



Current Issues in Pharmacy

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SEAC Meeting
November 20, 2014

Agenda

- Managing specialty pharmacy
 - Current landscape
 - Management challenges and opportunities
 - Lessons for actuaries
- The issue of adherence
 - How it's measured
 - What's the impact
 - Why we're talking about it

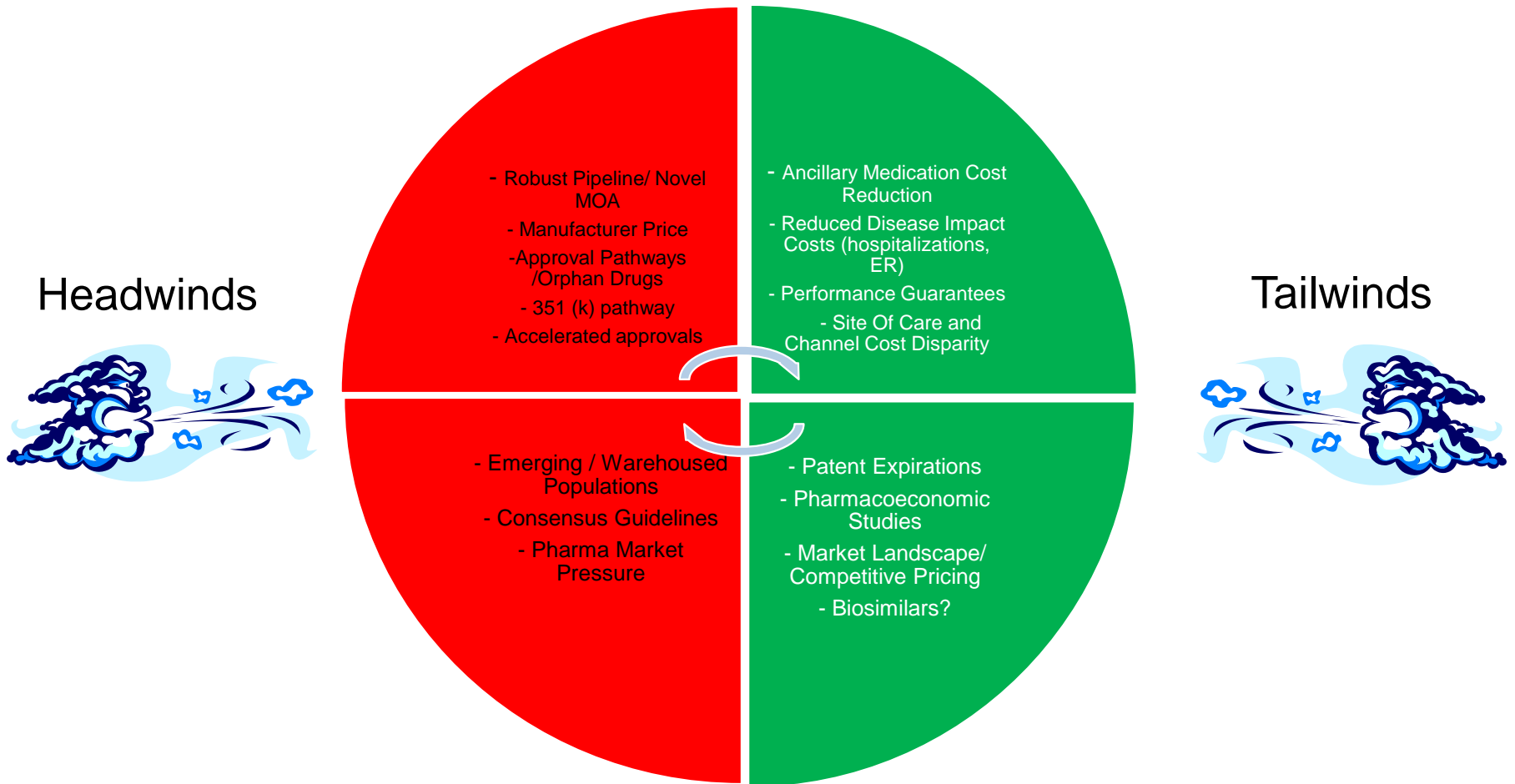


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The specialty landscape is changing



References: 1. FDA Orphan Drug Act accessed at <http://www.fda.gov/regulatoryinformation/legislation/federalfooddrugandcosmeticact/fdcact/significantamendmentstothefdcact/orphandrugact/default.htm>
2. Chughtai M, Chang J, Philips MI, et al. Benefits of the orphan drug act for rare disease treatments. *TUFTScope*. Spring, 2010.



