Cost Trends & Care Management
2002 Market Survey Highlights

The Impact of Disease Management Intervention on Healthcare Costs

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Cost Trends & Care Management Overview

- Macro Healthcare Spending
- Medical Expense Trends
- Overview of Medical Management Programs
- Care Management Impact on the MLR
- Bottom Line
FY 2001 $1.36 Trillion (13.4% of GDP) and Growing

Size (Billions) (1)

$140 BN
Discovery
Pharmaceuticals/ Biotechnology

$120 BN
Suppliers
Medical Devices - $71B
Medical Supplies - $49B

$1,012 BN
Clinical Delivery
Hospitals/ Ambulatory Physicians/ Prof Services - $435B
Long Term Care - $135B

$72 BN
Payers
Healthplans
HMOs/PPOs - $48B
Employers (Self-Insured) - $13B
Government - $11B

Industry Segments

**Bleak Picture: Galloping Healthcare Costs**

"Employers face the bleak prospect of doubled health benefit costs by the year 2007"
- Watson Wyatt 2002 Survey

<table>
<thead>
<tr>
<th>Healthcare Cost Drivers</th>
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<tbody>
<tr>
<td>Inflation</td>
<td>2.5%</td>
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<tr>
<td>Drugs, Med Devices/Technology</td>
<td>3.0%</td>
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<tr>
<td>Provider Fees</td>
<td>2.6%</td>
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<tr>
<td>Gov't Mandates &amp; Regs</td>
<td>2.0%</td>
</tr>
<tr>
<td>Consumer Demand</td>
<td>2.2%</td>
</tr>
<tr>
<td>Litigation &amp; Risk Mgmt</td>
<td>1.0%</td>
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<tr>
<td>Other (Fraud)</td>
<td>0.7%</td>
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**Total Healthcare Inflation** 14.0%

### Response to Rising Medical Costs

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<thead>
<tr>
<th>Rank</th>
<th>Employer</th>
<th>Healthplans</th>
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<tbody>
<tr>
<td>1</td>
<td>Change benefit design to increase employee cost sharing</td>
<td>First dollar coverage plans (&quot;Consumer Driven Healthcare&quot;). Three tier Rx co-pays (Canadian mail order- 2003-2004?). E-business transformation</td>
</tr>
<tr>
<td>3</td>
<td>Targeted Care, Disease and Population Health Management</td>
<td>Integrated care management. Better targeting, measurement</td>
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Society

An American Epidemic

Diabetes

The silent killer: Scientific research shows a ‘persistent explosion’ of cases—especially among those in their prime

By Jerry Adler and Claudia Kalb

Something terrible was happening to Yulanda Bentez’s eyes. They were being poisoned: the fragile capillaries of the retina attacked from within and were leaking blood. The first symptoms were red lines, appearing vertically across her field of vision; the lines multiplied and merged into a hole that shut out light entirely. “Her blood vessels inside her eye were popping,” says her daughter, Janette Romal, a Chicago college student. Bentez, who was in her late 40s when the problem began four years ago, was a cleaning woman, but she had to stop working. After five surgeries, she has regained vision in one eye, but the other is completely useless. A few weeks ago, awakening one night in a hotel bedroom, she walked into a door, setting off a paroxysm of pain and nausea that hasn’t let up yet. And what caused this catastrophe was nothing as exotic as pesticides or emerging viruses. What was poisoning Bentez was sugar.
Forces of Change: Aging Population & Chronically ill

Growing Chronic Population
125M Americans with $510 BN in DM Direct Costs in 2000

Sources –
(1) US Census (213M, 1998 US Population,
(2) AHCPR, Healthcare Informatics 3/2001 (Individual Expenditures)
(3) Robert Wood Johnson Foundation, 2001 (4) DM accounts for 60% of total medical costs [$510BN /($735 +$109 BN)]
Employer Sources: Survey of 945 major US employers "Hewitt Associates Health Promotion/Managed Health Provided by Major U.S. Employers in 2001"
HMO & Employer Expenditures on Vendors

DM Clinical Vendor Annual Growth Proj. 20% - 30%

Sources: Al Lewis, Disease Management Purchasing Coalition (DPMC), 2002, includes vendor IT (MMIT) includes IT expenditures for case, utilization, disease, and demand management systems.

While Healthplans will continue to outsource, vendors face pricing pressure.

Allocation of $491M (FY 2001) by Condition

- Asthma/COPD: $111M (22%)
- Cardio: $90M (18%)
- Diabetes: $54M (11%)
- AIDS: $4M (1%)
- Mat/Neon.: $25M (5%)
- Renal: $28M (6%)
- Hospitalists: $24M (5%)
- Cancer: $19M (4%)
- Other: $74M (15%)

Source: HealthLeaders, Fall 2001, Vertical Industry Briefing, Disease Management, p.13. DMPC (Al Lewis)
**Disease Prevalence & Cost...Pareto Analysis**

**Patient Type**
- Healthy, worried well, At-risk behavior
- Self-resolving illness
- Low grade acute illness
- Episodic
- “Waiting to happen”
- Chronic diseases
- Moderate to severe acute illness
- Complex patients (severe, co-morbid, or terminal, catastrophic)

**Percent (%) Claimants**
- Low 31%
- Medium 42% (69% CM)
- High 27%

**Attributable Cost**
- Low 31%
- Medium 42%
- High 27%

**Net Savings by Disease Management Program (1st Year)**

Arbitrage Opportunity?

HMO Gross Savings = $4.90, Total Net Savings = $1.51 pmpm, n = 35  PPO Total Net Savings = $0.95 pmpm; 2:1 ROI

Michael Cousins, Stark, Anthem SE BCBS analysis of PPO DM programs, 2002 (DMAA 2002 Conference)
Redundant Admin Costs

- Eligibility File Maintenance
- Internal medical management program coordination
- Vendor contract management
- Branding
- Multiple patient communication
- Standardized reporting metrics
- Physician office admin
- EAI (legacy, vendor, patient registries)
- Assignment of cost savings

Integrated Care Management (Sum of Parts > 1 +1)

Multiple Care Management Vendors

Vendor A  +  Vendor B  +  Vendor C  +  Vendor D

Not appropriate for rare diseases (ESRD). Integrated care program can save plans 15-30% on DM admin costs

(Sources: Health Dialog, Anthem, Highmark, DMAA Conference 2002)
Medical Management Program Impact (commercial)

**Medical Costs**

- 1-3% reduction in the Medical Loss Ratio (condition dependent) (1)
- 3-5% reduction in commercial medical expense trends (1)

**G & A Expense Reduction**

- 10% improvement in profitability from adopting CMIT (2)
  - 50% reduction in UM costs if referrals are automated (2)
  - 50% overspend on care management if predictive modeling and patient self-care process/applications are not deployed (2)

Integrated medical management (dba Total Population Health Management) will improve savings and ROI

ROI will improve with appropriate information technology infrastructure

Medical management initiatives will merge with payment for outcomes

Required: care management strategy

Elusive business case: demonstrating ROI

Changing behavior