Breakout III:

Drug Reconciliation and Medication Adherence—Two Sides of the Same Coin

Craig Schilling, Pharm.D.; Vice President, Patient Programs
John Mbagwu, Pharm.D.; Manager, PDL and Channel Strategies
Medication Adherence –
A Prescription for Lower Costs and Better Health Outcomes

Craig Schilling, Pharm.D.
UnitedHealth Group
One of the World’s Largest Healthcare Companies

UnitedHealth Group: $111B  
Publicly Traded Registrant  
(NYSE Ticker: UNH)

UnitedHealthcare: $82B
Health care coverage and benefits businesses, unified under a master brand
• Employer and Individual
• Community and State
• Medicare and Retirement

UnitedHealthcare purchases $35B in prescription drugs each year

Optum: $29B
Information and technology-enabled platform, focused on all of the major health system sectors:
• Life Sciences
• Providers
• Payers
• Governments

Our integration with OptumHealth and OptumRx allows us to harness additional capabilities to improve engagement with payers and providers

OPTUMInsight™
One of the world’s largest health information, technology and consulting companies, touching every sector of healthcare

OPTUMHealth™
The leader in population health management serving the physical, mental and financial needs of both individuals and organizations

OPTUMRx™
The pharmacy management leader in service, affordability and clinical quality

Confidential property of Optum. Do not distribute or reproduce without express permission from Optum.
Our clients, customers and partners

Optum provides health and information services to

62M

individuals or

1 in 5

AMERICANS

- 80K Physician practices & health care facilities
- 5K Hospitals
- 66K Pharmacies
- 400 Global life sciences companies
- 300 Different health plans
- 125 Government agencies
"Patients’ failure to take prescribed medications correctly is pervasive and... accounts for up to $100 billion in health care and productivity costs."
Adherence by the Numbers

125,000
Number of US deaths annually attributed to poor medication adherence ²

20
Percentage of new prescriptions in the US that are not filled ¹

40
Percentage of heart attack survivors who remain on statins two years after being prescribed the medication ³

290
Billion dollars or 13% of total health care expenditures, in potential savings, from adherence and related disease management annually ⁵

5
Dollars saved per $1 invested in medication therapy management programs⁴

¹ Fischer, M, Primary Medication Non-Adherence: Analysis of 195,930 Electronic Prescriptions, Journal of General Internal Medicine
² McCarthy R, The Price You Pay for the Drug Not Taken
³ Fernandez, G, Statin Myopathy: A common dilemma not reflected in clinical trials, Cleveland Clinical Journal of Medicine
⁴ Perez A, Economic Evaluation of Clinical Pharmacy Services, Pharmacotherapy
⁵ New England Health Care Institute estimate
Adherence to medications improves outcomes and economics

Consensus on the value of improving adherence

“Improving adherence is easy pickings to improve health outcomes, rather than having to discover new ways to treat a disease – or reduce the cost of medicine.” Janet Wright, cardiologist and Executive Director, Million Hearts initiative

- Diabetes, hypertension and high cholesterol non-adherence cost the U.S. $106 billion a year. *Am J Pharm Benefits, 2012*

- In patients who take their medications as prescribed, annual medical spending is reduced by approximately:
  - $9,000 per patient with Congestive Heart Failure
  - $4,000 per patient with hypertension or diabetes
  - $2,000 per patient with high cholesterol

*Health Affairs, 2011*

Medication Adherence as a Measure of Quality

**2014** CMS Marketplace Quality Team includes PQA’s Star Rating measures of medication adherence in the Quality Rating System (QRS) Beta Test measure set for insurance Marketplace Qualified Health Plans (QHPs).

**2012** Additional CMS Star Rating measures include medication adherence, using the PDC methodology endorsed by PQA. Categories measured: Statins, RAS antagonists, Diabetes medications (excluding insulin)

**2010** Pharmacy Quality Alliance (PQA), using measures developed in partnership with NCQA, launches demonstration projects to assess the impact of pharmacists interventions on medication adherence

**2009** The National Quality Forum endorsed medication adherence as an indicator of quality in drug therapy management. oral anti-diabetic drugs, CCBs, statins, ACEs, ARBs and antipsychotics included

**2007** URAC (Utilization Review Accreditation Commission) adds new performance measures (seven domains) to its accreditation programs for Pharmacy Benefit Management and Drug Therapy Management

**2007** National Council on Patient Information and Education issues a “National Action Plan” calling upon stakeholders to improve medication adherence
1. Which of the following statements are true related to the importance of medication adherence to Medicare Advantage Star Rating measures:

a. Medication adherence measures represent almost half of the part D Star Rating score

b. Medication adherence measures directly or indirectly impact 22 of the 48 Star measures

c. Medication adherence measures are weighted equally to the other 45 Star measures

d. a and b are true

e. a, b, and c are true
1. Which of the following statements are true related to the importance of medication adherence to Medicare Advantage Star Rating measures:

a. Medication adherence measures represent almost half of the part D Star Rating score
b. Medication adherence measures directly or indirectly impact 22 of the 48 Star measures
c. Medication adherence measures are weighted equally to the other 45 Star measures
d. a and b are true
e. a, b, and c are true
A Key Measure For Medicare Health Plan’s Quality Ratings

Fourteen of the 48 individual Star measures relate to Part D
- 48% of the Part D score & 17% of the overall Star score is attributable to med adherence

Three new medication adherence ratings were instituted in 2012.