Rare disease is a specialty subset accelerator

Orphan / Rare Disease

- Conditions that affect fewer than 200,000 patients¹
- Estimated 15 to 20 million Americans affected²

Specialty Spend

Through 2018, there will be a 17 percent compound annual growth rate in U.S.¹

Orphan Drugs Set to be 15.9% of Worldwide Prescription Sales by 2018²

Rare Disease

Prior to 1983 only 34 orphan products were marketed³

Between 1983 and 2009 the FDA approved 275 orphan drugs for 337 orphan indication³

There are an estimated 6,000 rare diseases currently recognized in the U.S. alone

2013-2018 CAGR

Orphan 5.67%
vs. Non-Orphan 3%

U.S. orphan market has resulted in 86 new approvals between 2000 and 2013⁴

References:

•1. <http://www.healthcarefinancenews.com/news/sensible-strategies-curb-cost-growth-specialty-drugs>

•2. Hyde R. **Orphan Drug Pricing and Payer Management in the United States: Are We Approaching the Tipping Point.** January/February 2010 Volume3 No1 American Health and Drug Benefits

•3. Joshua P. Cohen and Abigail Felix. Are payers treating orphan drugs differently? Journal of Market Access & Health Policy 201.2; 23513. [4. http://www.fiercepharmamarketing.com/story/orphan-drug-approvals-are-prices-are-more/2014-07-16](http://www.fiercepharmamarketing.com/story/orphan-drug-approvals-are-prices-are-more/2014-07-16)



Case Study: Pulmonary Arterial Hypertension



Population

- Prevalence of 109 per million for ages <65 and 451 per million for Medicare¹
- High Comorbid Index¹
- Average AWP Specialty Cost Per Month= \$8,000²
- Based on data from the Registry to Evaluate Early And Long-term PAH disease management (REVEAL) of patients in the United States, there is an estimated five-year survival rate of 57% from diagnosis.

References:

•[1.http://www.unboundmedicine.com/medline/citation/21793646/Prevalence_of_pulmonary_arterial_hypertension_and_chronic_thromboembolic_pulmonary_hypertension_in_the_United_States](http://www.unboundmedicine.com/medline/citation/21793646/Prevalence_of_pulmonary_arterial_hypertension_and_chronic_thromboembolic_pulmonary_hypertension_in_the_United_States) 2. Treatment patterns and resource utilization and costs among patients with pulmonary arterial hypertension in the United States 2010, Vol. 13, No. 3 , Pages 393-402



Case Study: Pulmonary Arterial Hypertension

Pharmacy Coverage Differences

- Formulary / Preferred Product
- Staging/Population Burden
- Access vs. Adherence
- Medical/Pharmacy Benefit Cross Over

References:

- [1.http://www.unboundmedicine.com/medline/citation/21793646/Prevalence_of_pulmonary_arterial_hypertension_and_chronic_thromboembolic_pulmonary_hypertension_in_the_United_States](http://www.unboundmedicine.com/medline/citation/21793646/Prevalence_of_pulmonary_arterial_hypertension_and_chronic_thromboembolic_pulmonary_hypertension_in_the_United_States) 2. Treatment patterns and resource utilization and costs among patients with pulmonary arterial hypertension in the United States 2010, Vol. 13, No. 3 , Pages 393-402



Case Study: Pulmonary Arterial Hypertension

Critical Variables

- Patent Expiration / Generic
- Pipeline - Novel Agents/ Price Set
- Manufacturer Price Increases
- Ancillary Care
- Population/Disease Burden

References:

•1.http://www.unboundmedicine.com/medline/citation/21793646/Prevalence_of_pulmonary_arterial_hypertension_and_chronic_thromboembolic_pulmonary_hypertension_in_the_United_States 2. Treatment patterns and resource utilization and costs among patients with pulmonary arterial hypertension in the United States 2010, Vol. 13, No. 3 , Pages 393-402



Case Study: Hemophilia

Background and Population

- Hemophilia is a chronic and expensive condition, with antihemophilic medications accounting for 45%-93% of total health care costs, depending on severity and treatment regimen.
- Estimated 18,500 patients with hemophilia A and B in the United States²
- 1 in 5,000 male babies are born in the U.S. with hemophilia A each year¹
- Approximately 12,500 hemophilia A patients utilize Factor VIII therapy³
- 28% mild, 19% moderate, 53% severe.

References:

1. Hemophilia A (factor VIII deficiency). National Hemophilia Foundation Web site. [Http://www.hemophilia.org/NHFWeb/MainPgs/MainNHF.aspx?menuid=180&contentid=45&rptname=bleeding](http://www.hemophilia.org/NHFWeb/MainPgs/MainNHF.aspx?menuid=180&contentid=45&rptname=bleeding)
2. Summary report of UDC activity national patient demographics (hemophilia). Centers for Disease Control and Prevention Web site. [3.https://www2a.cdc.gov/ncbddd/htcweb/UDC_Report/UDC_view1.asp?para1=NATION¶2=DEMOH¶3=&ScreenWidth=1920&ScreenHeight=1200](https://www2a.cdc.gov/ncbddd/htcweb/UDC_Report/UDC_view1.asp?para1=NATION¶2=DEMOH¶3=&ScreenWidth=1920&ScreenHeight=1200)
3. Summary report of UDC activity national treatment/clinical characteristics (hemophilia). Centers for Disease Control and Prevention Web site.
4. Smith PS. Levine PH. The benefits of comprehensive care of hemophilia: a five-year study of outcomes. *Am J Public Health*. 1984;74:616-617.



Case Study: Hemophilia

Coverage Drivers and Strategies

- Formulary / Preferred Product
- Medicaid Expansion
- Population Burden/Spend - Prevalence/ Spend Disparity in Medicaid vs. Commercial
- Care management vs. Drug Management
- StopLoss Reinsurance/ Risk Delegation/ Carve Out
- Medical benefit vs. Pharmacy benefit

References:

- 1. Hemophilia A (factor VIII deficiency). National Hemophilia Foundation Web site. [Http://www.hemophilia.org/NHFWeb/MainPgs/MainNHF.aspx?menuid=180&contentid=45&rptname=bleeding](http://www.hemophilia.org/NHFWeb/MainPgs/MainNHF.aspx?menuid=180&contentid=45&rptname=bleeding)
- 2. Summary report of UDC activity national patient demographics (hemophilia). Centers for Disease Control and Prevention Web site.
- 3. https://www2a.cdc.gov/ncbddd/htcweb/UDC_Report/UDC_view1.asp?para1=NATION¶2=DEMOH¶3=&ScreenWidth=1920&ScreenHeight=1200
- 3. Summary report of UDC activity national treatment/clinical characteristics (hemophilia). Centers for Disease Control and Prevention Web site.
- 4. Smith PS. Levine PH. The benefits of comprehensive care of hemophilia: a five-year study of outcomes. *Am J Public Health*. 1984;74:616-617.



Case Study: Hemophilia

Critical Variables

- New Long-Acting Products
- Performance Guarantees
- Manufacturer Price Increases
- Ancillary Care- Reduction in hospitalizations⁴
- Population/Disease Burden

References:

1. Hemophilia A (factor VIII deficiency). National Hemophilia Foundation Web site. [Http://www.hemophilia.org/NHFWeb/MainPgs/MainNHF.aspx?menuid=180&contentid=45&rptname=bleeding](http://www.hemophilia.org/NHFWeb/MainPgs/MainNHF.aspx?menuid=180&contentid=45&rptname=bleeding)
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A “Simple” Story about 5 Hypothetical Employer Groups

