North Carolina Department of Health and Human Services
2001 Mail Service Center • Raleigh, North Carolina 27699-2001
Tel 919-733-4534 • Fax 919-715-4645

Michael F. Easley, Governor

Dempsey Benton, Secretary

March 25, 2008

The Honorable William Purcell, Co-Chair
Appropriations on Health and Human Services
North Carolina General Assembly
Room 625, Legislative Office Building
Raleigh, NC 27603

Dear Senator Purcell:

Section 10.46 of S.L. 2007-323 (House Bill 1473), "Continue Efforts to Expand Community Care and Improve Quality of Care for Aged, Blind, and Disabled Medicaid Recipients," required DHHS to submit a report to the General Assembly on (1) the status of the implementation of Section 10.17 of S.L. 2005-276 and (2) the expansion of the scope of Community Care of NC care management model, through the piloted communitywide initiatives, to recipients of Medicaid and dually eligible individuals with chronic conditions and long-term care needs. The report needed to include the findings of the pilot initiatives with respect to cost containment and quality of care improvements and DMA's plans for expanding the pilots and implementing practices statewide. It is my pleasure to submit the required report at this time.

Please direct all questions concerning this report to Jeffrey Simms, Assistant Director for Managed Care in the Division of Medical Assistance. He can be reached at (919) 647-8170 or via e-mail at Jeffrey.Simms@ncmail.net.

Sincerely,

Dempsey Benton

DB:js

Attachment

cc:
Dan Stewart
William W. Lawrence, Jr., M.D.
John Price
Sharnese Ransome
Jennifer Hoffmann
Legislative Library (2)

Location: 101 Blair Drive • Adams Building • Dorothea Dix Hospital Campus • Raleigh, N.C. 27603
An Equal Opportunity / Affirmative Action Employer

North Carolina Department of Health and Human Services
2001 Mail Service Center • Raleigh, North Carolina 27699-2001
Tel 919-733-4534 • Fax 919-715-4645

Michael F. Easley, Governor

Dempsey Benton, Secretary

March 25, 2008

The Honorable Doug Berger, Co-Chair
Appropriations on Health and Human Services
North Carolina General Assembly
Room 622, Legislative Office Building
Raleigh, NC 27603

Dear Senator Berger:

Section 10.46 of S.L. 2007-323 (House Bill 1473), "Continue Efforts to Expand Community Care and Improve Quality of Care for Aged, Blind, and Disabled Medicaid Recipients," required DHHS to submit a report to the General Assembly on (1) the status of the implementation of Section 10.17 of S.L. 2005-276 and (2) the expansion of the scope of Community Care of NC care management model, through the piloted communitywide initiatives, to recipients of Medicaid and dually eligible individuals with chronic conditions and long-term care needs. The report needed to include the findings of the pilot initiatives with respect to cost containment and quality of care improvements and DMA's plans for expanding the pilots and implementing practices statewide. It is my pleasure to submit the required report at this time.

Please direct all questions concerning this report to Jeffrey Simms, Assistant Director for Managed Care in the Division of Medical Assistance. He can be reached at (919) 647-8170 or via e-mail at Jeffrey.Simms@ncmail.net.

Sincerely,

Dempsey Benton

DB:js

Attachment

cc: Dan Stewart
William W. Lawrence, Jr., M.D.
John Price
Sharnese Ransome
Jennifer Hoffmann
Legislative Library (2)

North Carolina Department of Health and Human Services
2001 Mail Service Center • Raleigh, North Carolina 27699-2001
Tel 919-733-4534 • Fax 919-715-4645

Michael F. Easley, Governor

Dempsey Benton, Secretary

March 25, 2008

Lynn Muchmore, Director
Fiscal Research Division
Room 619, Legislative Office Building
Raleigh, NC 27601

Dear Mr. Muchmore:

Section 10.46 of S.L. 2007-323 (House Bill 1473), "Continue Efforts to Expand Community Care and Improve Quality of Care for Aged, Blind, and Disabled Medicaid Recipients," required DHHS to submit a report to the General Assembly on (1) the status of the implementation of Section 10.17 of S.L. 2005-276 and (2) the expansion of the scope of Community Care of NC care management model, through the piloted communitywide initiatives, to recipients of Medicaid and dually eligible individuals with chronic conditions and long-term care needs. The report needed to include the findings of the pilot initiatives with respect to cost containment and quality of care improvements and DMA's plans for expanding the pilots and implementing practices statewide. It is my pleasure to submit the required report at this time.

Please direct all questions concerning this report to Jeffrey Simms, Assistant Director for Managed Care in the Division of Medical Assistance. He can be reached at (919) 647-8170 or via e-mail at Jeffrey.Simms@ncmail.net.

Sincerely,

Dempsey Benton

DB:js

Attachment

cc: Dan Stewart
William W. Lawrence, Jr., M.D.
John Price
Sharnese Ransome
Jennifer Hoffmann
Legislative Library (2)

North Carolina Department of Health and Human Services
2001 Mail Service Center • Raleigh, North Carolina 27699-2001
Tel 919-733-4534 • Fax 919-715-4645

Michael F. Easley, Governor
Dempsey Benton, Secretary

March 25, 2008

The Honorable Beverly M. Earle, Chairman
Appropriations Subcommittee on Health and Human Services
North Carolina General Assembly
Room 634, Legislative Office Building
Raleigh, NC 27603

Dear Representative Earle:

Section 10.46 of S.L. 2007-323 (House Bill 1473), "Continue Efforts to Expand Community Care and Improve Quality of Care for Aged, Blind, and Disabled Medicaid Recipients," required DHHS to submit a report to the General Assembly on (1) the status of the implementation of Section 10.17 of S.L. 2005-276 and (2) the expansion of the scope of Community Care of NC care management model, through the piloted communitywide initiatives, to recipients of Medicaid and dually eligible individuals with chronic conditions and long-term care needs. The report needed to include the findings of the pilot initiatives with respect to cost containment and quality of care improvements and DMA's plans for expanding the pilots and implementing practices statewide. It is my pleasure to submit the required report at this time.

Please direct all questions concerning this report to Jeffrey Simms, Assistant Director for Managed Care in the Division of Medical Assistance. He can be reached at (919) 647-8170 or via e-mail at Jeffrey.Simms@ncmail.net.

Sincerely,

Dempsey Benton

DB:js

Attachment

cc: Dan Stewart
William W. Lawrence, Jr., M.D.
John Price
Sharnese Ransome
Jennifer Hoffmann
Legislative Library (2)

Location: 101 Blair Drive • Adams Building • Dorothea Dix Hospital Campus • Raleigh, N.C. 27603
An Equal Opportunity / Affirmative Action Employer

North Carolina Department of Health and Human Services
2001 Mail Service Center • Raleigh, North Carolina 27699-2001
Tel 919-733-4534 • Fax 919-715-4645

Michael F. Easley, Governor

Dempsey Benton, Secretary

March 25, 2008

The Honorable Bob England, M.D., Chairman
Appropriations Subcommittee on Health and Human Services
North Carolina General Assembly
Room 2219, Legislative Building
Raleigh, NC 27601

Dear Representative England:

Section 10.46 of S.L. 2007-323 (House Bill 1473), "Continue Efforts to Expand Community Care and Improve Quality of Care for Aged, Blind, and Disabled Medicaid Recipients," required DHHS to submit a report to the General Assembly on (1) the status of the implementation of Section 10.17 of S.L. 2005-276 and (2) the expansion of the scope of Community Care of NC care management model, through the piloted communitywide initiatives, to recipients of Medicaid and dually eligible individuals with chronic conditions and long-term care needs. The report needed to include the findings of the pilot initiatives with respect to cost containment and quality of care improvements and DMA's plans for expanding the pilots and implementing practices statewide. It is my pleasure to submit the required report at this time.

Please direct all questions concerning this report to Jeffrey Simms, Assistant Director for Managed Care in the Division of Medical Assistance. He can be reached at (919) 647-8170 or via e-mail at Jeffrey.Simms@ncmail.net.

Sincerely,

Dempsey Benton

DB:js

Attachment

cc: Dan Stewart
William W. Lawrence, Jr., M.D.
John Price
Sharnese Ransome
Jennifer Hoffmann
Legislative Library (2)

North Carolina Department of Health and Human Services
2001 Mail Service Center • Raleigh, North Carolina 27699-2001
Tel 919-733-4534 • Fax 919-715-4645

Michael F. Easley, Governor

Dempsey Benton, Secretary

March 25, 2008

The Honorable Verla Insko, Chairman
Appropriations Subcommittee on Health and Human Services
North Carolina General Assembly
Room 307-B1, Legislative Office Building
Raleigh, NC 27603

Dear Representative Insko:

Section 10.46 of S.L. 2007-323 (House Bill 1473), "Continue Efforts to Expand Community Care and Improve Quality of Care for Aged, Blind, and Disabled Medicaid Recipients," required DHHS to submit a report to the General Assembly on (1) the status of the implementation of Section 10.17 of S.L. 2005-276 and (2) the expansion of the scope of Community Care of NC care management model, through the piloted communitywide initiatives, to recipients of Medicaid and dually eligible individuals with chronic conditions and long-term care needs. The report needed to include the findings of the pilot initiatives with respect to cost containment and quality of care improvements and DMA's plans for expanding the pilots and implementing practices statewide. It is my pleasure to submit the required report at this time.

Please direct all questions concerning this report to Jeffrey Simms, Assistant Director for Managed Care in the Division of Medical Assistance. He can be reached at (919) 647-8170 or via e-mail at Jeffrey.Simms@ncmail.net.

Sincerely,

Dempsey Benton

DB:js

Attachment

cc: Dan Stewart
William W. Lawrence, Jr., M.D.
John Price
Sharnese Ransome
Jennifer Hoffmann
Legislative Library (2)

Community Care of North Carolina (CCNC)
CHRONIC CARE PROJECT UPDATE
January 30th 2008

Shortly after receiving the directive from the General Assembly in July, 2005 to extend the Community Care's medical home and care management system to the Aged, Blind, Disabled, and Dually-eligible recipients, Community Care began building awareness across the CCNC networks and practices of the importance of applying CCNC principles and programs to these populations. This emphasis by CCNC and DHHS leadership has helped shift the CCNC focus to these populations with extensive chronic illnesses. Although the complexity of these populations and the many difficult care issues they bring ensures that there will be no quick fixes.

We do believe that the Community Care approach, (The Chronic Care Program), which includes the development of chronic care pilots by ten of the CCNC networks that are putting in place the expanded community-based systems, programs and supports, combined with a series of program-wide initiatives, including congestive heart failure, chronic obstructive pulmonary disease, stroke prevention, behavioral health co-location, and pharmacy management, is the right approach. Although most of the Chronic Care initiatives are still relatively early in their operational phases, we are already beginning to see impact from these efforts as well as from the heightened awareness and attention from our networks and practices to improving the care of chronic care patients.

According to actuarial work carried out by Mercer Government Human Services Consulting, Community Care's efforts began to show impact in the first year of the Aged, Blind and Disabled (Chronic Care Program) initiative. In comparison with baseline (FY2005), which showed approximately $7million in savings from Community Care's efforts in managing the SSI population, the FY2006 analysis by Mercer showed that savings from Community Care efforts in managing the SSI populations had jumped to more than $53 million. As Community Care's Chronic Care Program efforts mature and expand, these savings will continue to grow.

Background:

Under the Community Care of North Carolina program (CCNC), North Carolina is building a robust system of community health networks that are organized and operated by local physicians, hospitals, health departments and departments of social services. By establishing private, not-for-profit networks, the program is putting in place the local systems that are needed to achieve long-term quality, cost, access and utilization objectives in the management of care for Medicaid recipients. Currently, there are fourteen (14) networks with more than 3,200 physicians across North Carolina working with their local community providers and agencies to better manage the care of over 780,000 Medicaid enrollees.

This report will outline the progress made by the chronic care pilots in managing the most high cost and high risk Medicaid enrollees – the aged, blind and disabled populations. The pilots are testing program components to determine those components that are essential to positively impact this target population. Although much of the progress is qualitative and involves developing the appropriate infrastructures and processes at the community level to implement a chronic care model that works, the Mercer studies have documented our initial impact with this target population.

The ten (10) community networks participating in the development, implementation and evaluation of the chronic care project include:

- Access II Care of Western North Carolina (Buncombe County)
- Carolina Collaborative Community Care (Cumberland County)
- Community Care Plan of Eastern Carolina (Bertie County)
- Community Care of Wake and Johnston Counties (Wake County)
- Community Health Partners (Lincoln County)
- Community Care Partners of Greater Mecklenburg (Mecklenburg County)
- Northern Piedmont Community Care Network (Durham County)
- Southern Piedmont Community Care Plan (Rowan County)
- Northwest Community Care Network (Surry County)
- Central Carolina Health Network / AccessCare (Chatham County)

- Sandhills Community Care Network (To Begin Spring 2008)

North Carolina has learned that the best system for enabling long-term sustainability and system reform must be local and that the CCNC networks, in turn, provide an ideal mechanism for the state to ensure access to quality services and at the most reasonable cost for its citizens.

In the chronic care initiative, the CCNC networks, in partnership with community long term care provider organizations, are expected to provide a comprehensive and integrated package of screening and assessment, case management and care coordination, in addition to the primary, preventive and medical coordination and treatment that is provided to all enrollees.

Targeted for this initiative will be those individuals who are eligible for Medicaid who are in the aged, blind, disabled or CAP-DA categories. A defined subset, such as those individuals with high cost, high utilization and /or high risk, is being targeted for comprehensive case management. In addition, those enrollees who are dually-eligible for both Medicaid and Medicare will be included in this initiative. Although enrollment into CCNC is voluntary for the dually-eligible recipients, the program is working with CMS (Centers for Medicare and Medicare Services) to develop processes to maximize this enrollment.

The project goals will be met by building the foundation established through CCNC where a community model can be built that is patient centric and enfolds the physical, social, and behavioral health needs of the target population. The networks are reorganizing the delivery of care to those with chronic needs in ways that enhance appropriate access, increase service delivery options, improve efficiencies in the identification, assessment and care planning processes, reduce the risk of institutionalization and reduce the unnecessary inefficiencies and expenses inherent in the current system.

The long term vision of the CCNC chronic care project is to create an effective patient focused statewide chronic care system for both Medicaid and Medicare. This pilot project will lay the infrastructure for a potential demonstration with the Centers for Medicare and Medicaid (CMS) to manage the dually eligible (eligible for both Medicaid and Medicare), and ultimately the Medicare population through a 646 waiver.

The chronic care program is building on the foundation established through the CCNC program by emphasizing an enhanced care management process with strong ties to existing primary care providers / medical homes and by establishing new connections with community-based long-term care and mental health providers. CCNC is partnering with those providers and other professionals to improve how care is organized and delivered and to create local accountability for managing target populations.

The chronic care program is guided by the following principles:

- Working with community providers who have traditionally cared for North Carolina's low-income residents;

- Building private and public partnerships where community providers can work together to cooperatively plan for meeting patient needs and where existing resources can be used most efficiently;
- Placing responsibility for performance and improvement in the hands of those who actually deliver the care;
- Building a patient-centric model with the tools and processes that can be replicated in other networks and practices;
- Targeting disease and care management initiatives to a subset of the target population where the interventions will have the most impact;
- Ensuring that the "medical home" is supported in such a manner that enables primary care providers to improve how they manage chronic illnesses; and
- Integrating community based long term care providers and supports in the community-based chronic care model.

With CCNC's existing infrastructure of provider networks, case management services, web-based case management information systems, and capacity for claims-based quality and cost data feedback, the networks are uniquely well-suited to develop a community model best able to manage individuals with multiple conditions.

Pilot Summary:

Target Population Described

In State Fiscal Year 2006, the Aged, Blind and Disabled population accounted for 68.6 percent of the service dollars but only 28.4 percent of the recipients. The average recipient annual cost for the aged was $10,045 and for the blind and disabled was $13,761, compared to an average recipient annual cost for families and children of only $2,255.

As of December 2007, approximately 119,624 CCNC enrollees fall into the aged, blind and disabled categories. Of those, approximately 9,000 have chronic obstructive lung disease (COPD), 3,760 have congestive heart failure, 15,903 have diabetes and 30,450 have a mental health condition. These individuals represent a much higher percentage of expenditures following closely the national findings that 30% of the population accounts for 70% of the expenditures. Incorporating the existing CCNC infrastructure with population management (disease management, care management, pharmacy management, coordination of behavioral health and implementing evidence-based guidelines) is enabling the program to identify and manage those individuals at greatest risk and positively impact the overall quality and cost of care.

In the initial pilot networks, the networks began the chronic care program by developing program operations in one county and are now beginning to expand to additional network counties as the infrastructure and processes have been designed and developed and working smoothly. In the ten (10) pilot network counties, the enrolled aged, blind and disabled population was almost 30,000 enrollees. This pilot target population of 30,000 demonstrated the following characteristics:

- ✓ Take an average of 7.8 prescription medications per month
- ✓ 4,000 have Diabetes
- ✓ 2,400 have COPD
- ✓ 8,600 have Hypertension
- ✓ 900 have Congestive Heart Failure
- ✓ 7,900 have a co-morbid Mental Health Diagnosis
- ✓ 70% have co-morbidities (suffering with two or more chronic conditions)
- ✓ Congestive Heart Failure was the 2nd leading cause of hospitalization

Building Infrastructure and Processes

Funding was identified to support these pilot programs, and the networks received these funds in February 2007. Nonetheless, the pilot networks began meeting in the spring of 2006 to identify program components essential to implement a chronic care delivery model in community settings. The following work groups were identified and staffed by CCNC and network leadership staff:

- Enrollment and Outreach
- Screening, Assessment and Care Planning
- Polypharmacy
- Pediatric Chronic Care
- Hypertension / Coronary Artery Disease
- Mental Health
- Data and Evaluation
- Case Management Information System (CMIS)
- Self-Management of Chronic Illnesses
- Transitional Care – From Acute to Community Setting

Initially, the networks are extending the population, disease and care management initiatives and community partnerships that are already in place to the target population. The core disease and care management initiatives being extended into the aged, blind and disabled population include:

- Asthma, Diabetes and Congestive Heart Failure disease management initiatives;
- Pharmacy initiatives addressing cost and utilization;
- Emergency department utilization; and
- Managing those enrollees and services at highest risk and cost.

The networks are integrating care management initiatives to help physicians manage and care for the most frail and costly patients. Physicians and practices receive regular feedback on their ability to improve both the processes and outcomes of care. Out of the 30,000 aged, blind and disabled enrollees in the pilot network, 8,652 received a case management task in 2007, with over 1,500 enrollees described as having received “heavy” case management activities.

In addition to the core community care initiatives, the chronic care pilots are developing and implementing the following new disease and care management initiatives:

- Chronic Obstructive Pulmonary Disease (COPD) currently developing the model in five (5) community networks;
- Mental health integration and the management of mild to moderate depression; and
- Hypertension and Coronary Artery Disease

The CCNC networks are aligning the efforts of comprehensive care management processes that will support and assist the networks in managing those individuals with chronic and often co-morbid conditions. The Community Care networks are developing a community-based approach to identify individuals who might benefit most from chronic care case management and that approach includes performing an assessment, identifying patient needs, and developing an appropriate plan of care.

Depending on the needs of the individual, this process might include:

- ✓ establishment of a medical homed
- ✓ disease management
- ✓ pharmacy management

- ✓ mental health referrals
- ✓ social case management
- ✓ interdisciplinary team review
- ✓ patient empowerment and education
- ✓ family / care giver education
- ✓ coordination and collaboration with community providers.

Networks are also engaging the LME (Local Management Entity) and the behavioral health providers in their communities to work together on managing and coordinating the care of enrollees with mental health conditions.

The networks have established a local inter-disciplinary team to assist in evaluating and managing the needs of individuals with chronic conditions. In addition, the chronic care team reviews the Personal Care Services (PCS) and Home Health (HH) services to ensure that patients receive what is medically necessary. Local hospital partnerships and collaborations are important to the success of this project as they share real time information so network staff can identify their patients that are being hospitalized and partner with hospital discharge planners to ensure a safe transition back into the community. The chronic care program has begun to identify key elements and processes needed to implement transitional care – assisting enrollees transition from an acute or inpatient setting back to the community or nursing home.

A chronic care resource and training manual for the networks has been developed to provide guidance on the processes and tools needed in the development and implementation of a chronic care model. The chronic care pilot networks have been meeting regularly over this past year to share and standardize best practices in managing enrollees with chronic illnesses. Several of the work groups have been developing and testing best practices.

A standardized screening tool was developed and placed in the web based case management system. This tool helps the chronic care case managers prioritize outreach and interventions to those individuals at the highest risk and with the greatest potential to benefit. The "Chronic Care Screening Criteria" tool is included as Attachment A.

The screening, assessment and care management work group, in addition to developing the screening tool, has tested and spread a "Chronic Care Case Management (CCCM) Decision Tree" which provides the sequential logic for the case manager to consider in developing an appropriate plan of care. A draft of the decision tree is included as Attachment B.

"Chronic Care Activity Logs" are generated in CMIS (web based Case Management Information System) that summarize case management activity and provide patient level data abstracted from the screening tools. This method of documentation enables the case managers and their supervisors to see key data elements on the target population, such as, the co-morbidities and long term care services being provided. A sample of the "Chronic Care Activity Log" is included as Attachment C.

The pilot networks have implemented a consistent and standardized approach in the screening and assessing of the aged, blind and disabled populations.

Chronic Care Project Reporting

The next important element in managing the aged, blind and disabled population was the development of standardized reports to assist the networks and practices in identifying that sub-population group that would most benefit from the chronic care interventions. Providing the networks with meaningful data and reports is a critical step in the process of managing the aged, blind and disabled population. Listed below is the current list of chronic care reports that are standardized and are being provided to the networks on a regular basis.

Report Description	Data elements	Notes
Aged, Blind and Disabled (ABD) Patient List	• MID, name, DOB, age, gender, race, living arrangement, client county, • Year of claims data: # outpt physician providers, # inpt. claims, # ER claims, avg. # scripts/ month, total costs, total PCS costs, inpt. and ED costs, other costs • Dx indicator for diabetes, COPD, HTN, CHF, SMI • network, CA PCP, PCP county, dual status	• Based on enrolled ABD patients in network / pilot county for a certain month. • Looks back one year of claims data • Disease categories are modified HEDIS • Includes duals and non-dual in separate tabs
Quarterly Utilization / Cost Measures	• Total PMPM costs, • pharmacy PMPM, • % of pts enrolled for qtr w/ 24+ scripts, • Inpt rate pmpm, • ED rate pmpm, • non-emergent ED rate pmpm • # of hosp. readmission within 30 days, • 30 day readmissions as % of all admissions	• Enrolled ABD, non dual pop. • By PCP county • Original 10 pilot counties counted in “Phase I Total” • Add-on counties reported below • Recalculated (revised) measures truncated at 3 mos. time-to-paid-claim • Readmits counted only if PCP-enrolled at time of admission
Quarterly Utilization / Cost Measures for “Evaluation Cohort”	As above	• Limited to recipients continuously enrolled 12/06 to present
Diabetes Measures	Diabetes: • % with eye exam • % with A1c testing (1/yr) • % with A1c testing (2/yr)	• Enrolled ABD, Non Duals • By PCP county .
Quad 4 measures (quadrant 4 = high physical and mental health needs)	• % Quad 4 with 1+ OV during yr • # Quad 4 diabetics • % of Quad 4 diabetics w/ ≥ 2A1c tests during yr.	• Enrolled ABD, Non Duals • By PCP county
Heart Failure measures	• % HF Case ID pts assigned a condition • # HF pts ruled-in • % HF pts w/ risk assessment attempted • # HF inpt visits • # HF hosp. 30d readmit visits	• Enrolled ABD, Non Duals • By PCP county
Enrollment / Outreach Measures	• % of non dual ABD eligibles enrolled in CA (a) • # of non-enrolled eligibles in exempt code 9900030 (b)	• Denominator includes all Medicaid recipients • (a) Numerator includes CA-I & CA-II • (b) All aid categories of non-enrolled elig in 9900030 – not limited to ABD • Comes from DMA rpt on web • By pt county of residence
Exempt Population Report	• MID, name, client county, address, age, aid category, phone#, exempt code, CAP code, pop group, last provider seen (CA, CCNC, other), PCP spec. & type • If CCNC PCP, network linked to • If non CA PCP, DOS and procedure code used	• Non Dual, exempted ABD patients by county of residence • Excludes exempt codes 9999901 & 9999902 • Excludes people in specific living arrangements • Look back at 1 yr of claims for PCP info
Quad 4 Case ID	PCP, Network, PCP county, MID, Name, DOB, Dual status, MM with PCP, # PCP visits, MH diagnosis, # inpt MH visits, # MH ED visits, # MH Doc visits, MH PCP, Community Support $, MH medical costs for last 12 months, MH pharmacy costs for last 12 months, if on 8+ meds - # medications filled in last 3 months, if Asthma, Diabetes, COPD,CHF, HTN: • Criteria identified by • # IP visits for disease • # ED visits for disease • # Doc visits for disease • Medical $ for last 12 mo. for dx • Pharmacy $ for last 12 mo for dx	• QUAD 4 ABD patients enrolled in a certain month • One year of claims data
Case Management	• % enrolled with CC health assessment • % in target pop receiving CM services, by intensity	

Listed below are the reports that can be requested by the networks, as needed:

- ✓ List of PCS and Home Health Billers
- ✓ Mental Health Billers
- ✓ Hypertension Counts
- ✓ 30 day Readmission Details

These reports were developed, tested and modified by program and network staff as they tested what information was most meaningful and relevant to managing the target population.