<table>
<thead>
<tr>
<th>Measure ID</th>
<th>Measure Name</th>
<th>Weighting Category</th>
<th>Part D Summary</th>
<th>MA-PD Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>D01</td>
<td>Call Center – Pharmacy Hold Time</td>
<td>Measures Capturing Access</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>D02</td>
<td>Call Center – Foreign Language Interpreter and TTY/TDD Availability</td>
<td>Measures Capturing Access</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>D03</td>
<td>Appeals Auto-Forward</td>
<td>Measures Capturing Access</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>D04</td>
<td>Appeals Upheld</td>
<td>Measures Capturing Access</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>D05</td>
<td>Enrollment Timeliness</td>
<td>Process Measure</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>D06</td>
<td>Complaints about the Drug Plan</td>
<td>Patients’ Experience and Complaints Measure</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>D07</td>
<td>Beneficiary Access and Performance Problems</td>
<td>Measures Capturing Access</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>D08</td>
<td>Members Choosing to Leave the Plan</td>
<td>Patients’ Experience and Complaints Measure</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>D09</td>
<td>Improvement</td>
<td>Outcome Measure</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>D16</td>
<td>Part D Medication Adherence for Oral Diabetes Medications</td>
<td>Intermediate Outcome Measures</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>D17</td>
<td>Part D Medication Adherence for Hypertension (RAS antagonists)</td>
<td>Intermediate Outcome Measures</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>D18</td>
<td>Part D Medication Adherence for Cholesterol (Statins)</td>
<td>Intermediate Outcome Measures</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

## Impact of Medication Adherence on Star Rating measures

<table>
<thead>
<tr>
<th>ID</th>
<th>Measure name Part C</th>
<th>Weight</th>
<th>Direct or Indirect</th>
</tr>
</thead>
<tbody>
<tr>
<td>C05</td>
<td>Improve /Maintain Physical Health</td>
<td>3</td>
<td>I</td>
</tr>
<tr>
<td>C06</td>
<td>Improve /Maintain Mental Health</td>
<td>3</td>
<td>I</td>
</tr>
<tr>
<td>C10</td>
<td>Care for Older Adults – Med Review</td>
<td>1</td>
<td>I</td>
</tr>
<tr>
<td>C16</td>
<td>Diabetes Care- Blood Sugar Controlled</td>
<td>3</td>
<td>D</td>
</tr>
<tr>
<td>C17</td>
<td>Diabetes Care- Cholesterol Controlled</td>
<td>3</td>
<td>D</td>
</tr>
<tr>
<td>C18</td>
<td>Controlling Blood Pressure</td>
<td>3</td>
<td>D</td>
</tr>
<tr>
<td>C22</td>
<td>Plan All-cause Readmissions</td>
<td>3</td>
<td>D</td>
</tr>
<tr>
<td>C25</td>
<td>Customer Service</td>
<td>1.5</td>
<td>I</td>
</tr>
<tr>
<td>C26</td>
<td>Rating of Health Care Quality</td>
<td>1.5</td>
<td>I</td>
</tr>
<tr>
<td>C27</td>
<td>Rating of Health Plan</td>
<td>1.5</td>
<td>I</td>
</tr>
<tr>
<td>C28</td>
<td>Care Coordination</td>
<td>1.5</td>
<td>I</td>
</tr>
<tr>
<td>C29</td>
<td>Complaints about the Health Plan</td>
<td>1.5</td>
<td>I</td>
</tr>
<tr>
<td>C30</td>
<td>Member Choosing to Leave the Health Plan</td>
<td>1.5</td>
<td>I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ID</th>
<th>Measure name Part D</th>
<th>Weight</th>
<th>Direct or Indirect</th>
</tr>
</thead>
<tbody>
<tr>
<td>D04</td>
<td>Complaints about the Drug Plan</td>
<td>1.5</td>
<td>I</td>
</tr>
<tr>
<td>D05</td>
<td>Members Choosing to Leave the Plan</td>
<td>1.5</td>
<td>I</td>
</tr>
<tr>
<td>D06</td>
<td>Drug Plan Quality Improvement</td>
<td>5</td>
<td>D</td>
</tr>
<tr>
<td>D07</td>
<td>Rating of Drug Plan</td>
<td>1.5</td>
<td>I</td>
</tr>
<tr>
<td>D08</td>
<td>Getting Needed Prescription Drugs</td>
<td>1.5</td>
<td>D</td>
</tr>
<tr>
<td>D11</td>
<td>Diabetes Treatment</td>
<td>3</td>
<td>I</td>
</tr>
<tr>
<td>D12</td>
<td>Medication Adherence for Diabetes Medications</td>
<td>3</td>
<td>D</td>
</tr>
<tr>
<td>D13</td>
<td>Medication Adherence for Hypertension (RAS Antagonists)</td>
<td>3</td>
<td>D</td>
</tr>
<tr>
<td>D14</td>
<td>Medication Adherence for Cholesterol (Statins)</td>
<td>3</td>
<td>D</td>
</tr>
</tbody>
</table>

