



Disease Management in Medicaid

The Health Strategies Consultancy

The Intersection of Business
Strategy and Public Policy

Agenda

- I. Disease Management Overview**
- II. State Medicaid Experience with Disease Management**
- III. Case Studies of Emerging Disease Management Programs**
- IV. Conclusion**

I. Disease Management Overview

What is Disease Management (DM)?

Disease Management describes a coordinated and proactive approach to managing care and support for patients with chronic illnesses

DM Programs Employ These Strategies...

- Improved disease and treatment information to providers and consumers
- Improved disease monitoring
- Improved compliance with proven “best practices” for managing a disease
- Improved coordination and communication among caregivers and patients

To Accomplish These Goals:

Reduced direct and indirect costs

Higher quality of life

Clinical improvements

Difference Between Disease and Case Management

- Disease management programs are focused on treating patients with specific diseases
- Case management programs are usually focused on the care of the patient as a whole, enrolling patients with complex combinations of medical conditions

These terms are often used interchangeably; most states refer to their programs as disease management programs

Why Disease Management (DM)?

- **Chronic diseases account for 78% of the nation's medical costs**
- **People with chronic conditions utilize more health care services**
 - 76% of hospital admissions
 - 88% of filled prescriptions
 - 72% of all physician office visits
- **The number of people suffering from chronic conditions is on the rise**
 - In 2003, 125M people had at least one chronic condition
 - By 2020, the number is expected to rise to 157M

SOURCE: Chronic Conditions: Making the Case for Ongoing Care. Johns Hopkins University, Partnership for Solutions, December 2002.

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Prevalence and Cost of Uncured Disease in the US

Uncured Disease	Approximate Annual Prevalence (millions)	Approximate Economic Cost*	
		(\$)billions	year
Cardiovascular	61	\$368	estimated 2004
Cancer	10	175	2002
Diabetes	18	132	2002
Alzheimer's Disease	5	100	1994
Arthritis	70	82	1995
Stroke	5	54	estimated 2004
Depression	19	53	1999
Osteoporosis**	10	17	2001

*Economic costs include both direct and indirect costs of caring for individuals (e.g., direct medical care expenditures, lost work days, lost productivity, mortality).

**Economic costs include only direct expenditures (hospitals and nursing homes).

SOURCE: American Heart Association; Centers for Disease Control and Prevention; American Diabetes Association; Alzheimer's Association; National Institute of Mental Health; National Osteoporosis Foundation.

Snapshot of the DM Industry

- **An estimated 97% of health plans are pursuing some type of effort currently**
- **71% of employers either have or are considering offering DM services**
- **DM industry revenues during 1997-2002 estimated to have increased from \$70 million to \$600 million; expected to reach \$20 billion by the end of the decade**

SOURCES: Disease Management Programs: Improving Health While Reducing Costs. Georgetown University, Center on an Aging Society, January 2004.

Disease Management: The New Tool for Cost Containment and Quality. National Governors Association, February 2003.

Highlights of the 2001 AAHP Annual Industry Survey. American Association Health Plans, 2002. 8

DM Program Activities Can Vary in Participant Engagement and Technology Strategies

High Tech

- **Patient Risk Screening**
(stratify patients for different program interventions based on medical criteria)

- **Remote Patient Monitoring**
(utilize new information technology devices to monitor patients at home)
- **Performance Feedback**
(providers informed on health progress of patients)

Low Tech

- **Population Screening**
(target patients by disease, age group)
- **General Patient Education** (disease brochures)

- **Outreach/Case Management**
(case managers call patients to monitor progress)
- **Team Based Care**
(providers coordinate patients' care)
- **Guidelines/Support**
(promote best practices among providers)

