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Medicaid and North Carolina's Aging Population

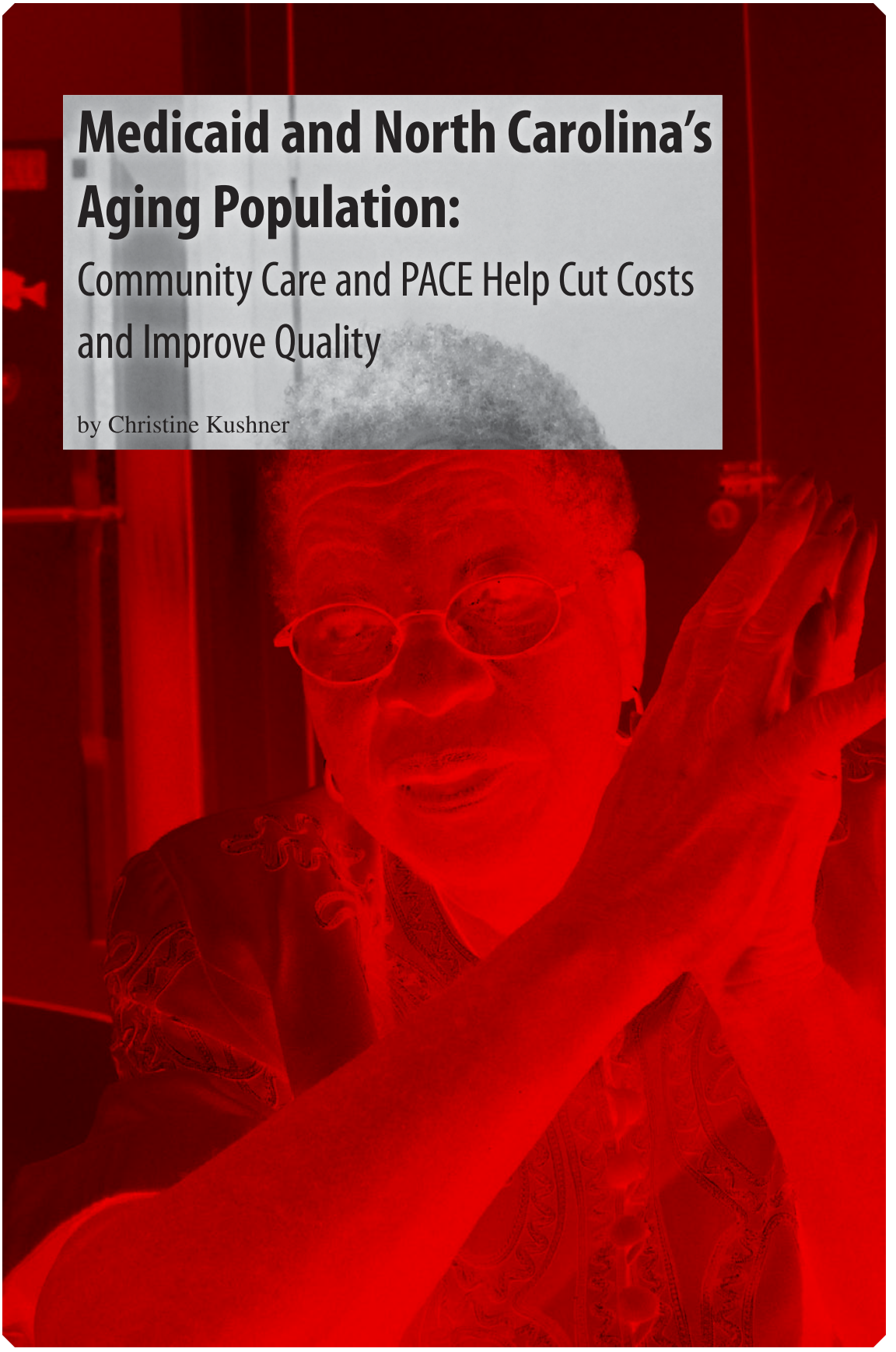
The Art of Aging: Our Elders, Our State

North Carolina Center for Public Policy Research

Medicaid and North Carolina's Aging Population:

Community Care and PACE Help Cut Costs and Improve Quality

by Christine Kushner



Karen Tam

Executive Summary

In 2007, Addie Shipman, then aged 69, went to dialysis three times each week as she awaited a kidney transplant. A Medicaid and Medicare recipient living in Whiteville, she had a multitude of other medical conditions, including heart problems and diabetes. Fortunately, Addie said she felt secure about her access to medical care. An aide came to her home to help her, and despite her many health problems, she said she always received the health care she needed.

The Baby Boomers are going to start turning 65 in 2011, and by 2030, North Carolina's older population is expected to double, rising from 1.1 million to 2.2 million. As the elderly population grows, many will need long-term care, and more will qualify for Medicaid. With the aging of the Baby Boomers, the state's future Medicaid spending is likely to continue to increase and consume an even greater portion of the state budget, threatening the availability of quality care for Addie Shipman and others. Is North Carolina on a path that is fiscally unsustainable? Or are there ways for the state to improve the quality of care and decrease costs?

Cost of Medical Care Rising Faster Than Other Goods

In part because of the rising cost of medical care, national health spending is expected to grow from $2.2 trillion in 2007 to $4.3 trillion in 2017. The cost of medical care in the United States has risen faster than inflation over the years, as measured by the Consumer Price Index. For the last 20 years, the growth in medical care costs has exceeded inflation by an average of 1.9 percent each year.

Several studies have analyzed the impact of aging on health care costs overall. One study found that from 2000 to 2030 there would be a 20 percent increase in health care costs due to aging—or 0.6 percent per year. Another study found an 18 percent increase between 2000 and 2050 due to aging—0.3 percent per year.

North Carolina's Medicaid Program

***Medicaid** is the state-run health insurance program for low-income North Carolinians, and **Medicare** is the federal government's national health insurance program for citizens aged 65 and older. Generally, Medicaid provides health insurance for individuals with low incomes, long-term care for the elderly, and services for persons with disabilities.*

*States must provide 16 basic services for the elderly on Medicaid—including hospital inpatient services, hospital outpatient services, physician services, nursing facility services, home health care for persons eligible for skilled nursing services, and laboratory and x-ray services. But, other services are optional, such as rehabilitation, physical therapy, hospice, prescription drugs, and transportation. North Carolina offers 27 of the optional services allowed by the federal government. The term **optional** means the state is not required by the federal government to provide the services, but any the state opts to provide will be eligible for federal matching funds.*

*Medicaid is a **federal entitlement.** If individuals are eligible, then legally they cannot be denied services, even if the state is facing a budget shortfall. Waiting lists are not allowed, nor can enrollment be capped.*

Medicaid and North Carolina's State Budget

The confidence of elderly North Carolinians like Addie Shipman in being assured of access to health care comes at an increasing price for the state's General Fund. Medicaid spending has increased steadily in the past three decades and continues to consume a greater proportion of the state's tax dollars. Medicaid spending has grown because of the increase in the number of eligible people, expansion of the services provided, increases in life expectancy, economic downturns, medical advances, and the increase in the number of very old persons requiring extensive acute and/or long-term health care—factors that have increased the costs for all states and all health plans. Nationally, Medicaid spending is expected to average 8.4 percent growth per year between 2009–18.

The total Medicaid budget for fiscal year 2008–09 in North Carolina was $9.9 billion. In North Carolina, Medicaid is funded jointly by the federal government (65.13 percent) and state government (34.87 percent). Until recently, the counties paid 2.7 percent. The county share was phased out on July 1, 2009.

In fiscal year 2006–07, total Medicaid expenditures were $9 billion, and $1.8 billion, or 20 percent, was spent on the elderly. Almost 50 percent of the Medicaid dollars spent on the elderly—$895 million—was spent on nursing facilities. There were 151,763 elderly recipients of Medicaid services, and the average expenditure per recipient was $11,675. While only 10 percent of the recipients of services are elderly, more than 20 percent of total service dollars in North Carolina are spent on the elderly.

One cost driver is Medicaid's coverage of long-term care, which is compounded by North Carolina's reliance on nursing home care instead of in-home care. In 2007, 48.9 percent of total Medicaid dollars spent on the elderly was for nursing facility care—up from 43.9 percent the year before.

Ranking ninth among states in total Medicaid spending, North Carolina's Medicaid program has worked hard not just to cut spending to keep the program solvent, but also to contain costs while improving the quality of health care. Two innovative programs are aimed at improving care while saving money and keeping seniors healthier—Community Care of North Carolina, a nationally-recognized program that manages Medicaid recipient care, and the PACE model for care of the frail elderly.

The Community Care Program: Controlling Costs with Coordination of Care

In 1986, North Carolina's Medicaid expenditures were increasing by more than 18 percent per year, more recipients were relying on emergency rooms because of the difficulty finding a primary care physician, and the overall eligible population for Medicaid was growing. In response, the state's Medicaid program partnered with

the N.C. Foundation for Advanced Health Programs and the N.C. Office of Research, Demonstrations, and Rural Health to develop and test health care management for Medicaid recipients. This collaboration began with the Wilson County Health Plan and then expanded statewide as the Carolina ACCESS program over a 15-year period.

The current incarnation of Carolina ACCESS is called Community Care of North Carolina (CCNC). It has evolved into a statewide initiative to implement health care management, evidence-based disease management, and case management for Medicaid recipients. The Community Care program also is the primary vehicle for controlling the growth in Medicaid spending. Medicaid recipients enrolled in the program are linked to a ***medical home****—a primary care provider who is part of one of 14 regional, community-based networks that cover all 100 counties and involve about 90 percent of the state's primary care providers. About 925,000 of almost 1.7 million Medicaid enrollees are part of the Community Care program.*

The program saves money by replacing fragmented health care visits for individual illnesses with a lifelong, coordinated approach to primary health care. Physicians serve as gatekeepers to more specialized—and expensive—services, including emergency room care. An article in The New York Times *in January 2009 noted another way the Community Care program saves the state money:*

> *The most striking difference . . . between Community Care of North Carolina and other state Medicaid programs is the complete absence of insurance companies. Most states partner with an insurance company to deliver care to Medicaid patients; any residual profits go to the insurance company. But in North Carolina, state Medicaid administrators and health care providers manage the program exclusively and then funnel profits directly back into patient care.*

Leaders of the Community Care program offer up a concrete record of accomplishments. In 2003, the program's successes included a 35 percent decrease in hospitalization rates for asthma, a 13 percent decrease in emergency room utilization, and $6 million in savings from a nursing home pharmacy project that examined multiple medications taken by nursing home patients. The Cecil Sheps Center for Health Services Research at UNC-Chapel Hill found $3.3 million in savings for the asthma management program and $2.1 million in savings for the diabetes management program in fiscal year (FY) 2001–02.

Mercer Government Human Services Consulting also has been tracking estimated cost savings from the Community Care program since 2002. An actuarial study by the group found the program saved the state $60 million in FY 2002–03 and $124 million in FY 2003–04. In FY 2004–05, the program saved $77 million to $85 million, and in FY 2005–06, it saved $154 million to $170 million. Mercer released its latest report in February 2009, and it estimates that the Community Care program saved North Carolina $135 million to $149 million in FY 2006–07.

The 2009 N.C. General Assembly is beginning to require comprehensive

evaluation of the cost savings provided by the Community Care program. The legislature instructed the N.C. Department of Health and Human Services to identify baseline data and performance measures to be used to evaluate cost savings and to develop data systems needed to implement the performance measures. Beginning December 31, 2010, a report on cost savings achieved by the CCNC networks will be required annually.