Each network has a pharmacist, at least part-time, and they are implementing a "pharmacy home" initiative where individuals on multiple medications can be reviewed, monitored and educated.

The pilot networks developed processes, standardized approaches and tools to help them identify, assess, and care manage their enrolled aged, blind and disabled population. In addition, the pilots have built additional clinical and pharmacy initiatives that are very relevant to individuals with chronic illnesses. These new initiatives will be highlighted over the next couple of pages.

Pharmacy Home Project

The goal of the pharmacy home project is to take a high risk group of patients/enrollees with complex medical problems on multiple medications and help assure that these patients have a "Pharmacy Home" that allows for pharmaceutical care coordination. The pharmacy home project targets a high risk group of patients with complex medical problems that are on multiple medications. Individuals are eligible for the pharmacy home program when they are: a) taking more than 8 medications, b) receive prescriptions from 3 or more practices, or c) are referred to the program by a clinician or a care manager.

The "Pharmacy Home" is supported by a multi-disciplinary team of CCNC and network staff and primary care providers. The foundation of the pharmacy home is comprised of three key providers of pharmaceutical care delivery:

1) Network pharmacist
2) Case manager
3) Primary Care Provider

This team works closely with all physician practices (both primary care practices and specialty practices) to provide pharmaceutical care coordination. The following processes guide the pharmacy home initiatives:

- ✓ Identify the patient's current medication list and relevant medical conditions by Medicaid claims and if necessary by communication with practice or chart audit. (network pharmacist)
- ✓ Review medication list and make suggestions for changes (duplications, medication interactions, generic substitution) (network pharmacist)
- ✓ Recommendations are sent to either to the case manager assigned to that patient or the patient's primary care provider (network pharmacist)
- ✓ Using the revised medication list, case manager and/or pharmacist meets with patient to explain changes, helps the patient with medication adherence, and if possible, provides a portable and legible medication list. Follow up meetings are schedules as needed. (case manager, network pharmacist)
- ✓ Appropriate changes are communicated back to pharmacist for follow up.

Preliminary Findings and Results from the Pharmacy Home Initiative:

1) A total of 414 aged, blind and disabled patients were enrolled in the Pharmacy Home Project as part of the Chronic Care Initiative by of the end of the pilot phase (December 2007).
2) All CCNC networks engaged in the Chronic Care Project now have established “Pharmacy Home” workflow models and are ready for a fully scaled project.
3) Patients initially enrolled in the pharmacy home have many conditions requiring chronic medication use. When considering all the Medicaid recipients in the state using at least one chronic medication, the average patient uses 2.40 chronic medications. The average aged, blind and disabled recipient in participating Chronic Care Initiative locations has a drug regimen with 3.73 chronic medications. The average “Pharmacy Home” enrolled patient has 6.92 chronic medications.
4) Adherence seems to be on the rise for “Pharmacy Home” enrollees. Statewide, adherence to chronic medications is 65% (as measured by the percentage of enrollees with fill rates greater than 0.8 for each drug-user pair). For the roughly ten thousand patients categorized as aged, blind and disabled in participating Chronic Care Initiative locations that are not yet enrolled in the “Pharmacy Home”, the rate is identical at 65%. For “Pharmacy Home” enrollees, the rate is currently 69%.
5) Fewer gaps in therapy are observed for “Pharmacy Home” enrollees. Statewide, the percentage of chronic medications having a gap in therapy (a period of time of at least 10 days in which the patient is without medicine) is 51%. For aged, blind and disabled patients in participating chronic care locations, the rate is 53%. For “Pharmacy Home” enrollees, it currently at 61%.
6) Drug costs have stabilized for “Pharmacy Home” enrollees, while those yet to be enrolled continue to see increasing drug costs. “Pharmacy Home” enrollees saw a drug cost *decrease* of 1.7% in October 2007 as compared to the benchmark (October 2006). Their aged, blind and disabled counterparts who have yet to be enrolled in the “Pharmacy Home” saw an increase of 11.2%. That represents a difference in difference drug cost savings of 12.9%.

Chronic Obstructive Lung Disease (COPD) Project

COPD is a slowly progressive lung disease that includes chronic bronchitis and emphysema. Tobacco smoking is the leading cause of COPD and 15-20% of all smokers develop clinically significant COPD. It is the fourth leading cause of death in the US. There are approximately 10 million adults with the diagnosis and many more who have the disease but are undiagnosed. The economic burden of this illness is great. COPD costs nearly 2.5 times as much as asthma, with annual costs totaling $37.2 billion. Hospital costs account for more than half of the direct medical costs of COPD. (*National Committee for Quality Assurance*) According to data from the North Carolina Medicaid program, COPD patients are 4.7 times more costly than the average Medicaid recipient. (*NC Division of Medical Assistance*). There are over 2,300 enrollees with COPD in the pilot counties.

In 2006, Community Care of North Carolina (CCNC) began a COPD Disease Management Program as a pilot initiative in response to a legislative directive to expand disease management programs and network and provider interest in COPD. The COPD pilot initiative utilizes a Disease Management Model based on the CCNC Asthma Disease Management Program. The participating networks include Northern Piedmont Community Care, Sandhills Community Care Network, Carolina Community Health Partnership, AccessCare, and Access III of Lower Cape Fear.

The pilot networks implemented evidence-based best practice guidelines following the Global Initiative for Chronic Lung Disease (GOLD) guidelines and the American Thoracic Society (ATS)/ European Respiratory Society (ERS) standards. They developed provider and case manager toolkits, action plans, and assessment and quality of life tools. Networks sponsored local provider training sessions and Spirometry (Pulmonary Function Testing) funding.

Preliminary COPD Findings:

Baseline program evaluation has been completed and additional evaluation is ongoing. To assess performance in process measures, baseline chart audits were completed on the participating cohort of over 1,000 patients. Another chart audit is scheduled to begin February 2008. To assess outcomes, baseline Quality of Life surveys were conducted and networks are in the process of completing a second round of surveys. Utilization outcomes including ED visits and hospitalizations were measured at baseline. To allow for a lag in administrative claims data, the second outcomes evaluation is to be completed in spring 2008. The Pilot Program Evaluation summary is expected in spring/summer 2008.

Although the evaluation has not been completed, initial results and feedback indicate that the pilot is very successful. Particular strengths include provider trainings with an emphasis on best practices, the provision of spirometers to practices, and patient appreciation for case management services. Final evaluation may further delineate program strengths and weaknesses but current expectations are for expansion of the COPD Disease Management program to CCNC networks participating in the Chronic Care Initiative with subsequent expansion statewide. Baseline data and graphs are depicted in the attached booklet (Community Care of North Carolina Disease and Care Management Initiatives – Attachment D).

Congestive Heart Failure (CHF) Project

CHF was the 2nd leading cause of hospitalization for the chronic care enrollees for the last quarter (2nd quarter 2007). Up to half of the CHF admissions may be preventable through self management coaching, medication adherence, and best practice care. CCNC developed its statewide Heart Failure program incorporating best practice models from clinical trials and managed care initiatives. The heart failure program is now one year into implementation in all fourteen (14) networks. While promoting evidence based heart failure care to primary care practices, the networks are identifying high risk patients that would benefit from intensive case management. Case managers follow patients for approximately two (2) months during which they ensure that CHF patients are able to self manage their disease and work effectively with their doctor and healthcare team.

Since September 2006, 2,289 individuals with heart failure have been identified by the networks (approximately 860 in the chronic care pilot counties). Of those, 1,489 have been contacted by case managers and 909 have received a complete assessment. Patients are contacted weekly and assessed for signs and symptoms of a heart failure exacerbation and given extensive coaching and education on self managing their condition. Patients that are developing new symptoms are referred in to care. The program is tracking hospitalization and re-hospitalization rates, total cost, medication adherence, and quality of life indicators.

In the chronic care pilots, the networks are developing the processes to identify patients that have been hospitalized with a CHF exacerbation. Patients are engaged in the hospital and case managers help them to transition out of the hospital and remain clinically stable. Most heart failure patients take multiple medications and have multiple co-morbidities. In 2008, the heart failure program will begin piloting in three networks the implementation of a tele-health initiative. Devices will be placed in the homes of individuals who are leaving the hospital following a diagnosis of congestive heart failure. Other programs have demonstrated a remarkable decrease in re-admissions due to the assistive devices.

Preliminary Heart Failure Findings:

Although, it is really too early to provide quantitative results, we have begun to see some initial positive trends in utilization. Early measurements to the baseline are demonstrating a decline in both inpatient CHF visits and ED CHF visits (Inpatient rates lowering to 32.1 rate per 1000 from a 34.3 rate per 1000 and ED visit rates lowering to 20.4 from a rate of 20.8 rate per 1000).

Diabetes Disease Management Program

Diabetes was the second program wide quality improvement initiative implemented in the Community Care program and all networks began implementing evidence-based best practice guidelines for Diabetes in 2000. The body of evidence from national and international studies documents that improving the quality of care for individuals with Diabetes will result in a variety of benefits to the individual and cost savings to the health care system. Several long term studies, most notably the Diabetes control and Complications Trial (DCCT) and the United Kingdom Prospective Diabetes Study (UKPDS), have shown that improved glucose control, can delay the onset and progression of diabetes complications. Diabetes is the leading cause of blindness, kidney failure, stroke, heart disease and hypertension.

The CCNC program just completed its 2007 Diabetes chart audits that provide feedback and monitoring on the program's ability to implement the best standards of care. The community care networks achieved the following in their diabetes disease management program:

- ✓ 96% had continued care visits
- ✓ 97% had blood pressure monitoring
- ✓ Increase in measuring glucose control (HbA1c) increased from 69% to 79%
- ✓ Eye exams increased from 45% to 51%
- ✓ 67% of individuals with Diabetes had their HbA1c under 8
- ✓ 47% of individuals with Diabetes had their HbA1c under 7
- ✓ Achieved these levels that exceed national benchmarks

Mental Health Integration and Co-Location Project

The CCNC's chronic care program is addressing the mental health care needs of their enrollees with chronic conditions. The chronic care networks are integrating depression screenings and referrals and are developing processes to communicate with mental health providers in the community so that patient centered care can be delivered. Over half of our enrollees with a chronic condition, such as diabetes, COPD or CHF, have a co-morbid mental health diagnosis, such as depression or anxiety disorder.

CCNC has developed a framework, tools and processes for primary care providers to integrate the screening, diagnosis and treatment for depression (not the severely depressed). In addition, the co-location project is working with twelve (12) networks and over forty five (45) practices where a behavioral health care provider is working on-site with the primary care providers. In a couple networks they are piloting a reverse co-location model where the primary care provider is co-locating in a mental health clinic. In addition, the community care networks are building relationships with the LMEs (Local Management Entities) and community behavioral health care providers.

A model that is able to integrate behavioral and physical healthcare needs will demonstrate the value of a chronic care management model that is patient-centric and able to identify and meet all the needs of an individual.

Self Management of Chronic Disease

The chronic care networks are exploring the various options available and proven effective to help individuals in self managing their chronic illness(es). Examples of some of the self-management options being developed and integrated are:

- Partnering with the Division of Public Health in the development and implementation of the Stanford Model of Self Management of Chronic Disease. Requires master trainers able to train the trainers at the community level. Trainers (including lay health trainers) will then hold local sessions to work with a group of individuals on self management skill building and education regarding chronic illness care.

- Integrating the group medical visit at the practice level so that individuals can gain experience and build confidence by sharing their experience in managing their disease with their peers and others with chronic illnesses.
- Integrating motivation interviewing techniques for case managers and primary care providers to maximize patient motivational efforts.

Preliminary Findings / Program Evaluation:

The chronic care project is collecting baseline information on the target population and will use administrative claims data to capture progress on a quarterly basis. For those measures that cannot be collected via claims data, the program will integrate the collection into their current chart review process. These measures will be collected on an annual basis. The chronic care project collected baseline data in 2007.

The long term vision of the chronic care project is to create sustainable local / regional systems within the CCNC framework and in partnership with the State and CMS, which will, through collaboration, the use of evidence-based tools and processes, care management and support, create an effective and consumer-focused statewide chronic care system for Medicaid recipients, the dually-eligible and ultimately for Medicare beneficiaries.

A description of Community Care's core disease and care management initiatives, including baseline date and preliminary results, is included in the spiral bound 2007 document entitled "Community Care of North Carolina Disease and Care Management Initiatives" (Attachment D).

ATTACHMENT A

DRAFT
Chronic Care Screening Criteria

Date of Referral:______________ ☐ Claims Review Completed ☐ Chart Review Completed

ACTION STEPS: The intervention "referrals received" must be documented in CMIS as well as tasks "claims review" and "case review/chart audit."

Referral Received: *Referral received identifies the "source" of the information received; not the type of information. The "source" of data from a hospital for example would simply be identified as a "hospital referral.* Indicates fields added to "task with" in CMIS

☐ CAP C ☐ CAP Choice ☐ CAP DA ☐ CAP MR/DD ☐ CDSA ☐ DSS ☐ ED
☐ Community Service Provider or Agency ☐ Hospital ☐ Hospice or Palliative Care Program ☐ IMPACC
☐ LME/Mental Health Provider ☐ Patient/CG ☐ PCP ☐ Pharmacist (CCNC) ☐ Pharmacy
☐ Primary CM ☐ School ☐ Specialist/s: ____________________________
☐ CCNC ☐ DMA

Pt Last____________________ Pt First__________________ DOB: ____________ Age:_____

Street Address:__________________________ City:_______________ State:____ Zip:_______

Phone #: (____)-_____-______ Social Security #:______________ MID #:__________________

Carolina Access? ☐ Yes ☐ No PCP:________________________ PCP Phone:________________

Program Aid Category(s):1)_______; 2)_______ Guardian(only if child)__________________________

<u>Minimum Screening Criteria</u>:

☐ Patient has <u>2 or more</u> chronic conditions (not limited to CCNC initiatives and including mental health conditions)

All identified conditions must be documented in CMIS:

Chronic Conditions documented per chart and/or claims review (mark all that apply):

☐ Asthma ☐ Cancer ☐ Cerebrovas/CVA ☐ CKD ☐ COPD ☐ CHF ☐ Diabetes ☐ GI
☐ HTN/CVD ☐ Liver Dz ☐ Neuro ☐ Obesity ☐ Pain ☐ Bi-Polar Disorder
☐ Depression ☐ MR/DD ☐ PTSD ☐ Schizophrenia ☐ Substance Abuse

Other:____

AND Patient is <u>UNSTABLE</u> as defined by evidence of <u>2 or more</u> of the following:

☐ 1 or more Inpatient admissions within the past 6 months
☐ 3 or more ED within the past 6 months
☐ 8 or more prescriptions over the past month or 24 over the past 3 months
☐ 3 or more outpatient providers over the past 6 months
☐ No PCP visit within the past year
☐ 2 or more ADL deficits requiring hands on assistance

Result of Screening: ☐ Deceased ☐ Defer - Well Linked ☐ Does not meet Criteria
☐ Not Appropriate ☐ Proceed to Assessment ☐ Refused Services
☐ To Be Determined ☐ Unable to Contact

☐ Chronic Care CM Secured Consultation from CCNC Pharmacist (Available for all patients Open for Chronic Care CM)

ACTION STEPS: Interventions, tasks and medications must be documented in CMIS:

CCCM Provided Consultation with/*Referral Sent: Use "C" for consultation & "R" for Referral in blocks below.

__ CAP C __ CAP Choice __ CAP DA __ CAP MR/DD __ CDSA __ DSS
__ Community Service Provider or Agency __ Hospital __ Hospice or Palliative Care Program __ IMPACC
__ LME/Mental Health Provider __ Patient/CG __ PCP __ Pharmacist (CCNC) __ Pharmacy
__ Primary CM __ School __ Specialist/s: ____________________________

Comments:____

* Referral implies that the agency/individual listed now assumes responsibility for coordinating patient services

rev 01272008

ATTACHMENT B

DRAFT
Chronic Care Case Management (CCCM) Decision Tree

Patient MEETS Chronic Care Inclusion Criteria

Determine from referral source if there are immediate needs for:
> **emergent intervention** i.e. adult protective services, to protect the patient's safety and/or access to appropriate services. Ex. patient lives alone and is being discharged to their home from a rehab facility following hip replacement surgery
> **immediate initiation of transitional care services** i.e. PCS, Home Health, PDN, in order to maintain the patient safely in their home
> assuring patient's **immediate access to services and / or education** related to disease management. Ex. appropriate follow-up to Coumadin clinic following frequent changes to Coumadin dosing resulting in patient's accidental double dosing and need for Vitamin K injection x 2 over the past month

Case Management Priorities:
- 3 or more Chronic Conditions
- > 1 inpatient admission within 6 mos
- 1 or more ED visits per/mo
- More than 11 prescriptions/month
- Top 10% of cost / utilization

CMIS documentation:
- CCNC Chronic Care Standardized Assessment
- Open all appropriate conditions / diagnoses
- Assign tasks/interventions/goals - develop a patient centric plan of care
- Complete other appropriate assessments i.e. PHQ-9 for the depressed patient
- Assign CM intensity and maintain CMIS documentation standards at required intervals

Contact Discharge Planner if applicable to:
- conduct phone call meeting to discuss discharge plans
- determine if inpatient visit with patient is appropriate;
- schedule time to review inpatient chart
- conduct phone call/face-to-face meeting with hospitalist to discuss appropriate management and follow-up for patient after discharge

Collaboration with other Service Providers

Based on Claims, Medical Record, and Hospital Data review:
- Contact agencies already providing CM services
- Initiate collaborative efforts for patient management

Begin Implementation of Patient Case Management with the following components:
- Diet Compliance and Education
- PCP update and facilitate visit if needed
- Medication review and compliance via Claims and Pharmacist
- Continue to facilitate linkage between community service providers, PCP, Specialists, other CM services (i.e. CAP-DA) and initiate Interdisciplinary Team Meetings when appropriate to coordinate care
- Assess need for and provide patient / CG / Family education related to disease management and how patient's co-morbid conditions impact overall health status
- Assess patient / CG / Family ability and willingness to participate in the Self-Management Process with implementation of the "Managing My Healthcare" notebook when appropriate
- Ensure that patient is appropriately linked with community service providers and be available to serve as liaison for communicating patient status and new or ongoing needs with the PCP, Specialists, Home Care Based Services, other CM services
- Address social / behavioral issues that impact overall patient status
- Provide ongoing communication with PCP and other service providers as the patient's condition improves/declines

Patient's Condition Stabilizes and referral back to PCM is appropriate when:
- pt is linked with appropriate services and has had no exacerbations resulting in ED or INPT admissions
- medication teaching is complete and pt is compliant with prescribed therapy
- pt / family / CG have received training in and are comfortable in the use of the Self-Management notebook
- pt is seeing PCP and other specialists for appropriate follow-up
- pt / family / CG have received appropriate disease management teaching and are meeting goals set to maintain optimal health
- pt has remained non-compliant and is unwilling to continue participation in intensive CM activities

CHRONIC CARE (CC) ACTIVITY LOG

ATTACHMENT C

Patients Processed:	168		Current Cases:	32			# heavy:	17		# medium:	15

Date of Initial Screening	Patient Last	Patient First	Referral Source	Asth	COPD	DM	CHF	HTN/ CVD	Neuro/ CVA	GI	CA	Dep	BPD	Schizo	MR	SA	PTSD	Pain	Other	Home Service	Home Service
7/2/2007	Patient		Data									x									
5/30/2007	Patient		Data		x	x	x			x		x									
8/31/2007	Patient		Comm	x	x								x				x				
6/22/2007	Patient		PCM	x								x	x								
6/8/2007	Patient		Data	x	x	x		x		x		x									
9/5/2007	Patient		Data															x			
9/13/2007	Patient		Data	x									x								
9/13/2007	Patient		Data	x						x									ADHD		
9/13/2007	Patient		Data										x					x	migraines		
9/13/2007	Patient		Data		x								x					x			
7/9/2007	Patient		PCM		x	x	x														
6/13/2007	Patient		Data				x								x						
9/14/2007	Patient		Data		x			x	x	x			x			X		x			
9/14/2007	Patient		Data							x					x				CP	PCS	
9/18/2007	Patient		Data							x					x				CP	PCS	
	Patient		Data																	HHS	
7/2/2007	Patient		Data																		
7/16/2007	Patient		Data										x								
6/1/2007	Patient		Data	x																	
7/13/2007	Patient		Data							x											
9/18/2007	Patient		Data					x						x						PCS	
9/18/2007	Patient		Data		x			x		x		x									
6/21/2007	Patient		Data																	PCS	
10/1/2007	Patient		Data			x		x				x							toes amputated	HHS	
5/18/2007	Patient		PCM			x				x		x						x			
9/5/2007	Patient		Data					x		x									dementia		
6/7/2007	Patient		Data			x		x		x		x		x							
5/8/2007	Patient		PCM			x						x									
10/1/2007	Patient		Data					x				x							HIV		
10/1/2007	Patient		Data			x						x									
8/31/2007	Patient		Other CM												x				Kidney Tplant		
7/24/207	Patient		Data					x		x		x									
10/1/2007	Patient		Data		x					x			x								
8/2/2007	Patient		Data		x			x		x		x									
10/1/2007	Patient		Data			x							x						obesity		
6/29/2007	Patient		Data														x				

As of 1/29/2008

CHRONIC CARE (CC) ACTIVITY LOG

ATTACHMENT C

168		Current Cases:																		FHC	
Patient Last	Patient First	Referral Source	PCP	ABD	Other CM Services	CM Status if Enrolled	Outcome	Comment	Disposition Date	Assessment Complete	Other Assessment	Pharmacy Consult	PHQ-9	Audit	Care Plan Initiated	Self-Mgmt Notebook	Measures			BCHC	
Patient		Data	Beacon	ABD			DNMC		10/24/2007											BCHC	
Patient		Data	FHC	ABD			Consult													MAFHC	
Patient		Comm	BCHC	ABD		medium	Enroll													BCHC	
Patient		PCM	BCHC	ABD	Mental Health	medium	Enroll			x		x	x		x					ACMC	
Patient		Data	MAFHC	ABD			DNMC	stable												FHC	
Patient		Data	BCHC	ABD			DNMC													Beacon	
Patient		Data	ACMC	ABD			DNMC													MAFHC	
Patient		Data	FHC	ABD			DNMC													PRMA	
Patient		Data	Beacon	ABD		medium	Enroll	4 specialists		x		x								BCHC	
Patient		Data	MAFHC	ABD			DNMC													BCHC	
Patient		PCM	PRMA	ABD		deferred	Enroll													ACMC	
Patient		Data	BCHC	ABD			Consult													ACMC	
Patient		Data	BCHC	ABD		medium	Enroll													BCHC	
Patient		Data	ACMC	ABD			DNMC													MAFHC	
Patient		Data	ACMC	ABD			DNMC													MAFHC	
Patient		Data	BCHC	ABD		TBD														BCHC	
Patient		Data	MAFHC	ABD		TBD														BCHC	
Patient		Data	MAFHC	ABD			DNMC													WNCCHS	
Patient		Data	BCHC	ABD			Consult													WNCCHS	
Patient		Data	BCHC	ABD			DNMC													BCHC	
Patient		Data	WNCCHS	ABD			DNMC													BCHC	
Patient		Data	WNCCHS	ABD			TBD													Hygeia	
Patient		Data	BCHC	ABD			Consult													Hygeia	
Patient		Data	BCHC	ABD		heavy	Enroll													MAFHC	
Patient		PCM	Hygeia	ABD		medium	Enroll	Dual		x		x			x					BCHC	
Patient		Data	Hygeia	ABD			DNMC	expired												WNCCHS	
Patient		Data	MAFHC	ABD	Mental Health		DNMC	to ICARE												Hygeia	
Patient		PCM	BCHC	ABD			Consult													ACMC	
Patient		Data	WNCCHS	ABD			DNMC													MAFHC	
Patient		Data	Hygeia	ABD			DNMC													PRMA-Bush	
Patient		Other CM	ACMC	ABD			DNMC													BCHC	
Patient		Data	MAFHC	ABD			DNMC													BCHC	
Patient		Data	PRMA-Bu	ABD			DNMC													BCHC	
Patient		Data	BCHC	ABD		deferred	Enroll													MAFHC	
Patient		Data	BCHC	ABD			DNMC													BCHC	
Patient		Data	BCHC	ABD			DNMC													Beacon	

