Health Care Costs and Quality: Managing Intensity of Health Care Services

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Executive Vice President and Chief Medical Officer
The Quest for Affordable, High Quality Health Care

Many strategies have attempted to improve health care quality and affordability. None has systematically applied evidence-based medicine and quality outcomes.

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

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

2000s
- “Boutique” delivery models, such as specialty hospitals
- Consumer-driven health care and health savings accounts
- High performance networks with cost and quality information
- Disease and care management programs
- Rewarding quality performance (pay for performance)
Medical Policy

- Evidence-based assessments of clinical value (current state of medical science) are used to establish uniform coverage
- Medical specialty societies, academic and community medical experts, and major academic centers are engaged
- Technology must have final approval from FDA; scientific evidence must demonstrate improved health outcomes
- Improvement must be attainable outside research setting
- All medical policies are fully disclosed on brand websites; updated frequently
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
Diagnostic Imaging Market

- Imaging market is large ($100B, >12% of health care) with accelerating inflation
- Most of growth is attributable to the expanding use of technology driven by new products, consumer demand, and other factors
- State-of-the-art imaging technologies important in improving the quality of health care but cost burden is substantial and needs to be managed
- Patient safety and affordability of health care are key concerns for sponsors (employers) and insurers

Source: Blue Cross Blue Shield Association Whitepaper, 2004; CMS, Analyst Reports
Imaging Continuum: From Bigger to Smaller

<table>
<thead>
<tr>
<th>Structural Anatomic</th>
<th>Physiologic Functional</th>
<th>Metabolic</th>
<th>Molecular</th>
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<tbody>
<tr>
<td>Full-body scanning</td>
<td>MR</td>
<td>PET and Nuclear Medicine</td>
<td></td>
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<tr>
<td>CT and MR and PET</td>
<td>MR spectroscopy (MRS)</td>
<td>Increasing applications for FDG PET</td>
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<tr>
<td>Fusion Imaging</td>
<td>Functional MRI (fMRI)</td>
<td>New radiotracers</td>
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<tr>
<td>PET/CT</td>
<td>Diffusion weighted imaging (DWI)</td>
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<tr>
<td>Treatment planning</td>
<td>Diffusion Tensor Imaging (DTI)</td>
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<td>Optical imaging</td>
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<td>Nanotechnology</td>
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<td></td>
<td>Vascular US</td>
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Drivers of Advanced Imaging

• Free-standing imaging centers owned by radiologists
• Non-radiologists invest in imaging centers or in-office imaging:
  – Primary care physicians
  – Specialists, including orthopedists, cardiologists, neurologists
• Policy issues: profitable service lines move from hospitals
• Quality concerns
• Utilization concerns
Diagnostic Imaging Spend is Substantial...

2004 Expenditures
$Billions

~40-50
Lab
~100
Diagnostic Imaging
~190-200
Pharmacy

Source: NIA estimates, Health Affairs, IMS Health, M&R health cost index
… And Rapidly Growing

2004 Medical Inflation Rates
Percent

~8%
~11%
~19%
~20-30%
~10%

Overall Medical Inflation
Pharmacy
Diagnostic Imaging
MRI, CT, NC & PET
Other Imaging

Source: NIA estimates, Health Affairs, CMS, Deloitte & Touche, Hewitt Associates
WellPoint: Managing Advanced Imaging Services

- Program criteria developed in collaboration with the American College of Radiology and in consultation with physicians
- Program requires pre-authorization of advanced imaging (MRI, CT, PET, Nuclear Stress)
- Redirects care to the most clinically appropriate imaging study
- Program has received high satisfaction among physicians (near 90%)
- Expanding program across enterprise
Longer-Term Impact of Radiology Management: Anthem Blue Cross and Blue Shield in Colorado

CT and MRI/A QoQ Utilization Growth

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Percent</th>
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<tr>
<td>2Q01</td>
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<td>17%</td>
</tr>
<tr>
<td>2Q02</td>
<td>1%</td>
</tr>
<tr>
<td>3Q02</td>
<td>4%</td>
</tr>
<tr>
<td>4Q02</td>
<td>-2%</td>
</tr>
<tr>
<td>1Q03</td>
<td>0%</td>
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<td>2Q03</td>
<td>3%</td>
</tr>
<tr>
<td>3Q03</td>
<td>1%</td>
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<tr>
<td>4Q03</td>
<td>-1%</td>
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<tr>
<td>1Q04</td>
<td>7%</td>
</tr>
<tr>
<td>2Q04</td>
<td>-3%</td>
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Pre-Program Trend = 23%