Now the Community Care program has received permission from the federal government to serve recipients who are dually eligible—that is, recipients who because of their age (65 and older) and their low incomes are eligible to receive services from both the state-run Medicaid program and the federal Medicare program. In early 2009, the federal Centers for Medicare and Medicaid Services (CMS) granted a 646 waiver—named after section 646 of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003—allowing the expansion of the Community Care program to provide services to dually eligible patients. Waivers allow states to operate programs outside of federal guidelines.

The Community Care program's success has garnered national attention. The Medicaid program was one of seven national winners of the 2007 Innovations in American Government Awards from Harvard University's Kennedy School of Government. It also received the 2007 Annie E. Casey Innovations Award in Children and Family Systems Reform. The Kaiser Commission on Medicaid and the Uninsured features the Community Care program in its May 2009 policy paper on how Medicaid can serve as a platform for health care reform. This comes as President Barack Obama is emphasizing the need for expanded health coverage for uninsured Americans as part of broader national health reform.

Testifying before the U.S. Senate on the significance of community care for health care reform nationally, Dr. Allen Dobson, chair of the N.C. Community Care Network, said:

> *We believe Community Care can serve as an important national model for healthcare reform. Community Care's local infrastructure will work in both urban and rural as well as public and private settings. The path forward for the U.S. healthcare system can clearly be informed by the important work of some of our best and most integrated healthcare systems. However the majority of the nation's healthcare is still provided in communities where there is no 'system' at all. Lessons learned in Community Care can provide a road map to organizing all local communities regardless of size in order to focus on quality, costs, and improvement in the health of its citizens.*

PACE: Cutting Costs by Helping the Elderly Remain at Home

In addition to reducing costs for nursing home patients, the state also contains Medicaid costs by helping frail elderly patients avoid entering nursing homes and instead remain in their homes, where health care costs can be lower and outcomes often are better. The Program of All-inclusive Care for the Elderly (PACE) offers coordination of health care services for frail elders who qualify for nursing home care through Medicaid but want to remain living at home.

There are currently 61 PACE projects nationally in 29 states, including three in North Carolina located in Burlington, Southern Pines, and Wilmington. One of these is Elderhaus, a nonprofit program in Wilmington, which provides daytime care and social services for elderly and disabled adults. Under PACE, Elderhaus enrolls 31 Medicaid patients and provides basic medical care, personal care services, transportation, and day care, as well as occupational, physical, recreational, and other therapies. By coordinating this care, participants stay healthier and remain out of a costly nursing home facility.

Piedmont Health SeniorCare is the PACE program located in Burlington that serves Alamance and Caswell counties. Using a newly renovated 15,000 square-foot facility, it enrolled its first participants in December 2008. It currently has 33 participants, who all have multiple chronic conditions. But instead of entering a nursing home, they are working with PACE to "age in place" by remaining in their homes.

Nationally, fewer than 10 percent of PACE participants go into nursing homes, and they also have fewer emergency room visits. Less time spent in nursing homes saves Medicaid money, and fewer emergency room visits saves Medicare money. The PACE programs may expand across North Carolina: The Moses Cone Health System is working with partners to develop PACE sites in Greensboro and Charlotte, and there are feasibility studies underway by Volunteers of America, a national, faith-based nonprofit, to develop other sites in North Carolina.

Conclusion

For patients like Addie Shipman, the Community Care program allows them to live at home and stay out of more costly nursing home care. Up until her death, Addie received care from the Whiteville physician practice she called her medical home, as well as case management from Access III of the Lower Cape Fear, her community care network. On August 1, 2008, Addie was admitted to the hospital, and she passed away three days later.

Estimates of the future costs of Medicaid vary because spending on long-term care will depend on the number of elderly who qualify for assistance, the type of care the elderly will use (nursing home or in-home care), and the availability of private and public providers of care. North Carolina's medical home model and emphasis on building a network of care may be important in implementing cost savings nationally under national health care reform. Otherwise, Medicaid spending is expected to average 8.4 percent growth per year and could consume more than 6 percent of the nation's gross domestic product by 2080.

According to recent estimates from the Fiscal Research Division of the N.C. General Assembly, Medicaid is the fastest-growing program in the state budget. In 2009, the authorized state budget for Medicaid was $3.2 billion, or 15 percent of the state's 21.2 billion authorized operating budget—an increase of 9 percent from 2008. With the first Baby Boomers turning 65 in 2011, North Carolina has to be sure it has the capacity to care for all of its low-income elderly residents in the future.

In 2007, Addie Shipman, then aged 69 and living in Whiteville, went to dialysis three times each week as she awaited a kidney transplant. She had a multitude of other medical conditions, including heart problems and diabetes. Fortunately, Addie, a recipient of both Medicare and Medicaid, said she felt secure about her access to medical care. "I feel good about my doctors," she said. An aide came to her home to help her with everyday activities, and despite her many health problems, Addie said she always received the health care she needed.

But according to testimony presented to Congress in 2007 by the U.S. Government Accountability Office,

> projections show that the federal budget is on a path that is fiscally unsustainable, in large part because of growth in spending for Medicare and Medicaid. Mandatory spending for these entitlements, together with spending for Social Security, threatens to crowd out discretionary spending for a vast array of domestic programs. It is largely the public payers who will bear the cost burden associated with the baby boom generation. . . .[1]

"With the aging of the Baby Boomers ... the state's future Medicaid spending is likely to continue to increase and consume an even greater portion of the state budget."

The Baby Boomers are going to start turning 65 in 2011, and by 2030, North Carolina's older population is expected to double, rising from 1.1 million to 2.2 million.[2] Eighteen percent of the population in North Carolina will be 65 or older, and more of the state's elderly will be older than 85 as life expectancy continues to increase.[3] As the elderly population grows, many will need long-term care, and more will qualify for Medicaid.

With the aging of the Baby Boomers, the need for more intensive medical care at the end of life, and our ongoing reliance on nursing home care, the state's future Medicaid spending is likely to continue to increase and consume an even greater portion of the state budget. Is North Carolina also on a path that is fiscally unsustainable? Or are there ways for the state to improve the quality of care and decrease costs?

Cost of Medical Care Rising Faster Than Other Goods

For more than 25 years, the cost of medical care in the United States has risen faster than inflation, as measured by the Consumer Price Index (CPI).[4] In 1985, for example, it cost $107.60 to buy household goods that would have cost $100 in 1982–84, but it cost $113.50 for medical care. In 2008, it cost $215.30 to buy those same goods, and it cost $364.07 for medical care. In 2008, the cost of medical care outpaced the costs of goods by 148 index points (see Figure 1), and for 20 years the growth in medical care costs has exceeded inflation by an average of 1.9 percent each year (see Table 1).

National health spending is expected to grow from $2.2 trillion in 2007 to $4.3 trillion in 2017.[5] By type of service, 31.1 percent of national health expenditures are for hospital care, 21.4 percent for physician and clinical services, 10.1 percent for prescription drugs, 5.9 percent for nursing home care, and 2.6 percent for home health care (see Figure 2). "The impact of population aging is expected to account for a relatively small share of future health care spending growth on a per enrollee basis but to have a substantial influence on the public share of spending growth, as the leading edge of the baby-boom generation becomes eligible for Medicare"[6] and Medicaid.

Several studies have analyzed the impact of aging on costs overall. One study found that from 2000 to 2030 there would be a 20 percent increase in health care costs due to aging—or 0.6 percent per year.[7] Another study found an 18 percent increase

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between 2000 and 2050 due to aging—0.3 percent per year. According to the study, *The Boomers Are Coming,* "The rate of change is steepest from 2000 to 2035 as Baby Boomers enter retirement, and then levels off from 2035 to 2050 as the age structure of the population stabilizes."[8] Eighty percent of the increase in cost per capita will occur for seven medical reasons: heart and vascular conditions, orthopedic and arthritic conditions, gastric and intestinal conditions, lung conditions, neurological disorders, endocrinal conditions, and urologic conditions.[9]

North Carolina's Medicaid Program

As a member of North Carolina's growing aging population, Addie Shipman qualified for Medicare, the federal government's national health insurance program for citizens aged 65 and older. She also received Medicaid, the health insurance program for low-income citizens (see Table 2 on the differences between Medicare and Medicaid). Medicare and Medicaid were both passed as part of the Social Security Act of 1965.[10] North Carolina submitted its original Medicaid State Plan in 1969, and the program was implemented on January 1, 1970.[11] Initially housed under the N.C. Division of Social Services, since 1978 the program has been administered by a separate Division of Medical Assistance within the Department of Health and Human Services. Generally, Medicaid provides health insurance for individuals with low incomes, long-term care for the elderly, and services for persons with disabilities.[12]

Addie Shipman, a recipient of Medicaid and Medicare.

Karen Tam

The federal government provides matching funds to North Carolina for its Medicaid program, but the state determines "who will be covered, the services they may receive, how much will be spent, and where Medicaid should rank among competing demands for limited state dollars."[13] North Carolina has a *state plan* which is the funding agreement between the Division of Medical Assistance and the federal government, but the state also uses *waivers* to operate programs outside federal guidelines. "The U.S. Secretary of Health and Human Services has the legal authority to waive compliance with certain provisions of Medicaid law. In the past, states have used waivers to expand coverage, provide services that could not otherwise be offered, expand home and community services, and require beneficiaries to enroll in managed care programs." [14]

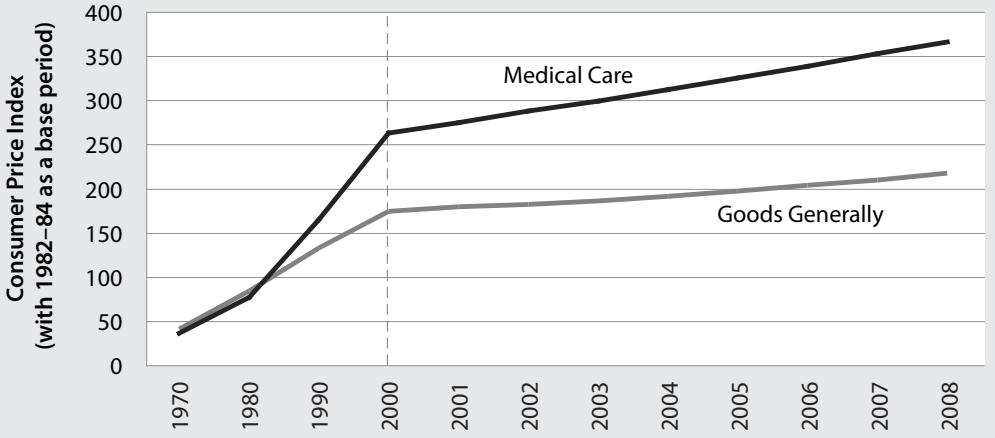
States must provide 16 basic services for the elderly on Medicaid—including hospital inpatient services, hospital outpatient services, physician services, nursing

Table 1. Annual Percent Change, Consumer Price Index and Medical Care, 1988-2008

Year	Annual CPI-U Increase	Annual Medical Care Increase
1988	4.1%	6.5%
1989	4.8%	7.7%
1990	5.4%	9.0%
1991	4.2%	8.7%
1992	3.0%	7.4%
1993	3.0%	5.9%
1994	2.6%	4.8%
1995	2.8%	4.5%
1996	3.0%	3.5%
1997	2.3%	2.8%
1998	1.6%	3.2%
1999	2.2%	3.5%
2000	3.4%	4.1%
2001	2.8%	4.6%
2002	1.6%	4.7%
2003	2.3%	4.0%
2004	2.7%	4.4%
2005	3.4%	4.2%
2006	3.2%	4.0%
2007	2.8%	4.4%
2008	3.8%	3.7%

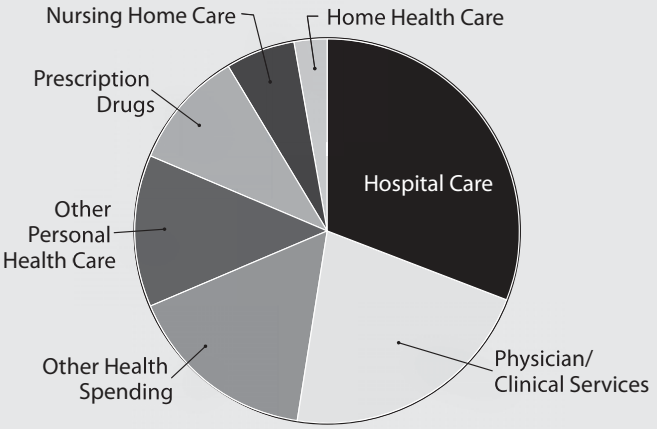
Source: Consumer Price Index – All Urban Consumers, U.S. City Average, Not Seasonally Adjusted, Base Period is 1982-84. On the Internet at *http://www.bls.gov/cpi/,* accessed on July 13, 2009.

