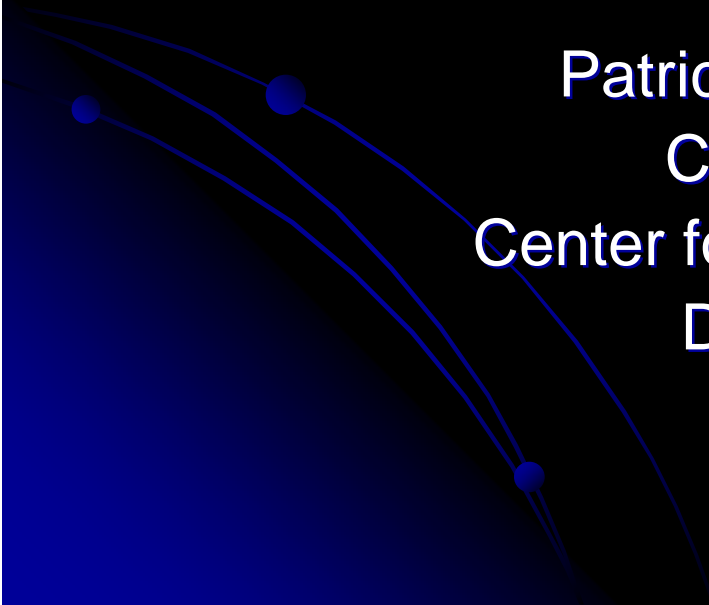


# Leveraging Disease Management to Support Value-Based Insurance Design



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December 15, 2005

# Disease Management is a Systematic Approach to the Management of Chronic Illness

- ◆ Population identification processes
- ◆ Evidence-based practice guidelines
- ◆ Collaborative practice models
- ◆ Patient self-management education
- ◆ Process and outcomes measurement, evaluation and management
- ◆ Routine reporting/feedback loop

# DM Programs Employ a Population-based Approach

- ◆ Identification of all individuals in a covered population that have the condition
- ◆ Stratification of individuals in groups with varying needs
  - ❖ Sickest, less sick, not so sick
  - ❖ Costliest, less costly, inexpensive
- ◆ Intensity and type of intervention is tied to stratification level
- ◆ Ultimately, although interventions are customized to the level of the stratification group, they are applied at the individual level

# Stratification and Customization

- ◆ The more homogeneous the stratification group is, the more the interventions are perceived as being customized to the individual
- ◆ The ultimate in customization is stratification groups of one
  - ❖ Requires sophisticated IT and management processes (e.g., Active Health Management)

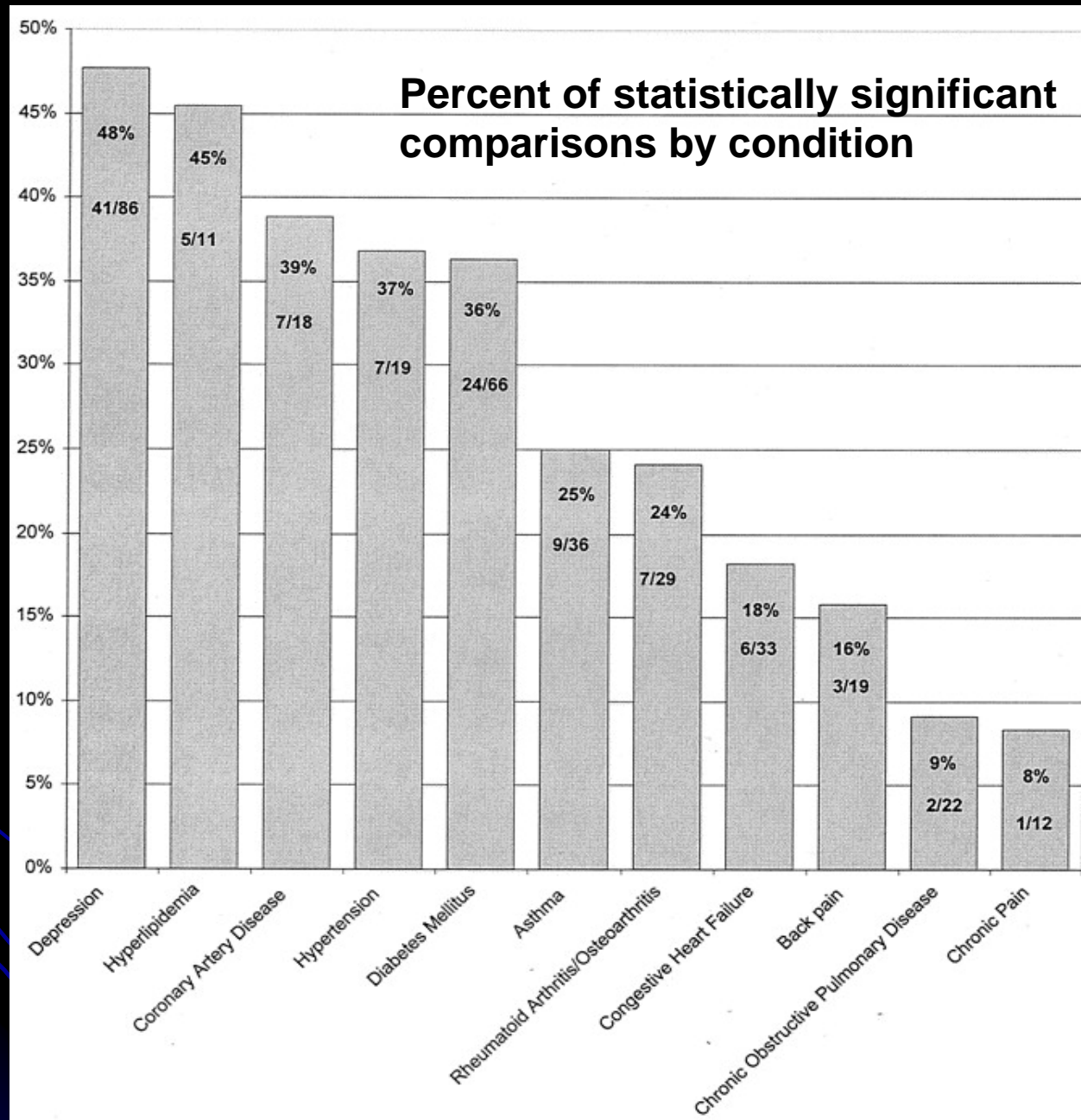
# DM Programs Attempt to *MEASURABLY* Improve:

