The Future of Disease Management: A New Landscape for Integrated Care

The Disease Management Colloquium
Jefferson Medical College
Thomas Jefferson University

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Executive Vice President and Chief Medical Officer
WellPoint, Inc.
Agenda

• Chronic Illness: Complex and Costly
• Drivers of Health Care Costs
• Vision of the Future of Health Care
• Strategies for Health Improvement
• Transition to Progressive Care Management
• New Landscapes for Disease Management
  – Breakthrough Technology
  – Specialty Pharmacy
  – Pay for Performance
  – Consumer Engagement
Who Is WellPoint?

• Largest health benefits company in the nation
• More than 28.5 million medical members
  – Blue plans in 13 states
  – UniCare across the country
  – HealthLink in 7 states
• Major specialty businesses: pharmacy, dental, vision, life/disability, behavioral health, EAP, workers’ compensation, Medicaid
• Nation’s 2nd largest Medicare contractor
• More than 38,000 associates
U.S. Health Status Continues to Deteriorate

Lifestyle choices biggest contributor to Americans’ health status

- Lifestyle Behavior (50%)
  - 66% overweight
  - 28% inactive
  - 23% smoke
  - 36% highly stressed

- Medical Care (10%)
- Genetics (20%)
- Environment (20%)
Prevalence of Chronic Illnesses

More than 130 million Americans suffer from chronic conditions and could benefit from disease management programs.
## Costs of Chronic Conditions

<table>
<thead>
<tr>
<th>Chronic Condition</th>
<th>Prevalence</th>
<th>Annual Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>16 million Americans</td>
<td>• $105 billion in health expenses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 11 million lost work days</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>60 million Americans</td>
<td>• $300 billion in health expenses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 1 million deaths</td>
</tr>
<tr>
<td>Asthma</td>
<td>14 to 15 million Americans</td>
<td>• $5.1 billion in medical expenses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 2.1 million missed work days</td>
</tr>
<tr>
<td>Depression</td>
<td>17 million Americans</td>
<td>• $43 billion</td>
</tr>
</tbody>
</table>
Health Care Spending as Percent of GDP

- **US**: 12.6%
- **Germany**: 10.6%
- **Canada**: 9.5%
- **UK**: 6.7%

Year:
- 1929
- 1940
- 1950
- 1960
- 1970
- 1980
- 1990
- 1992
- 1994
- 1996
- 1998
- 2000
- 2002
- 2010

Percent: 0, 2, 4, 6, 8, 10, 12, 14, 16
Drivers of Health Care Costs

- Population dynamics: aging population with chronic diseases
- Medical technology and treatment advances
- Medical errors; poor quality care
- Health professional shortages; medical malpractice litigation
- Consumer education, information, navigating the complex system
- Unnecessary care; duplication of medical services
- Administrative costs: hospitals, insurers, medical practices
- Physician and hospital compensation incentives
The Quest for Affordable, High-Quality Health Care

1980s
- HMOs
- Contracting in setting of excess capacity
- Aggressive medical management

1990s
- Capitation
- Physician management companies
- Vertically integrated delivery (and financing) systems

2000s
- “Boutique” delivery models
- Consumer-directed health care and HSAs
- High performance networks
- Rewarding quality performance
- Disease and care management
Vision of the Future of Health Care

Managing Components

Current

Episode of Care
Hospital center of delivery system
Focus on quality of service
Access, amount of care gold standard

Managing Overall Health

Evolving

Population health, disease prevention, integrated care
Proactive primary care integrated with specialty services
Focus on quality of care: improved outcomes
Consumer engagement and decision-making
Strategies for Health Improvement

% of WellPoint Members

<table>
<thead>
<tr>
<th>% of Members</th>
<th>Low Risk Members</th>
<th>Moderate Risk Members</th>
<th>High Risk, Single or Multiple Diseases</th>
<th>Complexly Ill</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>20%</td>
<td>25%</td>
<td>4%</td>
<td>1%</td>
</tr>
</tbody>
</table>

