



# Disease management interventions in a nationwide community pharmacy

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# Outline

1. Pharmacies as accessible healthcare destinations
2. Expanding the role of pharmacy and pharmacies
3. CMS and P4P adherence incentives
4. Medication adherence interventions
5. Examples of pharmacy outcomes studies
6. Behavioral medicine research opportunities
7. Questions?



# 95% of Americans live within 5 miles of a pharmacy



**~9,800**  
drugstores



**76%**  
of the U.S. lives within  
**5 miles** of a Walgreens



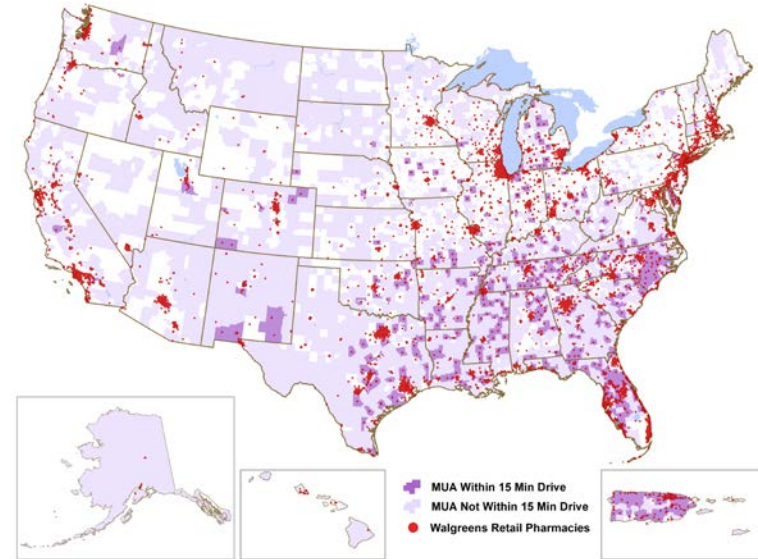
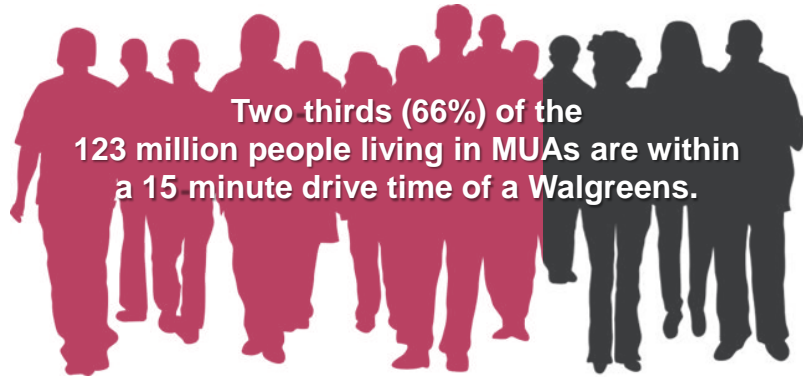
**300**  
community-based  
specialty pharmacies



**1,000+**  
disease-state  
specialized pharmacies

# Pharmacies provide healthcare access in medically underserved areas (MUA)

40% of MUAs are within a 15-minute drive time of a Walgreens pharmacy.  
59% of Walgreens pharmacies provided influenza vaccinations to MUA residents.

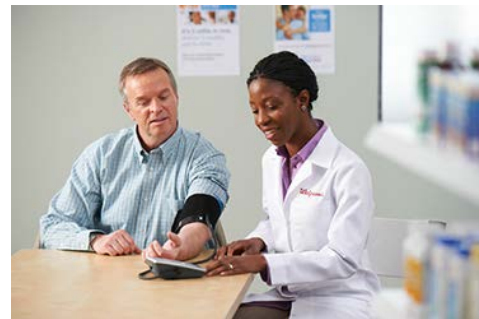


1. MUA data is from <https://data.hrsa.gov/data/download> as of January 2018.
2. Walgreens locations represent open retail pharmacies as of January 2018.
3. MUA's were defined as being within a 15-minute drive of Walgreens if the MUA centroid overlapped with the 15-minute drive time area of a Walgreens