As of 1/29/2008

Community Care of North Carolina Disease & Care Management Initiatives

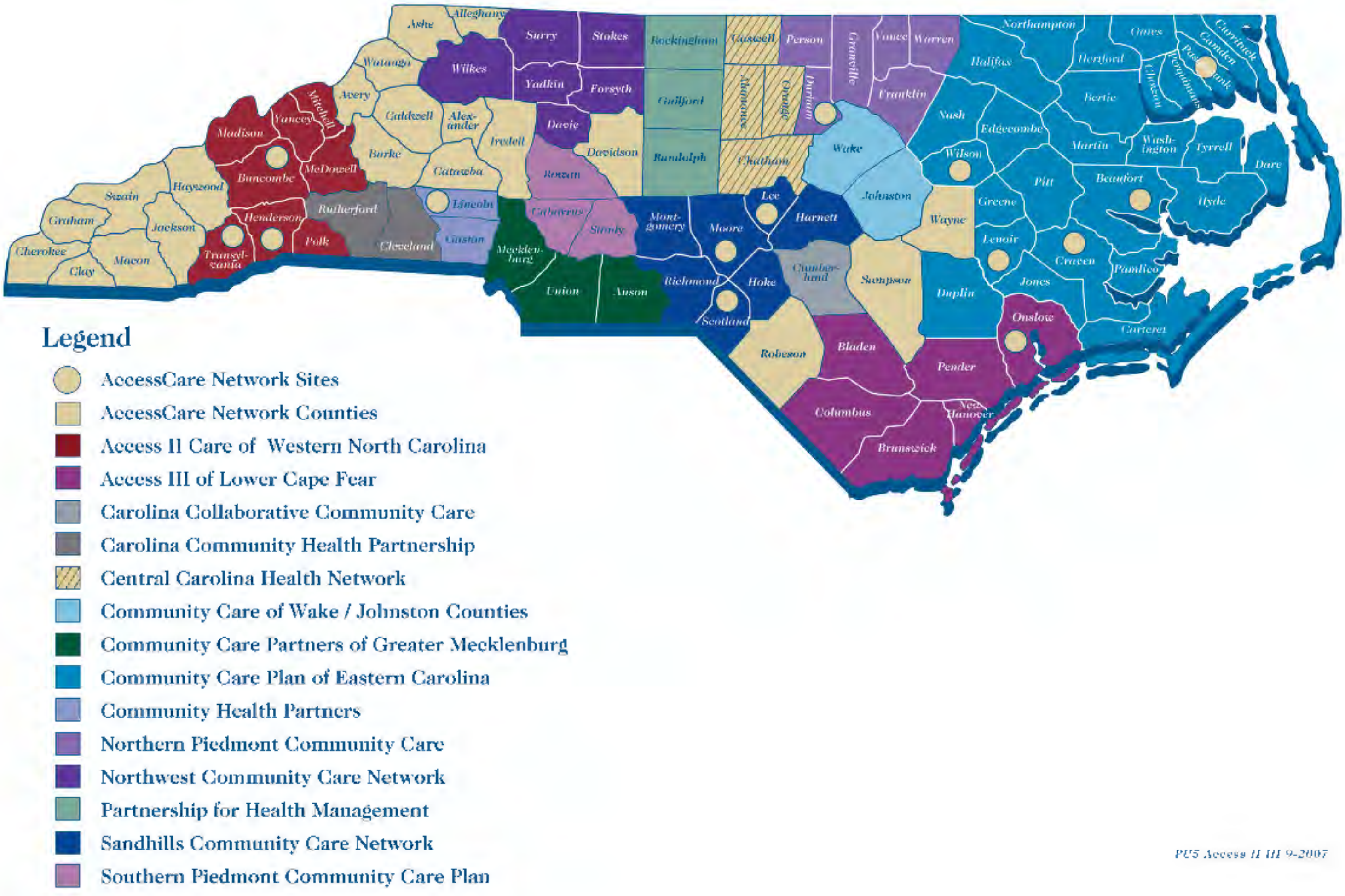
Community Care
of North Carolina

2007

Community Care of North Carolina
Mail Service Center 2009 • Raleigh, NC 27699-2009
(919) 715-1453 www.communitycarenc.com

Community Care of North Carolina

Access II and III Networks



PU5 Access II III 9-2007

TABLE OF CONTENTS

CCNC OVERVIEW

Like most states, North Carolina is facing the perpetual challenge of providing cost-efficient, high-quality acute and long-term care to its Medicaid population. Under the Community Care of North Carolina (CCNC) program, North Carolina is building a robust system of community health networks that are organized and operated by local physicians, hospitals, health departments and departments of social services. By establishing private, not-for-profit provider networks, the program is putting in place the local systems that are needed to achieve long-term quality, cost, access and utilization objectives in the management of care for the Medicaid recipients. Fourteen (14) networks with more than 3,000 physicians across North Carolina are working with their local health departments, hospitals, social service agencies and other community providers to better manage the care of approximately 760,000 Medicaid enrollees.

As of August 2007, the 14 networks, their coverage area and enrollees include:

- **AccessCare** (30 counties with 150 Provider Sites including UNC); enrollees 197,975
- **Access II Care of Western N.C.** (8 counties - Buncombe, Henderson, Madison, Mitchell, McDowell, Polk, Transylvania and Yancey); enrollees 30,036
- **Access III of Lower Cape Fear** (6 counties - Bladen, Brunswick, Columbus, New Hanover, Onslow and Pender); enrollees 41,139
- **Carolina Collaborative Community Care** (1 county - Cumberland); enrollees 35,883
- **Carolina Community Health Partnership** (2 counties - Cleveland and Rutherford); enrollees 18,921
- **Community Care of Wake and Johnston Counties** (2 counties - Wake and Johnston); enrollees 52,186
- **Community Care Partners of Greater Mecklenburg** (3 counties - Anson, Mecklenburg and Union); enrollees 81,259
- **Community Care Plan of Eastern Carolina** (27 counties - Beaufort, Bertie, Camden, Carteret, Chowan, Craven, Currituck, Dare, Duplin, Edgecombe, Gates, Greene, Halifax, Hertford, Hyde, Jones, Lenoir,Martin, Nash, Northampton, Pamlico, Pasquotank, Perquimans, Pitt, Tyrell, Washington and Wilson); enrollees 97,729
- **Community Health Partners** (2 counties - Gaston and Lincoln); enrollees 23,619
- **Northern Piedmont Community Care** (6 counties - Durham, Franklin, Granville, Person, Vance and Warren); enrollees 36,709
- **Northwest Community Care Network** (6 counties - Davie, Forsyth, Stokes, Surry, Wilkes, and Yadkin); enrollees 52,914
- **Partnership for Health Management** (3 counties - Guilford, Randolph and Rockingham); enrollees 29,928
- **Sandhills Community Care Network** (7 counties - Harnett, Hoke, Lee, Montgomery, Moore, Richmond and Scotland); enrollees 31,171
- **Southern Piedmont Community Care Plan** (3 counties - Cabarrus, Rowan and Stanly); enrollees 26,515

The current CCNC program is structured as an enhanced fee-for-service model, with designated medical homes receiving $2.50 pm/pm (per member/per month) to compensate for key access and disease/population management activities and local networks receiving $3 pm/pm to support local case and disease management activities and staff.

CCNC has developed quality improvement and care management initiatives that achieve access, quality, utilization, and cost objectives by improving the management of patient care. These initiatives aim to assess the needs and severity of their enrolled population in order to target care and disease management initiatives where they are most beneficial. Each network has at least one designated clinical director who takes the lead in spreading quality improvement initiatives throughout their network. The clinical directors meet quarterly to review and analyze meaningful data and information about their enrolled population and to collectively choose initiatives and performance measures and goals.

Each network has regular "medical management committee" meetings chaired by their clinical director and with clinical representation from participating practices. These meetings provide a forum to obtain provider input and buy-in and to implement a process for spreading quality improvement initiatives to all participating practices. This rapid cycle of quality improvement is being implemented at each network. Both the clinical director's meetings and the local medical management committee meetings serve as catalysts for this model of improvement.

CCNC is designed to support the development of community care systems that can develop programs and processes to manage the care of an enrolled population. The local systems include the following components:

- Enrollees linked to primary care physicians – creating medical homes.
- Medical and administrative committees that provide direction on care management activities.
- Dedicated care managers to carry out population management activities in case and disease management.
- Care management processes that apply both new and existing resources, such as health department and aging coalition support services, to meeting the needs of enrollees.

CCNC's Clinical Directors have established the following guiding principles in selecting a quality improvement (QI) initiative:

- There are enough enrollees with the disease to obtain a "return on investment".
- Evidence exists that best practices lead to predictable and improved outcomes.
- Appropriate evidence-based practice guidelines are available.
- Physicians will support the process.
- Patient education and support can improve outcomes.
- Best practices and outcomes are measurable, reliable and relevant.
- There is room for improvement – a gap exists between best practice and everyday practice.
- Ability to measure baseline and thus be able to measure improvement.

Each network designates clinical champions or QI team leaders to employ the model of rapid cycle quality improvement developed by the Institute for Healthcare Improvement (IHI). This model stresses setting aims, establishing measures, and making system changes that remove barriers to excellent care. The networks have joined together to do the following:

- Review initial data obtained from claims and chart audits.
- Choose disease management initiatives.
- Develop program expectations.
- Define goals, objectives and performance measures.
- Identify methods of information collection.
- Create plans for implementation, assessment and monitoring.
- Share best practices.
- Develop and implement an evaluation strategy for the initiative.

CCNC has the following disease and care management initiatives in place in every network:

- Asthma disease management;
- Diabetes disease management;
- Congestive heart failure disease management;
- High cost and high risk care management;
- Pharmacy management and prescribing initiatives; and
- Emergency room utilization.

In addition, pilots are underway in several networks creating models of care relevant to this target population. Examples include, but are not limited to:

- Chronic Obstructive Pulmonary Disease (COPD) management; and
- Mental health integration/co-location initiative.

CCNC provides centralized support to the networks by providing the following:

- Clinical expertise and leadership to meet with physicians and practices on targeted QI initiatives. Clinical staff is available to go on site and meet with practices and their staffs and provide disease management "101" on targeted diseases.
- Provider toolkits are created that summarize best practice guidelines and provide office-based tools for adoption and/or customization.
- Quarterly practice profiles on utilization, cost and quality indicators are created and disseminated to all participating practices/providers.
- A web-based case management information system supports the case manager's efforts and contains useful tools, such as uniform screenings and assessments for targeted disease initiatives (e.g., quality of life assessment for enrollees with COPD).
- Provider and patient education materials that can be printed and customized for individual practices (e.g., medical home brochure with the practice name and contact information).

CCNC uses the performance measures defined by the Clinical Directors to measure the ability of providers and networks to achieve quality outcomes and processes. The outcome indicators are typically gathered by claims data and the process indicators are gathered by external chart reviews. CCNC has contracted and partnered with Area Health Education Centers (AHECs) to perform randomized chart audits that provide practice specific feedback and monitoring on process measures, such as performing annual foot and eye exams on patients with diabetes. A standard chart audit tool is developed and a random representative sample of charts is identified for review.

Quality Improvement Performance Measures

A critical element to CCNC success centers around the ability of networks to locally implement system changes needed at the physician practice level, enabling targeted care and disease management to occur.

Providing credible and provider friendly reports are powerful tools, particularly when accompanied with benchmarks and comparisons to peers, helping to motivate providers to improve processes that will enable them to provide best care. The focus is on implementing evidence-based best practices at the individual practice level.

Currently, CCNC uses information obtained from claims, electronic records and chart reviews to establish baselines and to measure performance. Initial measurements are obtained prior to intervention to serve as the baseline from which to measure improvement. Chart reviews are conducted based on randomized representative samples. The following types of comparisons and breakdowns are made for reporting:

- By individual network.
- By individual practices within each network.
- By total networks – CCNC as a whole.
- By total enrollees with age breakdowns.
- By utilization and cost.

Care Coordination and the Role of the Case Manager

Each network has locally based care managers that work in concert with network leadership, Primary Care Providers (PCPs), participating practices and community agencies. Most networks have a combination of nurse case managers and social workers and their caseload is based on their area of expertise that best meets the needs of the patients. Networks employ a population management approach which includes disease and care management, as well as centralized coordination of preventive, primary and specialty care. Case manager interventions are targeted at those individuals who would benefit most from having a case manager. For example, case managers will not be working with individuals who in combination with the clinical support that is available are managing their disease at an acceptable level. They will focus on individuals who are not managing their disease well, who are newly diagnosed with an illness, who have been hospitalized, and/or who have been referred to them by a provider for case management and follow-up. Their primary role is to identify and work with enrollees that will benefit from targeted case management interventions.

Care coordination in the networks involves the following three steps and their component tasks:

- Assess and Plan
  - Uncover all important problems
  - Address all important problems and goals in the patient centered care plan
  - Draw from a comprehensive set of locally proven interventions
  - Produce a clear, practical plan of care with specific goals
- Implement and Deliver Plan of Care and Associated Interventions
  - Build strong relationship with patient's PCP and other specialty providers
  - Build ongoing relationship with patient and family/support group members
  - Patient education (either directly or through other providers)
  - Integrate patient self management training and coaching
  - Assure that planned interventions are completed
- Reassess and Adjust
  - Perform periodic reassessment to determine progress
  - Assure accessibility and provide regular contact
  - Nurture relationships with patients, family members, PCPs and other providers
  - Make prompt adjustments to the plan of care as needed based on results of reassessments

CCNC provides each network with reports that help in patient identification and stratification, such as high cost/ high utilization, custom queries and a report on ambulatory sensitive conditions.

The CCNC program has invested in building centralized state level infrastructure to support the networks in population management. At the local level, the networks have invested in building community based systems of care to meet the needs of their enrolled Medicaid population.

CCNC Program Summary Introduction & Background

Asthma Disease Management Program Summary

Community Care of North Carolina

2007

Community Care of North Carolina
Mail Service Center 2009 • Raleigh, NC 27699-2009
(919) 715-1453 www.communitycarenc.com

BACKGROUND

The Asthma Disease Management Program was the first program-wide quality improvement initiative developed by the Community Care of North Carolina (CCNC) Clinical Directors in 1998. The decision to address asthma was based on established guidelines for selecting a QI initiative, and on a review of Medicaid claims utilization data. The source for much of the utilization data was a 1999 report from the NC State Center for Health Statistics entitled *The Childhood Asthma in North Carolina Report*.

- In fiscal year 1998, the North Carolina Medicaid program spent more than $23 million on asthma related care.
- Approximately 14% of the Medicaid population had a diagnosis of asthma.
- Analysis of Medicaid claims data from the Community Care of North Carolina sites demonstrated that the primary reason for both hospital and emergency room visits for patients under 21 was asthma.

PROGRAM SUMMARY

Core Elements of the Asthma Disease Management Program

The CCNC Clinical Directors adopted core elements for the Asthma Disease Management Program. These core elements identify best practices and form the basis of the initiative to be implemented by the networks and participating providers and practices. Listed below are the core elements of the Asthma Disease Management Program:

1 Build capacity for routine assessment of asthma.
  - Adopt NIH (National Institutes of Health) guidelines for the diagnosis and management of asthma.
  - Develop and implement a method for identifying and recruiting asthma patients in the participating provider network.
  - Develop and implement a simple questionnaire that allows providers to quickly stage the severity of a patient with asthma.
  - Develop a method to record symptom frequency on a regular basis.
  - Establish peak flow meter readings as a tool for all patients with asthma, and record the peak flow at all appropriate times and in all appropriate settings.
  - Record each patient's personal best peak flow in the medical record and/or care management plan.
  - Use spacers/holding chambers when appropriate.
  - Identify one staff person in each practice as the "asthma QI champion."

2 Reduce unintended variation in care and establish consistency of care.
- Educate all medical personnel regarding the proper use of maintenance medications based on NIH guidelines.
- Educate all medical personnel regarding the stepwise approach to asthma management based on NIH guidelines.
- Offer physician profiling as a part of this effort, conduct detailed visits with staff and physicians to review each practice's prescribing histories, including a case-by-case discussion of diagnoses and recommended medications.
- Use case managers to coordinate information gathering, transfer, and care delivery as appropriate.
- Assess home environments for smoking, allergenic materials, and other known asthma triggers.
- Coordinate sharing of information with all caregivers.

3 Build capacity to educate patients, families, and school personnel about asthma.
- Develop and implement asthma action plans that include the patient monitoring peak flow meter readings when appropriate.
- Develop the capacity to teach patients with asthma and caregivers how to properly use peak flow meters, inhalers, spacers and/or holding chambers.
- When possible, collaborate with school nurses, teachers, administrators, and day care personnel to assure appropriate education, assessment, and treatment for school-age children with asthma.
- For children who cannot use peak flow meters, educate family on symptom-based management.

4 Report outcomes and process measures to all providers and staff regularly.
- Develop the information system capability to collect, monitor, and analyze data for measuring performance. Collect and disseminate information by physician, by practice, and by network.
- Use this information to assess current performance, to encourage efforts to improve care processes at all levels, and to set goals for performance improvement targets.

FAST FACTS:

Core elements of an asthma management plan:

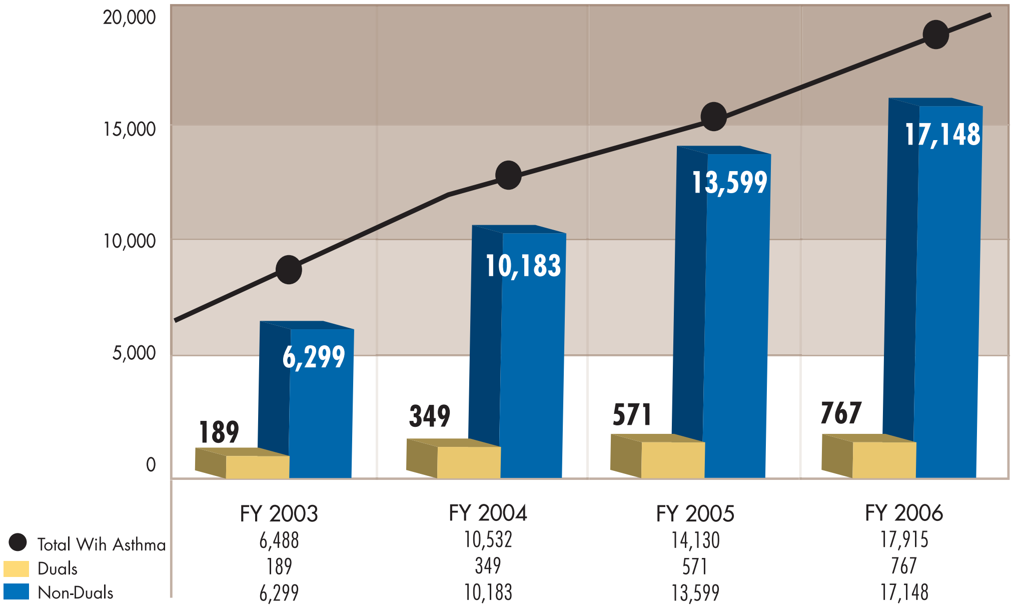
1. **Build capacity for routine assessment of asthma.**
2. **Reduce unintended variation in care and establish consistency of care.**
3. **Build capacity to educate patients, families and school personnel about asthma.**
4. **Report outcomes and process measures to all providers and staff regularly.**

DATA DISCUSSION

As **Figure 1** indicates, the number of patients with asthma enrolled in Community Care of North Carolina (CCNC) has increased significantly. The increase of 176% has resulted in 11427 additional CCNC patients with this chronic condition. Since most of the patients with asthma tend to be young, only 4.4% of persons with asthma in FY2006 were dually eligible for both Medicaid and Medicare, although that proportion is larger than in FY2003 when only 2.9% of individuals with asthma were dually eligible.

The percent of females in the past 4 years has not changed much (See **Figure 2**). However, the percentage of non-white patients with asthma decreased from 69% of all persons with asthma to 56%. These percentage calculations exclude patients for whom race was unknown. This trend reflects changes in the composition of CCNC because many of the newer practices enrolled during 2003, 2004 and 2005 were located in areas of the state where populations tend to have lower proportions of racial minorities. During the same period of time the average age of the CCNC persons with asthma increased from 13.5 to 14.9 years old.

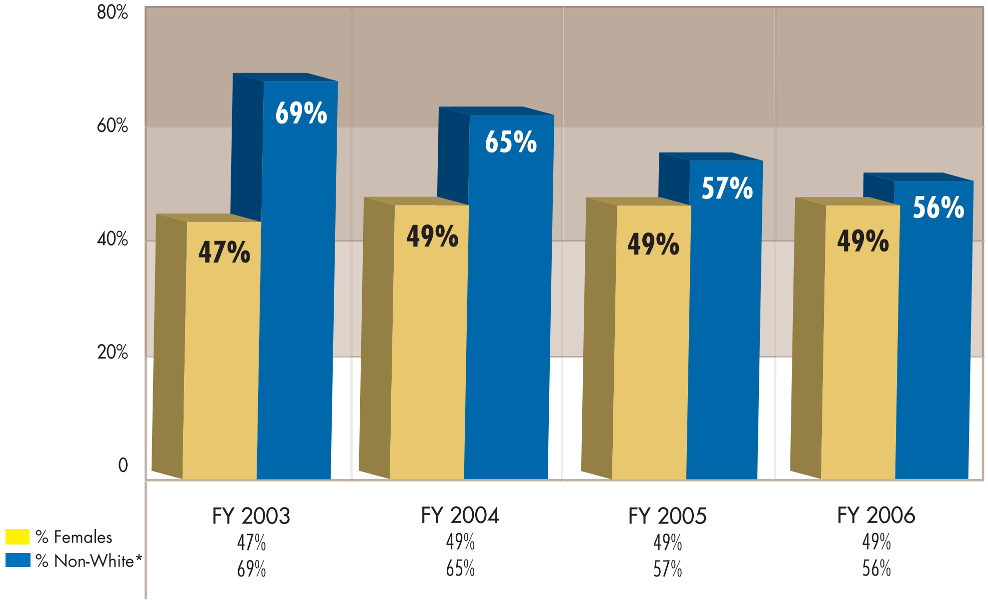
Fig. 1 – Number of Patients with Asthma in CCNC



	FY 2003	FY 2004	FY 2005	FY 2006
● Total Wih Asthma	6,488	10,532	14,130	17,915
🟨 Duals	189	349	571	767
🟦 Non-Duals	6,299	10,183	13,599	17,148

Dual eligibility means that patients are eligible for Medicare as well as for Medicaid.

Fig. 2 – Characteristics of Asthma Population



	FY 2003	FY 2004	FY 2005	FY 2006
🟨 % Females	47%	49%	49%	49%
🟦 % Non-White*	69%	65%	57%	56%

*Percentage calculations exclude those with unknown race.

PERFORMANCE MEASURES

CCNC has adopted performance measure to monitor progress of enrollees in different disease categories. For asthma, the following measures are among the key indicators used.

