The Future of Disease Management

Third National Disease Management Summit

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Managing Components of Illness

**Current**

- Episode of Care
- Clinical efficacy at time of intervention reacts to medical event
- Hospital at center of delivery system
- Quality through the eye of the patient and provider viewed as service quality
- Consumer and employer view access and amount of health care as the gold standard

Managing Overall Health Status and Chronic Illness

**Evolving**

- Population health and a system of care for chronic illnesses
- Clinical efficacy driven by disease prevention, minimal interventionist methods, and on basis of economic and clinical aspects of disease
- Pro-active primary care, well integrated with specialty services. Hospitals care for increasingly ill population
- Quality and outcomes that are evidence-based, measurable and improve health and the quality of life
- Consumer and employer are actively engaged in health promotion and informed decision-making
Drivers of Health Care Costs

- Population dynamics: an aging population with chronic diseases
- Medical technology and treatment advances
- Healthcare delivery model - failure of evidence-based care, medical errors, reactive interventions
- Litigation and risk management
- Health professional shortages
- Navigating the complex system
- Unnecessary care; duplication of medical services;
- Protecting the medical commons: failure to “ration” care
- Administrative costs: hospitals, insurers, medical practices
- Physician and hospital compensation incentives
Ensuring Quality Health Care and Managing Costs: *In Search of the Holy Grail*

- **1980s**
  - Staff model HMOs (Kaiser, Group Health, Harvard)
  - Gatekeeper medical delivery
  - Full risk capitation (PacifiCare)

- **1990s**
  - Physician management companies (MedPartners, PhyCor, Pediatrix)
  - Vertically integrated health care delivery systems

- **2000s**
  - Benefit design solutions: most recently defined contribution; accountability and cost shifting to consumers
  - Tiered networks with cost/quality information
  - Disease management programs
Reduction in Health Care costs: The First Journey for Health Plans

- Overcapacity in the health care system → lower unit costs

- Risk sharing models with providers - cost shifting and significant negative financial impact for health systems and physicians who did not have infrastructure to manage risk

- Rigorous utilization management:
  - viewed as intrusive
  - limitations in network and access

- Did not address marked variation in cost, quality, or address chronic disease
Disease Management: Definition

A multidisciplinary, systematic approach to health care delivery that:

- includes all members of a chronic disease population;
- supports the physician-patient relationship and plan of care;
- optimizes patient care through prevention, proactive, protocols/interventions based on professional consensus, demonstrated clinical best practices, or evidence-based interventions; and patient self-management; and
- continuously evaluates health status and measures outcomes with the goal of improving overall health, thereby enhancing quality of life and lowering the cost of care.
Disease Management: Program Components

- Population Identification processes;
- Evidence-based practice guidelines;
- Collaborative practice models that include physician and support-service providers;
- Risk identification and matching of interventions with need;
- Patient self-management education (which may include primary prevention, behavior modification programs, support groups, and compliance/surveillance);
- Process and outcomes measurement, evaluation, and management;
- Routine reporting/feedback loops (which may include communication with patient, physician, health plan and ancillary providers, in addition to practice profiling); and
- Appropriate use of information technology (which may include specialized software, data registries, automated decision support tools, and call-back systems).
Institute of Medicine: Redesign and Improve Care

- Care based on continuous healing relationships
- Customization based on patient needs and values
- The patient as the source of control
- Shared knowledge and the free flow of information
- Evidence-based decision-making
- Safety as a system property
- The need for transparency
- Anticipation of needs
- Continuous decrease in waste
- Cooperating among clinicians
Chronic diseases include coronary artery disease, asthma/COPD, CHF and diabetes.
Managing High Cost Members

Catastrophic Case Management

Disease Management

Chronic and Complex Illness

Transplant

Rare, Resource intensive illnesses
High Risk Population Case Management versus Disease Management

➤ Disease management defines members/patients by presence of a diagnosis.
   - Enhanced by stratification and management strategies

