Understanding the Link Between Disease Management and Pay for Performance

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P4P is Still Controversial

• Like it / Love It / Hate It
• Believe in It / Don’t Believe In It
• Salvation for Physicians/Primary Care or Damnation for Physicians/Primary Care

Pay for Performance/Pay for Quality is still gaining ground and is going to be around for a while
The Number and Breadth of P4P Programs Continues to Grow

2006 National Pay for Performance Study Results with ’07 Projections

<table>
<thead>
<tr>
<th>P4P Sponsor</th>
<th>Total Enrollment</th>
<th>Product Line with Incentive</th>
<th>PCP Incentives</th>
<th>Specialist Incentives</th>
<th>Hospital Incentives</th>
<th>Internal Program Name/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL ENROLLMENT FOR ALL P4P SPONSORS (does not include CMS or enrollment of national plans)</td>
<td>57,463,126</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Subtotal # of Payor Programs</td>
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<td></td>
<td></td>
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<tr>
<td>Subtotal # of CMS Government (Feders)</td>
<td>7</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Subtotal # of State Government (Medicaid)</td>
<td>25</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Subtotal # of Other Employer</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td>120</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Number of P4P Programs</td>
<td>258</td>
<td></td>
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</tr>
</tbody>
</table>

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Everyone Knows the Stats

• 45% of US population have one or more chronic conditions
  • But they account for 78% of all healthcare spending
  • (source: Anderson and Horvath, 2004)

• Chronic conditions utilize 82% of the healthcare $$
  • Source: CDC, 2004

Annual Healthcare Expenditures (billions)

- $1,700
- $1,400
- $300

[Diagram showing annual healthcare expenditures with breakdowns]
Prevalence & Cost of Chronic illness Continues to Rise

- Demographic and cultural trends are resulting in increased chronic illness
- Prevalence and costs of treating chronic conditions continue to rise
- 24% of all Americans have 2 or more chronic conditions

Chronic Condition Prevalence (millions) and Expenditures/year (billions)

- Asthma (25.7m): $16.1B
- CAD (15.8m): $151.6B
- Diabetes (20.8m): $132B
- Hypertension (72m): $66.4B
- CHF (5.2m): $33.2B
- COPD (11.2m): $37.2B

Source: American Heart Association, National Diabetes Information Clearinghouse, NIH, National Center for Health Statistics, National Heart Lung and Blood Institute

Rising Healthcare Costs

- Businesses are spending more of their profits on healthcare
- Businesses spend the equivalent of one-half to two thirds of their after-tax profits on healthcare
- Healthcare accounted for 7% of their employees' total compensation from 1993 to 2000

By the Numbers

1.1 million Number of people General Motors covers for health insurance.

$5.2 billion Amount GM spent to cover these people last year.

$400 million Amount GM expects its overall health care costs to rise this year.

$1,500 Amount added to the price of each GM vehicle to cover health care costs.

Sources: Centers for Medicare and Medicare Services, as reported by Cowan et al., 2002; Washington Post, February 11, 2005
56.1% of US Adults Receive the Recommended Care for Their Condition*

- **Patients** are inadequately trained to manage their conditions
- Rushed **physicians** do not/cannot always follow evidence-based practice guidelines

### Many patients don’t know:
- Where to start
- What to do to get healthy
- What tests they need and what they mean
- What choices and alternatives in care they have
- What exacerbates their illness

<table>
<thead>
<tr>
<th>Condition</th>
<th>% Not Receiving Recommended Care*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>54.6%</td>
</tr>
<tr>
<td>Hyperlipidemia</td>
<td>51.4%</td>
</tr>
<tr>
<td>Asthma</td>
<td>46.5%</td>
</tr>
<tr>
<td>COPD</td>
<td>42%</td>
</tr>
<tr>
<td>CHF</td>
<td>36.1%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>35.3%</td>
</tr>
<tr>
<td>CAD</td>
<td>32%</td>
</tr>
</tbody>
</table>


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**Pay for Quality Demonstration Projects**

- **Physician Group Practice Demonstration**: the first pay-for-performance initiative for physicians under Medicare-rewards physician groups that improve quality and efficiency of services delivered to Medicare fee-for-service beneficiaries.
  - Ten large physician groups (200+ physicians) are participating in the demonstration which became operational in April 2005.
  - Physician group practices will earn performance-based payments after achieving savings in comparison to a control group
  - Preliminary results positive

- **Advanced Medical Home**
  - Bringing case/disease management into primary care
  - The question is whether these activities are scalable and whether most physician practices can afford and put in place and manage the infrastructure needed to provide these types of services to patients
  - DM is part of the answer to providing the services to reinforce physician messages, improve outcomes, and help physicians report on their outcomes.
Achieving Outcomes Takes Investments and New Skillsets

- **Multifaceted interventions appear to be more effective than single interventions**

