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North Carolina Community Care Networks Health Care Quality 646 Demonstration Performance Year One Financial Results

Final Report

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RTI INTERNATIONAL

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OVERVIEW OF NC-CCN HEALTH CARE QUALITY 646 DEMONSTRATION PERFORMANCE YEAR ONE RESULTS

This package contains information regarding NC-CCN's financial results for the first performance year of the Health Care Quality 646 Demonstration (January 1, 2010–December 31, 2010). The results presented include: (1) assignment methodology, (2) intervention group (IG) profile tables for performance year one as well as the corresponding base year, (3) comparison group (CG) profile tables for performance year one as well as the corresponding base year, and (4) performance payment results.

All IG calculations were determined using the list of physicians provided by NC-CCN. The list included National Provider Identifiers (NPIs) which were used to identify physicians and assigned beneficiaries.

Assignment Methodology

Intervention Group

There are two steps involved in assigning beneficiaries to the IG as specified in Section 2 of the Protocol.

These steps are shown in Tables 1 of the Beneficiary Profiles. The two steps are:

- Identify beneficiaries who meet the general eligibility criteria for the demonstration IG during the assignment period and during the demonstration period.
- Identify the total number participating physician organizations, defined as the sum of participating physician practices, FQHCs/RHCs, and combination RHCs and physician organizations.

The IG population consists of North Carolina residents who meet general eligibility criteria (defined in Section 2 of the Protocol) and had at least one qualifying evaluation and management (E&M) visit with a participating physician, regardless of the place of service ZIP code on that claim line item. In the first two years of the demonstration beneficiaries must be Medicaid eligible. The IG was identified using final action claims with dates of service falling within the start and end dates of the demonstration year and a paid-date within six months of the end of the demonstration year. The same list of providers was used to determine participating providers in the performance year and the corresponding base year and to assign beneficiaries to each year.

Comparison Group

Two similar steps were used to assign beneficiaries to the CG. They involve identifying beneficiaries residing in the comparison counties who met the general assignment criteria set forth in Section 2 of the Protocol during the assignment and demonstration periods and identifying qualifying beneficiaries with at least one qualifying E&M visit with a primary care provider (PCP). These steps are shown in Tables 1 of the Beneficiary Profiles. The two steps are:

- Identify beneficiaries in the comparison counties who meet the general eligibility criteria for the demonstration CG during the assignment period and during the demonstration period.

- From these qualifying beneficiaries, identify beneficiaries that received at least one qualifying treatment from a PCP who was not participating in NC-CCN.

Calculating Medicare Expenditures

To calculate total Medicare Part A/B expenditures for each beneficiary, the expenditures are summed from all of the beneficiary's claims at any Part A/B provider (Part D expenditures are not included). The expenditures are then annualized by dividing by the fraction of the year (fraction of 12 months) each beneficiary was enrolled in Medicare Parts A and B. All further analyses weight the annualized expenditures by this eligibility fraction. Annualization and weighting ensures that payments are adjusted for months of beneficiary eligibility, including new Medicare enrollees and decedents.

To prevent a small number of extremely costly beneficiaries from significantly affecting average expenditures, annualized expenditures are capped. Expenditures for covered services that are incurred by beneficiaries without end stage renal disease (ESRD) are capped at a value equal to the 99th percentile of the pooled sample (IG plus CG beneficiaries) claims distribution for beneficiaries without ESRD, rounded to the nearest thousand dollars. Expenditures for covered services that are incurred by beneficiaries with ESRD are capped at an annualized value equal to the 99th percentile of the national claims distribution for beneficiaries with ESRD, rounded to the nearest thousand dollars. Table 1 presents the expenditure caps for the base year and performance year 1.

Table 1
Base year and performance year 1 expenditure caps

Year	Group	Expenditure cap
Base Year	Non-ESRD	$118,000
Base Year	ESRD	$306,000
Performance Year 1	Non-ESRD	$121,000
Performance Year 1	ESRD	$308,000

SOURCE: RTI analysis of October 2008 through December 2010 100% Medicare Claims Files and Enrollment Datasets.

Computer Output: univ2009, univ2010, univby_BY_no_ESRD, univpy1_PY1_no_ESRD

Demographic Factor Calculation

A demographic factor is used to adjust expenditures for changes in demographic composition over time for the IG and CG in both the base year and performance year.

Demographic Adjusted PBPM Expenditures = (PBPM Expenditures) / (Demographic Factor)

The demographic factors are established each year based on age, sex, Medicaid eligibility and aged, disabled and ESRD Medicare entitlement status. To calculate the demographic factors, RTI used the 2007 5% national Medicare claims data to estimate an ordinary least squares regression with expenditures as the dependent variable and independent variables representing age/gender/Medicaid eligibility categories. Separate regressions were run for ESRD and non-ESRD beneficiaries and the regression coefficients were restricted to be non-decreasing within 0-64 and 65-95+ age ranges. The coefficients from these regressions were then divided by the pooled (ESRD and non-ESRD) total sample mean expenditures to generate age/gender/Medicaid eligibility demographic factors.