➤ High risk population-based case management, or Advanced Care Management, defines members/patients on the basis of risk of future resource use. Chronic and complex illness(es) are common.
   - Requires standardized means of case identification
   - High risk members typically have co-morbidities and social challenges, and are at risk for deterioration in health
Ohio Care Counselor - Financial Outcomes: Hospital Admissions

Financial Outcomes: Admits/1000

Control Group

- 12 months prior: 1239
- 9 months during: 542

Intervention Group

- 12 months prior: 1213
- 9 months during: 396

Legend:
- 12 months prior
- 9 months during
Ohio Care Counselor - Financial Outcomes: Reductions in Costs

Control Group vs. Intervention Group

- Control Group: 54%
- Intervention Group: 64%
- Intervention Group: 38%
- Intervention Group: 51%
Ohio Care Counselor: Clinical Outcomes

- 13% of the participants stopped smoking
- There was a 19% increase in members following a low fat, low cholesterol diet
- 13% of the participants with Coronary Artery Disease (CAD) reduced cholesterol levels to below 200
- 27% increase in Congestive Heart Failure (CHF) members weighing themselves daily, recording and sharing that information with the physician
- Diabetic members who were diabetic showed improved in five key areas: Dilated Retinal Exam (DRE), Foot Exam, LDL screening, HgbA1c and Microalbuminuria testing
- Intervention group following a regular exercise program increased from 48% to 65%
- Extremely high satisfaction scores of 96%!
Disease Management: HMC Clinical Study

Disease Management: Utilizes a predictive model at the core of its four disease management programs:

- Diabetes Mellitus
- Asthma
- Congestive Heart Failure
- Coronary Artery Disease
Effects of Moving Intervention Cut off Point

A

B

C

D

Top 5%

6-10%

11-15%

16-100%

= target for high intervention

= members for low intervention

Cousins, Disease Management 5:2002.
Identification Model:
- Predicts expected medical costs for next 12-months
- Hybrid-model that uses combination of demographic, medical, pharmacy and/or laboratory information
- Clinical rules-engine
- Diagnosis groups
- Identifies cost drivers statistically

Intervention
- Outbound telephonic intervention for high risk members.
- Outbound mail-based intervention for lower risk members with inbound nurse line for use at member’s discretion.
Disease Management: HMC Clinical Study

➤ Methodology:
  ● ASO groups who purchased DM (Study group of 76k members) and those who did not (Control)

➤ Results:
  ● Savings of 11% for those enrolled in the program
  ● Net Savings of $0.94 PMPM for the entire 76k members
  ● ROI of $2.84 : $1.00
Health Care Quality: An Overview

- Institute of Medicine Reports: To Err is Human and Crossing the Quality Chasm:
  - Medical errors account for 50,000 - 100,000 deaths each year in hospitals; more than from breast cancer, AIDS or motor vehicle accidents.
  - US health care system does not apply evidenced-based medical knowledge; nor is there a system of care for chronic illness

- 58% of health care providers acknowledge serious quality defects.

- Consumers are gaining more information: 55% of all internet users access health care; consumer confidence is eroding in all components of healthcare

- Employers, through Leapfrog, are beginning to address quality

- Reimbursement models and financial incentives don’t recognize and reward quality

- The market is purchasing on cost and access; no health care market currently competes on the basis of improving quality, yet quality may reduce healthcare costs
The Institute of Medicine’s Definition of Quality

Quality of care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.
Healthcare Quality Defect Rates Occur at Alarming Rates

Defects per million

- Hospital acquired infections
- Hospitalized patients injured through negligence
- Airline baggage handling
- Anesthesia-related fatality rate
- Outpatient ABX for colds
- Adverse drug events
- Detection & treatment of depression
- Post-MI β-blockers
- Breast cancer screening (65-69)

σ level (% defects)

1
2
3
4
5
6

(69%) (31%) (7%) (.6%) (.002%) (.00003%)

