Integrating Quality Metrics with Focused Interventions to Improve Medication Adherence

The Seventh National Pay for Performance Summit
March 2012



PQA HIGHMARK® CECITY The Leader in Performance Improvement and Lifelong Learning Technology RITE AID UNIVERSITY OF PITTSBURGH School of Pharmacy THE ART and SCIENCE OF EXCELLENCE

Agenda

Title	Organization	Presenter
Introducing The PA Collaborative	CECity	Annette Boyer, RPh
Why does this Matter? The Health Plan Perspective	Highmark BCBS	Maureen Bieltz, PharmD
Transforming Community Pharmacy	Rite Aid	Jesse McCullough, PharmD
The Intervention Strategy & Preliminary Data Results Wrap up and Q & A	University of Pittsburgh School of Pharmacy	Jan Pringle, PhD

Introducing
The PA Collaborative

Annette D. Boyer, RPh
Vice President
Business Development
CECity, Inc.

PA Collaborative and the ASPIRE Cloud Platform

The Pennsylvania Collaborative

Phase I and II Partners	Stakeholder Role(s)
Highmark / medco	Data Aggregator & Data Provider
CECITY	Technology Platform Provider & Integrator
Rite Aid	Healthcare Professionals Provider Organization
PQA	Measure Provider

Phase II Partners	Stakeholder Role(s)
University of Pittsburgh School of Pharmacy	Intervention Strategy And Research Provider
Highmark	Performance Payment Program

Phase I Key Accomplishments

- Established technical approach for ***continuous*** data aggregation, exchange & measurement
- Established access to web-based performance reports ***inside*** of Rite Aid for both the ***pharmacist*** and Rite Aid as a ***system***
- Created ***collaborative model*** for quality improvement, across disparate organizations that can serve as foundation for risk-share/P4P
- ***Identified that measurement alone has little impact on improvement***

The Vision for Phase II Moving from Measurement to Improvement

Link Learning to Pe… Align Incentives; Make it Personal & Wrap… Scale & Spread Improvement

Next Phase
Add Incentives &
Communities of Practice
And Learning

Phase I
Performance
Measurement
Only

Phase II
Identify Gaps &
Link to Improvement

Feed
Forward

incentives

GAPS

performance

learning

Feed Back
For
Improvement

Next Phase
Add Incentives &
Communities of Practice
And Learning

ePortfolio

Communities of Practice &
Communication Networks

Performance Measures Now and in the Future

- **PQA Proportion of Days Covered (PDC) Metric - Compliance/adherence**
  - ACEI/ARB medications
  - Lipid-modifiers (statins)
  - Diabetes oral medications
  - Calcium channel blockers

- **Asthma controller therapy**
- **ACEI/ARB in diabetics with hypertension**
- **High-Risk Medications in the Elderly**
- **Drug-Drug Interactions**

ASPIRE Phase II
from Measurement to Improvement

Transforming Pharmacy Practice to Optimize Patient Outcomes

- Secure virtual private network
- HIPAA compliant
- Performance Reports with Peer Comparisons
- Three simple steps to move from measurement to improvement

ASPIRE Phase II
"How Do I Improve?"

