

There is a tide...which taken at the flood, leads on to fortune;
...on such a full sea are we now afloat
and we must take the current when it serves or lose our ventures.
--William Shakespeare

Coordinating Care for the Chronically III

How Do We Get There From Here?

A report prepared for and informed by

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INTRODUCTION

The number of Americans with one or more chronic conditions is expected to increase from 125 million in 2000 to 157 million by 2020, and the number of people with multiple chronic conditions will rise from 60 million to 81 million. A chronic condition is one that is likely to last more than one year, limits a person's activities, and may require ongoing medical care (Partnership for Solutions 2002a). People with multiple chronic conditions typically receive health and home care services from different systems, often from multiple providers within each system. As a result, the health care delivery system for those with chronic conditions is complex and confusing; care is often fragmented, less effective than it might otherwise be, and more costly. Care for people with chronic conditions accounts for 77 percent of Medicaid spending for beneficiaries living in the community.

As states confront both the growing number of chronically ill and the twin burdens of rising Medicaid spending and declining revenues, they are seeking to develop and sustain care coordination models that help ensure that services are consistent with the complex needs of beneficiaries and that providers are aware of the services received from other parts of the health and long-term care systems.¹

States are not alone in recognizing the need for better coordination of care. Recently, the Institute of Medicine (IOM) has highlighted chronic conditions in its *Quality Chasm* series and identified care coordination as a key component of caring for the chronically ill. At the request of U.S. Health and Human Services Secretary, Tommy Thompson, the IOM has developed a set of demonstration projects that have the potential to lead to fundamental change in the health care system. First among the IOM's five recommendations is using coordinated care to reduce the toll of chronic conditions on individuals and communities.

Dr. David Lawrence, former CEO and Chairman of Kaiser Permanente, writes in his recent book, *From Chaos to Care*, of the acute need for improved care coordination.

Many of the pieces we need to create an outstanding and affordable medical-care system are already in place. But they are scattered, disjointed, isolated from one another, fragments of a vast and costly

¹ A recent Kaiser Commission survey found that 49 states were making Medicaid cost containment plans for fiscal year 2003. Kaiser found that an increasing number of states plan to reduce or freeze provider payment rates, place new controls on their pharmacy costs, increase beneficiary co-payments, restrict eligibility, and reduce benefits. In addition, states are trying to increase their federal share of Medicaid funding by drawing down additional federal funds through "Medicaid maximization" strategies. Specific long-term care cost reduction strategies include: revising reimbursement policies for nursing homes; raising the minimum criteria for acceptance into Home and Community-Based Services (HCBS) waivers; freezing the number of HCBS slots available; and limiting the dollar value of the services the state would pay for under HCBS waivers for persons with developmental disabilities (Kaiser 2003).

puzzle that is still missing critical pieces. Medical care is like the chaos in an ant colony that occurs immediately after the nest is stirred with a stick. Our challenge is to leave that chaos behind, to identify innovations that work, and to knit the pieces together in to something that works for patients across the nation. (Lawrence 2002)

Increasingly, care coordination is recognized as having the potential to help people better access and negotiate complex delivery systems, arrange and schedule services, facilitate communication among multiple providers, and monitor changes. When successfully implemented, social, medical, and hybrid models of care coordination hold the promise of significantly increasing the quality of care for those with chronic conditions and reducing costs.

This paper, a product of the National Academy for State Health Policy's Flood Tide Forum series, is designed to identify innovative strategies to improve care coordination for the chronically ill. It reviews recent data on the incidence and costs of chronic conditions, summarizes the literature on care coordination, and highlights state programs.

OVERVIEW OF CHRONIC CONDITIONS AND IMPLICATIONS FOR THE HEALTH CARE SYSTEM

People with chronic conditions are living longer and more independently because of advances in the health care system and the availability of supportive services. The Partnership for Solutions has issued a series of profiles describing people with chronic conditions (2002b,c,d,e). Among its findings:

- An estimated 125 million Americans had at least one chronic condition in 2000, and the prevalence of chronic conditions is projected to increase to 157 million Americans by 2020;
- In 2000, 60 million Americans had multiple chronic conditions, and by 2020, a projected 81 million people will have multiple conditions; and
- The prevalence of multiple chronic conditions increases with age. Among people age 65 and older, 62 percent have two or more chronic conditions. By age 80 and older, 70 percent have two or more chronic conditions.

For purposes of this paper, a chronic condition is defined as one that is likely to last more than one year, limits a person's activities, and may require ongoing medical care (Partnership for Solutions 2002a). Examples of chronic conditions include arthritis, asthma, congestive heart disease, diabetes, eye disease, hypertension, cancer, and cardiovascular disease.

Twenty-five percent of people with chronic conditions have some type of activity limitation. Typically, people with functional limitations have difficulty performing activities of daily living (ADLs) such as a bathing, dressing, eating, toileting, and mobility and instrumental activities of daily living (IADLs): preparing meals, doing housework, using the telephone, managing medications, paying bills, and getting around outside the home. Nearly three million adults living in the community have severe functional impairments and need assistance with three or more ADLs (Feder et al. 2000). People with functional limitations often require supportive services to maintain their independence. Care can be provided informally by a spouse, family member, or friend or formally through a network of community-based long-term care programs and agencies. People with multiple chronic conditions receiving medical care and supportive services from separate delivery systems and providers are at risk of poor outcomes if care is not coordinated (Anderson and Knickman 2001).

The Partnership for Solutions (2002a) analysis of data from the Medical Expenditure Panel Survey (MEPS) shows that people with chronic conditions use more hospital care, physician services, prescription drugs, and home health visits than people without chronic conditions. Care for people with chronic conditions consumes 78 percent of all health care spending, 95 percent of Medicare spending, and 77 percent of Medicaid spending for beneficiaries living in the community. Eleven million, or nine percent, of the people with chronic conditions rely on Medicaid for coverage, and two and a half million (two

percent) are dually eligible for Medicaid and Medicare. The average per capita health care expenditure is significantly higher for individuals with one or more chronic conditions than for those with no chronic conditions. Among the Medicaid population, the costs are more than double, and for people age 65 and older who are dually eligible for Medicare and Medicaid, costs are more than five times higher. Out-of-pocket spending also increases with the number of chronic illnesses, especially among those 65 and older. People with five or more chronic conditions average 15 physician visits and fill almost 50 prescriptions in a year. A national study reported in the *Journal of the American Medical Association* found that 23 percent of community dwelling elderly patients in the U.S. received at least one of 33 potentially inappropriate medications (Zhan et al. 2001).