Source: modified from C. Buck, GE
Proven Effective Interventions That Are Underused

- Heart attack care
- Breast cancer care
- Hypertension detection and treatment
- Anticoagulation in atrial fibrillation
- Immunizations
- Inhaled steroids
- Depression detection and treatment
- ACE inhibitors in heart failure
- Diabetic retinal exam
- Prenatal care
- Mammography
Underuse of Secondary Prevention Strategies Following Acute MI

- Four therapies save about 80 lives per thousand patients treated
- We reach no more than half of eligible patients
- Over 750,000 Americans suffer MI’s each year
- Therefore, 18,000 preventable deaths

Source: Chassin, MR “Health Care: Are We Ready for Six Sigma Quality?” St. Louis, April, 1999
Recommendation 10:

*Private and public purchasers should examine their current payment methods to remove barriers that currently impede quality improvement, and to build in stronger incentives for quality enhancement.*
Dominant methods of payment today don’t achieve goal of clinical quality

- Fee-for-service payments encourage overuse
- Capitated payments encourage underuse
- Neither systematically rewards excellence in quality

Strategy is undercut by difficulties in measuring quality and adjusting for risk in a way that means something to consumers

Some early experiments in rewarding quality with more favorable payments
## Anthem Hospital Quality Program: 2002 Hospital Quality Program Scorecard

<table>
<thead>
<tr>
<th>Section</th>
<th>Possible Points</th>
<th>Percent of Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital QI Plan and Program</td>
<td>29</td>
<td>20</td>
</tr>
<tr>
<td>Joint Commission Grid Score</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>ED/Asthma/Pneumonia</td>
<td>24</td>
<td>17</td>
</tr>
<tr>
<td>Cardiac Care</td>
<td>22</td>
<td>15</td>
</tr>
<tr>
<td>Joint Replacement Care</td>
<td>22</td>
<td>15</td>
</tr>
<tr>
<td>Obstetrical Care</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>Cancer Care</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Acute MI/Congestive Heart Failure</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Patient Safety</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>145</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Rewarding High Scores Creates a Tangible Incentive for Progress

Reimbursement Increase Schedule

- 2002
- 2003
- 2004
- 2005

Relative Reimbursement Rate

Proportion of rate increase based on clinical quality
Base increase in hospital contract rate
Patient Outcomes - 55%

- Improve indicators of care for patients with heart disease
  - Participation in ACC cardiovascular data registry
  - Cardiac Catheterization and Percutaneous Coronary Intervention indicators
  - Acute MI or heart failure indicators
    - Administer aspirin, beta blockers at ER arrival, discharge
    - Smoking cessation
  - CABG indicators

- Pregnancy-related or community acquired pneumonia indicators

Patient Satisfaction - 15%

- Survey of Anthem members
- Link between improvement in care processes & outcomes and patient satisfaction
Patients experience the health care system through physicians who have legal authorization and often transform information.

Fundamental role in health care costs and quality.

Expertise:
- explain nature
- predict nature’s future
- Alter it to make it better
Physician Q605  When you were in training to become a physician, do you believe that you received enough instruction about caring for patients with chronic illness?

Percent Answering "Yes"
When you were diagnosed, would you have liked your doctor to . . . ?

Percent Answering "Yes"

- Would have liked doctor to explain guidelines from research showing what works best in treating condition
- Doctor explained guidelines from research showing what works best in treating condition
When seeking out information to help you with your condition, which of the following sources do you use?

- **My doctor**: 67% Satisfied, 74% Neither, 90% Dissatisfied
- **The Internet**: 69% Satisfied, 69% Neither, 68% Dissatisfied
- **Written materials**: 49% Satisfied, 53% Neither, 45% Dissatisfied
- **Nurses or PA's**: 36% Satisfied, 39% Neither, 30% Dissatisfied
- **Family and friends**: 37% Satisfied, 41% Neither, 37% Dissatisfied
- **News or TV programs**: 33% Satisfied, 34% Neither, 31% Dissatisfied
- **Other patients**: 25% Satisfied, 32% Neither, 39% Dissatisfied
Partnering with Physicians: Cardiology As an Optimal Model for Disease Management?

