



Contemporary Ambulatory Care Pharmacy Practice

Mollie Ashe Scott, Pharm.D., BCACP, CPP
Regional Associate Dean
Clinical Associate Professor
UNC Eshelman School of Pharmacy
Clinical Associate Professor
UNC School of Medicine



Conflicts of Interest

*Director-at-Large, ASHP Section of
Ambulatory Care Practitioners Executive
Committee*

Goals and Objectives

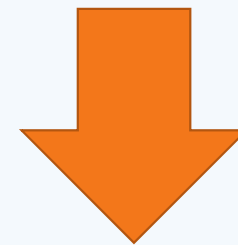
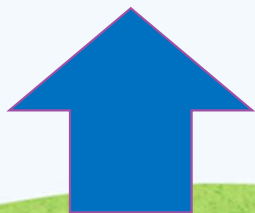
- Describe practice innovations in ambulatory care
- Highlight financial barriers that prevent the expansion of ambulatory care practice models
- Identify the components of current provider status legislation
- Discuss the impact that ambulatory care pharmacists can have on patients with diabetes in primary care settings



*What changes are
occurring in healthcare?*

Pharmacists Improve Care

- Improve quality indicators such as A1c, lipid panels, and blood pressure
- Improve medication appropriateness
- Improve medication adherence
- Increase patient satisfaction
- Improve screenings
- Decrease healthcare costs
- Decrease healthcare utilization
- Decrease hospitalizations
- Decrease bleeding with anticoagulants
- Decrease missed days of work



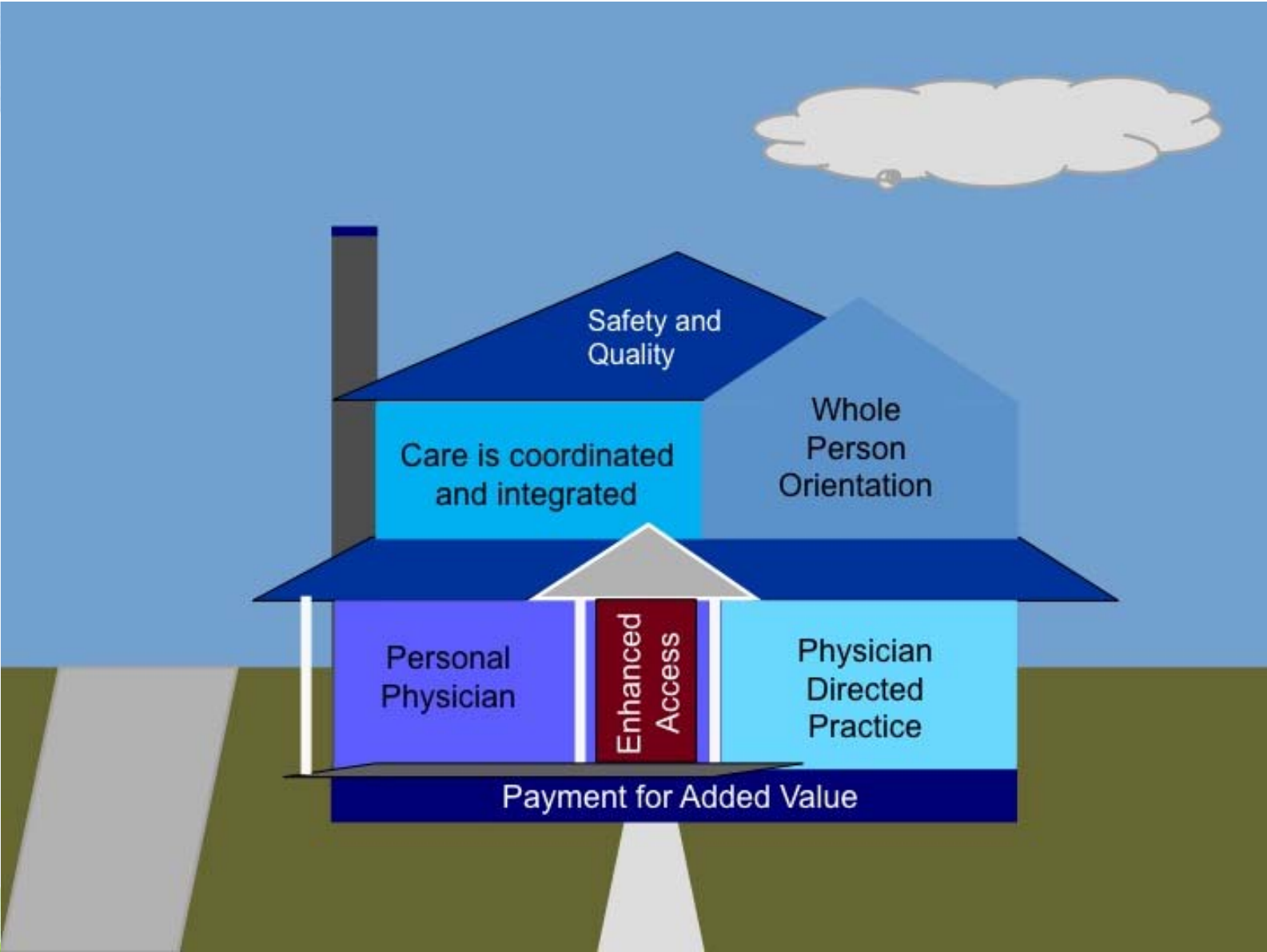
<http://www.usphs.gov/corpslinks/pharmacy/documents/2011advancedpharmacypracticereporttotheussg.pdf>