WHY COORDINATE CARE FOR PEOPLE WITH CHRONIC CONDITIONS?

Concerns over how best to serve people with chronic conditions have grown in recent years among both practitioners and policy makers. As noted above, this population is vulnerable to adverse outcomes, their care generally results in high medical costs, and the number of individuals with chronic conditions is expected to grow markedly over the next 30 years (Thornton et. al. 2002). The implications for the country's health care system are significant; for states and their Medicaid programs, and for Medicare and housing programs, they are enormous.

Historically, health care providers have devoted little time to assessing a patient's functional ability, providing instruction in behavior change or self-care, or addressing emotional or social distress. Care is often fragmented, with little communication across settings and providers (Chen et. al. 2000). People with multiple chronic illnesses often have to navigate a system that requires them to coordinate several disparate financing and delivery systems themselves, making it more difficult to obtain the full range of appropriate services. In addition, persons who need access to different programs are most likely to find that each program has different eligibility criteria, sets of providers, and providers that are not linked organizationally (Anderson and Knickman, 2001).

A nationwide study published in the *Journal of the American Medical Association* recently documented that tens of millions of patients with chronic diseases in this country are not receiving the type of care management proven to be effective. Researchers at the University of California-Berkeley and the University of Chicago found that physician groups on average used only 32 percent of 16 recommended care management processes for asthma, congestive heart failure, depression, and diabetes. These processes include the use of nurse case managers, programs to help patients care for their illness, disease registries, reminder systems, and feedback to physicians on their quality of care. The study also found that one physician group in six uses none of these processes (Casalino 2003).

People who need supportive services often delay seeking care until some acute exacerbation of their condition occurs, a crisis that might have been avoided if the person had sought assistance earlier (Anderson and Knickman 2001) or if care coordination had been available. In fact, an analysis conducted by the Partnership for Solutions suggests a correlation between the number of chronic conditions a patient has and the frequency of ambulatory care sensitive conditions (ACSCs). ACSCs are conditions for which timely and effective outpatient primary care may help to reduce the risk of emergency room use and hospital and nursing home admissions (such conditions include angina, asthma, diabetes, congestive heart failure, and hypertension). With each additional condition, the hospitalizations associated with avoidable illness increase dramatically.

AMBULATORY CARE SENSITIVE CONDITIONS AND MEDICAID COSTS

Hospital spending was the key driver of overall cost growth in 2001 reflecting increases in both hospital payment rates and use of hospital services (Strunk et al. 2002). Hospitalization rates are also known to drive health insurance premiums. Yet, national research has shown that 3.7 million (11.5 percent) of all hospitalizations were for potentially avoidable conditions (Kozak et al. 2001). The American Hospital Association estimates the cost per hospitalization to be \$6,649, suggesting that \$24.6 billion dollars is spent annually on potentially avoidable hospitalizations. In addition, the number of avoidable hospitalizations has been increasing over the past two decades and is significantly greater for Medicaid patients than for privately insured patients (Kozak et al. 2001 and Weissman 2002).

The Agency for Healthcare Research and Quality (AHRQ) recently highlighted the link between avoidable hospitalizations and quality of care by creating Prevention Quality Indicators, a set of free tools that use public-use hospital discharge data to detect potentially avoidable hospital admissions for common conditions. This effort also standardized the conditions and ICD-9-CM codes for avoidable hospitalizations. (AHRQ 2002).

AHRQ researchers identified 16 conditions, which if adequately treated by primary care providers, generally do not require hospital inpatient care. Hospitalizations associated with these conditions are considered avoidable to the extent that timely and adequate outpatient care—including physician office visits, laboratory tests, and prescription medications—could have prevented the need for hospital care.

Ambulatory Care Sensitive Conditions (ACSCs) are a focus of the Wisconsin Partnership Project, a major Medicare Medicaid Integration Project discussed below. Legislators in the State of Washington are also concerned about ACSCs. A recent report on avoidable hospitalizations in Washington State illustrates how states can analyze their Medicaid data using the AHRQ Prevention Quality Indicators. This study analyzed claims and enrollment data for adult and child Medicaid recipients. The estimates were specific to fee-for-service Medicaid recipients (40 percent of all Medicaid recipients in Washington) who are not dually eligible for Medicare. Among that population, 13 percent of all hospitalizations were avoidable (Lerch 2002).²

The Washington study found that the prevalence of chronic disease was higher for persons with avoidable hospitalizations than for all persons with a hospital stay. The five chronic diseases with the highest percentages of avoidable hospitalizations among Washington fee-for-service, non-dual eligible Medicaid enrollees were asthma, chronic

² This analysis did not include cost data. Lerch analyzed fee-for-service enrollees because the state data is most complete for this population. Based on the Medicaid enrollment figures published by Kaiser, nationally about 60 percent of all Medicaid enrollees are enrolled in fee-for-service or primary care case management. Each state has extensive utilization and cost data on these beneficiaries.

obstructive pulmonary disease, diabetes, alcohol and other drug abuse, and mental disorders.

WHAT DOES CARE COORDINATION MEAN?

Care coordination is a generic term that is sometimes used interchangeably with case management, care management, and disease management. Several variations of care coordination have emerged to improve care, promote independence, and reduce unnecessary service utilization. This coordination occurs along a continuum from social to medical in a range of settings that include independent care coordination agencies, provider agencies, health systems, group practices, and integrated networks.

One review of case management literature concludes that while there is professional agreement on the components common to most case management models (outreach, screening and intake, comprehensive assessment, care planning, service arrangement, monitoring, and reassessment), those components are implemented with considerable variation (National Chronic Care Consortium 1997). These variations are often due to the location from which the case management is provided, the case managers' type and level of authority, and the purposes of the services being provided.