Outcome measures (obtained from Medicaid Claims)

- Emergency Department Utilization Rate
- Emergency Department Utilization Rate for Asthma
- Inpatient Admission Rate
- Inpatient Admission Rate for Asthma

Process measures (obtained from annual chart audits)

- Percentage of Patients with Asthma Staged
- Percentage of Patients with Asthma Staged II, III, or IV on maintenance medications
- Percentage of Patients with Asthma Staged II, III, or IV with a Written Asthma Management Plan
- Percentage of Patients with Asthma Receiving an Annual Influenza Vaccine

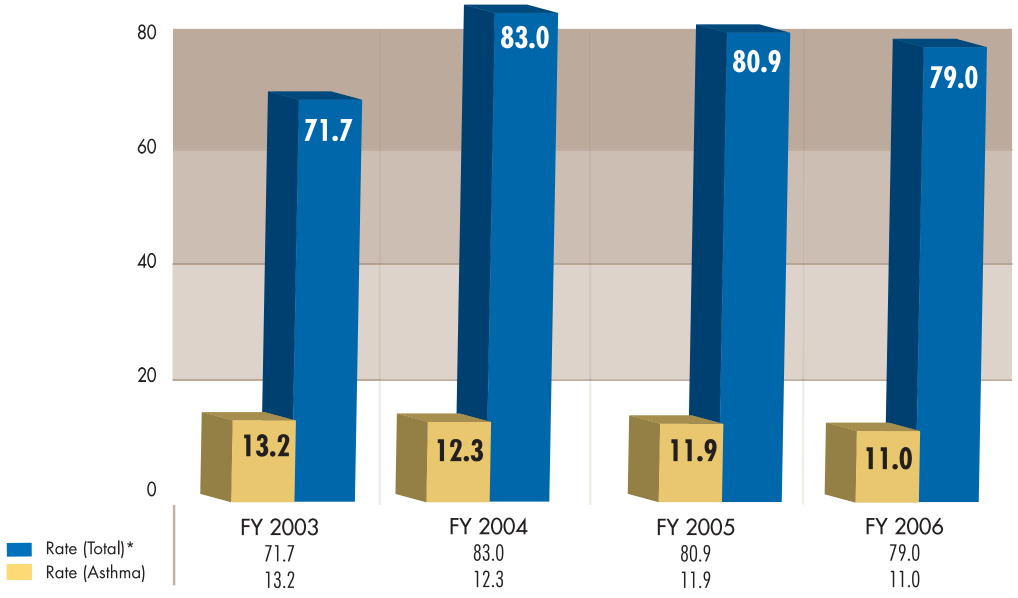
FAST FACT:

There is a slight trend for asthmatic patients to be older than in the past with average age increasing from 13.5 years old in FY2003 to 14.9 years old in FY2006. This trend reflects a higher proportion of newer practices (those enrolled in 2003-05) serving adult patients than practices enrolled before that time.

During the past four fiscal years, the rate of admissions to Emergency Departments (ED) by patients with asthma has remained fairly constant or trended slightly downward. Admissions are calculated per 1000 member months to establish a rate that permits comparisons among different groups and different times. **Figure 3** shows two sets of bars. The bars tracking total admissions to ED are based on any admissions by patients classified as having asthma. The second set of bars (asthma) refers to ED admissions by patients with a diagnosis of asthma recorded in the ED admission. This second trend is more representative of any impact that the asthma initiative may be having on ED admissions. It shows a 16.6% decline in admissions between FY2003 and FY2006.

Fig. 3 – Rate of Emergency Department Use Rate by Patients with Asthma in CCNC

(per 1,000 Member Months)



*Total rate includes ED visits for any diagnosis while asthma rate includes ED visits with a diagnosis of asthma.

PERFORMANCE MEASURES

CCNC has adopted performance measure to monitor progress of enrollees in different disease categories. For asthma, the following measures are among the key indicators used.

Outcome measures (obtained from Medicaid Claims)

- Emergency Department Utilization Rate
- Emergency Department Utilization Rate for Asthma
- Inpatient Admission Rate
- Inpatient Admission Rate for Asthma

Process measures (obtained from annual chart audits)

- Percentage of Patients with Asthma Staged
- Percentage of Patients with Asthma Staged II, III, or IV on maintenance medications
- Percentage of Patients with Asthma Staged II, III, or IV with a Written Asthma Management Plan
- Percentage of Patients with Asthma Receiving an Annual Influenza Vaccine

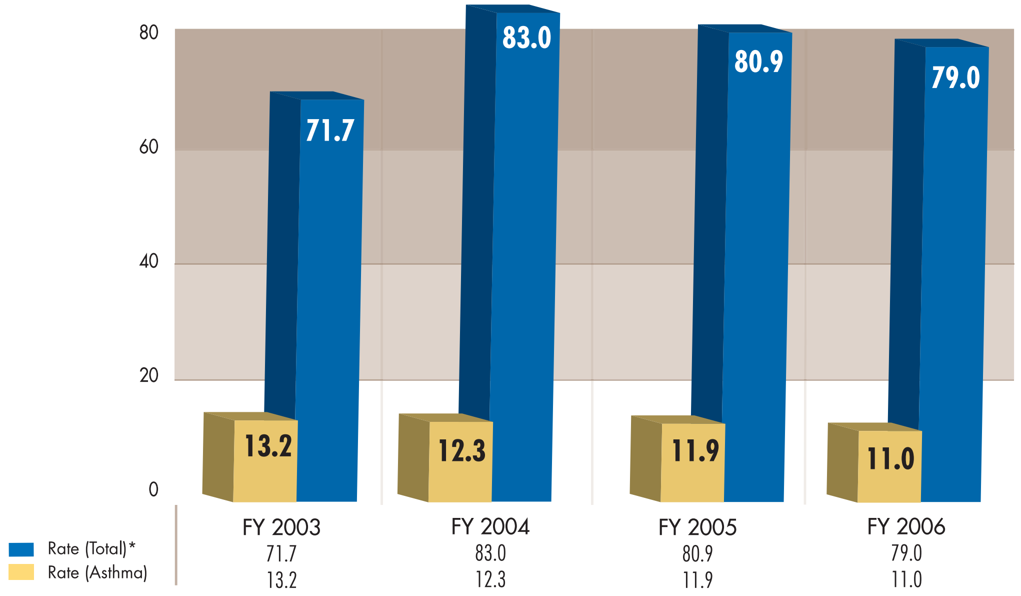
FAST FACT:

There is a slight trend for asthmatic patients to be older than in the past with average age increasing from 13.5 years old in FY2003 to 14.9 years old in FY2006. This trend reflects a higher proportion of newer practices (those enrolled in 2003-05) serving adult patients than practices enrolled before that time.

During the past four fiscal years, the rate of admissions to Emergency Departments (ED) by patients with asthma has remained fairly constant or trended slightly downward. Admissions are calculated per 1000 member months to establish a rate that permits comparisons among different groups and different times. **Figure 3** shows two sets of bars. The bars tracking total admissions to ED are based on any admissions by patients classified as having asthma. The second set of bars (asthma) refers to ED admissions by patients with a diagnosis of asthma recorded in the ED admission. This second trend is more representative of any impact that the asthma initiative may be having on ED admissions. It shows a 16.6% decline in admissions between FY2003 and FY2006.

Fig. 3 – Rate of Emergency Department Use Rate by Patients with Asthma in CCNC

(per 1,000 Member Months)



*Total rate includes ED visits for any diagnosis while asthma rate includes ED visits with a diagnosis of asthma.

FAST FACTS:

- **Between FY2003 and FY2006, there was a 16.6% decline in the rate of admissions to Emergency Departments.**
- **For the same period of time, there was a 40% decrease in the admission rate for patients with a diagnosis of asthma to Inpatient facilities.**
- **Practices which had been enrolled in CCNC for more than one year did better in four key performance measures than practices which had recently joined CCNC.**

PRACTICE & PROVIDER SUPPORTS

CCNC networks and central office staff provide participating practices and providers with a variety of supports and tools for implementing the Asthma Disease Management Program. Highlights include:

- Provider toolkits with best practice guidelines- Adapted from the National Asthma Education and Prevention Program's *Guidelines on the Diagnosis and Management of Asthma*. National Institutes of Health National Heart Lung and Blood Institute. Updated 1997.
- Technical assistance in quality improvement and provider educational sessions.
- Program, network, practice, and patient level data on process measures (chart audits), outcomes measures (emergency room and hospital utilization data), and other data extracted from the Medicaid claims system.
- Office tools such as Asthma Action Plans and Patient Questionnaire samples to determine severity of disease and Asthma Visit Forms to prompt providers on recommended clinical management and patient education.

- Case management services for patients with asthma:
  - Disease specific assessments,
  - Medication adherence counseling,
  - Smoking cessation counseling,
  - Coordination of care,
  - Follow up from emergency room and inpatient visits,
  - Education on community resources,
  - Education on disease, medication, equipment, and avoidance of triggers, and
  - Practice assistance with quality improvement and the Plan, Do, Study, Act (PDSA) cycle.
- Dedicated pediatrician leading the asthma initiative and available to provide the following type of activities and technical assistance:
  - Asthma training and educational sessions to physicians, practice staff and/or case managers,
  - Update and present findings to network clinical directors,
  - Serve on local and state level asthma advisory groups and committees representing CCNC
  - Update and present findings at local network level to staff and physicians, and
  - Research and make recommendations for program changes and enhancements.

Chronic Care Program Summary

Community Care of North Carolina

2007

Community Care of North Carolina
Mail Service Center 2009 • Raleigh, NC 27699-2009
(919) 715-1453 www.communitycarenc.com

BACKGROUND

Like most states, North Carolina is facing the perpetual challenge in providing cost-efficient, high-quality acute and long-term care to populations that consume nearly 70% of its Medicaid budget: high-cost and high-risk disabled and elderly clients with serious and co-morbid (multiple) medical conditions. Recognizing that arduous task, the North Carolina General Assembly directed the N.C. Department of Health and Human Services in 2005 to "expand the scope of Community Care of North Carolina care management model to recipients of Medicaid and dually eligible individuals with chronic conditions and long-term care needs…"

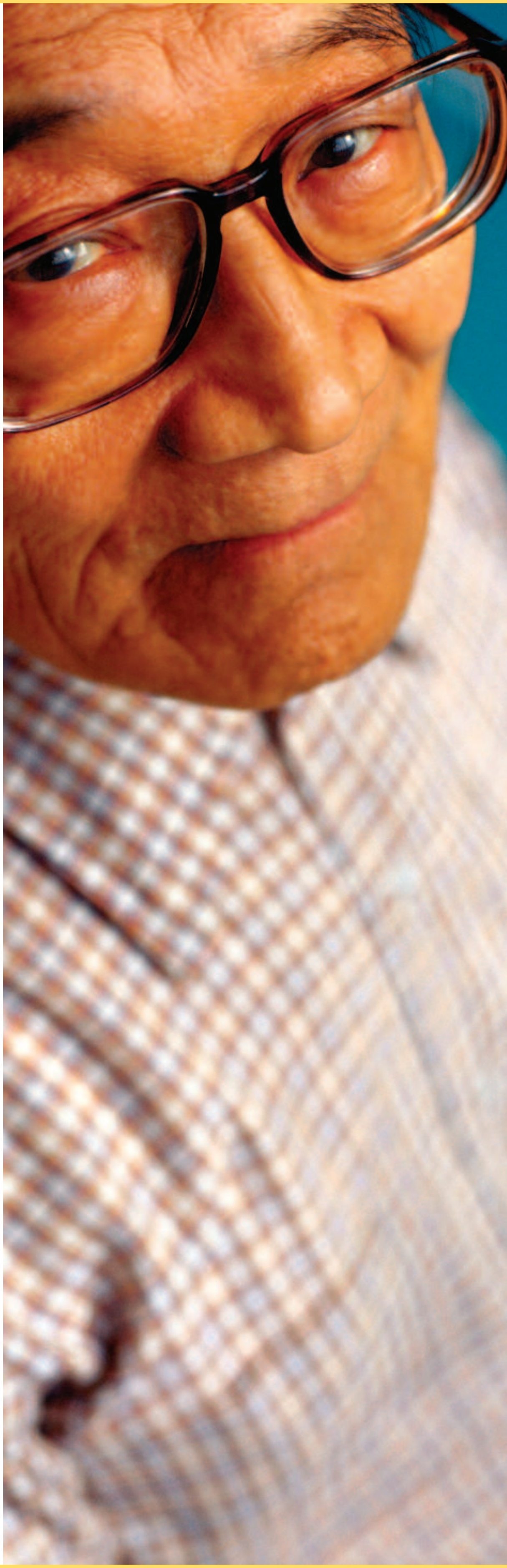
Nine (9) of the fourteen (14) community care networks volunteered to pilot a chronic care program and create a model for replication in the other networks:

- Access II Care of Western N.C. (Buncombe County)
- Carolina Collaborative Community Care (Cumberland County)
- Community Care Plan of Eastern Carolina (Bertie County)
- Community Health Partners (Lincoln County)
- Community Care Partners of Greater Mecklenburg (Mecklenburg County)
- Northern Piedmont Community Care Network (Durham County)
- Southern Piedmont Community Care Plan (Rowan County)
- Northwest Community Care Network (Surry County)
- Central Carolina Health Network/AccessCare (Chatham County)

The CCNC program has a proven track record in managing and coordinating the care of vulnerable populations and has demonstrated its ability to improve the quality of care while containing costs. In the chronic care initiative, the CCNC networks, in partnership with community long term care provider organizations, are expected to provide a comprehensive and integrated package of screening and assessment, case management and care coordination, in addition to the primary, preventive and medical coordination and treatment that is provided to all enrollees.

Targeted for this initiative will be those individuals who are eligible for Medicaid and are in the aged, blind, disabled or CAP-DA categories. A defined subset, such as those individuals with high cost, high utilization and /or high risk, will be targeted for comprehensive case management.

The project goals will be met by building on the foundation established through CCNC where a community model can be built



that is patient centric and enfolds the physical, social, and behavioral health needs of the target population. The networks will aim to reorganize the delivery of care to those with chronic needs in ways that enhance appropriate access, increase service delivery options, improve efficiencies in the identification, assessment and care planning processes, reduce the rate of institutionalization and reduce the unnecessary inefficiencies and expenses inherent in the current system.

The networks will partner with the local long term care community providers to improve how care is organized and delivered and to create local accountability for managing this population.

PROGRAM SUMMARY

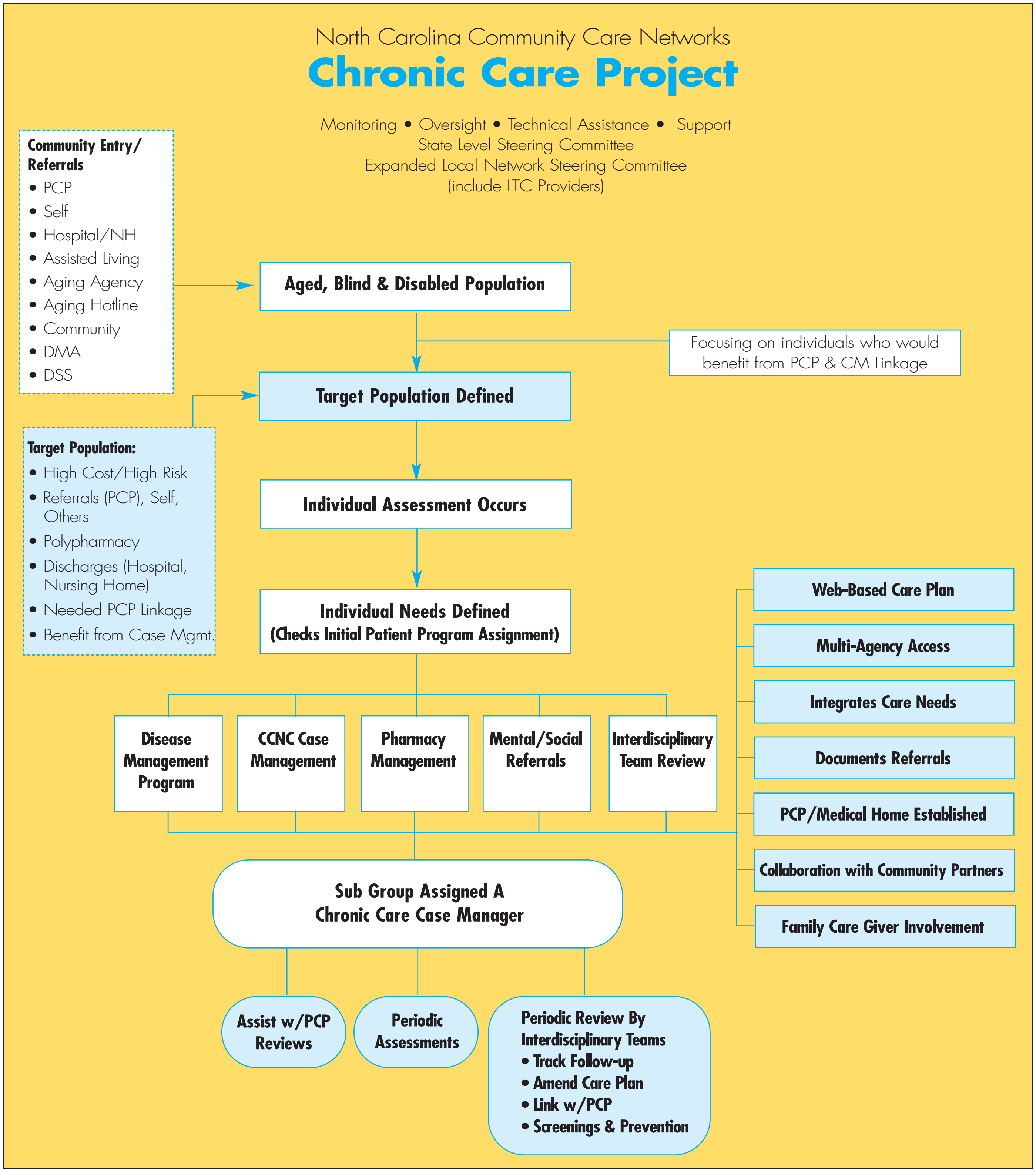
Funding was identified to support these pilot programs, and the networks received these funds in February 2007. Nonetheless, the pilot networks began meeting in the spring of 2006 to identify program components essential to implement a chronic care delivery model in community settings. Volunteers from the network staff are participating in the following chronic care project work groups:

- Enrollment and Outreach
- Screening, Assessment and Care Planning
- Polypharmacy
- Pediatric Chronic Care
- Hypertension/Coronary Artery Disease
- Mental health
- Data and Evaluation
- Case Management Information System (CMIS)
- Self Management of Chronic Illnesses

Initially, the networks will be extending the population, disease, and care management initiatives and community partnerships that are already in place to the target population. Networks have adopted evidence-based practice guidelines for asthma, diabetes, congestive heart failure, and chronic obstructive pulmonary disease. They have integrated targeted care management initiatives to help physicians manage and care for the most frail and costly patients. Physicians and practices receive regular feedback on their ability to improve both the processes and outcomes of care. In addition to disease management programs, the chronic care project will implement a hypertension/coronary vascular disease management program.

The CCNC networks will align the efforts of comprehensive care management processes that will support and assist the networks in managing those individuals with chronic and often co-morbid conditions. The flow chart (*on page 4*) best describes and demonstrates an anticipated process for community care to implement a chronic care program. CCNC will develop a community-based approach to identifying individuals who might benefit most from chronic care case management and that process would include performing an assessment, identifying individual needs, and developing an appropriate plan of care. Depending on the needs of an individual, this process might include: disease management, pharmacy management, mental health referrals, social case management, interdisciplinary team review, medical home established, patient empowerment and education, family/care giver involvement, and/or collaboration with community providers. The networks will establish a local inter-disciplinary team to assist in evaluating and managing the needs of individuals with chronic conditions. With CCNC's existing infrastructure of provider networks, case management services, web-based case management information systems, and capacity for claims-based quality and cost data feedback, the networks are uniquely well-suited to develop a community based model best able to manage individuals with multiple conditions.

Chronic Care Program Summary



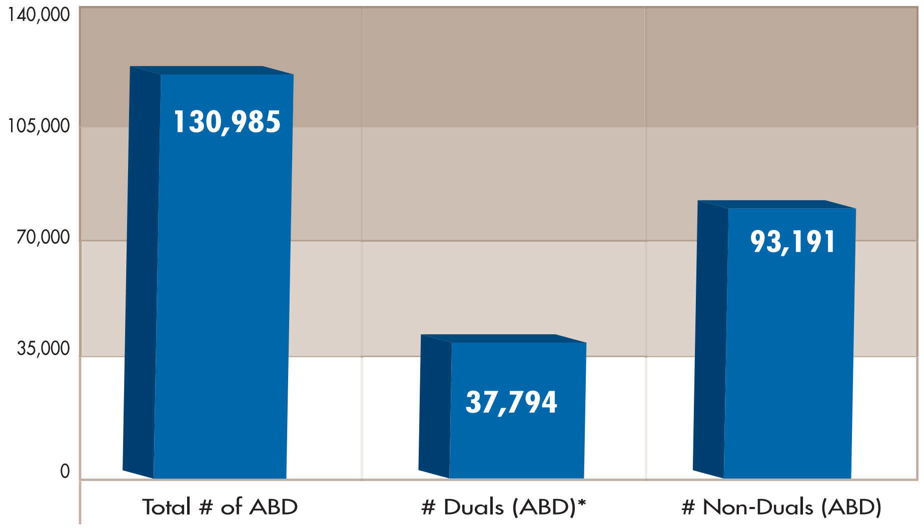
This graph represents a synopsis of the dynamics and relationships in the Chronic Care Project. It also shows the selection process for membership and the services that will be provided to the patients in the program.

DATA DISCUSSION

Because the definition of chronic care is based on the Medicaid eligibility criteria that includes the aged, blind, and disabled, many of these patients are also eligible for Medicare benefits as well. **Figure 1** shows that the numbers of total chronic care patients and the number of duals and non-duals. Not all Medicaid chronic care patients are enrolled in CCNC and part of this new initiative is to increase the number of enrollees into CCNC.

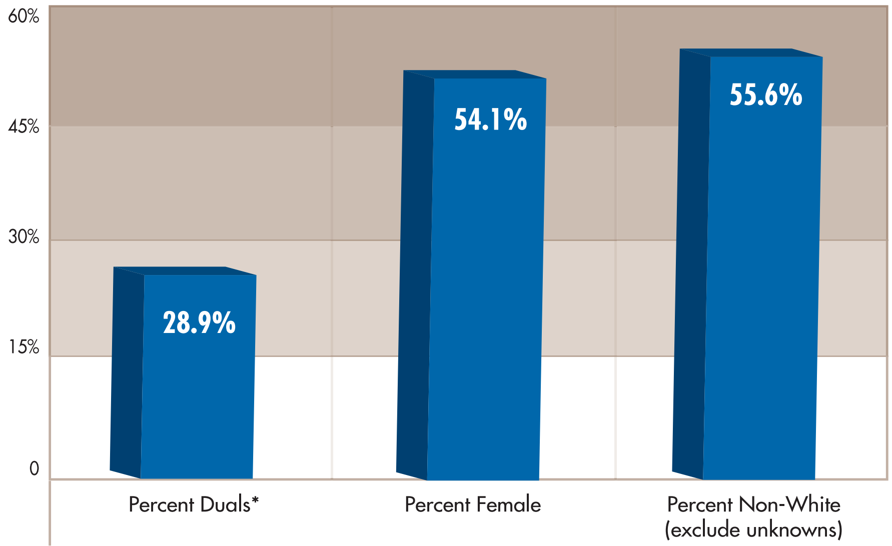
Figure 2 gives a breakdown of the characteristics of the CCNC chronic care population. Twenty nine (29%) percent are dually eligible while 54.1% are females (versus 55% for the CCNC population as a whole) and almost 56% (versus 45% for the CCNC population as a whole) are non-white. The average age of this population is 40 years of age (versus only 15.5 years for the CCNC population as a whole).

Fig. 1 – Number and Type of Chronic Care Patients Enrolled in CCNC During FY2006



Duals are Patients eligible for Medicare as well as Medicaid.

Fig. 2 – Characteristics of Chronic Care Patients Enrolled in CCNC During FY2006

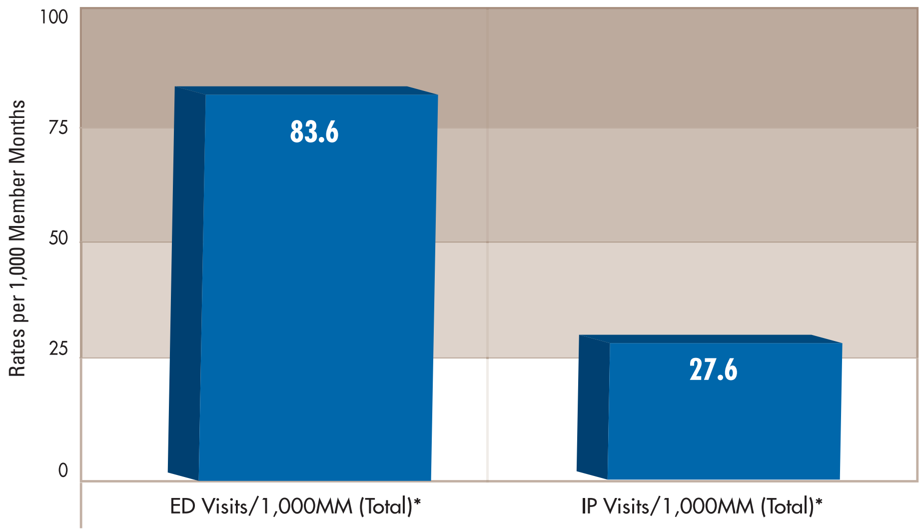


Duals are Patients eligible for Medicare as well as Medicaid.

Admission rates to Emergency Departments (ED) and Inpatient (IP) facilities are provided in **Figure 3**. Admissions could be for any diagnosis. As expected the rate of admission per 1,000 member months is more than three times higher for ED than it is for IP.