The Patient-Centered Medical Home

- *Joint Principles of the PCMH:*
 - *Personal physician*
 - *Physician-directed practice*
 - *Whole person orientation*
 - *Coordinated care*
 - *Patient safety and quality*
 - *Enhanced access to care*
 - *Appropriate reimbursement*
- *New Elements from NCQA 2014:*
 - *Integration of behavioral health*
 - *Care management of high-needs populations*
 - *Enhanced emphasis on team-based care*
 - *Focus on the triple aim*
 - *Sustained transformation*

<http://www.medicalhomeinfo.org/downloads/pdfs/JointStatement.pdf>

<http://www.ncqa.org/Programs/Recognition/Practices/PatientCenteredMedicalHomePCMH.aspx>



Safety and Quality

Care is coordinated and integrated

Whole Person Orientation

Personal Physician

Enhanced Access

Physician Directed Practice

Payment for Added Value

What Does a PCMH Look Like?

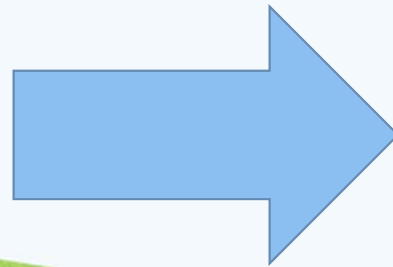
- *Based in primary care settings such as family medicine or internal medicine*
- *Practice redesign is a central element:*
 - *Team-based care*
 - *Implementation of electronic health records*
 - *Focus on population health management*
 - *Preventative care takes center stage*
 - *Work flows are adjusted*



Physician-
Based
Practices



Team-Based
Practices



Accountable Care Organizations

- Accountable Care Organizations (ACOs) are groups of doctors, hospitals, and other health care providers, who come together voluntarily to give coordinated high quality care to their Medicare patients.
- The goal of coordinated care is to ensure that patients, especially the chronically ill, get the right care at the right time, while avoiding unnecessary duplication of services and preventing medical errors.
- When an ACO succeeds both in delivering high-quality care and spending health care dollars more wisely, it will share in the savings it achieves for the Medicare program.

<https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/ACO/index.html?redirect=/ACO/>

Reimbursement

- *Healthcare is changing payment models in order to focus on quality instead of quantity*

Changing the Way Doctors Get Paid

March 4, 2013 | Issue Brief

The National Commission on Physician Payment Reform studies new ways to improve patient outcomes, while reining in costs.

Reimbursement

Fee-for-service

Pay for Performance

Meaningful Use

Value Based Purchasing





*Transitions
in
Pharmacy
Practice*

Pharmacy's Focus on Ambulatory Care

- *Board of Pharmaceutical Specialties Certification in Ambulatory Care*
- *ASHP Ambulatory Care Summit*
- *Schools and Colleges of Pharmacy curricular changes*
- *Provider status for pharmacists*

The Ambulatory Care Pharmacist

Ambulatory care pharmacy practice is the provision of integrated, accessible healthcare services by pharmacists who are accountable for addressing medication needs, developing sustained partnerships with patients, and practicing in the context of family and community.

*Board of Pharmacy Specialties. Specialties—ambulatory care.
www.bpsweb.org/specialties/AmbulatoryCarePharmacy.cfm*

The Ambulatory Care Pharmacist

This is accomplished through direct patient care and medication management for ambulatory patients, long-term relationships, coordination of care, patient advocacy, wellness and health promotion, triage and referral, patient education, and self-management.

The ambulatory care pharmacist may work in institutional or community-based clinic involved in the direct patient care of diverse populations.