- ◆ Health processes
  - ❖ Compliance with testing, medications, diet, exercise, etc.
- ◆ Health outcomes
  - ❖ Better test results, fewer complications
- ◆ Use of resources, including financial resources
  - ❖ Eliminate waste, invest in proven services
- ◆ Patient satisfaction with services provided
  - ❖ Patient engagement, self-management support

# DM Program Results

## Meta-analysis of DM literature:

- ◆ Many DM programs are associated with improvements in quality of patient care
  - ❖ Varies by program, condition
  - ❖ Greatest improvements in patient satisfaction, adherence, disease control, and provider adherence
- ◆ Relatively few studies evaluated health care utilization or costs
  - ❖ Findings were often modest and inconsistent
  - ❖ Program development and implementation costs often not considered



# DM Program Results

## Meta-analysis of DM literature:

- ◆ **Weak to moderate evidence of economic effectiveness of disease management programs**
- ◆ **Programs are more economically effective with severely ill enrollees**
  - ❖ **But studies were mostly short term (12 months)**
- ◆ **Most of the direct economic outcomes measures were related to hospitalizations and emergency room visits; few analyzed total medical costs**



# Single Disease DM vs “Whole Patient” Approaches

- ◆ DM programs initially targeted a single common, costly chronic disease
  - ❖ Diabetes
  - ❖ Asthma
  - ❖ CHF
- ◆ The list of conditions managed has expanded and now included “rare” diseases (e.g., MS) and other “impact” conditions (e.g., GERD)
- ◆ Some programs claim to manage the “whole patient” including multiple conditions, co-morbidities

# DM Programs Have Experienced Dramatic Growth in Recent Years

- ◆ Nearly 70% of large employers are using disease management programs through their health plans this year, compared with 49% last year, according to the 10th Annual National Business Group on Health/Watson Wyatt Survey Report
- ◆ Another 28% of the 555 large employers participating in this year's survey are adopting disease management programs through an outside vendor, up from just 11% in 2004

