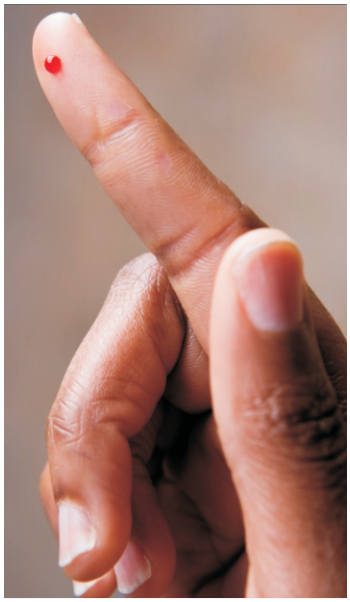
HHS MCC Strategic Framework



Private Sector Activities Focused on Improving the Health of Individuals with Multiple Chronic Conditions

INNOVATIVE PROFILES

Private Sector Activities Focused on Improving the Health of Individuals with Multiple Chronic Conditions

Innovative Profiles

November 2012

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
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Disclaimer

Review of activities and their inclusion in this report do not constitute an endorsement, promotion, or approval by HHS.

Background and Purpose

An increasing number of Americans are living with multiple chronic conditions (MCC) and other associated disabilities (including mental health illnesses such as depression, and long-term physical disabilities). The escalating problem of MCC among Americans is now considered to be a major public health and medical challenge. In an effort to begin to address the issue of MCC, the U.S. Department of Health and Human Services (HHS), with input from key stakeholder organizations, developed an action-oriented strategic framework[1] that outlines strategies for maximizing care coordination and improving health and quality of life for individuals with MCC. The HHS MCC Strategic Framework comprises four overarching goals that support the HHS vision for optimum health and quality of life for individuals with MCC.

1. Foster health care and public health system changes to improve the health of individuals with MCC
2. Maximize the use of proven self-care management and other services by individuals with MCC
3. Provide better tools and information to health care, public health, and social services workers who deliver care to individuals with MCC
4. Facilitate research to fill knowledge gaps about, and interventions and systems to benefit, individuals with MCC

Each goal is associated with a number of objectives and strategies that HHS—in conjunction with stakeholders and those who provide care to individuals with MCC—can use to guide efforts to better care for persons with MCC.

To date, both the Federal and private sectors have responded to the proposed strategic framework by investing resources to improve the care of people with MCC. In an effort to better understand the progress that has been made in advancing the MCC Strategic Framework, HHS collected information from all of its operating divisions and agencies to identify HHS-sponsored activities currently underway that address the goals and objectives outlined in the framework. The HHS inventory[2] consists of information self-reported by HHS operating agencies and includes programs that are primarily focused on the MCC population. Additionally, HHS commissioned (Contract No: HHSP23320095603WC) an evaluation and environmental scan of relevant, private sector-initiated (or non-HHS) activities that address strategies contained in the MCC Strategic Framework.[3]

The purpose of this report is to highlight a selection of the many innovative and successful activities that could potentially improve the quality of care and health outcomes for persons with MCC. This report focuses on select examples of non-HHS activities[4] that have a strong alignment with the objectives and strategies outlined in the

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[1] U.S. Department of Health and Human Services (2010), Multiple chronic conditions—A strategic framework: optimum health and quality of life for individuals with multiple chronic conditions (http://www.hhs.gov/ash/initiatives/mcc/mcc_framework.pdf)

[2] U.S. Department of Health and Human Services. U.S. Department of Health and Human Services (HHS) inventory of programs, activities and initiatives focused on improving the health of individuals with multiple chronic conditions (MCC). Compiled by the HHS Interagency Workgroup on Multiple Chronic Conditions under the direction of Anand Parekh, M.D., M.P.H., Deputy Assistant Secretary for Health (Science and Medicine), Office of the Assistant Secretary for Health. August 2011 (http://www.hhs.gov/ash/initiatives/mcc/mcc-inventory-20111018.pdf)

[3] Private Sector-Initiated Inventory of Programs, Activities, and Initiatives Focused on Improving the Health of Individuals with Multiple Chronic Conditions. Compiled by AFYA, Inc. and the Mongan Institute for Health Policy. 2012. Visit the HHS MCC Initiative Web site for access to the Web-based Inventory (http://www.hhs.gov/ash/initiatives/mcc/)

[4] While most of the included activities have been developed in the private sector with support from numerous private sources, many of the included activities have received research support from one or more federal sources such as the Agency for Healthcare Research and Quality or the National Institutes for Health.

MCC Strategic Framework. In addition, we selected activities that are innovative in their approach or perspective, have a demonstrated impact, are broadly scalable, or provide valuable insights and lessons for professionals or individuals/caregivers living with MCC. The specific criteria for selection are noted in the text box below. The brief summaries of activities profiled in this report are based on publicly available information, data from the published literature, and/or self-reported data provided by an activity's sponsoring organization. Activities were selected from a larger inventory of activities compiled of private sector-initiated/non-HHS sponsored activities

Innovative Activity Selection Criteria

Required:

- ✓ Address goals and objectives outlined in the MCC Strategic Framework

Should Demonstrate:

- ✓ Innovation, as demonstrated by one or more of the following:
  - Has a novel approach or perspective, including:
    - Identification of and training for new or expanded roles for health care professionals (including nurses, allied health professionals, students, or new graduates) or community providers
    - Include or train individuals with MCC (or their caregivers) in the management of their chronic conditions
    - Uses new technology or uses technology in a new or novel way
    - Guidelines, tools, or research that address the unique perspectives of persons with MCC
  - Addresses the needs of a new or unique patient population
  - Has a broad impact
- ✓ Positive impact on quality, safety, cost, and/or satisfaction (patient or caregiver) in the management of individuals with MCC
- ✓ Replication of the model or activity in other facilities or communities
- ✓ Evidence of scalability (where applicable)

that address the HHS MCC Strategic Framework.[5] Activities profiled in this report are organized alphabetically within each of the four goals of the MCC Strategic Framework. Additional noteworthy activities that address the MCC Strategic Framework are also identified at the end of each goal-related section.

The target audience for this report includes researchers, health care professionals (including physicians, nurses, or other allied health professionals), students or new graduates, community providers, policymakers, administrators, or individuals with MCC, their families, and/or caregivers.

[5] Private Sector-Initiated Inventory of Programs, Activities, and Initiatives Focused on Improving the Health of Individuals with Multiple Chronic Conditions. Compiled by AFYA, Inc. and the Mongan Institute for Health Policy. 2012 under contract to HHS (Contract No: HHSP-23320095603WC). Visit the HHS MCC Initiative Web site for access to the Web-based Inventory (http://www.hhs.gov/ash/initiatives/mcc/)

MCC Strategic Framework Goal 1: Foster health care and public health system changes to improve the health of individuals with MCC

Goal 1 Objectives and Strategies

Objective A: Identify evidence-supported models for persons with MCC to improve care coordination

- ✓ **Strategy 1** Define and identify populations with MCC broadly, and MCC subgroups with specific clusters of conditions, and explore focusing care models on the subgroups at high risk of poor health outcomes
- ✓ **Strategy 2** Develop and expand pilot studies and demonstration projects for innovative, multidisciplinary, longitudinal person-centered care models that improve health outcomes and quality of life while maintaining or decreasing net costs, and implement evidence-supported models

Objective B: Define appropriate health care outcomes for individuals with MCC

- ✓ **Strategy 1** Define desired health care outcomes appropriate for individuals with MCC
- ✓ **Strategy 2** Ensure that testing of care models includes evaluation of MCC-relevant outcomes

Objective C: Develop payment reform and incentives

- ✓ **Strategy 1** Work with stakeholders to identify, develop, and test incentives and payment approaches (e.g., episode-based payments across care settings) that promote effective care coordination for individuals with MCC
- ✓ **Strategy 2** Disseminate information about, and implement the use of, incentives that promote cost-effective care coordination by providers who care for individuals with MCC

Objective D: Implement and effectively use health information technology (HIT)

- ✓ **Strategy 1** Encourage the meaningful use of electronic health records (EHRs), personal health records, patient portals, and clinical registries to improve care for individuals with MCC
- ✓ **Strategy 2** Test and implement the use of secure messaging and additional health information exchange (HIE) platforms (e.g., telemedicine and remote monitoring) to improve care for individuals with MCC
- ✓ **Strategy 3** Encourage the use of HIT as a public health tool for monitoring the population's health and key performance measures related to mitigating the impact of MCC

Objective E: Promote efforts to prevent the occurrence of new chronic conditions and to mitigate the consequences of existing conditions

- ✓ **Strategy 1** Develop and implement preventive health and public health systems approaches that increase effectiveness in the prevention of new chronic conditions among persons with MCC, including conditions potentially arising from interactions between existing chronic conditions or therapies for those conditions, and the progression and exacerbation of existing chronic conditions
- ✓ **Strategy 2** Adopt public health policies (e.g., targeting unhealthy and risky behaviors, environments, and foods associated with increased risk of chronic disease) to prevent exacerbations or occurrence of new chronic conditions in persons with existing MCC
- ✓ **Strategy 3** Explore incentives to improve individuals' participation in chronic disease risk behavior prevention and other prevention programs

Objective F: Perform purposeful evaluation of models of care, incentives, and other health system interventions

- ✓ **Strategy 1** Conduct ongoing surveillance – through providers and individuals with MCC – of the impact and effectiveness of interventions for MCC
- ✓ **Strategy 2** Disseminate feedback to individuals with MCC, providers, researchers, and policymakers on needs and options for making more effective use of, and improving, interventions for MCC

1 AtlantiCare Special Care Center

Developed by AtlantiCare

About This Activity

In 2007, the Local 54 Health and Welfare Fund, which provides health benefits to Atlantic City's union restaurant, hotel, and casino workers, partnered with AtlantiCare, the largest local health care provider in southern New Jersey, to develop the Special Care Center (SCC), a new clinic that provides coordinated care management to beneficiaries with multiple chronic illnesses. The SCC is a primary care practice that provides intensive care management services to high-cost, medically complex patients, most with MCC. Under this program, a physician-health coach team works with the patient to develop a customized care plan that is reviewed and revised as needed. The patient receives a variety of ongoing care and care management support as indicated in the care plan, including regular phone and e-mail communications from the health coach, hospital and home visits, group visits, and other support. Regular communication and a patient registry support the effort.

Assessment of Its Impact

Impact on Health Outcomes and/or Quality of Life

Patients enrolled in the program for at least 6 months experienced significant improvements in clinical outcomes related to hypertension, cholesterol, and blood glucose management, as outlined below.

- The percentage of patients with hypertension in good control (defined as systolic blood pressure or SBP of less than 140 mm Hg) increased from 68.4 percent at enrollment to 82.3 percent after 6 months. The percentage with poor control (an SBP greater than 160 mm Hg) fell from 8.5 percent to 2.4 percent over the same time period, with an average drop of 26 points in this group. The percentage of diabetes patients with SBP greater than 140 mm Hg fell from 26.1 percent to 15.0 percent.
- Patients who entered the practice with a low density lipoprotein (LDL) level of 130 mg/dL or above experienced an average decline of 30 points after 6 months in the center, while those who entered with an LDL above 160 mg/dL experienced an average drop of 50 points. The percentage

Key Features

The AtlantiCare SCC is based on a care model called the Ambulatory Intensive Care Unit (A-ICU), which aims to improve outcomes and reduce costs by actively managing medically complex patients according to their individual needs.

Innovative components include:

- ✓ For patient recruitment, SCC uses a predictive computer model to identify and invite the most costly patients (top 10 percent in terms of expected total health care expenses). Hospital case managers may refer patients, and individuals with multiple chronic illnesses may self-refer.
- ✓ The SCC Staff consists of two physicians (one who serves as medical director); a registered nurse (RN); a social worker who manages the clinic; and a team of community health workers, known as health coaches, supervised by the RN.
- ✓ Health coaches are bilingual in English and at least one other prevalent language.
- ✓ Care coordination is achieved by having the patient, physician, and health coach meet to review the patient's health status, agree to health-related goals, and create a care plan designed to achieve those goals.
- ✓ The practice uses a Web-based patient registry to facilitate appropriate disease management and electronic medical records (EMRs) for all documentation.

of patients with low cholesterol (defined as LDL less than 100 mg/dL) increased from 69.9 percent to 77.1 percent. The percentage of diabetes patients with poorly controlled cholesterol fell from 15.8 percent to 11.4 percent.

- The proportion of diabetes patients with poor blood sugar control (defined as a hemoglobin A1c greater than 9 percent) dropped from 20.2 percent to 11.9 percent after 6 months in the program, with an average drop of 2.38 percentage points in this group. The proportion with excellent control (hemoglobin A1c less than 7 percent) rose from 40.8 percent to 52.5 percent.

Impact on Non-Health Outcomes

- After implementation, two phone surveys of patients were conducted. Both surveys documented positive responses from the majority of patients served by the SCC.
- Clinical providers and health coaches report that patients are more engaged in their care as a result of SCC enrollment. Some even bring their family members to appointments so they can work together on improving their health.
- Using Fund data, analysts followed trends for this population before and after their enrollment with the SCC. They found that prior to enrollment, the cost of patient care was rising by 25 percent per year. Post-enrollment, the annual increase is just 4 percent compared to the rate of 12 percent for a similar non-SCC population served by the Fund.

Sources

- Blash L, Chapman S, and Dower L. The Special Care Center-A joint venture to address chronic disease. Center for the Health Professions. Research Brief. 2011. 1-9 pg. Available at: www.futurehealth.ucsf.edu/Content/29/2010-11_The_Special_Care_Center_A_Joint_Venture_to_Address_Chronic_Disease.pdf
- Shaw G. (2009) Can health care quality improve and cost decrease? Pilot project in Atlantic City may show the way. Robert Wood Johnson Foundation grant results. Available at: http://www.rwjf.org/reports/grr/056351.htm

Awards or Recognition

The SCC model, based on the A-ICU model, is featured in a summary in the Agency for Healthcare Research and Quality's (AHRQ's) Health Care Innovations Exchange.