Care coordination for people with chronic conditions who receive home and community services is usually considered a social model with limited connections to medical providers. A medical model of care coordination has begun to emerge in the fee-for-service health care system and in managed care programs. Over the past several years, state policy makers have recognized the gap between supportive and medical services and new hybrid models are being developed. Some models are fully integrated managed care programs that cover both medical and long-term care services funded by Medicare and Medicaid. Others coordinate medical and long-term care services delivered through the fee-for-service system.

Care coordination is an integral component of long-term care and supportive services programs, and many states have created managed care-like systems for delivering these services. But health care services for people with chronic conditions are delivered in a very different manner. By and large, states reimburse for health care services for Medicaid beneficiaries with chronic conditions, and this fee-for-service care is delivered very differently from states' managed long-term care and supportive services. In addition, states, in general, have less control over the delivery of these services as a significant percentage of Medicaid beneficiaries with chronic conditions are "dually eligible" for services, covered by Medicaid and Medicare, with Medicare serving as the primary payer.

As the health system has evolved, providers have recognized the need for care coordination to manage the multiple treatments ordered for people with chronic conditions. The emergence of managed care drew attention to the complex needs of individuals with acute and chronic health conditions and to the challenges that functional and cognitive limitations, multiple funding sources, and multiple service providers pose to the traditional health and long-term care systems. Managed care has been a vehicle to develop coordination across settings and payers to produce preferred outcomes.

Much of the literature about medical models of care coordination focuses on provider initiatives to improve services for Medicare beneficiaries. States have developed medically-based approaches to care coordination through disease management programs serving beneficiaries with a specific diagnosis and primary care case management services for beneficiaries with complex social and medical conditions that place them at high-risk of hospitalization and adverse outcomes.

A comprehensive study of best practices in care coordination (Chen et al. 2000) noted that both disease management and case management focus on education for members. The case management initiatives help members identify and manage symptoms, self-monitor their conditions, avoid things that trigger acute episodes, reduce stress, and comply with medications, diets, and follow-up regimens. Disease management programs use similar strategies focused on the diagnosis.

Chen concluded that effective programs have three major components: assessment and planning, implementation and delivery of services, and reassessment and adjustment of interventions. Care coordination activities require clear goals to prevent health problems and crises by detecting problems early, whereas disease management programs follow evidence-based treatment and management guidelines. Traditional disease management programs do not usually coordinate with long-term care services. In addition, evidence based guidelines are based on clinical studies that often do not include patients with multiple chronic conditions and therefore the interactions between medications and treatments are unknown.

STATE INITIATIVES TO COORDINATE CARE

Current state efforts at coordinating integrated care vary by the program's focus, the organization responsible for care coordination, the scope of authority of care coordinators, and the relationship of the programs to primary care services. Because of the importance of the relationship between people with chronic conditions and the primary care provider, we have summarized several different state initiatives that are built on these relationships, some of which operate within Primary Care Case Management (PCCM) programs. Each summary includes an overview of the program, its purposes, the services provided through the program, the type of care coordination included in the model, and results to date.

GEORGIA — SOURCE

In Georgia, the Medicaid program contracts with health provider systems to link primary medical care with supportive services through case managers who are employed at ten sites across the state. Service Options Using Resources in a Community Environment (SOURCE) began in 1997 and is administered by the Division of Medical Assistance in the Department of Community Health. The demonstration is authorized under the state's Georgia Better Health Care (GBHC) Program, a primary care case management program operating under a Section 1915(b) waiver and the Community Care Services Program (CCSP) 1915(c) waiver. Approximately 70 percent of Georgia Medicaid beneficiaries are enrolled in GBHC.

SOURCE is an enhanced case management program that served 2,345 Medicaid eligible frail elderly and disabled adults in 96 counties in December 2002. The program links primary medical care with an array of long-term care services in a person's home or community to delay or prevent the need for preventable hospital and nursing home care or to allow the patient to return to the community from a nursing home or hospital. Unlike other HCBS waivers, SOURCE participants have at least one chronic medical condition and can be divided into four levels of care. Under two of the levels of care, beneficiaries must meet the Georgia Medical Facility nursing home level of care criteria.

SOURCE is an alternative to the CCSP, a more traditional HCBS waiver program that served 14,000 elderly and disabled individuals in Georgia in 1999 and that is administered by the state's Department of Human Resources, Division of Aging Services. CCSP is similar to HCBS waiver programs in many other states.

Purpose

SOURCE integrates primary medical care with supportive services through case managers who work with primary care physicians. Beneficiaries who meet eligibility criteria enroll with a provider organization for their primary care. The program was established to:

- Integrate primary care, specialty care, and home-based care to eliminate fragmentation;
- Reduce inappropriate emergency room use and hospital and nursing home admissions caused by preventable medical complications;
- Stabilize social and lifestyle factors that affect compliance, health status, and quality of life;
- Ensure that current gaps in Medicaid benefits for medical and supported living services are addressed so they do not negatively affect health outcomes and cost; and
- Reduce the need for long-term institutional placement.

Services

SOURCE case managers work closely with primary care physicians to complete assessments and care plans and to authorize supportive services. Case managers can authorize all HCBS waiver services available to SOURCE participants. These include home-delivered meals, emergency response systems, adult day health services, personal support services (including respite care), skilled services, home health services, services in personal care homes (assisted living), and 24-hour medical access based on a plan of care that supplements informal supports. SOURCE staff indicate that the SOURCE case managers have been successful in obtaining such additional services as incontinence supplies, nutritional supplements, and cab vouchers, services that are available in the community (through grants or donations, for example) but that are not a benefit covered under GBHC or CCSP. Efforts to obtain these types of non-reimbursed items and services are mandated in the SOURCE policy manual. Each SOURCE site has a team of professional case management staff with varied backgrounds to encourage a mix of disciplines and ideas. Program administrators indicate that sites with case managers from both nursing and social work disciplines are most effective.