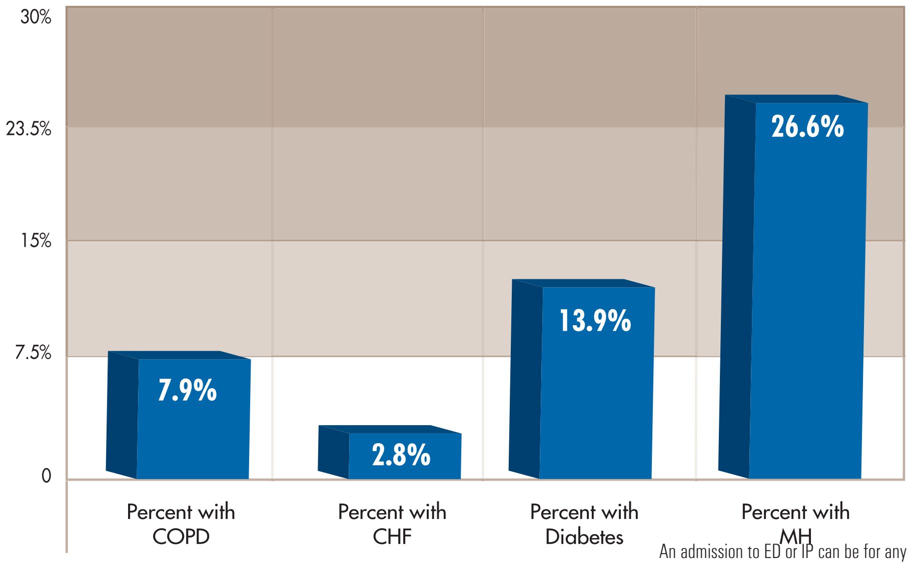
Figure 4 demonstrates the degree of co-morbidity among the chronic care population. Mental Health comorbidities exist in over 26% of the patients, while only 2.8% of them suffer from Chronic Heart Failure.

Fig. 3 – Admissions to Emergency Department (ED) and Inpatient (IP) for Chronic Care Patients Enrolled in CCNC During FY2006



An admission to ED or IP can be for any diagnosis.

Fig. 4 – Percent of Chronic Care Population with Co-Morbidities in CCNC Based on January 2007 Enrollment



An admission to ED or IP can be for any diagnosis.

Program Evaluation:

The chronic care measures and reporting workgroup are finalizing the proposed measures. The list of measures being considered are defined below:

Global Costs/Utilization

- Total Costs PMPM
- Inpatient Rates
- ED Rates
- Hospital Re-admission within 30 days
- ED return within 7 days

Outreach/Enrollment

- % of ABD eligibles enrolled

Case Management

- % of patients in the target population receiving CM services from the CCCM
- Intensity/level of service being received by chronic care patients as classified by the CM (heavy, moderate, light, very light) status

Polypharmacy

- Pharmacy costs PMPM
- Total costs PMPM for polypharmacy target population

Additional measures discussed, depending on capabilities of Intervent Rx program

- Number of consults with patients and physicians by network pharmacist with respect to pharmacy issues number of medication changes made
- Proportion of prescriptions written in a given class being part of Tier 1 Prescription Advantage

List Medication Possession Ratio

- Need to specify drug classes for this measure, include mental health drugs
- Percent Quad 4 with PCP visit in 1 yr
- Percent Quad 4 diabetics with A1c in 1 yr
- Inpatient rates for Quadrant 4 Target pop.
- ED rates for Quad 4 target pop
- Percent of LME providers with BAA signed

Heart failure

- CCNC Risk Assessment Performed
- Echocardiogram done within 3 years
- ACE adherence
- B blocker adherence
- CHF Inpatient rate
- Hospital readmission for CHF

Hypertension/Cardiovascular Disease

- TBD

Pediatrics

- TBD

Diabetes

- A1C testing rate
- Eye exams

The CCNC Clinical Directors, in concert with the Chronic Care projects will finalize the evaluation and performance measures by the end of 2007.

Chronic Care Program Summary

COPD
Pilot
Program
Summary

Community Care
of North Carolina

2007

Community Care of North Carolina
Mail Service Center 2009 • Raleigh, NC 27699-2009
(919) 715-1453 *www.communitycarenc.com*

BACKGROUND

COPD (Chronic Obstructive Pulmonary Disease) is a slowly progressive lung disease that includes chronic bronchitis and emphysema. Tobacco smoking is the leading cause of COPD and 15-20% of all smokers develop clinically significant COPD. It is the fourth leading cause of death in the US. There are approximately 10 million adults with the diagnosis and many more who have the disease but are undiagnosed. The economic burden of illness is great. COPD costs nearly 2.5 times as much as asthma, with annual costs totaling $37.2 billion. Hospital costs account for more than half of the direct medical costs of COPD. According to data from the North Carolina Medicaid program, COPD patients are 4.7 times more costly than the average Medicaid recipient.

In 2006, Community Care of North Carolina (CCNC) began a COPD Disease Management Program as a pilot initiative in five of the networks in response to a legislative directive to expand disease management programs and include COPD. The COPD pilot initiative is modeled after the CCNC Asthma Disease Management Program.

PROGRAM SUMMARY

Participating pilot networks include Northern Piedmont Community Care, Sandhills Community Care Network, Carolina Community Health Partnership, AccessCare, and Access III of Lower Cape Fear.

Best Practice Guidelines:

- Global Initiative for Chronic Lung Disease (GOLD) Guidelines, updated July 2003
- American Thoracic Society (ATS)/ European Respiratory Society (ERS) standards, updated 2004

Tools to be developed as part of the pilot:

- Provider Toolkit- to be developed centrally by the CCNC office using an advisory subcommittee consisting of representatives from participating networks and experts from ` partnership organizations, to include but not be limited to:
  - Laminated COPD Guidelines Card,
  - COPD booklet – to include hospital ED and Discharge protocols to be distributed to hospital based providers

  - Smoking Cessation Tools- including 5A's card, a list of medications covered by Medicaid, and statewide resources such as the Quit Now! call line number
  - Each network would also include local resources such as Pulmonary Rehab, smoking cessation, DME, and End-of-Life resources (hospice and palliative care)
- COPD Action Plan- to be piloted by one participating network
  - Produced in duplicate to be given to patients with a copy on the chart
  - Includes smoking cessation instructions
- Case Management Assessment Tool- to be incorporated into the web-based CMIS (Case Management Information System)
  - CMIS information /tools will include smoking cessation components and self management goals
  - Interviews by case managers could be conducted in person or via telephone
  - Communication and referral processes with providers will be defined

Performance Measures:

- Process Measures- from annual chart audits:
  - Stage documented — mild, moderate, severe, or very severe
  - Spirometry testing completed- includes last spirometry readings
  - Use of appropriate medications includes classes of COPD medications prescribed
  - Action Plan completed
  - Flu vaccine offered annually
  - Pnemovax vaccine documented
  - Smoking cessation counseling documented
  - Optional list of COPD medications and doses prescribed
- Outcomes Measures—from claims—includes cohort analysis and comparison groups:
  - ED visits for COPD exacerbations
  - Hospitalizations for COPD exacerbations
  - Medications- drug types and costs of filled medications
- Qualitative measures:
  - Quality of Life Tool- standardized tool to be administered by case managers for all COPD patients in the cohort
  - Adapted existing, validated tools from the Centers for Disease Control and St. George's Respiratory Questionnaire

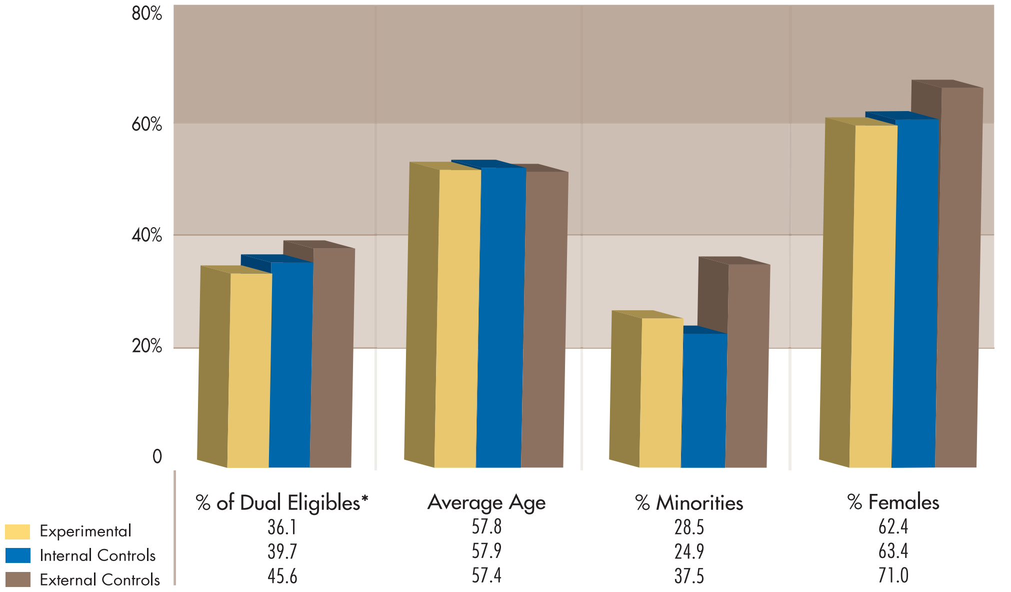
DATA DISCUSSION

The study design to investigate COPD consists of three groups of patients. The first group, which we labeled “Experimental”, consists of patients with a diagnosis of COPD who meet specific enrollment and service utilization criteria based on modified HEDIS guidelines. These patients had all been enrolled in practices participating in the pilot initiative within one of the five selected networks. The second group consisted of COPD clients in those five networks who met the same criteria as the experimental group but who were receiving services in practices not participating in the pilot initiative. This second group was called the “internal control group” because they were internal to the networks but in practices not in the study. The third group was comprised of COPD clients who were located in networks not in the study. This group was called the “external control group”.

Because COPD is a new initiative which was launched during 2006, we use Fiscal Year 2006 (July 1, 2005 through June 30, 2006) data throughout this report as the baseline year. Subsequent reports will have data measuring the impact of the program once it is fully implemented.

Figure 1 provides a breakdown on the composition of the three groups in terms of demographic characteristics as well as whether they were dually eligible for Medicare as well as for Medicaid. While the differences between the experimental and the internal control groups were small, the external controls tended to have a higher percentage of dually eligible as well as minorities and females. The differences were most likely due to geographic and demographic differences in the composition of patient groupings between networks.

Fig. 1– Characteristics of COPD Patients in FY2006 by Groups



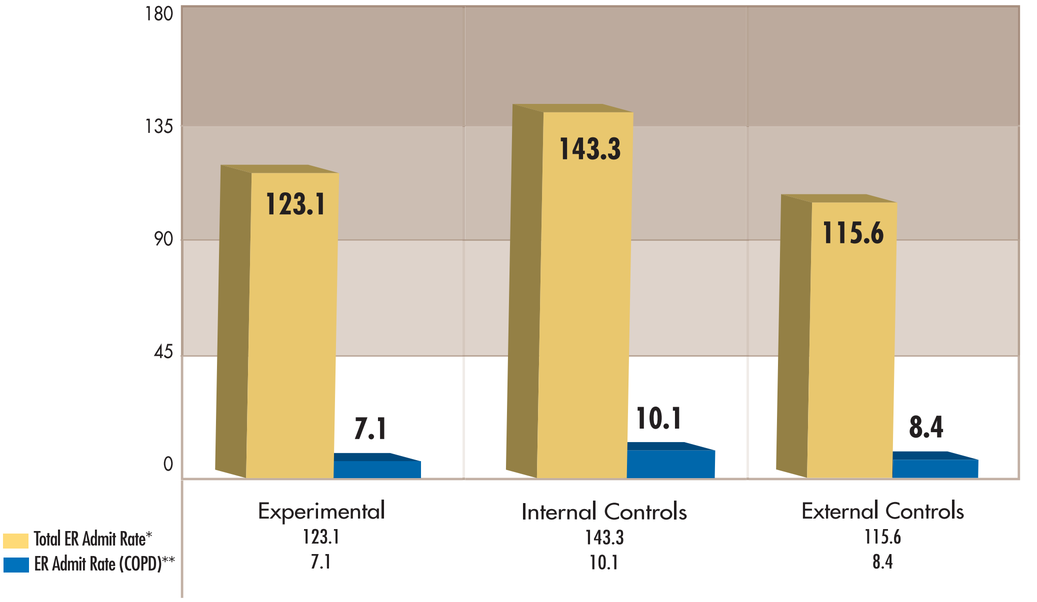
Dual eligibles are eligible for Medicare as well as for Medicaid.

FAST FACTS:

- CCNC launched the COPD initiative in five of its networks during 2006.
- The initiative will follow three groups of identified COPD patients for the next two years and measure the impact on service utilization and admission rates to inpatient and emergency departments.

Figure 2 shows the rate of admission to Emergency Departments (ED) per 1,000 member months. The baseline numbers provide the initial measures with which to compare future rates as the program develops and gets implemented. The experimental group has a lower rate than the internal controls and higher rates than external controls for admissions with **any** diagnoses. The experimental group also has the lowest admission rates for admissions with a **primary** diagnosis of COPD. It is possible that enrollment into practices which were beginning to implement the pilot initiative has a beneficial effect even at the very beginning and that the practices volunteering to be part of the study were using interventions that might have helped reduce ED admissions.

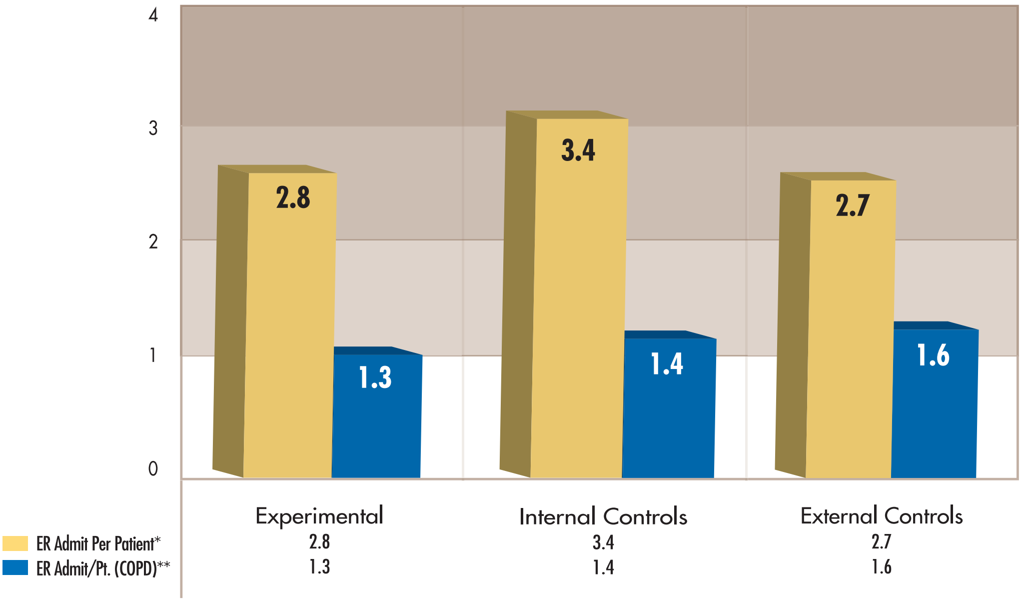
Fig. 2 – Rate of Admissions to ER for COPD Patients During FY2006



*Total Admission Rates count admissions to ER with any diagnosis. **COPD admissions to ER must have a primary diagnosis of COPD upon admission.

The same pattern is also true when examining the average number of ED admissions during FY2006 for COPD patients in the three groups (**Figure 3**). The average was calculated only for patients with at least one ER admission during FY2006. The experimental group has a lower average number of ED admissions than the other two groups for admissions with a **primary** diagnosis of COPD while they have a slightly higher rate than external controls for admissions with **any** diagnosis.

Fig. 3 – Average Number of Admissions to ER for COPD Patients* During FY2006

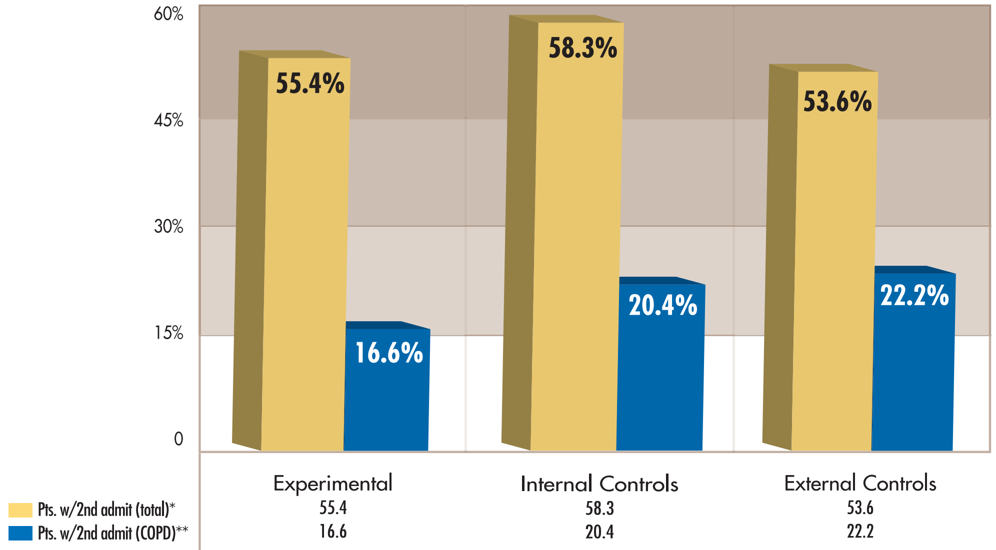


Statistics include only patients who had at least one ER admission FY2006. *Total Admission Rates count admissions to ER with any diagnosis.
**COPD Admissions must have a primary diagnosis of COPD upon admission.

Another measure of ED utilization is the percentage of clients who are re-admitted to ED during the Fiscal Year. As **Figure 4** demonstrates, the previous patterns hold. Experimental group continues to have the lowest rate for re-admissions with a primary diagnosis of COPD while their rate is between the other two groups for admissions with any diagnosis.

Figure 5 shows the rates for Inpatient Admission (IP) during FY2006. As was the case with admissions to ED, inpatient admission rates show that the experimental group has the lowest rate when compared to internal and external control groups. Again, this may be due to the possibility that participating practices were already providing specific services to COPD populations aimed at reducing inpatient admissions.

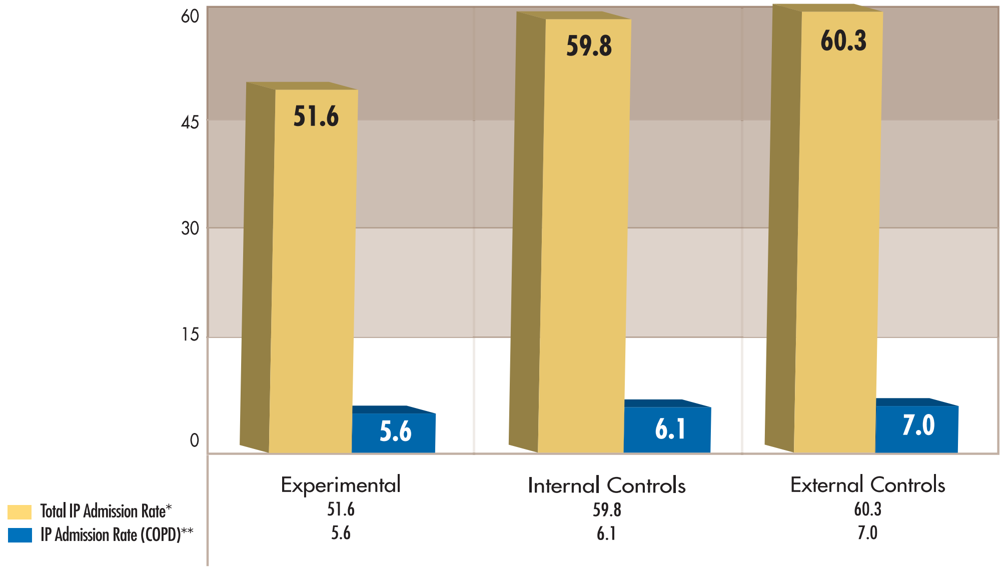
Fig. 4 – Percent of COPD Patients with a Second Admission to ER During FY2006



	Experimental	Internal Controls	External Controls
🟨 Pts. w/2nd admit (total)*	55.4	58.3	53.6
🟦 Pts. w/2nd admit (COPD)**	16.6	20.4	22.2

*Total Admission Rates count admissions to ER with any diagnosis. **COPD Admissions to ER must have a primary diagnosis of COPD upon admission.

Fig. 5 – Rate of Admissions to Inpatient (IP) For COPD Patients During FY2006



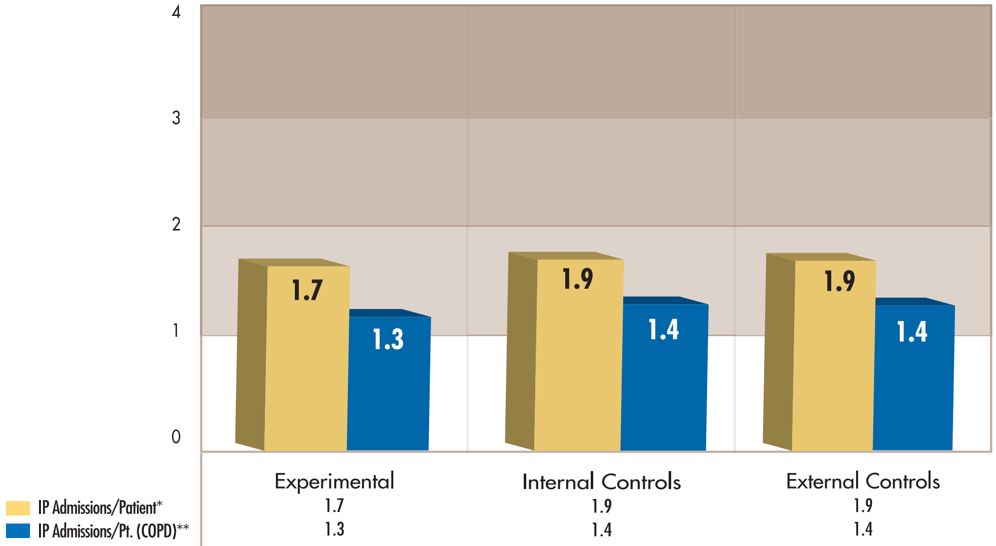
	Experimental	Internal Controls	External Controls
🟨 Total IP Admission Rate*	51.6	59.8	60.3
🟦 IP Admission Rate (COPD)**	5.6	6.1	7.0

*Total Admission Rates count admissions to IP with any diagnosis. **COPD admissions to IP must have a primary diagnosis of COPD upon admission.

The experimental group also had the lowest average number of IP admissions for patients who had at least one IP admission during FY2006 (**See Figure 6**).

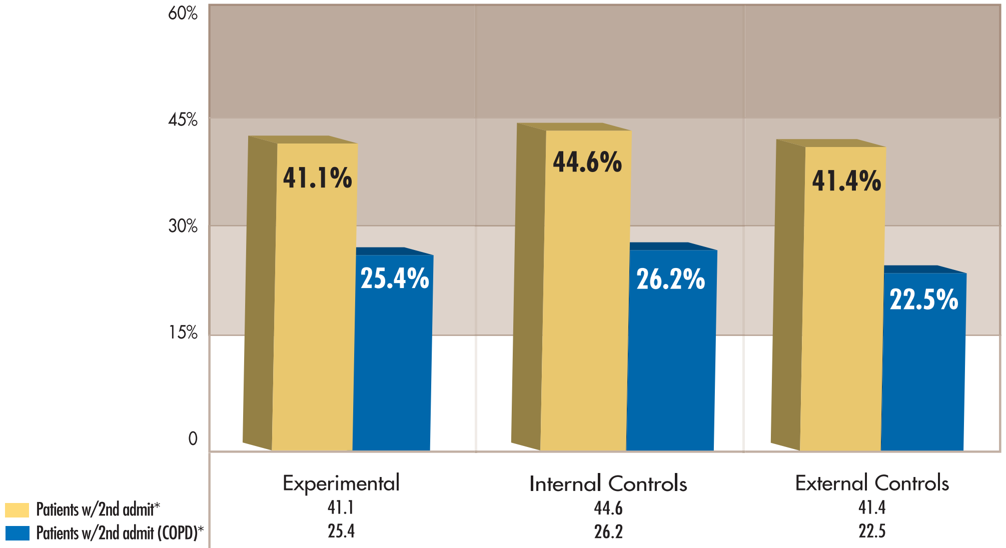
Figure 7 supports the trend of second admission rates being lower for the experimental group than for the other two groups. The one exception was for COPD re-admissions where the experimental group had a slightly higher COPD re-admission rate (25.4%) than the external control group (22.5%).

