Beneficiary Medication Adherence and Managing Pharmacy Costs

Hae Mi Choe, PharmD
Director, Innovative Ambulatory Pharmacy Practices
University of Michigan Hospitals and Health Centers

Clinical Associate Professor of Pharmacy
University of Michigan College of Pharmacy

Objectives

- Describe the impact of medication non-adherence on overall health care cost and quality of care
- Identify key barriers to medication adherence
- Review the impact of high drug costs for patients on adherence especially during coverage gap
- Discuss different strategies to avoid the coverage gap and decrease out of pocket costs
- Discuss the importance of comprehensive medication review to improve adherence and lower drug costs
- Describe University of Michigan Health System approach to managing high medication costs

Impact of Medication Non-adherence

- 75% of healthcare dollars are spent on chronic conditions (1.3 trillion dollars annually)
- Poor medication adherence
  - Rates have been estimated to be as low as 50%
  - Causes 33-69% of drug-related hospital admissions
  - Increases risk of disease progression
  - Leads to poor outcomes
- Total financial impact of non-adherence is estimated at $290 billion annually

Key Barriers to Medication Non-adherence

- Medication cost
  - High co-pay or out of pocket cost
- Regimen complexity
  - Increased regimen complexity
- Medication beliefs
  - Perceived risks of having a side effect
  - Perceived impact and need for the medication
- Depression
  - In patients with diabetes

Gellad, W., J. Grenard, and A. McGlynn. "A Review of Barriers to Medication Adherence: A Framework for Driving Policy Options." Rand Health Technical Report. 2009.

Current Medicare Part D Structure

- Initial coverage period
  - copayment or coinsurance
- Coverage gap or “doughnut hole”
  - starts when total drug costs > $2,970
  - 52.5% discount on brand-name formulary drugs
  - 21% discount on all generic formulary medications
- Catastrophic coverage period
  - starts when out-of-pocket costs > $4,750
  - $2.65 (generic)/$6.60 (brand) OR 5% of drug cost

Impact of Coverage Gap "Doughnut Hole"

- Medicare part D coverage gap intended to sensitize patients to drug costs
  - Encourage patients to switch to cost effective alternative treatments
- Patients in the coverage gap
  - Twice as likely to discontinue therapy
  - Less likely to switch

1 *Polinski, J. "Changes in Drug Utilizaion during a Gap in Insurance Coverage: An Examination of the Medicare Part D Coverage Gap." PLOS Medicine:. N.p., n.d. Web. 08 May 2013. <http://www.plosmedicine.org/article/info:doi/10.1371/journal.pmed.1001075>.*

Future Coverage Gap (Brand Drugs)

Plan Year	Beneficiary Cost-Sharing	Plan Cost-Sharing	Manufacturer Cost-Sharing
2013	47.5%	2.5%	50%
2014	47.5%	2.5%	50%
2015	45%	5%	50%
2016	45%	5%	50%
2017	40%	10%	50%
2018	35%	15%	50%
2019	30%	20%	50%
2020	25%	25%	50%

Future Coverage Gap (Generic Drugs)

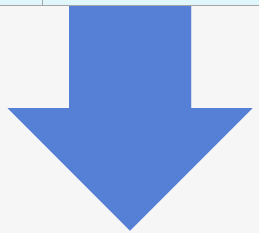
Plan Year	Beneficiary Cost-Sharing	Plan Cost-Sharing	Manufacturer Cost-Sharing
2013	79%	21%	0%
2014	72%	28%	0%
2015	65%	35%	0%
2016	58%	42%	0%
2017	51%	49%	0%
2018	44%	56%	0%
2019	37%	63%	0%
2020	25%	75%	0%

Tips for Reducing Medication Costs

- Therapeutic interchange
- Least expensive brand
- Combination pill
- Maximize therapeutic dose
- Pill splitting
- Separate tubes of combination creams
- Community pharmacy discount programs

Therapeutic Interchange

Drug Name	Full Drug Cost	Initial Cost	Gap Cost	Catastrophic Cost
Diovan®	$118	$41	$56	$7

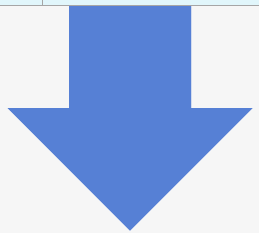


Drug Name	Full Drug Cost	Initial Cost	Gap Cost	Catastrophic Cost
losartan	$8	$5	$7	$3

*Monthly costs

Therapeutic Interchange

Drug Name	Full Drug Cost	Initial Cost	Gap Cost	Catastrophic Cost
Detrol LA®	$195	$41	$93	$10

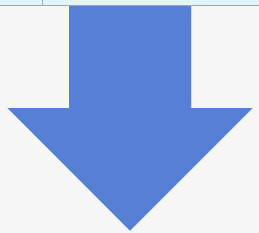


Drug Name	Full Drug Cost	Initial Cost	Gap Cost	Catastrophic Cost
oxybutynin	$9	$7	$7	$7

*Monthly costs

Least Expensive Brand

Drug Name	Full Drug Cost	Initial Cost	Gap Cost	Catastrophic Cost
Lantus®	$138	$41	$66	$7

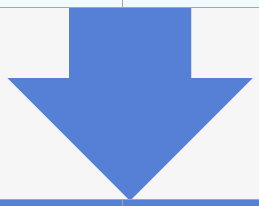


Drug Name	Full Drug Cost	Initial Cost	Gap Cost	Catastrophic Cost
Novolin® NPH	$80	$41	$38	$7

*Monthly costs for 1 vial of insulin. Switching to NPH requires BID dosing.