SOURCE is designed to build strong linkages between the medical and social support elements and offer more intensive care management than CCSP. Eligibility for CCSP is limited to people who require a nursing home level of care, while SOURCE eligibility includes people who do not meet the nursing home level of care. CCSP program staff reported that the CCSP enrollees are also older than SOURCE enrollees, have more dementia, and weaker informal supports.

SOURCE sites receive \$150 per member per month for care coordination activities that cover medical director time, case management functions, and provider oversight. Costs for these services under the CCSP program are included in the budget for each case management agency. The two programs differ in other ways as well:

- CCSP services are capped at approximately \$1,500 per member per month. Services for SOURCE enrollees are not capped.
- CCSP rotates referrals to all licensed Medicaid providers. SOURCE contracts with a limited number of licensed Medicaid providers and meets monthly with each provider

to review performance against benchmarks. Providers who fail to meet benchmarks have an opportunity to improve but may be replaced if they fail to do so.

- SOURCE staff emphasized the importance of coordinating with hospital discharge planners, while the CCSP staff suggested that the staff do not have enough time to coordinate with discharge planners as consistently as the SOURCE case managers, presumably because the caseloads are higher.

Enrollees in SOURCE must choose a SOURCE provider as their primary care physician, and this policy has raised concerns that potential enrollees who already have an established relationship with a non-SOURCE primary care physician (PCP) might be unwilling to enroll. SOURCE staff indicated that many enrollees lack a regular primary care physician prior to enrolling in SOURCE and had used emergency rooms for primary care. Thus, in practice, enrollment in SOURCE did not usually require enrollees to leave their PCP.

Care Coordination

SOURCE care management is a multi-disciplinary team approach. A care team comprised of case managers, clinicians, and program administrators meet weekly to establish, review, and revise the care plans, monitor client progress, and resolve issues. After enrollment, the case manager completes an assessment during a home visit and prior to the appointment with the primary care physician. The assessment provides more extensive information to the physician about the enrollee's social history, home environment, and functional status than would be obtained during an initial visit to obtain a medical history. Case managers contact enrollees at least once a month and make home visits at least once every quarter. The care path protocols (discussed below) are completed at each quarterly home visit. SOURCE program staff have found that the case management needs are episodic. One physician interviewed indicated that the program makes it easier for physicians to care for people with multiple conditions and that they are more confident that enrollees will receive additional, needed services.

Case managers and physicians follow standard protocols for monitoring outcomes. Following an initial assessment, a Level of Care checklist is completed to determine how much care the enrollee needs.

There are four levels of care with four corresponding care paths. Levels one and two include people with substantial cognitive and/or physical impairments that meet the nursing home level of care criteria. Levels three and four include people who have at least one chronic condition but do not meet Georgia nursing facility criteria. The program responds to the enrollee's risk factors in an effort to maintain functional capacity and prevent the progression of chronic conditions.

Each care path has goals (expected outcomes) and is customized to the needs of the beneficiary. Care paths are based on functional ability, not diagnosis, and cover community residence, skin care, medical compliance, transfers, informal supports,

nutrition/weight, key clinical indicators, ADLs/IADLs, and problem behaviors. Each path delineates the roles and responsibilities of the beneficiary, primary care physician, and the case manager.

The level one care path contains 13 goals (listed below), the maximum number of goals in a care path, and includes all the goals of the level two, three, and four plans as well as some additional goals. A beneficiary's customized plan of care details how the goals will be achieved.

Level one care path goals:

1. Enrollee/caregiver contributes to the design and implementation of community-based services plan.
2. Enrollee keeps scheduled medical appointments.
3. Support services are delivered in a manner satisfactory to SOURCE enrollee, informal caregivers and case managers.
4. SOURCE enrollee's body mass supports functional independence and does not pose a critical health risk or progress is made towards this goal.
5. Meals are generally balanced and follow appropriate diet recommended by PCP.
6. Enrollee has no skin breakdown or decubiti requiring clinical intervention/wound care or breakdown/decubiti measures smaller or quality of tissue is improved.
7. Key clinical indicators and lab values will regularly fall within parameters acceptable to SOURCE PCP or treating specialist.
8. Enrollee/caregiver understands and complies with medication regimen.
9. No observations by case managers or reports from enrollee/caregiver/other providers (including SOURCE PCP) identifying problems with ADLs, IADLs and/or patient safety.
10. Residential arrangements remain stable.
11. Mental health conditions or cognitive impairment will be adequately managed by informal or paid caregivers.
12. Patient has no falls due to unsuccessful attempts at transferring or mobility.
13. No reports or other indicators of caregiver exhaustion.

Results

The average costs for waiver services per enrollee for nursing home eligible enrollees in both programs are comparable. Total Medicaid costs over two years were lower for SOURCE nursing home eligible enrollees than comparable beneficiaries who received home care services that were not coordinated with primary care. Average costs for two years were \$15,350 for nursing home eligible SOURCE enrollees and \$19,751 for non-SOURCE individuals. Nursing home eligible SOURCE enrollees have fewer nursing home placements and shorter lengths of hospital stays than participants in the regular HCBS program who receive less frequent reassessments and home visits and who do not receive monthly reviews by a care coordination team. Further analysis of these results is

needed to determine the role of frailty among the populations in the two programs. Georgia State University is currently conducting an evaluation of SOURCE.

NORTH CAROLINA – ACCESS II & III

Carolina ACCESS is a PCCM program which began in North Carolina in 1991 and operates in all 100 counties. It is administered through the Division of Medical Assistance (DMA). The ACCESS II & III demonstration programs were implemented in July 1998 to build on Carolina ACCESS by working with local providers and networks to improve the coordination of care for Medicaid enrollees at the greatest risk of poor outcomes and related high cost.

ACCESS II & III have the same objectives but slightly different designs. ACCESS II consists of 10 integrated networks, and ACCESS III includes two countywide networks. Both local networks are comprised of providers with a stake in Medicaid (independent physicians, large group practices, hospitals, health departments, departments of social services) who have agreed to work together to develop care management systems and supports to manage enrollee care. Both programs are administered through the Office of Rural Health in conjunction with the Division of Medical Assistance (DMA).