- **Time demands and training issues suggest that physicians may not be the best individuals to provide self-management training**
  - More effectively implemented through the use of nurses, dieticians, and other types of practitioners

- **Optimal delivery of member interventions would be cost prohibitive for solo and small group practitioners**
  - **Source:** Beich, J. et al; “The Role of Disease Management in Pay-For-Performance Programs for Improving the Care of the Chronically Ill”; *Med Care Res Rev* 2006; 63; 96

What is DM?
The DM Service Model
What DM Isn’t & What it Is

Disease Management is a misnomer, it is NOT about companies or nurses or someone else externally managing a patient or disease

• It is about the following*:
  • Population identification strategies and processes;
  • Comprehensive needs assessments that assess physical, psychological, economic, and environmental needs;
  • Proactive health promotion programs that increase awareness of the health risks associated with certain personal behaviors and lifestyles;
  • Patient-centric health management goals and education which may include primary prevention, behavior modification programs, and support for concordance between the patient and the primary care provider;
  • Self-management interventions aimed at influencing the targeted population to make behavioral changes;
  • Routine reporting and feedback loops which may include communications with patient, physicians, health plan and ancillary providers;
  • Evaluation of clinical, humanistic, and economic outcomes on an ongoing basis with the goal of improving overall population health.

* from DMAA, the care continuum alliance

Definitions of DM

From DMAA:

• A system of coordinated healthcare interventions and communications for populations with conditions in which patient self-care efforts are significant, supporting the physician/patient relationship and their plan of care

• Emphasizes prevention of exacerbations and complications utilizing evidence-based practice guidelines and patient empowerment strategies

• Evaluates clinical, humanistic and economic outcomes on an ongoing basis with the goal of improving overall health

“DM is a population based approach to the treatment of chronic illness using evidence based clinical guidelines, multidisciplinary treatment approaches, and information systems to achieve good clinical outcomes at acceptable costs.”

Disease Management Goals

- To reduce the gap between evidence based practice and what patients are actually doing.
- To produce an educated patient who understands their condition.
- To support the patient’s caregivers and help them follow their treatment plans and advice.
- To produce an engaged patient who plays an active role in the management of their condition.
  - Understands the critical role they play in the management of their condition.
  - Has the skills and knowledge to carry out self care.
  - Demonstrates it through their repeated actions consistent with best evidenced based practice.
  - Sustains set backs, rebounds and gets back on their treatment plan.
- To improve the quality of life for patients with the conditions being managed.
- To support the control of escalating costs associated with the increasing prevalence of chronic disease.

How it Works
DM Has a “Formula”

• Starting with claims* data
  • Identify individuals with the disease(s)/condition(s) under review in the underlying population
  • Stratify those individuals into different categories of illness burden/risk
  • Reach out to the patient’s physician
  • Reach out to those identified individuals to enroll them in a program of education; advocacy; support; encouragement; and reminders in support of their physician’s care plan
  • Degree of “touch” dependent upon the level of stratification and the likelihood of near future high(er) utilization
  • Provide the ongoing services with:
    • Periodic reassessment of risk based on new inputs
    • Feedback loop to patient and physician
      • Results
      • Care alerts

* other data may be used but claims remains primary

Individualized Interventions at a Population Level

- Continuous Monitoring
  - Self reported vital signs
  - Self reported symptoms
  - Medical utilization/claims

- Coaching and Support
  - Nurse telephone calls
  - Home visits

- Educational Materials
  - Videotapes
  - Booklets & Magazine
  - Websites

- MD Decision Support
  - Evidence based guidelines

Identification

Predictive Modeling, Stratification, Enrollment and Training, Health History (HRA)

Individualized Evidence-Based Care Plan

Total Covered Population

Target Population
**Decision Support: Predictive Modeling/Risk Stratification**

<table>
<thead>
<tr>
<th>Member ID</th>
<th>Care Alerts</th>
<th>Risk Score</th>
<th>Aged</th>
<th>Modelled Costs</th>
<th>Future Modelled Costs</th>
<th>Future Modelled Costs</th>
<th>Impact Probability</th>
<th>Priority</th>
<th>Total Costs</th>
<th>Priority Risk Costs</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>00621396-06</td>
<td>A</td>
<td>Male 90 12 $19,942 $20,332 30.57 99.2% $16,033 $16,033</td>
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</tbody>
</table>

This patient has a very high risk of near future (12 mo) high utilization AND high risk of future (12 mo) inpatient stay risk.

This patient has an almost equally high risk score for future utilization but a very low risk of future inpatient stay risk.

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**Decision Support: Focus on Gaps in Care**

**Level One:** identifying the number of members receiving & NOT receiving the recommended treatment for each chronic disease.

**Level Two:** drilling down by condition or by quality opportunities brings you to the member level where you can view last years compliance and determine who requires additional education, outreach, support.
A Variety of Tools and Techniques to Engage and Support

Case Study
Program Results
Does it Work?
The Short Answer is Yes – They Improve Quality

There are a multitude of studies showing improvement in compliance with standards and guidelines, patient satisfaction and quality. The controversy has always been around cost savings.