Emerging



Traditional

Low Engagement

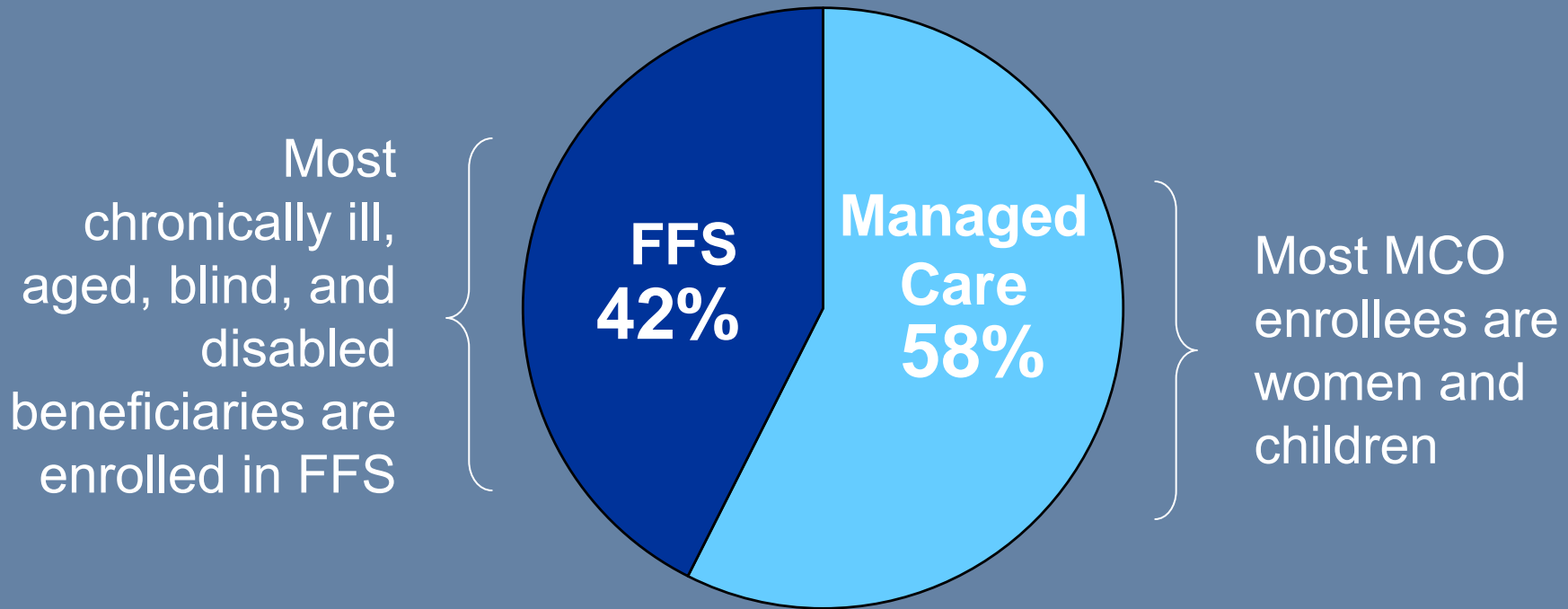
High Engagement

II. State Medicaid Experience with Disease Management

MCOs Have Been Pioneers in Bringing DM to Medicaid

- **Medicaid MCOs, operating in 47 states, have a long history of applying DM services**
 - However, Medicaid MCOs generally enroll healthier populations and utilize tools that may not be effective for more vulnerable populations
- **Medicaid MCO DM programs and tools have kept pace with the private sector**
 - MCOs offer coordinated services and continuity of care that place an emphasis on prevention
 - DM focus on diabetes, asthma, maternal and child health
- **Some Medicaid MCOs outsource DM programs, paying vendors based on performance metrics**
 - E.g., DM diabetes program is required to lower hemoglobin A1C levels by a certain percentage; DM asthma program is required to reduce hospitalizations by a set percentage
- **MCOs belief in the return on investment for DM (in terms of cost and quality) fuels Medicaid FFS programs' interest in DM strategies**
 - However, MCOs have ability to conduct sophisticated evaluations due to availability of coordinated medical and pharmacy claims data

However, MCOs Cover a Different Population from Those Enrolled in FFS



States are beginning to design DM options for vulnerable populations in FFS

SOURCE: Medicaid Managed Care Enrollment Report: Summary Statistics. Centers for Medicare and Medicaid Services, Center for Medicaid and State Operations, June 30, 2002.

