitted medications
 - Accidental duplications
 - Incorrect dosages

Medication Discrepancies at Hospital Admission



Sources: Agency for Healthcare Research and Quality. <https://psnet.ahrq.gov/primers/primer/1/medication-reconciliation>.
Cornish PL, et al. *Arch Intern Med*. 2005;165:424-429.

Levels of Reconciliation



Source: Rose AJ, et al. *JAMA*. 2017;317(20):2057-2058.

Medication History

- MARQUIS Toolkit
 - Provides guide for obtaining a “Best Possible Medication History” (BPMH)
 - Contains a checklist of high-performance behaviors including:

Open-ended
questions

Probing
questions

Adherence

Two sources of
information

Additional History

Allergies



Preferred pharmacy

Documentation in EMR

Source: Michels RD, et al. *Am J Health Syst Pharm.* 2003;60:1982-6.

Patient Education

Medication Education

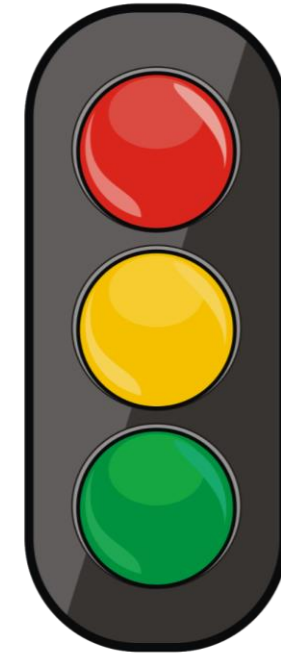
- Medication dose
- Frequency of administration
- Administration technique (if applicable)
- Storage and disposal instructions
- Common and serious adverse effects of medications
- Monitoring parameters



Source: American Pharmacists Association. Applying the Pharmacists' Patient Care Process to Care Transitions Services. February 2019.

Disease State Education

- Handouts
- Disease state educators
- Action Plans
 - COPD
 - Asthma
 - Diabetes
 - Heart Failure



Access to Medications

Resources

- Medicare
 - www.medicare.gov
 - Medicare Prescription Drug Plan Finder
 - Medicare Pharmaceutical Assistance Program
 - www.medicare.gov/pharmaceuticalassistance-program/
- GoodRx
 - <http://www.goodrx.com>
 - Prescription price estimates and discounts

Source: American Pharmacists Association. Applying the Pharmacists' Patient Care Process to Care Transitions Services. February 2019.

Resources (*continued*)

- NeedyMeds
 - 5013 non-profit, available free of charge
 - <http://www.needymeds.org>
 - Database for:



Source: NeedyMeds. <https://www.needymeds.org/>

Resources (*continued*)

- RX Assist
 - <http://www.rxassist.org>
 - Database of patient assistance programs
- Institutional grants
 - Site-specific
- Manufacturer coupons or trial cards
 - Brand name drugs only
 - Must read eligibility requirements

Manufacturer Coupon: Example 1



ELIGIBILITY: You may be eligible for this offer if you are insured by commercial insurance and your insurance does not cover the full cost of your prescription, or you are not insured and are responsible for the cost of your prescriptions. Patients who are enrolled in a state or federally funded prescription insurance program are not eligible for this offer. This includes patients enrolled in Medicare Part D, Medicaid, Medigap, Veterans Affairs (VA), Department of Defense (DOD) programs or TriCare, and patients who are Medicare eligible and enrolled in an employer-sponsored group waiver health plan or government-subsidized prescription drug benefit program for retirees. If you are enrolled in a state or federally funded prescription insurance program, you may not use this savings card even if you elect to be processed as an uninsured (cash-paying) patient. This offer is not insurance, is restricted to residents of the United States and Puerto Rico, and to patients over 18 years of age.