To calculate the weighted demographic factor used to adjust the expenditures when calculating savings, RTI multiplied each age/gender/Medicaid eligibility demographic factor by the percentage of beneficiaries that fell into the age/gender/Medicaid eligibility category and summed across categories. This is done separately for the IG and CG in both the base year and the performance year. The result was a demographic factor for each year for each group (4 in total) that reflects the relative expected cost associated with the demographic composition of the group in that year.

Minimum Required Savings Rate Calculation

The minimum required savings rate (MSR) is used in determining shared savings in each performance year. The MSR is based on the 95% confidence interval for the difference between actual expenditures for the IG and the expenditure target.

$$\text{Minimum Required Savings Rate} = 1.96 * CV \sqrt{2 * \left(\frac{1}{n_i} + \frac{1}{n_c}\right)}$$

where CV (coefficient of variation) is the standard deviation of base year expenditures for the pooled IG and CG sample divided by the base year mean expenditures for the pooled sample, n_i is the number of beneficiary-years assigned to the IG in the performance period, and n_c is the number of beneficiary-years assigned to the CG in the performance period. Table 2 shows the calculation of the MSR for the first performance year.

Table 2
Calculation of performance year 1 MSR

Index	Component	Group	Year	Value
[A]	Person Years IGPY1	Intervention Group	Performance Year 1	41,888.00
[B]	Person Years CGPY1	Comparison Group	Performance Year 1	89,732.75
[C]	Standard Deviation of Risk Adjusted Expenditures	Intervention Group and Comparison Group	Base Year	$16,704.43
[D]	Mean of Risk Adjusted Expenditures	Intervention Group and Comparison Group	Base Year	$9,248.51

Index	Component	Group	Year	Value
[E]	Coefficient of Variation (CV)	= [C]/[D]	—	1.81
[F]	MSR	$=1.96*[E]\sqrt{2*\left[\frac{1}{[A]}+\frac{1}{[B]}\right]}$	—	2.96%

NOTE: Numbers may not add exactly in any given column due to rounding error.

SOURCE: RTI International
Computer Output: nc30msr

Assigned Beneficiary Profile Tables

The purpose of the assigned beneficiary profile tables is to provide information about the characteristics and utilization patterns of IG beneficiaries. There is a set of tables for the IG in performance year one, as well as a set for the IG in the corresponding base year. The IG profile tables provide a broad range of information regarding NC-CCN's assigned beneficiaries. The tables present the results of the assignment process and statistics on office visits, hospital utilization, expenditures, demographics, Medicare and Medicaid eligibility, and geographic distribution. The IG beneficiary profile includes seven tables for both the base year and the first performance year denoted (BY) and (PY1), respectively.

- Table 1-1 shows the assignment and exclusion statistics. Assignment criteria are set forth in Section 2 of the Protocol.
- Table 1-2 shows the distribution of qualified office or outpatient E&M visits provided to assigned beneficiaries.
  - Note that this demonstration utilizes a one-touch E&M visit assignment rule.
- Table 1-3 shows the distribution of hospital discharges for NC-CCN assigned beneficiaries.

- Table 1-4 shows the distribution of capped annualized Medicare expenditures per NC-CCN assigned beneficiary.
  - Note that the table shows the caps for ESRD and non-ESRD beneficiaries separately.
- Table 1-5 presents the components of annualized Medicare expenditures per NC-CCN assigned beneficiary, which are not capped.
- Table 1-6 presents demographic and eligibility characteristics of the population, including Medicare and Medicaid eligibility.
- Table 1-7 shows the geographic distribution of the NC-CCN assigned beneficiaries by county.

Comparison Group Profile

The CG profile tables provide a broad range of information regarding NC-CCN's CG beneficiaries. The tables present the results of the Demonstration's assignment process and statistics on office visits, hospital utilization, expenditures, demographics, Medicare and Medicaid eligibility, and geographic distribution for the first performance year as well as corresponding base year. The comparison profile includes seven tables for both the base year and the first performance year denoted (BY) and (PY1) respectively. The CG profile tables provide the same information for the CG as the IG profiles do for the IG.

Performance Payment Results

The performance payment results table reports shareable savings from the first performance year of the demonstration. Table 3-1 provides results for PBPM expenditures, demographic factors, the standardized target and actual assigned beneficiary expenditures, shareable savings, performance payment not contingent on quality, performance payment contingent on quality performance and performance year one (PY1) earned performance payment (if any). In PY1, the performance payment not contingent on quality performance is 50% of the shared savings and the maximum performance payment contingent on quality performance is 50% of the shared savings.