Board of Pharmacy Specialties. Specialties—ambulatory care.
www.bpsweb.org/specialties/AmbulatoryCarePharmacy.cfm

Comprehensive Medication Management

- *Defined by the Patient Centered Primary Care Collaborative*
- *Elements include:*
 1. *Assessment of an individual patient's individual medication needs*
 2. *Identification of a patient's medication-related problems*
 3. *Development of a care plan with individualized therapy goals and personalized interventions*
 4. *Follow up evaluation to determine actual patient outcomes*

PCPCC, June 2012. <https://www.pcpcc.org/sites/default/files/media/medmanagement.pdf>

Why Pharmacists Belong in the Medical Home

- Most office visits involve medications for chronic conditions
- Pharmacists are often underutilized in these activities
- Roles that the pharmacist can play in the PCMH:
 - Perform comprehensive therapy reviews
 - Resolve medication-related problems
 - Optimize complex regimens
 - Design adherence programs
 - Recommend cost-effective therapies

Smith M, Health Affairs 2010;29(5):906-913

Report to the Surgeon General from the US Public Health Service

Focus points included:

1. History of how pharmacists are integrated into direct patient care settings that are interprofessional
2. Pharmacists improve patient and health care system outcomes
3. Appropriate reimbursement for services is needed
4. Review of the evidence in the literature for supporting expanded pharmacist roles

Impact of the pharmacist

“I firmly believe that one of the most evidence-based and cost-effective decisions we can make as a nation is to maximize the expertise and scope of pharmacists, and minimize expansion barriers to successful health care delivery models. It is the right thing to do for our patients.”

Scott Giberson, Chief Professional Officer for the
Public Health Service

<http://www.usphs.gov/corpslinks/pharmacy/documents/2011AdvancedPharmacyPracticeReporttotheUSSG.pdf>

Pharmacists in North Carolina: Steady Numbers, Changing Role

- The supply of pharmacists in NC currently equals the demand
- NC should have a stable supply of future pharmacists
- As ambulatory care expands, there may not be enough pharmacists trained for this type of practice
- North Carolina, with its CPP model, is well positioned to integrate pharmacists into direct patient care models
- The number of CPPs in NC has not grown due to lack of reimbursement for direct patient care services

<http://www.shepscenter.unc.edu/product/pharmacists-north-carolina-steady-numbers-changing-roles/>

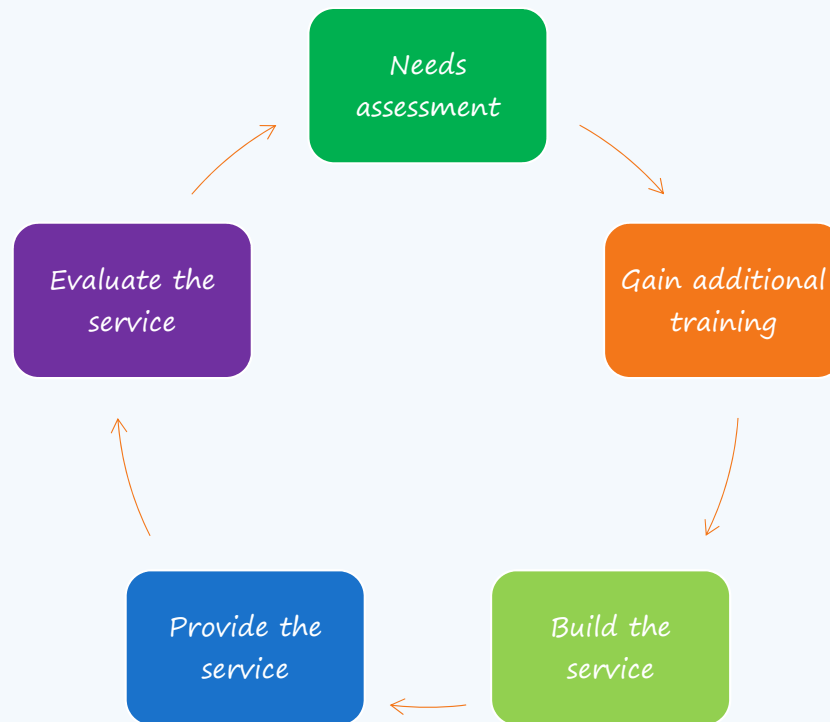
What Does Ambulatory
Care Pharmacy Practice
Look Like?



Mountain Area Health Education Center's Embedded Pharmacist Model

- Began in 2001 with the first ambulatory care pharmacist
- Now includes 6 pharmacists and 2 pharmacy residents
- Recognized by NCQA as a level III PCMH
- Home for MAHEC's family medicine residency
- Other trainees include medical students, pharmacy students, and nursing students
- Primary care providers include 10 physician faculty and 2 PAs/NPs
- Additional team members include nursing, behavioral medicine, case managers, laboratory and xray staff, and administrative staff

Starting New Ambulatory Care Services



How We Started

- *Needs assessment*
 - *Review of top 25 diagnoses in clinic*
 - *Survey of primary care providers about their medication therapy management needs*
- *General Pharmacotherapy*
 - *Referral clinic for medication therapy management*
 - *Top referrals included diabetes management and medication assistance*
- *Anticoagulation management*
 - *Started with the most challenging patients*
 - *Expanded into management of all ambulatory patients*