Source: AstraZeneca. Accessed from: <https://www.brilinta.com/brilinta-coupon-savings/commercial-insurance.html>

Manufacturer Coupon: Example 2

Free 30-Day Trial Offer

ELIGIBILITY REQUIREMENTS:

You may be eligible for the Free 30-Day Trial offer for ELIQUIS[®] (apixaban) if:

1. You have **not previously** filled a prescription for ELIQUIS;
2. You have a **valid 30-day prescription** for ELIQUIS;
3. You are being treated with ELIQUIS for an FDA-approved indication that an HCP has planned for **more than 35 days** of treatment;
4. You are 18 years of age, or older; and
5. You are a resident of the United States or Puerto Rico.

Co-pay Card

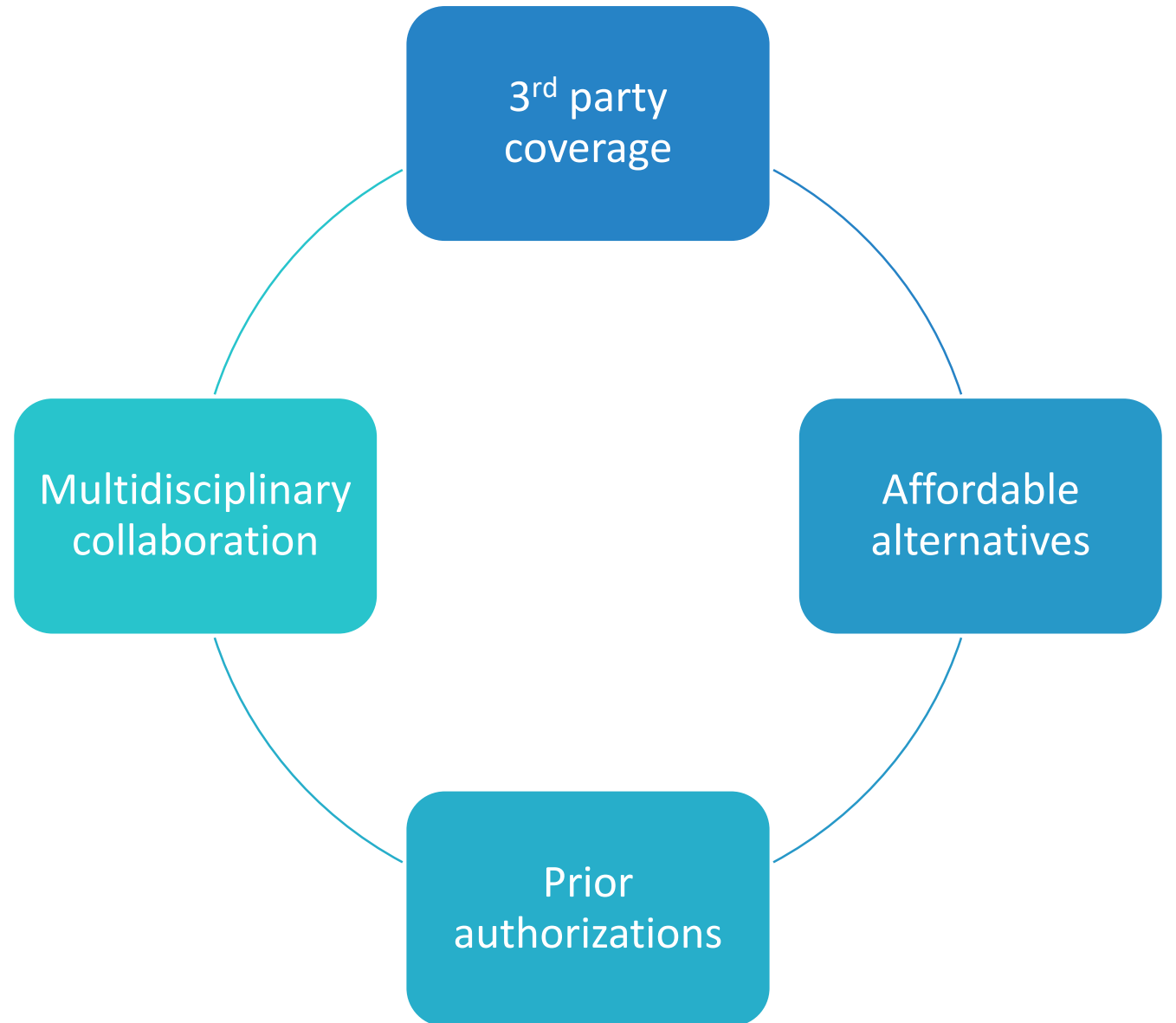
ELIGIBILITY REQUIREMENTS:

You may be eligible for the Co-pay Card for ELIQUIS[®] (apixaban) if:

1. You are **insured by commercial insurance** and your prescription insurance coverage does not cover the full cost of your prescription, that is, you have a co-pay obligation for ELIQUIS;
2. You do **not** have prescription insurance coverage through a **state or federal** healthcare program, including but not limited to **Medicare Part D, Medicaid, Medigap, Veterans Affairs (VA), or Department of Defense (DOD) programs**; patients who move from commercial plans to state or federal healthcare programs will no longer be eligible;
3. You are 18 years of age or older; and
4. You are a resident of the United States or Puerto Rico.

Source: Bristol-Myers Squibb and Pfizer. Accessed from: <https://www.eliquis.bmscustomerconnect.com/afib/savings-and-support>

Additional Roles



Evidence-based Transitions of Care

Project RED

- RED = “Re-engineered Discharge”
- Randomized trial conducted at Boston Medical Center
- **Objective:** Test effects of intervention designed to minimize hospital utilization post-discharge
- **Primary outcomes:** ED visits and hospitalizations 30 days after discharged
- **Secondary outcomes:** self-reported preparedness, frequency of PCP follow-up
- **Intervention:**
 - Discharge nurse helped patients arrange follow-up appointments, confirm medication reconciliation, and provide education
 - Clinical pharmacist called patients 2-4 days after discharge to reinforce plan and review medications

Source: Jack BW, et al. *Ann Intern Med.* 2009;150:178-187.

Project RED

- **Results:**

	Intervention Group (n=370)	Usual Care (n=368)	P-value
Hospital utilization (visits per month)	0.314	0.451	P=0.009

- Incidence rate ratio, 0.695 [95% CI, 0.515 to 0.937]

PCP Follow-up Rate	190 (65%)	135 (44%)	P<0.001
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Source: Jack BW, et al. *Ann Intern Med.* 2009;150:178-187.

Project RED – Toolkit

Tool #1 – How to begin implementation



Tool #2 – How to deliver the re-engineered discharge



Tool #3 – How to deliver RED to diverse populations



Tool #4 – How to conduct post-discharge follow-up phone call



Tool #5 – How to monitor RED implementation and outcomes

Source: Jack BW, et al. Rockville, MD: Agency for Healthcare Research and Quality; 2012. AHRQ Publication No. 12-0084.

Project BOOST

- BOOST = “Better Outcomes for Older adults through Safe Transitions”
 - Note: Project RED’s average age was 50 years
- Semi-controlled pre–post study conducted at 11 hospitals
- **Objective:** To determine the effect of intervention on rehospitalization rates and length of stay
- **Primary outcome:** 30-day, all-cause rehospitalization, pre-implementation vs. post-implementation
- **Methods**
 - 2-day training session and 5–6 scheduled follow-up conference calls
 - Developed structured action plans

Source: Hansen LO, et al. *J Hosp Med.* 2013;8(8):421-427.

Project BOOST

- **Results:**



Intervention

Average rate of 30-day rehospitalization

- Pre-implementation: **14.7%**
- 12 months post-implementation: **12.7%**
- (P = 0.010)



Control

Average rate of 30-day rehospitalization

- Pre-implementation: **14.0%**
- 12 months post-implementation: **14.1%**
- (P = 0.831)

Source: Hansen LO, et al. *J Hosp Med.* 2013;8(8):421-427.