Each ACCESS II & III network has two primary groups that provide local leadership and direction for the network, the Governing Board/Steering Committee and the Medical Management Committee. Staff indicated that the forum for local buy-in and input provided by these committees contributed to the successful implementation of local quality improvement initiatives.

While home and community-based services are currently managed outside of Access II & III, the program administrators have been asked to develop two pilot projects. The first would combine case management of waiver services and primary care in countywide networks, similar to the Georgia SOURCE program. The second pilot would provide case management for enrollees in nursing homes.

Purpose

ACCESS II & III are designed to support the development of community care systems that manage the care of Medicaid enrollees. The program is a partnership of local providers as well as a state/local partnership. The state provides resources, information, and technical support to help the ACCESS II & III networks deliver care. The networks work with the State in defining, tracking, and reporting performance measures that are focused on quality, utilization, and cost.

The programs bring providers together to plan cooperatively for meeting patient needs and to strengthen the community health care delivery infrastructure. ACCESS II & III staff indicate that targeted care and disease management are able to occur because the

program has the ability to implement system changes needed at the physician practice level.

Services

The local ACCESS II & III systems are characterized by the following:

- Medicaid enrollees linked to primary care physicians;
- Medical and administrative committees providing direction in care management activities;
- Communication systems across all local agencies caring for the Medicaid population.
- Dedicated case managers to carry out population management/stratification activities,³ and
- Care management processes that apply both new and existing resources, such as health department support services, to meet the needs of enrollees.

ACCESS II & II networks have developed care management initiatives for asthma disease management, diabetes disease management, and emergency department utilization. Inpatient admissions are one of the largest categories of North Carolina's Medicaid expenditures, and emergency room expenditures increased by 35 percent in FY 2002. The ACCESS II & III programs provide targeted outreach, education, case management and follow-up to those who use the emergency department inappropriately. The initial asthma and diabetes disease management programs (described below) were designed to reduce unnecessary hospitalizations and emergency department visits. In addition, both diseases had evidence-based best practice guidelines and opportunities existed for improving the quality of care.

Asthma disease management (DM) was the first program-wide initiative developed and implemented in ACCESS II & III. Physicians adopted National Institutes of Health guidelines for evidence based "best practices," identified performance measures, implemented office procedures and system changes, and participated in regular chart audits and evaluation measurements. They began with asthma because it had been identified as the primary reason for hospital and emergency department visits for Medicaid patients under 21 years of age. Fourteen percent of the North Carolina Medicaid population has asthma, and it is the most prevalent chronic illness among children. The asthma disease management program has since been expanded to adults.

Diabetes in North Carolina is the primary reason for hospital and emergency department visits by adults and the fifth leading cause of death, accounting for 14 percent of all hospitalizations. Hospitalization for diabetes cost the state \$117 million annually. As

³ Population stratification is the application of a common series of measures to describe the distribution and severity of illness and the index of resource utilization (assigning enrollees to "risk buckets" for purposes of program assignment) in an effort to anticipate individual enrollees' needs. Enrollees falling within certain risk strata are assigned to case management, disease management, and other preventive health programs designed by each network.

part of Diabetes DM, physicians identified evidence based best practices and performance measures, are in the process of implementing office procedures and system changes, and are participating in chart audits and evaluation measurements. The network clinical directors chose to adopt the American Diabetes Association (ADA) guidelines for the core program elements in the ACCESS II & III diabetes DM program.

In 2002, the ACCESS II & III sites began statewide implementation of several new initiatives, including:

- *Polypharmacy.* Physician and pharmacist teams evaluate patients receiving six or more drugs in nursing homes and eight or more in ambulatory settings to address the 21 percent increase in pharmacy costs in FY 2002. In addition to cost containment, polypharmacy provides an opportunity to improve quality.
- *Best Prescribing Practices.* ACCESS II & III physicians are developing and implementing a best prescribing practices initiative based on the efficacy and cost of selected drugs. This effort is designed to encourage the use of generics when appropriate and will be available through a web-based application. In addition, pocket guides and office charts will be available for all participating physicians and practices.
- *Generic Prescribing.* Providers are receiving specific profiling reports on generic prescribing that identify opportunities for improvement in prescribing patterns.
- *Emergency Department.* To address the 35 percent increase in emergency department utilization in FY 2002, enrollees with three or more emergency department visits are targeted to receive case management to help them access less expensive care through primary care providers. Providers, enrollees, and hospitals will also receive targeted educational efforts.

Care Coordination

In addition to a primary care provider (PCP), ACCESS II & III enrollees have care managers who assist in developing, implementing, and evaluating enhanced managed care strategies at each site. ACCESS II & III PCPs receive \$2.50 per member per month and the networks are paid an additional \$2.50 per enrollee per month care management fee. The enhanced care management fees to support the Access II & III networks are paid to a non-profit administrative entity. These funds are used to support the local infrastructure needed to implement a community model of care and primarily fund the case managers and other staff who work in concert with the local physicians and practices.

Results

In FY 2001 ACCESS II & III had a 34 percent lower hospital admission rate for enrollees under 21 than the control group and produced \$12.3 million in savings. In the same year, ACCESS II & III had an 8 percent lower emergency department rate than the control

group, saving \$1.7 million. The diabetes DM program began in late 2001, and initial chart audits have shown an increase in the percent of patients receiving best practices in compliance with national ADA guidelines.

During FY 2001, North Carolina's Division of Medical Assistance analyzed HEDIS data related to the treatment of persistent asthma in its pediatric population across the four systems of care offered through the North Carolina Medicaid Program (ACCESS, ACCESS II & III, HMOs, and fee-for service). Of those individuals ages 5 through 20 continuously enrolled in Medicaid for years 1998 and 1999, 4.7 percent were identified as persistent or chronic asthmatics. Approximately 60 percent of these children were receiving appropriate medications for long-term asthma management during year 1999. There were significant differences across the systems of care with Carolina ACCESS and ACCESS II & III children having the highest rates for appropriate medication use. The average asthma episode cost for children enrolled in ACCESS II & III was 24 percent lower than for those not enrolled in the program (a \$166 decline per episode). Chart audits also demonstrated a steady improvement in use of best practices.