**22 of 48 Measures Impacted**
- 9 Direct
- 13 Indirect
Commercial Payer Perspective on Addressing Medication Adherence

• Highly prevalent chronic condition
  – Specific measurable goals of treatment exist
  – Symptoms of condition are less noxious than adverse events caused by drug therapy that negatively impact adherence

• Associated drug therapy exhibits a low baseline proportion of days covered (PDC) in the commercial population

• National clinical guidelines that support the adherence intervention

• Strong clinical and pharmacoeconomic evidence within the therapeutic category that is supported by improved medication adherence
  – Improvement in adherence leads to improved clinical outcomes and reductions in disease-related, or overall healthcare costs
Solving Problems Across The Payer Value Chain

Medication Adherence responds to six (6) Payer Clinical value chain needs

Client Experience

Operations & Administration
- Aligning consumer experience with service capabilities
- Managing increased volume and the needs of new cohorts
- Reducing overhead costs
- Managing and aligning data while making it a truly useful asset
- Navigating legislative uncertainty

Claims and Payment Mgmt
- Maximizing bonus opportunities (i.e., Stars)
- Executing value based reimbursement
- Reducing the cost of paying claims
- Modifying enrollment and billing for exchanges
- Aligning consumer experience with service capabilities
- Reducing cost while improving service levels
- Utilizing technology to improve performance
- Meeting compliance requirements while reducing cost

Constituent Service
- Meeting compliance requirements while reducing cost
- Ensuring accurate payment
- Compliance with payment guidelines
- Reducing cost while improving service levels
- Managing increased volume and the needs of new cohorts
- Modifying enrollment and billing for exchanges
- Aligning consumer experience with service capabilities
- Reducing overhead costs
- Managing and aligning data while making it a truly useful asset
- Navigating legislative uncertainty

Corporate Admin
- Navigating legislative uncertainty
- Reducing overhead costs
- Managing and aligning data while making it a truly useful asset
- Aligning consumer experience with service capabilities
- Aligning consumer experience with service capabilities
- Reducing cost while improving service levels
- Utilizing technology to improve performance
- Meeting compliance requirements while reducing cost

Quality Improvement
- Maximizing bonus opportunities (i.e., Stars)
- Executing value based reimbursement
- Reducing the cost of paying claims
- Modifying enrollment and billing for exchanges
- Ensuring accurate payment
- Compliance with payment guidelines
- Reducing cost while improving service levels
- Managing increased volume and the needs of new cohorts
- Modifying enrollment and billing for exchanges
- Aligning consumer experience with service capabilities
- Reducing overhead costs
- Managing and aligning data while making it a truly useful asset
- Navigating legislative uncertainty

Health Mgmt
- Maximizing bonus opportunities (i.e., Stars)
- Executing value based reimbursement
- Reducing the cost of paying claims
- Modifying enrollment and billing for exchanges
- Ensuring accurate payment
- Compliance with payment guidelines
- Reducing cost while improving service levels
- Managing increased volume and the needs of new cohorts
- Modifying enrollment and billing for exchanges
- Aligning consumer experience with service capabilities
- Reducing overhead costs
- Managing and aligning data while making it a truly useful asset
- Navigating legislative uncertainty

Network Mgmt
- Maximizing bonus opportunities (i.e., Stars)
- Executing value based reimbursement
- Reducing the cost of paying claims
- Modifying enrollment and billing for exchanges
- Ensuring accurate payment
- Compliance with payment guidelines
- Reducing cost while improving service levels
- Managing increased volume and the needs of new cohorts
- Modifying enrollment and billing for exchanges
- Aligning consumer experience with service capabilities
- Reducing overhead costs
- Managing and aligning data while making it a truly useful asset
- Navigating legislative uncertainty

Pricing and Underwriting
- Maximizing bonus opportunities (i.e., Stars)
- Executing value based reimbursement
- Reducing the cost of paying claims
- Modifying enrollment and billing for exchanges
- Ensuring accurate payment
- Compliance with payment guidelines
- Reducing cost while improving service levels
- Managing increased volume and the needs of new cohorts
- Modifying enrollment and billing for exchanges
- Aligning consumer experience with service capabilities
- Reducing overhead costs
- Managing and aligning data while making it a truly useful asset
- Navigating legislative uncertainty