Figure 1. The Cost of Goods Generally and the Cost of Medical Care, 1970–2008



Source: Consumer Price Index – All Urban Consumers, U.S. City Average, Not Seasonally Adjusted.

Figure 2. Distribution of National Health Expenditures, by Type of Service, 2007



Hospital Care	31.1%	Prescription Drugs	10.1%
Physician/Clinical Services	21.4%	Nursing Home Care	5.9%
Other Health Spending	16.2%	Home Health Care	2.6%
Other Personal Health Care	12.7%		

Source: Kaiser Family Foundation, Trends in Health Care Costs and Spending, Pub. No. 7692-02, March 2009. On the Internet at *http://www.kff.org/insurance/upload/7692_02.pdf,* accessed Sept. 25, 2009. The Kaiser Family Foundation calculations used National Health Expenditures data from the Centers for Medicare and Medicaid Services, Office of the Actuary, and National Health Statistics Group.

In the future people will be born with just enough money to last until they get seriously ill.

George Carlin

facility services, home health care for persons eligible for skilled nursing services, and laboratory and x-ray services (see Table 3). But, other services are optional, such as rehabilitation, physical therapy, hospice, prescription drugs, and transportation.[15] North Carolina offers 27 of the optional services allowed by the federal government, according to the Division of Medical Assistance. The term *optional* means the state is not required by the federal government to provide the service, but if they opt to provide it, then they will be eligible for federal matching funds.[16]

Medicaid provides funding for health care for individuals who are both financially and categorically eligible. To be *financially eligible,* a recipient's income and assets must be low enough to qualify for services.[17] In North Carolina, an older single adult in North Carolina must meet federal poverty guidelines. For a single person, monthly income must be $903 or less to qualify for Medicaid, or $10,830 a year. For a couple or two-person household, the maximum monthly income is $1,215, or $14,570 a year (see Table 4).[18] "It's easy to forget how poor someone needs to be to qualify for Medicaid," says Denise Levis Hewson, director of quality improvement and clinical operations for N.C. Community Care Networks, Inc.

To be *categorically eligible,* recipients must fall into one of the covered population categories, like the aged, blind, or disabled. Again, there are both *mandatory* eligibility groups (those required by the federal government, like the elderly receiving Supplemental Security Income[19]) and *optional* eligibility groups (states may elect to serve other categorically needy groups).[20]

Medicaid is a *federal entitlement,* which means that if an individual is eligible then legally they cannot be denied services, even if the state is facing a budget shortfall.[21] Waiting lists are not allowed,[22] nor can enrollment be capped.[23] *Dual eligibility* refers to the group of people, like Addie Shipman, enrolled in both Medicare and Medicaid. "Virtually all elderly Medicaid enrollees are also enrolled in Medicare," notes a report on Medicaid for state legislators.[24]

The confidence of elderly North Carolinians like Addie when it comes to being assured of access to health care comes at an increasing price for the state's General Fund. Medicaid spending has increased steadily in the past three decades and continues to consume a greater proportion of the state's tax dollars. Medicaid spending has grown because of the increase in the number of eligible people, expansion of the services provided, increases in life expectancy, economic downturns, medical advances, and the "increase in the number of very old and disabled persons requiring extensive acute and/or long-term health care."[25] These are factors that have increased the costs of Medicaid for all states and all health plans.

While total federal and state Medicaid spending decreased from 6.1 percent growth in 2007 to 4.7 percent growth in 2008, federal Medicaid spending in 2008 increased 8.4 percent—the highest rate of growth since 2003. The federal government temporarily increased its percentage of Medicaid payments for 27 months as part of the American Recovery and Reinvestment Act of 2009 to help states during the recession. This retroactive legislation shifted $7 billion of Medicaid spending from the states to the federal government in the fourth quarter of 2008. Nationally, Medicaid spending is expected to average 8.4 percent growth per year between 2009 and 2018.[26]

Medicaid and North Carolina's State Budget

The total Medicaid budget for fiscal year 2008–09 in North Carolina was $9.9 billion, including $2.4 billion in state funds.[27] In North Carolina, Medicaid is funded jointly by the federal government (65.13 percent) and state government (34.87 percent). Until recently, the counties paid 2.7 percent.[28] The county share was phased out completely on July 1, 2009.[29]

Table 2. How Does Medicaid Differ From Medicare?

	Medicaid	Medicare
Basics	Medicaid is designed for low-income and disabled people. By federal law, states must cover low-income pregnant women, children, the elderly, and the disabled. Childless adults are not covered, and many poor individuals earn too much to qualify.	Medicare is a federal program that covers individuals aged 65 and over, as well as some disabled individuals.
Administration	The states are responsible for administering the Medicaid program.	The federal government is responsible for administering the Medicare program.
Financing	Medicaid is financed jointly by the states and federal government. Every dollar that a state spends on Medicaid is matched by the federal government. Overall, the federal government pays for 57 percent of Medicaid costs. *[In North Carolina, the federal government pays for 65.13 percent.]*	Medicare is financed by federal income taxes, a payroll tax shared by employers and employees, and individual enrollee premiums (for Part B and Part D).
Benefits	Medicaid offers a fairly comprehensive set of benefits, including prescription drugs.	Medicare Part A covers hospital services, Medicare Part B covers physician services, and Medicare Part D offers a prescription drug benefit. There are many gaps in Medicare coverage, including incomplete coverage for skilled nursing facilities, dental, hearing, and vision.

Source: Reprinted from the Council of State Governments, *Medicaid 101: A Primer for State Legislators,* Lexington, KY, Jan. 2009, p. 6. On the Internet at *http://www.csg.org/pubs/Documents/Medicaid_Primer_final_screen.pdf,* accessed Sept. 25, 2009.

Table 3. Services Covered in N.C. by Medicaid, Mandatory and Optional Categories

Mandatory	Optional
1. Ambulance and Other Medical Transportation	1. Case Management
2. Durable Medical Equipment	2. Chiropractor
3. Family Planning	3. Clinic
4. Federally Qualified Health Centers & Rural Health Centers	4. Community Alternatives Programs (CAP)
5. Health Check (EPSDT)	5. Dental and Dentures
6. Hearing Aids (children)	6. Diagnostic
7. Home Health	7. Eyeglasses
8. Hospital Inpatient	8. Health Maintenance Organization (HMO) Membership
9. Hospital Outpatient	9. Home Infusion Therapy
10. Nurse Midwife	10. Hospice
11. Nurse Practitioner	11. Intermediate Care Facilities for the Mentally Retarded
12. Nursing Facility	12. Mental Health
13. Other Laboratory and X-ray	13. Nurse Anesthetist
14. Physician	14. Optometrist
15. Psychiatric Residential Treatment Facility Services and Residential Services (treatment component only)	15. Orthotic and Prosthetic Devices (children and adults)
16. Routine Eye Exams & Visual Aids (children)	16. PACE
	17. Personal Care
	18. Physical and Occupational Therapy and Speech/Language Pathology
	19. Podiatrist
	20. Prescription Drugs
	21. Preventive
	22. Private Duty Nursing
	23. Rehabilitative
	24. Respiratory Therapy (children)
	25. Routine Eye Exams & Visual Aids (adults)
	26 Screening
	27. Transportation

Note: All optional services are available to children under age 21 if they are medically necessary.

Source: N.C. Division of Medical Assistance, July 10, 2009.

In fiscal year 2006–07, total Medicaid expenditures in North Carolina were $9 billion, and $1.8 billion, or 20 percent, was spent on the elderly (see Table 5). Only 50 percent of the Medicaid dollars spent on the elderly—$895 million—was spent on nursing facilities (see Table 6). There were 151,763 elderly recipients of Medicaid services, and the average expenditure per recipient was $11,675. While only 10 percent of the recipients of services are elderly (see Table 7), more than 20 percent of total service dollars in North Carolina are spent on the elderly.[30]

North Carolina spent 16.9 percent ($3.3 billion) of its General Fund on Medicaid in 2007, up from 10.5 percent ($1.5 billion) in 2000 (see Table 5). And costs continue to rise. Program service expenditures increased by 19 percent in 2005, 13 percent in 2006, and 12 percent in 2007.[31] Almost 19 percent of the population in North Carolina is now eligible for Medicaid services (see Table 7).

"One cost driver is Medicaid's coverage of long-term care, which is compounded by North Carolina's reliance on nursing home care instead of in-home care."

One cost driver is Medicaid's coverage of long-term care, which is compounded by the reliance on nursing home care instead of in-home care. There are more than 400 certified nursing homes in North Carolina,[32] and in 2007, 48.9 percent of Medicaid service dollars spent on the elderly was for nursing home care—up from 43.9 percent the year before.[33] As the Baby Boom ages, there will be an increased demand to build more nursing home beds. But, building more beds to meet growing demand will drive up Medicaid costs. "We can't build enough beds to keep up with the growth in the aging population, so we need to keep them [patients older than 65] healthier," says Dr. Allen Dobson,[34] a family physician in Mount Pleasant and former Assistant Secretary for Health Policy and Medical Assistance for the N.C. Department of Health and Human Services.

For decades, states have attempted to control Medicaid costs, or at least stem the rate of growth.[35] Some states have cut or frozen provider payments, while others have limited eligibility or the range of optional services. Others reduced pharmacy benefits, and some implemented greater cost-sharing such as higher copayments.

Legislatures across the country are once again looking at Medicaid as they try to find ways to keep their states fiscally healthy.[36] Medicaid is a target in tough budget times because it is one of the fastest growing and largest pieces of state budgets. During a 2008 special session of its legislature, Utah first cut optional services, such as physical therapy, vision and hearing services, and visits to chiropractors. Then they trimmed administrative costs and cut increases for inflation.[37]

But some cuts create more problems than they solve. In Nevada, Medicaid covered so few services and the reimbursement rates were so low that "a card verged on becoming meaningless, an insurance card doctors won't honor."[38] A report on Medicaid by the National Conference of State Legislatures notes that "[a]nother Medicaid problem haunts states. Even in good times, health care costs are skyrocketing faster than state revenues. Each year Medicaid gobbles up a greater piece of the budget pie."[39]

Ranking ninth among states in total Medicaid spending (see Table 8), North Carolina's Medicaid program has worked hard not just to cut spending to keep the program solvent, but also to contain costs while improving the quality of health care. Two innovative programs are aimed at improving care while saving money and keeping seniors healthier—Community Care of North Carolina, a nationally-recognized program that manages Medicaid recipient care, and the PACE model for care of the frail elderly.

Table 4. Financial Eligibility for Medicaid Based on Federal Poverty Guidelines, 2009

Family Size	100% of Federal Poverty Level
1	$10,830
2	14,570
3	18,310
4	22,050
5	25,790

Source: The 2009 U.S. Department of Health and Human Services Poverty Guidelines. On the Internet at *http://aspe.hhs.gov/poverty/09poverty.shtml*, accessed on Sept. 25, 2009.