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# Both the pharmacists' role and pharmacy services are being expanded

- Medication counseling
  - Adherence support
  - Chronic disease education
  - Self-management support
  - Biometric monitoring
  - Vaccinations
  - Opioid education
  - Prescribing
  - Digital interventions  
(Next presentation)
- Innovations in retail healthcare services
    - ❖ Retail health clinics
    - ❖ Primary care
    - ❖ Senior care
    - ❖ Urgent care
    - ❖ Lab
    - ❖ Optical
    - ❖ Hearing
    - ❖ Dental



# Increased incentives to manage adherence

CMS Star Health Plan Quality Ratings  
Medication adherence is triple weighted

- Diabetes
- High cholesterol
- Hypertension

## Star Ratings

★★★★★	<b>Excellent</b>
★★★★	<b>Above Average</b>
★★★	<b>Average</b>
★★	<b>Below Average</b>
★	<b>Poor</b>



Pay for Performance  
Pharmacy Contracting



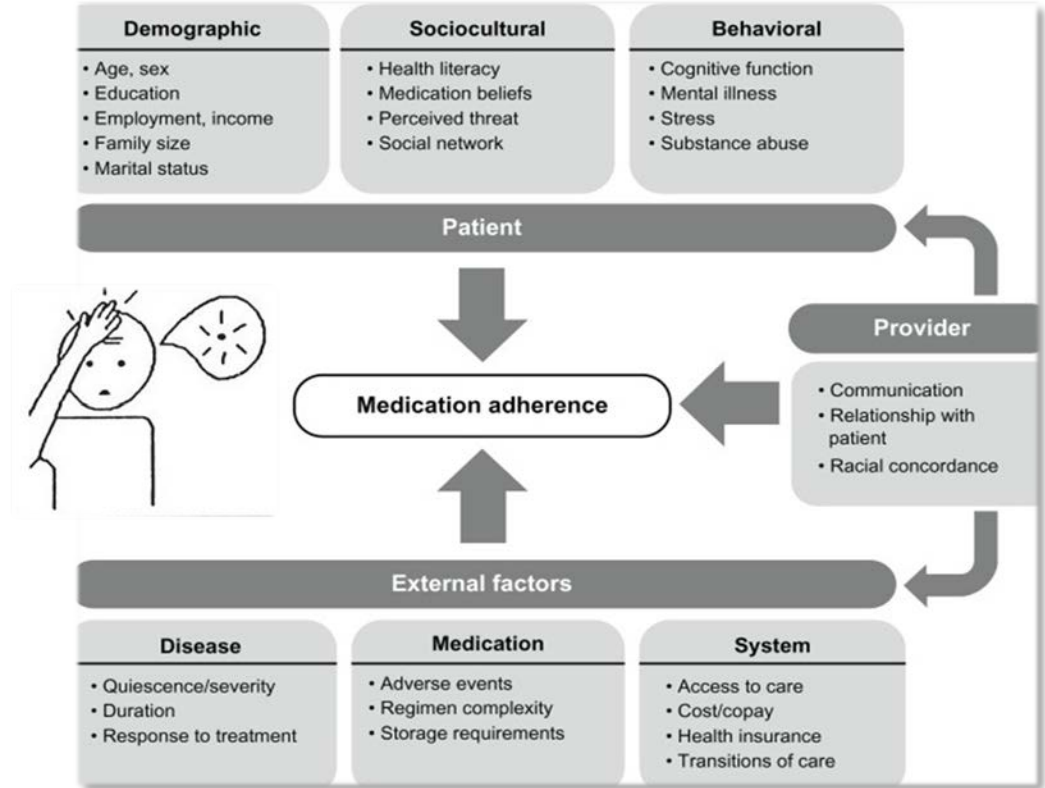
# What impacts medication adherence?