% of Health Care Costs

- Data Mining, Predictive Modeling
- Integrated Care Models/Care Counselors
- Disease Management
- Hospital and Physician Quality Programs/Pay For Performance
- New Technologies and Therapeutics Processes
- Specialty Pharmacy Programs
Transition to a Progressive Care Management Model

Innovative medical management strategies support members as they navigate complex health care system

Traditional
- Benefit-centered
- Reactive
- Cost-containment
- Acute episodes of care
- Diagnosis-driven
- Minimal member and physician contact
- Arranging, authorizing, approving

Progressive
- Member-centered
- Proactive and anticipatory
- Quality outcomes
- Long-term management
- Interplay of illness and environment
- Direct member contact, physician collaboration
- Assessing, planning, coordinating, monitoring, evaluating
### Integrating Breakthrough Technology with DM

#### What Does Innovation in Health Care Do?

<table>
<thead>
<tr>
<th>Innovation</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hip, Knee Replacement</td>
<td>Improves Quality of Life</td>
</tr>
<tr>
<td>Cardiac Procedures, Implanted Defibrillators</td>
<td>Increases Length of Life</td>
</tr>
<tr>
<td>Advanced Diagnostic Studies, Medical Informatics, Computerized Medical Records</td>
<td>Improves Quality of Care</td>
</tr>
<tr>
<td>Minimally Invasive Surgery, Estrogen Receptor Therapy</td>
<td>Lowers Total Health Care Costs</td>
</tr>
</tbody>
</table>
Introduction of New Medical Technologies and Therapies

- If effective, promote as consistent best practice
- If ineffective, don’t do it
- If insufficient evidence, assess in clinical trial
- Pharmaceutical companies, NIH, device manufacturers, CMS, health plans should support clinical trials and registries
Colorectal cancer illustrates the complexities of advancing science and accelerating health care costs.

• Third most common cancer (150,000 new cases / year) and second most common cause of death (57,000 deaths / year).

• Over 90% of colon cancer deaths are preventable, yet fewer than 50% of people over 50 undergo screening.

• Specific molecular events of carcinogenesis provide window of opportunity of 8 to 10 years for diagnosis.

• Specific DNA alterations occur as discrete steps in cascade and can be measured by new molecular tests.

• New screening techniques (i.e., CT colonography) increasingly find small tumors. This technology may supplant more invasive, expensive colonoscopy.

• Avastin, an FDA-approved drug for metastatic colon cancer, costs $50,000 a year and prolongs life 8 to 10 months.
A Look to the Future for Technology Introduction

• More rapid introduction of novel technologies and therapies
• Greater emphasis on health services research and clinical trials (cooperative trials, FDA, AHRQ)
• New generation of physicians who recognize life-long learning and rapidly adopt new technologies
• Patients are informed health care consumers
• Technology integrated with care management models
• Health plans and Medicare support clinical trials and registries to arrive at evidence-based decision-making
Integrating Specialty Pharmacy with DM

Specialty Pharmacy: A Definition

• Chronic, expensive, uncommon diseases
• Expanding clinical indications such as anemia in cancer and treatment of certain types of arthritis
  – Annual cost per patient range: $8,000 to $150,000 or more
• Usually delivered non-orally (e.g., injection, infusion)
• Special handling (temperature controlled, overnight)
• High-touch patient interface (compliance, monitoring, education linked to care management programs)
• Complex reimbursement
Specialty Pharmacy

*Market expansion and cost of specialty, biotech drugs will accelerate.*

- 200 on market by end of 2005; product revenue of $50 billion; 600 drugs in development.
- Average monthly cost of drug > $1,000, compared to $45 for traditional drug; Cerezyme costs $250,000 yearly.
- Increases of 25-50% in cost trends
- Currently:
  - 156 clinical indicators
  - 36 disease categories
  - 22 physician specialties