The AtlantiCare SCC model also received the Premier Cares Award for innovative, successful management of chronic conditions.

Additional Information

More information about the AtlantiCare Special Care Center is available online at:
http://www.atlanticare.org/index.php/special-care-center

2 Care Management Plus

Developed by Intermountain Healthcare and Oregon Health & Science University

About This Activity

The Care Management Plus program is a care management and coordination model designed to address the care needs of individuals with MCC. Care Management Plus redesigns primary care using a team-based approach. It combines two main components: a care manager situated in the primary care clinic who works with patients who have complex conditions, and effective use of an electronic information technology system. Care Management Plus was developed at Intermountain Healthcare.

Primary care physicians (PCPs) refer patients with complex care needs to a care manager. The care manager (a nurse or social worker) is trained in essential patient self-management skills. By consulting with the patient, family, physicians, and other health care providers, the care manager assesses the patient's needs, creates a care plan, and ensures that the care plan is implemented.

An electronic information system facilitates the work of the interdisciplinary team through the incorporation of evidence-based guidelines, protocols, and reminders for the optimal care of patients. The Care Management Tracking database monitors tasks such as clinician follow-ups, check-in calls to patients, ensuring tests are ordered, and tracking patient outcomes. An electronic messaging system helps providers gain access to care plans, reminds them of best practices for the patient' specific conditions, and facilitates communication among the health care team.

Key Features

Care Management Plus is a care coordination model designed to meet the needs of patients with MCC and their caregivers, and includes identification of individuals who may benefit, health status assessment, care planning, use of clinical practice guidelines for disease management, coaching and self-management training for patients and their families, support with care transitions, coordinated care among providers, proactive monitoring, and ongoing guidance and support.

Innovative components include:

- ✓ The Care Management Plus program has ICCIS (Integrated Care Coordination Information System), a Web-based tracking program based on the Care Management Plus software, which can more easily exchange information with EHRs and population registries.
- ✓ The program also has a training curriculum that includes in-person intensive training and 8 weeks of online instruction.

Assessment of Its Impact

Impact on Health Outcomes and/or Quality of Life

Six related studies in Utah were completed to evaluate the effectiveness of care management in the initial program. All used matched controls of patients with similar disease states, healthcare usage, age, and gender as intervention patients.

- **Reduced mortality**: One study identified an approximate 20 percent reduction in mortality for all Care Management Plus patients; individuals with diabetes had the largest reduction.

- **Decreased hospitalizations**: Hospitalizations decreased 8 percent for all patients (14 percent for individuals with diabetes).
- **Improved symptoms of depression**: In a third study, individuals with depression were much more likely than the control group to move from severe to mild/moderate depression.
- **Increased adherence**: One study demonstrated a 20 to 42 percent improvement in adherence to diabetes process and outcome measures, including HbA1c and LDL control, when patients were care managed.
- **Increased productivity**: A multivariate time-series analysis of productivity indicated that physicians who referred appropriate patients to Care Management Plus experienced a 5 percent to 10 percent increase in productivity as soon as the next month.
- **Improved physician satisfaction**: For 19 physicians who used the system and were assessed through qualitative interviews, the vast majority of them expressed being extremely pleased with the system for the time it saved, improvements in the patient's health, and a reduction in frustrations experienced.

Sources

- Dorr DA, Wilcox A, Burns L, et al. Implementing a multi-disease chronic care model in primary care using people and technology. Dis Manag. 2006;9(1):1-15.
- Donnelly S, Burns L. Using clinic-based care managers to improve quality outcomes and increase efficiency in primary care. Quality Insight. Fall 2006:7-8.
- Dorr DA, Wilcox A, McConnell KJ, et al. Productivity enhancement for primary care providers using multi-condition care management. Am J Manag Care. 2007;13(1):22-8.
- Dorr DA, Wilcox A, Jones SS, et al. Care management dosage. J Gen Intern Med. 2007;22(6):736-41.
- Wilcox AB, Jones SS, Dorr DA, et al. Use and impact of a computer-generated patient summary worksheet for primary care. AMIA Annual Symp Proc. 2005:824-8.
- Dorr DA, Wilcox A, Donnelly SM, et al. Impact of generalist care managers on patients with diabetes. Health Serv Res. 2005;40(5 Pt 1):1400-21.
- Dorr DA, Wilcox AB, Brunker CP, et al. The effect of technology supported, multi-disease care management on the mortality and hospitalization of seniors. J Am Geriatr Soc. 2008;56(12):2195-2202

Awards or Recognition

The Care Management Plus program has been recognized in numerous articles and presentations and the primary investigators have received awards for their work on this program. See the Care Management Plus Web site for additional detail: http://caremanagementplus.org/news.html

Additional Information and Resources

The Care Management Plus project offers several printerd and virtual tools: (1) a readiness assessment survey for interested clinics and/or health systems, (2) the Care Management Tracking database; and (3) a patient summary sheet. These and other resources for senior care management are available at the Care Management Plus Web site: http://caremanagementplus.org/srresources.html

3 Care Transitions Intervention®

Developed by Eric A. Coleman, M.D., M.P.H., and the Division of Health Care Policy and Research at the University of Colorado in Denver

About This Activity

The Care Transitions Intervention® is a patient-centered care transition approach that addresses potential threats to quality and safety during care transitions. Patients with MCC and family caregivers receive specific tools and learn self-management skills during a 4-week program. A Transitions Coach®, who is an advanced practice nurse, supports both the patient and caregivers to ensure their needs are met during the transition from hospital to home.

The intervention focuses on four conceptual areas referred to as The Four Pillars®: (1) assistance with medication self-management, (2) a patient-centered record owned and maintained by the patient to facilitate cross-site information transfer, (3) timely follow-up with primary or specialty care, and (4) knowledge of "red flags" indicative of a worsening condition and instructions on how to respond to them.

The model was designed to be truly patient-centered and, as such, the first step in its development was to solicit the insights of the target population. Qualitative studies were performed to learn more about the experiences of older adults and family caregivers during times of transitions. Subjects were asked to describe approaches that they believed would provide greater support during transitions and improve their overall experience. The Care Transitions Intervention® was then explicitly designed to be consistent with patients' recommendations through the Four Pillars.

Key Features

The Care Transitions Intervention® is associated with extensive provider and patient tools, as well as special provider training, and has been adopted by numerous health care provider organizations. There has been exceptional diversity among the care settings that have adopted the model. The model has been implemented in rural populations, low literacy populations, African-American and Hispanic populations, and in high performing as well as low performing markets.

A key component to the approach is the Transitions Coach® who supports the patient and ensures their needs are met during care transitions.

Innovative components include:

- ✓ The Personal Health Care Record (PHR), a patient-centered document containing key information needed to help facilitate the continuity of the patient's care across settings.
- ✓ Medication self-management and a Medication Discrepancy Tool©.
- ✓ A care transitions measure and an associated toolkit designed to help providers assess the quality of care transitions, and for the use of performance measurement and public reporting.

Assessment of Its Impact

Impact on Health Outcomes and/or Quality of Life

- **Fewer hospital readmissions**: Patients who participated in this program were significantly less likely to be readmitted to the hospital, and the benefits were sustained for 5 months after the end of the 1-month intervention.
- A randomized controlled study of the Care Transitions Intervention® found that intervention patients had lower hospital readmission rates than control patients at each time interval studied (30 days, 90 days and

180 days). Intervention patients also had significantly lower hospital costs at 90 days and 180 days.

- **May detect more medication discrepancies**: Organizations that have adopted the model have reported that Transitions Coaches® detect medication discrepancies in over 40 percent of patients.
- **Enables health goal achievement**: Patients who work with Transitions Coaches® are significantly more likely to achieve 30-day personal health goals.

Evidence

- Coleman EA, Parry C, Chalmers S, Min SJ. The Care Transitions Intervention: results of a randomized controlled trial. Archives of Internal Medicine 2006;166:1822-8.
- Coleman EA, Smith JD, Frank JC, Min S, Parry C, Kramer AM. Preparing patients and caregivers to participate in care delivered across settings: The Care Transitions Intervention. J. of the Amer Geriatrics Society. 2004;52(11):1817-1825.
- Parry C., Kramer H, Coleman EA. A qualitative exploration of a patient-centered coaching intervention to improve care transitions in chronically ill older adults. Home Health Care Services Quarterly. 2006;25(3-4):39-53.
- Parry C, Coleman EA, Smith JD. Sites of geriatric care. Home Health Services Quart. 2003;22(3):1-18.
- Coleman, EA, Mahoney E, Parry C. Assessing the quality of preparation for post-hospital care from the patient's perspective: The Care Transitions Measure. Medical Care. 2005;43(3):246-255.
- Coleman EA, Smith JD, Raha D, Min SJ. Post-hospital medication discrepancies: prevalence, types and contributing factors. Arch of Int Med 2005;165(16)1842-1847.
- Smith JD, Coleman EA, Min S. Identifying post-acute medication discrepancies in community dwelling older adults: a new tool. American Journal of Geriatric Pharmacotherapy. 2004;2(2):141-148.

Awards or Recognition

Numerous instances of how the Care Transitions Intervention has influenced policy are listed on the following Web site: http://caretransitions.org/policy.asp

Additional Information and Resources

The Care Transitions Intervention® is associated with a broad collection of provider and patient/caregiver tools and support materials that are available for download at http://caretransitions.org/index.asp. Among them:

- **A Personal Health Record (PHR)** form for patients/caregivers to bring with them to healthcare visits.
- The **Discharge Preparation Checklist**, a structured checklist of critical activities that patients should complete before leaving the hospital or nursing facility.
- The **Medication Discrepancy Tool©** designed to help the Transitions Coach reconcile the patient's medication regimen.
- The **Protocol Manual**, a guide for practitioners, researchers, and policymakers on to improve interventions and transitions between sites of care.
- **Sample Transition Coach Charting Form**
- The **Care Transitions Measure**, a five-part toolkit designed to assess the quality of care transitions for the use of performance measurement and public reporting. This tool was designed to provide a consistent measurement and is applicable across multiple sites of care.
- The **Care Transitions Intervention Video**, a video showing the Transitions Coach® and a patient in various settings, highlighting transitional care issues and scenarios and illustrating the key facets of the intervention.

4 Geriatric Resources for Assessment and Care of Elders (GRACE) Program

Developed by Indiana University Center for Aging Research, Indiana University School of Medicine, Regenstrief Institute, Inc., and Wishard Health Services

About This Activity

The Geriatric Resources for Assessment and Care of Elders (GRACE) model of primary care was developed to improve the quality of care for frail, low-income seniors with complex care needs. Under this model, a GRACE support team works with frail elders in their homes and their community to manage their health problems. The model was developed to optimize health and functional status of elderly individuals and prevent long-term nursing home placement.

The first step in the GRACE model is an in-home geriatric assessment completed by the GRACE support team which is composed of a nurse practitioner and social worker. The GRACE support team then works with a larger interdisciplinary team consisting of a geriatrician, pharmacist, mental health worker, and community resource expert (all of whom work for the affiliated health system) to develop an individualized care plan. The care plan is also informed by a set of GRACE protocols for 12 common geriatric conditions (e.g. difficulty walking/falls, chronic pain, depression, and cognitive impairment) which were developed from recommendations contained in evidence-based guidelines. The support team then collaborates with the patient's primary care provider to review the care plan, and then to implement the care plan consistent with the patient's health care goals.

After the initial in-home follow-up visit, and when the care plan has been finalized, the GRACE support team meets with the patient to review the plan. The support team then provides ongoing care management and coordination of care across conditions, providers, and sites of care, primarily using face-to-face and telephone contacts with patients, family members/caregivers, and providers. The support team also collaborates with hospital or nursing home discharge planners to optimize care transitions and link the patient back to their primary care provider following hospital or emergency department (ED) visits. During these transitions, GRACE teams support the older person and their family or caregivers through a post-discharge home visit to reconcile medications and ensure follow-up services such as home healthcare are started.

Key Features

With the GRACE model, onsite support teams made up of an advanced practice nurse and social worker provide comprehensive, home-based primary care to frail, low-income seniors who receive care through community health centers.

Innovative components include:

- ✓ In-home assessment and care management provided by a nurse practitioner and social worker team.
- ✓ Extensive use of specific care protocols for evaluation and management of 12 common geriatric conditions. These recommendations are based on published practice guidelines and input from local primary care providers.
- ✓ Patient education and self-management materials developed for seniors with limited literacy skills.
- ✓ Utilization of an integrated electronic medical record (EMR) and a Web-based care management tracking tool.
- ✓ Integration with affiliated pharmacy, mental health, and community-based and inpatient geriatric care services.
- ✓ Indiana University Geriatrics GRACE Training and Resource Center which provides training, tools, and resources to implement the program.

GRACE team reviews and patient visits are held at three and six weeks and three, six, and nine months after initial and annual care-planning meetings.

Each support team has a caseload of approximately 100 to 125 patients. Both the nurse practitioners and social workers have access to the affiliated health system's EMR and Web-based care management tracking tool developed specifically for the GRACE program.

Assessment of Its Impact

Impact on Health Outcomes and/or Quality of Life

- **Improvements in multiple process and patient-oriented outcomes**: In a randomized controlled trial (RCT), the GRACE program was observed to improve the provision of evidence-based care; led to significant improvements in measures of general health, vitality, social functioning, and mental health; and reduced ED visits ($p = 0.03$). However, hospital admission rates per 1,000 were not significantly different between the treatment and control ($p = 0.66$). In a predefined group at high risk of hospitalization (comprising 112 intervention and 114 usual-care patients), ED visit and hospital admission rates were lower for intervention patients in the second year ($p = 0.03$). Although overall hospital admission rates were not affected by the program, admission rates for high-risk participants were lower than for comparable patients in the usual-care group.
- **Not associated with greater cost:** A recent cost analysis found that the GRACE program was cost-neutral over a two-year period, and yielded cost savings in the third year for high-risk enrollees (Counsell et al., 2009). These savings stemmed from continued lower hospitalization rates and costs.