## Adherence Metrics

PDC = Proportion of days covered

% Adherent = % of patients with  
 $PDC \geq 0.80$

Persistence = Days on therapy until  
discontinuation



# Medication adherence interventions

## New to Therapy Consultations

- Pharmacist-initiated calls to discuss patients' new medications for targeted drug classes.

## Refill Reminders

- Automated calls, emails, or text messages sent to patients before their prescriptions are due for refill

## Late to Refill

- A call or face-to-face consult for patients with a history of refilling late and are late on their current fill

## Pick Up Reminders & Return to Stock

- Omni-channel set of reminders for patients to pick up their filled prescriptions

## Connected Care

- Condition-specific specialty pharmacy programs, clinical counseling & support to address challenges of complex and comorbid conditions

## 90-day

- Filling retail scripts for 90 days supply vs 30 days supply

## Medication Therapy Management

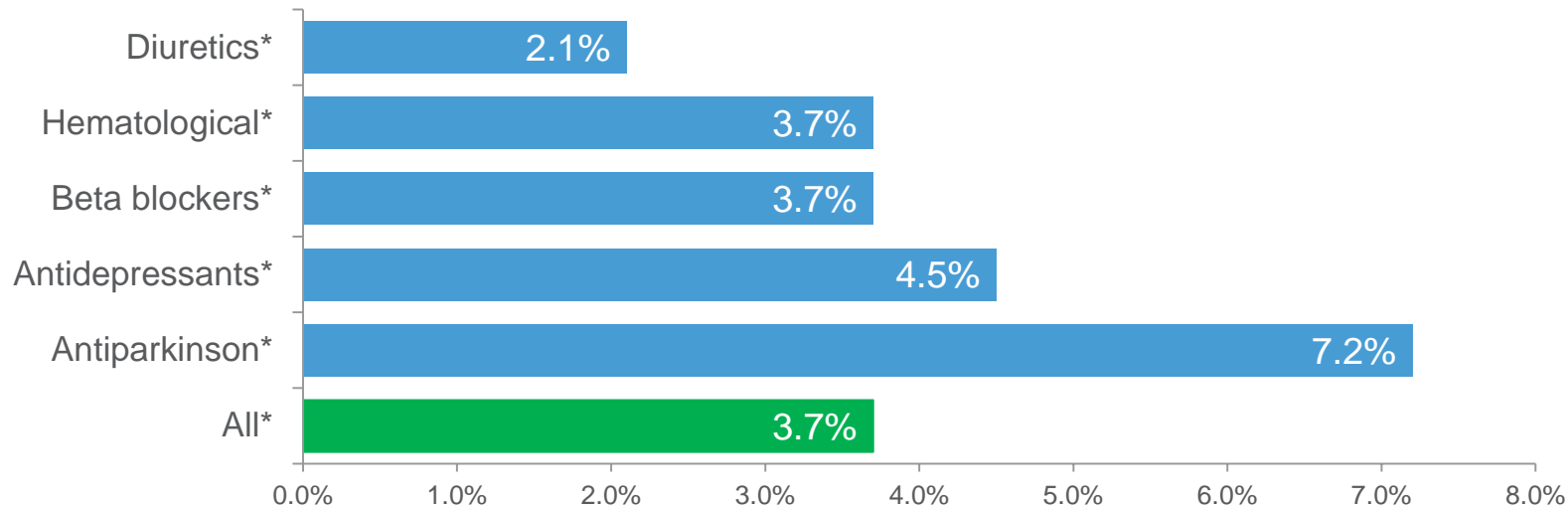
- Comprehensive medication profile review and targeted disease state or medication review

## Medication Synchronization

- Consultation and process for patients with multiple chronic conditions to pick-up all of their medications at the same time.