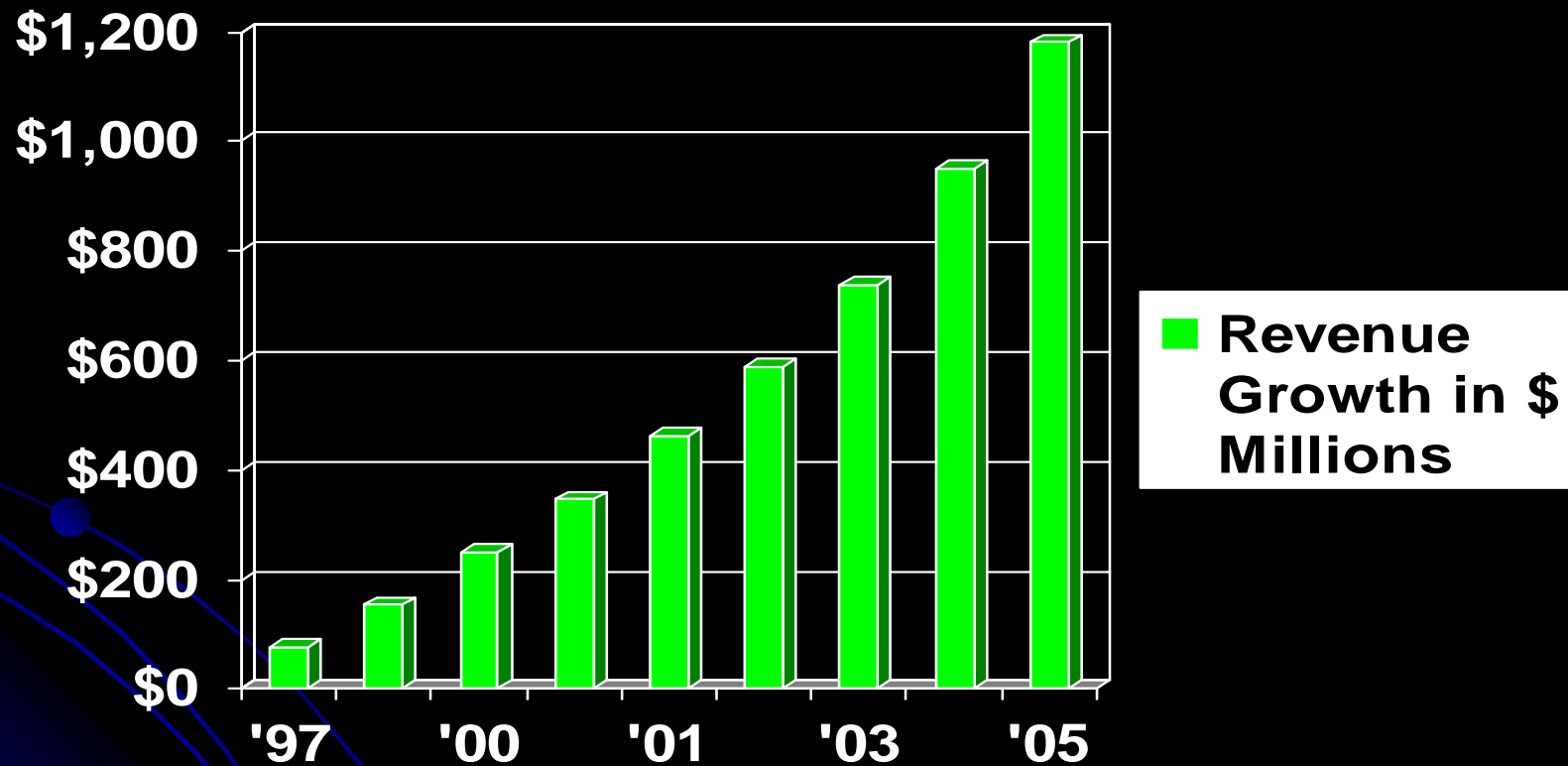
# Investment in DM Programs is Substantial...

- ◆ DM revenue is estimated to be \$1.2 billion in 2005 up from \$346 million in 2000 and \$78 million in 1997

Personal communication, Al Lewis, Disease  
Management Purchasing Consortium, 12/10/05

**DMPC**  
Disease Management  
*Purchasing Consortium International, Inc.*

# DM Industry Revenue Growth



Personal communication, Al Lewis, Disease Management Purchasing Consortium, 12/10/05

# ...and Has Resulted in a Robust DM Infrastructure

- ◆ Sophisticated population identification software
  - ❖ Complex algorithms to identify members with disease
  - ❖ Complex algorithms to identify “care opportunities”
  - ❖ Predictive modeling
- ◆ Disease registries
- ◆ Automated reminders (patients & providers)

# Robust DM Infrastructure (cont.)

- ◆ Educational materials (patients and providers)
- ◆ Call centers
- ◆ Multidisciplinary health “coaches”
- ◆ Infrastructure to measure results
  - ❖ Data collection, analysis and reporting tools
  - ❖ Measurement teams
- ◆ Evaluation infrastructure
  - ❖ Experts in evaluating financial ROI for population-based programs
- ◆ Administrative infrastructure
- ◆ Accreditation infrastructure