WISCONSIN PARTNERSHIP PROGRAM

The Wisconsin Partnership Program (WPP) is a voluntary, fully integrated, comprehensive program serving elders and people with physical disabilities who meet the Medicaid criteria for admission to a nursing home. It combines all Medicaid and Medicare acute and long-term care services. The Partnership began operations in 1995 as a partially capitated pre-paid health plan. It began operations as a fully capitated program under an 1115/222 waiver in 1999. WPP currently operates as a demonstration program in four areas of the state. The state contracts with four community-based organizations for care coordination. The organizations contract with physicians, hospitals, and other providers to offer a comprehensive benefits package. Two sites serve elders, one serves adults with physical disabilities, and one site serves both. In July 2002, the program served 1,260 beneficiaries.

WPP is similar to the PACE model with two primary differences: participants are allowed to retain their primary care physician if the physician agrees to join the program, and participation in an adult day care program is not required.⁴ Another major difference from PACE is that people with physical disabilities age 18 or older (that are nursing home eligible) are eligible to enroll in WPP and PACE is limited to elderly beneficiaries.

⁴ PACE (Program of All-Inclusive Care for the Elderly) is a capitated Medicare and Medicaid managed care benefit for the frail elderly that features a comprehensive medical and social service delivery system. It uses a multidisciplinary team approach in an adult day health center supplemented by in-home and referral service in accordance with participants' needs.

Purpose

The primary goals of the Wisconsin Partnership Program are to:

- Improve the quality of health care and service delivery while containing costs;
- Reduce fragmentation and inefficiency in the existing health care delivery system; and
- Increase people's ability to live in the community and participate in decisions about their health care.

Services

The capitation payment covers all services available through Medicare, the Medicaid state plan, and Medicaid HCBS waivers. Services are provided in the beneficiary's setting of choice. The capitation payment gives sites the flexibility to approve non-traditional services that help a beneficiary maintain his or her independence. For example, an expansion has recently occurred to include full dental care.

Care Coordination

An important feature of the WPP delivery system is the use of interdisciplinary care coordination teams. The teams include a geriatric nurse practitioner (GNP), social worker/social services coordinator, and a registered nurse. The GNP serves as the liaison to each member's primary care physician. Assessment and care planning is a function shared between the teams and each member. The process includes identifying health and social service needs, services to support the member in the context of his or her own resources and capabilities, and goals regarding work and participation in the community. Each site uses an operation protocol developed by the state's Department of Health and Family Services, Division of Systems Delivery Development that describes the procedures for teams to work with the member. The protocol emphasizes the role of the member as a critical part of the team. Teams met weekly and review member service plans every six months or more often if necessary.

The GNP role is to serve as the link to the primary care physician, whose involvement in the overall care plan varies widely. In some cases, the physician may communicate actively with the team, while in others there may be little direct communication. Coordination depends heavily on the relationship between the GNP and the physician and the physician's willingness to delegate responsibility for ongoing care oversight.

Typically, GNPs or registered nurses attend primary care visits. During the meeting, they discuss the care plan and the physician's previous orders to treat or manage chronic conditions. According to Partnership staff, physicians have been willing to work with the team if the GNP is well prepared. For example, during an office visit, the GNP might list the last six changes in the member's blood pressure.

The social worker team member provides information about benefits and services available outside of WPP. The social worker will often accompany the member when applying for benefits such as food stamps or SSI.

The experience of the Partnership suggests that developing effective interdisciplinary teams takes time. Members of the program staff report that the WPP teams worked to create a shared vision of the model and the role of the team and each member. With experience, members from different disciplines came to understand the perspective and professional judgment of other team members.

Results

A formal evaluation of the program is under way. The state agency tracks and analyzes information on WPP enrollees. A review of encounter data has found a very low incidence of emergency room visits and hospital admissions for ambulatory care sensitive conditions. Hospital days dropped from between four to five days per year per thousand to 2.1 days after enrolling in WPP. Nursing home days also declined, and emergency room visits were basically unchanged.

OREGON CONTRACT RN SERVICE

Oregon has a mature community-based care system for elderly and disabled Medicaid beneficiaries. In the 1980s, local Area Agencies on Aging (AAAs) and regional field offices became a single point of entry for persons seeking long-term care. The Seniors and People with Disabilities Division (SPD) serves 75 percent of its Medicaid clients in home and community-based care settings, which is significantly higher than the national average. The state was able to achieve a significant shift from nursing facility to home and community-based care by pooling long-term care funding and thereby allowing money normally spent for nursing home care to support residential and in-home services based on the preference of the consumer.

In the early 1990s, Oregon implemented Medicaid managed care through the Oregon Health Plan (OHP). OHP managed care plans are required by state law to create Exceptional Needs Care Coordinators (ENCC) for certain elderly and disabled members. ENCCs coordinate services among providers within HMO networks. They also coordinate acute and long-term care services with aging and disabled service network agencies. The number of ENCCs that a plan must have is not specified in the law and over time, the number has declined to less than ten statewide. The few remaining ENCCs focus on medical care for a small number of medically unstable and high cost members.

In 1998, the state implemented the Contract RN service in another effort to coordinate care between the medical and long-term care systems. Contract RN is designed to support clients with stable, chronic, and/or maintenance health care needs. It is a modified

disease management program that brings enrollee specific medical education and training to long-term care providers and the enrollee.

Purpose

The goals of the Contract RN program are to:

- Maintain functional capacity;
- Minimize risk;
- Maximize the strengths of the client and the care provider; and
- Promote autonomy and self-management of health care through teaching and monitoring.

Services

The contract registered nurses (CRNs) focus is health care assessment, care planning, and teaching rather than the provision of direct care for clients with acute care needs. The CRNs support the direct caregivers of Medicaid clients in institutional and home and community-based settings. The Seniors and People with Disabilities Division began the Contract RN program five years ago and currently contracts with 150 registered nurses (CRNs) throughout the state. CRNs are financed through Medicaid administrative expenses and are eligible for 75 percent federal match.