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Community Clinics: Opportunity to Facilitate Medicaid DM

- **Currently more than 700 Community Health Centers (CHCs) across the country (3,000 clinic sites)**
 - Charged with providing “primary and preventive care to medically underserved populations”
 - Served more than 8.3 million people in 2002
- **CHC funding comes from grants from the federal government, Medicaid, private insurance, patient fees**
- **Clinics increasingly dependent on Medicaid as source of funding**
 - In 15 years, Medicaid’s share of CHCs’ revenues more than doubled (from 15 to 34 percent)
 - The number of CHCs participating in Medicaid managed care increased throughout the 1990s

Community Clinics: Opportunity to Facilitate Medicaid DM

- **Many clinics already provide DM services to Medicaid beneficiaries**
 - FQHC clinics are expected to participate in DM initiatives
 - Overwhelming majority of CHCs do not get paid for DM services
 - Some preventive services reimbursed by Medicaid; varies on a state-by-state basis
- **Many DM and preventive services targeted on:**
 - Maternal/early childhood health (e.g., prenatal education, childhood immunizations)
 - Diabetes, including diagnosis, regular disease monitoring, patient education
 - Asthma
- **Several studies cite CHCs' success in improving quality**
 - Diabetic patients who use CHCs twice as likely to have glycohemoglobin tested on schedule than the general population
 - CHC Medicaid patients 22 percent less likely to have preventable hospitalizations
- **However, CHCs face significant challenges with changes in the marketplace**
 - Cuts in Medicaid programs, growth of managed care, increasing number of uninsured in recent years

SOURCES: Bonnie Lefkowitz. Health Centers: Past, Present, Future. American Public Health Association, November 1998.

Ann Dievler and Terence Giovannini. Community Health Centers: Promise and Performance. Medical Care Research and Review, 1998.

Opportunities and Challenges for CA's CHCs to Facilitate Medi-Cal DM

Opportunities

- **Many Medi-Cal patients have established relationships with primary care providers in community clinics (CHCs)**
 - About 720 CHCs see 900,000 Medi-Cal patients and provide 3M Medi-Cal encounters/ year
 - Primary care providers are familiar with patients' cultural and linguistic sensitivities
- **Considerable momentum in providing DM services at CA's CHCs**
 - Approximately 40% of CA's CHCs are participating in a chronic care model initiative for at least one disease (e.g., diabetes)
 - Changes practices and provides standard key measures
 - Growing support from CHC leadership for DM development and adoption
 - CHC advocates support "carve-in" DM initiatives where DM services are provided and reimbursed in the primary care setting, such as in CHCs, as opposed to carving-out services to a commercial DM vendor

Challenges

- **Main deterrent to providing DM services is the lack of reimbursement**
 - Most CHCs depend on foundation and private donations to maintain DM services
- **Most CHCs are not in the position to take on financial risk associated with a modified DM initiative as a private DM vendor may be willing to do**

SOURCE: California Primary Care Association. Office of Statewide Health Planning and Development. 2002.

Disease States Most Commonly Targeted by DM Programs

DM in Private Sector

- CHF/Cardiovascular Disease
- Asthma
- Diabetes
- Cancer
- Maternal/Neonatal
- Rare Diseases
- ESRD

DM in Medicaid

- **Depression**
 - **Anxiety**
 - **Psychosis**
 - Diabetes
 - Hypertension
 - Respiratory Illness/Asthma
 - CHF, Cardiovascular
- Different From Private Sector*

SOURCE: Disease Management: The New Tool for Cost Containment and Quality. National Governors Association, February 2003.