Prior Consultation Program implemented

Post-Program 2-Year CAGR = 1%
## P4P Programs at WellPoint

### Partnerships with physicians and hospitals on quality incentive programs (include PPO and HMO products, and Medicaid)

<table>
<thead>
<tr>
<th>PCP Programs</th>
<th>Specialist Programs</th>
<th>Hospital Programs</th>
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<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 cardiac facilities. Hospital programs typically have the following components:</td>
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<tr>
<td>✓ Clinical Outcomes</td>
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<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>
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<td></td>
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- **PCP Programs**: Focused on primary care physicians. Typical major components include:
  - Clinical Outcomes
  - Evidence-based medical procedures
  - Generic Prescribing Rates
  - Technology & streamlined administrative processes
  - Patient Satisfaction

- **Specialist Programs**: Focused on specialty care physicians. Early initiatives in: Obstetrics/Gynecology (Ob/Gyn), Cardiology, Orthopedics. Measures similar to PCP programs:
  - Clinical Outcomes
  - Evidence-based medical procedures
  - Generic Prescribing Rates
  - Technology & streamlined administrative processes
  - Patient Satisfaction

- **Hospital Programs**: Focused on acute care hospital, typically full service cardiac facilities. Hospital programs typically have the following components:
  - Patient Safety
  - Clinical Outcomes
  - Patient Satisfaction
Timing Is Right for Pay for Performance

- Increasing purchaser interest in quality as a factor in buying decisions
- IOM reports and Medicare reform boost quality measurement; Medicare launched P4P physician program in April 2005
- President’s EMR goal to improve quality
- AMA, JCAHO and MedPAC focused on P4P
  - Senate and House “Value-Based Purchasing” bills incorporate MedPAC P4P recommendations
- Regional coalitions forming to improve market adoption of P4P (Leapfrog, IHA, Bridges to Excellence)
- Growing public interest: media coverage on pay for performance increased nearly 150 percent (2004-2005)
Why Pay for Performance?

• Improve Care and Outcomes
• Save Lives
• Eliminate Ethnic Disparities
• Reduce Costs
• Incent Health IT Adoption
Improve Care and Outcomes

Nearly one-half of physician care not based on best practices

% of Recommended Care Received

- 64.7% Hypertension
- 63.9% Congestive Heart Failure
- 53.9% Colorectal Cancer
- 53.5% Asthma
- 45.4% Diabetes
- 39.0% Pneumonia
- 22.8% Hip Fracture

Source: Elizabeth McGlynn et al, RAND, 2003
Quality Vision for P4P Programs

Quality broadens the dialogue beyond fees to building a foundation of trust.

Long-Term Goals
- Value

Short-Term Goals
- Improve Member Health
- Outcomes
- Structure / Process
- Build Trust / Collaboration

Foundation
Patient Safety - 25%

- Meet 6 JCAHO patient safety goals:
  - Improve the accuracy of patient identification
  - Improve the safety of using high-alert medications
  - Eliminate wrong-site, wrong-patient and wrong-procedure surgery
  - Improve the safety of using infusion pumps
  - Improve the effectiveness of clinical alarm systems
  - Improve the effectiveness of communication among caregivers

- Implement 3 patient safety initiatives
  - Computerized Physician Order Entry (collected via Leapfrog survey)
  - ICU staffing standards (collected via Leapfrog survey)
  - Automated pharmaceutical dispensing devices

- Report 2 patient safety indicators
  - Anesthesia complications, post-operative bleeding, etc.