Care Coordination

The CRN service begins when an enrollee's case manager makes a referral to the CRN for the assessment of an enrollee's functional and health care needs and the training the provider requires. Based on the assessment findings the CRN develops a proposed six-month health care plan and visitation schedule. Within five working days after the completion of the assessment, the CRN meets with the case manager to review the assessment, health care plan, and proposed visitation schedule.

If during the course of an assessment, the CRN discovers the need for mental health, hospice, or home health agency care for a client, the CRN makes the necessary referral or communicates the need to the case manager. Together they revise the health care plan to document how the additional services will be coordinated.

The case manager authorizes the health care plan and CRN visitation schedule and orders equipment and services indicated in the health plan. Based on the health care plan, the CRN provides instruction and supervision to the care provider and the client. Training is directed towards helping the client's care provider learn more about specific disease conditions, meet needs associated with activities of daily living, and perform nursing tasks. The CRN also teaches how to prevent deterioration and care complications as well as improve function. CRNs provide these support services for care providers in all

settings, but as noted above, the majority of Oregon's Medicaid long-term care recipients receive these services in home and community-based settings.

The CRN also consults and coordinates with other medical professionals (i.e., physicians, pharmacists, nurse practitioners, mental health personnel, home health and hospice RNs) when indicated in the health care plan. According to program staff, the CRN, the care provider and the client often attend medical appointments together.

Changes in client status are to be reported to the case manager by the CRN within one working day. Staff note that increased CRN hours are occasionally needed (during flu season, for example) and the program has the flexibility to respond to these changing needs.

Results

No outcome data are available, but the SPD Division staff reports that the program works best with more predictable and stable enrollees. They also suggest that the program has had the most success with people with diabetes, those with paralysis and younger adults with disabilities. For these patients, the focus is on self-management, and the number of needed CRN hours tends to be low generally.

DISEASE MANAGEMENT IN ARIZONA

The Arizona Long Term Care System (ALTCS) is part of the state's Medicaid program and provides acute care, behavioral health, and long-term care services to elders, younger adults with physical disabilities, and people with developmental disabilities through capitated managed care. ALTCS managed care organizations conduct traditional disease management, educating medical providers about the members' chronic diseases and monitoring health between physician visits to detect early onset of an acute episode or other changes in condition.

Pinal/Gila Long-term Care (P/GLTC) is one of eight ALTCS contractors and serves two rural counties with an enrollment of about 1,050 members. P/GLTC has designed an innovative program applying disease management principals in long-term care settings. In the P/GLTC DM program, disease management is provided by the assisted living facilities and attendant care providers with which the P/GLTC is already contracting.

Purpose

Several of the goals of the P/GLTC DM program are similar to traditional disease management programs that provide services through medical care providers. These goals include: increasing compliance with adult immunizations and diabetic screens, using primary care providers for preventive health care, and decreasing emergency room

visits and in-patient admissions. Two additional and more unique objectives of the P/GLTC program are to assist the PCP with the medical management of his or her home-based members and to educate home and community-based care providers so they are better able to care for members.

Services and Coordination

About one-third of P/GLTC's enrollees receive long-term care services through home-care providers; two-thirds receive them through assisted living facilities or attendant caregivers (personal assistants).

The work of the caregiver in assisted living facilities and the attendant caregivers is dictated by the specific care plan developed for each member. The services they provide typically include frequent observation of the enrollee and coordination of PCP visits for preventive care, preventive screens, adult immunizations, and other preventive health care measures. The caregiver is charged with reporting to the PCP any signs of a change in condition in order to facilitate early intervention. Caregivers are also required to attend quarterly meetings to discuss compliance with quality improvement projects, learn of enhancements or changes to the program, and become familiar with any quality management trends identified by the disease management program.

As noted above, the remaining one-third of enrollees receiving long-term care services are in the "Home Alone" program and receive disease management from a DM nurse. These services are typically delivered over the phone and include periodic evaluation of the member's condition; coordination of PCP appointments for preventive health screens, disease specific health screens, and adult immunizations; and information and support regarding disease progress or psychosocial issues.

The disease management nurse also conducts mandatory training programs on chronic diseases, organizes quarterly meetings for continuing education, and serves as a resource for assisted living facilities and attendant caregivers on medical care issues.

Results

The program began in December of 2002 and no outcome data are available.

MAINE NET

Begun in 2002, MaineNet is a state initiative that specifically addresses pharmacy utilization issues. Ninety physicians (practicing in six physician groups) are involved in the project. Together they serve 2,000 elderly and disabled Medicaid beneficiaries who have diabetes, heart disease, or congestive heart failure.

Purpose and Services

The program uses Medicaid claims data to produce on those target beneficiaries who, in addition to having one or more of the chronic conditions listed above, also:

- Receive prescriptions from more than three physicians;
- Have nine or more prescriptions;
- Receive prescriptions that may be inappropriate for people over age 65; and/or
- Have not had their prescription filled within the last three months.

These reports are then provided to the beneficiary's physician. The state has a data use agreement with CMS to receive and analyze Medicare data for these patients. However, the adjudication process for the Medicare claims has a six-month to one-year lag. This makes it difficult to see the entirety of the patient's utilization, so in practice the program is not using this information for the regular reporting to physicians. The MaineNet staff plan to analyze the complete utilization data on an annual basis.

Coordination

The data reports also give physicians information about how other professionals are serving the same beneficiaries and offer opportunities for responding to and coordinating care. The physicians meet periodically with the MaineNet program manager to review the data and discuss interventions. The program manager is a health educator from the University of Southern Maine, Edmund S. Muskie School of Public Service.

In addition to receiving patient utilization reports and meeting with the MaineNet program manager, participating physicians are offered an educational meeting with the project's consulting pharmacist to review the findings and discuss medication alternatives. Physicians are compensated at the contractual rate of \$100 per hour for the actual time spent with the pharmacist or the program manager.

Results

The program staff indicates that participating physicians have been surprised by the number of prescriptions their patients receive from other providers and have found the information about treatments from other providers helpful. The program staff also reports changes in prescribing practices for specific individuals when the physician is notified that the patient is receiving an inappropriate medication, but that behavior is not yet being applied to other patients that come into the program.