RAND study finds evidence disease management programs
Disease management programs that help guide the care of patients with chronic health problems appear to improve the quality of health care, but there is little evidence that such efforts actually save money...

But evidence of cost-savings was inconclusive for most of the conditions, indicating that further research is needed.

Most of the studies Mattke and his colleagues reviewed followed patients only for about a year, which is not long enough to assess long-term health outcomes. For example, a disease management program may improve a patient’s cholesterol levels in the short term, but it can take years to determine whether those interventions – assuming they were sustained for a long period -- prevent heart attacks and costly hospitalizations years into the future.

Positive Effect on adherence to evidence-based guidelines for
- CHF, CAD, Diabetes, Depression

Source: Mattke et al, AJMC, December 2007

Some Examples
Clinical Performance Results: Commercial Population

Program Results – Medicare Dual Eligible Population

- Clinical outcomes generally improve the longer participants stay in the program
Comparative Performance CHF ACE Usage – 2006

Quality of Care Metrics - Over Time – Commercial Population

<table>
<thead>
<tr>
<th>Metric</th>
<th>Commercial Population</th>
<th>Medicare Population</th>
<th>Medicaid Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hemoglobin A1C Testing</td>
<td>80.5%</td>
<td>88.6%</td>
<td>85.5%</td>
</tr>
<tr>
<td>Poor HbA1C Control</td>
<td>34.7%</td>
<td>23.1%</td>
<td>25.1%</td>
</tr>
<tr>
<td>Good Control (New in 2007)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eye Exam</td>
<td>39.5%</td>
<td>43.0%</td>
<td>39.7%</td>
</tr>
<tr>
<td>LDL-C Screening</td>
<td>89.0%</td>
<td>88.6%</td>
<td>84.5%</td>
</tr>
<tr>
<td>LDL-C Level &lt;130 mg/dl</td>
<td>66.7%</td>
<td>86.9%</td>
<td>62.6%</td>
</tr>
<tr>
<td>LDL-C Level &lt;100 mg/dl</td>
<td>38.4%</td>
<td>43.2%</td>
<td>35.2%</td>
</tr>
<tr>
<td>Monitoring Diabetic Nephropathy</td>
<td>65.4%</td>
<td>54.9%</td>
<td>77.8%</td>
</tr>
<tr>
<td>BP&lt;140/90 (New in 2007)</td>
<td>65.6%</td>
<td>65.9%</td>
<td>67.2%</td>
</tr>
</tbody>
</table>
Outcomes Measurement – Commercial Population – A1c Results

• Integrated Delivery System – Internal & External Medical Groups
  • High concentration of Medicaid Patients
  • Very high prevalence of Diabetes
  • Three years of results

Advantages for Physicians

• Rather than be a burden, DM can reduce hassles for physicians and office managers by
  • Coaching patients to be more compliant;
  • Better prepared when they see the physician; and
  • Less likely to be making unnecessary phone calls to the office

• DM programs cost the physician nothing
  • They are paid for by employers/health plans/ etc.

• They can help your patients follow your recommendations and evidence based standards better
  • Improve patient outcomes/Help improve your outcomes
  • Reduce cost
  • Increase your opportunity to take advantage of P4P programs
  • And even provide data to you on the results if needed

• It’s a win-win for you and your patient
Some Quotes

• From the California HealthCare Foundation
  • “Patient self-management aims to help improve chronic disease care and curb the escalating economic and public health impact of chronic illness. Through daily decisions about diet, exercise, self-measurement, and medications, people with chronic illness are encouraged to play the central role in determining the course of their diseases. However, to be successful, they need the support of their health care providers to make and sustain changes in these areas.”
  • “Around 90 percent of the care a person needs to manage a chronic disease must come directly from the patient. Evidence is growing that self-management interventions, such as self-monitoring and decision making, lead not only to improvements in health outcomes and health status, but also to increased patient satisfaction and reductions in hospital and emergency room costs.”

  • “Self management occurs when patients are engaged in activities to promote health, adhere to treatment protocols, monitor their own physical and emotional status, and manage the impact of disease on their life.”

References

• Jeff Beich, Dennis P. Scanlon, Jan Ulbrecht, Eric W. Ford and Ibrahim A. Ibrahim; “The Role of Disease Management in Pay-For-Performance Programs for Improving the Care of the Chronically Ill”; Med Care Res Rev 2006; 63; 96
• AHRQ Resources on Pay for Performance; www.ahrq.gov/pay4per.htm
• The 2006 National Pay for Performance Study; copyright 2006-2007; Med-Vantage, Inc.
• Promoting Effective Self-Management to Improve Chronic Disease Care: Lessons Learned; The California HealthCare Foundation, April 2008

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