Benefit Design
- Aligning benefit design with target segments and desired risk profiles
- Shifting to community rating
- Pricing for state and federal bids
- Automating underwriting
- Measuring & managing risk
- Aligning risk and payments to payers
- Managing reserves
- Assessing subsidy impact
- Developing a networks strategy
- Contracting
- Aligning networks and products
- Credentialing
- Meeting demands of increased volume and new cohorts
- Improving specialty network performance and LTC
- Improving communic.
- Managing chronic conditions
- Promoting health and wellness
- Engaging consumers and improving decision making
- Maintaining Medical Policy
- Integrating care delivery
- Aligning care to regulatory mandates
- Achieving cost and quality goals
- Measuring quality (i.e., HEDIS)
- Improving stakeholder satisfaction
- Maximizing bonus opportunities (i.e., Stars)
- Closing gaps in care
- Driving accountable care
- Trending medical econ

Acquisition & Retention
- Marketing and selling directly to consumers
- Enabling plan selection
- Succeeding on exchanges
- Retaining groups
- Bidding and winning contracts for Medicare & Medicaid
- Increasing member loyalty
- Designing products for consumers
- Differentiating products on exchanges and for public programs
- Delivering defined contribution arrangements
- Aligning benefit design with target segments and desired risk profiles
- Shifting to community rating
- Pricing for state and federal bids
- Automating underwriting
- Measuring & managing risk
- Aligning risk and payments to payers
- Managing reserves
- Assessing subsidy impact
- Developing a networks strategy
- Contracting
- Aligning networks and products
- Credentialing
- Meeting demands of increased volume and new cohorts
- Improving specialty network performance and LTC
- Improving communic.
- Managing chronic conditions
- Promoting health and wellness
- Engaging consumers and improving decision making
- Maintaining Medical Policy
- Integrating care delivery
- Aligning care to regulatory mandates
- Achieving cost and quality goals
- Measuring quality (i.e., HEDIS)
- Improving stakeholder satisfaction
- Maximizing bonus opportunities (i.e., Stars)
- Closing gaps in care
- Driving accountable care
- Trending medical econ

Payer Needs
Optum Adherence Solution Is A Proactive Program-Three-Step Approach For Better Results

**ID Members at Risk Before Gap Occurs**

Proprietary predictive modeling tool – Drug Adherence Index™v2.0 (DAI).

Identify specific members at risk for negative adherence behavior changes.

Target members with high propensity to increase adherence levels to > 80% proportion of days covered.

Limit interventions for members who are already >80% proportion of days covered and not at risk for declining adherence behavior.

**Seek to Understand the Cause**

Engage members directly for patient centric approach.

Confirm members at-risk for non-adherence a using validated psychometric instrument.

“Diagnose” underlying issue that may cause non-adherence using Barrier Assessment Survey.

**Remove Barriers to Improve Adherence**

Member engagement to address barrier.

Offer multi-modal options to engage members (live call agent, home visit, interactive voice response, text).

Leverage Health care practitioners (Registered Nurse or Pharm.D.) to address adherence barriers (literacy, motivation, cost).

Provide reminder messaging and organizational tools to address the forgetfulness barrier.
### Star Rating cut-points: Medication Adherence Measures (MA-PD)

<table>
<thead>
<tr>
<th></th>
<th>3-Star</th>
<th>4-Star</th>
<th>5-Star</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013 (2011 PDE data)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAS Antagonists</td>
<td>72.6 – &lt;76.5</td>
<td>&gt;/= 76.5 - &lt;79.7</td>
<td>&gt;/= 79.7</td>
</tr>
<tr>
<td>Diabetes Medications</td>
<td>72.0 – &lt;75.7</td>
<td>&gt;/= 75.7 - &lt;79.0</td>
<td>&gt;/= 79.0</td>
</tr>
<tr>
<td>Statins</td>
<td>67.3 – &lt;71.6</td>
<td>&gt;/= 71.6 - &lt;75.4</td>
<td>&gt;/= 75.4</td>
</tr>
<tr>
<td>2014 (2012 PDE data)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAS Antagonists</td>
<td>&gt;/= 72.0 - &lt;75.0</td>
<td>&gt;/= 75.0 - &lt;79.0</td>
<td>&gt;/= 79.0</td>
</tr>
<tr>
<td>Diabetes Medications</td>
<td>&gt;/= 71.0 - &lt;74.0</td>
<td>&gt;/= 74.0 - &lt;77.0</td>
<td>&gt;/= 77.0</td>
</tr>
<tr>
<td>Statins</td>
<td>&gt;/= 68.0 - &lt;71.0</td>
<td>&gt;/= 71.0 - &lt;75.0</td>
<td>&gt;/= 75.0</td>
</tr>
<tr>
<td>2015 (2013 PDE data)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAS Antagonists</td>
<td>&gt;/= 76.0 - &lt;81.0↑ 4%</td>
<td>&gt;/= 81.0 - &lt;85.0↑ 6%</td>
<td>&gt;/= 85.0↑ 6%</td>
</tr>
<tr>
<td>Diabetes Medications</td>
<td>&gt;/= 73.0 - &lt;77.0↑ 2%</td>
<td>&gt;/= 77.0 - &lt;81.0↑ 3%</td>
<td>&gt;/= 81.0↑ 4%</td>
</tr>
<tr>
<td>Statins</td>
<td>&gt;/= 68.0 - &lt;76.0</td>
<td>&gt;/= 76.0 - &lt;83.0↑ 5%</td>
<td>&gt;/= 83.0↑ 8%</td>
</tr>
</tbody>
</table>
Optum Adherence Solution Is A Proactive Program - Three-Step Approach For Better Results