Impact on Non-Health Outcomes

- **Associated with greater patient and provider satisfaction**: The GRACE program has also generated high levels of physician and patient satisfaction. A survey of primary care physicians participating in the GRACE trial found they were much more satisfied with the resources available to treat patients under the GRACE model when compared with patients not enrolled in the program (Counsell et al., 2006).

Sources

- Counsell SR, Callahan CM, Tu W, Stump TE, Arling GW. Cost analysis of the Geriatric Resources for Assessment and Care of Elders care management intervention. J Am Geriatr Soc. 2009 Aug;57(8):1420-6.
- Counsell SR, Callahan CM, Butttar AB, et al. Geriatric Resources for Assessment and Care of Elders (GRACE): a new model of primary care for low-income seniors. J Am Geriatr Soc. 2006;54(7):1136-41.
- Counsell SR, Callahan CM, Clark DO, Tu W, Buttar AB, Stump TE, Ricketts GD. Geriatric care management for low-income seniors: a randomized controlled trial. JAMA. 2007 Dec 12;298(22):2623-33.

Awards or Recognition

The GRACE model of care is featured in a summary in the Agency for Healthcare Research and Quality's (AHRQ's) Health Care Innovations Exchange.

Additional Information

The GRACE Interdisciplinary Team Suggestions guide for health care providers offers suggestions and tools for providers as they develop and implement individualized care plans for low-income seniors.
http://medicine.iupui.edu/IUCAR/research/graceteamsuggestions.pdf

5 Guided Care® Program

Developed by Johns Hopkins University, Bloomberg School of Public Health

About This Activity

Guided Care® is a solution to the growing challenge of caring for older adults with multiple chronic conditions (MCC) and complex health needs. The Guided Care program places a specially trained registered nurse, known as a Guided Care nurse, onsite at a primary care practice; each Guided Care nurse coordinates care for 50 to 60 elderly patients. Eligible patients are aged 65 years and older; have multiple, complex conditions; and are expected, in the absence of any intervention, to have high health expenditures in the near future. Patients are identified through a review of 12 months of health insurance claims and the use of a predictive model to identify the 20 to 25 percent of older patients who have the highest predicted need for complex health care in the near future.

Supported by an electronic health record (EHR) and using a variety of established methods, including disease management, case management, transitional care, self-management, lifestyle modification, caregiver education and support, and geriatric evaluation and management, each nurse works with two to five primary care providers, specialists, caregivers, and community resources to coordinate and improve patient care across health care providers and settings.

Guided Care nurses access a secure Web-based EHR that was specially designed for the program. The secure Web-accessible EHR assists the Guided Care nurse with drug interaction alerts, evidence-based guidelines, reminders, and tracking of encounters with health care professionals. The EHR incorporates evidence-based guidelines for the 15 most prevalent chronic conditions. Guided Care nurses use the EHR to document care; review medications and test data; generate the Care Guide and Action Plan; and document contacts with patients, families, and health care providers.

Key Features

Registered nurses trained in Guided Care collaborate with two to five physicians and their office staff to assist chronically ill patients (mostly the elderly with MCC) with their care needs.

Innovative components include:

- ✓ In-home patient assessment.
- ✓ Creation of an evidence-based Care Guide and Action Plan.
- ✓ Monthly monitoring using HIT alerts, and use of a secure Web-based EHR that was specially designed for the program.
- ✓ Patient self-management education using motivational interviewing techniques, using primarily the Chronic Disease Self-Management Program developed by Stanford University.
- ✓ Provider coordination among all of the patient's providers.
- ✓ Planning for smooth transitions between sites of care.
- ✓ Support for caregivers.
- ✓ Facilitating access to community resources.
- ✓ Training: The Guided Care program also provides a six-week, 40-hour Web-based course that prepares registered nurses to become Guided Care nurses.

Assessment of Its Impact

Impact on Health Outcomes and/or Quality of Life

A multiyear, cluster-randomized, controlled trial conducted at eight sites (including more than 900 patients, 300 family caregivers, and 49 PCPs) in the Baltimore/Washington, DC area revealed that Guided Care improves patient and caregiver perceptions of quality, and may significantly reduce utilization and cost.

- **Higher quality as perceived by multi-morbid older patients with complex health-care needs and family caregivers:** After 18 months, Guided Care patients with multimorbidity were twice as likely as usual care patients to rate the quality of their care highly. Caregivers of Guided Care patients reported that the quality of chronic illness care received by their loved one was significantly higher than that provided by usual caregivers.
- **May lower costs and utilization:** After 20 months, Guided Care patients experienced, on average, 30 percent fewer home health care episodes, 21 percent fewer hospital readmissions, 16 percent fewer skilled nursing facility days, and 8 percent fewer skilled nursing facility admissions (only the reduction in home health care episodes was statistically significant). Guided Care produced even larger reductions in a subset of patients who received their primary care from one well-managed health system (Kaiser Permanente).

Impact on Non-Health Outcomes

- **Less work-related impact on family caregivers:** After 18 months, family caregivers reported increased work productivity, low absenteeism, and a decline in presenteeism.
- **Higher physician and nurse satisfaction:** Physicians who practiced Guided Care for 1 year rated their satisfaction with patient/family communication and their knowledge of their chronically ill patients' clinical conditions significantly higher than did their peers in the control group. Guided Care nurses reported a high regard for most aspects of their jobs, consistently expressing high satisfaction with work-hour flexibility and the model of care they provide.

Sources

- Boyd CM, Reider L, Frey K, et al. The effects of guided care on the perceived quality of health care for multi-morbid older persons: 18-month outcomes from a cluster-randomized controlled trial. J Gen Intern Med. 2010;25(3):235-42.
- Wolff JL, Rand-Giovannetti E, Palmer S, et al. Caregiving and chronic care: the guided care program for families and friends. J Gerontol A Biol Sci Med Sci. 2009;64(7):785-91.
- Wolff JL, Giovannetti ER, Boyd CM, et al. Effects of guided care on family caregivers. Gerontologist. 2010;50(4):459-470.
- Boult C, Reider L, Leff B, et al. The effect of guided care teams on the use of health services: results from a cluster-randomized controlled trial. Arch Intern Med. 2011;171(5):460-466.
- Marsteller J, Hsu YJ, Reider L, et al. Physician satisfaction with chronic care processes: a cluster-randomized trial of guided care. Ann Fam Med. 2010;8(4):308-315.
- Boult C, Reider L, Frey K, et al. The early effects of "Guided Care" on the quality of health care for multi-morbid older persons. J Gerontol A Biol Med Sci. 2008;63(3):321-7.

Awards or Recognition

The Guided Care model has received a number of awards, including:

- 2008 Archstone Foundation Award for Excellence in Program Innovation
- 2009 Medical Economics Award for Innovation in Practice Improvement
- 2010 Case In Point Platinum Award for Case Management Provider Program

Additional Information and Resources

A number of support tools are available, including (1) an implementation manual; (2) a short book, for chronically ill patients and their families, which describes what Guided Care is and how it can help them; and (3) the Guided Care Chronic Care Management Toolkit. Refer to the Guided Care Web site for additional information: http://www.guidedcare.org/adoption.asp.

6 High Risk Case Management Program for AARP Members with Multiple Chronic Conditions

Developed by UnitedHealth Group (UHG) and AARP

About This Activity

UnitedHealth Group (UHG) and AARP have strategically aligned their respective strengths and resources to help improve the health of the people and communities they serve. UHG, in collaboration with AARP, launched several case management pilot programs for AARP members with MCC who have an AARP Medicare Supplement Insurance plan (i.e. Medigap), insured by UnitedHealthcare Insurance Company. The case management pilot programs focus on improving care coordination among patient, doctor, and caregiver. The program aims to reduce health care costs and treatment errors while improving patient compliance with prescribed therapies and improving clinical outcomes and quality of life.

The High Risk Case Management (HRCM) program is designed to identify the sickest, most frail individuals in the 65-plus population (based on claims analysis, predictive modeling, health risk assessments, and referrals) and then provide both face-to-face and telephone-based condition and case management interventions.

Assessment of Its Impact

Impact on Health Outcomes and/or Quality of Life

A cohort study presented at the 2011 American Public Health Association annual meeting evaluated the HRCM program on hospital readmissions and costs of care during the first year of the program for Medicare beneficiaries with a Medigap plan.

676 members who were engaged in the HRCM program and utilized the HRCM services were compared to 5,654 non-engaged members.

The results for hospital-related quality of care improvements are indicated below:

- **Physician follow-up, hospital readmissions, and inpatient hospital expenditures**. After adjusting for demographic and health status differences, HRCM participants were significantly (3.7%, p = 0.05) more likely to have an office visit

Key Features

The HRCM program incorporates the best practices in case, disease, and depression management into one program, providing both face-to-face and telephone-based condition and case management interventions. Each member also receives access to integrated medical and mental health services through depression management and medication compliance monitoring.

Innovative components include:

- ✓ Home-based heart monitoring devices (heart failure only) to monitor health status and coordinate care.
- ✓ Patient empowering education that provides members, caregivers, physicians, and the general public with health assessment tools and tips that will help them better understand their chronic conditions.
- ✓ A dedicated nurse case or disease manager and an interdisciplinary team of social workers, behavioral health advocates, and medical directors who work with the member to coordinate treatment plans.
- ✓ Advance care planning, advance directives, and health care proxy identification assistance.
- ✓ Integrated medical and mental health services.
- ✓ Social services assistance to clients with coordinating in-home assessments, meals, social activities, and transportation.

within 15 days of a hospital discharge, significantly less likely (28.1%, p = 0.07) to have a hospital readmission within 30 days of hospital discharge, and averaged significantly lower inpatient hospital expenditures per month ($37.28, p = 0.01).

- **Participant satisfaction**. Almost all members (98%) were satisfied or very satisfied with the program.

The results of the ROI are indicated below.

- **Program costs**. Total program costs ($1,066,515) were divided by the number of engaged participants (n = 676, excluding outliers) and their average length of participation (11.5 months) to estimate the average cost per engaged participant per month ($137.19).
- **Program savings**. The generalized linear model estimated savings to be $299.35 per engaged participant per month after adjusting for demographic, socioeconomic, and clinical characteristics.
- **Return on investment (ROI)**. There was a $2.18 return for every $1 invested. This was calculated as the per-member monthly savings ($299.35) divided by the per-member monthly costs ($137.19) of the program.

The number of engaged participants was small, and the ROI results were not statistically significant (p = 0.65). These savings primarily accrued to Medicare, which paid about 84 percent of the total health care expenditures. To a lesser extent, savings accrued to the Medigap payer and to members, who paid 7 percent and 9 percent of total expenditures, respectively.

The analysts reported that while the ROI estimate was not statistically significant for the first year of the program, the results were encouraging. Additionally, program participation was associated with high member satisfaction and better hospital-related quality of care.

Sources

Evidence supporting this program was presented in two abstracts at the 2011 American Public Health Association Annual Conference.

- Hawkins K, et al. Return on investment associated with a high risk case management pilot program for Medicare beneficiaries with Medigap coverage. 2011. https://apha.confex.com/apha/139am/webprogram/Paper235252.html
- Hawkins K, et al. Hospital-related quality of care improvements associated with a high risk case management pilot program for Medicare members with Medigap coverage. 2011. https://apha.confex.com/apha/139am/webprogram/Paper235234.html

Additional Information and Resources

Additional information about this program has been published in the UHG 2009 Social Responsibility Report (http://www.unitedhealthgroup.com/2009-social-responsibility-report/content/healthy/treating-disease/page-3.aspx) and is also available on the UHG Web site. https://www.unitedhealthcareonline.com/

7 Transitional Care Model

Developed by the University of Pennsylvania School of Nursing, New Courtland Center for Transitions and Health

About This Activity

The Transitional Care Model (TCM) provides comprehensive in-hospital planning and home follow-up for chronically ill, high-risk, elderly adults who are hospitalized for a medical or surgical condition. TCM was designed to help prevent health complications and re-hospitalizations, which are particularly common among those with MCC and those taking complex medication regimens. Key elements of the TCM include a focus on patient and caregiver education, facilitating the patient and his/her family/caregiver's ability to manage care at home, and medication reconciliation and management.

A Transitional Care Nurse (TCN), trained in caring for chronically ill, elderly patients with multi-morbidities, provides elderly, hospitalized individuals with comprehensive discharge planning and subsequent in-home follow-up visits. Each nurse manages an active caseload of 15-20 patients. The TCN assesses the patient's health within 24 hours of the patient's enrollment in an acute inpatient setting. The TCN collaborates with the physicians and other members of the health care team to streamline the care plan, design and coordinate inpatient care, and create discharge plans based on a comprehensive assessment and goals identified by the patient.

Within 24-48 hours of discharge from the hospital, the TCN visits each patient in home; then the TCN conducts a minimum of one home visit per week during the first month, followed by semi-monthly visits. The TCN accompanies the patient on the first follow-up visit with the physician post-discharge and on subsequent visits if needed.

Key Features

The Transitional Care Model is led by a Transitional Care Nurse who follows the patient from hospital to home and provides services designed to streamline plans of care and prevent health status decline.

Innovative components include:

- ✓ TCNs are trained on national standards of care delivery, and are experienced in providing both acute care and community-based services.
- ✓ TCM uses a multidisciplinary team-based approach that includes physicians, nurses, social workers, discharge planners and other members of the health care team in the implementation of tested protocols.
- ✓ Patients, informal caregivers, family members and the extended support system are TCM's central focus.
- ✓ Patients' and caregivers' goals are identified and an individualized plan focusing on self-management skills is implemented.
- ✓ Regular, recurring home care enables the TCN to assess the ability of patients and caregivers to function in their own environment and determine if the living situation is appropriate for their health and safety.

Assessment of Its Impact

Findings from multiple, multi-site randomized clinical trials (RCTs) have consistently demonstrated positive health and economic outcomes following the implementation of TCM.