# DM Programs Continue to Innovate

## Use of incentives:

### ◆ Provider incentives

- ❖ Pay-for-Performance programs tied to DM

### ◆ Patient incentives

- ❖ Earn rewards for participation, compliance or outcomes
  - ◆ American Healthways & MyHealth IQ
- ❖ Eliminate or reduce disincentives
  - ◆ Reduce co-pays for conditions related drugs if participate in a DM program

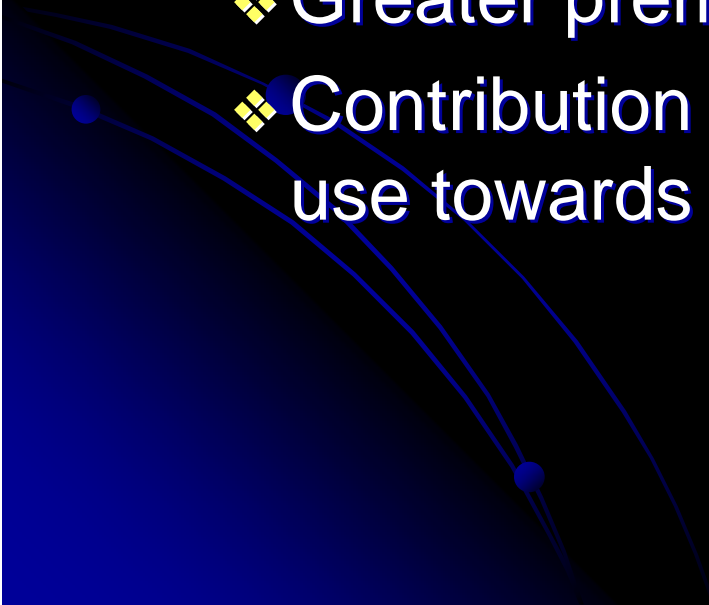
# Patient Incentives: American Healthways “MyHealth IQ”

- ◆ MHIQ is a corporate health risk management program that gives financial rewards based on quantifiable, improved biometrics
- ◆ Employees receive a monthly health insurance premium discount for participation (health and lifestyle history and blood samples)
  - ❖  $\geq 80\%$  participation rates





# Patient Incentives: American Healthways “MyHealth IQ”

- ◆ If the employee raises his/her score in the span of 12 months, they receive additional rewards in year two
    - ❖ Greater premium reduction
    - ❖ Contribution to a health savings account for use towards co-pays and deductibles
- 

# Patient Incentives: American Healthways “MyHealth IQ”

1500+participants, 6-8 employers	Baseline No Risk %	Baseline At Risk %	End yr 1 No Risk %	End yr 1
Total Cholesterol*	68.4	31.6	75.4	24.6
HDL	51.1	48.9	47.2	52.8
LDL*	25.2	74.8	31.5	68.5
Total Chol/HDL	27.8	72.2	31.0	69.0
Body Mass Index	29.3	70.7	29.9	70.1
Systolic BP*	41.7	58.3	55.2	44.8
Diastolic BP*	65.2	34.8	76.2	23.8
Triglycerides	60.9	39.1	63.8	36.2
Glucose	76.5	23.5	77.8	22.2