Fig. 6 – Av. Number of Admissions to Inpatient (IP) by COPD Patients During FY2006



This statistic excludes patients who had no IP visits during FY2006. *Total Admissions count admissions to IP with any diagnosis. **COPD admissions to IP must have a primary diagnosis of COPD upon admission.

Fig. 7 – Percent of COPD Patients with Second Admission to Inpatient (IP) During FY2006



*Total Admissions count admissions to IP with any diagnosis. **COPD admissions to IP must have a primary diagnosis of COPD upon admission.

FAST FACTS:

- **Under the COPD initiative, reviewers have gone to the practice sites and abstracted medical charts to extract additional treatment information.**
- **The baseline data has been collected and preliminary findings show a lower utilization rate for patients in the experimental group.**

The last chart (**Figure 8**) shows data obtained from chart audits conducted on-site by trained auditors who review medical records to extract information about disease management for COPD not available from any other sources. These audits are an integral part of CCNC efforts to monitor Quality Improvement and ensure that providers are following best practice protocols in accordance with established standards of care. **Figure 8** shows four baseline indicators as to how practices in the five pilot sites are implementing quality of care processes to treat COPD patients.

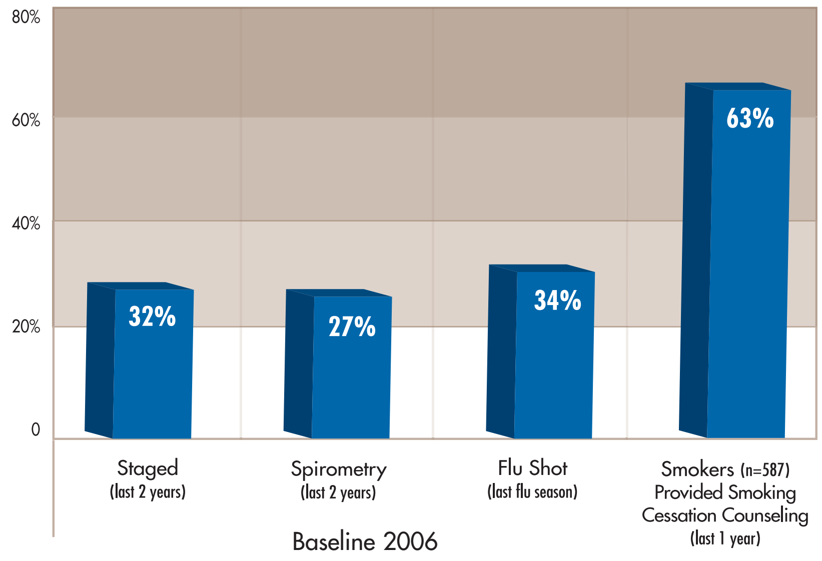


Fig. 8 – Community Care of North Carolina COPD Pilot

(n = 897)

PRACTICE & PROVIDER SUPPORTS

- Provider Trainings:
  - Networks sponsored local provider training sessions to review best practices for COPD diagnosis and management and the importance of spirometry.
- Spirometry (Pulmonary Function Testing):
  - Networks utilized pilot funding from the N.C. Foundation for Advanced Health Programs to purchase spirometers to be used by participating providers to aid in the diagnosis and management of COPD.
  - Providers and practices offered ongoing training in the use of machines and interpretation of results.
- Provider toolkits with best practice guidelines developed as part of the pilot and to include:
  - Laminated COPD Guidelines Card
  - COPD booklet
  - Smoking Cessation Tools
  - Information on local resources for COPD
- Technical assistance in quality improvement.
- Program, network, practice, and patient level data on process measures (chart audits), outcomes measures (emergency room and hospital use data), and other data from the Medicaid claims system.
- Office tools such as COPD Action Plans to be piloted as part of the initiative.
- Case management services for patients with COPD:
  - Disease specific assessments utilizing the COPD Assessment developed as part of the pilot
  - Quality of Life Assessments
  - Medication adherence counseling
  - Smoking cessation counseling
  - Coordination of care including information on Pulmonary Rehab and End of Life resources
  - Follow up from emergency room and inpatient visits
  - Education on community resources
  - Practice assistance with quality improvement and the PDSA cycle

Diabetes Quality Improvement Initiative

Community Care of North Carolina

2007

Community Care of North Carolina
Mail Service Center 2009 • Raleigh, NC 27699-2009
(919) 715-1453 *www.communitycarenc.com*

Diabetes Quality Improvement Initiative Summary

BACKGROUND

The Clinical Directors of CCNC chose diabetes as the second program-wide disease management initiative (after asthma) for the Access II and III Networks. In 2005, the Behavioral Risk Factor Surveillance System (BRFSS) reported that 8.5% of adults responding indicated having been told by a physician that they had diabetes. A 2002 report from the North Carolina Division of Public Health found that approximately 389,000 adults in North Carolina had been diagnosed with diabetes. From 1995 to 2005, the prevalence of diagnosed diabetes in North Carolina adults almost doubled, increasing from 4.5% to 8.5%. Diabetes is the leading cause of blindness, kidney failure, stroke, heart disease and hypertension. Diabetes causes approximately 14,000 hospital admissions per year and 3,000 lower extremity amputations across the state. Diabetes was ranked as the seventh leading cause of death in North Carolina in 2005, and resulted in 2,255 deaths.

The Diabetes Quality Improvement Initiative is built on the core components of process improvement and patient outcome improvement. Based on national studies, improving the quality of care people with diabetes receive can result in a variety of benefits to the individual and cost savings to the health care system. Several long-term studies, most notably the Diabetes Control and Complications Trial (DCCT) and the United Kingdom Prospective Diabetes Study (UKPDS), have shown that improved glucose control, improved blood pressure control, and improved lipid control, can delay the onset and progression of diabetes complications. Improving metabolic control, blood pressure control and preventing complications requires primary care, follow-up care and education that is consistent with evidence based practice guidelines. CCNC is committed to improving the quality of care provided to their patients with diabetes. This initiative has been designed based on guidelines developed by the American Diabetes Association (ADA) and national models for improvement.

PROGRAM SUMMARY

The following steps are defined as the core elements of the Diabetes Initiative:

Step One: *Criteria for Diagnosis and Standards for Best Practice*
Clinical Directors adopted ADA criteria for diagnosing diabetes, and ADA Clinical Practice Recommendations to define Best Practice guidelines and audit measures.

Step Two: *Identify and Implement Diabetes Teams*
Networks identify and recruit Diabetes Champions and multidisciplinary staff resources within their local practices and communities. Diabetes Teams work with providers and practice staff to achieve QI goals based on data from program-wide audits.

Step Three: *Define and Develop Diabetes Resources and Tools*
Develop and customize tools, tailored to meet the varying needs of each Network.

Step Four: *Enhance Partnerships with Community Resources*
Identify, collaborate, and coordinate with existing community resources. Develop and implement processes of communication with hospitals to follow-up with patients who have diabetes.

Step Five: *Develop Materials and Tools for Provider Education & Buy-In*
Customize tools; identify and meet new needs on an ongoing basis.

The following criteria are used to identify the Diabetes Population:

- Modified HEDIS criteria and CCNC enrollment criteria is used for defining a patient with diabetes.
- Identify individuals, age 3 and older, who meet *ONE* of the following:
  1. Patient has an ED visit with a primary diagnosis of diabetes (ICD-9 = 250…,3572,3620…,or 36641)
  2. Patient has an inpatient visit with a primary diagnosis of diabetes
  3. Patient has had two or more primary care contacts (physicians, outpatient) with primary diagnosis of diabetes.
  4. Patient has met the modified HEDIS prescription requirement of one or more prescription of insulin or hypoglycemics/ antihyperglycemics using the approved drug list of diabetes related agents.

  Enrollment Criteria: Patients must meet HEDIS AND have been enrolled with CCNC at least 10 of 12 months.

Program Performance Measures

Program Performance Measures – To identify patients with diabetes, modified HEDIS criteria are used. A randomized sample of patients are identified for chart reviews. The following best practice standards are used to trend performance:

a. % of diabetes patients with at least 2 continued care visits in 12 months.
b. % of diabetes patients with a blood pressure reading recorded at every continued care visit
c. % of diabetes patients with an annual foot exam documented
d. % of diabetes patient with at least 2 A1C tests performed each year
e. % of diabetes patients with an annual documented eye exam referral
f. % of diabetes patients with annual lipid panel results

Utilization Data – Using modified HEDIS criteria for defining a patient with diabetes and enrollment criteria, claims data was evaluated from 2002 through 2006 for:

a. Rate of hospital admissions with any diagnosis.
b. Rate of ED visits with a diagnosis code for diabetes
c. Rate of Inpatient Admission to hospital with any diagnosis
d. Rate of hospital admission with a diagnosis code for diabetes

FAST FACTS: Quality Improvement Started with Diabetes

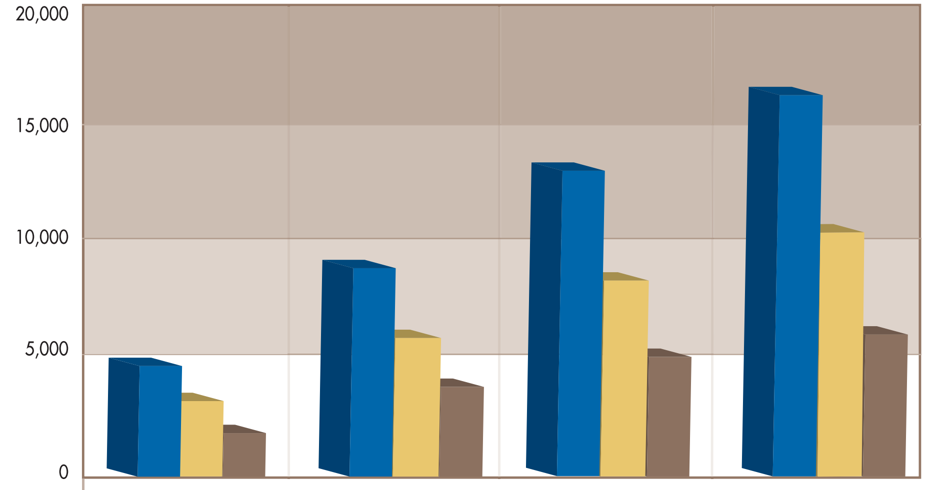
- **Provider toolkits with Best Practice guidelines are distributed to all CCNC providers**
- **Office tools, flow sheets, monofilaments, and other materials are provided to all CCNC practices**
- **Case Managers work with providers and practice staff to implement Best Practice guidelines**

DATA DISCUSSION

The number of persons with diabetes in CCNC has increased substantially in the past 4 years. Although some of the increase can be attributed to the growth in the number of patients enrolled, a good portion of the increase is due to the higher incidence of diabetes in the population. **Figure 1** describes this increase and documents the parallel increase of persons with diabetes among the dual eligibles (those with eligibility in Medicare as well as Medicaid) and non-dual (those solely eligible in Medicaid) populations within CCNC. The total number of patients with diabetes increased more than threefold between FY2003 and FY2006.

Although the number of persons with diabetes has increased significantly, the average age of patients with diabetes has remained the same. Other demographic and enrollment characteristics of patients with diabetes have been more prone to change (see **Figure 2**). For example, the proportion of non-whites among those with diabetes has decreased from 71% to 60% in three years. Most of that change can be attributed to the racial composition of

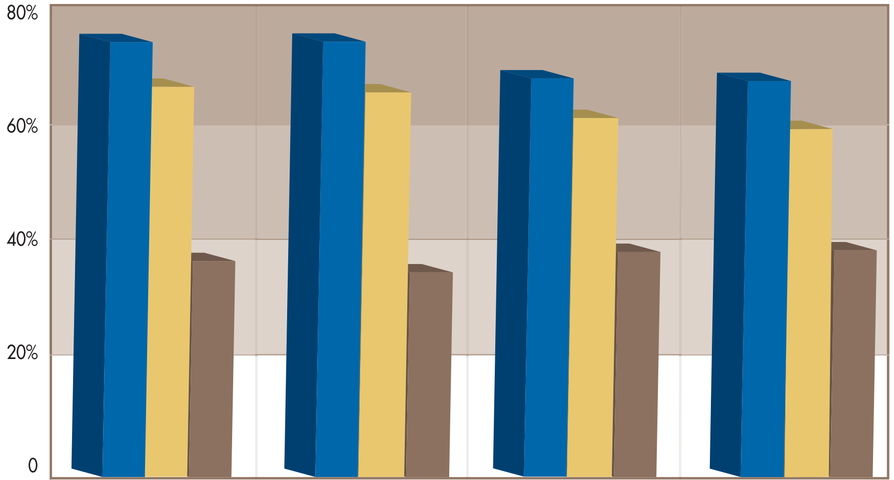
Fig. 1 – Number of Diabetics in CCNC



	FY 2003	FY 2004	FY 2005	FY 2006
■ Total Diabetics	4,693	8,772	13,704	17,149
◆ Non-Duals	2,927	5,684	8,450	10,390
● Duals	1,766	3,088	5,254	6,759

Dual eligibility means that patients are eligible for Medicare as well as for Medicaid.

Fig. 2 – Characteristics of Diabetic Population in CCNC



	FY 2003	FY 2004	FY 2005	FY 2006
■ % Females	75%	75%	74%	74%
◆ % Non-White*	71%	67%	62%	60%
● % Duals**	38%	35%	38%	39%

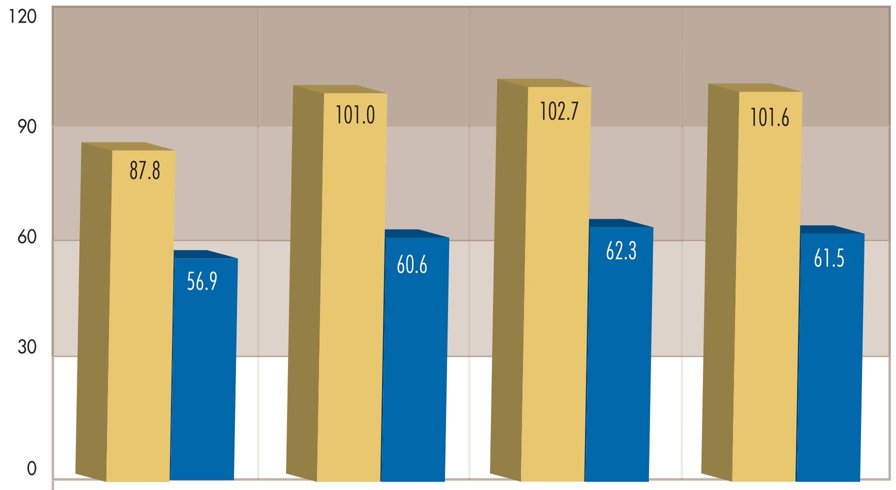
*Percentage calculations exclude those with unknown race. **Duals are those with Medicare as well as Medicaid eligibility.

the newest networks which joined CCNC during those years. It will be interesting to see if this trend continues in the future once CCNC has reached maximum penetration of the Medicaid population in North Carolina. **Figure 2** also shows that there has been very little change in the gender make up of persons with diabetes or in the proportion of the patients who have dual eligibility status.

The utilization rates concerning admissions to Emergency Departments (ED) for those who had been already diagnosed with diabetes can be seen in **Figure 3**. Although there was a modest increase in the rates per 1,000 member months from FY2003 to FY2004, the rates have remained the same for the past three years. The steady rates have held fairly constant for both types of admissions.

A more varied pattern is evident (see **Figure 4**) for hospital admissions. While there has been a modest increase in the rate for admissions for any diagnosis, the rate for admissions with a diagnosis of diabetes has remained quite stable. The second type of admission is a better predictor of how well the condition of diabetes is being managed.

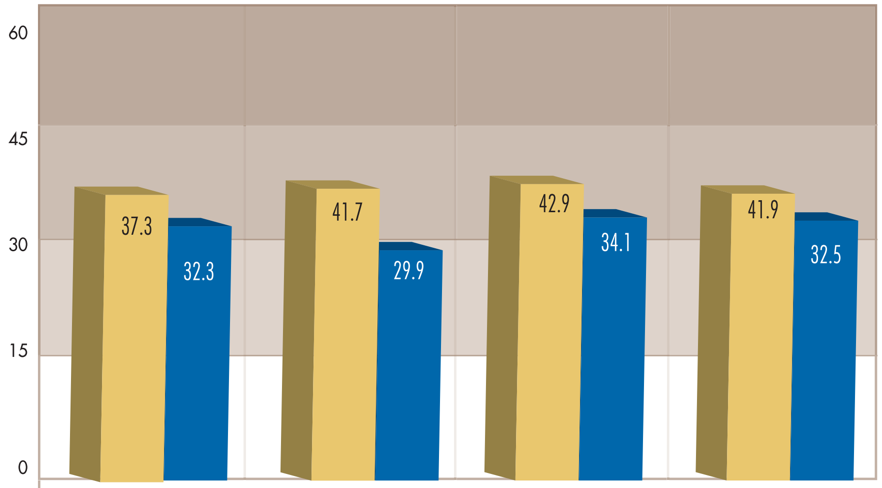
Fig. 3 – Rate of Emergency Department (ED) Visits for Diabetic Patients in CCNC per 1,000 Member Months



	FY 2003	FY 2004	FY 2005	FY 2006
🟨 Rate (Total)	87.8	101.0	102.7	101.6
🟦 Rate (Diabetes)	56.9	60.6	62.3	61.5

Total ED visits count any ED visit while Diabetes ED visits must include a diagnosis of diabetes at time of admission.

Fig. 4 – Rate of Inpatient (IP) Admissions for Diabetic Patients in CCNC per 1,000 Member Months



	FY 2003	FY 2004	FY 2005	FY 2006
🟨 Rate (Total)	37.3	41.7	42.9	41.9
🟦 Rate (Diabetes)	32.0	29.9	34.1	32.5

*Total Admission Rates count admissions to ER with any diagnosis. **COPD Admissions to ER must have a primary diagnosis of COPD upon admission.

The next two figures show results from the last two rounds of chart reviews carried out to help monitor Best Practice guidelines in the networks. The reviews are done by trained coders who audit medical charts on site according to established protocols. The findings are then coded and sent to a central data base for further analysis. **Figure 5** shows the results for six selected measures during the last two rounds of audits. With the exception of Testing for HbA1c, all the measures showed small improvements in compliance with these standard practices. **Figure 6** compares the same six measures between new and established practices. Established practices are those which have been enrolled with CCNC for more than one year. As expected, established practices had higher percentages of compliance (excepting for two continued care visits) than new practices did.

Fig. 5 Community Care of North Carolina

Diabetes Disease Management Quality Initiative
Established Practices

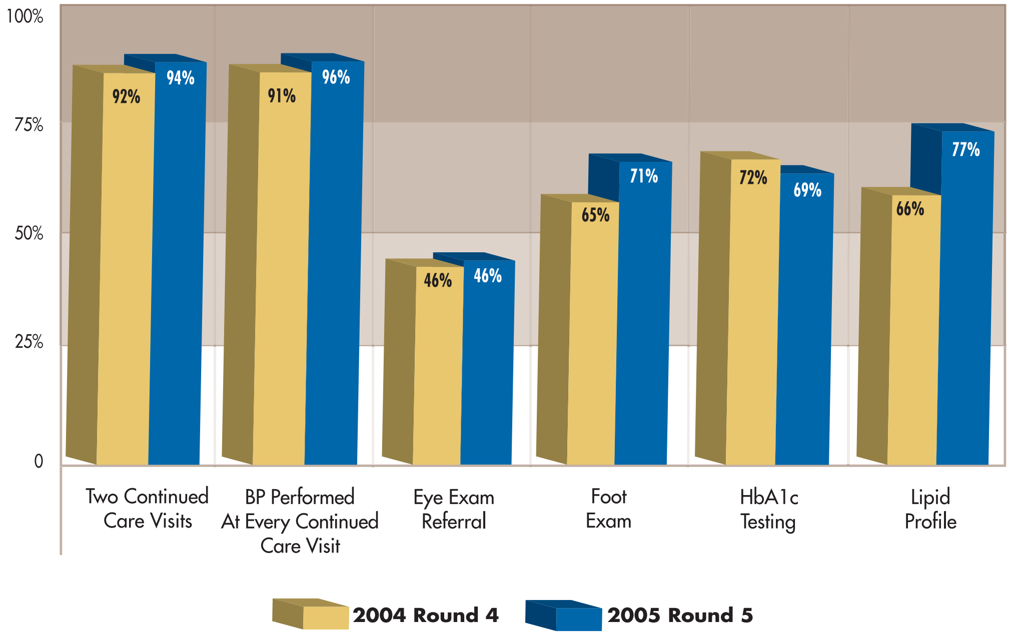
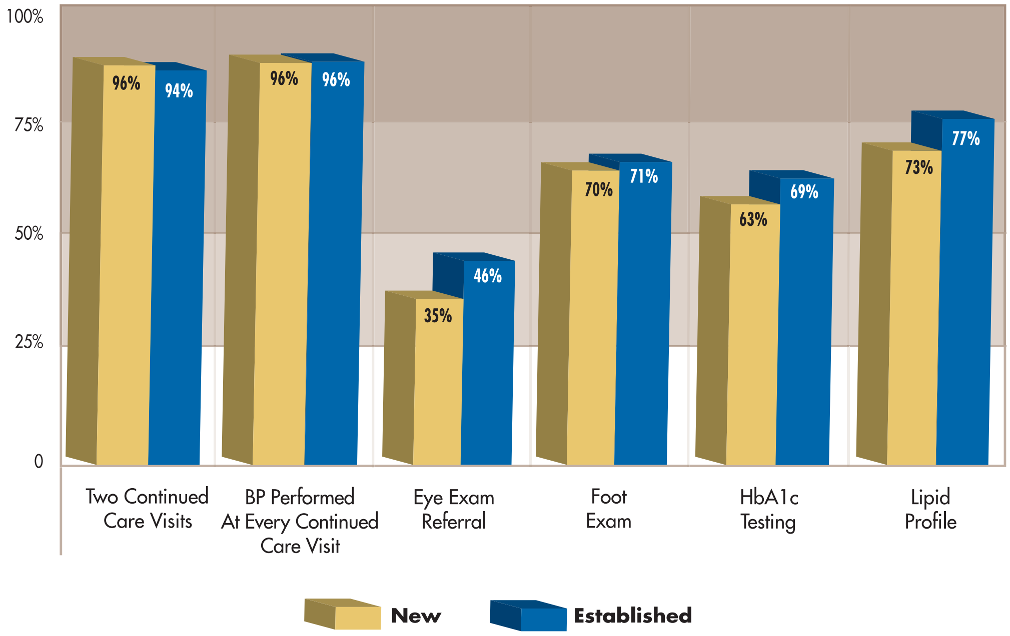


Fig. 6 Community Care of North Carolina

Diabetes Disease Management Quality Initiative
Round 5 2005 • New and Established Practices



FAST FACTS:

- **94% of CCNC enrollees with diabetes see their PCP at least 2 times a year to address their diabetes.**
- **96% of CCNC enrollees with diabetes have their blood pressure measured at each PCP visit.**
- **Approximately 70% of CCNC enrollees with diabetes have annual lipid tests, foot exams, and A1C tests performed every 6 months.**
- **Average A1C level for CCNC enrollees with diabetes is 7.7%.**

PRACTICE & PROVIDER SUPPORTS

CCNC networks and central office staff provide participating practices and providers with a variety of supports and tools for implementing the diabetes disease management initiative, including, but not limited to the following:

- Provider toolkit with best practice guidelines and office tools, such as diabetes flow sheet.
- Program, network and practice level data on process and outcome measures.
- Technical assistance in quality improvement, diabetes care and targeted educational sessions for providers and case managers.
- Targeted case management support and interventions.
- Dedicated diabetes nurse educator to lead the initiative, provide training, technical assistance and follow-up.

Summary:

The CCNC Diabetes Quality Improvement Initiative serves as an effective vehicle to enhance provider process and patient outcome in order to screen for and reduce the rate of diabetes related complications. Ninety-four percent (94%) of patients with diabetes attend provider visits in which their diabetes is addressed. This indicates a high level of continued care which is necessary in treating chronic illness. Ninety-six percent (96%) have their blood pressure evaluated at every visit. Approximately 70% of patients with diabetes seen by CCNC providers have annual lipid tests, foot exams and A1C tests performed every 6 months.