ASPIRE | Advancing Safety and Performance Improvement for Pharmacy Excellence

LOGGED IN AS DDobbs
Support

Home | Performance

Performance Goals Established By Highmark

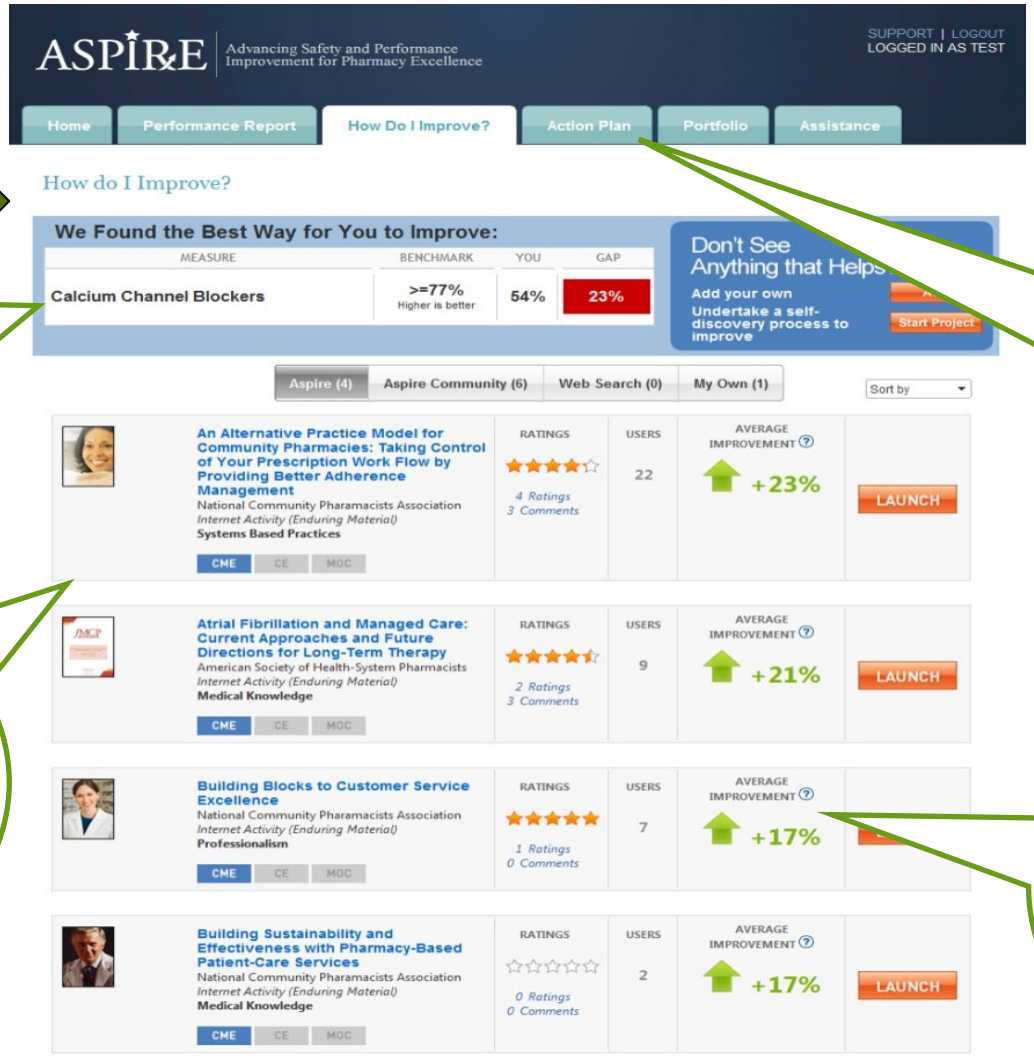
Dynamic Peer Comparisons

Gaps in Measures Drives Link to Interventions

Measure	Goal	Go... On	My Pharmacy (n) | Ti...	GAP	...proving?	
Beta-Blockers show details	>80% Higher is better	PQA Standard	79.6% (110) Q3 2010 show history	0.4%	+	How Do I Improve?
Calcium Channel Blockers show details	>80% Higher is better	PQA Standard	73% (106) Q3 2010 show history	7%	-2% analyze data	How Do I Improve?
Diabetes Medications show details	>80% Higher is better	PQA Standard	70% (102) Q3 2010 show history	10%	+2.5% analyze data	How Do I Improve?
ACE Inhibitors/Angiotensin II Receptor Blockers show details	>80% Higher is better	PQA Standard	70% (105) Q3 2010 show history	10%	+20% analyze data	How Do I Improve? 1 Intervention
Dyslipidemia Medications show details	>80% Higher is better	PQA Standard	55% (103) Q3 2010 show history	25%	+10% analyze data	How Do I Improve?

ASPIRE Phase II…Continuous Performance Improvement

How Do I Improve?



Gaps in Measures Linked to Library of Interventions

Professional Tools Including Action Plan Builder

Interventions
•CECity Hosted
•Link to 3rd party hosted resources
•Connect to 3rd party Apps (e.g. MTM)

Next Step
Add Functionality

Auto Calculate Intervention Impact

Community Added interventions

ASPIRE Phase II...Key Value Points and Success Demonstrated

Adoption

Pharmacist (Professionalism)

Organization (Leadership)

Fostered Culture of Improvement

Process

Scaled Performance Improvement via Cloud/Web Platform (n=117)

Integrated Interventions at Point of Care & Process Redesign

Scaling Performance Improvement via Cloud Platform

Outcomes

Improved Patient Adherence as Evidenced by improvement of PQA Measures...*Across Sites and Systems*

Financial

Scaled PI with Minimal Field Support / Related Expenses

Streamlined Data Integration

Impact ($) of Health Costs – TBA

What are the Drivers?

- **Medicare Part D Star Ratings**

  Medicare drug plans receive an overall rating on quality as well as scores in four domains;

  PQA measures are used in one of the domains

- **National Business Coalition on Health evaluates health plans;**

  PQA measures are used

- **URAC accredits pharmacy benefit managers (PBMs), mail-service pharmacies and disease mgmt organizations;**

  PQA measures are used

- **NCQA accredits health plans and requires reporting of quality measures (some related to medications)**

The Health Plan Perspective

Maureen Bieltz, PharmD
Clinical Pharmacy Specialist
Highmark BCBS

The Health Plan Perspective
Where are we?