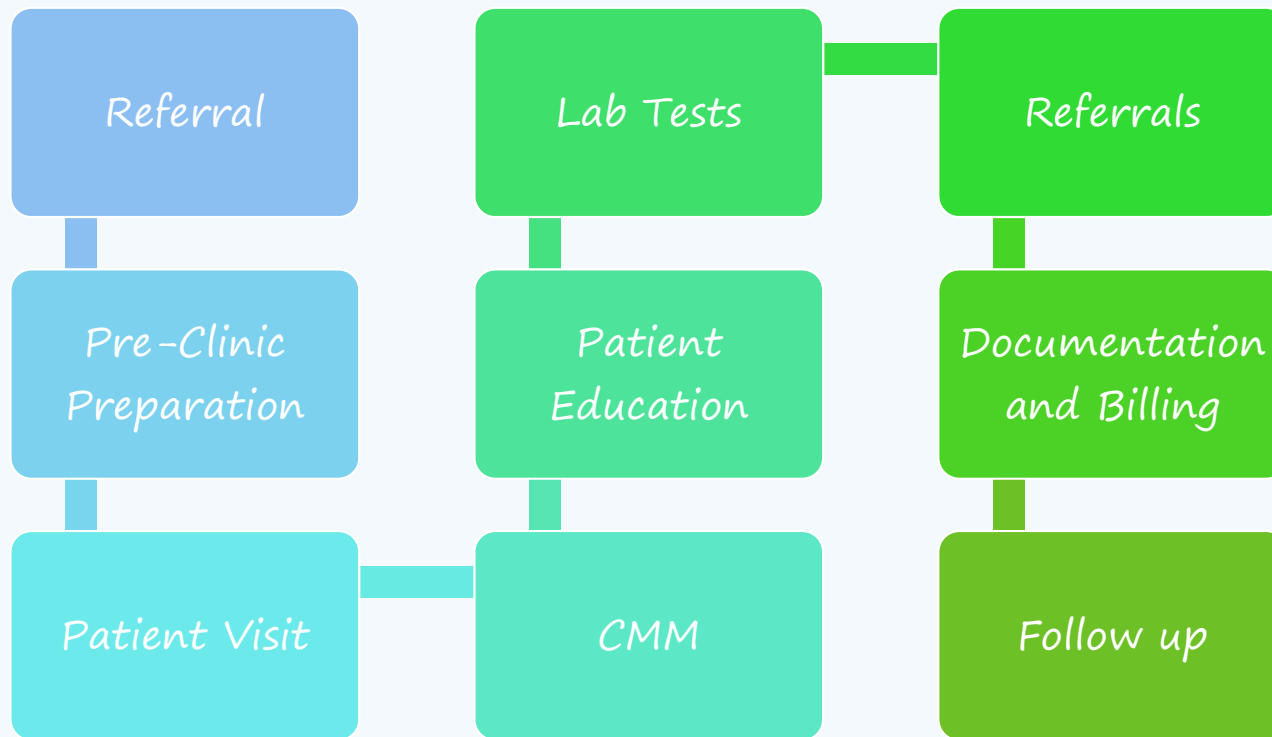
How We Grew

- *Geriatric fellowship program*
 - *Partnership with Givens Estates and Deerfield*
 - *Addition of two geriatric fellows and geriatric pharmacist*
- *Global health*
 - *Shoulder-to-Shoulder in Honduras*
 - *Addition of pharmacists on annual trips*
- *Population management strategies*
 - *Identified a need to improve medication use in CHF*
 - *Identified a need to improve inhaled steroid use in asthma*
 - *Identified a need to improve screening for and management of osteoporosis*

Pharmacotherapy Services Today

<i>Service</i>	<i>Practice Model</i>	<i>Providers Utilized</i>
<i>Pharmacy Clinic</i>	<i>Pharmacist provides comprehensive medication management & disease state management</i>	<i>Pharmacist and ambulatory care pharmacy residents</i>
<i>Pain Management Visits</i>	<i>Group clinic model</i>	<i>Nurse practitioner and pharmacist</i>
<i>Osteoporosis Clinic</i>	<i>Team-based, interprofessional teaching clinic</i>	<i>Physician, pharmacist, and medical assistant</i>
<i>Annual Wellness Visits</i>	<i>AWV provided to Medicare recipients</i>	<i>Pharmacist for high risk patients & RN for low risk patients</i>
<i>Transitions in Care</i>	<i>Phone and face-to-face visits for patients leaving the hospital</i>	<i>Pharmacy students supervised by pharmacist</i>

Pharmacy Clinic WorkFlow



CHF Clinic

- EHR query identified patients with CHF not seen at Asheville Cardiology Associates not on a beta blocker or ACEI or not at target doses
- Eligible patients were scheduled into a team-based clinic that included a physician, family medicine resident, and a pharmacist
- Interventions included:
 - Education about CHF, medications, responding to weights at home, nutrition and immunizations from the pharmacist
 - Titration of medications by the team