# New-to-therapy consultation program increases adherence by 3.7 percent

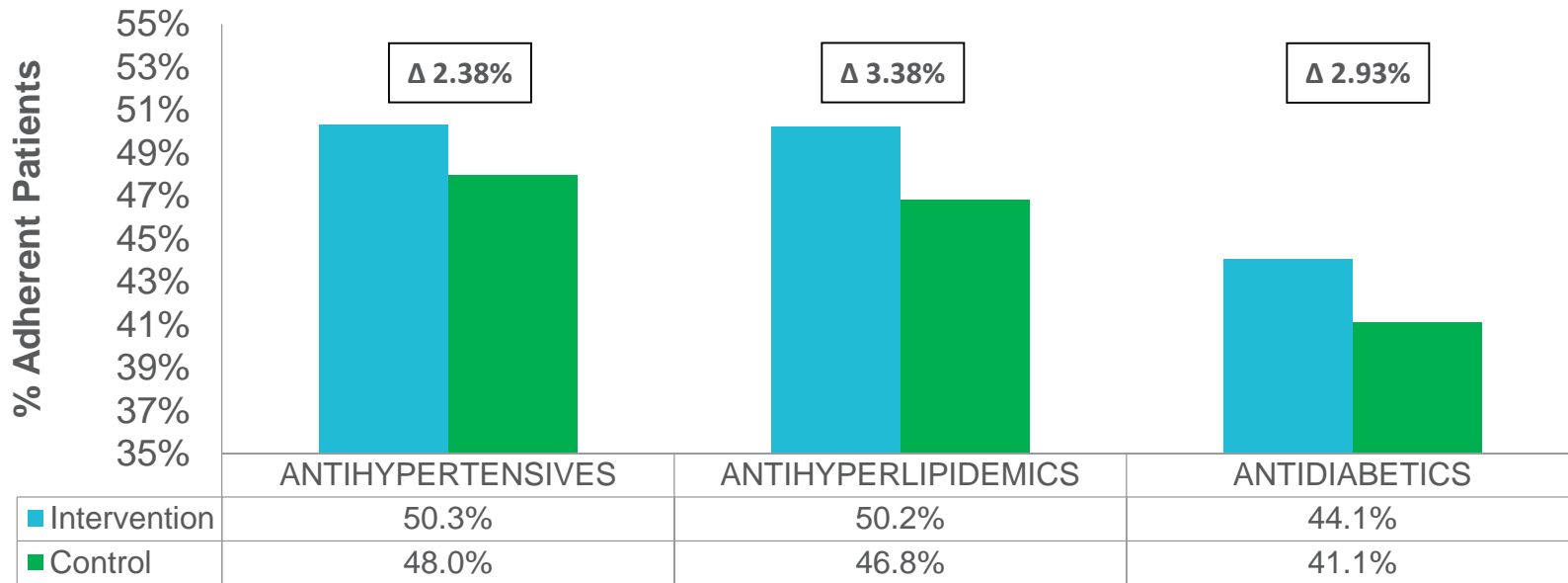


Test group had one phone intervention with their pharmacist; the control group had none; PDC increase by test group at the confirmed intervention level  
PDC=Proportion of days covered; Time=February 2013 through February 2014; N=306,854 patients

Taitel M, Jiang JZ, Rudkin K. Impact of pharmacist-call intervention program on new-to-therapy patients' medication adherence. Poster presented at: 19<sup>th</sup> Annual International Meeting of the International Society for Pharmacoeconomics and Outcomes Research; May 31-June 4, 2014; Montreal, Canada.