The Community Care Program: Controlling Costs with Coordination of Care

Like other states in the mid-1980s, North Carolina's Medicaid program faced a serious funding problem. In 1986, Medicaid expenditures were increasing by more than 18 percent per year, more recipients were relying on emergency rooms because of difficulty in finding a primary care physician, and the overall eligible population for Medicaid was growing.[40] The state's Medicaid program partnered with the nonprofit N.C. Foundation for Advanced Health Programs[41] and the N.C. Office of Research, Demonstrations, and Rural Health (now called the Office of Rural Health and Community Care) in the N.C. Department of Health and Human Services to develop and test health care management for Medicaid recipients.

This collaboration began with a single county demonstration (the Wilson County Health Plan) to improve access to care for the poor and contain health care costs. Over a 15-year period, the Carolina ACCESS program expanded statewide. The

Table 5. N.C. Medicaid Eligibility

State Fiscal Year	# Eligible for Medicaid	# 65 and Over Eligible for Medicaid	Total Medicaid Expenditures	Federal Expenditures	
1970	456,000		$ 49,862,059[1]		
1980	455,702	82,859	410,053,625		
1990	639,351	80,266	1,427,672,567		
2000	1,221,266	154,222	4,783,840,430	$2,998,403,878	
2001	1,354,593	154,284	5,480,241,286	3,430,145,921	
2002	1,390,028	153,282	6,185,038,224	3,827,151,587	
2003	1,447,283	151,672	6,605,712,421	4,172,894,036	
2004	1,512,360	151,478	7,404,741,424	4,868,510,671	
2005	1,563,751	151,512	8,170,028,897	5,168,013,772	
2006	1,644,457	149,961	8,583,463,472	5,209,510,606	
2007	1,682,028	147,813	9,012,613,680	5,286,618,011	

Sources: History of North Carolina Medicaid Program: State Fiscal Years 1970 to 2007, pp. 52-54. On the Internet at *http://www.dhhs.state.nc.us/dma/pub/historyofmedicaid.pdf*, accessed Sept. 26, 2009.

Medicaid in North Carolina; Annual Report, State Fiscal Year 2007, Division of Medical Assistance, Raleigh, NC, Dec. 2008, pp. 56-57. On the Internet at *http://www.dhhs.state.nc.us/dma/2007report/2007report.pdf*, accessed Sept. 26, 2009.

current incarnation of Carolina ACCESS is a program called Community Care of North Carolina (CCNC). Available in all of North Carolina's 100 counties, it utilizes health care management, evidence-based disease management, and case management for Medicaid recipients to control costs. The Community Care program is the primary vehicle for controlling the growth in Medicaid spending in North Carolina.

A Medical Home

The premise of *health care management* is linking patients with a *medical home* to control health care costs and improve care for Medicaid recipients. Each patient is assigned to a medical home—a primary care physician or provider who assumes responsibility to serve as a coordinator for that recipient's medical care.[42] Other health professionals such as nurses, certified nursing assistants, social workers, and lay health advisors work with the physician or provider to maintain and coordinate

and Expenditures, State Fiscal Years 1970-2007

	State Expenditures	Local Expenditures	N.C. General Fund (in millions)	Total State Budget (in millions)	State Fiscal Year
					1970
					1980
			$ 7,360.0	$ 11,996.4	1990
	$1,531,441,167	$253,995,385	14,561.7	24,290.4	2000
	1,740,075,518	310,019,848	14,350.1	24,501.7	2001
	2,004,262,173	353,624,465	15,135.3	26,565.9	2002
	2,061,550,446	371,267,939	15,205.1	27,152.6	2003
	2,164,109,962	372,120,792	15,930.8	29,397.0	2004
	2,574,797,253	427,217,872	17,107.3	31,221.5	2005
	2,916,023,074	457,929,792	18,033.9	34,539.6	2006
	3,261,308,502	464,687,167	19,319.5	36,761.0	2007

The North Carolina State Budget, Summary of Recommendations, 2009-2011, Office of State Budget and Management, Raleigh, NC, March 2009, p. 23. On the Internet at *http://www.osbm.state.nc.us/new_content/historical_budget_data.pdf,* accessed Sept. 26, 2009.

[1] Expenditures for six months: Medicaid began on January 1, 1970, and the state fiscal year ended on June 30, 1970.

Table 6. N.C. Medicaid Expenditures on the Elderly, State Fiscal Year 2006-07

Type of Service	Elderly	Percent of Total Medicaid Dollars in N.C., State Fiscal Year 2006-07
Inpatient Hospital`	$ 12,073,303	0.7
Outpatient Hospital	19,995,400	1.1
Mental Hospital	7,742,200	0.4
Physician	44,983,518	2.5
Clinics	10,735,139	0.6
Nursing Facility	894,727,384	48.9
Intermediate Care Facility for Mental Retardation	30,693,265	1.7
Dental	12,396,877	0.7
Prescribed Drugs	8,495,283	0.5
Home Health	39,390,795	2.2
Community Alternative Programs Disabled Adult	177,152,766	9.7
Community Alternative Programs Mentally Retarded	8,138,739	0.4
Personal Care	150,152,139	8.2
Hospice	37,647,128	2.1
Early and Periodic Screening, Diagnosis, and Treatment (Health Check)	64	0.0
Laboratory & Imaging Services	566,851	0.0
Adult Home Care	88,640,409	4.8
Other Services	37,305,062	2.0
TOTAL SERVICES	1,580,836,322	86.5
Medicare, Part A Premiums	50,988,814	2.8
Medicare, Part B Premiums	193,349,350	10.6
HMO Premiums	2,842,883	0.2
TOTAL PREMIUMS (see note)	247,181,047	13.5
GRAND TOTAL SERVICES AND PREMIUMS	$ 1,828,017,369	100.0
Medicare Crossovers	$ 106,041,911	
Total Elderly Recipients	151,763	
Expenditures per Recipient	11,675	
Medicare Part D Payments	$ 132,081,660	

Note: Medicare-Aid is a program that helps pay for Medicare expenses, including deductibles, premiums, and coinsurance charges for the elderly 65 and over that qualify for Medicaid.

Source: Medicaid in North Carolina, Annual Report, State Fiscal Year 2007, Division of Medical Assistance, Raleigh, NC, Dec. 2008, Table 12, p. 65. On the Internet at *http://www.dhhs.state.nc.us/dma/2007report/2007report.pdf,* accessed Sept. 26, 2009. Some numbers updated by Steve Owen, chief business operations officer for N.C. Division of Medical Assistance.

services. Case managers work with patients on improving their health. For example, in Addie Shipman's case, after she visited her primary care physician, a nurse at the physician's office would routinely call her to check on her status, and an aide would come into her home to provide one-on-one assistance.

In North Carolina, providers are part of 14 regional, community-based networks that cover all 100 counties and involve about 90 percent of the state's primary care providers (see Table 9).[43] About 925,555 of almost 1.7 million Medicaid enrollees are part of the Community Care program. The initiative has built a care management system for Medicaid recipients organized and operated by community providers.

Cost Savings of the Community Care Program

The Community Care program saves money by offering "a patient-centered form of care that replaces episodic treatment based on individual illnesses with a long-term coordinated approach."[44] The program enrolls primary care physicians "to serve as patients' gatekeepers to more specialized—and expensive—services. In return, Medicaid pays participating physicians a modest care coordination fee."[45] An article in *The New York Times* in January 2009 noted another way the Community Care program saves the state money:

Table 7. Percent of State Population Eligible for Medicaid and Percent of Recipients Who Are Elderly, 2007

N.C. Population	8,860,341
Percent Eligible for Medicaid	1,682,028
Percent of State Population Eligible for Medicaid	18.98%
Number of Elderly Eligible for Medicaid	161,722
Percent of Medicaid Recipients Who Are Elderly	9.9%

Source: Medicaid in North Carolina, Annual Report, State Fiscal Year 2007, Division of Medical Assistance, Raleigh, NC, Dec. 2008, p. 10, p. 57, p. 63. On the Internet at *http://www.dhhs.state.nc.us/dma/2007report/2007report.pdf*, accessed Sept. 26, 2009.

> The most striking difference, . . . between Community Care of North Carolina and other state Medicaid programs is the complete absence of insurance companies. Most states partner with an insurance company to deliver care to Medicaid patients; any residual profits go to the insurance company. But in North Carolina, state Medicaid administrators and health care providers manage the program exclusively and then funnel profits directly back into patient care.[46]

Jeffrey Simms, former assistant director for Medicaid in the N.C. Department of Health and Human Services, says, "At the heart of the program is a concentrated effort to improve clinical performance." Many patients experience problems taking multiple medications or seeing too many specialists, he says. Physician leaders from each Community Care network meet regularly, and physicians and personnel develop program-wide strategies to improve care.

"Community Care has taken community-based medicine and care management and implemented it statewide," says Torlen Wade, executive director of N.C. Community Care Networks, Inc. (NCCCN, Inc.). "Community-based medicine has rarely been implemented on a grand scale."

The Community Care program has piloted innovative practices in a few areas of the state and then implemented successful strategies statewide in all the networks. For example, the program piloted initiatives in dental fluoride varnishing for high-risk Medicaid recipients. Dental fluoride varnishing is a protective coating painted on teeth to help prevent new cavities from forming and to keep cavities that have already started from expanding. Now those services have been implemented statewide, says Denise Levis Hewson, the Medicaid specialist at NCCCN, Inc. Current pilot initiatives include management of chronic obstructive lung disease, congestive heart failure, depression, hypertension, and mental health services.

Leaders of the Community Care program offer up a concrete record of accomplishments. In 2003, the program's successes included a 35 percent decrease in hospitalization rates for asthma, a 13 percent decrease in emergency room utilization, and $6 million in savings from a nursing home pharmacy project that examined multiple

Alone and Old, Without a Medical Home

It does make a difference to have a doctor you know, someone you can call, someone you know will fill your prescriptions when they run out. Dennis Streets, the director of North Carolina's Division of Aging and Adult Services shares the story of an 83-year-old resident of Four Oaks in Johnston County, about 35 miles southeast of Raleigh. The woman's family physician of seven years left town to join a practice in Clayton that was not accepting any more Medicare or Medicaid patients. Shortly thereafter, the woman's endocrinologist moved to another out-of-area practice without making arrangements for her to see another doctor. The woman's daughter called all of the other medical practices in the area, but none of them were accepting Medicare or Medicaid patients. Writes the daughter, "The last office I spoke with told me that they didn't know of any doctors in the Raleigh area that were taking Medicare patients, that I would have to call Durham or Chapel Hill." But her mother is 83 years old and frail, a widow who does not drive. When the daughter called an endocrinologist to explain that her mother was low on her medication, she never heard back. Her mother just says, "What is the sense?"