Group Asthma Clinic Model

Group class on asthma

Nurse for PFTs

PA for diagnosis
and plan

Pharmacists to
implement plan
and educate
patient

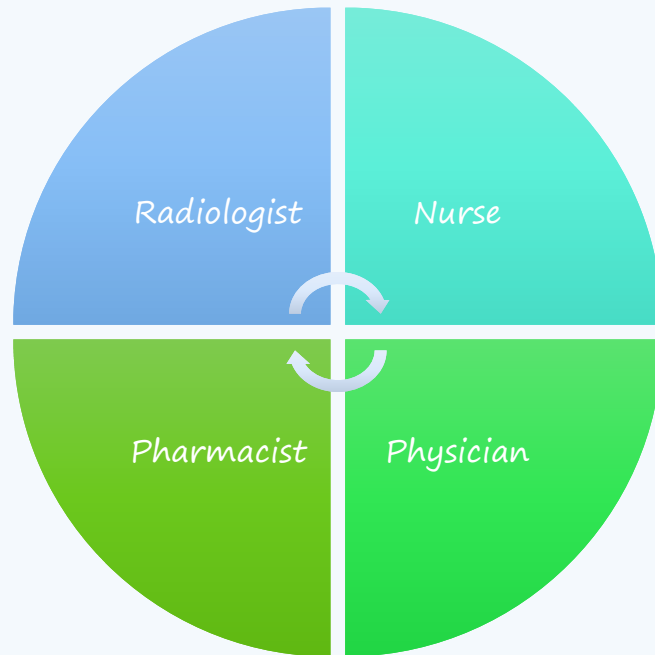
Osteoporosis Clinic

DXA screening for women over 65

Osteopenia or osteoporosis – go to osteoporosis clinic

Visit with a team including a physician, nurse, and pharmacist

Osteoporosis Clinic Work Flow

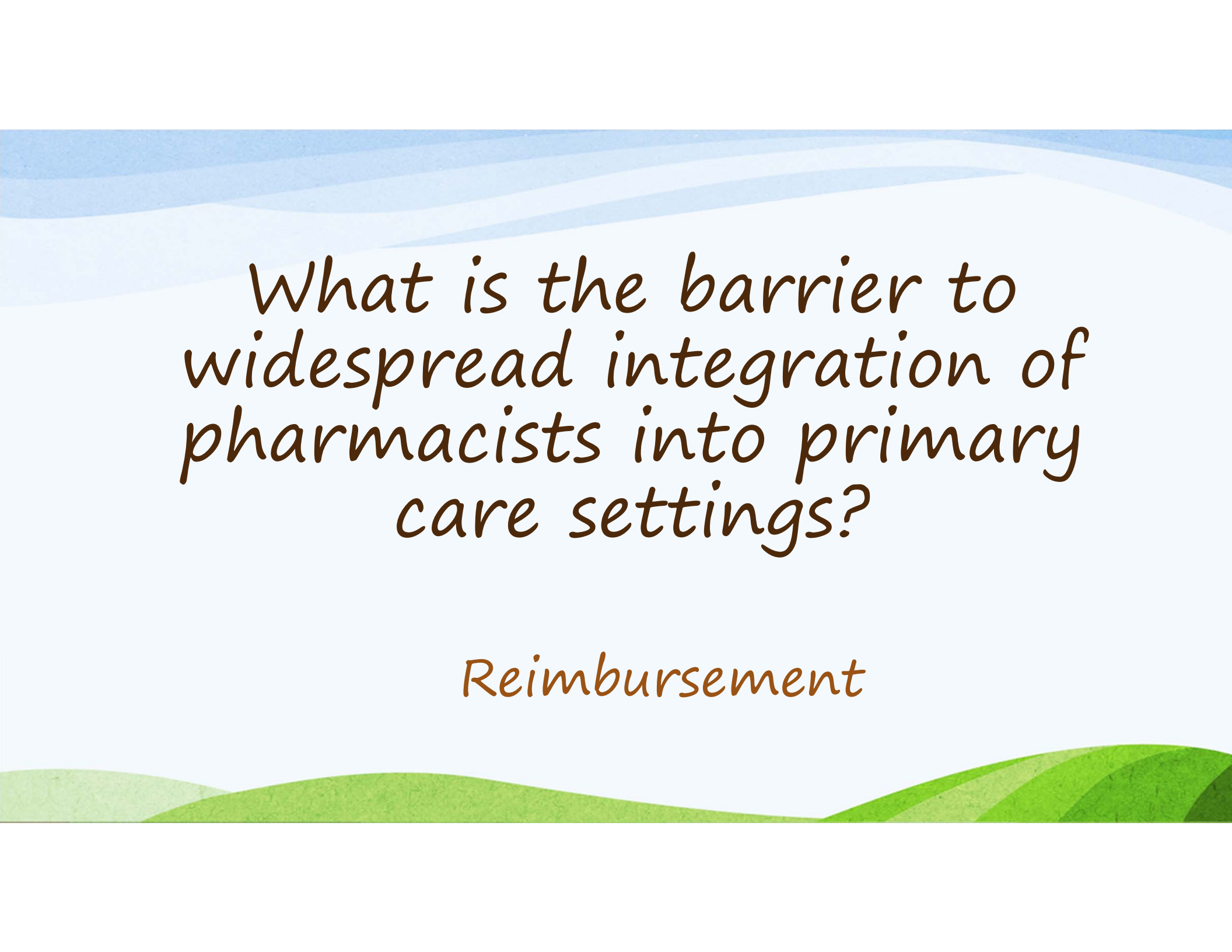


Medicare Wellness Visit

- Medicare will pay for an Annual Wellness Visit that focuses on prevention and wellness
- Reimbursable service to the practice
- Specific elements to address during the visit are defined by Medicare
 - Health risk assessment
 - List of current providers
 - Medical and family history
 - Assess for potential depression and cognitive impairment
 - Assess functional status and level of safety
 - Develop a written screening and immunization schedule
 - Personalized health advice

Transitional Care Management Services

- Service provided after discharge from skilled nursing, hospital setting, or observation setting
- Bundle face-to-face and non-face-to-face services into one billing code
- Includes care management services provided by non-physicians and a physician visit
- Required components:
 - Communication with patient or caregiver within 2 days of discharge
 - Medical decision-making
 - Face-to-face visit within 7-14 days, depending on complexity



*What is the barrier to
widespread integration of
pharmacists into primary
care settings?*

Reimbursement

Title XVIII, Section 1861 of the Social Security Act

- In Section 1861 s2, those who are considered providers are named
- Services are provided by a physician or incident to the physician
- Those named in this section include:
 - Physician assistants
 - Nurse practitioners
 - Clinical psychologists
 - Clinical social workers
 - Clinical nurse specialists
 - Certified nurse midwives
 - Medical nutrition therapy services

http://www.ssa.gov/OP_Home/ssact/title18/1861.htm

Provider Status for Pharmacists

H.R. 4190

- *Introduced in the House of Representatives in March of 2014*
- *Sought to amend Title XVIII of the Social Security Act to provide coverage of pharmacist services under Medicare*
- *Included coverage for patients in medically underserved communities, medically underserved populations, and health professional shortage areas as defined by HRSA*
- *Provided a reimbursement mechanism at 85% of the physician fee schedule*
- *Died in committee*

<https://www.congress.gov/bill/113th-congress/house-bill/4190>