Combination Pills

Drug Name	Full Drug Cost	Initial Cost	Gap Cost	Catastrophic Cost
lisinopril 20 mg	$7	$5	$5	$3
HCTZ 12.5 mg	$15	$5	$11	$3



Drug Name	Full Drug Cost	Initial Cost	Gap Cost	Catastrophic Cost
lisinopril 20 mg/ HCTZ 12.5 mg	$7	$5	$5	$3

*Monthly costs

Maximize Therapeutic Dose

Drug Name	Full Drug Cost	Initial Cost	Gap Cost	Catastrophic Cost
metformin 500mg/ glyburide 2.5mg	$9	$5	$7	$3

Drug Name	Full Drug Cost	Initial Cost	Gap Cost	Catastrophic Cost
metformin 1,000 mg	$9	$5	$7	$3

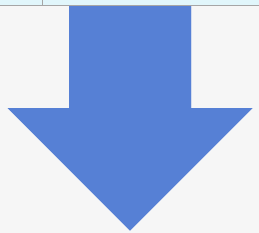
Drug Name	Full Drug Cost	Initial Cost	Gap Cost	Catastrophic Cost
Vytorin® (ezetimibe 10mg simvastatin 20mg)	$166	$90	$79	$8

Drug Name	Full Drug Cost	Initial Cost	Gap Cost	Catastrophic Cost
simvastatin 40 mg	$7	$5	$5	$3

*Monthly costs

Pill Splitting

Drug Name	Full Drug Cost	Initial Cost	Gap Cost	Catastrophic Cost
Crestor® 10 mg (1 tab)	$169	$41	$80	$8

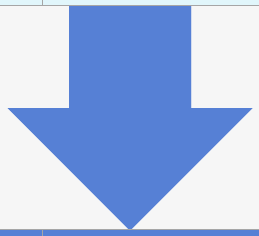


Drug Name	Full Drug Cost	Initial Cost	Gap Cost	Catastrophic Cost
Crestor® 20 mg (1/2 tab)	$85	$41	$41	$7

*Monthly costs

Separate Tubes of Combination Creams

Drug Name	Full Drug Cost	Initial Cost	Gap Cost	Catastrophic Cost
nystatin/ triamcinolone	$233	$7	$184	$12



Drug Name	Full Drug Cost	Initial Cost	Gap Cost	Catastrophic Cost
nystatin	$28	$7	$22	$7
triamcinolone	$8	$7	$6	$7

*Monthly costs

Patient Case

Mrs. Smith comes into the pharmacy to pick up her medications. She is told that her co-pay doubled. Mrs. Smith can't afford to pay for her medications so she calls her doctor's office. Mrs. Smith says,

"My pharmacy is charging me more money. I can't take my medicines any more"

Mrs. Smith's Current Medication Regimen

Drug Name	Full Drug Cost	Initial Cost	Gap Cost	Catastrophic Cost
Cymbalta®	$369	$41	$175	$18
Advair HFA 115/21®	$271	$41	$129	$14
Lantus®	$138	$41	$66	$7
Novolog®	$149	$41	$71	$7
Proair HFA®	$48	$41	$23	$7
atorvastatin	$16	$7	$13	$7
omeprazole	$11	$7	$9	$7
metformin	$9	$5	$7	$3
lisinopril	$7	$5	$5	$3
amlodipine	$7	$5	$5	$3
Monthly Total	$1,025	$234	$503	$76

Mrs. Smith's Cost-Effective Regimen

Drug Name	Full Drug Cost	Initial Cost	Gap Cost	Catastrophic Cost
citalopram	$8	$5	$6	$3
Flovent Diskus 250 ®	$162	$41	$77	$8
Relion NPH®	$0*	$25	$25	$25
Novolog®	$149	$41	$71	$7
Proair HFA®	$48	$41	$23	$7
atorvastatin	$16	$7	$13	$7
omeprazole	$11	$7	$9	$7
metformin	$9	$5	$7	$3
lisinopril	$7	$5	$5	$3
amlodipine	$7	$5	$5	$3
Monthly Total	$417	$182	$241	$73

* NOT submitted through insurance

Medication Cost Savings

Mrs. Smith

Current Regimen (Annual Cost)	New Regimen (Annual Cost)	Annual Savings
$3,094	$2,420	$674

Part D Plan

Current Regimen (Annual Cost)	New Regimen (Annual Cost)	Annual Savings
$7,118	$2,080	$5,038