Note: Text in red reflects NQF measure
Quality Insights Hospital Incentive Program

**Patient Outcomes - 60%**

- Improve indicators of care for patients with heart disease
  - Participation in American College of Cardiology cardiovascular data registry
  - Cardiac catheterization and angioplasty intervention indicators
  - **Acute MI or heart failure indicators (collected via JCAHO)**
    - Administer aspirin, beta blockers at ER arrival, discharge
    - Smoking cessation
  - **Coronary artery bypass graft indicators**
- Pregnancy-related or community acquired pneumonia indicators

**Patient Satisfaction - 15%**

- Survey of members
- Link between improvement in care processes and outcomes, and patient satisfaction

*Note: Text in red reflects NQF measure*
WellPoint Hospital Quality Programs: Goals and Guiding Principles

- Continuously improve quality of care delivered in network hospitals
- Develop program using comprehensive evidence-based metrics
- Minimize administrative burden to participate
- Promote partnerships with key hospitals
- Drive change in overall health care delivery arena
- Designed to improve care delivered to all patients, not just WellPoint members; reporting for all hospital patients
- Support health care delivery goals and public reporting of outcomes data
- Financial incentives for clinical performance, quality care, error reduction
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**

<table>
<thead>
<tr>
<th>Year</th>
<th>Proportion</th>
<th>Base Increase</th>
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<tbody>
<tr>
<td>2002</td>
<td>0.1</td>
<td>0.4</td>
</tr>
<tr>
<td>2003</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>2004</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>2005</td>
<td>0.4</td>
<td>0.1</td>
</tr>
</tbody>
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Physician Quality Scorecard: Blue Cross of California

- Scorecard combines: clinical quality measurements, generic prescription performance, administrative service, member satisfaction
- Third year of expanded incentive program
- Added efficiency measure for 2005 based on medical group-specific UM targets
- Total of $66 million in quality and generic pharmacy payments
- 176 of 190 PMG/IPAs on new program
- Alignment with IHA clinical and member satisfaction measures
Payment for Clinical Performance and Quality: Obstetrics and Gynecology Program with MaternOhio Physicians

• **Approach:**
  – Preventive care: mammography, pap smear
  – Patient satisfaction
  – American College of Obstetrics and Gynecology’s guidelines for hysterectomy
  – Generic index for pharmaceuticals

• **Recognition and reward:**
  – No precertification or concurrent review requirements
  – Positive adjustment in reimbursement
Payment for Clinical Performance and Quality: Obstetrics and Gynecology Program with MaternOhio Physicians

Program Results

- Patient Satisfaction: Pre-Program = 13.20%, Post-Program = 98%
- Mammography: Pre-Program = 4.20%, Post-Program = 86%
- Cervical Cancer Screening: Pre-Program = 81.30%, Post-Program = 100%
- Postpartum Care: Pre-Program = 54%, Post-Program = 100%
- Hysterectomy: Pre-Program = 13.20%, Post-Program = 90%

Pre-Program vs. Post-Program Performance in Clinical Performance and Quality.
Increasing Numbers of Physicians, Hospitals Engaged in Quality Improvement Programs at WellPoint

<table>
<thead>
<tr>
<th>Health Plan</th>
<th>Physicians/Hospitals in Program</th>
<th>Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>&gt; 1,200 physicians; 180 medical groups</td>
<td>97% of all medical groups</td>
</tr>
<tr>
<td>Colorado</td>
<td>&gt; 1,040 PCPs; 18 hospitals</td>
<td>80% of all admissions in CO and NV occur in participating facilities</td>
</tr>
<tr>
<td>Nevada</td>
<td>&gt; 50 PCPs</td>
<td></td>
</tr>
<tr>
<td>Connecticut</td>
<td>&gt; 2,400 physicians; 7 hospitals (QHIP)</td>
<td>78% of PCPs eligible in Northeast (CT, ME, NH)</td>
</tr>
<tr>
<td>Maine</td>
<td>&gt; 1,080 physicians; 15 hospitals (QHIP)</td>
<td></td>
</tr>
<tr>
<td>New Hampshire</td>
<td>&gt; 725 physicians</td>
<td></td>
</tr>
<tr>
<td>Georgia</td>
<td>1,300 physicians; 7 hospitals</td>
<td>Expanding in 2006</td>
</tr>
<tr>
<td>Indiana</td>
<td>300 physicians; 110 hospitals</td>
<td>Hospital Quality Program in IN, KY, OH recognized by Harvard as outstanding quality programs</td>
</tr>
<tr>
<td>Kentucky</td>
<td>60 PCPs; 99 hospitals</td>
<td></td>
</tr>
<tr>
<td>Ohio</td>
<td>&gt; 5,300 physicians; 148 hospitals</td>
<td></td>
</tr>
<tr>
<td>Missouri</td>
<td>&gt; 1,060 physicians; 6 hospitals (QHIP)</td>
<td>32% of HMO PCP network</td>
</tr>
<tr>
<td>Virginia</td>
<td>6,000 eligible physicians; 49 hospitals</td>
<td>100% for HMO products</td>
</tr>
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High Performance Networks: A Definition