- Strong multicenter clinical trials create evidence-based medicine and best practices
- ACC Leadership in advancing clinical effectiveness
- Proven clinical results through intervention in coronary artery disease and congestive heart failure
- Financial and clinical impact of cardiac disease
- Assessment of new technologies: cardiac CT scans for CAD, drug eluting stents, LV assist devices
- Opportunities to create an effective collaborative model with physicians to enhance cardiac care, emphasizing cardinal role of physicians and the support of the patient physician relationship
- Quality defects in health care

Anthem®
**Consumer Driven Health Care**

**Employer**
- Predictability in benefit expense
- Responsibility of health care management shifted to employees
- Flexible plans to match consumer demands
- Empower & educate employees with comprehensive, interactive online tools

**Employee**
- Control over how and where health care dollars are spent
- Management of health care benefits to determine what’s appropriate for them
- Ease of use as there are no restrictive networks, gatekeepers, or referrals
- Plan and predict annual and future expenses
- Added value through Anthem’s online, customized member experience
## Costs Decline When Consumers Share Expenses

Changes in medical costs based on changes in consumer co-pay in a loosely managed market*

<table>
<thead>
<tr>
<th>Changes attributable to decline in utilization</th>
<th>Total percent change</th>
<th>Changes attributable to patient co-pay</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>13</td>
<td>Hospital 8%</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Mental Health 33%</td>
<td>20</td>
</tr>
<tr>
<td>15</td>
<td>Primary Care 43%</td>
<td>28</td>
</tr>
<tr>
<td>17</td>
<td>Specialty Care 43%</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Pharmacy 48%</td>
<td>31</td>
</tr>
</tbody>
</table>

* Utilization comparison based on $0 co-pay plan vs. co-pays of $250 IP, $100 ER, $20 office visit and $20 RX
Success Factors

New market requirements are driving a new definition of success

From

- Broad industry quality metrics
- Standardized plan designs
- Employer accountability
- Physician-directed information
- Provider access
- Cost predictability

To

- Cost control and affordability
- Improved health outcomes
- Product flexibility
- Consumer accountability & economic alignment
- Consumer choice, access to services
- Consumer empowerment through information
- Marketplace Requirements

Consumer empowerment through information
Consumer Driven Health Care

Happy Economist Scenario
- Engaged and well-informed consumers . . .

> 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
> Satisfied with their care

Ugly Reality
- Engaged but often ill-informed consumers . . .

> Experiencing cost shifting
> Seeing what things cost
> Making decisions without good information
> Making emotional -- rather than ration -- decisions
> Spending money unwisely (e.g., total body scans)
> Trading down more often than trading up
> Not complying
> Angry and feeling deprived

Source: Ian Morrison
Medical Management: A Changing Landscape

Traditional:
- Precertification, referral authorization, utilization review

- Hospital Utilization - manage hospital utilization through appropriateness of admission and length of stay
- Focus - one size fits all utilization
- Clinical Management - wide variation in regional clinical practice pattern
- Financials: ROI minimal
- Members: view as barriers to care
- Physicians: consider these approaches administrative hassles that increase office costs and personal intervention
- “Partnership:” Approaches add cost and create dynamic tension

Progressive:
- Disease management, advanced care management

- Manage hospital admissions by preventing deterioration in health status
- Targeted at high impact members
- Evidence-based care models: more consistent approaches to care
- ROI analyses incomplete; very promising early results
- View care navigation positively, >90% acceptance
- Viewed as promoting the delivery of quality care and helping them manage challenging patients
- Models are collaborative
Member Medical Management Strategies

Strategies
- Advanced Care Management
- Disease Management, identification of at-risk members
- Prevention and member education
- Wellness and product strategies