Provider Status Legislation - 2015

- Underserved Areas Enhancement Act introduced in the House and the Senate*
- HR 592 introduced in the House of Representatives*
- S314 introduced in the Senate*

The Message of Provider Status

1. Medication-related problems increase the cost of care and decrease the quality of care provided
2. Pharmacists are trained to be the medication expert
3. Physicians and pharmacists are frequently trained together
4. Healthcare reform emphasizes team-based, interprofessional care
5. Patients do not have significant access to comprehensive medication management services
6. The primary barrier to providing these services is lack of adequate reimbursement
7. If pharmacists are recognized as providers, there will be a positive impact on the triple aim of healthcare – quality, experience, and cost

Implementation of the Law

- *CMS would write the regulations for the law*
- *States would apply the law based upon pharmacy practice acts and collaborative practice*



Medicare Reimbursement Rates

Complexity of Care	NC Medicare reimbursement rate	Now	Under Provider Status Legislation
99211 (nurse visit)	\$19.06	Yes	Yes
99212	\$40.04	No	Yes
99213	\$63.83	No	Yes
99214	\$99.21	No	Yes


Adapted from Scott et al, JAPhA 2012;52(2):175-80

Building a Business Case

- Assume cost of the pharmacist is \$100,000 annually plus 20% fringe benefits
- It is challenging to pay for a pharmacist billing level 1 visits due to the low reimbursement rates

CPT Code	Number of patients/day to generate adequate charges	Number of patients/day to generate adequate collections
99212	12	23
99213	7	14
99214	5	10

Scott et al, JAPhA 2012;52(2):175-80



What Role Can an
Ambulatory Care
Pharmacist Play in
Diabetes
Management?

Ideas for Finding Patients

- Referrals from other team members*
- Identification of high risk patients through the electronic medical record*
- Automatic referrals for patients with a new diagnosis of diabetes*
- Transitions in care visits for patients hospitalized for complications of diabetes*

Patient Case

- SB is a 60 yo WF with a history of diabetes x 1 years
- PMH: hyperlipidemia, hypertension, depression
- SH: smokes e-cigarettes daily, married, works as a teacher's aide in a local school
- Vitals: BP 138/80, HR 88, Weight 206 lbs, BMI 31 kg/m²
- Laboratory studies:

Hgb A1c May 2014 7.8%

Hbg A1c December 2014 8.9%

Patient Case

Medications:

- Simvastatin 40 mg daily
- Lisinopril 40 mg daily
- Amlodipine 5 mg daily
- Citalopram 20 mg daily
- Metformin 1000 mg BID

What are the next steps for treating her hyperglycemia?