—Mebane Rash

Karen Tam

medications taken by nursing home patients.[47] The Cecil Sheps Center for Health Services Research at UNC-Chapel Hill found $3.3 million in savings for the asthma management program and $2.1 million in savings for the diabetes management program in fiscal year (FY) 2001–02.[48]

Mercer Government Human Services Consulting also has been tracking estimated cost savings from the Community Care program since 2002. An actuarial study by the group found the program saved the state $60 million in FY 2002–03[49] and $124 million in FY 2003–04.[50] In FY 2004–05, the program saved $77 million to $85 million, and in FY 2005–06, it saved $154 million to $170 million.[51] Mercer released its latest report in February 2009, and it estimates that the Community Care program saved North Carolina $135 million to $149 million in FY 2006–07.[52]

The 2009 N.C. General Assembly is beginning to require comprehensive evaluation of the cost savings provided by the Community Care program. The legislature instructed the N.C. Department of Health and Human Services to identify baseline data and performances measures to be used to evaluate cost savings, and to develop data systems needed to implement the performances measures. Beginning December 31, 2010, a report on cost savings achieved by the CCNC networks will be required annually.[53]

> *"The most striking difference, ... between Community Care of North Carolina and other state Medicaid programs is the complete absence of insurance companies."*
>
> —Pauline Chen

Table 8. Total Medicaid Spending, 2007

Total Medicaid Spending by State	
United States	$319,676,945,585
1. New York	44,339,402,218
2. California	35,967,973,808
3 Texas	20,590,458,601
4. Pennsylvania	15,929,772,590
5. Florida	13,583,925,509
6. Ohio	13,055,536,533
7. Illinois	12,662,317,482
8. Massachusetts	10,295,026,778
9. North Carolina	9,829,512,415
10. Michigan	9,269,125,201
11. New Jersey	8,917,247,008
12. Tennessee	7,129,518,417
13. Georgia	7,008,880,080
14. Arizona	6,617,354,876
15. Missouri	6,592,655,741
16. Minnesota	6,191,584,929
17. Washington	5,790,755,733
18. Maryland	5,435,635,386
19. Louisiana	5,382,488,715
20. Indiana	5,120,212,952
21. Virginia	4,962,886,260
22. Wisconsin	4,937,145,634
23. Kentucky	4,592,658,490
24. Connecticut	4,351,097,846
25. South Carolina	4,163,992,140

Total Medicaid Spending by State	
26. Alabama	4,117,497,718
27. Oklahoma	3,373,421,013
28. Mississippi	3,286,383,258
29. Arkansas	3,097,083,201
30. Colorado	2,927,993,070
31. Oregon	2,894,603,853
32. New Mexico	2,634,223,335
33. Iowa	2,537,531,126
34. West Virginia	2,173,717,591
35. Kansas	2,137,147,780
36. Maine	1,991,445,967
37. Rhode Island	1,727,509,804
38. Nebraska	1,536,659,100
39. Utah	1,390,594,747
District of Columbia	1,387,540,411
40. Nevada	1,243,947,007
41. New Hampshire	1,165,227,603
42. Hawaii	1,097,894,199
43. Idaho	1,096,537,275
44. Delaware	990,917,350
45. Alaska	954,000,419
46. Vermont	904,331,790
47. Montana	732,621,232
48. South Dakota	619,710,508
49. North Dakota	508,004,001
50. Wyoming	433,236,885

Note: The number listed for North Carolina in this chart is higher than the number – 9,012,613,680 – used in Table 5 from *Medicaid in North Carolina: Annual Report State Fiscal Year 2007.* In this chart, the number includes *all* state and federal expenditures. Expenditures include benefit payments and disproportionate share hospital payments, but do not include administrative costs, accounting adjustments, or the U.S. Territories.

Source: The Henry J. Kaiser Family Foundation. On the Internet at *http://www.statehealthfacts.org/comparetable.jsp?ind=177&cat=4&sub=47&yr=30&typ=4&sort=a,* accessed on Sept. 26, 2009.

Expanding the Community Care Program to Those Dually Eligible for Medicare and Medicaid

Now, the Community Care program has received permission from the federal government to serve recipients who are dually eligible—that is, those who because of their age (65 and older) and their low incomes are eligible to receive services from both the state-run Medicaid program and the federal Medicare program.[54] In early 2009, the federal Centers for Medicare and Medicaid Services (CMS) granted a 646 waiver[55] to expand the Community Care program to provide services to dually eligible patients.[56]

Working with the Office of Rural Health and Community Care, the Division of Medical Assistance, and the 14 provider networks, N.C. Community Care Networks, Inc. (NCCCN, Inc.), a private nonprofit, will administer the 646 waiver. Torlen Wade, executive director of the nonprofit, says, "We need to change the health care system from an acute care model to a continuum of care model that includes prevention, acute care, chronic care, and social supports." The 646 waiver will move dually eligible patients toward that continuum, he says. The initial three-year pilot is limited to 26 counties. After targeting dually eligible recipients in its first two years, the waiver will take the next three years of a five-year demonstration project to target the inclusion of Medicare-only recipients.

No one is sure how much money the waiver will save North Carolina, in part because the agreement between the NCCCN, Inc. and the federal Centers for Medicare and Medicaid Services has not been finalized. The waiver will encourage better care and care coordination for those that are dually eligible, an important goal in and of itself. It is expected to translate into better patient outcomes and cost savings. Allen Feezor, Deputy Secretary for the N.C. Department of Health and Human Services, says, "The savings from the waiver is to be shared between the federal Centers for Medicare and Medicaid Services and NCCCN, Inc.—based on a negotiated formula. While the state should save some money on Medicaid for its coverage of these folks, it remains to be seen how much that will be. The real plus will be better care and care coordination for these individuals, most of whom are heavy users of the health care delivery system."

Most of the cost savings from the waiver will be realized by Medicare through decreased acute care and other high-level costs. For example, an elderly person in a nursing home will have access to comprehensive care, led by the community-based

To treat, and how to treat –
Two of many hard questions.
…
Use this drug or that one? That procedure or none?
How long did s/he live, and did s/he have fun?
What function was gained? What function was lost?
And, you may wonder, how much did it cost?

—Excerpted from MEDical Treatment Effectiveness Program Poem (MEDTEPP), by Clair W. Maklan, as printed in *The Milbank Quarterly*, New York, NY, Vol. 68, No. 2, 1990, p. 170.

Table 9. Community Care Networks

1. Access Care (150 provider sites including UNC)
2. Access II Care of Western NC (Buncombe, Henderson, Madison, Mitchell, McDowell, Polk, Transylvania, and Yancey)
3. Access III of the Lower Cape Fear (Bladen, Brunswick, Columbus, New Hanover, Onslow, and Pender)
4. Carolina Collaborative Community Care (Cumberland)
5. Carolina Community Health Partnership (Cleveland and Rutherford)
6. Northwest Community Care (Davie, Forsyth, Stokes, Surry, Wilkes, and Yadkin)
7. Community Care Partners of Greater Mecklenburg (Anson, Mecklenburg, and Union)
8. Community Care of Wake and Johnston Counties (Wake and Johnston)
9. Community Care Plan of Eastern Carolina (Beaufort, Bertie, Camden, Carteret, Chowan, Craven, Currituck, Dare, Duplin, Edgecombe, Gates, Greene, Halifax, Hertford, Hyde, Jones, Lenoir, Martin, Nash, Northampton, Pamlico, Pasquotank, Perquimans, Pitt, Tyrrell, Washington, and Wilson)
10. Community Health Partners (Gaston and Lincoln)
11. Northern Piedmont Community Care (Durham, Franklin, Granville, Person, Vance, and Warren)
12. Partnership for Health Management (Guilford, Randolph, and Rockingham)
13. Sandhills Community Care Network (Harnett, Hoke, Lee, Montgomery, Moore, Richmond, and Scotland)
14. Southern Piedmont Community Care Plan (Cabarrus, Rowan, and Stanly)

Source: Community Care of North Carolina, Community Care Fact Sheet, Jan. 2009.

network that enrolls the patient. The goal is to reduce emergency room visits and other higher level and costly medical services by managing chronic diseases such as diabetes and congestive heart failure more effectively. For example, nursing home patients could have physicians, physician assistants, nurse practitioners, nurses, and other front-line health workers visiting or calling more frequently. And, potentially, every nursing home could have electronic medical records that could improve efficiency and reduce costs during hospitalizations of patients.

A Model for Health Care Reform Nationally

The Community Care program's success has garnered national attention. The Medicaid program was one of seven national winners of the 2007 Innovations in

American Government Awards from Harvard University's Kennedy School of Government. The Community Care program also received the 2007 Annie E. Casey Innovations Award in Children and Family Systems Reform. The Kaiser Commission on Medicaid and the Uninsured featured the program in its May 2009 policy paper on how Medicaid can serve as a platform for health care reform.[57] This comes as President Barack Obama is emphasizing the need for expanded health coverage for uninsured Americans as part of broader national health reform.

In the case of Addie Shipman, the Community Care program gave her greater confidence to manage her own health care, and despite her age and chronic illnesses, she was able to live at home. Nurses monitored her health and her medications through home visits and frequent phone calls. Addie said she had routine screenings and felt like the system cared for her. "The nurses help me take care of myself," she said.

PACE: Cutting Costs by Helping the Elderly Remain at Home

In addition to reducing costs for patients in nursing homes, the state also contains Medicaid costs by helping frail elderly patients avoid entering nursing homes and remain in their homes, where health care costs can be lower and outcomes often are better. The Program of All-inclusive Care for the Elderly (PACE) offers coordination of health services for frail elders who qualify for nursing home care through Medicaid but wish to remain in their homes. The PACE model began in the early

—continues on page 30

Medicaid Fraud in North Carolina

As the number of people eligible for Medicaid in North Carolina increases, so does the opportunity for financial fraud and patient abuse. At the North Carolina Attorney General's Medicaid Investigative Unit, we look into complaints, returning millions to the state and sending wrongdoers to prison.

The Medicaid Investigative Unit prosecutes cases of physical abuse of Medicaid recipients and theft of personal funds belonging to Medicaid recipients. For example, in 2009 we investigated and prosecuted state employees accused of beating patients at Cherry Hospital and other state mental health facilities.

Last year, the majority of cases involved allegations of personal care aides and mental health community support providers billing for more hours of service than they provided and recruiting recipients who did not need services; drug manufacturers engaging in the improper off-label marketing of drugs and offering kickbacks to doctors to prescribe drugs; and transportation companies billing ambulance transports that were not provided or were medically unnecessary.

It is our work to ensure that public funds dedicated to health care are used properly and to root out those who mistreat patients or rob the system. During the federal fiscal year that ended September 30, 2008, the Medicaid Investigative Unit won 17 criminal convictions and 15 civil settlements that recovered more than $52 million from Medicaid abusers. This followed several years of record-setting Medicaid fraud busts, which resulted in more than $300 million recovered over the last seven years. A review in 2007 showed that for each $1 in state funds spent on MIU operations, the state obtained $22 in recoveries for Medicaid and other related benefits. Much of the success of the Medicaid Investigative Unit is due to cooperation with federal and state partners, including other Medicaid fraud control units, the United States Attorney's Office, and the Office of Inspector General.

—Charles Hobgood

Charles Hobgood is the Director, Medicaid Investigations Unit, Office of the North Carolina Attorney General.

Erma Cofield of Rocky Mount is 70 years old, and she has diabetes, hypertension, and heart failure. Erma is on Medicaid and enrolled in Community Care. She lives in a home for senior citizens. She says she does not feel any stigma associated with being on Medicaid or Community Care.

Erma arrives for her appointment at Heritage Hospital Chronic Heart Failure Clinic with a plastic bag filled with all of the bottles of pills she takes. Caroline Gardner, RN, BSN, is a nurse case manager in Edgecombe County with the Community Care Plan of Eastern Carolina. She checks the medications and realizes that Erma has two bottles of the same medicine. Erma cannot read, but she had realized the names of the medications matched. If Erma had taken pills from both bottles, she would have ended up dehydrated and in the hospital. This is an example of the health benefits and cost savings provided by Community Care. Erma sees her primary care physician, but she has been referred to heart and lung specialists. This is why she often has duplicate medications. Nurse Caroline's job is to work directly with the patient to keep it all straight.

Erma used to end up in the hospital at least once a year, but it has been 18 months since she was hospitalized. "Our number one job is to keep clients out of the hospital," says Denise Poland-Torres, a Physician's Assistant with the Heart Failure Clinic.

Medicaid pays for a personal care assistant to come to Erma's home three days a week for two hours. The helper cleans, cooks, and checks Erma's sugar levels.