1. Oncology
2. HIV / AIDS
3. Multiple Sclerosis
4. Rheumatoid Arthritis
5. Hemophilia
6. Hepatitis C
7. Resp Syncytial Virus
8. Infertility
9. Gaucher Disease
10. Crohn’s Disease
11. Immune Disorders
12. Growth Hormone Def.
13. Pulmonary Hypertension
Specialty Pharmacy: Current Environment

• $35 billion in 2004, growing 20% to 35% annually

• Associated with biotech (the fastest-growing area of the pharmaceutical industry)

• Expected to climb to > 25% of employers’ total drug costs over next few years

• Distribution channel in transition
  – Traditional: retail drugstores, hospitals, physicians, home health
  – Emerging: specialty pharmacies, infusion centers
Specialty Rx: Current Environment

Rapid Growth

2004 Outpatient Pharmacy Spend $190 Billion

IMS Data through November 2004
Wall Street Equity Research, 2004
Data on file: CuraScript

2008 Projected Outpatient Pharmacy Spend $283 Billion

PhRMA, International Federation of Pharmaceutical Wholesalers & Biotech Industry Organization
# Current Environment: Therapy Examples

<table>
<thead>
<tr>
<th>Chronic Condition</th>
<th>Medications</th>
<th>Avg. Annual Cost (AWP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth Hormone Deficiency</td>
<td>Nutropin, Humatrope, Genotropin, Norditropin</td>
<td>$18,000 – $20,000</td>
</tr>
<tr>
<td>Hepatitis C</td>
<td>Rebetron, Pegasys, Peg-Intron, Infergen</td>
<td>$24,000 – $30,000</td>
</tr>
<tr>
<td>Infertility</td>
<td>Fertinex, Lupron, Gonal F, Follistim</td>
<td>$10,000 – $20,000</td>
</tr>
<tr>
<td>Multiple Sclerosis</td>
<td>Betaseron, Avonex, Rebif, Copaxone</td>
<td>$12,000 – $15,000</td>
</tr>
<tr>
<td>Oncology, BMT, HIV/AIDS</td>
<td>Neupogen, Procrit, Neulasta, Epogen, Aranesp, Gleevec, Iressa, Fuzeon</td>
<td>$5,000 – $20,000</td>
</tr>
<tr>
<td>Hemophilia</td>
<td>Recombinant Blood Factor Products</td>
<td>$150,000 +</td>
</tr>
<tr>
<td>Rheumatoid/Psoriatic Arthritis</td>
<td>Enbrel, Remicade, Humira, Kineret</td>
<td>$15,000 – $20,000</td>
</tr>
<tr>
<td>Gaucher Disease</td>
<td>Cerezyme, Zavesca</td>
<td>$150,000 – $225,000</td>
</tr>
<tr>
<td>Pulmonary Hypertension</td>
<td>Flolan, Tracleer, Remodulin</td>
<td>$30,000 – $100,000</td>
</tr>
<tr>
<td>Lysosomal Storage Disorders</td>
<td>Fabrazyme, Aldurazyme</td>
<td>$175,000 – $200,000</td>
</tr>
<tr>
<td>Psoriasis</td>
<td>Amevive, Enbrel, Raptiva</td>
<td>$12,000 – $20,000</td>
</tr>
<tr>
<td>Allergic Asthma</td>
<td>Xolair</td>
<td>$10,000 – $15,000</td>
</tr>
</tbody>
</table>
Specialty Pharmacy: Care Coordination

- Clinical care coordination ensures the appropriate use of specialty drugs
- Inappropriate utilization is eliminated
- Persistency and completion of therapeutic treatment plans are improved
- Regular interactions with patient improves clinical awareness and outcomes, engaging the patient in care
- Comprehensive support system for the patient
Health Care Quality: Institute of Medicine Reports

“To Err is Human” and “Crossing the Quality Chasm”

– Medical errors account for 50,000 to 100,000 deaths each year in hospitals (more than breast cancer, AIDS or motor vehicle accidents)
– U.S. health care system does not apply evidenced-based medical knowledge; no system of care for chronic illness
Integrating Financial Incentives with DM