Impact on Health Outcomes and/or Quality of Life

- **Reductions in costs**: Findings from multi-site RCTs yielded positive economic outcomes, including reductions in total and average costs per patient (approximately $5,000 saved per older adult).

- **Reductions in hospital readmissions and hospitalization time**: Findings from RCTs have shown that the enhanced care management and supportive service provided by the TCM have resulted in a significant decrease in time to first readmission, total number of hospital readmissions, and the number of inpatient days following a readmission.
- **Improvements in health outcomes and patient satisfaction**: Patients who have received care under TCM have shown significant improvements in physical function, functional status, quality of life, and satisfaction with care, as well as increased time to death.

Impact on Non-Health Outcomes

- **May be associated with nurse satisfaction**: Anecdotal evidence suggests that nurse satisfaction is high. Individual nurses reported higher levels of job satisfaction in the role of the TCN than in their previous nursing roles.

Sources

- Naylor MD. Transitional care for older adults: a cost-effective model. LDI Issue Brief. 2004 Apr-May; 9(6):1-4.
- Naylor MD, et al. Transitional care of older adults hospitalized with heart failure: a randomized, controlled trial. J Am Geriatr Soc. 2004 May; 52(5):675-84.
- Naylor MD, et al. Comprehensive discharge planning and home follow-up of hospitalized elders. JAMA. 1999 Feb 17; 281(7):613-20.
- Naylor MD, et al. Comprehensive discharge planning for the hospitalized elderly. Annals of Internal Medicine. 1994; 120: 999-1006.

Awards or Recognition

Dr. Mary Naylor (developer) has received numerous awards including the Episteme Award (2009) for her significant and clinically relevant contribution to nursing. In 2004, she was the first nurse selected as a McCann Scholar, and in 2005 she was elected to the National Academy of Sciences, Institute of Medicine. Additionally, TCM has been classified as meeting the congressionally based Top Tier Evidence Standard, defined as "interventions shown in well-designed and implemented randomized controlled trials, preferably conducted in typical community settings, to produce sizeable, sustained benefits to participants and/or society."

Additional Information and Resources

Web-based training modules are offered to TCNs. Additional information is available at http://www.transitionalcare.info/TCMT-2604.html.

In addition, the Penn research team developed a Web-based clinical information system containing all of the evidence-based assessment tools, intervention protocols, and charting for the Omaha System—a standardized language for documenting patient problems and nursing interventions. Visit the Penn Nursing Science Web site for more information: http://www.nursing.upenn.edu/ncth/Pages/default.aspx.

Other Noteworthy Activities

Improving Treatment of Depression Among Latinos with Diabetes Using Project Dulce and IMPACT

Study conducted by researchers at the University of California, San Diego (UCSD) and Scripps Whittier Diabetes Institute

Researchers from UCSD and the Whittier Institute for Diabetes partnered with four nonprofit community clinics in San Diego County to implement a depression treatment program known as IMPACT (Improving Mood-Promoting Access to Collaborative Treatment). The intervention combines Project Dulce, an existing diabetes care and education program in San Diego County community clinics that addresses the specific needs of culturally diverse populations, to include care management for depression using the IMPACT model. While Project Dulce and IMPACT have been individually implemented and independently evaluated in the past (showing positive results), this project provided an opportunity to test and evaluate the integration of the two models to address a common set of co-occurring conditions—diabetes and depression. The project, implemented as part of the Center for Health Care Strategies' (CHCS) Medicaid Value Program to test interventions for beneficiaries with multiple chronic conditions (MCC), found that adding a depression care manager to existing diabetes management teams was effective at reducing depressive symptoms at a reasonable cost.
View the published results at: http://care.diabetesjournals.org/content/31/7/1324.full.pdf+html.

Integrated Health Care Clinics

Developed by the University of Illinois at Chicago, College of Nursing and Thresholds Psychiatric Rehabilitation Centers (Thresholds)

Integrated Health Care (IHC) is an academic nurse-managed center of the College of Nursing through which University of Illinois at Chicago (UIC) faculty nurse practitioners provide integrated primary physical and mental health care services for people with severe mental illness and co-occurring disorders. Since 1998, the College of Nursing has partnered with Thresholds, the leading interdisciplinary freestanding psychiatric rehabilitation agency serving metropolitan Chicago, to provide integrated health care to clients with serious mental illness by locating small clinics in existing psychiatric rehabilitation service centers. In 2007, IHC also partnered with the Mile Square Health Center, the UIC Federally Qualified Health Center (FQHC). IHC currently provides services thru three Thresholds sites. This health care model promotes education, research, and dedication to professional and community collaboration. In 2008, the UIC College of Nursing received funding to launch a new program called *Integrated Health Care without Walls*. This program brings integrated primary and mental health services to hard-to-reach members through house calls, group medical visits, and telemonitoring.
Visit http://www.uic.edu/nursing/ihc/index.shtml.

SoonerCare Health Management Program

Developed by the Oklahoma Health Care Authority for Oklahoma Medicaid Beneficiaries

The SoonerCare Health Management Program (HMP) is an innovative and comprehensive disease management program designed to benefit Oklahoma Medicaid beneficiaries with chronic conditions (many with MCC) as well as their providers. HMP members are selected for the program using MEDai predictive modeling software. The software identifies SoonerCare Choice members who are at high risk for adverse outcomes and increased health care expenditures. Most of this risk is driven by comorbid conditions that increase the likelihood of a health care crisis. Once identified, the members are stratified to two levels of care. Tier-1 members (stratified to the highest risk category) receive face-to-face nurse care management. Tier-2 members (stratified to a lower-level, but still considered at risk) receive telephonic nurse care management. Nurse care managers provide primary care physicians with monthly reports on their patients' status. Individuals in both tiers receive the same services: monthly contact with a nurse care manager, assistance with customized self-management, education about their illness, and medication management. In addition, a behavioral health specialist and a community resource specialist are dedicated to the program.
Visit http://www.okhca.org/individuals.aspx?id=8516&menu=42.

MCC Strategic Framework Goal 2: Maximize the use of proven self-care management and other services by individuals with MCC

Goal 2 Objectives and Strategies

Objective A: Facilitate self-care management

- ✓ **Strategy 1:** Continually improve and bring to scale evidence-based self-care management activities and programs, and develop systems to promote models that address common risk factors and challenges that are associated with many chronic conditions
- ✓ **Strategy 2:** Enhance sustainability of evidence-based self-management activities and programs
- ✓ **Strategy 3:** Improve the efficiency, quality, and cost-effectiveness of evidence-based self-care management activities and programs

Objective B: Facilitate home and community-based services (HCBS)

- ✓ **Strategy 1:** Improve access to effective HCBS for the MCC population through information and referral, options counseling, and smooth care transitions
- ✓ **Strategy 2:** Improve infrastructure (e.g., telemonitoring and shared information services) to support HCBS, and promote educational and technological innovations that permit individuals with MCC to remain maximally functional and independent, understand and better manage their conditions and reside safely in their homes or other settings
- ✓ **Strategy 3:** Provide training and information on evidence-based self-care management to, and improve support for, family caregivers

Objective C: Provide tools for medication management

- ✓ **Strategy 1:** Develop and disseminate shared decision-making and other tools for individuals with MCC to provide accessible information about treatment choices and improve adherence to medication regimens
- ✓ **Strategy 2:** Identify or develop and then disseminate tools to help individuals with MCC and their caregivers recognize drug-drug interactions and potential adverse drug events from complex medication regimens
- ✓ **Strategy 3:** Foster improved and culturally appropriate health literacy to facilitate better informed decision-making about use of medications

8 Chronic Disease Self-Management Program

Developed by Stanford University Patient Education Research Center

About This Activity

The Chronic Disease Self-Management Program (CDSMP) is an evidence-based lay-leader led workshop for people who have one or more chronic conditions. The program consists of six structured workshops offered in community settings such as senior centers, churches, and libraries and is not disease-specific. Workshop sessions are highly participative, with attendees learning processes and skills to better manage their own health and become actively engaged in their treatments.

The workshop is 2½ hours, once a week, for 6 weeks. The workshops are facilitated by a team of two trained leaders, one or both of whom are non-health professionals (lay leaders) with chronic diseases themselves. Each participant in the workshop receives a copy of the companion book, *Living a Healthy Life With Chronic Conditions* 3rd Edition, and an audio relaxation tape, *Time for Healing*.

Subjects covered in the workshops include the following:

- Techniques to deal with problems such as frustration, fatigue, pain, and isolation
- Appropriate exercises for maintaining and improving strength, flexibility, and endurance
- Appropriate use of medications
- Communicating effectively with family, friends, and health professionals
- Nutrition
- Evaluation of new treatments

During the program, participants focus on building the skills they need to manage their conditions by sharing experiences and providing mutual support, as well as developing action plans related to these topics through structured planning and feedback exercises.

Key Features

CDSMP is an interactive workshop for people with a variety of chronic health conditions (e.g., arthritis, diabetes, heart or lung disease) that focuses on learning chronic disease management skills including decision making, problem-solving and action-planning.

Innovative components include:

- ✓ CDSMP is a lay leader-led program that is conducted in community settings such as senior centers, churches, and libraries.
- ✓ The program content concentrates on patients' self-defined needs and self-management options for common problems and symptoms such as pain, fatigue, sleeping problems, anger, and depression—symptoms that extend across specific medical diagnoses.
- ✓ The CDSMP Leader's Manual is available in multiple languages, including Arabic, Bengali, Chinese, Dutch, French, German, Greek, Hindi, Italian, Japanese, Korean, Khmer, Norwegian, Punjabi, Somali, Swedish, Tagalog, Tamil, Turkish, and Vietnamese (Russian coming soon).
- ✓ CDSMP is also offered through a Web-based program to facilitate its dissemination. Better Choices, Better Health™ is an online workshop and study group conducted via the Internet for people with chronic conditions.
- ✓ CDSMP has been adapted in a program called HARP (Health and Recovery Peer Program) for individuals with serious mental illness.

Classes are highly participative, where mutual support and success build the participants' confidence in their ability to manage their health and maintain active and fulfilling lives.

Assessment of Its Impact

Impact on Health Outcomes and/or Quality of Life

A randomized controlled trial (RCT) was conducted to evaluate the effectiveness (changes in health behaviors, health status, and health service utilization) of the self-management program for chronic disease in community-based sites. The study also explored the differential effectiveness of the intervention for subjects with specific diseases and comorbidities. Treatment subjects, when compared with control subjects, demonstrated improvements at 6 months in weekly minutes of exercise, frequency of cognitive symptom management, communication with physicians, self-reported health, health distress, fatigue, disability, and social/role activities limitations. Treatment subjects also had fewer hospitalizations and days in the hospital. No differences were found in pain/physical discomfort, shortness of breath, or psychological well-being.

In a second, before-after cohort study (Lorig et al., 2001), 613 patients from various Kaiser Permanente hospitals and clinics underwent a 7-week course with CDSMP.

- At 1 year, participants in the program experienced statistically significant improvements in health behaviors (exercise, cognitive symptom management, and communication with physicians), self-efficacy, and health status (fatigue, shortness of breath, pain, role function, depression, and health distress) and had fewer visits to the emergency department (ED).
- There were slightly fewer outpatient visits to physicians and fewer days in the hospital, but the differences were not statistically significant. Results were of about the same magnitude as those observed in a previous RCT.

Another study examined the 2-year health status and health care utilization of study participants. Compared with the baseline for each of the two years, emergency room outpatient visits and health distress were significantly reduced, and self-efficacy was improved.

Centers for Disease Control and Prevention (CDC) Meta-Analysis of CDSMP

In May 2011, the CDC conducted a meta-analysis to examine the specific effects of two self-management education programs developed at Stanford University, CDSMP and the Arthritis Self-Management Program (ASMP). Their investigation included all eligible and available studies of the effects of these two programs (both RCTs and longitudinal program evaluations) and examined multiple outcomes that reflected physical and psychological health status (including self-efficacy), health behaviors, and health care utilization. An additional meta-analysis examined whether the effects of the interventions varied by participant characteristics or implementation factors.

A total of 23 studies were included in the analysis of CDSMP. The 23 studies included 8,688 participants (2,902 were enrolled in RCTs and 5,779 in longitudinal studies).

- **Self-efficacy improved**: Self-efficacy measures (when measured across multiple dimensions or specific to managing pain and other symptoms) showed moderate and significant increases at 4-6 months and 9-12 months.
- **Psychological health status improvement**: Psychological health outcomes (for health distress and depression) showed consistent small to moderate improvements at both 4-6 months and 9-12 months.

- **Physical health status**: Physical outcomes (e.g., energy, fatigue, pain, functional disability, and shortness of breath) were less consistent than changes in the psychological health status variables.
- **Health behavior changes**: Of the four behaviors evaluated (aerobic exercise, cognitive symptom management, communication with physician, and stretching/strengthening exercise), three showed small to moderate significant improvements at 4-6 months, with most improvements persisting at 9-12 months.
- **Health care utilization**: Changes in three of four utilization outcomes (i.e., physician visits, emergency room visits, hospitalization times, and hospitalization days and nights) were minimal. Three of the four variables measured showed no significant effect sizes at 4-6 months or 9-12 months. There was a small but significant change in the fourth measure, days in the hospital, at 4-6 months that did not persist at 9-12 months. This small but significant effect was seen in both RCTs and longitudinal studies at 4-6 months.
- **Self-rated health**: There were modest but significant improvements in self-rated health at 4-6 months, but these did not persist at 9-12 months.
- **Social/role limitation**: Measures showed a small but significant effect at 4-6 months that persisted at 9-12 months.