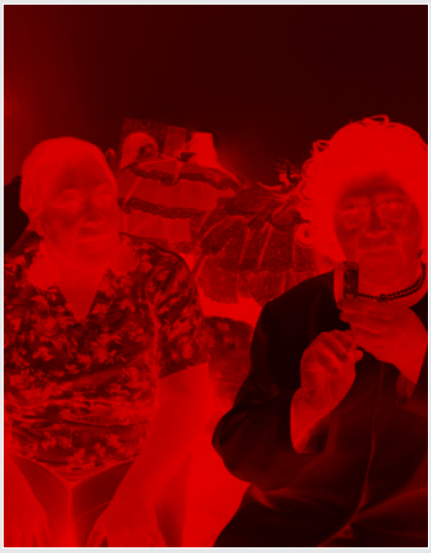
Erma also likes having her own nurse that she "loves to death." The relationships are close; enough so that practical jokes are not uncommon. When Caroline was visiting Erma one day, they decided to play a joke on Denise. Erma called Denise to report that she had a hot dog and a dill pickle for lunch. Denise was upset, knowing these foods are not good for Erma, given her medical conditions. Then, Erma told Denise it was a joke, and the three women are still laughing about it to this day. Erma said, "They know their stuff!" And while Erma may not know she has a "medical home" or understand what "Community Care" is, Erma knows that Caroline is her Medicaid nurse.

Karen Tam

Josephine Johnson of Tarboro is 80 years old. She was born in North Carolina, but lived in Connecticut and New York doing housework for most of her life. She lives by herself now. Her only son passed away, so she does not have family to check in on her. She has diabetes, high blood pressure, and pulmonary fibrosis.

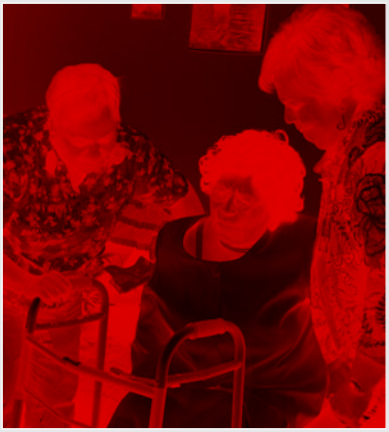
Josephine is happy to be able to stay in her home, and she says she has no money worries when it comes to health care. She is on Medicaid, and she has been with Community Care for more than two years now. Her doctor referred her to Caroline. Josephine needs help controlling her blood sugar.

Angela Murphy is the personal care aide who comes to Josephine's home about two hours each day, seven days a week, to cook Josephine's food, help her buy groceries, and take her to the doctor's office. Angela also works with Caroline, who visits Josephine once a month.



Josephine has trouble keeping track of her medications, and she sometimes takes a medicine twice. One time, when she ran out of a medication, Caroline was able to refill it at the pharmacy and get Josephine back on the medication quickly enough that it kept her out of the emergency room. About her pills, Josephine says, "I do my best to stay on them."

Josephine loves MoonPies, and without supervision, she might eat four or five or six of them a day. Little things are monitored, but they make a big difference. Angie says, "Community Care gives a person back a part of their life."



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1970s in a San Francisco immigrant neighborhood. The immigrants viewed institutionalized care as financially unfeasible and against their culture of family care. At many PACE sites, much of the work is done through volunteers and community workers recruited by the PACE providers. These programs provide full medical services to their enrollees through their network of providers. As Medicaid recipients, PACE participants receive all services covered under the Medicaid program except emergency services.

Karen Tam

In the mid-1980s, the federal government began to look at the PACE model as a means of containing Medicare and Medicaid costs, and both government and private grantmaking foundations have experimented with PACE.[58] The federal Balanced Budget Act of 1997 authorized reimbursement for PACE programs under the Medicare program and authorized PACE as a state option under Medicaid.[59] There are currently 61 PACE projects nationally in 29 states,[60] approved by the federal Centers for Medicare and Medicaid Services (CMS). There are three in North Carolina in various stages of development: Elderhaus, Inc.; Piedmont Health Services, Inc.; and St. Joseph's of the Pines.[61]

Elderhaus: Providing Medicaid Services Through Adult Day Care

After about 10 years of planning, Elderhaus, a nonprofit adult day care program in Wilmington, received certification and approval from CMS in January 2008 to be a PACE project, and it began recruiting enrollees.[62] Elderhaus has provided adult daytime care and social services for elderly and disabled adults since 1981. Larry Reinhart, the PACE Director for Elderhaus, says PACE gives Elderhaus an entirely new role as a Medicare and Medicaid certified medical care provider. Under PACE, Elderhaus is enrolling Medicaid patients and providing all their basic medical care, personal care services, transportation, and day care, as well as occupational, physical, recreational, and other therapies. A physician and/or nurse practitioner is present every day in Elderhaus' medical facility. While most PACE programs are paired with nursing homes or hospitals, Elderhaus relies on its experience as an agency well-versed in the social and therapeutic needs of the elderly, Reinhart says, making it an exciting model for PACE and medical development. "We're working on a gravel road," he says. "It's not paved yet." Elderhaus has 31 participants enrolled as of July 2009, is enrolling about 3 to 4 new participants each month, and expects to enroll 125 participants over the next four years.

Reinhart says Elderhaus initially received referrals of patients from hospitals and emergency rooms, but now they also are getting referrals from private physicians and long-term care facilities. This is significant because it means they are getting patients in nursing homes to leave those high-cost facilities and enroll in PACE. This can happen "especially when there's motivation in the family" to have a loved one leave a nursing home to return to their or a relative's home with support provided by PACE.

Piedmont Health SeniorCare: Helping the Elderly "Age in Place"

Operated by Piedmont Health Services, a Carrboro-based nonprofit, Piedmont Health SeniorCare is the PACE program located in Burlington that serves Alamance, Caswell, and Orange counties. Using a newly renovated 15,000 square-foot facility, it enrolled its first participants in December 2008 after receiving certification by CMS in September 2008, says Marianne Ratcliffe, its executive director. As of September 1, 2009, it had 33 participants, who all have multiple chronic conditions. But instead of entering a nursing home, they are working with PACE to "age in place" by remaining

in their homes and out of costly nursing home care. The participants visit Piedmont Health SeniorCare at least once a week and as often as every weekday.

Piedmont Health SeniorCare's 20 staff members include a physician, a nurse practitioner, a registered nurse, a physical therapist, an occupational therapist, a speech therapist, an activities coordinator, a social worker, a pharmacist, and a dietician, as well as support staff and aides who assist patients and administrators. Each morning, the clinical staff reviews the day's appointments and discusses different aspects of each participant's care in an interactive case management system. The pharmacist may point out drug side effects to the physician or nurse, and the social worker may make an observation on which the physician can follow up. Piedmont hopes to enroll 150 participants eventually and expand its staff to 50 clinicians and administrative staff.

As of June 30, 2009, when there were 24 participants, 75 percent of them were female and 25 percent were male. The average participant is 75 years of age and deficient in five out of six of the Instrumental Activities of Daily Living (IADL),

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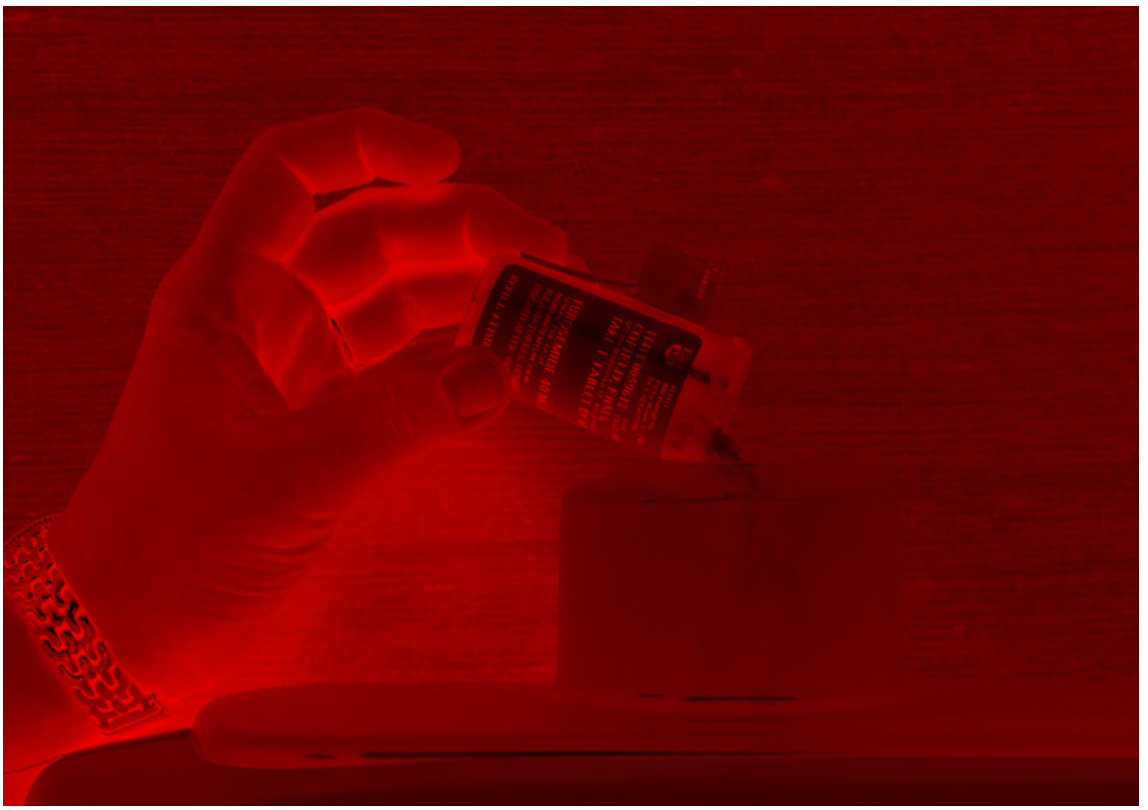
such as paying bills and driving; deficient in six out of eight of the Activities of Daily Living (ADL), such as feeding, bathing, and grooming; has 10 diagnoses; and enters the program on 10.67 medications. By three months into the program, the average number of medications has been reduced by 1.67, to a total of nine medications, with the hope of continuing to decrease medications. Of the 24 participants, 15 (or 62.5 percent) have some form of dementia; six are reliant on oxygen; seven utilize home care services; six are reliant on wheelchairs; 13 rely on walkers; one relies on a cane; and four walk independently (however, three of the four who walk independently require standby assistance due to wandering). Under the medical director's leadership, the interdisciplinary team is focusing its quality improvement efforts this year on preventing skin breakdowns, reducing medications, and preventing falls.[63]

Ratcliffe says North Carolina's Division of Medical Assistance has been greatly supportive of Piedmont's efforts and is encouraging the PACE model. Given the area's demographics, Piedmont hopes eventually to have multiple PACE sites in the organization's service area. "PACE is recognized as an innovative model for the most fragile clients," she says. "PACE offers the flexibility to provide preventive measures and services not normally covered by Medicare and Medicaid."

Establishing PACE Programs

PACE programs in the state have to be certified on two levels—by the Centers for Medicare and Medicaid Services at the federal level and by the N.C. Division of Medical Assistance at the state level. Each level of certification takes time. Both Reinhart and Ratcliffe say that securing funding for the start-up costs was difficult, especially given their agencies' nonprofit status. Piedmont Health SeniorCare was one of 14 programs nationally to receive $500,000 from the CMS rural grant program. They also received more than $600,000 from the Kate B. Reynolds Charitable



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> *PACE is recognized as an innovative model for the most fragile clients.*
>
> —Marianne Ratcliffe

Trust and The Duke Endowment, two leading foundations making grants for health care projects in North Carolina. Piedmont received additional support from the Blue Cross and Blue Shield of North Carolina Foundation. Elderhaus received $400,000 from the Kate B. Reynolds Charitable Trust and the Duke Endowment, in addition to $150,000 from the Cape Fear Memorial Foundation in Wilmington.