- Assumptions for this presentation
 - Five employer groups are attempting to predict their specialty spend
 - Each employer group has 5,000 covered lives and has experienced no significant enrollment changes
 - They are all expecting a 2014 – 2015 SP trend of 18% based on information from advisors
 - Each plan had a 2014 Specialty pharmacy spend of \$250 PMPY*
 - » \$1.25M incurred in 2014
 - » Expecting \$1.47 in 2015

• **For illustrative purposes only. Commercial Specialty per member per year costs per Express Scripts Drug Trend Report was reported at \$240.57 in 2013*

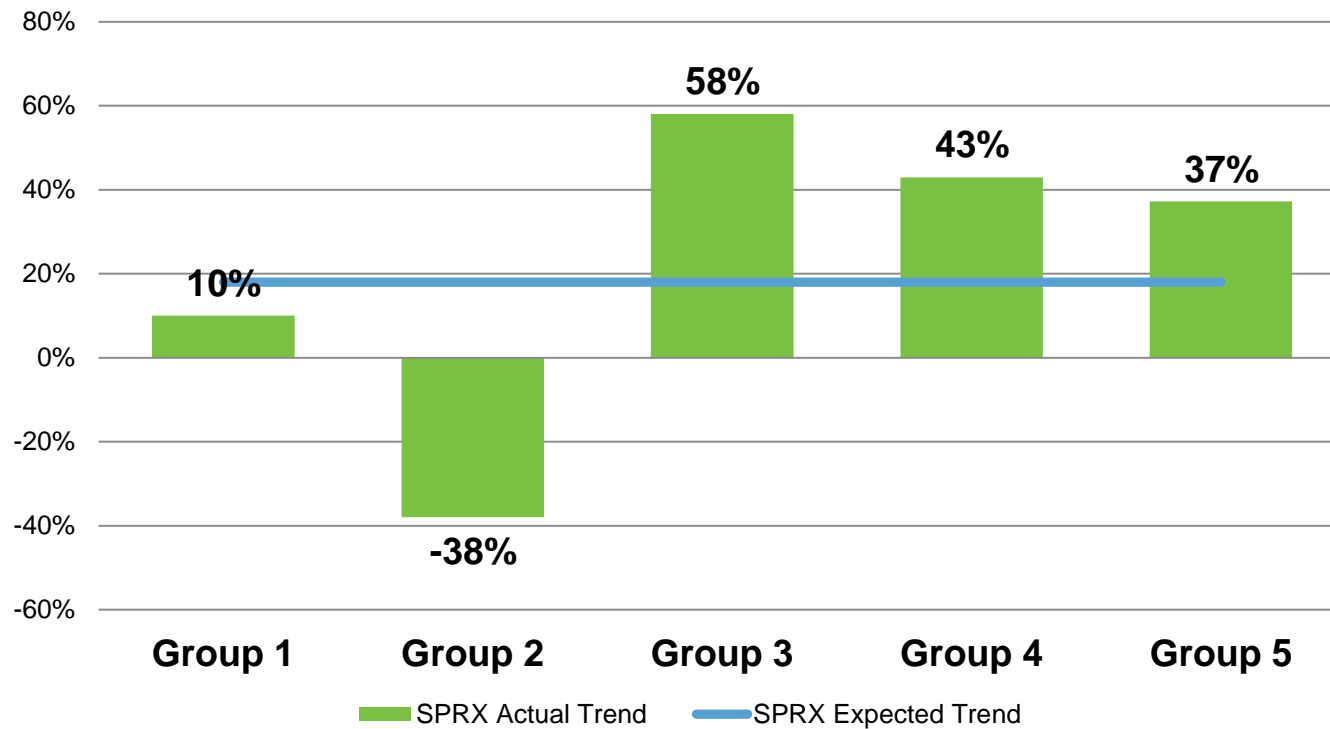


- One Year Later.....



What Happened to the Expected 18% Trend?

2015 Specialty Drug Trend of 5 Hypothetical Employer Groups



Insight into Specialty Trend Drivers

- Annual specialty therapy can typically cost \$30,000 per year or more.¹
- Some therapies can cost >\$300,000 per year.
- Pricing inflation is the only constant in every employer group's trend.
- Due to the low prevalence of specialty patients (~1-2% of a population), trend prediction can be challenging.¹
- **Unlike traditional pharmacy, one specialty patient can impact trend.**
- Rare disease treatments can dramatically skew trend.
- Patients switching coverage between medical and pharmacy benefits can impact trend.
- One poorly managed specialty patient can dramatically negatively impact trend.