• Dominant methods don’t achieve goal of clinical quality in health care
  – Fee-for-service payments encourage overuse
  – Capitated payments encourage underuse
  – Neither systematically rewards excellence in quality

• Strategy undercut by difficulties in measuring quality and adjusting for risk in way that is meaningful to consumers

• Some early experiments in rewarding quality with more favorable payments, but limited
Quality broadens the dialogue beyond fees to building a foundation of trust
## P4P Programs at WellPoint

### Partnerships with physicians and hospitals on quality incentives

<table>
<thead>
<tr>
<th>PCP Programs</th>
<th>Specialist Programs</th>
<th>Hospital Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focused on primary care physicians. Typical major components:</td>
<td>Focused on specialty care physicians. Early initiatives in: Ob/Gyn, Cardiology, Orthopedics. Measures similar to PCP programs:</td>
<td>Focused on acute care hospital, typically full service facilities. Hospital programs typically have the following components:</td>
</tr>
<tr>
<td>✓ Clinical outcomes</td>
<td>✓ Clinical outcomes</td>
<td>✓ Patient safety</td>
</tr>
<tr>
<td>✓ Evidence-based medical procedures</td>
<td>✓ Evidence-based medical procedures</td>
<td>✓ Clinical outcomes</td>
</tr>
<tr>
<td>✓ Generic prescribing rates</td>
<td>✓ Generic prescribing rates</td>
<td>✓ Patient satisfaction</td>
</tr>
<tr>
<td>✓ Technology &amp; streamlined administrative processes</td>
<td>✓ Technology &amp; streamlined administrative processes</td>
<td></td>
</tr>
<tr>
<td>✓ Patient satisfaction</td>
<td>✓ Patient satisfaction</td>
<td></td>
</tr>
</tbody>
</table>
WellPoint Coronary Services: Extensive Quality Outcomes Metrics

- **Coronary Artery Bypass Grafts (CABG)**
  - number of procedures
  - mortality
  - return to OR
  - saphenous vein use
  - infections

- **Percutaneous Transluminal Coronary Arteriography (PTCA)**
  - number of procedures
  - repeat PTCA
  - failed PTCAs which go onto CABG within 24 hours
  - primary PTCA for acute myocardial infarction

- **Myocardial Infarction (MI)**
  - number of patients with MI
  - time to PTCA
  - time to thrombolytic therapy from ER (door to drug)
  - aspirin use in 24 hours
  - mortality
  - β-blocker use
  - critical pathway use
  - number with LVEF < 40% prescribed ACE inhibitors
Hospital Quality Programs

*Rewarding high scores creates tangible incentive for quality improvement*

*Reimbursement Increase Schedule*

- Relative Reimbursement Rate
- Proportion of rate increase based on clinical quality
- Base increase in hospital contract rate

- 2002
- 2003
- 2004
- 2005

Company Confidential - Do Not Copy
## California Scorecard Overview

### Measurement Period End
- **Score:** 07/15/2003
- **Your Rate:** 93%
- **Peer Mean:** 72%

### Care Management

<table>
<thead>
<tr>
<th>Clinical Indicator</th>
<th>Observed Care</th>
<th>Eligible Cases</th>
<th>Your Rate</th>
<th>Peer Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast Cancer Screening</td>
<td>49</td>
<td>58</td>
<td>84%</td>
<td>82%</td>
</tr>
<tr>
<td>Cervical Cancer Screening</td>
<td>68</td>
<td>84</td>
<td>81%</td>
<td>78%</td>
</tr>
<tr>
<td>Colorectal Cancer Screening</td>
<td>26</td>
<td>45</td>
<td>50%</td>
<td>53%</td>
</tr>
<tr>
<td>Compliance with Lip Lowering Drugs</td>
<td>11</td>
<td>22</td>
<td>50%</td>
<td>43%</td>
</tr>
<tr>
<td>Diabetes: Diabetic Retinal Exam</td>
<td>10</td>
<td>11</td>
<td>45%</td>
<td>32%</td>
</tr>
<tr>
<td>Diabetes: Glycosylated Hemoglobin for Diabetics</td>
<td>10</td>
<td>11</td>
<td>91%</td>
<td>71%</td>
</tr>
<tr>
<td>Composite Total</td>
<td>159</td>
<td>231</td>
<td>73%</td>
<td>65%</td>
</tr>
</tbody>
</table>