Project BOOST – Toolkit

- Assessing Patient Risk for Adverse Events After Discharge—The 8Ps
- Assessing the Patient’s Preparedness for Transitioning Out of the Hospital
- Patient-centered Written Discharge Instructions
- Teach Back
- Follow-up Telephone Calls
- Follow-up Appointments
- Interprofessional Rounds
- Post-acute Care Transitions
- Medication Reconciliation

Source: Coffey C, et al. Project Boost Implementation Guide: 2nd edition. 2013.

Project BOOST – Toolkit

- **8P Screening Tool:** Identifying Your Patient’s Risk for Adverse Events After Discharge

Problems with
medications

Psychological

Principle
diagnosis

Physical
limitations

Prior health
literacy

Patient
support

Prior
hospitalization

Palliative care

The 8P Screening Tool

Identifying Your Patient's Risk for Adverse Events After Discharge

The 8Ps (Check all that apply.)	Risk Specific Intervention	Signature of individual responsible for insuring intervention administered
Problems with medications (polypharmacy – i.e. ≥ 10 routine meds – or high risk medication including: insulin, anticoagulants, oral hypoglycemic agents, dual antiplatelet therapy, digoxin, or narcotics) <input type="checkbox"/>	<input type="checkbox"/> Medication specific education using Teach Back provided to patient and caregiver <input type="checkbox"/> Monitoring plan developed and communicated to patient and aftercare providers, where relevant (e.g. warfarin, digoxin and insulin) <input type="checkbox"/> Specific strategies for managing adverse drug events reviewed with patient/caregiver <input type="checkbox"/> Elimination of unnecessary medications <input type="checkbox"/> Simplification of medication scheduling to improve adherence <input type="checkbox"/> Follow-up phone call at 72 hours to assess adherence and complications	
Psychological (depression screen positive or history of depression diagnosis) <input type="checkbox"/>	<input type="checkbox"/> Assessment of need for psychiatric care if not in place <input type="checkbox"/> Communication with primary care provider, highlighting this issue if new <input type="checkbox"/> Involvement/awareness of support network insured	
Principal diagnosis (cancer, stroke, DM, COPD, heart failure) <input type="checkbox"/>	<input type="checkbox"/> Review of national discharge guidelines, where available <input type="checkbox"/> Disease specific education using Teach Back with patient/caregiver <input type="checkbox"/> Action plan reviewed with patient/caregivers regarding what to do and who to contact in the event of worsening or new symptoms <input type="checkbox"/> Discuss goals of care and chronic illness model discussed with patient/caregiver	
Physical limitations (deconditioning, frailty, malnutrition or other physical limitations that impair their ability to participate in their care) <input type="checkbox"/>	<input type="checkbox"/> Engage family/caregivers to ensure ability to assist with post-discharge care assistance <input type="checkbox"/> Assessment of home services to address limitations and care needs <input type="checkbox"/> Follow-up phone call at 72 hours to assess ability to adhere to the care plan with services and support in place.	
Poor health literacy (inability to do Teach Back) <input type="checkbox"/>	<input type="checkbox"/> Committed caregiver involved in planning/administration of all discharge planning and general and risk specific interventions <input type="checkbox"/> Post-hospital care plan education using Teach Back provided to patient and caregiver <input type="checkbox"/> Link to community resources for additional patient/caregiver support <input type="checkbox"/> Follow-up phone call at 72 hours to assess adherence and complications	
Patient support (social isolation, absence of support to assist with care, as well as insufficient or absent connection with primary care) <input type="checkbox"/>	<input type="checkbox"/> Follow-up phone call at 72 hours to assess condition, adherence and complications <input type="checkbox"/> Follow-up appointment with appropriate medical provider within 7 days after hospitalization <input type="checkbox"/> Involvement of home care providers of services with clear communications of discharge plan to those providers <input type="checkbox"/> Engage a transition coach	
Prior hospitalization (non-elective; in last 6 months) <input type="checkbox"/>	<input type="checkbox"/> Review reasons for re-hospitalization in context of prior hospitalization <input type="checkbox"/> Follow-up phone call at 72 hours to assess condition, adherence and complications <input type="checkbox"/> Follow-up appointment with medical provider within 7 days of hospital discharge <input type="checkbox"/> Engage a transition coach	
Palliative care (Would you be surprised if this patient died in the next year? Does this patient have an advanced or progressive serious illness? "No" to 1 st or "Yes" to 2 nd = positive screen) <input type="checkbox"/>	<input type="checkbox"/> Assess need for palliative care services <input type="checkbox"/> Identify goals of care and therapeutic options <input type="checkbox"/> Communicate prognosis with patient/family/caregiver <input type="checkbox"/> Assess and address concerning symptoms <input type="checkbox"/> Identify services or benefits available to patients based on advanced disease status <input type="checkbox"/> Discuss with patient/caregiver role of palliative care services and the benefits and services available to the patient	