Balancing cost, quality, and access

- Control/Reduce healthcare spend
- Improving quality of services for our members

Incentive reimbursement programs (P4P)

- Model P4P or other incentives for pharmacies based on performance improvement

Adaptation to changes in the market

- Medicare Plans - CMS STAR ratings
- PQA-endorsed metrics

Medicare Advantage Incentives

- Medicare Advantage plans have a new payment system in 2012 and beyond
- The star ratings will affect payment to Medicare Advantage plans wherein higher-rated plans get higher payment
- Quality Bonus Payments (QBPs) will be awarded on a sliding scale according to star ratings
- 2013 payments will be based on 2012 ratings which were based on 2010-11 data
- Stand-alone Part D plans will have marketing advantages related to star ratings, but not QBPs

Quality Bonus Payments (QBPs)

For Demonstration in 2012-14

Stars	QBP*
Less than 3	0
3 stars	3.0 %
3.5 stars	3.5 %
4 stars	4.0 %
4.5 stars	4.0 %
5 stars	5.0 %

•QBP is a percentage increase in payment to the plan above the standard rate. For plans with less than 5 stars, the standard rate may be capped at pre-ACA rates. For more details, https://www.cms.gov/MedicareAdvtgSpecRateStats/

QBPs – Big Deal ?

- Medicare Advantage plans are paid by CMS
- The expected difference in payments for a 3-star plan and 5-star plan is about $16 per member per month
- For a Medicare Advantage plan with 1 million members, moving from 3 to 5 stars would boost revenue by ~ $200 million
- PQA measures account for about 20% of the star rating for a Medicare Advantage plan that offers drug benefits
- In 2015, the demonstration is scheduled to end; QBPs will change to ACA-specified rates unless further changes occur (plans below 4 stars will not be eligible for QBPs)

2012 Benchmark: Medicare

	MA-PD	PDP
PDC – Diabetes	73.0 %	74.4 %
PDC - ACEI/ARB	72.2 %	74.3 %
PDC – Statins	68.0 %	69.1 %
Diabetes – ACEI/ARB Use	84.1 %	82.2 %
High-Risk Medications	20.0 %	22.2 %

2012 Star Thresholds

MA-PD Plans

	3-star	4-star	5-star
PDC – Diabetes	70.7 %	74.9%	78.8 %
PDC - ACEI/ARB	70.1 %	74.8 %	77.9 %
PDC – Statins	67.4 %	70.8 %	75.2 %
Diabetes – ACEI/ARB Use	83.2%	86.0 %	87.3 %
High-Risk Medications	≤ 22.2 %	≤ 14.0 %	≤ 9.3 %

There are Implications for All

- As CMS and employers increase their scrutiny of quality of medication utilization, the health plans are asking PBMs to measure and improve quality.
- PBMs will be looking to their retail networks and pharmaceutical companies to help boost adherence.
- Plans, pharmacies and pharma companies can work together to drive improvements in medication-use quality, and improved medication adherence.
- Pharmacies and plans should share in the quality rewards (QBPs).

Potential Impact of Community Pharmacy

- **The large MA-PD with 1 million members may have 100,000 patients on oral diabetes meds**
  - 3 stars = 70,700 adherent diabetics
  - 4 stars = 74,900 adherent diabetics

- **4,200 pharmacies x 1 more adherent patient leads to a shift from 3 stars to 4 stars**

Transforming Community Pharmacy

Jesse McCullough, PharmD
Manager
Field Clinical Services
Rite Aid Pharmacy

Community Pharmacy Involvement

- Join collaborative partners to allow each to do what they do best.
- Scale performance improvement – minimal resources.
- Raises the professionalism of Rite Aid pharmacists.
- Solidifies the pharmacists' relationship with the patient.
- Supports corporate philosophy.

Role of Community Pharmacy

- **Community pharmacies:**
  - Accessible
  - Patient Contact
- **Positioned to drive:**
  - Safety
  - Efficacy

Community Pharmacy Scalability

- **Keys to Scalability**
  - Simple process
  - Easily implemented
  - Practical training & education
  - Aligns and promotes professionalism
  - Robust data sources
  - Use of technology to scale across walls

Execution Strategy

- Adopt a “Bring it on” mentality
- Maintain focus
- Screen continuously
- Provide ongoing reporting and support
- Drive participation with middle management
- Develop new strategies

Pharmacist Training

- **Trained pharmacists on the following:**
  - Quality in healthcare
  - Performance metrics
  - ASPIRE website access
  - Pharmacist to Patient
    - Screening tools
    - Brief Intervention – Motivation Interviewing
  - Potential impact of quality for pharmacy

- **Constantly looked to improve each training class**
- **Encouraged pharmacists to provide feedback**

Making Performance Improvement Manageable & Scalable

122	• Number of Rite Aid Stores in Phase II
245,000	• Total Unique patients on (any) Medications • Actual in month measured
63,700	• Total patients on chronic medications (estimated based on Benchmark) relative to the PQA measures
70%	• Adherence Rate (estimated based on Highmark Benchmark) • At 80% of PDC measures
19,110	• Opportunity for Pharmacy to Impact Patient Adherence • Estimated number of patients non-adherent (30%)
163	• Number of Patients per Pharmacy per month to be Counseled
5	• Number of Patients to Counsel per Pharmacy per day