### Care Management Composite
- **Composite Total:** 159
- **Confidence Interval:** 67% - 79%

### Composite Ratings

<table>
<thead>
<tr>
<th>Clinical Composites</th>
<th>Associated Fee Schedule Adjustment</th>
<th>Maximum Possible Fee Schedule Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Above Peer Mean&quot; in each composite scored</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>One &quot;Above Peer Mean&quot; and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One &quot;At Peer Mean&quot; Clinical Composite</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>&quot;At Peer Mean&quot; in each composite scored</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Generic Prescribing Composite "Above Peer Mean" | 2% | 2% |
| Administrative Composite "All Standards Met" | 2% | 2% |

| TOTAL PQIP INCENTIVE POSSIBLE | Prudent Buyer + | 12% |

### Administrative Composite
- **Meets All Standards**

<table>
<thead>
<tr>
<th>Tax ID Number (TIN)</th>
<th>Submit Claims Electronically</th>
<th>Provider Access Use</th>
<th>Practice Open</th>
</tr>
</thead>
<tbody>
<tr>
<td>77-0019017</td>
<td>76%</td>
<td>190</td>
<td>Yes</td>
</tr>
<tr>
<td>77-0024655</td>
<td>94%</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

### Administrative Indicators
- **Indicator standard:** > 85% in any TIN
- **Provider Access Use:** > 0 nts in any TIN

### Summary

- **Above Peer Mean**
- **At Peer Mean**
- **Below Peer Mean**
Rewarding Clinical Performance: Timing Is Right

- Increasing purchaser interest in quality as a factor in buying decisions
- IOM reports and Medicare reform boost quality measurement; Medicare launched new P4P physician program in April
- President’s EMR goal to improve quality
- AMA, JCAHO and MedPAC focusing their constituencies on P4P
- Regional coalitions forming to improve market adoption of P4P (Leapfrog, IHA, Bridges to Excellence)
Consumer Directed Health Care

- High-deductible PPO
- Health Savings Accounts (HSA)

Product and Plan Design
Cost-share Funding Mechanisms
Consumer Decision Support Tools
Flexible Provider Network
Technology Platform
Consumer-Centric Product
CDH: Members engaged in their own care

- Traditional Coverage
  - Engages once a member’s health account is depleted

- Member Health Account
  - HSA - Health Savings Account
  - HRA - Health Reimbursement Account

- Consumer Tools
  - Internet-based
  - Helps member manage care and expenses
CDH: Giving consumers control of health care decisions and dollars

- Helping consumers take an active role in their health and health care
- Giving consumers control of routine health decisions and dollars
- Internet-based tools help individuals better manage their care and medical expenses through informed decision-making
The Healthcare Advisor: Easy-to-Use Decision-Making

- User-friendly with context-consistent data and information
- Research more than 150 different medical conditions and procedures
- Compare hospital quality
The Healthcare Advisor: Side-by-Side Comparison

- Clinical outcomes
- Patient safety
- Hospital reputation
- Market-specific studies
- Hospital comments
CDH and DM: A New Landscape

- Allocating coverage dollars wisely
- Making rational treatment and provider decisions
- Using reliable and easily understood quality metrics
- Trading up to better treatments when value is demonstrated
- Complying with treatments
- Consumers satisfied with their care
Realizing the Future of Disease Management

“Discovery consists of seeing what everybody has seen and thinking what nobody has thought.”

Albert Szent-Gyorgyi

1937 Nobel Laureate in Medicine