Medication REACH Program

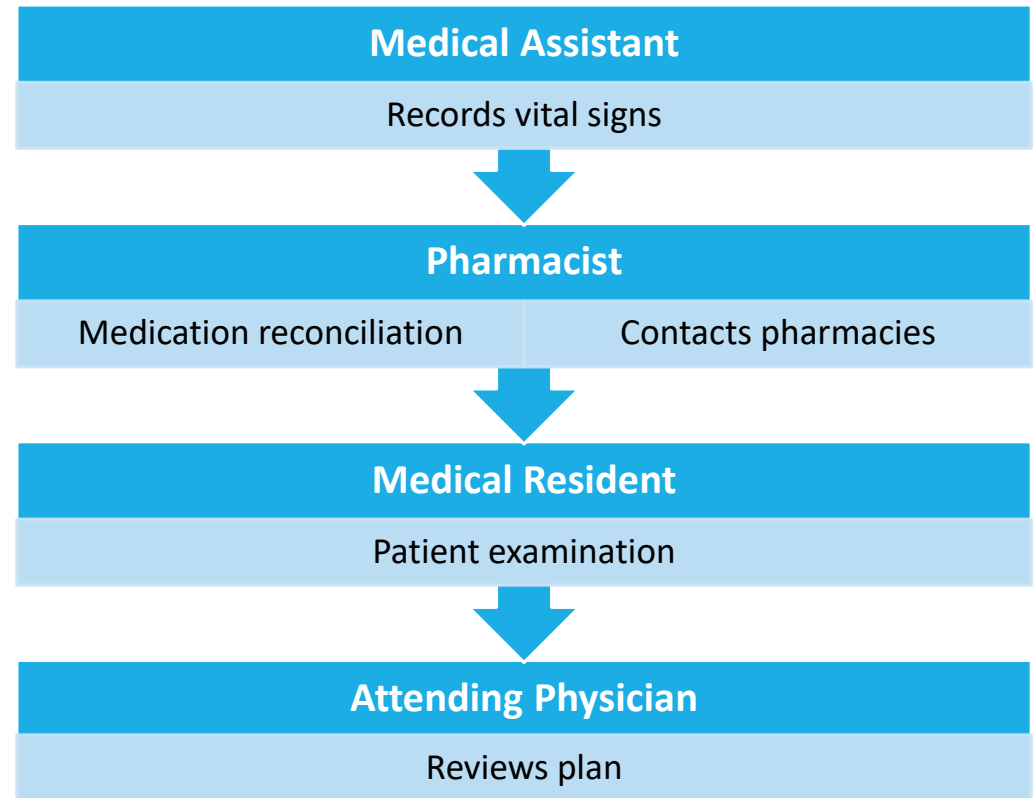
- REACH → “Reconciliation, Education, Access, and Counseling Healthy Patients at Home”
- Implemented at Einstein Medical Center
- 89 patients randomized to receive traditional nurse-mediated or clinical pharmacist-mediated discharge counseling
 - Provided uninsured patients with medications free of charge for the first 30 days

	Intervention Group (n=47)	Control Group (n=42)
Readmission Rate	10.6%	21.4%

Source: ASHP-APhA. February 2013. Available at: <http://www.ashp.org/DocLibrary/Policy/Transitions-of-Care/ASHP-APhA-Report.pdf>.