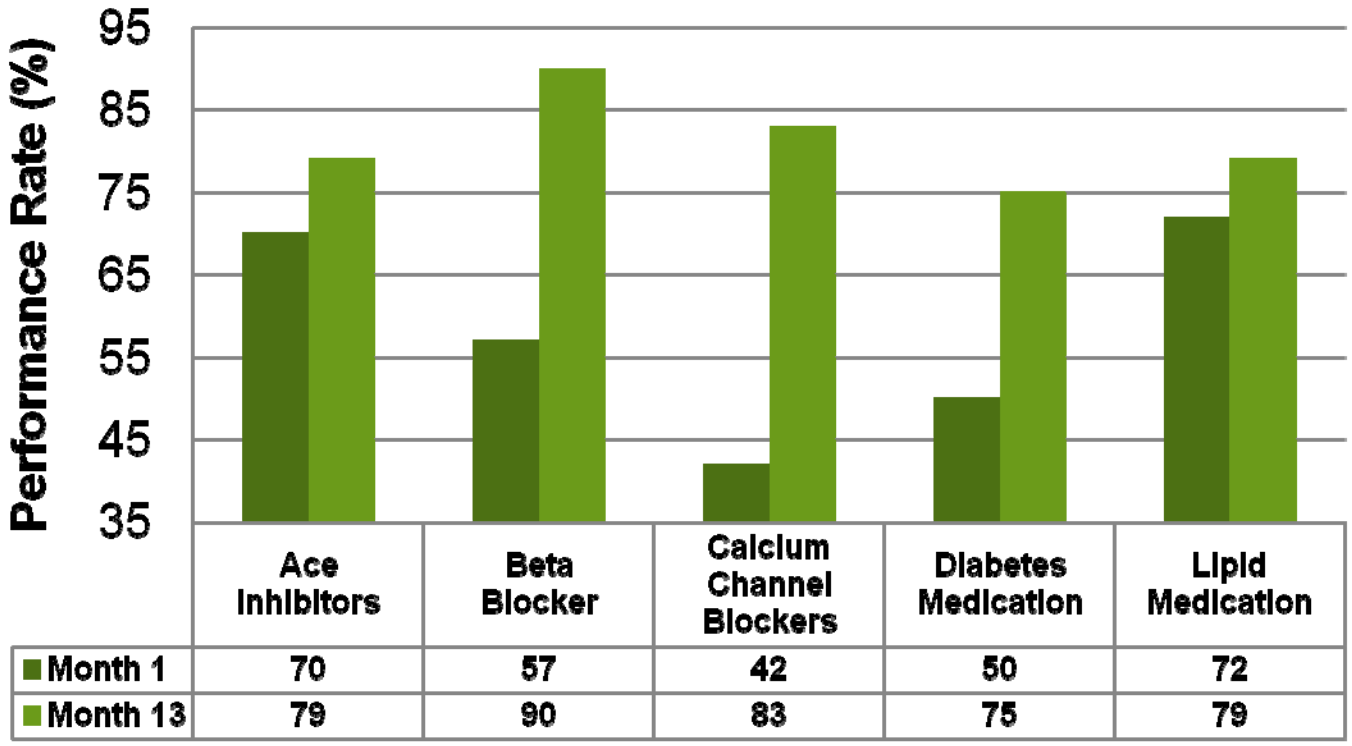
Estimated 740,000 Across Rite Aid

A Manageable Goal

*Based on Rite Aid Actual Patient Counts and Highmark Benchmarks for Adherence

Case Study
Top Performing Pharmacy

Rite Aid Pharmacy #1304
(n = >1,600 patients)



	Ace Inhibitors	Beta Blocker	Calcium Channel Blockers	Diabetes Medication	Lipid Medication
Month 1	70	57	42	50	72
Month 13	79	90	83	75	79

Best Practices of Top Performing Pharmacy

- ASPIRE access
  >Minimum of once per month
- Pharmacist Team Engagement
  > 4.33/5.00 (average across 3 pharmacists)
- Use of Interventions

Combined Tools	Adherence and Feedback Tools
Feedback Survey	Adherence and Feedback Tools
Taking It Right	Patient Education Resources

The Intervention Strategy and Preliminary Findings

Jan Pringle, PhD
Director
Program Evaluation Research Unit (PERU)
University of Pittsburgh
School of Pharmacy

The Intervention Strategy

Aimed at improving professional practice and patient medication adherence

- Universal Screening: Identifies patients at high or moderate risk of non-adherence; opens up dialogue with the patient
- Intervention: Pharmacists, trained in motivational interviewing, facilitates positive relationships with at-risk patients with the goal of successfully affecting a behavior change
- Targeted Resources: Links to online CE, patient education tools, evidence-based guidelines, etc. targeted at the PQA measures