The total performance payment earned by NC-CCN for PY1 can be found on line [AB] (total earned performance payment) of the performance payment table.

NC-CCN INTERVENTION GROUP PROFILE TABLES PERFORMANCE YEAR ONE

Table 1-1 (PY1)
NC-CCN beneficiary assignments and exclusions, and participating practices and physicians
Performance Year One

Beneficiaries, exclusions, practices and physicians	Count
I. Beneficiaries[1]	
1. All North Carolina beneficiaries[2]	1,627,436
2. Beneficiaries covered by Medicaid in the assignment period[3]	322,184
Exclusions (from line 2)—By criterion[4]	
Exclusions during assignment period (October 2009–September 2010)	
Not alive on January 1, 2010	5,329
At least one month of Part A-only or Part B-only coverage	3,773
At least one month of Medicare Advantage enrollment	51,470
Had coverage under employer-sponsored group health plan	1,770
Total exclusions during assignment period	61,659
Additional exclusions during performance year one (Calendar Year 2010)[5]	
At least one month of Part A-only or Part B-only coverage	149
At least one month of Medicare Advantage enrollment	700
Had coverage under employer-sponsored group health plan	36
Not covered by Medicaid	3,228
Total exclusions during the performance year	4,098
3. Total number of excluded beneficiaries	65,757
4. North Carolina beneficiaries eligible for assignment (line 2- line 3)	256,427
5. Beneficiaries with a qualifying patient visit with a participating physician at a participating practice[6,7]	42,629
6. Beneficiaries with a qualifying patient visit with a participating physician at a non-participating practice	1,869
7. Assigned Beneficiaries (line 5 + line 6)	44,498
II. Practices and physicians[8]	
1. Participating physician practices	194
2. Participating FQHCs/RHCs	32
3. Combination of RHCs and participating physician practices	8
4. Total participating practices (line 1+ line 2+ line 3)	234
5. Total practitioners provided by NC-CCN	932

NOTES:
[1] Performance year one financial reconciliation is performed on Outpatient and Part B Carrier Claims for the calendar year 2010. Per protocol §2.2, beneficiary assignment is performed on claims October 2009-September 2010.
[2] Present in Denominator File, Calendar Years 2009 and 2010.
[3] The assignment period is October 2009-September 2010.
[4] Exclusions are not mutually exclusive. A beneficiary may be excluded for more than one reason.
[5] Exclusions during the performance year ensure that beneficiaries meet the general eligibility requirements outlined in protocol §2.1.1 during the entire performance year, not only during the assignment period.
[6] Beneficiaries for Highgate Family Medicine Center, Durham Family Practice, Charles Drew Medical Center, Prospect Hill CHC, and Scott Medical Center (CHC) and beneficiaries with a qualifying patient visit with participating FQHCs/RHCs are selected regardless of location of practice.
[7] Beneficiaries with a qualifying patient visit with a participating physician both at a participating practice and at a non-participating practice are included in this count.
[8] Practices and Physicians as reported by NC-CCN.
COMPUTER OUTPUT: nc22tbl1_table1.out
SOURCE: RTI analysis of October 2009 through December 2010 100% Medicare Claims Files and Enrollment Datasets.

Table 1-2 (PY1)
Distribution of qualified office or outpatient E&M visits for NC-CCN assigned beneficiaries
Performance Year One[1,2]

Office or other outpatient E&M visits[3]	
Mean	9.19
Standard deviation	7.38
Standard error	0.035

Count of visits	Beneficiaries	Percentage
Total	44,498	100.0%
21+	3,216	7.2
16-20	3,586	8.1
11-15	7,528	16.9
7-10	10,396	23.4
4-6	10,705	24.1
3	3,628	8.2
2	3,241	7.3
1	2,198	4.9
0	—	0.0

NOTES:

[1] Qualifying E&M visits are listed in § 9.1 of the Protocol.

[2] Qualifying E&M visits are counted regardless of the performing physician.

[3] Visits to Federally Qualified Health Centers (FQHC) and to Rural Health Clinics (RHC) are counted as one E&M visit.

COMPUTER OUTPUT: nc22tbl3_table3_E&M_visit.out

SOURCE: RTI analysis of January 2010 through December 2010 100% Medicare Claims Files and Enrollment Datasets.

Table 1-3 (PY1)
Distribution of hospital discharges for NC-CCN assigned beneficiaries[1]
Performance Year One

Mean	0.61
Standard deviation	1.28
Standard error	0.006

Count of discharges	Beneficiaries	Percentage
Total	44,498	100.0
5+	901	2.0
4	778	1.7
3	1,384	3.1
2	3,183	7.2
1	7,458	16.8
0	30,794	69.2

NOTES:

[1]Refers to hospital discharges at any provider.