Sources

- Lorig KR, Sobel DS, Stewart AL, Brown BW Jr, Bandura A, Ritter P, Gonzalez VM, Laurent DD, Holman HR. Evidence suggesting that a chronic disease self-management program can improve health status while reducing hospitalization: a randomized trial. Med Care. 1999 Jan;37(1):5-14.
- Lorig KR, Ritter P, Stewart AL, Sobel DS, Brown BW Jr, Bandura A, Gonzalez VM, Laurent DD, and Holman HR. Chronic disease self-management program: two-year health status and health care utilization outcomes. Med Care. 2001 Nov;39(11):1217-23.
- Lorig KR, Sobel DS, Ritter PL, Laurent D, and Hobbs M. Effect of a self-management program on patients with chronic disease. Eff Clin Pract. 2001 Nov-Dec;4(6):256-62.
- Druss BG, Zhao L, von Esenwein SA, Bona JR, Fricks L, Jenkins-Tucker S, Sterling E, Diclemente R, Lorig K. The Health and Recovery Peer (HARP) Program: a peer-led intervention to improve medical self-management for persons with serious mental illness. Schizophr Res. 2010 May; 118(1-3):264-70.
- Brady T, Murphy L, Beauchesne D, Bhalakia A, Chervin D, Daniels B, et.al. Sorting through the evidence for the arthritis self-management program and the chronic disease self-management program. [Executive Summary]. 2011 May. Available at http://www.cdc.gov/arthritis/docs/ASMP-executive-summary.pdf.

Awards or Recognition

James A. Vohs Award for Quality Winner in 2002

Additional Information and Resources

- Book: Living a Healthy Life With Chronic Conditions, 3rd Edition: Self-Management of Heart Disease, Arthritis, Stroke, Diabetes, Asthma, Bronchitis, Emphysema and Others. By Kate Lorig RN DrPH, Halsted Holman MD, David Sobel MD, Diana Laurent MPH, Virginia González MPH, and Marian Minor RPT PhD. Bull Publishing, 2006
- Audio Tape/CD: Time for Healing: Relaxation for Mind and Body (long version). Two 30-minute relaxation exercises with background music and the voice of Catherine Regan Ph.D., Bull Publishing Company, 1994. Cassette or CD.

Visit http://patienteducation.stanford.edu/programs/cdsmp.html for more information.

9 Double Trouble in Recovery

Developed by Howard S. Vogel

About This Activity

Double Trouble in Recovery (DTR) is a mutual-aid, self-help program for adults 18-55 years of age who have been dually diagnosed with mental illness and a substance use disorder. In a mutual aid program people help each other address a common problem, usually in a group led by lay facilitators rather than by professional treatment or service providers.

The DTR program is adapted from the 12-step method of Alcoholics Anonymous, where men and women come together, usually in a community setting to share their experience, strength, and hope with one another so that they may solve their common problems and help others to recover from their particular co-occurring addiction(s) and manage their mental disorders.

The 60- to 90-minute meetings are held in a community-based setting and are led by recovering individuals. The traditional 12-step format is followed, which includes member introductions, presentations by speakers with similar experiences, and time for attendees to share their experiences with the group. Unique to the program are members' discussions about their addictions, mental illness, psychotropic medication, and experiences with formal mental health treatment without the stigma they may otherwise encounter in a traditional 12-step program.

Key Features

Double Trouble in Recovery (DTR) developed as a grassroots initiative. Community-based meetings follow the traditional approach of 12-step programs but include discussions from individuals with both substance abuse/addiction and mental illness issues.

Innovative components include:

- ✓ All DTR groups are lay run and peer led. DTR functions with minimal involvement from the professional community.
- ✓ Meeting space is generally provided free by community-based organizations or within treatment facilities.
- ✓ DTR materials are available to provide information on implementation, such as how to organize a group.
- ✓ Personalized training is available for interested group leaders.
- ✓ A fidelity checklist and participant survey are available to support quality assurance activities.

Since DTR began in 1989, thousands of individual have participated in the program. In the last three years, on average at least one new group is started each month.

DTR has spread nationwide by word of mouth, and more than 200 DTR groups are currently operating in the United States.

Assessment of Its Impact

Impact on Health Outcomes and/or Quality of Life

- **Reduced drug or alcohol use**: At a 6-month follow-up, study participants exposed to DTR group meetings reported fewer days of drug or alcohol use during the past 90 days than study participants not exposed to DTR group meetings (intent-to-treat analysis, $p<0.05$).
- **Improved treatment adherence**: At a 6-month follow-up, study participants exposed to DTR group meetings had better psychiatric medication adherence than study participants not exposed to DTR group meetings (intent-to-treat analysis, $p<0.05$).
- **Improved meeting attendance**: At a 6-month follow-up, study participants exposed to DTR group meetings attended traditional 12-step groups more frequently than study participants not exposed to DTR group meetings (intent-to-treat analysis, $p = 0.01$).

Sources

- Magura S. Effectiveness of dual focus mutual aid for co-occurring substance use and mental health disorders: a review and synthesis of the "Double Trouble" in Recovery evaluation. Subst Use Misuse. 2008;43(12-13):1904-26.
- Magura S, Rosenblum A, Villano CL, Vogel HS, Fong C, and Betzler T. Dual-focus mutual aid for co-occurring disorders: a quasi-experimental outcome evaluation study. American Journal of Drug and Alcohol Abuse. 2008;34(1), 61-74.
- Vogel HS, Knight E, Laudet AB, and Magura S. Double Trouble in Recovery: self help for people with dual diagnoses. Psychiatr Rehabil Journal. 1998;21(4), 356-364.

Awards or Recognition

Double Trouble in Recovery is listed in the HHS, Substance Abuse and Mental Health Services Administration's (SAMHSA) National Registry of Evidence-Based Programs and Practices (NREPP).

Additional Information and Resources

Hazelden is the exclusive publisher of materials and supplies for DTR groups (http://www.bhevolution.org/public/dtr_materials.page#basicguide). Program materials include those below:

- Double Trouble in Recovery Basic Guide: This book is the equivalent to the Alcoholics Anonymous book for those dealing with severe mental illness and addiction.
- How to Start a Double Trouble in Recovery Group: A Guide for Professionals: This guide provides the information and resources professionals need to help clients establish and maintain DTR groups in their community.
- Starting and Running a Double Trouble in Recovery Group: This DVD features professionals and DTR group members giving practical information and inspiring personal stories about their experiences with the success of peer support.

10 Project Enhance

EnhanceWellness and EnhanceFitness

Developed by Group Health Cooperative of Puget Sound, Northshore Senior Center, PacifiCare of Washington, Senior Services, and the University of Washington Health Promotion Research Center

About This Activity

EnhanceWellness. The EnhanceWellness program supports community-dwelling seniors with MCC by working with health or social service practitioners to develop a targeted health management plan. A health or social service practitioner (typically a nurse), operating out of a senior center, meets with functionally independent, community-dwelling seniors to develop a targeted health management plan to help the senior manage his or her chronic illnesses, MCC, and/or other risk factors for disability. Participants also receive continuous peer support from volunteer mentors and can attend a chronic disease self-management course.

The practitioner and senior periodically talk on the phone and/or meet in person over approximately 6 months. During these conversations, the practitioner gauges the senior's progress in meeting the goals laid out in the self-management plan. For those having difficulties following the plan, the practitioner may suggest an in-person meeting to discuss and address any challenges or barriers, and/or to modify the plan. The frequency of contact will vary according to the needs of the senior. Trained mentors, typically other seniors facing similar health issues who have completed the program, provide ongoing support to participants.

EnhanceFitness. A related Project Enhance program, EnhanceFitness, is a low-cost evidence-based group exercise program that helps seniors at all fitness levels, including those with MCC, become more active and empowered to sustain independent lives. One-hour classes are conducted by a certified EnhanceFitness trainer in a relaxed, community-based setting. This EnhanceFitness program has also shown to improve physical and psychosocial function and is considered a promising model for preventing functional decline.

Key Features

The EnhanceWellness program assists community-dwelling seniors with MCC by developing targeted health management plans for their illnesses. A related program, EnhanceFitness, offers community-based fitness classes to improve physical and psychosocial functioning of seniors.

Innovative components include:

- ✓ Practitioner follow-up visits and calls over a 6-month period to support plan adherence.
- ✓ Peer support from volunteer mentors.
- ✓ Participation in local chronic disease self-management program (when available).
- ✓ Throughout the program, the primary care physician (PCP) initiates communication with the practitioner to work on the senior's health-related issues.
- ✓ The practitioner works to educate and empower the senior to raise health issues directly with the PCP, but will contact the PCP if an emergency situation arises.

Project Enhance offers both evidence-based programs, EnhanceWellness and EnhanceFitness, in a community-based setting for seniors at over 500 locations nationwide.

Assessment of Its Impact

EnhanceWellness

Impact on Health Outcomes and/or Quality of Life

The evidence consists of multiple studies conducted in different senior centers, including the following: a randomized

controlled trial (RCT) of 201 chronically ill older adults in one senior center (Leveille et al., 1998; Phelan et al., 2004); a pre- and post-implementation comparison of key metrics for 224 adults enrolled in the program in 25 senior centers (Phelan et al., 2006); and a matched comparison (Mayer et al., 2010) of health care costs in the year after participation among 218 program participants and 654 similar nonparticipants enrolled in Group Health Cooperative's health maintenance organization.

Studies conducted in various senior centers found:

- **Fewer disability days and risk factors for disability days**: In an RCT of the 12-month version of the program at one senior center, participants had significantly fewer bed days and restricted activity days than those in a control group.
- **Fewer hospitalizations and inpatient days**: In the RCT, participants experienced a 38 percent decline in hospitalizations and a 72 percent drop in inpatient days, compared with a 69 percent increase in hospitalizations and a 20 percent increase in inpatient days among members of the control group.
- **Enhanced ability to perform activities of daily living (ADLs)**: Among RCT study participants not initially experiencing disabilities with respect to performing ADLs, only 14.3 percent of those in the program developed an ADL disability after 12 months, compared with 21.3 percent of those in the control group. Among those experiencing ADL disabilities at the time the program began, 80.5 percent of program participants experienced improvements after 12 months, well above the 46.5 percent of control group members who exhibited improvements.
- **Better self-reported health status**: After 12 months in the program, 78 percent of participants in the longitudinal study ranked their health as good or better, up from 69 percent when the program began.

Impact on Non-Health Outcomes

- **Positive feedback from PCPs**: A survey of PCPs found that 60 percent believe their patients benefited from the program, with 58 percent indicating they would recommend it to their patients and colleagues.
- **Potential (moderate) decrease in costs**: The decline in inpatient utilization demonstrated in the RCT suggests that the program could save an estimated $1,200 per participant, excluding the cost of post-hospitalization rehabilitation and home health care (including these costs would increase the potential savings). A separate study among Group Health Cooperative members found that total health care costs (adjusted for prior-year costs or health care use, comorbidities, and preventive health-seeking behaviors) among program participants in the year after participation were $582 less than among similar nonparticipants, although this finding was not statistically significant.

EnhanceFitness

Impact on Health Outcomes and/or Quality of Life

The evidence supporting this program comes from multiple studies, including an RCT (Wallace et al., 1997) of 100 older adults recruited for a six-month trial. All members of the experimental group received an exercise intervention, nutrition counseling, and a home safety assessment. The exercise program was well received. Approximately 85 percent of intervention subjects completed the six-month program and adherence was excellent, with over 90 percent attendance at exercise classes. Additional results included:

- **Improved functional health and wellbeing**: After six months, the intervention group had significantly better scores on seven of eight of the Medical Outcomes Study Short Form (SF-36) health survey subscales and fewer depressive symptoms than controls.

A retrospective matched cohort study (Ackermann, et al, 2008) was conducted to determine if changes in health care costs for Medicare-eligible adults who choose to participate in a community-based exercise program are dif-

ferent from changes in health care costs for similar individuals who do not participate. Key results from this study are indicated below.

- **Total health care costs**: After adjusting for differences in age, sex, enrollment date, comorbidity index, and pre-exposure cost and utilization levels, total health care costs for participants were 94.1 percent (95% confidence interval [CI], 85.6%-103.5%) of the costs for controls. For participants who attended the exercise program at an average rate of ≥1 visit weekly, the total adjusted follow-up costs were 79.3 percent (95% CI, 71.3%-88.2%) of the costs for controls.
- **Reduced increases in annual health care costs**: The average increase in annual total health care costs was less in participants compared to controls (plus $642 vs. plus $1,175 in controls; p = 0.05).

Sources

- Ackermann RT, et al. (2008). Healthcare cost differences with participation in a community-based group physical activity benefit for Medicare managed care health plan members. The Journal of The American Geriatrics Society, 56:1459-1465, 2008.
- Fitts SS, Won CW, Williams B, et al. What is the optimal duration of participation in a community-based health promotion program for older adults? J Appl Gerontol. 2008;27:201-14.
- Leveille SG, Wagner EH, Davis C, et al. Preventing disability and managing chronic illness in frail older adults: a randomized trial of a community-based partnership with primary care. J Am Geriatr Soc. 1998;46(10):1191-8.
- Phelan EA, Williams B, Penninx BW, et al. Activities of daily living function and disability in older adults in a randomized trial of the health enhancement program. J Gerontol A Biol Sci Med Sci. 2004;59:838-43.
- Phelan EA, Williams B, Snyder SJ, et al. A five state dissemination of a community-based disability prevention program for older adults. Clin Interv Aging. 2006;1(3):267-74.
- Mayer C, Williams B, Wagner EH, et al. Health care costs and participation in a community-based health promotion program for older adults. Prev Chronic Dis. 2010;7(2):1-8.
- Phelan EA, Cheadle A, Schwartz S, et al. Promoting health and preventing disability in older adults. Fam Community Health. 2003;26(3):214-20.
- Phelan EA, Williams B, Leveille S, et al. Outcomes of a community-based dissemination of the health enhancement program. J Am Geriatr Soc. 2002;50:1519-24.
- Wallace JI, et al. (1998). Implementation and effectiveness of a community-based health promotion program for older adults. Journal of Gerontology: Medical Sciences, 53a(4): M301-M306.