In conclusion, the design of the CCNC Diabetes Quality Improvement Initiative involves strong partnerships between the local Networks and a variety of community agencies. In addition, network case managers target interventions to those individuals that are high risk and high cost and whom might benefit the most from interventions.

Information Sources

1. Bell, R., Page J. Focus on Diabetes in North Carolina. Diabetes Prevention and Control Unit, 2000.
2. Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System (BRFSS), 1990-2000.
3. State Center for Health Statistics. Estimation of diabetes prevalence by race, sex and age group. BRFSS, 2000. Data not published.
4. State Center for Health Statistics. North Carolina Leading Causes of Death. Vital Statistics, Volume 2, 2000.
5. State Center for Health Statistics. Hospitalization, costs, Discharges for Diabetes Related Complication in NC, 2000. Data not published.

Diabetes Quality Improvement Initiative Summary

Heart Failure Program Summary

Community Care of North Carolina

2007

Community Care of North Carolina
Mail Service Center 2009 • Raleigh, NC 27699-2009
(919) 715-1453 www.communitycarenc.com

■ BACKGROUND

The Heart Failure Program is the third state-wide disease management program developed by Community Care of North Carolina. The clinical directors reviewed prevalence and outcome data for several chronic diseases and reviewed the evidence for disease management models for cardiovascular disease and heart failure. The consensus of the clinical directors was to design a program to improve the quality of care and health outcomes for North Carolina's heart failure population. There are several heart failure disease management models that have clearly demonstrated improved outcomes including decreased mortality, hospitalizations, improved quality of life, and decreased cost. The development of the heart failure initiative began in 2006 and all fourteen networks have begun to implement the program in 2007.

National Burden of Illness – Heart failure has a tremendous impact on individuals' functional status and quality of life. They are frequently hospitalized and suffer from chronic shortness of breath and fatigue. On the population level, heart failure is the most common cause of hospitalization for the elderly and accounts for 5.4% of healthcare expenditures nationally or $38 billion. Ten percent of individuals are re-hospitalized within 6 months. The prevalence of heart failure increases with age with 8/1000 individuals age 50-59 and a prevalence of 66/1000 individuals for age 80-89. Heart failure is also an important area to address healthcare disparities as the prevalence of heart failure is 25% higher in blacks. Mortality for heart failure is worse than most cancers with an annual mortality of 12-19% and five year mortality of > 50%.

N.C. Data – In North Carolina, heart failure is the second leading cause of preventable hospitalization and expenditures per individual far exceed those for individuals with diabetes or asthma. In the CCNC program, about 3,000 individuals were identified with heart failure, while there are over 17,000 CCNC enrollees with either diabetes or asthma. However, the annual mean Medicaid expenditure for individuals with heart failure is $27,000, while it is $7,900 and $12,000 for people with asthma and diabetes, respectively. Fortunately there are opportunities to improve outcomes for people with heart failure by promoting evidence-based therapies, self management, and access to the medical home.

Heart failure is a treatable condition with several proven strategies that can improve health outcomes. While heart failure patients are frequently hospitalized, up to 53% of hospitalizations are thought to be avoidable. Lack of adherence to medications and diet accounts for 41% of hospitalizations. Modifiable factors leading to hospital readmissions for heart failure include:

- Inadequate patient and caregiver education and counseling
- Poor communication among healthcare providers
- Failure to organize follow up care
- Clinician failure to emphasize non-pharmacologic aspects of heart failure care (diet, activity, and symptom monitoring).

Best Practices for Managing Heart Failure – The optimal disease management approach focuses on case management of high risk individuals to promote adherence and self management and working with clinicians to follow evidence based clinical practice guidelines. A decline in health status can often be prevented if patients or caregivers are able to monitor symptoms and daily weights. If an individuals' weight increases rapidly, it is often a sign of worsening heart failure. If these individuals are able to access healthcare promptly where their medication can be adjusted, often a hospitalization can be avoided. Medication adherence is also a key issue in keeping heart failure patients healthy.

Angiotensin converting enzyme inhibitors (ACEI), angiotensin receptor blockers (ARB), and beta blockers have been shown to reduce mortality, prevent hospitalization, and improve quality of life for patients with heart failure. Patients are often on complex medical regimens and frequent monitoring and support is necessary to help patients benefit from these therapies.

PROGRAM SUMMARY

CCNC Heart Failure Program Design

1. **Identifying the Heart Failure Population:** The program will primarily use claims data to identify individuals with heart failure. Individuals will also be identified at hospital discharge and by referral from physicians.
2. **Improving Quality of Care in CCNC Practices**: The CCNC Medical directors reviewed several heart failure clinical practice guidelines and identified the ACC/AHA *Guidelines for the Evaluation and Management of Chronic Heart Failure in the Adult* to adopt statewide. Working with clinical experts in heart failure, CCNC developed a Heart Failure Toolkit to promote best practices in heart failure management.

   Each network identifies a PCP physician champion and a cardiology physician champion. The Network Clinical Director and Network Coordinator, along with the Medical Management Committee and physician champions, work with practices to improve quality of care for heart failure patients. The Network also identifies community resources such as hospital-based heart failure programs and case management programs.

   Measuring Improvement: The CCNC clinical directors reviewed the literature for evidence based measures that are effective in changing practice and improving outcomes. Measures evaluated whether an accurate diagnosis was made, whether patients were prescribed evidence based therapies, medication adherence, utilization, cost, and whether individuals are assessed regularly by case managers. Heart failure performance reports will be distributed to networks on quarterly intervals with performance data at the individual network and state level
3. **CCNC Heart Failure Case Management Program:** Effective case management models for heart failure involve identifying a high risk population and contacting them at regular intervals.
   - Everyone in the heart failure population receives a comprehensive assessment every 12 months
   - Those that are determined to be high risk are contacted weekly for approximately 6 months.
   - Those developing symptoms of a heart failure exacerbation are referred to their primary provider.

   During phone calls or visits, case managers provide self management support, educate individuals and caregivers about the disease process, promote medication adherence, and help identify early signs of a heart failure exacerbation. A patient centered tool kit was developed, “Managing Your Heart Failure”, to promote self management.

   Individuals are assessed with a web based assessment tool that is integrated into the Case Management Information System (CMIS). The tool determines the clinical status of the patient, educational needs, medication adherence, and psychosocial needs. The CMIS Heart Failure Module allows case managers to assess individuals over the phone and then transmit messages and tasks to local case managers who can address local needs. Measures are collected in the module that will be used in evaluating the effectiveness of the program.

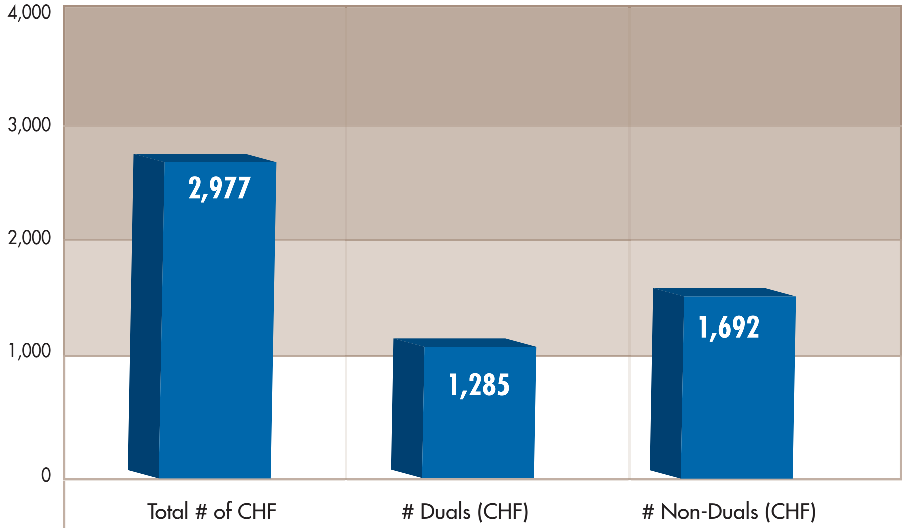
DATA DISCUSSION

Baseline Date: The following data were obtained in FY2006, prior to the implementation of the CCNC Heart Failure Program.

Figure 1 identifies the total number of individuals with heart failure identified in 2006. Forty-three (43%) of the population was dually eligible for both Medicare and Medicaid. Individuals were identified if they had an inpatient admission or emergency room visit in the last two years or at least two out patient visits for heart failure in the last year.

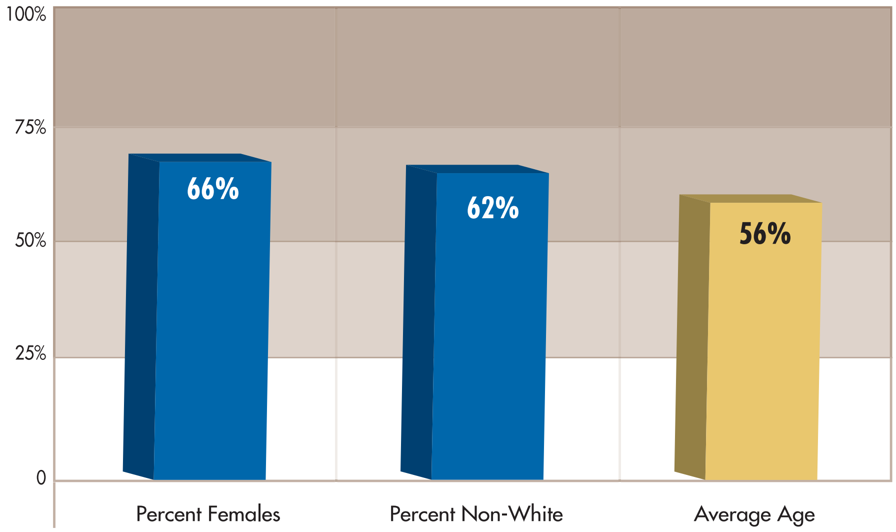
Figure 2 shows the mean age of the heart failure population is 56 with the majority being female (66%) and non-white (62%).

Fig. 1 – Number of CCNC Patients with Chronic Heart Failure



Duals indicate that patient is eligible for Medicare as well as Medicaid.

Fig. 2 – Characteristics of Chronic Heart Failure (CHF) Patients

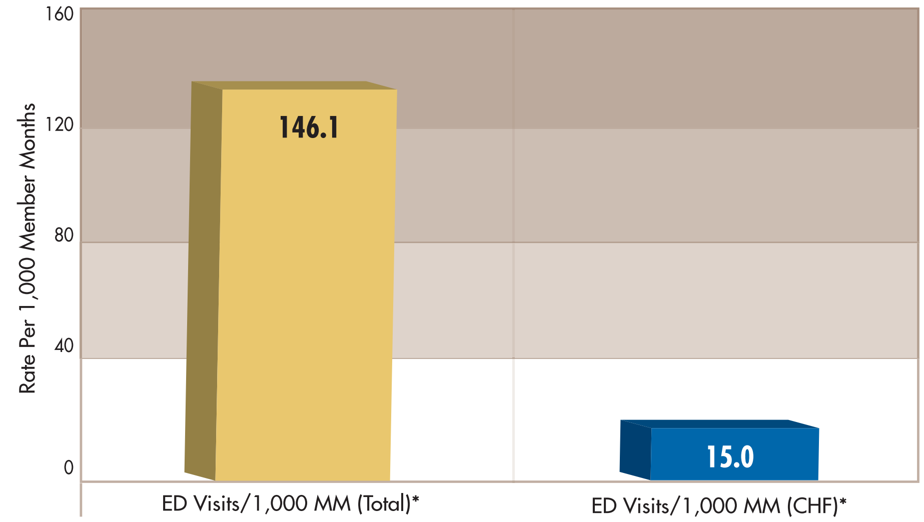


Patients with Unknown Race are excluded from calculations.

Figure 3 presents the emergency department visit rates. The rates are standardized to 1000 member months so that rates can be compared across other populations and over time. There were 146.1 emergency department visits per 1000 member months for any diagnosis and 15.0 per 1000 member months for a primary or secondary diagnosis of heart failure.

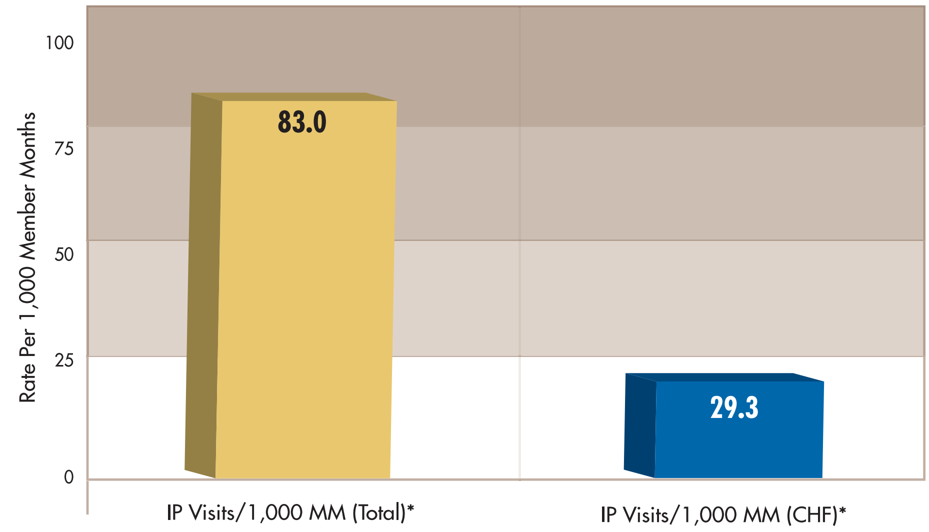
Figure 4 presents the inpatient rates for the heart failure population. There were 83 inpatient admissions per 1000 member months for any diagnosis and 29.3 admissions per 1,000 member months for a primary or secondary diagnosis of heart failure. This rate translates into 35% of the population admitted with a primary or secondary diagnosis of heart failure per year.

Fig. 3 – Rate of Emergency Department Visits



Total ED visits include those made by CHF patients for any diagnosis. ED visits for CHF must have a primary or secondary diagnosis of CHF.

Fig. 4 – Rate of Inpatient Admissions



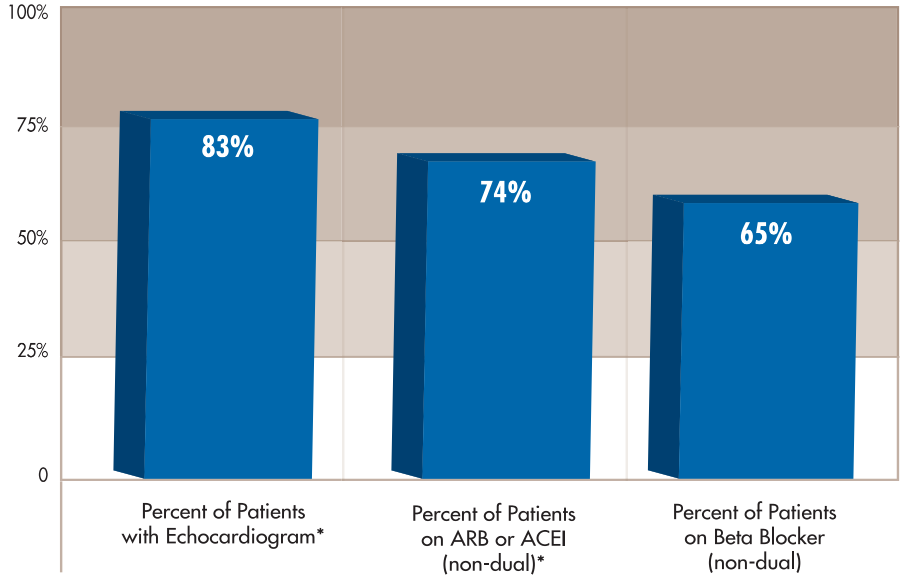
Total IP Admissions include those made by CHF patients for any diagnosis. IP Admissions for CHF must have a primary or secondary diagnosis of CHF.

FAST FACTS:

- **Over 3,000 CCNC enrollees suffer from CHF at a cost of more than $27,000 per patient.**
- **Up to 53% of hospitalizations are thought to be avoidable. Lack of adherence to medications and diet accounts for 41% of the hospitalizations.**
- **While 83% of CCNC patients with CHF have had an echocardiogram in the last three years, 74% are on ARB and 65% are on beta blockers**

Figure 5 shows the percentage of the non-dual population that were prescribed ACEI or ARB medications. This includes individuals with both systolic and diastolic heart failure. The percentage of the population receiving an echocardiogram in the last 3 years is also shown.

Fig. 5 – Baseline Performance Measures for Chronic Heart Failure (CHF) Patients During Fiscal Year 2006



*Readmissions to ED and IP are counted only if they were for a primary or secondary diagnosis of CHF.

PRACTICE & PROVIDER SUPPORTS

Building on successful models for asthma and diabetes, CCNC has developed a disease management program for heart failure. The program began working with heart failure patients in the fall of 2006. A successful program will have a substantial impact on improving both the quality of life and health outcomes for Medicaid recipients with heart failure. There is also opportunity to garner savings by decreasing hospitalization rates and improving the efficiency of utilization in this population.

The CCNC Heart Failure Program capitalizes on the relationships that have been fostered between CCNC case managers and physicians and the collaborative learning process that occurs between networks. The majority of heart failure disease management programs designed by payers are “carve out” programs where case managers work remotely from patients and do not have established relationships with physicians, hospitals, or public health. The program will also improve the cost-effectiveness of care management by testing a telephone case management approach where individuals are initially engaged and assessed on the phone and then ongoing local needs are addressed at the local level.

There are several challenges that have been identified in working with the Medicaid Heart Failure population. In evaluating baseline performance data, it seems that NC healthcare providers caring for this population are prescribing evidence based therapies at high rates compared to national benchmarks. However, among people prescribed these medicines, only half are taking their medications regularly. This data reinforces the need for case managers to support self management and medication adherence. The program will also rely heavily on contacting patients frequently by phone. Medicaid recipients often are difficult to contact and may move frequently. Networks will use their established relationships with practices, social services, and hospitals to engage these individuals.

Heart failure patients can remain healthy if they learn to self manage their disease and work closely with healthcare providers to adhere to optimal therapies. CCNC’s community networks are well designed to improve the health outcomes and quality of life for NC Medicaid’s heart failure population through improving quality of care in CCNC practices and through case management of individuals with heart failure.

Heart Failure Program Summary

Mental Health Integration Pilot Program Summary

Community Care of North Carolina

2007

Community Care of North Carolina
Mail Service Center 2009 • Raleigh, NC 27699-2009
(919) 715-1453 www.communitycarenc.com

■ BACKGROUND

Several networks in the Community Care of North Carolina (CCNC) program began seeing an increasing number of Medicaid enrollees at primary care provider practices with both behavioral and physical health care needs. As a result of efforts in mental health reform and changes in the local service delivery infrastructure, four CCNC networks working in concert with their local management entities (LMEs) began piloting (in July 2005) a collaborative approach to managing Medicaid enrollees who have both behavioral and physical health needs and serve them in the most appropriate setting. The mental health integration pilot is a state level collaboration between the Division of Mental Health, the Division of Medical Assistance, the Office of Rural Health and Community Care (ORHCC), and the North Carolina Foundation for Advanced Health Programs, Inc. This two year pilot began in July 2005 and ended in June 2007.

■ PROGRAM SUMMARY

The primary goal of the mental health integration pilots was to work on program model development that focused on:

- Integrating the identification and care of depression in the primary care provider's office;
- Implementing the Four Quadrant Model as the platform for screening, identification, and triage of complex needs patients (combined medical and behavioral concerns); and
- Demonstrating effectiveness in communication and consultation between primary care physicians and mental health providers.

The pilots aimed to do the following:

- increase the comfort level of primary care providers (PCPs) in identifying and treating people with depression who present in their office;
- improve communication between the PCPs and behavioral health care providers;
- adopt standardized screening, assessment, reporting and communication tools;
- implement psychiatric telephone consultations;
- implement co-location models, when feasible;
- ensure, through improved coordination, that patients are able to access care at a point in the system where their health and behavioral health needs are optimally met; and
- adopt uniform process and outcome measurements for program evaluation.

Each network targeted both the adult and pediatric population (this last group broken out by age: 0-5 and 6 and older) using the Four Quadrant Clinical Integration Model as the foundation for communication, collaboration, assessment, referral and clinical management of care. Using CCNC's web-based case management system, the networks and LME staff were able to document and share information. To ensure that data collection is comparable across projects, common forms and tools have been developed including a telephone consultation form, behavioral health assessment form, case consultation request form, and provider surveys. In addition, based upon the patient's age, a common set of primary screening tools were chosen: ASQ or PEDS for 0-5; PSC or Y-PSC for 6-18; and PHQ 9 for 18 and older.

The four networks and LMEs involved in the pilot were: Access II Care of Western North Carolina and Western Highlands; Southern Piedmont Community Care Plan and Piedmont Behavioral Healthcare; Central Piedmont Access II and CenterPoint Human Services; and Partnership for Health Management and the Guilford Center.

All networks implemented a universal screening tool and clinical pathway for depression. In addition to the standardized efforts mentioned above, the pilots aimed to demonstrate the following:

> **Access II Care of Western North Carolina** provided incentives to PCPs to complete behavioral risk screenings and to have a trained therapist or an RN following the clinical pathway and administering the evidence based screenings at critical points of care. They planned to develop a system for psychiatric back-up to support the PCPs treating behavioral health issues in the office. And, by analyzing Medicaid claims, Access II Care of Western NC identified population management strategies for both physical and behavioral health care.
>
> **Southern Piedmont Community Care Plan** identified the screening tools that work best in the PCP setting to identify individuals with depression, ADD, anxiety, conduct disorder, and bipolar disorder. In addition they aimed to develop protocols for determination of Four Quadrant Model assignments. Focused education was given to providers and improvement of consumer self-management skills and participation in disease management programs was an integral part of their initiative. A steering committee comprised of medical and behavioral health physicians and professionals provided planning and oversight to the activities.
>
> **Northwest Community Care** implemented a co-location model by placing a behavioral specialist in the PCP practice and integrated the school system to target elementary aged children. By creating structured opportunities, such as "collaborative rounds", Central Piedmont increased the collaboration between PCPs and the mental health providers and created mechanisms for linking mental health and primary care services.
>
> **Partnership for Health Management** provided ongoing physician education and conducted regularly scheduled lunchtime case discussions/pharmacology reviews between LME providers and PCPs. A dedicated care manager focused on implementation and transition activities. ADHD, depression, and early childhood mental health are specific areas of interest for Partnership for Health Management.

All of the networks have adopted a uniform provider survey format and the preliminary baseline survey has been completed for both primary and behavioral health care providers. The pilots used a uniform and standardized survey instrument, and they completed another survey again at the end of the pilot project. The baseline survey found the following: both behavioral and physical health providers desired

better communication between disciplines and physical health providers wanted to feel more comfortable with prescribing and treatment modalities for depression, ADHD, adjustment disorder, and anxiety.

The outcome and performance measures will be captured through the web-based case management system and through paid claims. These include the rates and PMPM costs for: pharmacy, outpatient visits, ED visits, hospitalizations, psychotherapy visits, overall Medicaid costs, and overall screening rates. Other desired information included: missed school or work days, no-show rates, medication adherence, patient reported functional status, information on telephone consultations, and screening tools.

The lessons learned in the mental health integration pilots have led into a new pilot of co-location models. The infrastructure and models developed and implemented by the pilots will be able to support replication and expansion efforts in other networks and communities and serve as a foundation for the co-location pilots. A model that is able to integrate behavioral and physical healthcare needs will demonstrate the value of a chronic care management model that is patient-centric and able to identify and meet all the needs of an individual.

■ DATA DISCUSSION

Across all four pilot networks there was agreement that relationship building between physical and behavioral health care providers is paramount for a successful program. Each network approached this endeavor with their own flavor and creativity, such as hosting “brown bag lunch exchanges”, evening mixers and socials and inviting behavioral health care providers to medical management committee meetings. We have learned that the LME needs to be represented on the network boards and /or steering committees so that partnerships and collaborative efforts begin early.

The four pilot networks captured information on a cohort of individuals that were identified with depression. The following graphs describe the characteristics of the mental health integration cohorts.

The selection of patients for participation in the CCNC Mental Health Pilots was made by the networks in the project. These patients were given screening tests for mental health and then, based on the scores, referred for inclusion into the treatment models. During the two year period there were 547 selected for participation in the four sites. The Medicaid IDs of these patients were matched against claims data to find out their demographic characteristics and their service utilization.

Figure 1 shows the percentage of females and non-whites (excluding those of unknown race). Both percentages were higher than the proportions for the entire patient population in CCNC. The percentage of non-whites was 18 percentage points higher (63% versus 45%) and the proportion on females was 19 percentage points higher (74% versus 55%). The average age was also significantly higher than for the CCNC population as a whole (24.9 versus 15.5).