COMPUTER OUTPUT: nc22tbl4._discharges.out

SOURCE: RTI analysis of January 2010 through December 2010 100% Medicare Claims Files and Enrollment Datasets.

Table 1-4 (PY1)
Distribution of annualized Medicare expenditures[1,2,3] per NC-CCN assigned beneficiary
Performance Year One

Summary statistic	PBPY	PBPM
Mean[4]	$14,057	$1,171
Standard deviation[4]	$24,156	—
Standard error[4]	$118	—

Range	Beneficiaries	Percentage
Total	44,498	100.0%
$308,000	50	0.1
$121,001–307,999	189	0.4
$121,000	1,176	2.6
$85,000–120,999	876	2.0
$50,000–84,999	2,267	5.1
$25,000–49,999	4,196	9.4
$10,000–24,999	6,101	13.7
$5,000–9,999	6,006	13.5
$2,000–4,999	8,873	19.9
$500–1,999	10,374	23.3
$0–499 [5]	4,390	9.9

NOTES:

[1] Annualized Medicare expenditures per beneficiary are calculated by dividing actual by the fraction of the year the beneficiary is alive and are capped accordingly.
The expenditures for non-ESRD beneficiaries are capped at $121,000, the weighted 99th percentile of the 2010 claims distribution for beneficiaries without ESRD.
The expenditures for ESRD beneficiaries are capped at $308,000, the weighted 99th percentile of the 2010 national claims distribution for beneficiaries with ESRD.

[2] Expenditures have been rounded to the nearest dollar for presentation purposes. Performance payment calculations will use additional precision, i.e., expenditures will not be rounded to the nearest dollar.

[3] Inpatient pass through amounts (e.g., direct graduate medical education and organ acquisition costs) are not included in total annualized Medicare expenditures.

[4] Weighted by the eligibility fraction.

[5] Some assigned beneficiaries have positive allowed charges but zero expenditures, because of the Medicare Part B deductible.

COMPUTER OUTPUT: nc22tbl5._expend.out

SOURCE: RTI analysis of January 2010 through December 2010 100% Medicare Claims Files and Enrollment Datasets.

Table 1-5 (PY1)
Components of annualized Medicare expenditures [1,2,3] per NC-CCN assigned beneficiary
Performance Year One

Expenditure component	Mean	Standard deviation	Standard error	Percentage of total $	Percentage of beneficiaries with zero $ for component
Inpatient	5,865	19,716	96.3	39.1%	69.2%
Hospital Outpatient	2,450	6,658	32.5	16.3	13.7
Part B Physician/Supplier[4]	3,150	5,656	27.6	21.0	1.1
Skilled Nursing Facility	1,742	7,685	37.6	11.6	89.4
Home Health	715	2,640	12.9	4.8	85.8
Hospice	406	4,683	22.9	2.7	96.9
Durable Medical Equipment	663	3,041	14.9	4.4	50.1

NOTES:

[1] Annualized Medicare expenditures per beneficiary are calculated using eligibility fractions. Component expenditures are not capped as total expenditures are in Table 1-4.

[2] Expenditures have been rounded to the nearest dollar for presentation purposes. Performance calculations will use additional precision, i.e., expenditures will not be rounded to the nearest dollar.

[3] Inpatient pass through amounts (e.g., direct graduate medical education and kidney acquisition costs) are not included in components of annualized Medicare expenditures.

[4] An Assigned Beneficiary may have zero Part B Physician/Supplier payments if he or she has a qualifying visit, but is below the Part B deductible so that Medicare payments are zero.

COMPUTER OUTPUT: nc22tbl6._components.out

SOURCE: RTI analysis of January 2010 through December 2010 100% Medicare Claims Files and Enrollment Datasets.

Table 1-6 (PY1)
Demographic and eligibility characteristics of NC-CCN's assigned beneficiaries, Performance Year One

Population	Beneficiaries	Percent
Total assigned beneficiaries	44,498	100.0%
Beneficiary deaths	2,140	4.8
Beneficiaries survived	42,358	95.2
Medicare eligibility:		
Total	44,498	100.0
Aged	24,231	54.5
Disabled	19,247	43.3
ESRD	1,020	2.3
Original reason for entitlement among current aged[1]:		
Total	24,591	100.0
Originally disabled	6,259	25.5
Not originally disabled	18,332	74.5
Medicaid eligibility[2]:		
Total	44,498	100.0
Medicaid eligible at least one month	44,498	100.0
Not Medicaid eligible for any months	0.0	0.0
Hospice status:		
Total	44,498	100.0
Hospice	1,394	3.1
Non-Hospice	43,104	96.9
Gender:		
Total	44,498	100.0
Male	14,165	31.8
Female	30,333	68.2
Age:		
Total	44,498	100.0
Age < 65	19,907	44.7
Age 65–74	10,433	23.4
Age 75–84	8,673	19.5
Age 85 +	5,485	12.3

(continued)

Table 1-6 (PY1)
Demographic and eligibility characteristics of NC-CCN's assigned beneficiaries, Performance Year One (cont.)