Phase II Results
Summary of Preliminary Findings

- **Total Intervention Pharmacies in Analysis = 117**
  - Pharmacies in the control group have similar demographics
- **Monthly Data Cycles Included in Analysis = 1 through 9, 12**
  - Analysis included cycles 1-9 and 1-12.
- **Total Patients/Rxs in Denominator = 46,500/month**
  - Number of patients/prescriptions included in the denominator across PQA measures included in Phase II analysis

- Note 1: Benchmarks set before study based on average adherence rate across all Highmark patients
- Note 2: The data analyzed does not include patients excluded by the measures, or those covered by other health plans, which also may have benefited from the global Phase II performance improvement initiatives

Percentage of Pharmacies above Benchmark by Drug Category

Drug Category	Benchmark[b]	Cycle 1[a] Number (Percent)[c]	Cycle 9[a] Number (Percent)[c]
Intervention Stores			
Ace Inhibitors	72%	80 (68.4%)	87 (74.4%)
Beta Blockers	72%	71 (60.7%)	83 (70.9%)
Calcium Channel Blockers	77%	62 (55.4%)	74 (66.1%)
Diabetes Medication	65%	47 (42.7%)	50 (45.5%)
Dyslipidemia Medication	68%	72 (61.5%)	70 (59.3%)
Control Stores			
Ace Inhibitors	72%	67 (63.2%)	73 (68.9%)
Beta Blockers	72%	76 (71.7%)	80 (75.5%)
Calcium Channel Blockers	77%	59 (60.2%)	59 (59.6%)
Diabetes Medication	65%	48 (53.9%)	31 (34.4%)
Dyslipidemia Medication	68%	56 (52.8%)	71 (67.0%)

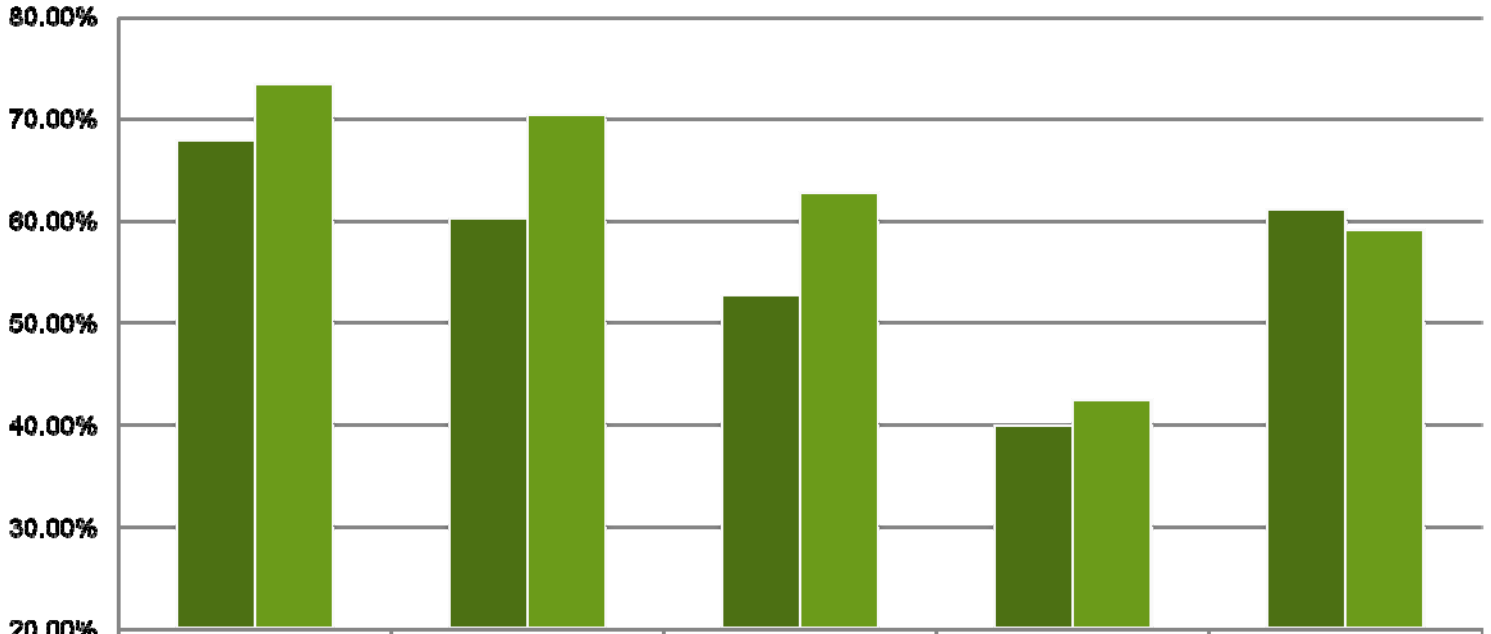
[a]Adherence reports were updated every month for 12 months (i.e., 12 cycles). The adherence rate for each cycle was based on 12 months of data.