**ID Members at Risk Before Gap Occurs**

Proprietary predictive modeling tool – Drug Adherence Index™ v2.0 (DAI).

Identify specific members at risk for negative adherence behavior changes.

Target members with high propensity to increase adherence levels to > 80% proportion of days covered.

Limit interventions for members who are already >80% proportion of days covered and not at risk for declining adherence behavior.

**Seek to Understand the Cause**

Engage members directly for patient centric approach.

Confirm members at-risk for non-adherence a using validated psychometric instrument.

“Diagnose” underlying issue that may cause non-adherence using Barrier Assessment Survey.

**Remove Barriers to Improve Adherence**

Member engagement to address barrier.

Offer multi-modal options to engage members (live call agent, home visit, interactive voice response, text).

Leverage Health care practitioners (Registered Nurse or Pharm.D.) to address adherence barriers (literacy, motivation, cost).

Provide reminder messaging and organizational tools to address the forgetfulness barrier.
Conception Of The Drug Adherence Index™ v1.0

The DAI (Drug Adherence Index™) was shared at the 17th Annual International meeting of the ISPOR (International Society for Pharmacoeconomics and Outcomes Research) on June 5, 2011.

Creation of the Drug Adherence Index™ (DAI) to Predict Non-Adherence in Medicare Patients
Matthew Sitznik, Ajaya Upadhyay, Dan Alkire, Craig Schilling | OptumInsight

Abstract
- The Centers for Medicare and Medicaid Services (CMS) conducted plan star ratings that indicate the quality of Medicare plans.
- In 2011, the CMS created the Centers for Medicare & Medicaid Services (CMS) Indicators, drug adherence as a quality measure within the five-star rating system.
- Based on a three-year CMS demonstration project from 2012 to 2014, quality bonuses payments (QPPs) will be awarded to plans achieving or exceeding a rating of three stars in its overall star rating.
- Drug adherence measures are weighted three times as high as most other measures for Medicare Part D. This indicates that drug adherence is an important component of improving overall star ratings and obtaining associated QPPs.

Methods
- Study Design
  - Descriptive database study that used eligibility, medical, and pharmacy claims data from a large US health care organization.
- Variables
  - 1 prescription drug claim for cholesterol lowering medication (Statin drugs), blood pressure (Ras-1 Antagonist System Antagonists - ACE/ARB), and cholesterol lowering medications (Statin medicines).
- Objective
  - To identify patients at risk for non-adherence through a multi-variate regression prediction model.
- Background
  - This study examined the factors in predicting drug non-adherence and created risk scores for use in predicting patients who are likely to be non-adherent.

Conclusions
- Adherence to previous medication regimen(s) were the most significant predictors of future drug utilization.
- Adherence intervention programs that target the entire patient population are unnecessary and not cost-effective. Prescriptive identification of patients at risk for future non-adherence can allow managed care organizations to target the right patients in need of drug adherence intervention programs.

Limitations
- Presence of a claim for a filled prescription does not indicate that the medication was consumed nor that it was taken as prescribed.
- Medications filled over the counter or provided as samples by the physician will not be observed in the claims data.
- Certain information is not readily available in claims data that could have an effect on study outcomes, such as certain clinical and disease-specific parameters.
- Additionally, the design of this study was retrospective, which are limited in their ability to account for the unobserved differences between study cohorts. Multivariate analyses adopted in this study adjusted for only the observed characteristics. Additionally, plan benefit design was not included in the model, which may increase model performance.
The Drug Adherence Index™

*Target those patients that need intervention and will drive the most programmatic success*

- A predictive model that can proactively identifies patients at high risk of not adhering to their medications.
- It produces a risk score for every patient.
- The score is based on each patient’s past drug usage and other medical and socio-demographic characteristics.
- It is completely scalable and applicable to multiple data sources
Using The Index To Target Members For Intervention

Goal: Identify patients predicted to be non-adherent

Comparison of Actual PDC vs. Risk Score

* PDC = Proportion of Days Covered  * OAD = Oral Anti-Diabetic  * Ace Arb = Angiotensin converting enzyme inhibitor / Angiotensin receptor blocker
Goal: Target those with the greatest opportunity for Stars success