Awards or Recognition

Project Enhance, including EnhanceWellness and EnhanceFitness, has received the following awards and recognition:

- International Council on Active Aging, 2006 Industry Innovators Award
- National Council on Aging/Health Promotion Institute, 2004 Best Practice Award
- Archstone Foundation, 1999 Award for Excellence in Program Innovation

Additional Information and Resources

Information about how to enroll an organization in the EnhanceWellness network, including instructions, licensing agreements, and program costs can be found on the EnhanceWellness Web site at http://www.projectenhance.org/EnhanceWellness/Enroll.aspx.

11 Healthy Moves for Aging Well

Developed by Partners in Care Foundation

About This Activity

Healthy Moves for Aging Well is an in-home physical activity intervention with the goal of enhancing the activity level of frail and sedentary older adults with multiple functional losses and chronic conditions. The program utilizes care managers from community-based care management agencies to teach the program's exercises to their older clients in their home.

The program is composed of two elements: a physical activity component and a behavioral change component. The physical activity component includes a simple and safe, in-home physical activity intervention developed and tested by Partners in Care to enhance physical activity level. The counseling component of the program helps participants sustain physical activity behaviors developed during the program. During brief clinical encounters, the Brief Negotiation method is the approach used for increasing older adults' intrinsic motivation for making and sustaining changes in physical activity.

Motivational phone coaches are recruited from the community and local universities, and trained in motivational interviewing. Phone coaches complement the role of care managers by reinforcing behavior change through motivational interviewing techniques, providing social support and motivation for participants in the physical activity program, and monitoring client participation. Phone coaches contact participants weekly or biweekly throughout a three-month period to reinforce new behavior change.

Care managers monitor clients' participation through monthly phone calls and at regularly scheduled appointments. For care managers, only a 15-minute session is needed with each participant to identify the personal goals needed to motivate clients to incorporate movement into their daily routines.

Key Features

The Healthy Moves program provides guidance for implementing a physical activity program with a care management element that helps older adults sustain behavior changes adopted during the program.

Innovative components include:

- ✓ Care managers partner with motivational volunteer coaches from the community and local universities to assess the physical condition of their clients, engage them to participate, teach a variety of safe exercises, and encourage continuation by monitoring their progress.
- ✓ The Brief Negotiations Roadmap is a research-based comprehensive tool that care managers use for increasing older adults' intrinsic motivation for making sustained changes in physical activity via brief clinical encounters.
- ✓ One Brief Negotiations strategy is to invite clients to make arguments for change and ways of achieving it.
- ✓ Care managers collaborate with clients to identify barriers, and set an achievable plan of action.
- ✓ Healthy Moves can also be used by adult day health care centers, senior housing sites, Meals on Wheels programs and health plans.

Assessment of Its Impact

Impact on Health Outcomes and/or Quality of Life

Healthy Moves integrates best practice information from two sources. The physical activity component of Healthy Moves is drawn from the evidence-based work of fitness experts Dr. Jessie Jones and Dr. Roberta Rikli of California State University in Fullerton, California. They conducted a nationwide research study, testing six exer-

cises linked to activities of daily living on 7,183 adults ages 60 to 94, representing 267 sites in 21 States. As part of the study, they developed a standardized test, known nationally as the Senior Fitness Test, for assessing the fitness levels of older adults. The results of this study demonstrated that increased physical activity reduces the loss of function over the years by 10 percent each decade after the age of 60. Physically active individuals drop their rate of decline in half.

The evidence for changing behavior is from the research of James Prochaska and Carlo DiClemente. These researchers developed and tested the Stages of Change model, also known as Motivational Interviewing and Brief Negotiation. The Brief Negotiation method is an innovative approach for increasing older adults' intrinsic motivation for making and sustaining changes in physical activity in brief clinical encounters.

- **Reductions in self-reported pain and depression**: A program evaluation, completed by the Andrus Gerontology Center at the University of Southern California, was conducted using, within group, pre- and post-impact evaluation data. Healthy Moves participants (n = 865) experienced improvement in both arm curls and step-in-place, as well as a decrease in depression (measured by the Geriatric Depression Scale). Self-reported level of pain was also reduced. Among Healthy Moves participants, a statistically significant reduction in the number of falls was also realized.
- **Improvements in multiple patient-oriented outcomes**: An evaluation of Healthy Moves for Aging Well by Tingjian et al. (2009) examined the program's effectiveness in reducing participants' number of falls, fear of falling, depression, and pain. Results indicated that participants (n = 338) had statistically significant health improvements.

Impact on Non-Health Outcomes

- **Improves exercise participation**: In the pilot study, care managers succeeded in engaging very frail older adults with multiple functional losses and chronic conditions in adopting and continuing in-home exercises. After 6 months of participation, 76 percent continued to participate in regular exercise.

Sources

- Tingjian Y, Wilber KH, Wieckowski J, and Simmons WJ. (2009). Results from the Healthy Moves for Aging Well Program: changes of the health outcomes. Home Health Care Services Quarterly Vol. 28, Iss. 2-3.
- Wieckowski J, and Simmons WJ. (2006). Translating evidence-based physical activity programs into community-based programs [Special Issue]. Home Health Care Services Quarterly, 25 (½), The Haworth Press.
- Wieckowski J. (Spring 2006). Integrating a simple in-home physical activity program for older adults. Healthcare and Aging Newsletter.

Awards or Recognition

Healthy Moves is officially designated as an evidence-based health promotion program by the Federal Administration on Aging, and is part of a series of healthy aging programs described on the National Council on Aging Web site.

Additional Information and Resources

The Partners in Care Foundation Web site provides numerous resources to assist organizations interested in implementing this program. Among the resources provided are guidance on chair bound and advance exercises that can be taught (handouts provided in seven different languages) and tools for evaluating program outcomes.
Visit http://www.picf.org/landing_pages/22,3.html.

Other Noteworthy Activities

A Matter of Balance

Developed by the Roybal Center at Boston University

A Matter of Balance: Managing Concerns About Falls is a program designed to reduce the fear of falling and increase activity levels among older adults. A Matter of Balance includes eight two-hour sessions for a small group led by a trained facilitator. During the class, participants learn to view falls as controllable, set goals for increasing activity, make changes at home to reduce fall risk, and exercise to increase strength and balance. A randomized controlled trial has demonstrated effectiveness of the program in increasing intended activity and mobility control mobility immediately following the intervention, and improved social function and mobility range at 12 months following the intervention. Visit http://www.mainehealth.org/mh_body.cfm?id=432.

Fit and Strong!

Developed by University of Illinois at Chicago, Institute for Health Research and Policy

Fit and Strong! is a low-cost, evidence-based, multiple-component exercise program. It combines flexibility, strength training, and aerobic walking with health education for sustained behavior change among older adults (most of whom have multiple chronic conditions) with lower-extremity osteoarthritis. Fit and Strong! works with providers across the country to deliver an 8-week program that improves lower-extremity stiffness, pain, and strength; aerobic capacity; participation in exercise and caloric expenditure; and self-efficacy for exercise. The program helps participants gain a clear understanding of what osteoarthritis is and how physical activity that is tailored to the needs of people with arthritis can help them manage arthritis symptoms. The ultimate aim of the program is to assist clients with maintaining independent functioning.
Visit http://www.fitandstrong.org/.

Healthy IDEAS (Identifying Depression, Empowering Activities for Seniors)

Developed by Baylor College of Medicine's Huffington Center on Aging

Healthy IDEAS (Identifying Depression, Empowering Activities for Seniors) is an evidence-based program that integrates depression awareness and management into existing case management services provided to older adults. The program is a structured depression program that prepares case managers and care coordinators to identify depression in at-risk elders, including those with MCC, and to facilitate access to treatment. It targets underserved, chronically ill older adults in the community and addresses commonly recognized barriers to mental health care: detecting depression, helping clients understand depression is a treatable illness, assisting them to gain knowledge, and develop self-management skills. Healthy IDEAS empowers clients to manage their depression through a behavioral-activation approach that encourages involvement in meaningful, positive activities.
Visit http://careforelders.org/default.aspx?menugroup=healthyideas&AspxAutoDetectCookieSupport=1.

Medication Use Safety Training (MUST) for Seniors™

Developed by the National Council on Patient Information and Education

The MUST for Seniors program is designed as an interactive, national initiative to promote safe and appropriate medicine use by enabling older adults to avoid medication misuse; recognize and manage common side effects; and improve medicine use knowledge, attitudes, and skills to avoid medication errors. MUST for Seniors can be offered to community-based, ambulatory older adults who take multiple medications. Family caregivers are also encouraged to use the Web site and to participate in the program. The Web site offers fact sheets, a PowerPoint slide presentation, booklets, participant worksheets, and links to external resources.
Visit http://www.mustforseniors.org/.

PEARLS *(Program to Encourage Active, Rewarding Lives for Seniors and those with Epilepsy)*

Developed by the University of Washington

PEARLS is a community-based, in-home counseling program that uses home visits and brief follow-up phone calls to assist homebound elders with depression and adults of all ages with epilepsy and co-morbid depression. During six to eight in-home sessions, PEARLS Program counselors use brief behavioral techniques to empower individuals to take action and to make lasting changes so that they can lead more active and rewarding lives. During these interactions, counselors help individuals identify and address problems and increase social and physical activities. Two randomized controlled trials have demonstrated that the PEARLS Program is effective in reducing depressive symptoms and improving quality of life in older adults and all-age adults with epilepsy. The PEARLS Program has been disseminated successfully in communities throughout the United States, and each year more individuals and organizations enroll in PEARLS Training so they can offer the PEARLS Program to individuals in their community. Visit http://www.pearlsprogram.org/Default.aspx.

Resources for Caregivers

Innovations Clearinghouse on Family Caregiving is an online clearinghouse of interventions that support caregivers from the Family Caregiver Alliance. This online resource serves as a national, searchable repository of evidence-based interventions, policy efforts, and emerging practices and tools with a primary focus on the support of family/informal caregivers. Visit http://www.caregiver.org/caregiver/jsp/content_node.jsp?nodeid=2319.

Rosalynn Carter Institute for Caregiving is an online clearinghouse of family caregiver interventions, materials, and training that aims to promote the use and adoption of evidence-based interventions that have the greatest chance of improving the health and well-being of caregivers. This database provides detailed information on interventions that have been tested in a randomized controlled trial (RCT) and have been found to positively impact caregiver outcomes. Visit http://www.rosalynncarter.org/evidence_based_resources/.

MCC Strategic Framework Goal 3: Provide better tools and information to health care, public health, and social services workers who deliver care to individuals with MCC

Goal 3 Objectives and Strategies

Objective A: Identify best practices and tools

- ✓ **Strategy 1:** Identify, develop, disseminate, and foster integration of best practices information relevant to the general care of individuals with MCC
- ✓ **Strategy 2:** Identify, develop, endorse, and use key quality metrics, in the form of performance measures, to promote best practices in the general care of individuals with MCC
- ✓ **Strategy 3:** Identify, develop, and validate materials that assist providers in educating individuals with MCC and family caregivers in appropriate self-care and shared decision-making
- ✓ **Strategy 4:** Develop and disseminate tools for use by and across different organizations, providers, and family caregivers that improve the use and management of medications, including promotion of knowledgeable use of medications, reduction of prescription of inappropriate medications, and reduction of patient risks associated with polypharmacy

Objective B: Enhance health professionals' training

- ✓ **Strategy 1:** Identify or develop information relevant to the general care of individuals with MCC for use in health and social service professional training programs
- ✓ **Strategy 2:** Disseminate information relevant to the general care of individuals with MCC to all HHS-funded or supported health and social service professional training programs for inclusion in required curricula, as appropriate
- ✓ **Strategy 3:** Ensure that health care, public health, and social services professionals receive training on monitoring the health and wellbeing of family caregivers for individuals with MCC
- ✓ **Strategy 4:** Develop and foster training within both traditional and nontraditional professional settings (e.g., medicine, nursing, social work, psychology/counseling, clinical pharmacy, chaplaincy, vocational rehabilitation, community health workers) that emphasizes increased competency in palliative and patient-centered approaches

Objective C: Address multiple chronic conditions in guidelines

- ✓ **Strategy 1:** Ensure that developers of guidelines include information on the most common comorbidities clustering with the incident chronic condition and on the management of risk factors to prevent the occurrence of additional chronic conditions
- ✓ **Strategy 2:** Ensure that clearinghouses or repositories of chronic disease guidelines encourage labeling and promotion of selected guidelines that incorporate information on individuals with MCC

12 Complex Care Management Toolkit

Developed by the California Quality Collaborative and the California HealthCare Foundation

About This Activity

The Complex Care Management Toolkit is the product of a yearlong collaborative effort among eight California-based care organizations who joined together to share and test methods for producing better health outcomes through complex care management programs for patients with MCC, limited functional status, and psychosocial needs.

Participating organizations in the collaborative included those below:

- Bristol Park Medical Group
- CalOptima
- Central California Alliance for Health
- HealthCare Partners
- High Desert Medical Group
- Humboldt Del Norte IPA/Foundation
- PrimeCare
- St. Joseph Heritage Medical Group

Over the course of the year, Action Community members participated in shared learning via three all-day, in-person sessions, along with teleconference calls that supplemented learning and information exchange.

The Complex Care Management Toolkit is a 14-page change package that summarizes the ideas of the Action Community to improve an existing complex care program, or implement a new one. In the electronic version of the toolkit, there are links to numerous resources and tools that can be adapted as organizations build or test changes for their program.
Visit http://www.chcf.org/projects/2012/complex-care-action-community.

Key Features

The Complex Care Management Toolkit is organized into seven sections, summarizing ideas from the collaborative on how to improve existing complex care programs or implement a new one. Links are provided to tip sheets, resources, and tools online.