# Pharmacist Medicare Part D late-to-refill calls increase the percent of adherent patients (**PDC $\geq$ 80%**)

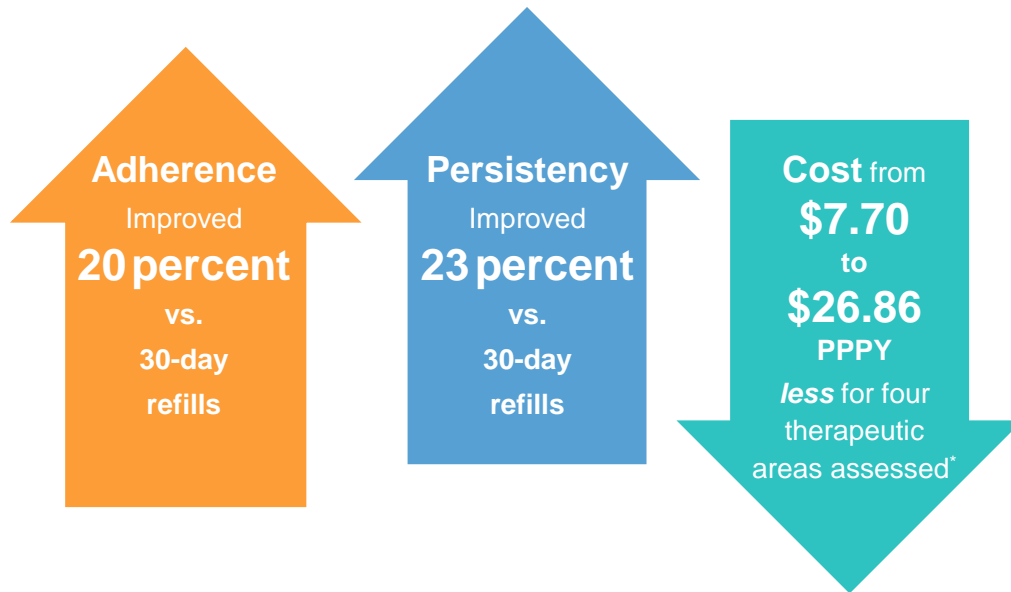
## Differences in Adherent Patients Between Groups



# 90-day refills at retail pharmacy improves adherence and reduce costs for Medicaid patients

Compared with 30-day refills, patients with 90-day refills had

- Greater medication adherence
- Greater persistency
- Nominal wastage
- Greater savings



Data=Pharmacy claims from January 2010

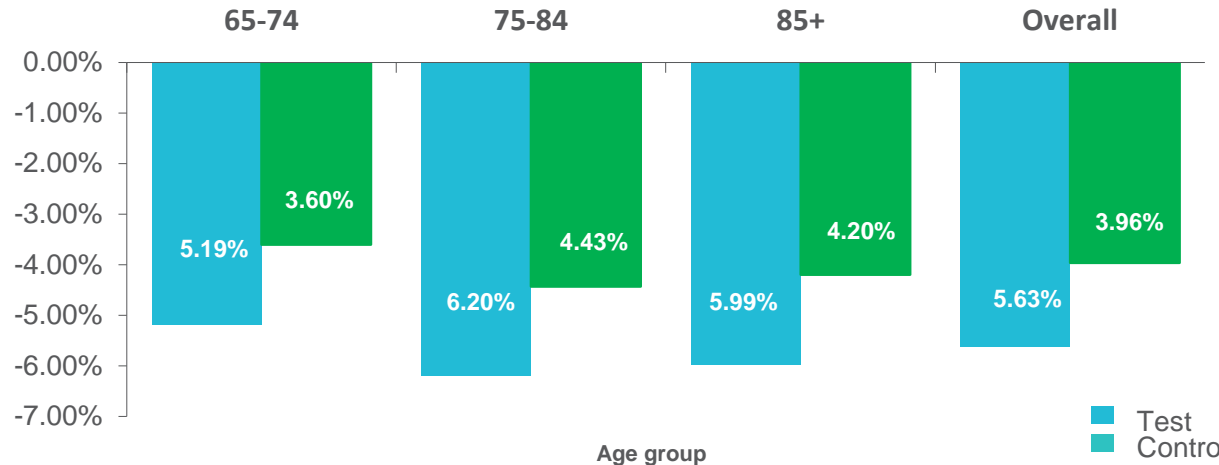
N=52,898 Medicaid patients

Adherence was measured by the medication possession ratio (MPR); persistency was the number of continuous days of therapy until a 30-day gap occurred, if one occurred. PPPY = per patient per year. Four medication classes were statin, antihypertensive, selective serotonin reuptake inhibitor (SSRI) and oral hypoglycemic medications.