Drug Adherence Index™: Comparison of Actual PDC vs. Risk Score

* PDC = Proportion of Days Covered
* OAD = Oral Anti-Diabetic
* Ace Arb = Angiotensin converting enzyme inhibitor / Angiotensin receptor blocker
Using The Index To Target Members For Intervention

Goal: Broaden member targets to improve medical management and reduce utilization

Drug Adherence Index™ - Comparison of Actual PDC vs. Risk Score

* PDC = Proportion of Days Covered  
* OAD = Oral Anti-Diabetic  
* Ace Arb = Angiotensin converting enzyme inhibitor / Angiotensin receptor blocker
2. Adherence to medications is highly important from a clinical, health economic, and quality perspective. If a group of patients are adherent to their chronic hypertension / diabetes / statin medication (i.e. their ‘proportion of days covered’ measure is at least 80%), what percent of them will become non-adherent to that same medication class in the coming 12 months?

a. 1%
b. 5%
c. 10%
d. 25%
e. 40%
2. Adherence to medications is highly important from a clinical, health economic, and quality perspective. If a group of patients are adherent to their chronic hypertension / diabetes / statin medication (i.e. their ‘proportion of days covered’ measure is at least 80%), what percent of them will become non-adherent to that same medication class in the coming 12 months?

a. 1%
b. 5%
c. 10%
d. 25%
e. 40%
Predictive Modeling Specific To Higher Risk Members: DAI™ v2.0

- Drug Adherence Index™ was developed in a large, national cross section of Medicare members
- Adherence rates for six chronic conditions exhibit similar geographic patterns (Diabetes, Hypertension, Coronary Artery Disease, Asthma, Depression, Hyperlipidemia)
- It was necessary to enhance our existing capability to accommodate for geographic variability to optimize our outreach in these geographies

Analyses by Optum

Best Decile (10%)
Middle 40-60%
Worst Decile (10%)
Insufficient Data
Optum Adherence Solution Is A Proactive Program-Three-Step Approach For Better Results

**ID Members at Risk Before Gap Occurs**
- Proprietary predictive modeling tool – Drug Adherence Index™ v2.0 (DAI).
- Identify specific members at risk for negative adherence behavior changes.
- Target members with high propensity to increase adherence levels to > 80% proportion of days covered.
- Limit interventions for members who are already >80% proportion of days covered and not at risk for declining adherence behavior.

**Seek to Understand the Cause**
- Engage members directly for patient centric approach.
- Confirm members at-risk for non-adherence a using validated psychometric instrument.
- “Diagnose” underlying issue that may cause non-adherence using Barrier Assessment Survey.

**Remove Barriers to Improve Adherence**
- Member engagement to address barrier .
- Offer multi-modal options to engage members (live call agent, home visit, interactive voice response, text).
- Leverage Health care practitioners (Registered Nurse or Pharm.D.) to address adherence barriers (literacy, motivation, cost).
- Provide reminder messaging and organizational tools to address the forgetfulness barrier.
Geographic Variation in Overall Medication Adherence

Medication Adherence Commercially Insured (Hospital Referral Regions >4,000 members)

- Average medication adherence rates tend to vary across regions
- Communities in the South and mountain regions have lower rates of medication adherence

Data from UnitedHealth Group commercial claims as analyzed by Optum
Tracking Results using Adherence Measurement

Proportion of Days Covered (PDC):
• The standard adherence metric used in accordance to specifications developed by the PQA, and endorsed by CMS, as well as, the NQF

• Equals the proportion of days in the measurement period “covered” by prescription claims for the same medication or another in its therapeutic category.

Adherence Star Measure Calculation:
• **Numerator** - Number of member-years of enrolled beneficiaries 18 years or older with a proportion of days covered (PDC) at 80 percent or over across the specified medication class(es) during the measurement period

• **Denominator**** - Number of member-years of enrolled beneficiaries 18 years or older with at least two fills of medication(s) across the specified drug class(es) during the measurement period

**Patients are only included in the measure calculation if the first fill of their medication occurs at least 91 days before the end of the enrollment period.**
Role of the Provider in Medication Adherence: Significant! Knowledge & Approach are Key

Knowledge:

• Work with your health plan(s)
  - Knowledge of benefit design, and drug coverage options
    - Use of Rx drug cards vs. low $ cash co-pay programs
  - Ask for adherence rates of your patient population
    - Incorporate adherence data into the patient’s care plan

• Knowledge about barriers to patient adherence
  - Health literacy and motivation are more prevalent than financial barriers

• Appreciate complexity of life circumstances and medication regimen
  - Knowledge of methods to reduce complexity
    - Pill boxes
    - Synchronize refills at the pharmacy
Role of the Provider in Medication Adherence: Significant!
Knowledge & Approach is Key

Approach –
Modifying our approach to improve adherence¹:

• Patients are the only experts in their behaviors and barriers (years of experience)
  ➢ Patients will not take their medications in the manner you have prescribed until they
    believe you respect their expertise

• Successfully addressing the 3 difficult adherence conversations
  1. Asking about adherence
     ❏ Open ended questions, clarify, and be curious (about their life and experience
        taking their chronic medication)
  2. How to problem solve
     ❏ Work on acceptance of diagnosis; shared decision making on treatment; issues
        with treatment implementation
  3. How to inform/educate
     ❏ Understand what they know
     ❏ What they want to know (no assumptions)
     ❏ What they need to know (avoid too much here)

• Does not need to be done all in one visit – a little at a time is fine too

• A team based approach to adherence improvement is a great prescription
  for success!