¹ Walgreens data on file.



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Common measures of medication adherence

• **Medication possession ratio (MPR)**



• **Total days of supply**

• **Total days in observation period**

• **Proportion of days covered (PDC)**



• **Total days covered**

• **Total days in observation period**

•1. Nau DP. Proportion of days covered (PDC) as a preferred method of measuring medication adherence.

<http://www.pqaalliance.org/images/uploads/files/PQA%20PDC%20vs%20%20MPR.pdf>. Accessed June 10, 2014. 2. Leslie, RS. Calculating medication compliance, adherence, and persistence in administrative pharmacy claims databases. Paper presented at: SAS Global Forum; April 16-19, 2007; Orlando, FL.



Unmet needs of adherence

The Institute for Healthcare Improvement's "Triple Aim" focuses on three dimensions¹

- ➔ Improving patient satisfaction and quality of care
- ➔ Improving population health
- ➔ Reducing the cost of healthcare

Medication nonadherence—the failure to take medication as prescribed—is an impediment to healthcare optimization²



- The Congressional Budget Office (CBO) estimates that a **1 percent increase in the number of prescriptions filled** by beneficiaries would cause Medicare's spending on medical services to fall by roughly **one-fifth of 1 percent**³

¹. Institute for Healthcare Improvement. The IHI Triple Aim. <http://www.ihl.org/Engage/Initiatives/TripleAim/Pages/default.aspx>. Accessed April 14, 2014. ². Nasseh K, Frazee SG, Visaria J, Viahiotis, Tian Y. Cost of medication nonadherence associated with diabetes, hypertension, and dyslipidemia. *Am J Pharm Benefits*. 2012;4(2):e41-e47. ³. Congressional Budget Office. Offsetting effects of prescription drug use on Medicare's spending for medical services. www.cbo.gov/publication/43741. Published November 29, 2012. Accessed June 4, 2014.



Current clinical state of adherence

Medication nonadherence is common and costly

75 percent

fail to take
medications
as directed¹

33 percent

of prescriptions
are never filled¹

Up to
60 percent

of the time,
patients with
chronic conditions
do not take their
medication¹

• Approximately

• **125,000**
deaths annually
are attributed to
nonadherence to
medication therapy²

Hospital readmissions

Adverse medication events (including patient nonadherence) are at the core of the readmission problem. This leads to treatment failures and wasted resources³



•1. Bosworth HB; National Consumers League. Medication adherence: making the case for increased awareness. http://www.scriptyourfuture.org/wp-content/themes/cons/m/Script_Your_Future_Briefing_Paper.pdf. Accessed September 17, 2014. 2. American Hospital Association. Uncompensated Hospital Care Cost Fact Sheet. <http://www.aha.org/content/13/1-2013-uncompensated-care-fs.pdf>. Published January 2014. Accessed September 17, 2014 3. Institute for Safe Medication Practices. Reduce readmissions with pharmacy programs that focus on transitions from the hospital to the community. www.ismp.org/newsletters/acutecare/showarticle.aspx?id=36. Published November 15, 2012. Accessed June 1, 2014.



The economic cost of nonadherence

The total direct national cost of **nonadherence** for adults diagnosed with diabetes, hypertension, or dyslipidemia was **\$105.8 billion**, or an average of **\$453 per adult**, in 2010¹

Diabetes

37.9 percent of patients are **nonadherent**²

Asthma

80.2 percent of pediatric patients and

53.8 percent of adult patients are **nonadherent**²

Hypertension

28.1 percent of patients are **nonadherent**²

Dyslipidemia

27.2 percent of patients are **nonadherent**²



Preventable hospital readmissions cost the U.S. healthcare system **\$25 billion** annually³

¹Nasseh K, Frazee SG, Visaria J, Viahiotis A, Tian Y. Cost of medication nonadherence associated with diabetes, hypertension, and dyslipidemia. *Am J Pharm Benefits*. 2012;4(2):e41-e47. ²Express Scripts. Drug trend report. <http://lab.express-scripts.com/~media/previous%20reports%20pdfs/drug%20trend%20report%202012.ashx>. Updated October 2013. Accessed March 19, 2014. ³Pricewaterhouse Coopers' Health Research Institute. The price of excess: identifying waste in healthcare spending. <http://www.pwc.com/us/en/healthcare/publications/the-price-of-excess.jhtml>. Accessed April 29, 2014.