FLOOD TIDE FORUM PARTICIPANT DISCUSSION THEMES

This paper was prepared as background information for participants in a NASHP Flood Tide Forum on care coordination for people with chronic conditions. Participants in the February 2003 Flood Tide Forum—many with direct experience in developing and implementing care coordination efforts in their states—were convened to discuss these programs and how they might shape future efforts. The participants identified the following issues, building blocks, and process steps as important consideration for states working to build and refine care coordination activities and programs.

Key Issues

Chronic Conditions. People with four or more chronic conditions need to be identified. Systems need to be able to identify the conditions that clients have that need to be managed. The systems needs to address the full scope of beneficiary needs and should focus on both social and health needs. It may be easier to build care coordination for chronic conditions within the long-term care system than within the health care system.

Dual Eligibles. Policy makers need to understand how dual eligibles and people with chronic conditions drive Medicaid spending.

Universal assessment tools are necessary. Assessment tools that cross populations, settings of care, and systems of care are difficult to develop but important to managing care for people with chronic conditions.

Care plans need to be based on beneficiary needs, not the list of services available, and need to offer a flexible menu of service options. Care coordinators need linkages with physicians and hospitals in order to identify admissions and intervene when appropriate. Team meetings are valuable when multiple providers, agencies, or programs are serving beneficiaries with complex needs.

Physician involvement. Successful strategies for getting physicians involved need to be identified.

Prescription management is key. Strategies may include:

- Seeking larger medical practices with nurse practitioners to assist physicians;
- Developing claims data to prepare reports for physicians of beneficiaries with Beers List prescriptions; and
- Identifying physicians who may be problem prescribers.

Mental health. Prescription drug and mental health issues must be dealt with. States might consider contracting with community mental health centers to serve beneficiaries with mental health needs.

Building Blocks

Flood Tide Forum participants identified a number of building blocks that have proved successful in some states and that may hold promise for other states seeking to build, improve, and/or expand their care coordination activities. They include:

- Establishing single entry point systems that use a universal assessment tool;
- Building care management expertise about chronic conditions within the single entry point system, acknowledging that case managers sometimes resist learning and dealing with “medical” issues;
- Building competencies of home and community-based service providers to prevent, monitor, and treat chronic conditions;
- Including physicians in the care coordination model and paying for case review time;
- Integrating Medicare and Medicaid case management services. A new CMS demonstration program to provide care management or disease management for Medicare beneficiaries includes dual eligibles.
- Developing integrated Medicare and Medicaid demonstrations such as the Wisconsin Partnership Program (WPP) and Minnesota Senior Health Options (MSHO);
- Despite recognized barriers to expanding managed care models, especially for dual eligible beneficiaries, forum participants supported expanding existing integrated Medicare and Medicaid demonstrations.
- Expanding existing integrated models to include additional target populations. For example, expanding the Minnesota Disability Health Options, which currently includes people with physical disabilities, to enroll people with developmental disabilities.

Process Steps

Finally, the Flood Tide Forum participants with direct experience in building and/or expanding state care coordination programs suggested the following steps states might take to develop or refine their care coordination activities:

Develop goals, including some short-term (18-24 months) results that might highlight, among other things:

- Improved access and coordination of health and long-term care services for people with chronic conditions that bridge health and long-term care systems;
- One-time expenditures tied to savings;
- Reductions in the spending trend line;
- The achievement of immediate and concrete savings; or
- The reinvestment of some savings in start-up capacity and staffing.

Develop options among the building blocks listed above and identify the barriers and opportunities associated with each.

Identify and involve decision-makers including the governor, legislators, agency heads, consumers, and advocates to gain support for the goals.

Design a road map. Each state needs to consider whether the most appropriate approach is a pilot program, statewide policy, or phase-in based on the size of the state. Among Flood Tide Forum participants, there appears to be a preference for the pilot demonstration approach. Other factors for consideration include how easily a plan or program can be replicated, where the support and opposition will come from, and the history of working relationships, philosophies, and past coordination efforts (among agencies and individuals in the state) .

CONCLUSION

The growing prevalence and costs of caring for Medicaid beneficiaries with chronic conditions have enormous implications for states. In an effort to meet the growing demand for programs and services for the chronically ill, to insure quality, and to contain the costs of this care, states are increasingly looking to models of care coordination. But coordinating care for the chronically ill is a complex endeavor, one reason, perhaps, why so many different approaches to care coordination have begun to emerge.

The programs described in this paper can be distinguished in two important ways.

1. Whether the approach to coordinating care builds on *medical systems* or *home and community-based service systems*.

Two of the programs detailed here build on medical systems: MaineNet by integrating prescription drug utilization and North Carolina by community involvement in disease management.

Two programs integrate medical and home and community-based services in both medical and long-term care settings. SOURCE sites include hospitals, nursing homes, and area agencies on aging. The Wisconsin Partnership Program's interdisciplinary teams are located at an Independent Living Center, a community-based organization, elderly housing units, and a hospital.

Two programs, in states with sophisticated Medicaid managed care programs (Oregon and Arizona) are building on their home and community based systems by providing medical education and support to HCBS providers.

2. Whether the program's primary focus is on *reducing fragmentation between medical care providers and home and community-based care providers* or on *improving prescription drug utilization*.

The Georgia SOURCE, Oregon Contract RN, Wisconsin Partnership Program, and Arizona programs focus on reducing the fragmentation between the long-term care services and medical care. The MaineNet and North Carolina programs primarily focus on coordination across medical providers to improve prescription drug utilization.

Although the approaches to care coordination in these programs vary, the underlying emphasis is the same: each attempts to reduce fragmentation of care for people with chronic conditions. The programs are also all, to some degree, interdisciplinary, available to multiple populations (older adults and adults with disabilities), and applicable to enrollees in home, community-based, and institutional settings.

States devote significant resources, more than three-quarters of Medicaid spending, to care for people with chronic conditions. States also face increasing costs and budget deficits. These programs offer promising approaches to address cost and quality issues, but few evaluations have been conducted. Further research, analysis and dissemination of the results will be important in determining the pace and direction of their expansion. Given the complicated needs of people with chronic conditions however, care coordination will remain a critical component of quality care for the growing number of people with chronic conditions.

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