Community-based Transitions of Care

- Interdisciplinary Transitions of Care Clinic
 - Physician residents, attending physician, clinical pharmacist, nurse, medical assistants, and social worker
- Accommodates patients unable to schedule appointment with primary care provider within 1–2 weeks of hospital discharge
 - Inpatient care team calls clinic to schedule appointment
 - Patient phone call within 2 business days following discharge



Source: Otsuka SH, et al. *J Am Pharm Assoc.* 2015;55:527–533.

Community-based Transitions of Care

- Implementation suggestions:
 - Establish goals and objectives for clinic
 - Develop standard operating procedures
 - Clearly define roles and responsibilities
 - Decide patient populations to target
 - Establish a workflow
 - Conduct market assessment
 - Institute plan for monitoring and evaluation

Additional Resources

Additional Resources

Joint Commission

- Transitions of Care Portal

ASHP/APhA

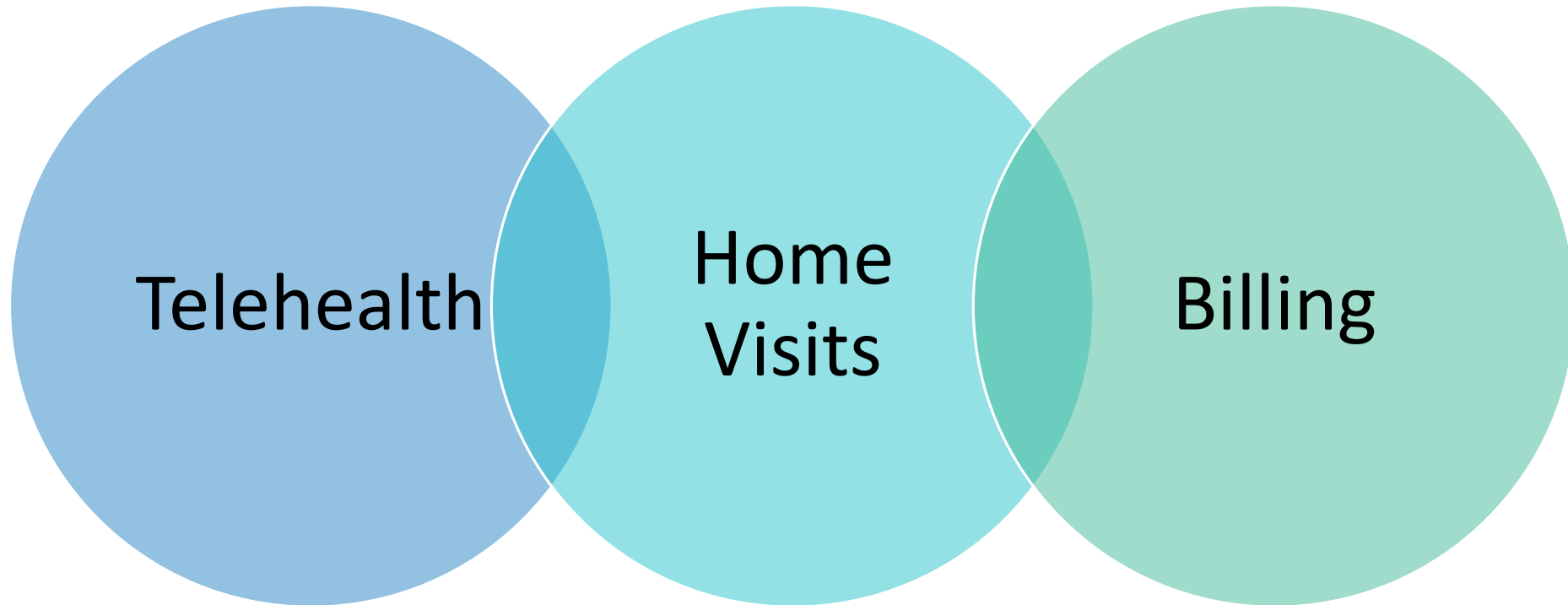
- “Best Practices from the ASHP-APhA Medication Management in Care Transitions Initiative”