Reinhart says, "The outcome will be [that PACE enrollees] will spend less time in costly nursing homes." Nationally, fewer than 10 percent of PACE participants go into nursing homes, and they also have fewer emergency room visits. Less time spent in nursing homes saves Medicaid money, and fewer emergency room visits saves Medicare money.

Nationally, none of the PACE programs have failed financially and Marianne Ratcliffe says, "As a financial model, PACE has proven to be self-sustaining once start-up costs are met." PACE has the longest history of any model managing total care for the frail elderly on a fixed income. The state of Tennessee found its PACE program generated a 17 percent cost savings, and the state of Texas found a 14 percent cost savings.[64]

Michael Howard, acting director of PACE for Medicaid, said the Moses Cone Health System is working with partners to develop PACE sites in Greensboro and Charlotte. There also are feasibility studies underway by Volunteers of America, a national, faith-based nonprofit, to develop other sites in North Carolina.[65]

Federalizing Care for Those Dually Eligible for Both Medicare and Medicaid

Another potential cost-saving mechanism has been proposed by David C. Grabowski of Harvard Medical School. Grabowski says, "A more dramatic proposal . . . is to shift financial responsibility for the care of the dually eligible population, including long-term care, to the federal government. The idea is that this shift—to either Medicare or some new federal program—would improve the coordination of care for dually eligible enrollees and also offer substantial fiscal relief to the states." While the idea of federalizing care for the dually eligible originated in the early 1980s and received an endorsement in 2005 from the National Governors' Association, it has yet to garner a critical mass of political support.[66] Given the massive federal budget deficit, which just hit a trillion dollars for the first time, it is unlikely to be enacted in the foreseeable future.

Conclusion

Despite numerous health problems and some dementia, the Community Care Program enabled Addie Shipman to live at home and stay out of more costly nursing home. Up until her death, she received care from the Whiteville physician practice she called her medical home, as well as case management from Access III of the Lower Cape Fear, her Community Care network. On August 1, 2008, Addie was admitted to the hospital, and she passed away three days later.

> *We could certainly slow the aging process down if it had to work its way through Congress.*
>
> —Will Rogers

For the nation, the medical home model and emphasis on building a network of care may be important in implementing cost savings under national health care reform. On January 2,

Table 10. Fastest Growing Programs in the State Budget, Ranked by Percentage Increase

		Total Authorized State Budget, FY 2008–09	% of Authorized State Budget, FY 2008–09	% Increase from FY 2007–08
1.	Medicaid (including administration)	$ 3.2 billion	15.00%	9.04%
2.	Debt Service	0.64 billion	3.03%	5.40%
3.	Education	12.3 billion	57.38%	4.06%
4.	Total Authorized State Budget	12.3 billion		

Source: Fiscal Research Division, N.C. General Assembly, Dec. 9, 2009.

2009, Dr. Allen Dobson, chair of N.C. Community Care Networks, Inc., testified before the Committee on Health, Education, Labor, and Pensions in the U.S. Senate about state initiatives that improve health and control costs:

> We believe Community Care can serve as an important national model for healthcare reform. Community Care's local infrastructure will work in both urban and rural as well as public and private settings. The path forward for the U.S. healthcare system can clearly be informed by the important work of some of our best and most integrated healthcare systems. However the majority of the nation's healthcare is still provided in communities where there is no 'system' at all. Lessons learned in Community Care can provide a road map to organizing all local communities regardless of size in order to focus on quality, costs, and improvement in the health of its citizens.
>
> There are a number of lessons from Community Care. . . . These are 1) primary care physicians and the medical home are essential to providing improved access to care and prevention; 2) public-private partnerships that develop and strengthen local healthcare systems are important; 3) providers are best motivated when the focus is on quality, population health, and how care is delivered locally; 4) a shared responsibility and shared incentives are important; 5) the program must have flexibility that allows communities to organize themselves based on their unique characteristics and resources; 6) strong physician leadership is needed; 7) to create meaningful and lasting improvement you have to engage the physicians and other community providers who care for our patients; and 8) a portion of the savings must be reinvested to further develop local systems and programs.

Estimates of the future cost of Medicaid vary because spending on long-term care will depend on the number of elderly who qualify for assistance, the type of care the elderly will use (nursing home or in-home care), and the availability of private and public providers of care. "Absent significant changes in the availability of payment sources, future spending will continue to rely on public payers, particularly Medicaid," says Kathryn Allen, the director of health care for the Government Accountability Office.[67] *Otherwise, Medicaid spending may consume more than 6 percent of the nation's gross domestic product by 2080* (see Figure 3).

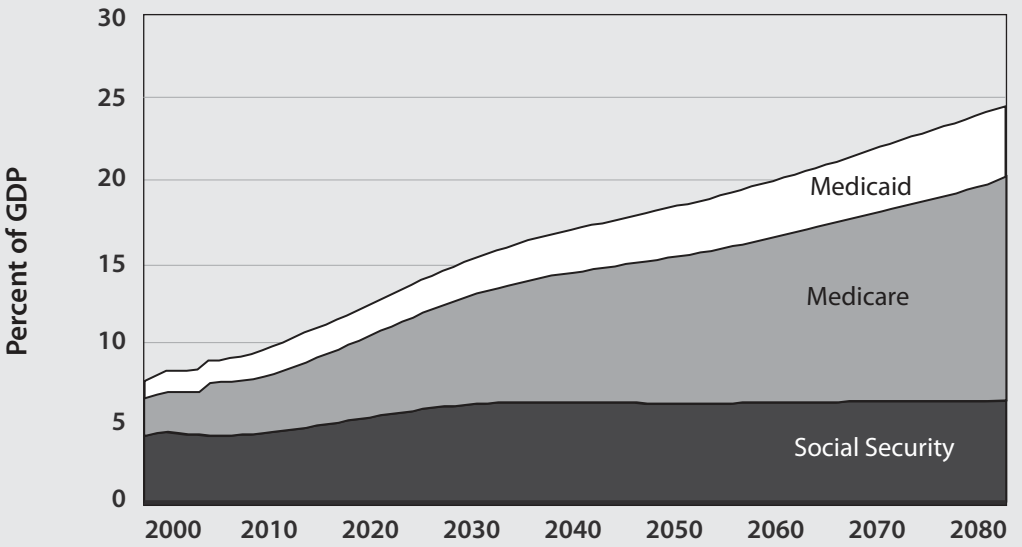
For North Carolina, it is important for the state to continue to invest in the network of care it has built through programs like Community Care and PACE, programs that both control the costs of Medicaid while providing care to those entitled to services. Physicians, state agencies, and legislators worked together to build this network for Medicaid recipients in North Carolina.[68]

According to recent estimates from the Fiscal Research Division of the N.C. General Assembly, Medicaid is the fastest-growing program in the state budget. In 2009, the authorized state budget for Medicaid was $3.2 billion, or 15 percent of the state's 21.2 billion authorized operating budget—an increase of 9 percent from 2008 (see Table 10). Medicaid is expected to be $250 million over budget by June 2010, creating a problem for next year's budget, which begins in July 2010.

"Nationally, Medicaid spending may consume more than 6 percent of the nation's gross domestic product by 2080."

Governor Beverly Perdue went to Washington, DC, in December 2009 to seek federal relief for the extra costs of the Medicaid program that are due in part to enrollment increases because people are out of work. With the first Baby Boomers turning 65 in 2011, it is time for the state to make sure it has the capacity to care for the state's low-income elderly residents in the future.

Figure 3. Federal Spending for Medicaid, Medicare, and Social Security as a Percentage of GDP, 2000 through 2080



Notes: Medicaid spending in this chart includes federal, but not state, expenditures. Social Security and Medicare projections based on the intermediate assumptions of the 2005 Trustees' Reports. Medicaid projections based on the Congressional Budget Office's (CBO) January 2005 short-term Medicaid estimates and the CBO's December 2003 long-term Medicaid projections under mid-range assumptions.

Source: GAO analysis based on data from the Office of the Chief Actuary, Social Security Administration; Office of the Actuary, Centers for Medicare & Medicaid Services; and the Congressional Budget Office.

Footnotes

[1] A. Bruce Steinwald, Director of Health Care, "Health Care Spending: Public Payers Face Burden of Entitlement Program Growth, While All Payers Face Rising Prices and Increasing Use of Services," Testimony Before the Subcommittee on Military Construction, Veterans Affairs, and Related Agencies on Appropriations, U.S. House of Representatives, Feb. 15, 2007, p. 2.

[2] John Quinterno, "The Demographics of Aging in North Carolina," *North Carolina Insight*, Vol. 23, Nos. 2-3, N.C. Center for Public Policy Research, Raleigh, NC, June 2009, p. 21. According to Jennifer Song at the N.C. Office of State Budget and Management, OSBM has changed the way it calculates projections, and projections currently are available only through July 1, 2029. The OSBM projection for the population in North Carolina aged 65 and older is 2,194,126 on July 1, 2029. On the Internet at *http://www.osbm.state.nc.us/demog/countytotals_agegroup_2029.html,* accessed on October 20, 2009.

[3] *Ibid.,* pp. 21 and 25.

[4] Inflation describes the concept of how prices rise over time. The Consumer Price Index (CPI) measures inflation as felt by consumers as they buy the goods they need to live. The most comprehensive CPI is the CPI-U, which is the all items index (including food, housing, clothing, transportation, medical care, recreation, education, and other goods and services) for urban consumers. It uses 1982–84 as the reference base where the index is 100, and it measures change in relation to that figure.

[5] Sean Keehan *et al.*, "Trends: Health Spending Projections Through 2017: The Baby-Boom Generation Is Coming To Medicare," *Health Affairs—Web Exclusive,* Bethesda, MD, Feb. 26, 2008, p. w145.

[6] *Ibid.,* p. w150.

[7] Berhanu Alemayehu and Kenneth E. Warner, "The Lifetime Distribution of Health Care Costs," *Health Services Research,* Vol. 39, Issue 3, Chicago, IL, May 2004, pp. 627–42.

[8] E. Mary Martini *et al.*, "The Boomers Are Coming: A Total Cost of Care Model of the Impact of Population Aging on Health Care Costs in the United States by Major Practice Group," *Health Services Research,* Vol. 42, Issue 1, Chicago, IL, Feb. 2007, p. 208.

[9] *Ibid.*

[10] Medicaid was established by Title XIX of the Social Security Act of 1965, 42 U.S. Code Chapter 7, Subchapter XIX, §§ 1396–1396v.

[11] *Medicaid in North Carolina,* Annual Report, State Fiscal Year 2007, Division of Medical Assistance, Raleigh, NC, Dec. 2008, p. 7. On the Internet at *http://www.dhhs.state.nc.us/dma/2007report/2007report.pdf*, accessed Sept. 26, 2009. See also N.C. Gen. Stat. 108A and N.C. Admin. Code, Title 10A, Chapters 21 and 22.

[12] Melanie Bush, Fiscal Research Division, *Medicaid Overview,* March 11, 2009, p. 3. On the Internet at *http://www.ncleg.net/fiscalresearch/frd_reports/frd_reports_pdfs/Session%20Briefings/2009%20Medicaid%200verview.pdf,* accessed Sept. 26, 2009.

[13] Council of State Governments, *Medicaid 101: A Primer for State Legislators,* Lexington, KY, Jan. 2009, p. 5. On the Internet at *http://www.csg.org/pubs/Documents/Medicaid_Primer_final_screen.pdf,* accessed Sept. 26, 2009.

[14] *Ibid.,* p. 5.

[15] Earl Dirk Hoffman, Jr. *et al.*, "Brief Summaries of Medicare & Medicaid," Office of the Actuary, Centers for Medicare & Medicaid Services, Nov. 1, 2008, pp. 21–22. On the Internet at *http://www.amsa.org/business/MedicareMedicaidSummaries2007.pdf,* accessed Sept. 26, 2009.