Robert I. Garis and Kevin C. Farmer. Examining Costs of Chronic Conditions in a Medicaid Population. Managed Care, August 2002.

CMS Encourages Use of DM for FFS Populations

- **A letter to state Medicaid directors outlines several models states may use to gain federal funds for DM programs in Medicaid**
 - Defines DM programs that qualify for medical services versus administrative matching costs rate
- **Outside funding for DM, e.g., funds from pharmaceutical manufacturers, is considered a supplemental rebate**
 - (i.e., state has to share portion of funding with federal government according to federal match rate)

“We encourage states to take advantage of the opportunities DM programs offer to provide coordinated, cost-effective care that improves the health of Medicaid beneficiaries.”

SOURCE: State Medicaid Director Letter #04-002. Centers for Medicare and Medicaid Services, February 25, 2004.

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States Implement DM Programs Under Varying Authority

- **DM can be implemented as a benefit under a state plan amendment (SPA) under these circumstances:**
 - 1905 (a)
 - Disease management is included as a Medicaid service; must be provided to everyone who meets particular requirements; must be statewide (i.e., geography cannot be limited); provider choice cannot be restricted; enrollment is voluntary
 - 1915 (a)
 - Managed care; enrollment is voluntary; must be statewide; provider choice cannot be limited
 - 1932 (a)
 - Loosens 1915(a) to allow states to require some beneficiaries to enroll in PCCMs or managed care; provider choice and geography (i.e., not statewide) can also be limited; certain groups (including duals) are excluded

States Implement DM Programs Under Varying Authority (cont'd)

- **DM can also be implemented under a SPA with administrative dollars if no direct health services are provided (e.g., outreach, education materials)**
 - Match rate for most administrative activities (50%) is lower than for medical services (national average 57%)
 - Match rates are the same for CA
- **DM can be implemented under waivers under these circumstances:**
 - 1915 (b)
 - Can mandate enrollment (including duals); limit geography; limit provider choice; services provided to beneficiaries enrolled in the waiver
 - 1915(c)
 - For beneficiaries who meet an institutional level of care; limit geography and enrollment; services provided to beneficiaries enrolled in the waiver

Selected Examples of DM in Medicaid FFS

State	DM Program Focus	Years in Operation
Florida	Asthma, CHF, HIV/AIDS, Hemophilia, ESRD, Diabetes, Hypertension, Depression	1998 – Present
Mississippi	Asthma, Diabetes, Hyperlipidemia, Coagulation Disorders	1998 – Present
North Carolina	Asthma, Diabetes, LTC Polypharmacy	1998 – Present
Virginia	Asthma, Diabetes, Ulcers, GERD, CHF, COPD	Asthma Pilot: 1995 – 1997 All Others: 1997 – Present
Washington	Asthma, CHF, Diabetes, ESRD, Other High Cost Patient Populations	2002 – Present

III. Case Studies of Emerging DM Programs in Medicaid FFS and Lessons Learned

Highlights of Selected States With DM Programs

- **Florida**
 - Leader in implementing DM in Medicaid
- **Washington**
 - Experiments in risk-based contracts
- **North Carolina**
 - Innovations in pharmacy management in the LTC setting
- **Jackson, MS**
 - Community-based DM approach

Florida Has Experimented with DM for Several Years

- **1997-8: State obtains waiver to start DM programs; first diseases targeted—asthma, diabetes, HIV/AIDS, hemophilia**
- **1998-9: Initial diseases continued; CHF, ESRD, hypertension, cancer and sickle cell anemia begin**
- **1998-2000: State ends contracts for ESRD and CHF; new and more stringent financial requirements imposed on vendors**
- **2000: Given implementation challenges, state looks for new approaches to manage chronic conditions; COPD added**
- **2001-2: Pharmaceutical industry sponsored DM programs accepted in lieu of supplemental rebates in conjunction w/PDL**
 - State agencies recognized savings in these programs but state legislative budget office criticized program savings
 - Legislature passed legislation to eliminate these programs but the Governor vetoed the bill (2004)