The admission rates to Inpatient (IP) and to Emergency Departments (ED) are partial measures of success in finding community alternatives for the treatment of this population. The rates are standardized to 1000 member months as patients may vary in the number of months enrolled in CCNC during any given year. The data presented here is a baseline measuring the utilization of these services at one point in time. Subsequent data will allow rate comparison across time. **Figure 2** charts the rates. Admissions are counted if a patient was admitted with any diagnosis during the period of time prior to the beginning of the pilot mental health program. These two years constitute the baseline.

Fig. 1 – Characteristics of Mental Health Integration (MHI) Cohorts

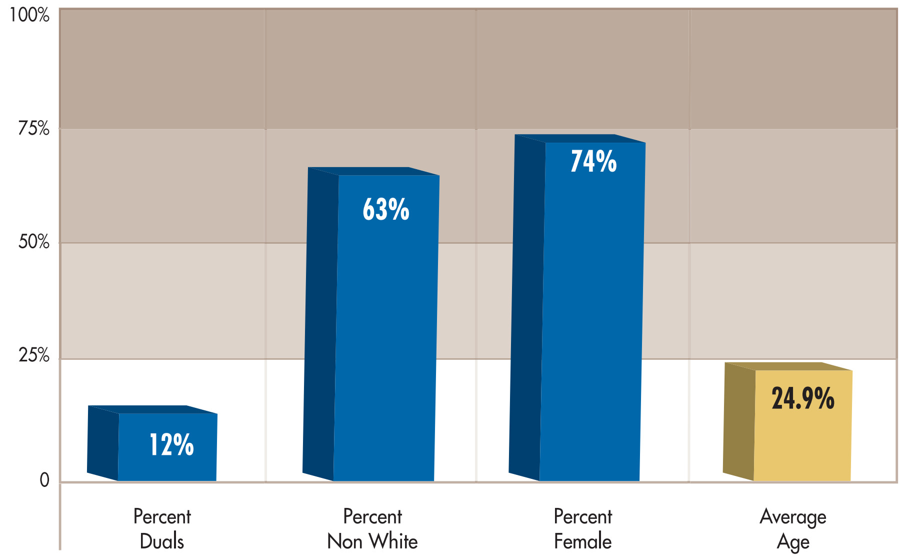
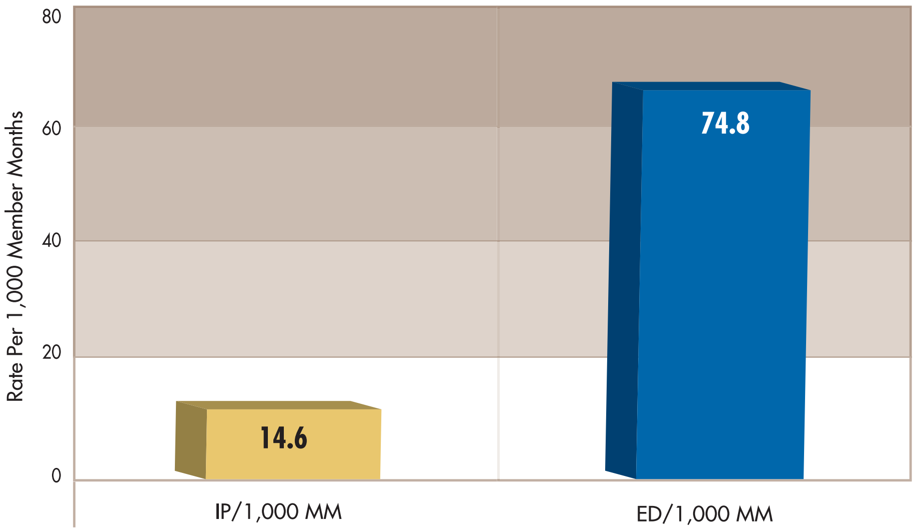


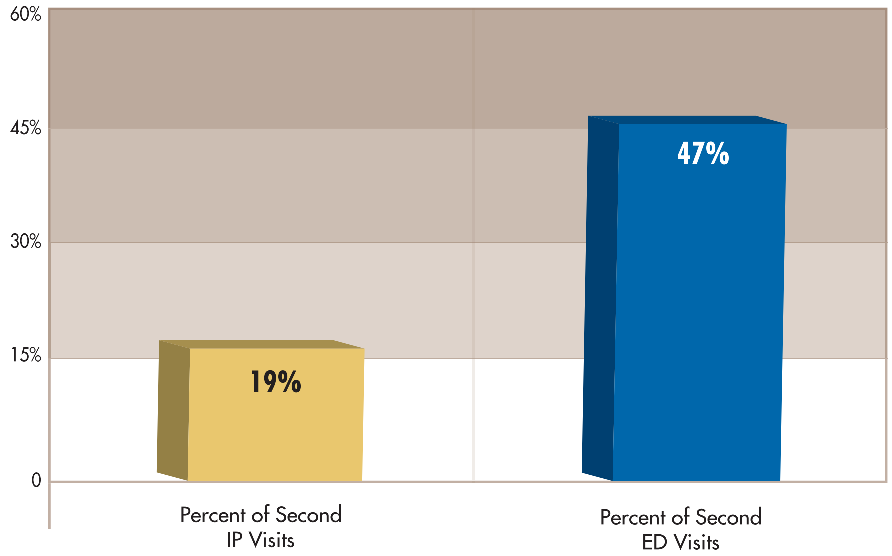
Fig. 2 – Rate of Admissions* to Inpatient (IP) and to Emergency Departments (ED) During FY2005 & FY2006



*Admissions include any admissions to ED and IP, regardless of diagnosis.

Another measure of treatment effectiveness is the percentage of patients who have a second admission to IP or ED after having been admitted once. **Figure 3** demonstrates that, for patients with one ED admission during the two year cycle, 47% were admitted a second time. For patients with at least one admission to IP during the two year period, 19% were admitted a second time to an inpatient facility.

Fig. 3 – Percentage of Patients With Second Visit* to Inpatient (IP) or Emergency Departments (ED) During FY2005 & FY2006



* Admissions include any admissions to ED and IP, regardless of diagnosis.

The number of visits to mental health facilities is another utilization measure that gauges the extent to which these patients avail themselves of services in the community. The rate of 649 visits per 1,000 member months is high and is in line with the expectation that these clients used mental health services to a significant extent during the two year period. Another way to describe this statistic is to say that if a patient in these cohorts were enrolled for 12 months in CCNC, he/she would visit a mental health office an average of 7.8 times per year.

The final study on the MHI pilots will be completed by the fall of 2007. The networks are still collecting information to submit to the program evaluator. The final evaluation will also be made available on the CCNC website.

Provider toolkits, communication and referral forms, and screening tools are available for networks to download and use from the CCNC website: *www.communitycarenc.com*

PRACTICE & PROVIDER SUPPORTS

One of the pilots, Buncombe County, has taken the integration effort to a higher level. Buncombe County community providers, including Western Highlands, MAHEC, Access II Care of Western NC, and Buncombe County Health Department, have developed a successful integration initiative that includes a community-wide planning and implementation process, a very successful depression project, co-location of a psychiatrist in MAHEC family practice sites, phone consultation support for primary care physicians, and "meet and greet" sessions where behavioral health providers and physical health providers can get to know each other.

This type of collaborative process is now being implemented in other communities including Cumberland County, where key community organizations (FAHEC, Carolina Collaborative Community Care, Cumberland County Health Department, Cape Fear Valley Health System, and the LME) are meeting to plan a similar behavioral health integration initiative.

Co-location Pilot Grants – with the joint cooperation of our Medicaid Division and Office of Rural Health and Community Care, the Community Care program is providing co-location grants to primary care practices to improve mental health access for Medicaid enrollees by encouraging the co-location of primary and behavioral health services. Start-up funds are being provided to 41 primary care practices and 3 behavioral health care centers (reverse co-location with a primary care provider in a behavioral health care setting) to implement a co-location model in 12 CCNC networks. These new pilots will include the mental health integration pilot networks and also include some new networks and practices.

The purpose of the grant, which cannot exceed $25,000 per practice– is to help offset the start-up costs involved in co-locating a psychiatrist, psychologist, mental health social worker, or mental health physician′ assistant/nurse practitioner in a participating primary care practice. There is a companion piece which will also provide a start-up grant for a primary care physician co-locating in a mental health practice (reverse co-location). CCNC is working closely with the ICARE project (ICARE = Integrated, Collaborative, Accessible, Respectful and Evidence-Based) to maximize resources and avoid duplicating efforts and technical assistance. The ICARE project is a three year project with a focus on statewide education and assistance, local model development, and process and policy change. Their website will also include useful information, tools, forms and screenings and can be found at: *www.icarenc.org*

Mental Health Integration Pilot Program Summary

Pharmacy Initiatives Program Summary

Community Care of North Carolina

2007

Community Care of North Carolina
Mail Service Center 2009 • Raleigh, NC 27699-2009
(919) 715-1453 *www.communitycarenc.com*

BACKGROUND

North Carolina Medicaid pharmacy costs have increased dramatically over the last several years and account for the largest expenditure of service dollars. In response to the rising costs and the high number of Medicaid recipients on eight (8) or more prescriptions, the Community Care of North Carolina (CCNC) Clinical Directors chose pharmacy as a quality improvement and cost containment effort in 2002. Two pharmacy initiatives developed by the CCNC program – the Prescription Advantage List and the Nursing Home Polypharmacy Project – were both designed to improve quality of care while reducing costs.

The Prescription Advantage List (PAL) was developed by the N.C. Physician Advisory Board (NCPAG) and CCNC leadership who analyzed the most costly therapeutic drug classes and ranked them according to the greatest potential cost savings based upon the actual net cost, including rebates, to the Medicaid program. This voluntary list was first published in November 2002 as a guide to prescribing less expensive medications whenever clinically appropriate. Piloted in the CCNC networks, the original PAL list helped to yield a 22 percent reduction in pharmacy costs.

Due to the success of PAL, the Division of Medical Assistance (DMA) implemented an updated PAL list in November 2003 which included select Over-The-Counter (OTC) medications. Certain OTC drugs are covered by DMA with a valid prescription from the primary care provider. The addition of OTC drugs offers considerable cost savings to the Medicaid program. If half of the prescriptions written for Proton Pump Inhibitors (PPI) and Non-Sedating Antihistamines (NSA) are OTC, then approximately $50 million dollars could be saved. CCNC was instrumental in educating pharmacists and providers regarding the new coverage policies.

PROGRAM SUMMARY

By 2005, OTC prescribing patterns had plateaued and several CCNC networks began testing other methods to increase the prescribing of more cost-effective medications. One network elected to offer a monetary incentive to providers for each PPI or NSA prescription they switched to an OTC. This approach was most effective with NSAs, which resulted in a 24 percent increase in OTC prescribing. The other method was to create standing orders with the pharmacies. Standing orders were first initiated in the western part of the state for the therapeutic substitution of PPIs and NSAs. Standing orders are customized and voluntary and allow the primary care providers to order substitutions of the more expensive drugs with those drugs that are most cost effective for Medicaid. One month after roll-out, NSA OTC prescriptions in the network had increased 20 percent while OTC PPIs usage had increased 12.6 percent. The initial success has encouraged several other networks to implement standing orders.

Another collaborative effort designed to improve the care of Medicaid patients while managing pharmacy cost was the Nursing Home Polypharmacy Project. This project was piloted by eleven nursing homes within several CCNC networks in the spring of 2002. This initiative focused on better management of prescribing practices for a patient population that averages nine prescriptions per month and resides in nursing facilities. CCNC physicians and clinical directors partnered with pharmacists and nursing home leadership to review the drug regimen of all Medicaid residents. Medications in this initiative were flagged if they met the following criteria:

1) appear on the PAL;
2) represent a therapeutic duplication;
3) appear on the Beers list (a list of medications potentially inappropriate for use by the elderly);
4) the length of therapy appears excessive; or
5) drugs appear on a list developed by a committee of long-term care pharmacists that features drugs associated with significant savings.

Results from the pilot demonstrated an opportunity to reduce costs and to increase the quality of care. Drug cost savings averaged $30.33 per patient per month with 72 percent of patients receiving a change recommendation. As a result of this pilot, the State implemented a similar project with nursing homes throughout the state.

DATA DISCUSSION

Figure 1 shows the rapid growth in the cost of medications for patients in Medicaid in North Carolina. In six years the drug costs have more than tripled, representing an average increase of 25% annually, significantly beyond inflationary costs. With the advent of the 2006 federal drug plan for Medicare recipients, it has become more difficult to monitor drug costs from Medicaid claims data for dually eligible patients (both in Medicaid and Medicare) as claims no longer reflect costs associated with medications that may be covered under the new plan.

Fig. 1 – Cost of Medications for N.C. Medicaid Patients

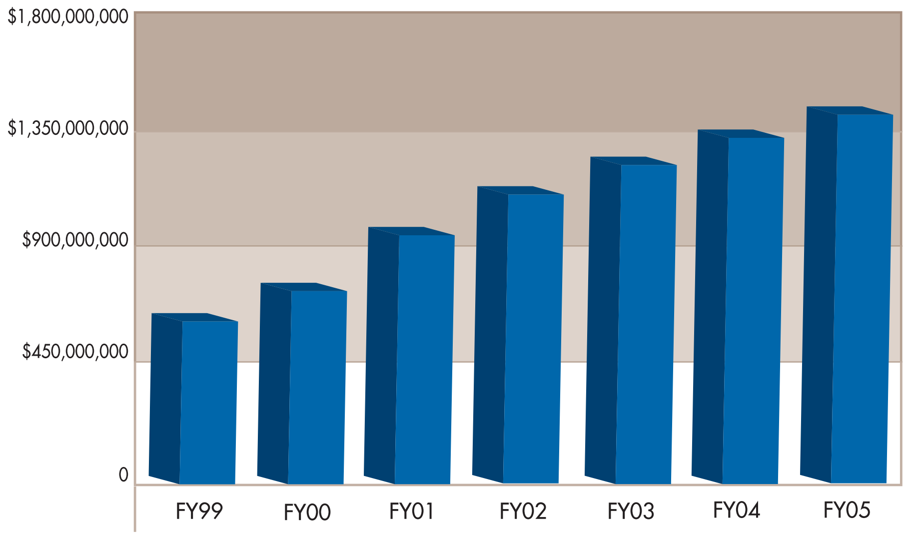
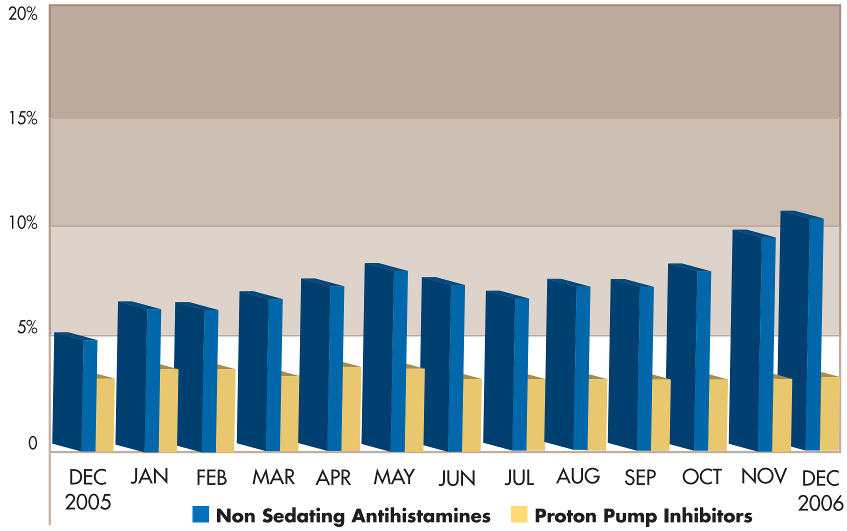


Figure 2 shows trends in the use of OTC medications for Non-Sedating Antihistamines (NSA) and Proton Pump Inhibitors (PPI) over a one year period. The OTC alternatives for both types of medications have been found to be cost effective and result in savings without a decrease in clinical care. While the use of OTC for PPIs has remained quite stable, there has been a modest increase in the use of OTC alternatives to NSAs. It is possible that there were fewer OTC alternatives for PPIs than there were for NSAs during this period of time, or physicians were more reticent to prescribe OTCs for PPIs.

Fig. 2 – CCNC Program Percent of OTC Prescriptions Filled



■ PRACTICE & PROVIDER SUPPORTS

Working closely with DMA, CCNC is implementing several new pharmacy initiatives in 2007 to further improve the management programs of patients taking multiple medications. The critical component of all the pharmacy programs is the addition of a pharmacist or a Doctor of Pharmacology (PharmD) to the local networks. Based upon enrollment, each network receives funds to hire a part-time or full-time PharmD to assist with the education, coordination, roll-out, and oversight of all pharmacy benefit programs within the network. This position will also support the networks as they expand the pharmacy management programs to HealthChoice children and the Aged, Blind and Disabled population.

Beginning in 2007, CCNC will manage patients on six to eleven medications and help support DMA's Focused Risk Management Program (FORM) for patients with greater than 11 prescriptions. Education and relationship building will be important aspects to the success of managing patients on multiple medications. The role of the PharmD will be instrumental for establishing relationships with the retail pharmacists, community physicians, and the patient to improve communication and help resolve medication related issues. The PharmD will be helpful in educating providers and patients to help ensure appropriate and cost-effective medication use.

Another targeted approach will focus on the Aged, Blind and Disabled population. CCNC was charged by the N.C. Legislature to improve the management, cost-effectiveness, and coordination of local services for a population that consumes almost 70 percent of the Medicaid budget. Creating a "pharmacy home" for these patients will assist in containing costs and ensuring that appropriate medications are being prescribed according to the care plan. Using targeted interventions, the PharmD and case managers will work in concert to increase medication adherence, increase the number of Tier 1 or OTC prescriptions, and decrease the number of patients on regimens with known drug interactions. In addition, the pharmacist will be an integral part of an interdisciplinary team that can work with individuals with chronic disease to improve self-management skills.

FAST FACTS:

1. Prescription drugs account for the largest percentage of service dollars spent by Medicaid.
2. Switching half the PPI and NSA prescriptions to OTCs would yield approximately $50 million in savings.
3. Seventy-two percent (72%) of the patients involved in the nursing home pilot received a drug change recommendation.

Summary

Accounting for 20 percent of the total Medicaid expenditures in SFY 2005, spending on prescription drugs increased 12 percent over the last fiscal year and has risen 118 percent since SFY 2000 (Figure 1). As the prescription drug segment of the Medicaid budget continues to increase, CCNC routinely looks for ways to better manage the pharmacy costs of its enrollees. CCNC has found that assisting physicians in identifying cost-saving drugs through the PAL, managing populations on multiple medications, and creating partnerships to improve the coordination of care are successful methods that enhance therapeutic outcomes and improve the quality of health while providing cost-effective care.

Resources

- Prescription Advantage List – *www.communitycarenc.com*
- Current OTC medication list – *www.dhhs.state.nc.us/dma/mp/mpindex.htm*
- Focused Risk Management Program – *www.dhhs.state.nc.us/dma/bulletin/PharmacyBulletin0707.pdf*
- *A Pharmacy Management Intervention for Optimizing Drug Therapy for Nursing Home Patients.* **The American Journal of Geriatric Pharmacotherapy**; Vol2, Number 4, December 2004
- *Pharmacist Response to Alerts Generated From Medicaid Pharmacy Claims in a Long-term Care Setting: Results from the North Carolina Polypharmacy Initiative.* **Journal of Managed Care Pharmacy**; Vol. 11, Number 7, September 2005 Pages 575-583

Summary

Community Care
of North Carolina

2007

Community Care of North Carolina
Mail Service Center 2009 • Raleigh, NC 27699-2009
(919) 715-1453 www.communitycarenc.com

Summary

North Carolina is attempting to stop the rapid rise of health care costs in the Medicaid population while at the same time aiming to improve the quality of care and health outcomes. In states like North Carolina, the challenge in finding an innovative approach to address the quality and cost problem is much greater – it has a diffused population, with a significant percentage still living in rural areas; its medical services infrastructure remains dominated by small physician practices and loosely connected health organizations; and managed care penetration is low. To help address these challenges, North Carolina began building in 1998 regional community-based networks of providers – Community Care of North Carolina (CCNC) – that is statewide and provides the infrastructure to improve health care for all Medicaid beneficiaries.

CCNC has demonstrated success in participating practices/physicians in selecting and adopting evidence-based practice guidelines for asthma, diabetes, congestive heart failure, depression and chronic obstructive pulmonary disease. The networks have integrated targeted care management initiatives to help physicians manage and care for the most frail and costly patients. Case managers, hired locally by the networks, work closely with primary care physicians and patients/families to implement care and disease management interventions. CCNC produces and distributes reports to physicians and practices that highlight their effectiveness in meeting performance measures and goals and offers tools to improve outcomes. CCNC has demonstrated that if you engage those community providers who care for the patients and provide them with a system and support, community-based health is effective in improving quality of care and helping preserve limited health care resources.

The importance to North Carolina of having a statewide provider network in place cannot be overstated. Not only is the Community Care system achieving documented improvements in the quality, utilization and cost-effectiveness of care for Medicaid, it also has given North Carolina a community-based infrastructure that can be used to tackle a range of problems. By providing a structure for community providers to work together, by providing tools and supports for networks to design and develop programs, and by providing resources to implement programs, North Carolina has created a system that, if nurtured, can continue to grow and respond to state and local health care needs.

As data from the CCNC initiatives presented in the previous seven chapters demonstrate, the projects are all ongoing works in progress.

Two of these initiatives, asthma and diabetes, have had a longer implementation history than the others and there are more data points for comparing rates. For them we have longer trends showing that statewide implementation has been effective in providing not only useful data but also that the information given to the networks is used for specific improvements in the care of the patients afflicted with those conditions. Both the claims and the chart audit data have provided a wealth of information that helps CCNC to determine the effectiveness of these programs. CCNC plans to continue to monitor these initiatives to ensure quality and to maintain best health care practices among providers.

Other disease initiatives are in more developmental stages than either asthma or diabetes. For example, currently there is only baseline data for COPD. CCNC will follow up with the five pilot sites over the next year with another round of chart reviews and claims data to produce a longitudinal analysis. This analysis will help drive decisions and strategies in spreading and replicating the initiative statewide.

A similar situation is taking place with CHF except that the implementation of the treatment model was launched statewide instead of being piloted. All 14 networks are presently participating in this initiative and CCNC will monitor trends over the next two years. Using those trends, which are primarily based on claims data, CCNC will collaborate with the networks to improve CHF treatment protocols.

Two other initiatives, Chronic Care and Mental Health, are also still in their formative periods. Chronic Care is a very comprehensive component of CCNC as it will include a variety of Medicaid eligibility categories (e.g., aged, blind, and disabled) and which, by its nature, overlaps with many other diseases. This overlap results in a complex web of co-morbidities that make follow up more complex and challenging. Fortunately, CCNC is now working with the Centers for Medicare and Medicaid (CMS) to obtain a waiver to allow for a demonstration of how managed care improves efficiency of services and results in cost effectiveness for the Medicaid population that is also Medicare eligible. This population is called "dually eligible" because of their eligibility for both Medicaid and Medicare. The implementation of the waiver, referred to as the 646 waiver, will take a full three to five years to demonstrate its effectiveness and to show whether managed care results in significant savings among this higher risk population.

Mental Health also just launched its pilot study over the past two years and is still looking at the results from those four sites. Based on preliminary findings, CCNC has already proceeded to contract with 41 practices across the state to follow up on implementing co-location models during the next two years. These models are similar to the ones implemented in the pilot sites and even involve sites where reverse co-location (i.e., having a primary care provider present in behavioral health practices) will be tried for the first time. Results from the co-location grants will not be available until the end of 2009.

Last, the pharmacy initiative is distinct from the other six insofar as it does not involve a disease but rather monitors how medications are prescribed to the CCNC population. CCNC is highly committed to providing the most cost effective system to bring about beneficial drug use. CCNC has already given networks funds to hire pharmacists who work at the local level in an effort to accomplish the aforementioned goals. The results from their work will be available within the next year or so.

This summary outlines the complex and varied ways by which CCNC works with networks to provide the best possible care to more than 750,000 Medicaid patients. CCNC is undergoing a period of growth during which it will extend its health care model to new populations in need. These populations not only include a segment of the Medicare patients but also those in the North Carolina Child Health Insurance Programs (CHIP). This work is taking place during 2007 and should be completed by early 2008. It will bring an additional 110,000 children into the CCNC networks for health care. It is possible that, within two years, CCNC will be in charge of managing care for more than 1 million patients in North Carolina.

Future reports will continue to monitor the results of the multiple ways by which CCNC aims to accomplish its ultimate goal of improving health for the citizens of the state.

Summary