Key elements of the toolkit include:

- ✓ Getting started: Deciding whether to develop a complex care management program.
- ✓ Patient identification and risk stratification: Development of criteria to identify and stratify candidates into different levels of interventions and outreach intensity.
- ✓ Complex care management model design: High-level structuring of the complex care program, including development of levels within the program geared to illness severity.
- ✓ Care manager, care team roles, and training: Hiring, training, and communication strategies.
- ✓ Physician and office staff engagement: Strategies for forming the care team, engaging office staff, and identifying champions.
- ✓ Patient engagement: Strategies for patient recruitment, enrollment, retention, and self-management.
- ✓ Measurement plan: Strategies for tracking and measuring cost and utilization, clinical quality, patient experience, and provider and care team experience.

13 The Health Mentors Program

A Longitudinal Chronic Illness Mentorship Program

Developed by Jefferson Medical College, the College of Health Professions of Thomas Jefferson, Thomas Jefferson University

About This Activity

The Health Mentors Program at Jefferson Medical College was designed to address the gap in chronic illness care education and to introduce students to the benefits of working as part of an inter-professional team. The program allows students to learn first-hand from a patient about things that really matter to patients living with health conditions or impairments. The Health Mentors Program curriculum was created to teach students through experiential learning. Its goals are to improve students':

- Understanding of the value and contributions of various members of the inter-professional health care team.
- Understanding of the patient's perspective and patient-centered care.
- Appreciation of how a person's health conditions and impairments interact with personal and environmental factors.

Two medical students and one or two nursing, physical therapy, or occupational therapy students are teamed with a volunteer Health Mentor who has one or more chronic illnesses. Teams meet eight times over a two year period.

Key Features

The program is targeted to medical, nursing, physical therapy, occupational therapy, pharmacy, public health, and family and couples therapy students. Students are enrolled in the program and paired with over 250 community-based volunteers who are living with chronic conditions or physical disabilities.

Between 2007 (when the program was started) and 2010, over 2,250 Thomas Jefferson University students have been enrolled in the program.

Innovative components include

- ✓ The mentorship program is centered on using the individual with chronic illness as the teacher.
- ✓ Health Mentors volunteer their time to share the impact of living with a chronic health condition or disability with students.
- ✓ Health mentors are recruited from affiliated outpatient physician practices, local senior centers, retirement communities, and other community organizations.

Assessment of Its Impact

During its first year, 131 Health Mentors were recruited and paired with an inter-professional student team. Preliminary findings suggest that a longitudinal, inter-professional mentorship program may be promising for the development of higher-quality inter-professional health care teams. Early, longitudinal patient contact may help to prevent the negative connotations many students come to associate with chronic illness during their later clinical experiences.

Sources

- Collins L, Arenson C, Jerpbak C, Kane P, Dressel R, Antony R. Transforming chronic illness care education: a longitudinal interprofessional mentorship curriculum. J Interprof Care. 2011 May;25(3):228-30

Detailed curricular materials for the program are available from the authors and on the Association of American Medical College's MedEdPORTAL at https://www.mededportal.org/publication/4062.

Other Noteworthy Activities

MD Link: Partnering Physicians with Community Based Organizations Toolkit

Developed by National Council on Aging (NCOA), the Center for Healthy Aging, and Merck Institute of Aging and Health

The purpose of this toolkit is to guide a physician in educating his/her colleagues about the benefits and practicalities of collaborating with community-based organizations that serve older adults. The toolkit is designed to help a physician learn more about community organizations and share what she/he knows with others. It is not a how-to guide for building linkages between physicians and local organizations; however, it does include some suggestions for fostering such linkages. The toolkit identifies senior centers, area agencies on aging, day service centers, multi-purpose social service organizations, faith-based organizations, and housing programs as important community resources for older adults and their families. The programs and services they offer older adults include physical activity classes, education programs, support groups, congregate meals, in-home services, and care management. These community-based organizations have programs in place that address common geriatric problems including increased risk of falling, managing chronic conditions, combating isolation, and loss of physical mobility. Visit http://www.ncoa.org/improve-health/center-for-healthy-aging/content-library/md-link-partnership.html.

Partnering in Self-Management Support: A Toolkit for Clinicians

Developed by the MacColl Center; Institute for Healthcare Improvement

The MacColl Center, in collaboration with the Robert Wood Johnson Foundation's New Health Partnerships program and the Institute for Healthcare Improvement, has developed and released Partnering in Self-Management Support: A Toolkit for Clinicians. The concepts and tools in this toolkit are intended to provide busy clinical practices an introduction to a set of activities and changes that support patients and families in the day-to-day management of chronic conditions. The toolkit contains a number of tested resources and tools that can assist both experienced clinical practices and those just beginning the process of reorganizing their practices to better support patient-centered care. The toolkit outlines high-impact changes that should occur before, during, and after the patient visit in order to transform the patient/caregiver relationship into a collaborative partnership. Visit http://www.improvingchroniccare.org.

Partners in Care Foundation Medication Management Improvement System (HomeMeds)

Developed by Partners in Care Foundation

The Partners in Care Foundation Medication Management Improvement System (developed in collaboration with Vanderbilt University researchers and a national consensus panel of experts) is an evidence-based intervention specifically designed to enable social worker and nurse care managers to identify and resolve certain medication problems common among frail elders living in the community. Home health nurses and care managers use software-based protocols to screen older clients' medications and collaborate with pharmacists and physicians to reduce the risk of medication errors and adverse effects. The system targets potential medication problems including both drug use and symptoms associated with specific adverse drug effects. The process includes consultation with a specially trained clinical pharmacist and an interdisciplinary care-management team, as well as a follow-up with the client's physician. It adheres to periodically updated guidelines established by a Geriatric Advisory Panel composed of pharmacists, physicians, social workers, and nurses. Visit http://www.homemeds.org/.

Mount Sinai Visiting Doctors – Training Program

Developed by Brookdale Department of Geriatrics and Aging, Mount Sinai Department of Medicine

The Mount Sinai Visiting Doctors (MSVD) program delivers comprehensive patient-centered primary and end-of-life care to an underserved segment of the population: homebound adults, consisting of geriatrics patients as well as those with psychiatric, neurological, complex, and terminal illnesses. The individuals served are predominantly elderly (more than half are 80 years of age or older) and suffer from several medical and psychiatric conditions, making it difficult for them to seek regular medical care. The program also provides emotional support and social services to the families and caregivers of homebound patients, and educational training and experience on home care to medical trainees. The MSVD program provides training to more than 200 medical students, residents, and fellows every year, including visiting trainees from institutions around the country and nations abroad. Every resident in Internal Medicine at Mount Sinai spends 1 month with the program visiting patients in their homes. Visit http://www.mountsinaifpa.org/patient-care/practices/visiting-doctors-program/about-us.

Pediatric Resident Continuity Clinic - Pediatric Medical Home Program

Developed by Mattel Children's Hospital at the University of California, Los Angeles (UCLA)

The Pediatric Medical Home Program at UCLA, established in 2003, is based at the Pediatric Resident Continuity Clinic at Mattel's Children's Hospital UCLA. The goal of the program is to provide care to pediatric patients with complex medical needs (most with MCC) that is accessible, family-centered, continuous, comprehensive, coordinated, compassionate, and culturally-effective. The program employs guidelines from the American Academy of Pediatrics and includes multiple components: a resident with primary responsibility for overseeing the child's care; procedures for ensuring continuity of care when the treating resident graduates; a bilingual family liaison to coordinate and facilitate access to care; comprehensive intake and follow-up visits; a family notebook that contains all relevant, up-to-date medical information on the child; monthly meetings to educate and solicit input from families; and a special curriculum designed to educate residents about the medical home approach. The program has been shown to reduce emergency department visits by more than 50 percent and has generated high levels of satisfaction among participating families. Visit http://www.uclahealth.org/body_mattel.cfm?id=1434.

Additional Training Programs

Clinical Health Coach Training Program: The Clinical Health Coach Training Program is a six-week (40 contact hours) interactive experience for health care professionals who desire to attain skills in chronic care management through proactive, patient-centered strategies. The program uses a coaching model to engage participants with a faculty of certified health coach professionals, behavioral change specialists, experienced clinical operations personnel, and fellow professionals in health coaching practice. The program offers both on-site and distance learning approaches, and is designed to build care management strategies, enhance leadership and communication skills, and develop health coaching skills that result in improved health, clinical and behavioral outcomes, and business efficiency. Visit http://www.iowaccc.com/.

Washington State GA-U Mental Health Integration Program Training: Washington State's General Assistance-Unemployable (GA-U) Mental Health Integration Program (MHIP) is designed to integrate mental health screening and treatment into primary care settings serving safety net populations. Since 2008, MHIP has offered training and workforce development for integration in health care for over 200 professionals State-wide. Ongoing training takes place monthly for a growing number of mental health professionals across the State. Care coordinators participating in MHIP are offered three types of training and support: comprehensive training sessions, training sessions focused on specific topics of interest to care coordinators, and roundtable support and discussion sessions. Visit http://integratedcare-nw.org/training.html and http://chpw.org/gau/.

Practice Guidelines for Multimorbidity

Guiding Principles for the Care of Older Adults with Multimorbidity: An Approach for Clinicians: Developed by American Geriatrics Society (AGS), this clinical guidance describes how best to care for older adults with MCC. Guidance for providers is organized around five domains relevant to the care of older adults with multimorbidity: 1) patient preferences, 2) interpreting the evidence, 3) prognosis, 4) clinical feasibility, and 5) optimizing therapies and care plans. The AGS provides both clinical tools for providers on how to implement the guidance, and public education resources for patients and/or their caregivers. Electronic copies are available at http://www.americangeriatrics.org/health_care_professionals/clinical_practice/multimorbidity.

Diabetes Management in the Context of Serious and Persistent Mental Illness: Developed by Integrated Health Care Centers, University of Illinois at Chicago College of Nursing, this clinical practice guideline addresses caring for type 2 diabetes in the context of mental illness. The guideline objective is to help to overcome issues with diabetes self-management that arise as a result of these mental health diagnoses. Electronic copies are available at http://www.uic.edu/nursing/pma/services/diabetes/teaching/ClPrRec9_02Peer.pdf.

New York State Department of Health HIV Guidelines: The AIDS Institute's Office of the Medical Director, of the New York State Department of Health, directly oversees the development, publication, dissemination, and implementation of clinical practice guidelines, in collaboration with the Johns Hopkins University Division of Infectious Diseases. These guidelines address the medical management of adults, adolescents, and children with HIV infection and the primary and secondary prevention in medical settings. The institute contains a series of guidelines that address HIV in the context or presence of co-occurring conditions. Electronic copies are available at http://www.hivguidelines.org/clinical-guidelines/.

MCC Strategic Framework Goal 4: Facilitate research to fill knowledge gaps about, and interventions and systems to benefit, individuals with MCC

Goal 4 Objectives and Strategies

Objective A: Increase the external validity of trials

- ✓ **Strategy 1:** Develop methods to assess the inclusion of individuals with MCC in clinical trials. Such methods should include determining 1) optimal trial designs for including MCC patients; 2) optimal approaches for recruiting MCC patients; 3) the potential risks of exposing some MCC patients to new interventions; and 4) the appropriate analysis of outcomes data from clinical trials that include individuals with MCC
- ✓ **Strategy 2:** Improve the external validity of HHS-funded community and clinical intervention trials by ensuring that individuals with MCC are not unnecessarily excluded (as determined by scientific experts and external stakeholders)
- ✓ **Strategy 3:** Ensure, through guidance or regulation, that individuals with MCC are not unnecessarily excluded from clinical trials for the approval of prospective drugs and devices
- ✓ **Strategy 4:** Assess and strengthen postmarketing surveillance for potential intervention-related adverse events and poor outcomes among individuals with MCC

Objective B: Understand the epidemiology of multiple chronic conditions

- ✓ **Strategy 1:** Stimulate epidemiological research to determine the most common dyads and triads of MCC
- ✓ **Strategy 2:** Determine the distribution of MCC for Medicare and Medicaid beneficiaries, as well as clients of HRSA-funded community health centers and Indian Health Service hospitals and clinics, and use this information to plan interventions and monitor their effectiveness
- ✓ **Strategy 3:** Develop tools to identify and target population subgroups of individuals with MCC who are at high risk for poor health outcomes

Objective C: Increase clinical, community, and patient-centered health research

- ✓ **Strategy 1:** Expand research on the optimal clinical, self-care, and community- based approaches for health promotion, disease prevention, and healthcare management of individuals with MCC, as well as on the systems to best support and sustain this programming
- ✓ **Strategy 2:** Innovate and strengthen methods for researchers to improve measurement of patient-centered outcomes of treatments and other interventions for individuals with MCC
- ✓ **Strategy 3:** Improve knowledge about patient trajectories temporally in relation to changes in health status, functional status, and health services use

Objective D: Address disparities in multiple chronic conditions populations

- ✓ **Strategy 1:** Stimulate research to more clearly elucidate differences between and opportunities for prevention and intervention in MCC among various sociodemographic groups
- ✓ **Strategy 2:** Use research findings on group-specific indicators for MCC risk and intervention options to leverage HHS disparities programs and initiatives to address the MCC population

14 Faces of Medicaid Multimorbidity Series

Sponsored by the Center for Health Care Strategies, Inc. (CHCS)

About This Activity

The Center for Health Care Strategies, Inc. (CHCS) has published a series of reports on the patterns of multi-morbidity and the special care needs of people with MCC among the Medicaid population. Reports produced as part of this series include the following:

- **The Faces of Medicaid:** *The Complexities of Caring for People with Chronic Illnesses and Disabilities* (2000)
- **The Faces of Medicaid II**: *Recognizing the Care Needs of People with Multiple Chronic Conditions* (2007)
- **The Faces of Medicaid III**: *Refining the Portrait of People with Multiple Chronic Conditions* (2009)
- **The Faces of Medicaid**: *Clarifying Multi-Morbidity for Medicaid Programs to Improve Targeting and Delivery of Clinical Services* (2010)

CHCS released the first Faces of Medicaid report in 2000. The goals of this report were to begin to identify populations with special health care needs in Medicaid and State Children's Health Insurance Programs (CHIP), describe the severity of some of their primary and secondary conditions, and highlight a subset of the clinical and fiscal policy issues faced by States and health plans enrolling these populations in managed care. The first report served as the first step toward identifying chronic illnesses and disabilities found in high prevalence among the Medicaid population and what services were most needed. In subsequent years, however, it became clear that the majority of Medicaid spending is devoted to people with not just one chronic condition, but multiple conditions.