Personal Communication, Mark McConnell, American Healthways, 12/8/05

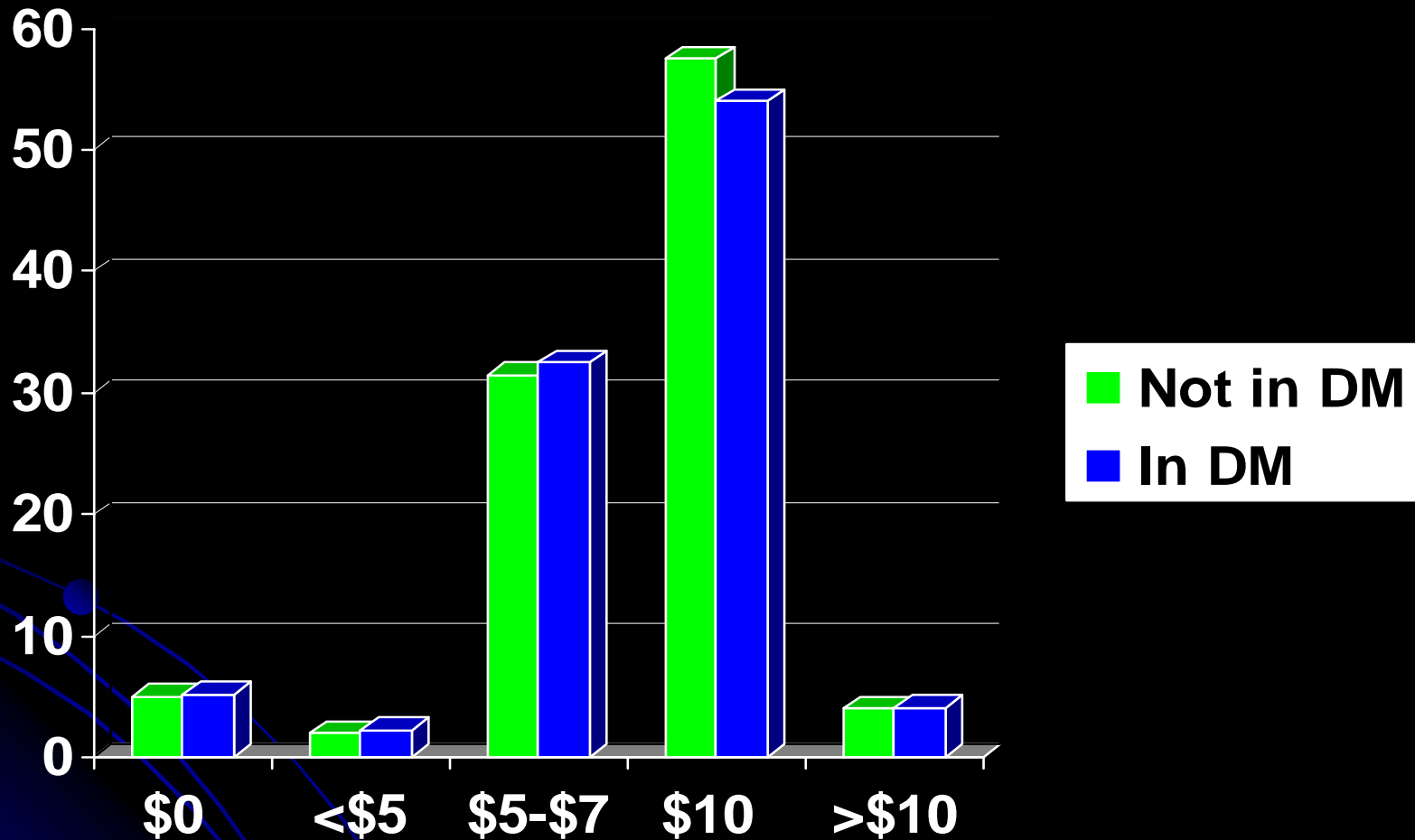
# Insurance Plans are Also Population-based Programs

- ◆ The population is the coverage (or employer) group
- ◆ Usually no attempt to stratify and/or customize
  - ❖ Everyone in the group gets the same benefit package regardless of need
  - ❖ May promote over-use, under-use and misuse
  - ❖ Benefit designs may not support and may conflict with goals of disease management programs

# Example of Insurance Benefit Designs That Do Not Support DM Programs

- ◆ Aggressive management of blood glucose is the cornerstone of diabetes disease management programs
  - ❖ Expensive insulin sensitizer drugs, such as Actos and Avandia, are placed in third tier
  - ❖ They also have a prior authorization requirement discouraging busy physicians from prescribing them

## Copay Distributions for Preferred Brand Name Drugs by DM Enrollment Status in a Single Large Health Plan



Chernew, Rosen, Fendrick, unpublished data, 2005

# Failing to Adjust Co-Payments for Individuals in DM Programs Creates Waste

- ◆ Employers, plans and individuals “invest” in DM in an effort to drive treatment plan adherence and better outcomes
- ◆ Copays are in place that discourage adherence
- ◆ More DM resources must be utilized to “overcome” the disincentive

# Value-based Insurance Can Be Designed to Support Disease Management Programs and Goals

- ◆ Co-pays are reduced for diabetes medications and waived when diabetes patients actively participate in a diabetes disease management program
- ◆ Individuals with pre-diabetes and/or metabolic syndrome “earn” lower out-of-pocket by participating in a risk reduction program

# Value-based Insurance Designs Should Leverage, *not* Disincent DM

- ◆ The infrastructure is in place to effectively manage populations with chronic illness
- ◆ Cost-sharing reduces utilization, including appropriate utilization
- ◆ Customization of benefits, via Value-based Insurance Designs, offer the opportunity to apply benefits in a way that optimizes their value



# Questions?