Florida's Experience

- **Extensive experience; many comprehensive programs focus on individual diseases, which incorporate a range of services such as patient education and nurse case management**
- **Legislature granted DM authority and reduced the Medicaid budget in anticipation of DM savings**
- **Challenges emerged over time related to: enrollment, interruptions in Medicaid eligibility, provider involvement, staffing costs, data limitations when trying to calculate savings**
- **Program adjustments have included efforts to:**
 - Target enrollment and engage beneficiaries
 - Move from multiple vendors to a partnership of vendors, providers, beneficiaries and manufacturers
 - Emphasize improved health outcomes, not just savings

Evaluation Results of DM in FL Depend on Point of View

- **Florida Agency**
 - All non-manufacturer sponsored DM programs have produced savings of \$13.3 million since implementation; projected savings of \$19.3 million between 2002-2004
 - Manufacturer sponsored programs* produced savings of \$64.7 million since implementation in 2002
 - Manufacturer sponsored DM programs have reduced inpatient days and ER visits; hospital admissions have decreased by 36%; other programs have experienced similar results
- **Florida Assembly's Budget Office (OPPAGA)**
 - DM programs have only saved \$13.4 million compared to anticipated savings of \$112.7 million from 1997-2001
 - Manufacturer sponsored programs saved less than cash only rebates would have
 - Criticized state's methodology and insufficient assessment of whether health outcomes have improved

* DM programs operated by drug manufacturers in lieu of supplemental rebates; savings include manufacturer contributions to develop and run programs

SOURCE: Progress Report. Office of Program Policy Analysis and Government Accountability an Office of the Florida Legislature, May 2004.

Washington's DM Programs

Patient Populations	Vendor	Patient Identification	Program Intervention	Program Evaluation
Asthma CHF Diabetes	McKesson	<ul style="list-style-type: none"> • Medical claims data identify patients • Vendor stratifies patients by risk level 	<ul style="list-style-type: none"> • Nurses maintain regular contact with patients via telephone • Higher risk patients receive in-person visits 	University of Washington will perform evaluation; will use baseline PMPM costs to determine program savings
ESRD	Renaissance	<ul style="list-style-type: none"> • Beneficiaries identified during dialysis sessions • Not stratified by risk 	<ul style="list-style-type: none"> • Nurses make in-person visits during dialysis • Follow up visits focus on education and self management 	

Unique Attributes of Washington's DM Programs

- **Vendors must assume full risk in contracts**
 - 80% of payment at financial risk based on projected savings
 - 20% of payment based on performance/quality risk
- **Financial and clinical goals clearly expressed in the contracts**
 - Cost goals include vendors producing at least 5% cost savings through reductions in hospitalizations and unnecessary use of ERs
 - Clinical quality goals developed on a disease-specific basis
 - E.g., 55% of asthma enrollees must have an annual flu shot; Diabetes enrollees must have improved HgA1c values and increased use of aspirin; 80% of ESRD enrollees should have Albumin 3.5 or greater, URR 65 or greater, Hematocrit 30 or greater, and Calcium X Phosphate 70 or less
- **Methodology for evaluation established prior to program implementation**
- **State limited vendor selection to two companies**
 - McKesson and Renaissance

Preliminary Results for Washington's DM Programs

- **Programs report an estimated \$2 million in savings during first full year in operation (2002-2003)**
 - Full public evaluation of cost data not yet available
- **150,000 Medicaid FFS beneficiaries identified; 15,500 actively participating in DM program**
 - 5,500 asthma patients; 1,700 CHF patients; 8,000 diabetes patients; 150-300 ESRD patients enrolled in the DM programs
- **Quality improvements between 2002-03 include:**
 - Asthma patients who receive flu shots increased from 45% to 59%
 - CHF patients who weigh themselves daily increased from 28% to 67%
 - Diabetic patients who take aspirin increased from 41% to 57%