1. Taitel M, Fensterheim L, Kirkham H, Sekula R, Duncan I. Medication days' supply, adherence, wastage, and cost among chronic patients in Medicaid. *Medicare & Medicaid Research Review*. 2012;2(3):E1-E13.

# Medication therapy management (MTM) counseling delivers excellence in patient care

- A retail pharmacy MTM program has been shown to reduce high-risk-medication (HRM) use in the elderly<sup>1</sup>
  - The **test group had a 5.6 percent reduction** in overall HRM rate
  - The control group had a 4 percentage point reduction in HRM rate

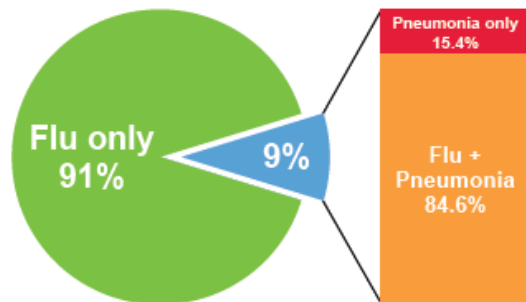


1. Taitel M, Lou Y, Huang Z, Nada J. Face-to-face medication therapy management program at community pharmacy reduces high risk medication use in the elderly. Poster presented at: Annual Research Meeting of AcademyHealth; June 8-10, 2014; San Diego, CA.

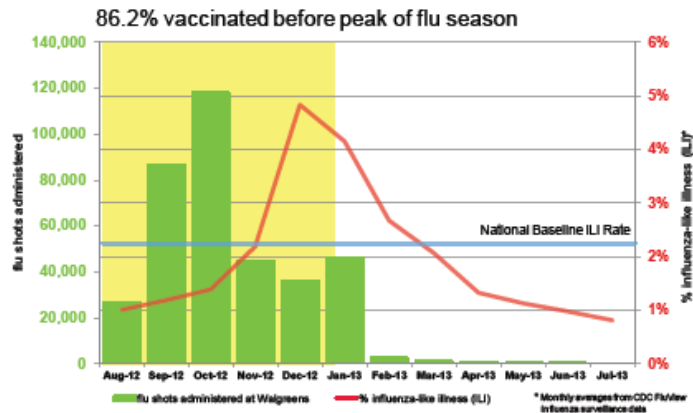
# Influenza vaccination uptake among diabetes patients in community pharmacies

- 84.6% of the diabetes patients receiving a pneumococcal vaccination also received an influenza vaccination (Figure 1).
- 86.2% of the influenza vaccinations administered to diabetes patients were between August and December, offering maximum protection early in the influenza season (Figure 2).

**Figure 1. Diabetes patients receiving immunizations: distribution of vaccine type**



**Figure 2. Flu shots administered to diabetes patients and influenza activity in the United States**



# Research opportunities



- Problems
  - Aging population
  - Limited resources
  - More and more expensive medications
  - Growing incidence of diabetes
  - Anti-vaccine movement
- Patients' adoption of retail healthcare
- Self-management in the changing healthcare environment
- Understanding the pharmacy environment
- Behavior change theory and practice based on multiple brief encounters

# More research opportunities



- Develop brief motivational interviewing techniques
- Leveraging omni-channel communications to reinforce behavior change
- The role of small incentives to support medication adherence
- Medication management self-efficacy by among seniors and care givers
- Understanding the patients' condition journey and behavior changes needed at each stage
- Tailoring interventions by social determinants of health
- Overcoming vaccine hesitancy
- Program evaluation of new initiatives

# Questions?



## The Walgreens Center for Health & Wellbeing Research

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