Antihyperglycemic Therapy in Type 2 Diabetes

	Metformin + Sulfonylurea	Metformin + Thiazolidinedione	Metformin + DPP-4 inhibitor	Metformin + SGLT2 inhibitor	Metformin + GLP-1 receptor agonist	Metformin + Insulin (basal)
Dual therapy†						
Efficacy*	high	high	intermediate	intermediate	high	highest
Hypo risk	moderate risk	low risk	low risk	low risk	low risk	high risk
Weight	gain	gain	neutral	loss	loss	gain
Side effects	hypoglycemia	edema, HF, fxs	rare	GU, dehydration	GI	hypoglycemia
Costs*	low	low	high	high	high	variable

If A1C target not achieved after ~3 months of dual therapy, proceed to 3-drug combination (order not meant to denote any specific preference—choice dependent on a variety of patient- and disease-specific factors):

American Diabetes Association. *Diabetes Care* 2015;38:S41-S48

Choosing the Next Agent - AACCCDEE

- Age
- A1C
- Blood glucose patterns
- Body weight
- Complications
- Comorbidities
- Duration of diabetes
- Life expectancy
- Expense



Patient Case

- *Patient was started on liraglutide which is a GLP-1 receptor agonist*
- *She tolerated liraglutide well*
- *Over the next 3 months, she lost five pounds*
- *In May 2015, her Hbg A1c decreased to 7.2%*

GLP-1 Receptor Agonists

► Mechanism:

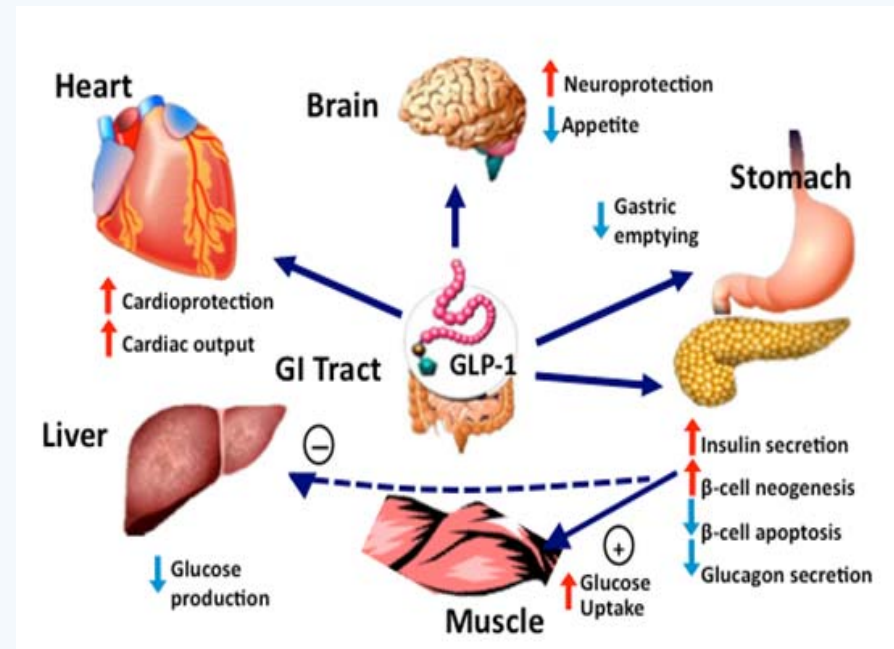
- Decrease hepatic glucose production
- Increase glucose-dependent insulin release
- Delay gastric emptying, improve satiety

► Benefits:

- Lower postprandial blood glucose
- Minimal risk of hypoglycemia
- Beta cell protection
- Weight loss

► Side effects: nausea, vomiting, diarrhea

► Precautions: pancreatitis, thyroid cancer



Exenatide (Byetta®)	Exenatide (Bydureon®)	Liraglutide (Victoza®)	Albiglutide (Tanzeum®)	Dulaglutide (Trulicity®)
5mcg or 10mcg SQ twice daily	2mg SQ once weekly	0.6mg, 1.2mg, or 1.8mg SQ once daily	30mcg or 50mcg SQ once weekly	0.75mg or 1.5mg SQ once weekly
↓A1c 0.7-0.9%	↓A1c 1.6%	↓A1c 0.8-1.1%	↓A1c 0.7-0.9%	↓A1c 0.6-0.8%
↓weight 2.7-2.9kg	↓weight 2.3kg	↓weight 2.1-2.5kg	↓weight 0.4-0.9kg	↓weight 1.4-2.3kg