Population	Beneficiaries	Percent
Race:		
Total	44,498	100.0
White	23,500	52.8
Black	19,211	43.2
Asian	616	1.4
Hispanic	523	1.2
North American Natives	261	0.6
Other	316	0.7
Unknown	71	0.2

NOTES:

[1] Original reason for Medicare entitlement among beneficiaries currently entitled to Medicare by age. Includes beneficiaries eligible by both age and ESRD.

[2] During first two performance years, all assigned beneficiaries are eligible for Medicaid.

COMPUTER OUTPUT: nc22tbL7_demogr.out

SOURCE: RTI analysis of January 2010 through December 2010 100% Medicare Claims Files and Enrollment Datasets.

Table 1-7 (PY1)
Distribution of NC-CCN assigned beneficiary residents by demo area counties
Performance Year One

County name	County code [1]	Beneficiaries	Percentage
Total	—	44,498	100.0%
Bertie	34070	1,329	3.0
Buncombe	34100	3,548	8.0
Cabarrus	34120	2,676	6.0
Chatham	34180	318	0.7
Chowan	34200	357	0.8
Edgecombe	34320	1,048	2.4
Gates	34360	200	0.4
Greene	34390	419	0.9
Hertford	34450	1,265	2.8
Hoke	34460	498	1.1
Lincoln	34540	1,019	2.3
Madison	34570	785	1.8
Mecklenburg	34590	7,517	16.9
Mitchell	34600	595	1.3
Montgomery	34610	440	1.0
Moore	34620	1,218	2.7
New Hanover	34640	2,285	5.1
Orange	34670	428	1.0
Pasquotank	34690	503	1.1
Pender	34700	636	1.4
Perquimans	34710	256	0.6
Pitt	34730	3,508	7.9
Sampson	34810	923	2.1
Stanly	34830	1,341	3.0
Union	34890	826	1.9
Yancey	34981	713	1.6
Other North Carolina Counties	—	9,847	22.1

NOTES:

[1] State and county codes used by the Social Security Administration (SSA)

COMPUTER OUTPUT: nc22tbl8_table8_demo_area.out

SOURCE: RTI analysis of January 2010 through December 2010 100% Medicare Claims Files and Enrollment Datasets.

NC-CCN INTERVENTION GROUP PROFILE TABLES BASE YEAR

Table 1-1 (BY)
NC-CCN beneficiary assignments and exclusions, and participating practices and physicians
Base Year

Beneficiaries, exclusions, practices and physicians	Count
I. Beneficiaries[1]	
1. All North Carolina beneficiaries[2]	1,584,002
2. Beneficiaries covered by Medicaid in the assignment period[3]	313,846
Exclusions (from line 2)—By criterion[4]	
Exclusions during assignment period (October 2008–September 2009)	
Not alive on January 1, 2009	5,409
At least one month of Part A-only or Part B-only coverage	4,147
At least one month of Medicare Advantage enrollment	48,519
Had coverage under employer-sponsored group health plan	1,899
Total exclusions during assignment period	59,255
Additional exclusions during base year (Calendar Year 2009)[5]	
At least one month of Part A-only or Part B-only coverage	141
At least one month of Medicare Advantage enrollment	704
Had coverage under employer-sponsored group health plan	33
Not covered by Medicaid	2,999
Total exclusions during the base year	3,852
3. Total number of excluded beneficiaries	63,107
4. North Carolina beneficiaries eligible for assignment (line 2- line 3)	250,739
5. Beneficiaries with a qualifying patient visit with a participating physician at a participating practice[6,7]	42,454
6. Beneficiaries with a qualifying patient visit with a participating physician at a non-participating practice	1,720
7. Assigned Beneficiaries (line 5 + line 6)	44,174
II. Practices and physicians[8]	
1. Participating physician practices	194
2. Participating FQHCs/RHCs	32
3. Combination of RHCs and participating physician practices	8
4. Total participating practices (line 1+ line 2+ line 3)	234
5. Total practitioners provided by NC-CCN	932