- **High Performance Networks (also called Value Networks and Efficient Networks)** represent both a new product design and a network development strategy that:
  - Ranks physicians and facilities based on cost and/or quality measures
  - Encompasses an approach to analyzing physician performance generally using an episode treatment grouper (ETG) methodology
  - Creates incentives to direct members to selected physicians and hospitals; may include additional financial rewards for physicians and hospitals

- **While some High Performance Networks only recognize efficiency (cost), others attempt to ensure high quality care**
  - Clinical Effectiveness Measures
    - Diabetes care, care of members with heart attacks
  - Preventive Care Measures
    - Immunizations, breast cancer screening
  - Specialty care (orthopedics, surgery, cancer) is the key driver of health care costs; however, specialty care quality measures are generally not available with the exception of cardiology
High Performance Network Opportunities

MD Longitudinal Cost Efficiency Index
(total cost per case mix-adjusted treatment episode)

Low Efficiency
High Quality
Lower Longit. Efficiency/ Higher Cost

Low Efficiency
Low Quality
(Nightmare Suppliers)

High Efficiency
High Quality
(Dream Suppliers)

High Efficiency
Low Quality

Higher Longit. Efficiency/ Lower Cost

Continuous Efficiency Gains Offset Cost of Medical Miracles

Source: Arnie Milstein, Mercer

Adapted from Regence BlueShield
WellPoint Coronary Services Network: 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
WellPoint Coronary Services: 
Quality and Cost Performance

Efficiency Index 
Quality Index 
Note: Efficiency Index is not case mix adjusted 

Size of diamond = 
Volume of services 

Lower Efficiency / 
Higher Cost 

~$15,500 
~80 out of 100 
~$8,000 
~90 out of 100 
~$3,500 

Higher Efficiency / 
Lower Cost 

Higher 

Lower
High Performance Networks: Finding the Right Balance

Issues to Consider

- Can HPNs combine quality and efficiency criteria, particularly for high-cost, high-impact specialties?
- Will purchasers embrace long-term value of addressing quality as well as cost?
- What is the best approach where there is insufficient data to determine quality or efficiency?

The Way Forward

- Measurable, meaningful quality criteria must be developed for primary care and specialty physicians
- Develop methodology that reflects optimal care
- Programs should be designed to enhance physician relationships
- Involve key physicians, hospitals and national specialty societies
- Programs should be developed around “raising the bar” – supporting initiatives to make all physicians/hospitals higher quality and more efficient
### Claim Types
- Claims
- Rx
- Lab
- Provider
- Member
- HRA
- DATA

### Analytics
- Variation Models
  - Unit/Unit $'
- Predictive Models
- Evidence-Based Medicine

### Identification and Stratification

<table>
<thead>
<tr>
<th>WellPoint Members</th>
<th>Low Risk Members</th>
<th>Moderate Risk Members</th>
<th>High Risk, Multiple Diseases</th>
<th>Complex and Intensive Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevention and Education</td>
<td>Optimize Resources in Acute Episodes of Care, Population Care</td>
<td>DM and Education, Risk Avoidance</td>
<td>Episodic Care Mgmt, Clinical Guidelines, High Risk DM</td>
<td>Total Care Integration</td>
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<table>
<thead>
<tr>
<th>% of WellPoint Members</th>
<th>% of Health Care Costs</th>
</tr>
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<tbody>
<tr>
<td>50%</td>
<td>10%</td>
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<tr>
<td>20%</td>
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<td>25%</td>
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<tr>
<td>4%</td>
<td>30%</td>
</tr>
<tr>
<td>1%</td>
<td>25%</td>
</tr>
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### Health and Wellness
- Disease Management
- Advanced Care Management
- Clinical decision support – safety and quality (IRIS)
- Demand Management/ 24 x 7 Nurse Call Centers
- Radiology Management
- Specialty Pharmacy
- Hospital and Physician Quality Programs/Pay for Performance
- Centers of Excellence Network Contracting
- New Technologies and Therapeutics Processes
- Consistent UM and Care Management