[b]The benchmark for each drug category was selected prior to the study and was based on the average adherence rate for that category across all Highmark patients in that category.

[c]117 intervention stores and 106 control stores. Not all cases have entries for every category.

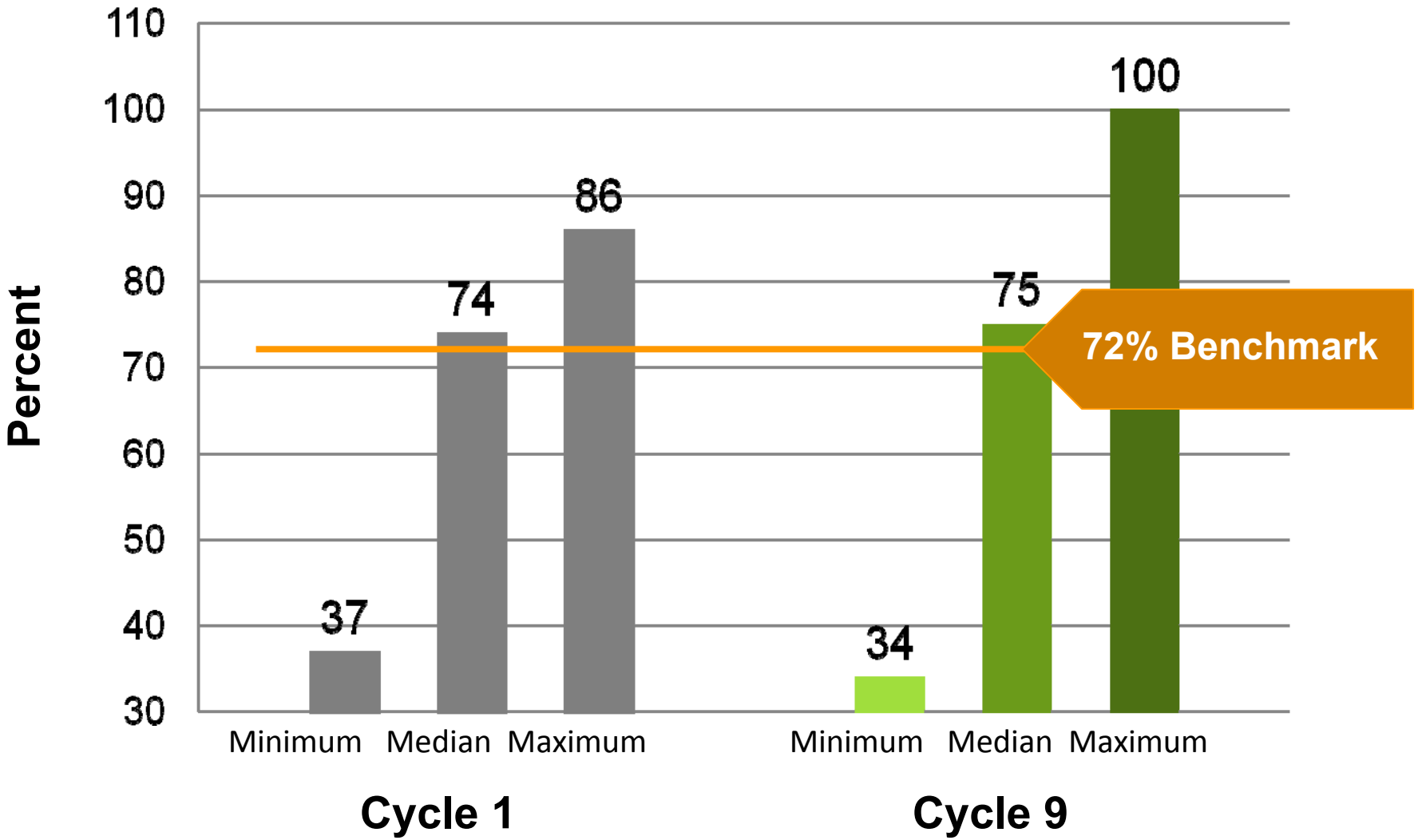
Demonstrated Success in Scaling Improvement Across the System

Percentage of Pharmacies *ABOVE* Benchmark
Data Cycle 1 versus Data Cycle 9
(n = 117)