Patient Case

- *Additional care provided within the PCMH:*
 - *Primary care provided by physician*
 - *Pharmacist interventions: basic education about diabetes, medication review and calendar development to help with adherence, laboratory monitoring, immunizations, smoking cessation*
 - *Referral to the diabetes education center for group classes*
 - *Referral to behavioral medicine faculty member for counseling for depression*
 - *Retinal scan with ophthalmology follow up*

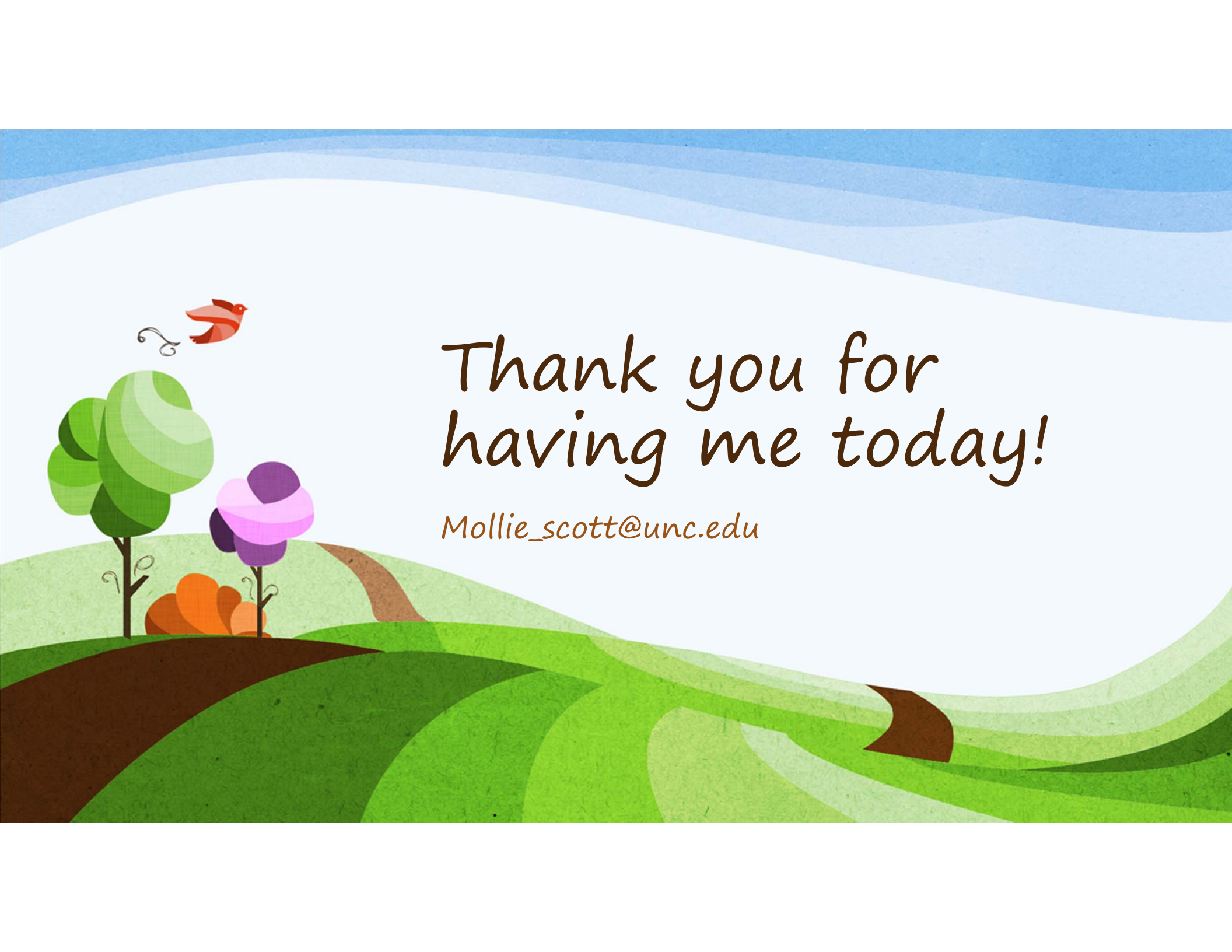
Take Home Points

- *Ambulatory care is the hot new pharmacy practice environment*
- *Reimbursement for cognitive services is variable*
- *Provider status is needed to increase patient access to ambulatory care services*
- *Pharmacists in ambulatory care are an important team member for patients with diabetes*

Biblical Thoughts on Team-Based Care

For just as each of us has one body with many members, and these members do not all have the same function, so in Christ we, though many, form one body, and each member belongs to all the others. We have different gifts, according to the grace given to each of us. If your gift is prophesying, then prophesy in accordance with your faith; if it is serving, then serve; if it is teaching, then teach; if it is to encourage, then give encouragement; if it is giving, then give generously; if it is to lead, do it diligently; if it is to show mercy, do it cheerfully.

Romans 12:4-8



Thank you for
having me today!

Mollie_scott@unc.edu