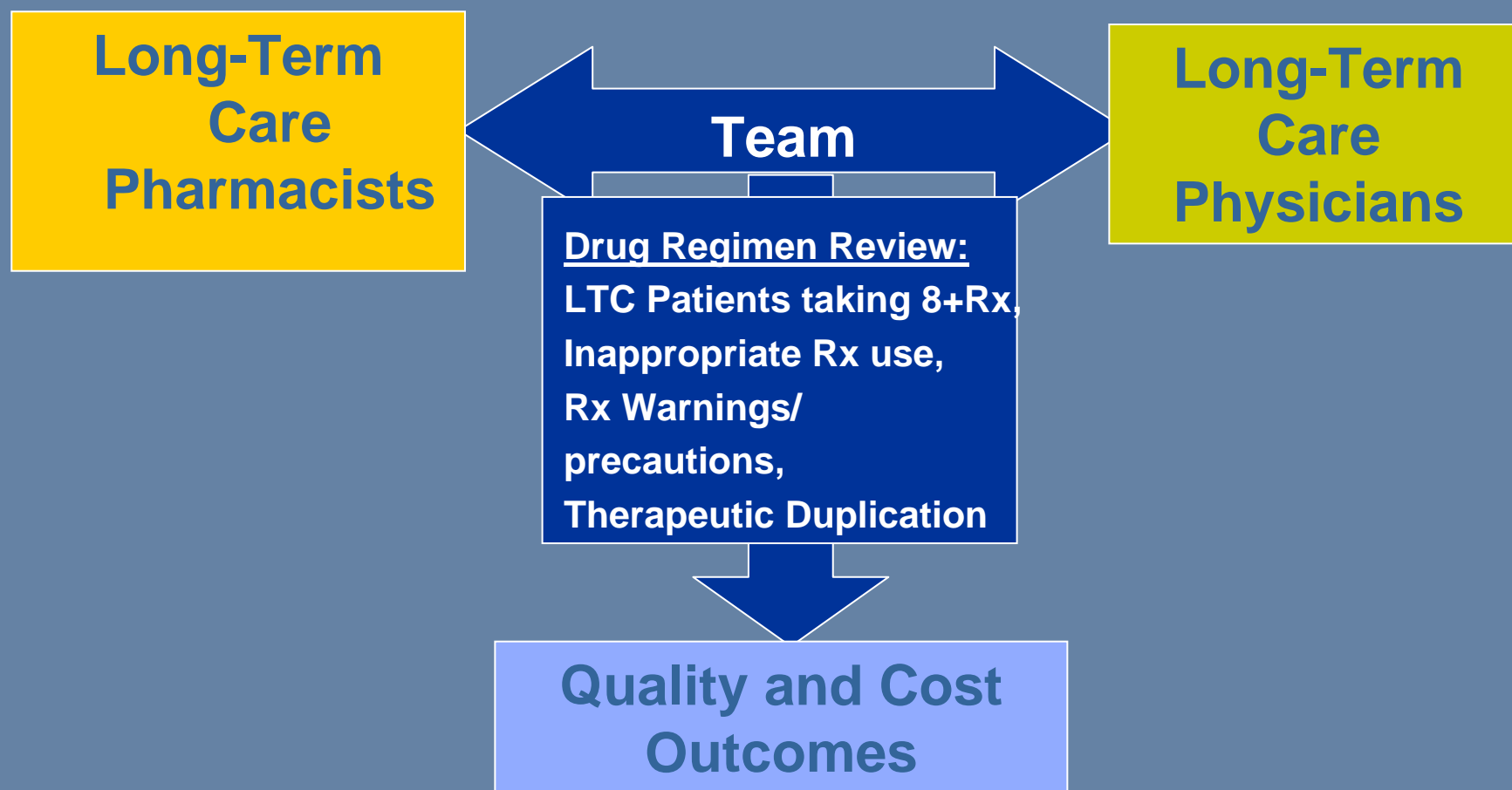
SOURCE: Washington Medicaid and its Contractor, McKesson, Get National Award for Best Disease Management Program. Washington State Department of Social and Health Services, October 15, 2003.