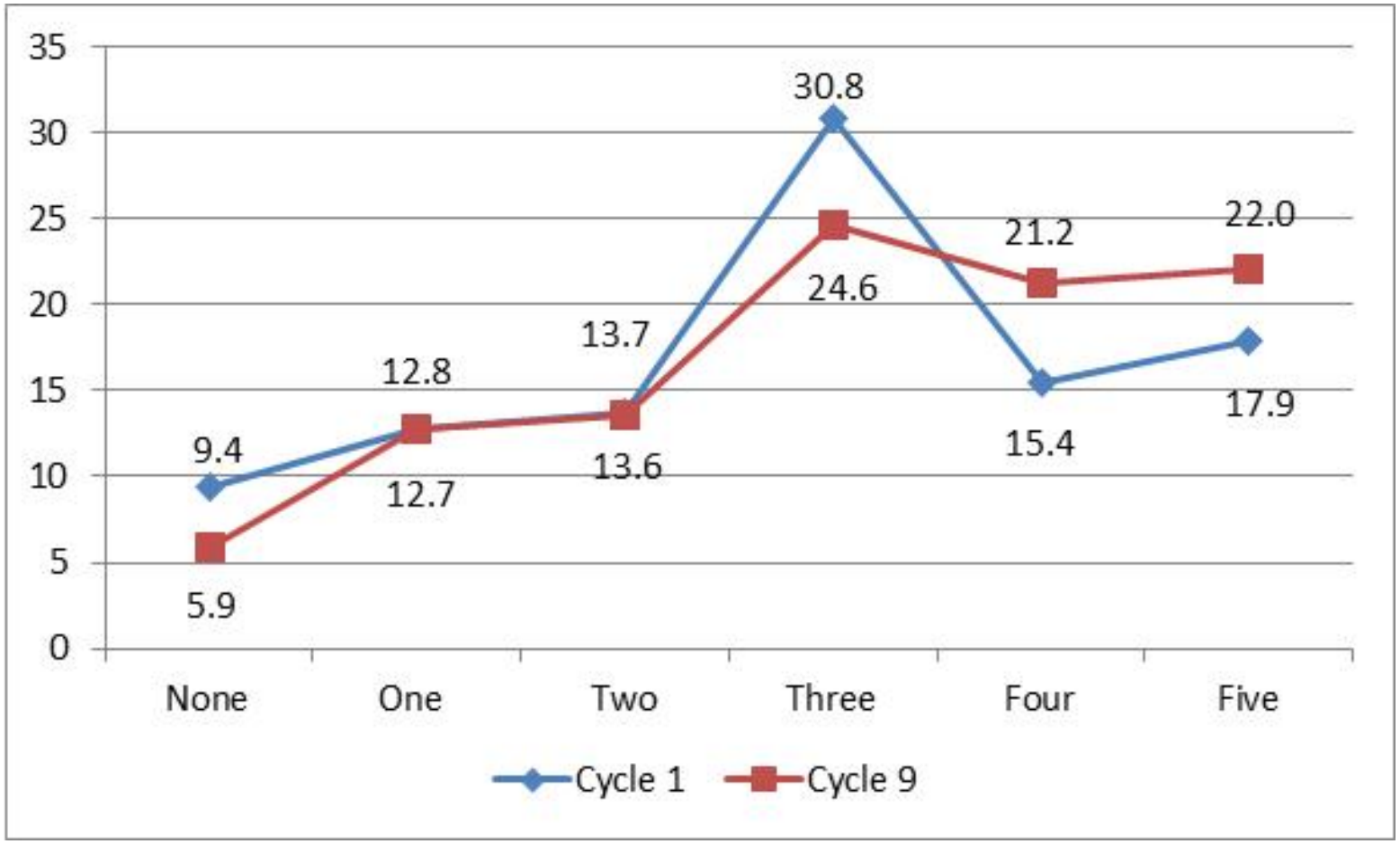


	Ace Inhibitors	Beta Blockers	Calcium Channel Blockers	Diabetes Medication	Dyslipidemia Medication
Month 1	67.80%	60.17%	52.54%	39.83%	61.02%
Month 9	73.30%	70.34%	62.71%	42.37%	59.02%

Intervention Store Analysis Statistics for ACE Inhibitors



Percentage of Medication Categories above Benchmarks



Mean Cycle 1 = 2.8 Mean Cycle 9 = 3.1

Implementation Survey Results

Survey Question	October, 2011	Average of all Months Prior to October, 2011
How well is your store implementing the PQA program?	5.64 (1.77)	5.60 (1.93)
Your store talks with patients to see how they can help improve their health.	3.83 (0.88)	3.96 (0.92)
You use the ASPIRE website at least monthly to review your store's medication adherence metrics.	3.36 (1.31)	2.96 (1.51)
How well would you rate your store partner's support of the PQA project? Does your partner's support of the project affect how well YOU implement it?	3.00 (0.95)	3.59 (1.12)
Summary Score	4.56 (0.70)	4.64 (0.80)

Intervention vs. Control Group

- **At baseline, the intervention and control stores did not differ with respect to the percent of patients who met the PDC metric**