APhA

- “Applying the Pharmacists’ Patient Care Process (PPCP) to Care Transitions Services”

Evolving Trends

Evolving Trends



Source: Mansukhani RP, et al. *P&T*. 2015;40(10)690-694.



Conclusion

- Improved patient outcomes
- Care coordination
- Reduced hospital readmissions
 - Alleviate costs
 - Ensure provider reimbursement for high-quality care
 - Guide efficient resource allocation

Sources: McAuliffe L, et al. *Am J Health-Syst Pharm.* 2018;75:111-9.

Image obtained from: http://harringtonhospital.org/for-patients/patient-information/patient_portals/

Assessment Questions



Pharmacist: Question #1

- Which of the following disease states or procedures is NOT currently used to measure performance based on readmissions by the Centers for Medicare and Medicaid Services?
 - a) Myocardial infarction
 - b) Gastrointestinal bleeds
 - c) Congestive heart failure
 - d) Total hip or knee arthroplasty
 - e) Pneumonia

Pharmacist: Response #1

- Which of the following disease states or procedures is NOT currently used to measure performance based on readmissions by the Centers for Medicare and Medicaid Services?
 - a) Myocardial infarction
 - b) Gastrointestinal bleeds**
 - c) Congestive heart failure
 - d) Total hip or knee arthroplasty
 - e) Pneumonia

Pharmacist: Question #2

- Which of the following has NOT been shown to be a predictive risk factor for 30-day readmissions?
 - a) Outpatient pharmacy utilized
 - b) Polypharmacy
 - c) Prescription insurance status at discharge
 - d) Comorbidities

Pharmacist: Response #2

- Which of the following has NOT been shown to be a predictive risk factor for 30-day readmissions?
 - a) **Outpatient pharmacy utilized**
 - b) Polypharmacy
 - c) Prescription insurance status at discharge
 - d) Comorbidities

Pharmacist: Question #3

- Which of the following resources can be used to improve patient access to medications?
 - a) Manufacturer coupons
 - b) Institutional grants
 - c) Patient assistance programs
 - d) All of the above

Pharmacist: Response #3

- Which of the following resources can be used to improve patient access to medications?
 - a) Manufacturer coupons
 - b) Institutional grants
 - c) Patient assistance programs
 - d) All of the above**

Pharmacy Technician: Question #1

- Which of the following is NOT an example of a strategy to obtain a best practice medication history?
 - a) Obtaining information from at least two different sources of information
 - b) Resolving discrepancies between sources
 - c) Recognizing retail prescription claims are more accurate than patient recollection
 - d) Using probing questions during patient interviews

Pharmacy Technician: Response #1

- Which of the following is NOT an example of a strategy to obtain a best practice medication history?
 - a) Obtaining information from at least two different sources of information
 - b) Resolving discrepancies between sources
 - c) Recognizing retail prescription claims are more accurate than patient recollection**
 - d) Using probing questions during patient interviews

Pharmacy Technician: Question #2

- Medication histories can be obtained for patients who are directly admitted, transferred from other hospitals or admitted on weekends.
 - a) True
 - b) False

Pharmacy Technician: Question #2

- Medication histories can be obtained for patients who are directly admitted, transferred from other hospitals, or admitted on weekends.

a) True

b) False

Transitioning to the Future of Pharmacy

Thank you!

Nicole.Fluegel@atlantichalth.org