Improved adherence can impact your organization

Enhance clinical outcomes, patient satisfaction and quality of care

- Pharmacist counseling can significantly impact adherence and clinical outcomes¹⁻³

Increase Medicare Advantage star quality ratings

- Star metrics adherence measures are triple weighted
- May impact bonus payments and improve competitiveness⁴

Reduce healthcare costs

- Up to **19 percent** of discharged patients experienced an **adverse event after discharge**
 - **Two-thirds** were attributed to **medications**
 - **One-third** resulting in a hospital admission were related to **nonadherence**⁵



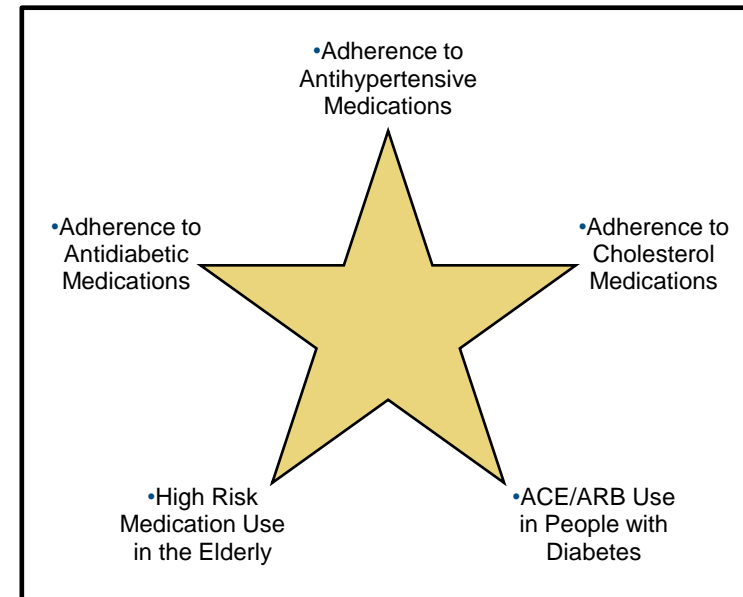
•1. Bluml BM, McKenney JM, Cziraky MJ. Pharmaceutical care services and results in project ImPACT: hyperlipidemia. *J Am Pharm Assoc (Wash)*. 2000;40(2):157-165. 2. Bunting BA, Smith BH, Sutherland SE. The Asheville Project: clinical and economic outcomes of a community-based long-term medication therapy management program for hypertension and dyslipidemia. *J Am Pharm Assoc (2003)*. 2008;48(1):23-31. 3. Fera T, Bluml BM, Ellis WM. Diabetes Ten City Challenge: final economic and clinical results. *J Am Pharm Assoc (2003)*. 2009;49(3):383-391. 4. Walgreen Co. Data on file; 2013. 5. Bosworth HB; National Consumers League. Medication adherence: making the case for increased awareness. http://www.scriptyourfuture.org/wp-content/themes/cons/m/Script_Your_Future_Briefing_Paper.pdf. Accessed September 17, 2014.



Improved adherence can impact your organization

Increase Medicare Advantage star quality ratings

- Five heavily-weighted medication-related Star ratings
 - » Account for $\geq 17\%$ of a MA-PD's Star rating
 - » Account for $\geq 50\%$ of a PDP's Star rating
 - » Star rating performance is relative
 - Must perform better than other plans to receive a high score
- May impact bonus payments and improve competitiveness
 - » Applicable for MA-PD plans
 - » Increase in overall Star rating can increase capitation
 - » High overall Star ratings lead to increases in enrollment
 - 5-star plans are eligible to enroll year-round
 - » Improvement in quality measures can reduce medical cost



Thank you!

Q&A (or O)