1 – Dr. Ira Wilson, MD, MSc; Brown University – November, 2013
Conclusions – Key Takeaways

- Non-adherence to chronic medications for highly prevalent primary care conditions remains a significant health care dilemma.

- Adherence to medications improves clinical endpoints and health economic outcomes, plus is a highly prioritized measure of health care quality.

- Adherence improvement to diabetes, hypertension and cholesterol drugs in Medicare Advantage members is a key strategy to improve a health plan’s overall Star Rating.

- Patient identification and segmentation using real-time analytics and predictive modeling allow for efficient and cost effective adherence intervention in the right patients.

- The role of the provider and the health care team in medication adherence improvement is significant.

- Knowledge of medication taking behaviors and proactively addressing the three difficult adherence conversations is critical for success.
Questions / Discussion

Contact Information:
Craig Schilling, Pharm.D
Work: 763-478-3273

[Email Link]
Medication Reconciliation

John Mbagwu, Pharm.D.
Objectives

- Medication reconciliation
  - Definition

- Ways to improve medication reconciliation

- Medication Therapy Management (MTM)

- Resources
In a recent study of newly discharged patients, how many experienced an adverse drug event?

A) 25%
B) 50%
C) 5%
D) 11%

Question #1…

- In a recent study of newly discharged patients, how many experienced an adverse drug event?

A) 25%
B) 50%
C) 5%
D) 11%

Question #2....

- Medication reconciliation can be done at which of the following settings?

A) Outpatient clinic
B) Pharmacies
C) Hospitals
D) All the above
Question #2: Medication reconciliation can be done at which of the following settings?

A) Outpatient clinic
B) Pharmacies
C) Hospitals
D) All the above
“Medication reconciliation is a formal process for creating the most complete and accurate list possible of a patient’s current medications and comparing the list to those in the patient record or medication orders” (Barnsteiner, 2008)

- This reconciliation is done to avoid errors such as:
  - Omissions
  - Duplications
  - Dosing errors
  - Drug-drug or drug-disease interactions

>40% of medication errors are believed to result from inadequate reconciliation in handoffs during transitions of care

- Of these errors, ~20% are believed to result in harm (Rozich, 2004)

- Reconciliation must be done at every transition of care!
Medication Reconciliation, cont.

- According to the Joint Commission, there are 5 steps that need to be conducted with each medication reconciliation:
  - List of **current** medications
  - List of medications to be **prescribed**
  - **Compare** the two lists
  - Make **clinical decisions** based on the comparison
  - **Communicate** the new list to appropriate caregivers and to the patient

Best Practices: Medication Reconciliation

- Determine next **site of care** for the patient
  - SNF, outpatient clinic, etc.

- Educate **patients** and **caretakers** to serve as **advocates**
  - Self-management and understanding of medication regimen by the patient

- A **comprehensive list** of medications should include not only prescription medications, but **herbals**, **vitamins/supplements**, **OTC drugs**, **vaccines**, **diagnostic/contrast agents**, and **IV solutions**
  - Need name of medication, dose, route, frequency, and when last dose was taken
  - Obtain most recent discharge papers, medication lists, and/or medication bottles from the patient
Best Practices: Medication Reconciliation

- Engage patient’s pharmacy to determine and reconcile pre- and post- hospitalization medications

- Leverage use of electronic health records (EHRs) to gain access into patient’s inpatient/outpatient prescription drug lists
  - Establish a location on the medical record to store the most current drug list
  - Ensure software is updated in a timely manner to reflect current health plan formulary information

- Emphasis needed on patients with polypharmacy (≥6 chronic medications)
  - Special focus on patients who are on high risk medications
Best Practices: Medication Reconciliation

- Have an explicit **time frame** for completion

- Leverage programs with multiple impact points such as **Medication Therapy Management (MTM)**
  - Star Ratings measures
    - Part C domains: **Staying Healthy & Managing Chronic Conditions**
    - Part D domains: **Member Experience** with Drug Plan & **Patient Safety** and **Accuracy** of Drug Pricing
Question #3…

MTM is a valuable tool in helping to reduce or prevent all of the following except?

A) 1.5 million preventable adverse events
B) $177 billion in injury and death
C) Republicans taking control of the Senate
D) A and B
Question #3…

MTM is a valuable tool in helping to reduce or prevent all of the following except?