The focus of its second report, The faces of Medicaid II (2007), is on people with multiple chronic conditions who represent the greatest opportunities to improve outcomes and control costs within publicly financed care. In order to design programs that are tailored to the needs of this very heterogeneous group, states and health plans must have a clear picture of the prevalence of chronic conditions, the patterns of health care utilization and the associated costs. To provide this "portrait" of beneficiaries with comorbidities, CHCS worked with Rick Kronick, Ph.D., and Todd Gilmer, Ph.D.—experts in

Background and Goals

Although the Medicaid program finances essential health services for more than 60 million Americans, expenditures are highly concentrated. Approximately 50 percent of Medicaid expenditures are incurred among just 5 percent of its beneficiaries, including adults with disabilities and the elderly, most with multi-morbidity. Identifying clinical opportunities for Medicaid beneficiaries with multi-morbidity is of considerable importance to state efforts to manage spending. However, it is not yet clear how to target clinical interventions to improve the effectiveness of Medicaid programs because this requires clarification of the patterns of multi-morbidity in Medicaid as well as linked clinical strategies relevant to the most prevalent, highest cost, or clinically relevant combinations of co-occurring conditions.

This series of reports, developed by CHCS, aimed to:

- ✓ Examine national utilization and costs data from CMS, pharmacy claims, and five-year diagnostic data to identify beneficiaries with multi-morbidity, and their patterns of health care utilization and expenditures.
- ✓ Identify subgroups of Medicaid beneficiaries that can be managed through targeted clinical programs.
- ✓ Identify opportunities to improve quality and cost outcomes.

Medicaid disease prevalence from the University of California, San Diego—to conduct a systematic analysis of national utilization and cost data supplied by the Centers for Medicare & Medicaid Services (CMS). The two key questions addressed in this analysis were: (1) What is the prevalence of chronic conditions within the Medicaid population? and (2) Are there patterns or clusterings of these conditions that could inform the development of more appropriate guidelines, care models, performance measurement systems, and reimbursement methodologies? The report and analyses showed that beneficiaries with three or more chronic conditions are responsible for a significant portion of Medicaid spending and shed light on how Medicaid stakeholders can rethink care management approaches for high-need, high-cost beneficiaries with multi-morbidity.

Building on the 2007 Faces of Medicaid II report, a subsequent analysis was commissioned by CHCS (i.e., The Faces of Medicaid III: Refining the portrait of people with multiple chronic conditions) to examine two additional data sets: pharmacy claims and 5 years of diagnostic data. The purpose was to further refine what is known about Medicaid beneficiaries with MCC, particularly those with serious mental illness. By looking at these two additional data sets, the researchers were able to obtain more accurate estimates of the prevalence of individuals with MCC among the Medicaid population, and the overall costs of caring for these individuals. It was also clear from these analyses that psychiatric illnesses are highly prevalent among high-cost Medicaid beneficiaries and that psychiatric illnesses are represented in three of the top five most common pairs of multi-morbidity affecting these individuals.

In its fourth report, *Clarifying Multi-morbidity for Medicaid Programs to Improve Targeting and Delivery of Clinical Services* (2010), CHCS partnered with researchers at Johns Hopkins University to conduct this analysis to examine multi-morbidity patterns among adult Medicaid beneficiaries with disabilities and explore the implications of specific patterns on hospitalizations and cost. The main goal of this project was to define methodology and patterns of multi-morbidity in national Medicaid datasets as a prelude to designing appropriate care delivery models for multi-morbid populations. The analysis highlighted significant opportunities for prioritizing clinical interventions, including the need to integrate physical and behavioral health services given the high prevalence of psychiatric illnesses among high-cost Medicaid beneficiaries. To help guide Medicaid stakeholders, CHCS, together with its partners at Johns Hopkins, developed a variety of online resources detailing prevalence, utilization, and cost data as well as promising clinical opportunities for identifying high-priority conditions. This analysis and related resources aimed to help States in targeting efforts to best meet the needs of high-priority beneficiary populations.

The four comprehensive reports are available from the CHCS Web site.

- **The Faces of Medicaid:** *The complexities of caring for people with chronic illnesses and disabilities* (2000) http://www.chcs.org/usr_doc/Chartbook.pdf
- **The Faces of Medicaid II**: *Recognizing the care needs of people with multiple chronic conditions* (2007) http://www.chcs.org/publications3960/publications_show.htm?doc_id=540806
- **The Faces of Medicaid III**: *Refining the portrait of people with multiple chronic conditions* (2009) http://www.chcs.org/publications3960/publications_show.htm?doc_id1058416
- **The Faces of Medicaid IV**: *Clarifying multi-morbidity for Medicaid programs to improve targeting and delivery of clinical services* (2010) http://www.chcs.org/publications3960/publications_show.htm?doc_id1261201

Additional Information and Resources

In tandem with this series of reports, CHCS, together with its partner on the fourth Faces of Medicaid analysis, Johns Hopkins, developed a variety of online resources to support Medicaid stakeholders in more effectively targeting interventions to high-need, high-cost beneficiaries. Available resources include:

- Data brief: Clarifying Multi-morbidity to Improve Targeting and Delivery of Clinical Services for Medicaid Populations provides a high-level summary of analysis findings and addresses implications for how states can use the findings to develop more effective models of care for high-risk populations.
  Available at: http://www.chcs.org/usr_doc/clarifying_multimorbidity_patterns.pdf.
- Multi-Morbidity Pattern and Clinical Opportunities tables: Tables include the following resources for each of 13 index conditions:
  - Summary tables detailing the five most costly patterns for each index condition
  - Data tables for the 16 most common multi-morbidity patterns identified for each index condition, including prevalence, utilization, and expenditure data for each
  - Clinical opportunities tables that catalog promising clinical models for specific patterns of multi-morbidity. (A bibliography for all the studies listed in the clinical opportunities tables is also available.)

  Available at: http://www.chcs.org/publications3960/publications_show.htm?doc_id=1261203.
- Literature review: Evidence-Based Clinical Models Not Specific to a Multi-Morbidity Pattern provides a summary of clinical models that have been developed and tested for patients with multi-morbidity, regardless of the specific underlying conditions.
  Available at: http://www.chcs.org/usr_doc/Clinical_Opportunities_General_Models_121510.pdf.
- Bibliography of evidence-based studies: An alphabetical listing of all citations identified in the clinical opportunity and general multi-morbidity literature reviews is also available.
  Available at: http://www.chcs.org/usr_doc/Bibliography_FINAL.pdf.

15 Medicaid Value Program: Health Supports for Consumers with Chronic Conditions

Sponsored by the Center for Health Care Strategies, Inc. (CHCS)

About This Activity

The Medicaid Value Program (MVP), the first national effort to examine novel approaches to improve care for adults with MCC, brought together 10 diverse organizations, including health plans, State Medicaid agencies, provider organizations, and others, to develop and test new strategies in caring for adult Medicaid beneficiaries with MCC.

As part of the MVP, CHCS researched which strategies have been successfully employed within this high-needs population, and drafted a report consisting of key considerations and recommendations for the 10 teams selected to participate in the program.

Throughout the 2-year initiative, participating teams received ongoing technical assistance to improve how care for consumers with MCC is delivered, integrated, measured, and/or financed. An independent evaluation of the program offers lessons for improving care for Medicaid's highest-risk and highest-cost beneficiaries, those with MCC.

Of the organizations submitting proposals, 10 were selected to receive $50,000 each to help offset their costs but were expected to otherwise self-finance their effort:

- ✓ **CareOregon** – The CareOregon Complex Care Support Program
- ✓ **Comprehensive NeuroScience, Inc**. – Medical Risk Management in Missouri: Improving the Quality of Care for Persons with Schizophrenia and Co-occurring Medical Conditions
- ✓ **District of Columbia Department of Health, Medical Assistance Administration** – Building a Model of Excellence: Testing Medicaid Waiver Approaches to Case Management and Chronic Care Service Delivery
- ✓ **Johns Hopkins Healthcare LLC** – Structuring the Integration of Services for Medicaid Recipients with Chronic Illness and Psychiatric and/or Substance Abuse Problems
- ✓ **Managed Health Services, Inc.** – Comparative Study of SSI Risk Stratification: Comparing Predictive Modeling Data with Health Risk Assessment

Key Features

The MVP sought to build knowledge about effective interventions for Medicaid beneficiaries with MCC. MVP grantees were selected through a competitive process. The solicitation was directed to State Medicaid agencies and organizations with whom they contract to deliver care. Applicants had flexibility in defining their target populations and intervention strategies as long as they focused on clients with MCC.

Key features of the programs included:

- ✓ Target population: Varied by program. Examples included diabetes and comorbidities; mental health and substance abuse; and individuals at high risk for adverse events and/or high overall costs along with MCC.
- ✓ Intervention focus: Case management and coordination models to improve patient care; Augmentation of pre-existing disease management program with in-person patient education; Integration of providers to improve the quality of patient care.
- ✓ Duration: Ranged from less than 12 months to 12 months or more; average of 15 months.

- ✓ **McKesson Health Solutions** – A Collaborative Group Approach to Consumer Diabetes Education for High Risk Consumers to Support Disease Management Interventions in Oregon and New Hampshire
- ✓ **Memorial Healthcare System** – My Valued Partner (MVP) Program
- ✓ **Partnership HealthPlan of California** – Reducing Risk of Cardiovascular Complications in Diabetics
- ✓ **University of California at San Diego** – Improving Treatment of Depression in a Low-Income and Ethnically Diverse Population of Patients with Diabetes Using the IMPACT Model and Project Dulce
- ✓ **Washington State Department of Social and Health Services** – Washington Medicaid Integration Partnership (WMIP)

Each "innovation team" received intensive technical assistance in designing and implementing its new approaches to care and was expected to share information on its efforts and data on its process and outcome measures.

Assessment of Its Impact

Findings from the independent evaluation reinforce the following conclusions:

- Medicaid purchasers, plans, and providers are willing and able to test groundbreaking models of care for beneficiaries with MCC.
- Formal measurement of these innovations is critical to quality improvement and to building an evidence base where none now exists.
- Integrating services —such as physical, behavioral, substance abuse, and long-term care—for high-risk Medicaid beneficiaries appears particularly promising in generating quality improvements and reducing hospital admissions.

Sources

Evaluation of the Medicaid Value Program: Health Supports for Consumers with Chronic Conditions. Mathematica Policy Research, Inc. August 14, 2007.
http://www.chcs.org/usr_doc/Final_Report-MVPEvaluation.pdf.

Additional Information and Resources

- **Report:** Environmental scan: health supports for consumers with chronic conditions
  http://www.chcs.org/publications3960/publications_show.htm?doc_id=317310
- **Case studies:** Medicaid Value Program case studies
  http://www.chcs.org/publications3960/publications_show.htm?doc_id=514996
- **Technical assistance tools:** Medicaid Value Program logic models
  http://www.chcs.org/publications3960/publications_show.htm?doc_id=514998
- **Report:** Evaluation of the Medicaid Value Program: health supports for consumers with chronic conditions
  http://www.chcs.org/usr_doc/Final_Report-MVPEvaluation.pdf
- **Journal Article:** Using qualitative and quantitative methods to evaluate small-scale disease management pilot programs
  http://online.liebertpub.com/doi/abs/10.1089/pop.2008.0037

Other Noteworthy Activities

Partnership for Solutions: Better Lives for People with Chronic Conditions

Developed by Johns Hopkins University with support from the Robert Wood Johnson Foundation

The Partnership for Solutions, led by Johns Hopkins University and the Robert Wood Johnson Foundation, was an initiative to improve the care and quality of life for the more than 125 million Americans with chronic health conditions. The partnership engaged in three major activities: conducting original research and identifying existing research that clarifies the nature of the problem; communicating research findings to policymakers, advocates, and organizations that pay for, or provide, services to those with chronic conditions; and working to identify promising solutions to the problems faced by children and adults with multiple chronic health conditions. Visit http://www.partnershipforsolutions.org/index.html.

Frequent Users of Health Services Initiative

Sponsored by the California Endowment and the California HealthCare Foundation

The Frequent Users of Health Services Initiative was a 5-year, $10 million initiative focused on promoting a more responsive system of care that addresses patients' needs, improves outcomes, and decreases unnecessary use of emergency rooms and avoidable hospital stays. "Frequent users" are people who are often chronically ill and under- or uninsured who repeatedly use emergency rooms and hospitals for medical crises that could be prevented with more appropriate ongoing care. They often have multiple psychosocial risk factors, such as mental illness, alcohol or substance use disorders, and homelessness, and they lack social supports, which affects their ability to get continuous, coordinated care. The initiative funded six demonstration projects across California that emphasized integrated strategies to meet the health and related needs of the frequent user population. An independent evaluation of the initiative showed that coordinated, multidisciplinary care can reduce hospital visits and costs while helping to improve stability and quality of life for patients.
Visit http://www.chcf.org/projects/2008/frequent-users-of-health-services-initiative.

New Jersey Health Initiatives – Projects to Improve Transitions in Care

Sponsored by the Robert Wood Johnson Foundation

New Jersey Health Initiatives (NJHI) is a statewide grant-making program of the Robert Wood Johnson Foundation. NJHI supports advancement in health services delivery, improvement in health, and the expansion of leadership expertise through grant-making across the State of New Jersey. To meet the many health needs of the State's diverse populations, regions, and communities, the NJHI program encourages improvement and collaboration in health service programs, delivery systems, provider arrangements, and financing mechanisms. Eleven grants have been awarded with funding from 2011 through 2013 to support improvements in care transitions for individuals with developmental disabilities and medically complex conditions.
Visit http://njhi.org/projects/tags/Transitions-in-Care.