CMS Star Ratings

- CMS initiative to improve quality, safety and efficiency of services beneficiaries receive
  - Rating of 1 to 5 stars on various measures for Medicare Part C and D
    - 20 operational measures
    - 27 clinical measures
- Star ratings impact:
  - Reimbursement/Capitation
  - Ability to share in quality bonuses with stakeholders
    - hospitals, clinics, pharmacies
  - Retention and attraction of beneficiaries

New 2015 Star Measure: Comprehensive Medication Review

- Comprehensive medication review (CMR)
  - Evaluate medication regimen for efficacy, safety, and **costs**
  - Recommend treatment alternatives to providers
  - Provide patient education
- Measures % eligible patients receiving CMR
  - Patients who opt-out or do not respond to offers will not be excluded
- Challenges in providing CMR
  - High patient and physician refusal rates

University of Michigan Health System

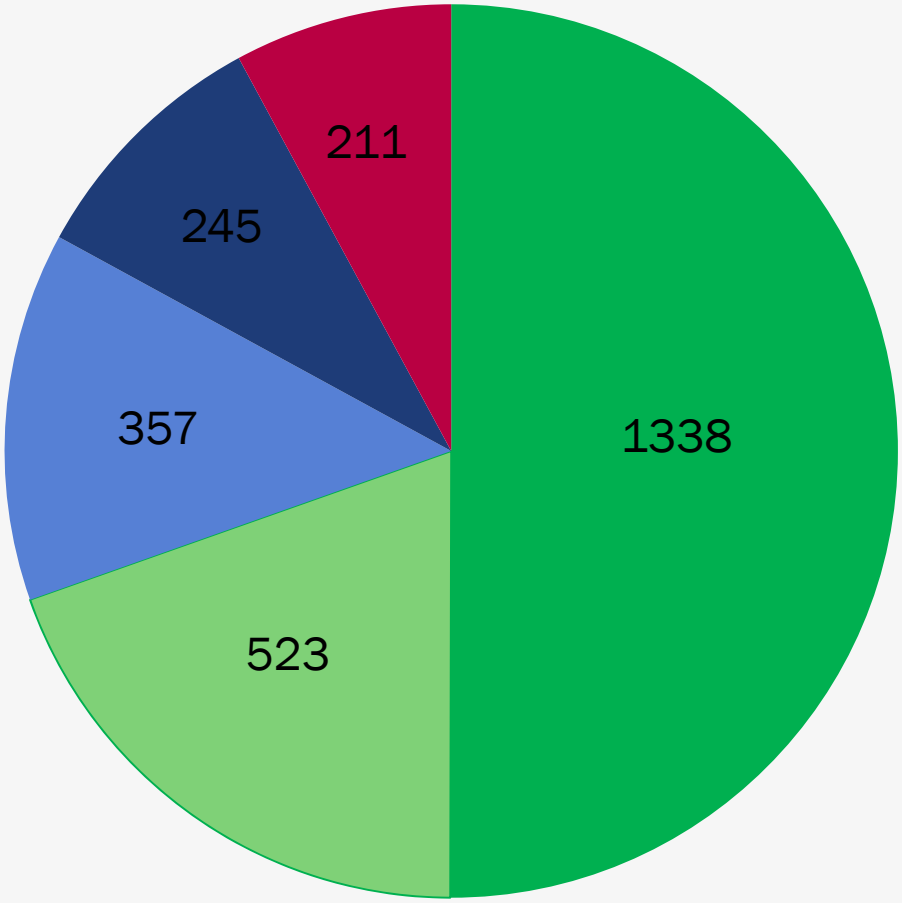
PCMH Pharmacist Practice Model

- 9 embedded pharmacists across all primary care sites
  - 3.8 clinical FTE
  - 9 internal medicine and 5 family medicine sites
- Provide disease management services (diabetes, hypertension, and hyperlipidemia) and CMR
- Pharmacist's time at primary care sites
  - 1 – 6 half-days/week
- Scheduled patient appointments
  - Clinic visits (30 minutes)
  - Phone consults (15 – 30 minutes)

Pharmacist's Scope of Services

- Per Collaborative Practice Agreement
  - Evaluate and optimize therapeutic regimen
  - Provide medication management to achieve goals
  - Assess and address barriers to medication adherence including costs
  - Provide chronic condition education and medications
  - Assist in limited physical assessment (BP, foot exam)
  - Order labs and medical equipment (glucometer)
  - Facilitate referrals to other health care providers
  - Motivational interviewing for self management goals

Pharmacists' Therapeutic Interventions



Total: 2,674 interventions
(5/1/11 – 4/30/12)

- increased dose
- added medication
- decreased dose
- deleted medication
- optimized regimen

Future Expansion

- Expand CMR and disease management services to specialty areas:
  - Cardiology
  - Psychiatry
  - Chronic Kidney Disease Clinic
- Develop new reimbursement model to support CMR activities
  - Reimbursement from Part D plans

Summary: Meeting Triple Aim

- Improve the experience of care
  - Provide patient-centered care to address medication barriers and adherence
  - Mrs. Smith is very happy with the care!
- Improve health
  - Assess appropriateness of medications based on efficacy and safety to ensure optimal treatment plan
- Reduce cost of health care
  - Decrease medication costs for patients and plans
  - Prevent additional health care expenses due to discontinuation of necessary treatment