A) 1.5 million preventable adverse events
B) $177 billion in injury and death
C) Republicans taking control of the Senate
D) A and B
Medication Therapy Management

- Medication Therapy Management or MTM is a “…service or group of services that optimize therapeutic outcomes for individual patients” (APhA, 2004)

- Services include:
  - Medication therapy reviews
  - Pharmacotherapy consults
  - Anticoagulation management
  - Health and wellness programs
  - Immunizations

http://www.pharmacist.com/mtm
Medication Therapy Management, cont.

- MTM is needed because of the massive medication-related problems and mismanagement in the US
  - Experts estimate that **1.5 million preventable adverse events** occur each year that result in **$177 billion** in injury and death (APhA, 2014)

- MTM can be provided by pharmacists or other qualified healthcare providers in most settings:
  - Retail
  - Clinics
  - Managed Care
    - Health Plans
    - PBMs

- Components of MTM:
  - Medication therapy review (**MTR**)
  - Personal medication record (**PMR**)
  - Medication-related action plan (**MAP**)
  - **Intervention** and/or referral
  - **Documentation** and follow-up
Medicare and MTM

- Medicare Modernization Act of 2003 (MMA) established the requirements, which went into effect in 2006, that plan sponsors must meet with regard to cost control and quality improvement including requirements for MTM programs.

- Medicare beneficiaries who are eligible for MTM services are those who have multiple chronic diseases, are taking multiple Part D drugs, and are likely to incur annual costs for covered Part D drugs that exceed a predetermined level.

- Sponsors are required to target beneficiaries with multiple chronic diseases, and they define the minimum threshold for eligibility into their MTM program.
  - Ceiling number is 3

- Each sponsor sets a minimum number of covered Part D drugs beneficiaries must have filled.
  - Max number is 8

- Annual cost threshold in 2014 is $3,144 on covered Part D medications.

Medicare and MTM, cont.

- Sponsors must offer a **minimum** level of MTM services to all targeted beneficiaries:
  - Interventions for beneficiaries and prescribers
  - Annual comprehensive medication review (**CMR**)  
  - Quarterly targeted medication reviews (**TMRs**) with follow-up interventions when necessary

Medicare and MTM, cont.

- CMS estimates **25%** of beneficiaries are eligible for MTM

- According to a recent analysis, **less than half (~11%)** of Part D members eligible for MTM received these services
  - Members enrolled in a MA-PD plan were more likely to receive MTM services (11.4%) than those in stand-alone PDPs (10.7%)
  - MA-PD members were also more likely to receive a CMR (1.7%) than those in PDPs (0.6%)

Source: “Few Medicare Beneficiaries Receive Comprehensive Medication Review Services.” Avalere Health
Health Plans and MTM

- As **ACOs** and **collaborative practice** models continue to gain momentum, data will need to flow **both** ways to enhance care to the patients
  - Pharmacists conducting MTM in the outpatient setting may reach out to **case managers** or **disease management nurses** at the health plan to determine and overcome challenges in care

- **Health information technology (HIT)** can be leveraged to identify patients within a plan for whom MTM would benefit

- **Health plans** and **providers** have a shared goal in providing the most **cost-effective** care to their patients
Optum Medication Therapy Management Program (MTMP)

- Offered to Part D beneficiaries who meet eligibility criteria
- Goals of the program:
  - Ensure appropriate use of medications
  - Reduce risk of adverse events, including drug interactions

- Provides services that exemplify best practices and may significantly impact clinical outcomes.
  - CMR with an RPh via phone
  - Provides patient & physician education
  - Improves medication adherence
  - Detects clinically significant drug-drug interactions
  - Detects medications that are considered inappropriate in elderly patients
  - Detects patterns of over- and under-use of prescribed medications
  - Maximizing effectiveness of medication therapy
Summary

 Medication reconciliation is an integral part of providing quality care to patients

 Utilize “best practices” to improve medication reconciliation activities at your practice site

 Leveraging programs with multiple impact points such as Medication Therapy Management (MTM) may help to improve Star Ratings measures
Resources

- American Society of Health System Pharmacists (ASHP)
  - ASHP Medication Reconciliation (Med Rec) Toolkit
    - ROI Worksheet - Worksheet justifying FTEs for MedRec
    - Example flowcharts of MedRec in an ambulatory setting

- American Pharmacists Association (APhA) / American Society of Health-System Pharmacists (ASHP)
  - Improving Care Transitions: Optimizing Medication Reconciliation 2012

- Health Partners
  - Ambulatory Patient Safety Toolkit 2013
    - Medication safety - Medication reconciliation

- American Pharmacists Association (APhA)
  - Medication Therapy Management

- America’s Health Insurance Plans (AHIP)
  - Innovations in Medication Therapy Management: Effective Practices for Diabetes Care and Other Chronic Conditions
References

- American Pharmacists Association Medication Therapy Management: http://www.pharmacist.com/mtm
Contact Information

John Mbagwu, Pharm.D
Work: 952-205-0323
john.mbagwu@optum.com