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North Carolina's Pharmacy Management Initiative

- **Health Department directed by Governor's office and legislature to address rising Rx costs**
 - \$1.1B spent on Rx drugs in Medicaid in 2001
 - 2001 Medicaid Rx drug growth rate was 16%
 - Elderly accounted for 34% of Rx drug expenditures
- **Nursing home polypharmacy issues identified—pilot to address this area implemented as part of broader Rx reform**

LTC Polypharmacy Initiative



First Year Results for NC's Pilot Polypharmacy Initiative

- **Quality Results:**
 - 19% decline in use of unnecessary Rx drugs
 - 7% decline in use of the wrong dose
 - 9% decline in use of Rx drugs with potential adverse effects
 - Added new Rx to drug regimens in 3% of cases
- **Cost Results:**
 - \$16M in annual savings reported
 - 4.2% savings per patient
 - 13:1 savings to costs ratio

NC decided to expand the polypharmacy program statewide after its pilot year

Community-Based Approach to DM in Mississippi

- **Jackson, MS clinic affiliated with University of Mississippi**
 - Pharmacy management programs provided in CHCs for Medicaid beneficiaries with asthma, diabetes, coagulation disorders
 - Patients identified based on medical diagnosis
 - Over 40 percent of patients enrolled in the program have coverage through Medicaid FFS
 - Pharmacists manage patient drug regimens, promote self monitoring, patient education
 - Pharmacists reimbursed for DM consultation services; no additional payment for performance measures
 - Participating clinics report \$100K in savings associated with prevented hospitalizations

Lessons Learned from Early Medicaid DM Programs

Observations focus on the following areas:

- Selecting conditions
- Outsourcing DM services
- Identifying/enrolling beneficiaries
- Securing provider buy-in
- Measuring outcomes

Selecting Conditions

Factors to Consider:

- Success in selecting a specific disease depends on:
 - Large number of beneficiaries having the condition, resulting in costly acute events (e.g., ER visits)
 - Consensus surrounding treatment pathways
 - Measurable quality and cost outcomes

Result:

- Asthma, diabetes, CHF most often targeted by states

Future Trends:

- Holistic approaches to patient management (i.e., focused on more than a disease, e.g., case management)

Outsourcing DM Services

Factors to Consider:

- High upfront costs if programs administered internally; however, may result in long-term savings and meaningful program change
- Low upfront costs if outsourced, as states can leverage vendor infrastructure and experience (vendors also often assume financial risk)
- Different vendors for different diseases may complicate care for beneficiaries with multiple conditions

Result:

- Many states outsourcing in current budget climate

Future Trends:

- Continued interest in outsourcing
- Experimentation with new partnerships (e.g., with pharmaceutical companies to secure funding and expertise)

Identifying Eligible Beneficiaries

Factors to Consider:

- Limitations in Medicaid data systems
- Miscoded diagnoses on claims forms

Result:

- In absence of alternatives, medical and/or pharmacy claims data still used to identify patients

Future Trends:

- Integrated use of data files; supplementing data files with additional patient information not recorded electronically

Enrolling Beneficiaries

Factors to Consider:

- Issues with consistency in enrollment
- Lack of continuity of care due to frequent use of ERs and lack of consistency among provider interactions

Result:

- Fluctuating enrollment causes modest program uptake; patient drop off

Future:

- Temporary extension of DM program enrollment
- States move toward automatic DM enrollment with an opt out option

Securing Provider Buy-In

Factors to Consider:

- Programs viewed by some providers as administratively burdensome
- In many programs, there is little communication with providers on effects of programs
- Many programs provide little incentive for physicians to participate

Result:

- Modest provider participation

Future Trends:

- Compensation to providers for DM services
- Providers included in designing program
 - Participation in process increases provider receptivity as providers identify methods that best suit their needs
- Physicians given feedback on program effects
 - e.g., physicians provided with quarterly summaries on patients' progress

Non-Monetary Strategies to Secure Provider Buy-In

- **Integrating physicians into program design**
 - Physicians are more likely to participate in programs developed by their peers, as opposed to vendors, insurers or policymakers
- **Developing program with clinical goals as primary focus**
 - Physicians often do not participate in DM programs because the emphasis of the program is on financial goals rather than clinical goals
- **Providing physicians with feedback on quality effects of program**
 - Physicians express frustration at being far-removed from the program and not knowing the impact the program has on patient care
- **Profiling of DM and preventive services across practices; establishing practice standards**
 - DM vendors and insurers have found that physicians sometimes respond to periodic reports of how they compare to their peers (e.g., use of diagnostic tests, patient compliance in taking certain medications)

Evaluating DM Programs

Factors to Consider:

- Difficulties in establishing budget baseline data
- Effects of program may be realized in the future beyond evaluation timeframe
- Challenges associated with tracking Medicaid patients

Result:

- Savings calculations and health outcome results often questioned
- Difficult to clearly prove DM results because methodology is often criticized

Future Trends:

- States establishing quantifiable goals in advance of program implementation
- Third-party validation of data

Further Discussion of DM Evaluation Methodologies

- **Limitations of state data**
 - Lag between time when medical services are rendered and when cost data are submitted
 - Sometimes separate data systems for physician, ER visits and clinical outcomes data
 - Difficulty in demonstrating causal link between calculated savings and clinical data
- **Methodological challenges**
 - Difficulty of establishing a true control group
 - Regression to the mean—if beneficiaries have particularly high costs during one time period, their costs would be expected to fall regardless of whether they participated in DM
 - Hard to isolate other factors that contribute to improved health outcomes or decreased costs
 - Hard to account for higher short term costs from enrolling patients who were underutilizing and neglecting needed services

IV. Conclusion

Challenges with DM in Medicaid

- **Multiple and inherently complex needs of Medicaid patients**
 - Many patients suffer from more than one chronic condition
 - Many beneficiaries see multiple providers
 - Inconsistent patient follow up
- **Measuring savings is particularly difficult in the Medicaid environment**
 - Incomplete data and unique population challenges make it more difficult than measuring the impact in the private sector
- **Federal approval for programs viewed by some as barriers to implementation**
 - State Medicaid Director letter indicates Administration may be more receptive than in the past

Promise of DM in Medicaid

- **DM programs can improve care quality and patient satisfaction**
 - Beneficiaries report improved health and higher satisfaction with the health care system
- **Medicaid DM activity is growing as states confront budget crises**
 - States hope that DM will help to achieve cost savings without compromising quality
- **Key stakeholders show interest in successful state experiences and future DM trends**
 - States are watching the experience of the forerunners as they implement their own programs

Despite Questions About Outcomes, State Interest in DM Persists

“The DM industry has developed programs that claim to improve the quality of health care services and reduce their costs, but ... it is not yet clear whether those programs can improve health outcomes, much less produce long-term savings.”

– Congressional Budget Office, Sept 2002

“DM provides a strategy for states to improve patient health outcomes and limit health care spending...”

– National Governors Association, Feb 2003

“We encourage states to take advantage of the opportunities DM programs offer to provide coordinated, cost-effective care that improves the health of Medicaid beneficiaries.”

– Centers for Medicare and Medicaid Services, Feb 2004