NOTES:
[1] The Base Year financial reconciliation is performed on Outpatient and Part B Carrier Claims for the calendar year 2009. Per protocol §2.2, beneficiary assignment is performed on claims October 2008-September 2009.
[2] Present in Denominator File, Calendar Years 2008 and 2009
[3] The assignment period is October 2008-September 2009.
[4] Exclusions are not mutually exclusive. A beneficiary may be excluded for more than one reason.
[5] Exclusions during the base year ensure that beneficiaries meet the general eligibility requirements outlined in protocol §2.1.1 during the entire base year, not only during the assignment period.
[6] Beneficiaries for Highgate Family Medicine Center, Durham Family Practice, Charles Drew Medical Center, Prospect Hill CHC, and Scott Medical Center (CHC) and beneficiaries with a qualifying patient visit with participating FQHCs/RHCs are selected regardless of location of practice.
[7] Beneficiaries with a qualifying patient visit with a participating physician both at a participating practice and at a non-participating practice are included in this count.
[8] Practices and Physicians as reported by NC-CCN.
COMPUTER OUTPUT: nc23tbl1_Table1.out
SOURCE: RTI analysis of October 2008 through December 2009 100% Medicare Claims Files and Enrollment Datasets.

Table 1-2 (BY)
Distribution of qualified office or outpatient E&M visits for NC-CCN assigned beneficiaries
Base Year[1,2]

Office Or Other Outpatient E&M Visits[3]	
Mean	10.45
Standard Deviation	8.32
Standard Error	0.040

Count of visits	Beneficiaries	Percentage
Total	44,174	100.0
21+	4,596	10.4
16-20	4,366	9.9
11-15	8,130	18.4
7-10	10,181	23.0
4-6	9,499	21.5
3	3,051	6.9
2	2,593	5.9
1	1,758	4.0
0	—	0.0

NOTES:

[1] Qualifying E&M visits are listed in § 9.1 of the Protocol.

[2] Qualifying E&M visits are counted regardless of the performing physician.

[3] Visits to Federally Qualified Health Centers (FQHC) and to Rural Health Clinics (RHC) are counted as one E&M visit.

COMPUTER OUTPUT: nc23tbl3_table3_E&M_visit.out

SOURCE: RTI analysis of January 2009 through December 2009 100% Medicare Claims Files and Enrollment Datasets.

Table 1-3 (BY)
Distribution of hospital discharges for NC-CCN assigned beneficiaries[1]
Base Year

Mean	0.60
Standard Deviation	1.25
Standard Error	0.006

Count of discharges	Beneficiaries	Percentage
Total	44,174	100.0
5+	868	2.0
4	697	1.6
3	1,440	3.3
2	3,123	7.1
1	7,366	16.7
0	30,680	69.5

NOTES:

[1]Refers to hospital discharges at any provider.

COMPUTER OUTPUT: nc23tbl4._discharges.out

SOURCE: RTI analysis of January 2009 through December 2009 100% Medicare Claims Files and Enrollment Datasets.

Table 1-4 (BY)
Distribution of annualized Medicare expenditures[1,2,3] per NC-CCN assigned beneficiary
Base Year

Summary statistic	PBPY	PBPM
Mean[4]	$13,519	$1,127
Standard deviation[4]	$23,622	—
Standard error[4]	$116	—

Range	Beneficiaries	Percentage
Total	44,174	100.0
$306,000	53	0.1
$118,001–305,999	187	0.4
$118,000	1,190	2.7
$85,000–117,999	813	1.8
$50,000–84,999	2,126	4.8
$25,000–49,999	3,986	9.0
$10,000–24,999	6,049	13.7
$5,000–9,999	5,725	13.0
$2,000–4,999	8,974	20.3
$500–1,999	10,496	23.8
$0–499 [5]	4,575	10.4

NOTES:

[1] Annualized Medicare expenditures per beneficiary are calculated by dividing actual by the fraction of the year the beneficiary is alive and are capped accordingly.
The expenditures for non-ESRD beneficiaries are capped at $118,000, the weighted 99th percentile of the 2009 claims distribution for beneficiaries without ESRD.
The expenditures for ESRD beneficiaries are capped at $306,000, the weighted 99th percentile of the 2009 national claims distribution for beneficiaries with ESRD.

[2] Expenditures have been rounded to the nearest dollar for presentation purposes. Performance payment calculations will use additional precision, i.e., expenditures will not be rounded to the nearest dollar.

[3] Inpatient pass through amounts (e.g., direct graduate medical education and organ acquisition costs) are not included in total annualized Medicare expenditures.

[4] Weighted by the eligibility fraction.

[5] Some assigned beneficiaries have positive allowed charges but zero expenditures, because of the Medicare Part B deductible.

COMPUTER OUTPUT: nc23tbl5._expend.out

SOURCE: RTI analysis of January 2009 through December 2009 100% Medicare Claims Files and Enrollment Datasets.