[16] Kaiser Commission on Medicaid and the Uninsured, "Medicaid: An Overview of Spending on 'Mandatory' vs. 'Optional' Populations and Services," Washington, DC, June 2005. On the Internet at *http://www.kff.org/medicaid/7331.pdf,* accessed on Sept. 26, 2009.

[17] *Medicaid in North Carolina 2007*, note 11 above, p. 8.

[18] The 2009 U.S. Department of Health and Human Services Poverty Guidelines. On the Internet at *http://aspe.hhs.gov/poverty/09poverty.shtml,* accessed Sept. 26, 2009.

[19] Supplemental Security Income (SSI) is a federal insurance program for those that have lost their incomes because of a disability.

[20] Council of State Governments, note 13 above, p. 7; *Medicaid in North Carolina 2007,* note 11 above, pp. 8–9.

[21] Bush, note 12 above, p. 19.

[22] Council of State Governments, note 13 above, p. 8.

[23] Rachel Brand, "Medicaid: Under the Weather," *State Legislatures,* Vol. 35, No. 4, National Conference of State Legislatures, Denver, CO, April 2009, p. 13. According to William Lamb at the UNC Institute of Aging, "North Carolina participates in the Community Alternative Program for Disabled Adults (CAP-DA). This is a Medicaid waiver program and is outside of the regular Medicaid program policies. It is possible to have waiting lists on this program, and we do, and it is possible to freeze the program when we confront a fiscal crisis, and we have. It is important to note that the institutional components of Medicaid are entitlements, but a significant portion of the home and community care 'option' is not."

[24] Council of State Governments, note 13 above, p. 8.

[25] Hoffman *et al.*, note 15 above, p. 24.

[26] Micah Hartman *et al.*, "Health Spending at a Historic Low in 2008," *Health Affairs,* Vol. 29, No. 1, Project HOPE: The People-to-People Foundation, Bethesda, MD, Jan. 2010, pp. 148 and 153. On the Internet at *http://content.healthaffairs.org/cgi/reprint/29/1/147*, accessed on Jan. 7, 2010. See also the American Recovery and Reinvestment Act of 2009, Public Law 111-5, and the National Health Expenditure Fact Sheet, Centers for Medicare & Medicaid Services, March 11, 2009. On the Internet at *http://www.cms.hhs.gov/NationalHealthExpendData/25_NHE_Fact_Sheet.asp,* accessed Sept. 26, 2009.

[27] Email correspondence with Melanie Bush, Fiscal Research Division, N.C. General Assembly, Sept. 28, 2009. Actual expenditures for state fiscal year 2009 were $9,927,578,697, including $2,444,878,684 in state funds. Actual expenditures for state fiscal year 2008 were $9,540,256,465, including $2,776,882,395 in state funds.

[28] On the Internet at *http://aspe.hhs.gov/health/fmap10.htm,* accessed on Sept. 26, 2009.

[29] Bush, note 12 above, p. 22. North Carolina's 100 counties traditionally paid 15 percent of the non-federal share of Medicaid costs. In 2007, the N.C. General Assembly passed legislation that phases out the county portion. N.C. Session Law 2007–323, § 10.36 (a). Beginning Oct. 1, 2007, the counties paid 11.25 percent of the non-federal share; on July 1, 2008, the county share was reduced to 7.5 percent; and on July 1, 2009, the state began paying 100 percent of the non-federal share. *Medicaid in North Carolina 2007,* note 11 above, p. 31.

[30] *Medicaid in North Carolina 2007,* note 11 above, Table 10, p. 63.

[31] *Ibid.,* Table 6, p. 56.

[32] Kaiser State Health Facts, Total Number of Certified Nursing Facilities, 2008. On the Internet at *http://www.statehealthfacts.kff.org*, accessed Jan. 6, 2010.

[33] *Medicaid in North Carolina 2007,* note 11 above, Table 12, p. 65; *Medicaid in North Carolina,* Annual Report, State Fiscal Year 2006, Division of Medical Assistance, Raleigh, NC, April 2007, Table 12, p. 75. On the Internet at *http://www.dhhs.state.nc.us/dma/2006report/2006report.pdf,* accessed on Sept. 26, 2009.

[34] Dr. Dobson resigned his post as Assistant Secretary on Aug. 31, 2007, and he has returned to practicing medicine full-time in Cabarrus County. He is the chair of N.C. Community Networks.

[35] Medicaid Cost Containment Strategies in North Carolina and Other States, North Carolina Family Impact Seminar (convened by the Center for Child and Family Policy at Duke University and the School of Government at UNC-Chapel Hill), Durham, NC, May 24, 2005, pp. 14–32.

[36] Brand, note 23 above, pp. 12–16.

[37] *Ibid.,* p. 14.

[38] *Ibid.,* p. 16.

[39] *Ibid.,* p. 13.

[40] *Early History of Carolina Access,* N.C. Foundation for Advanced Health Programs, Inc., Raleigh, NC. On the Internet at *www.ncfahp.org.* For more information on the Community Care program, see Stephen Wilhide and Tim Henderson, "Community Care of North Carolina: A Provider-Led Strategy for Delivering Cost-Effective Primary Care to Medicaid Beneficiaries," American Academy of Family Physicians, Washington, DC, June 2006.

[41] The North Carolina Foundation for Advanced Health Programs is a statewide nonprofit that works to make affordable, quality health care available to everyone in North Carolina.

[42] The federal statutory definition of a medical home is "a physician practice that—(1) is in charge of targeting beneficiaries for participation in the project; and (2) is responsible for—(A) providing safe and secure technology to promote patient access to personal health information; (B) developing a health assessment tool for the individuals targeted; and (C) providing training programs for personnel involved in the coordination of care." Public Law No. 109–432, Division B, § 204 of the Tax Relief and Health Care Act of 2006, Dec. 20, 2006. See also 42 U.S.C. § 1395b-1.

[43] Data for Community Care of North Carolina provided by the N.C. Department of Health and Human Resources.

[44] John Buntin, "Health Care Comes Home," *Governing Magazine,* Washington, DC, March 1, 2009. On the Internet at *http://www.governing.com/node/633/,* accessed on Sept. 26, 2009.

[45] *History of North Carolina Medicaid Program: State Fiscal Years 1970 to 2007,* p. 13. On the Internet at *http://www.dhhs.state.nc.us/dma/pub/historyofmedicaid.pdf,* accessed Sept. 26, 2009.

[46] Pauline W. Chen, M.D., "Building a Healthy Community: One Child at a Time," *The New York Times,* New York, NY, Jan. 23, 2009. On the Internet at *http://www.nytimes.com/2009/01/23health/22chen.html,* accessed Sept. 26, 2009.

[47] Community Care Chart Reviews and Data, confirmed with Shelley Keir at Community Care of North Carolina.

[48] Thomas C. Ricketts, III *et al.*, *Evaluation of Community Care of North Carolina Asthma and Diabetes Management Initiatives: January 2000-December 2002,* N.C. Rural Health Research and Policy Analysis Program, Chapel Hill, NC, April 15, 2004, pp. 2–3. On the Internet at *http://www.shepscenter.unc.edu/research_programs/health_policy/Access.pdf,* accessed on Sept. 26, 2009.

[49] Letter to Jeffrey Simms, ACCESS Cost Savings—State Fiscal Year 2003 Analysis, June 25, 2004. On the Internet at *http://www.communitycarenc.com/PDFDocs/Mercer%20SFY03.pdf,* accessed on Sept. 26, 2009.

[50] Letter to Jeffrey Simms, ACCESS Cost Savings—State Fiscal Year 2004 Analysis, March 24, 2005. On the Internet at *http://www.communitycarenc.com/PDFDocs/Mercer%20SFY04.pdf,* accessed Sept. 26, 2009.

[51] Letter to Jeffrey Simms, CCNC/Cost Savings—State Fiscal Year 2005 and 2006 Analysis, Sept. 19, 2007. On the Internet at *http://www.communitycarenc.com/PDFDocs/Mercer%20SFY05_06.pdf,* accessed on Sept. 26, 2009.

[52] Letter to Chris Collins, CCNC/ACCESS Cost Saving—State Fiscal Year 2007 Analysis, Feb. 26, 2009. On the Internet at *http://www.communitycarenc.com/PDFDocs/Mercer%20SFY07.pdf,* accessed on Sept. 26, 2009.

[53] N.C. Session Law 2009–451 § 10.36(a)-(f).

[54] The federal Medicare program provides medical care for the elderly and covers the costs of primary and acute medical care, drug prescriptions, and other services. It often requires payment of a Medicare premium, a payment required for health care or prescription drug coverage. The state-based Medicaid program provides medical care for low-income residents, according to various state eligibility regulations. It pays for long-term nursing home care and other services for the poor older than 65 who qualify for the program.

[55] Named after section 646 of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, Public Law No. 108–173.

[56] The cooperative agreement with the federal government was signed in Dec. 2009. On Jan. 1, 2010, the demonstration project began in 26 counties. For more information on the effects of care coordination for Medicare recipients, see Deborah Peikes *et al*., "Effects of Care Coordination on Hospitalization, Quality of Care, and Health Care Expenditures Among Medicare Beneficiaries," *Journal of the American Medical Association,* Vol. 301, No. 6, American Medical Association, Chicago, IL, Feb. 11, 2009, pp. 603-18.

[57] Kaiser Commission on Medicaid and the Uninsured, "Community Care of North Carolina: Putting Health Reform Ideas into Practice in Medicaid," Pub. No. 7899, May 12, 2009. On the Internet at *http://kff.org/medicaid/7899.cfm%20,* accessed on Sept. 26, 2009.

[58] More information on community-based PACE programs can be found at the National PACE Association website, on the Internet at *www.npaonline.org.*

[59] Federal Balanced Budget Act of 1997, Public Law No. 105–33.

[60] National PACE Association. On the Internet at *http://www.npaonline.org/website/article.asp?id=12,* accessed on Sept. 26, 2009.

[61] Elderhaus, Inc. of Wilmington began operation on Feb. 1, 2008, and it serves New Hanover and Brunswick counties. Piedmont Health Services, Inc. of Carrboro began operation on Oct. 1, 2008. The program is located in Burlington, and it serves Alamance and Caswell counties. St. Joseph's of the Pines in Southern Pines expects to begin operations in late 2009 or early 2010, and it plans to serve Fayetteville.

[62] *Development of PACE in North Carolina Status Report,* N.C. Division of Medical Assistance, Raleigh, NC, March 1, 2005, p. 1. See additional information on the Internet at *http://www.dhhs.state.nc.us/dma/services/pace.htm,* accessed on Sept. 26, 2009.

[63] Email correspondence with Marianne Ratcliffe.

[64] "What can PACE do for your State?" On the Internet at *http://npaonline.org/website/article.asp?id=203,* accessed on Sept. 26, 2009.

[65] More information about PACE is available on the Internet at *http://www.ncdhhs.gov/dma/services/pace.htm* and *http://www.cms.hhs.gov/PACE/.*

[66] David C. Grabowski, "Medicare and Medicaid: Conflicting Incentives for Long-Term Care," *The Milbank Quarterly,* Vol. 85, No. 4, Blackwell Publishing, Malden, MA, Dec. 2007, pp. 596–97.

[67] Kathryn G. Allen, "A Look at Our Future: When Baby Boomers Retire," Presentation to the Medicaid Commission, March 14, 2006, Atlanta, GA, Slide 17. In May 2005, the Secretary of the U.S. Department of Health and Human Services established a Medicaid Commission to advise the Secretary on ways to update the Medicaid program so that it can provide high-quality health care to its beneficiaries in a financially sustainable way. On the Internet at *http://aspe.hhs.gov/medicaid/.*

[68] Chen, note 46 above.