- **The analyses followed a repeated measures (panel) design. The statistical models evaluated potential time trends using first- and higher-order polynomials.**
  - This is a robust method for analyzing change in adherence rates over time across multiple groups; Trend over time is a better indicator of current and potential improvement in outcomes.
  - Quadratic and cubic curves can better model trends since the change in adherence rates was not just a simple linear increase

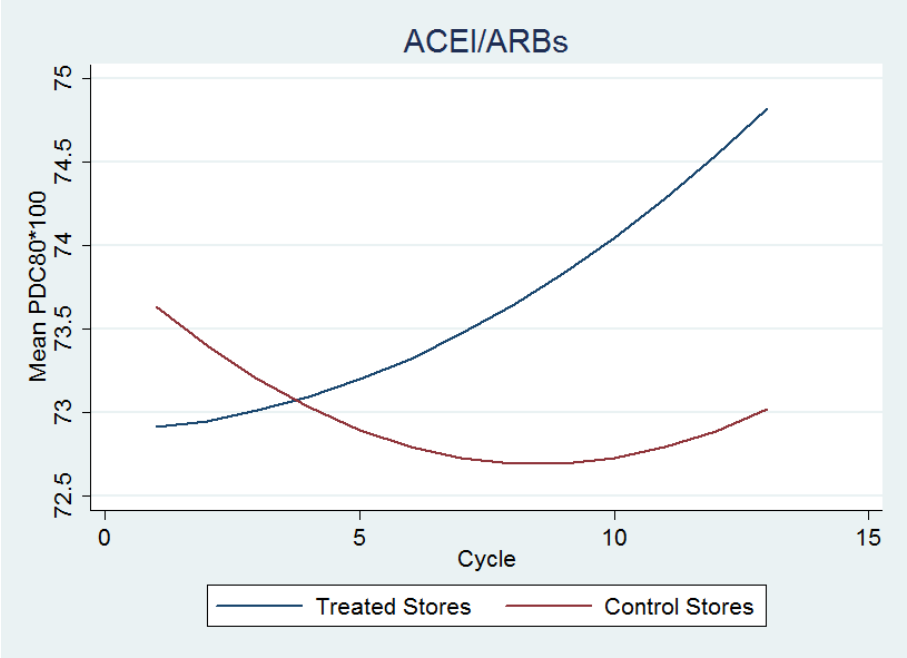
Intervention vs. Control Group

- **Intervention stores experienced significantly greater improvement in adherence rates compared to control group stores for most categories of medications.**
  - ACEI/ARBs, Beta-Blockers, Calcium Channel Blockers, and Diabetes Medications all showed improvement

- **Changes in medication adherence in the intervention stores happened over time and were accumulative.**

ACEI/ARB Example (Across All Stores)

- For 117 intervention stores, there were 11,342 people identified as having a prescription for ACEI/ARBs
- Each month, approximately 33 additional patients achieved PDC-80 threshold (i.e., became adherent) or almost 400 more adherent patients per year
- Caveat: The curvilinear trend would eventually reach a saturation point.



Conclusions: Implementation

- Successful Collaborative Model
- Scalable Technical Approach
- Successful Web-Based Cloud Platform (ASPIRE)
- Successful Stores Used ASPIRE More Frequently to view their performance reports
- Successful Quality Metric Aggregation

Conclusions: Implementation

- **Implementation was supported by the concepts of:**
  - Strong organizational leadership support
  - Updated and relevant performance measures
  - Continuous learning
  - Continuous quality improvement efforts
  - Sound and feasible intervention
  - Minimal resources and related expense

Conclusion: Impact on Adherence

- Intervention and Control Stores the Same Opportunity for Improvement
- Patient adherence for ACE/ARBs, Beta-Blockers, Calcium Channel Blockers and Diabetes medications were all **significantly greater** in intervention stores compared to the control stores.
- Improvements in medication adherence observed in the intervention stores accumulated over time
- The observed intervention impact demonstrates that the effect on adherence when multiplied over a patient population can add up to a significant number of positively affected patients

Conclusion: Future Work

- Future work will examine how well the intervention effect is sustained
  - If the accumulated impact results in further improvements, and whether the positive impact on adherence translates to decreased healthcare utilization (and perhaps medical costs).
- The potential impact of a health plan modeling a pay-for-performance program will also be explored
- Beta Phase Implementation: Addition of multiple plans and pharmacies (chain and independents)

Where do we go from Here?

- E-QuIPP = **E**lectronic **Qu**ality **I**mprovement Platform for **P**lans & **P**harmacies

- The E-QuIPP Initiative is built on the model from the ASPIRE demonstration wherein a health plan and pharmacies collaborated on quality improvement

- During 2012, the “Beta Phase” will be implemented
  - Engage health plans/pharmacies in Pennsylvania, Florida and Alabama to view quality scores and benchmarks
  - Expand the functionality to support dashboards for the health plans
  - Metrics that align with the Medicare Star Ratings

Thank You

Questions

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