Table 1-5 (BY)
Components of annualized Medicare expenditures [1,2,3] per NC-CCN assigned beneficiary
Base Year

Expenditure component	Mean	Standard deviation	Standard error	Percentage of total $	Percentage of beneficiaries with zero $ for component
Inpatient	5,658	18,839	92.4	39.2	69.5%
Hospital Outpatient	2,269	6,437	31.6	15.7	13.9
Part B Physician/Supplier[4]	3,069	5,954	29.2	21.3	1.1
Skilled Nursing Facility	1,728	7,670	37.6	12.0	89.6
Home Health	671	2,704	13.3	4.7	86.4
Hospice	380	4,441	21.8	2.6	96.9
Durable Medical Equipment	660	2,806	13.8	4.6	50.7

NOTES:

[1] Annualized Medicare expenditures per beneficiary are calculated using eligibility fractions. Component expenditures are not capped as total expenditures are in Table 1-4.

[2] Expenditures have been rounded to the nearest dollar for presentation purposes. Performance calculations will use additional precision, i.e., expenditures will not be rounded to the nearest dollar.

[3] Inpatient pass through amounts (e.g., direct graduate medical education and kidney acquisition costs) are not included in components of annualized Medicare expenditures.

[4] An Assigned Beneficiary may have zero Part B Physician/Supplier payments if he or she has a qualifying visit, but is below the Part B deductible so that Medicare payments are zero.

COMPUTER OUTPUT: nc23tbl6._components.out

SOURCE: RTI analysis of January 2009 through December 2009 100% Medicare Claims Files and Enrollment Datasets.

Table 1-6 (BY)
Demographic and eligibility characteristics of NC-CCN's assigned beneficiaries, Base Year

Population	Beneficiaries	Percent
Total assigned beneficiaries	44,174	100.0%
Beneficiary deaths	2,299	5.2
Beneficiaries survived	41,875	94.8
Medicare eligibility:		
Total	44,174	100.0
Aged	24,315	55.0
Disabled	18,915	42.8
ESRD	944	2.1
Original reason for entitlement among current aged[1]:		
Total	24,649	100.0
Originally disabled	6,044	24.5
Not originally disabled	18,605	75.5
Medicaid eligibility[2]:		
Total	44,174	100.0
Medicaid eligible at least one month	44,174	100.0
Not Medicaid eligible for any months	0.0	0.0
Hospice status:		
Total	44,174	100.0
Hospice	1,378	3.1
Non-Hospice	42,796	96.9
Gender:		
Total	44,174	100.0
Male	13,989	31.7
Female	30,185	68.3
Age:		
Total	44,174	100.0
Age < 65	19,525	44.2
Age 65–74	10,250	23.2
Age 75–84	8,929	20.2
Age 85 +	5,470	12.4

(continued)

Table 1-6 (BY)
Demographic and eligibility characteristics of NC-CCN's assigned beneficiaries, Base Year (cont.)

Population	Beneficiaries	Percent
Race:		
Total	44,174	100.0
White	23,416	53.0
Black	19,044	43.1
Asian	578	1.3
Hispanic	487	1.1
North American Natives	252	0.6
Other	351	0.8
Unknown	46	0.1

NOTES:

[1] Original reason for Medicare entitlement among beneficiaries currently entitled to Medicare by age. Includes beneficiaries eligible by both age and ESRD.

[2] During first two performance years, all assigned beneficiaries are eligible for Medicaid.

COMPUTER OUTPUT: nc23tbL7_demogr.out

SOURCE: RTI analysis of January 2009 through December 2009 100% Medicare Claims Files and Enrollment Datasets.

Table 1-7 (BY)
Distribution of NC-CCN assigned beneficiary residents by demo area counties
Base Year

County name	County code [1]	Beneficiaries	Percentage
Total	—	44,174	100.0%
Bertie	34070	1,309	3.0
Buncombe	34100	2,958	6.7
Cabarrus	34120	2,658	6.0
Chatham	34180	357	0.8
Chowan	34200	492	1.1
Edgecombe	34320	942	2.1
Gates	34360	239	0.5
Greene	34390	446	1.0
Hertford	34450	1,196	2.7
Hoke	34460	503	1.1
Lincoln	34540	997	2.3
Madison	34570	803	1.8
Mecklenburg	34590	7,540	17.1
Mitchell	34600	625	1.4
Montgomery	34610	692	1.6
Moore	34620	1,297	2.9
New Hanover	34640	2,404	5.4
Orange	34670	445	1.0
Pasquotank	34690	484	1.1
Pender	34700	643	1.5
Perquimans	34710	276	0.6
Pitt	34730	3,636	8.2
Sampson	34810	934	2.1
Stanly	34830	1,263	2.9
Union	34890	801	1.8
Yancey	34981	752	1.7
Other North Carolina Counties	—	9,482	21.5

NOTES:

[1] State and county codes used by the Social Security Administration (SSA)

COMPUTER OUTPUT: nc23tbl8_table8_demo_area.out

SOURCE: RTI analysis of January 2009 through December 2009 100% Medicare Claims Files and Enrollment Datasets.

NC-CCN COMPARISON GROUP PROFILE TABLES PERFORMANCE YEAR ONE

Table 2-1 (PY1)
NC-CCN comparison group beneficiary assignments and exclusions, Performance Year One

Beneficiaries and exclusions	Beneficiaries Total	Beneficiaries Georgia Area	Beneficiaries Kentucky Area	Beneficiaries South Carolina Area	Beneficiaries Tennessee Area	Beneficiaries Virginia Area
Beneficiaries[1]						
1. Beneficiaries residing in all five comparison group state areas[2]	989,409	310,033	106,726	141,119	205,998	225,533
2. Beneficiaries covered by Medicaid in the assignment period[3]	164,803	55,911	20,014	23,728	41,268	23,882
Exclusions (from line 2)- By Criterion[4]						
Exclusions during assignment period (October 2009-September 2010)						
Not alive on January 1, 2010	2,254	738	235	367	518	396
At least one month of Part A-only or Part B-only coverage	2,236	723	222	257	555	479
At least one month of Medicare Advantage enrollment	35,970	14,332	2,172	5,807	10,835	2,824
Had coverage under employer-sponsored group health plan	1,271	411	135	188	342	195
Total exclusions during assignment period	41,318	16,037	2,746	6,546	12,141	3,848
Additional exclusions during performance year one (Calendar Year 2010)[5]						
At least one month of Part A-only or Part B-only coverage	88	36	19	9	12	12
At least one month of Medicare Advantage enrollment	1,026	479	15	118	388	26
Had coverage under employer-sponsored group health plan	19	4	2	1	7	5
Not covered by Medicaid	1,596	402	156	213	682	143
Total exclusions during the performance year	2,718	917	191	341	1,084	185
3. Total number of comparison group beneficiaries excluded from comparison group	44,036	16,954	2,937	6,887	13,225	4,033
4. Beneficiaries eligible for assignment to the comparison group (line 2- line 3)	120,767	38,957	17,077	16,841	28,043	19,849
5. Comparison group beneficiaries: Beneficiaries eligible for assignment who were provided at least one office or other Outpatient E&M service by a Primary Care Physician[6]	94,945	29,068	13,877	13,242	23,243	15,515

NOTES:

[1]Performance year one financial reconciliation is performed on Outpatient and Part B Carrier Claims for the calendar year 2010. Per protocol §2.3, beneficiary assignment is performed on claims October 2009-September 2010.

[2]Present in Denominator File, Calendar Years 2009 and 2010.

[3]The assignment period is October 2009-September 2010.

[4]Exclusions are not mutually exclusive. A beneficiary may be excluded for more than one reason.

[5]Exclusions during the performance year ensure that beneficiaries meet the general eligibility requirements outlined in protocol §2.1.1 during the entire performance year, not only during the assignment period.

[6]Primary Care Physicians include those in family medicine, general medicine, internal medicine, geriatric medicine, and physician assistant, nurse practitioner, or clinical nurse specialist who provides primary care services.

COMPUTER OUTPUT: nc24tbl1_Table1.out

SOURCE: RTI analysis of October 2009 through December 2010 100% Medicare Claims Files and Enrollment Datasets.

Table 2-2 (PY1)
Distribution of qualified office or outpatient E&M visits for NC-CCN comparison group beneficiaries
Performance Year One[1,2]

Office or other outpatient E&M visits[3]	
Mean	8.85
Standard deviation	7.28
Standard error	0.024

Count of visits	Beneficiaries	Percentage
Total	94,945	100.0%
21+	6,233	6.6
16-20	7,372	7.8
11-15	16,027	16.9
7-10	21,132	22.3
4-6	22,269	23.5
3	8,033	8.5
2	7,701	8.1
1	6,178	6.5
0	—	0.0

NOTES:

[1] Qualifying E&M visits are listed in § 9.1 of the Protocol.

[2] Qualifying E&M visits are counted regardless of the performing physician's specialty.

[3] Visits to Federally Qualified Health Centers (FQHC) and to Rural Health Clinics (RHC) are counted as one E&M visit.

COMPUTER OUTPUT: nc24tbl3_table3_E&M_visit.out

SOURCE: RTI analysis of January 2010 through December 2010 100% Medicare Claims Files and Enrollment Datasets.

Table 2-3 (PY1)
Distribution of hospital discharges for NC-CCN comparison group beneficiaries
Performance Year One

Mean	0.57
Standard Deviation	1.27
Standard Error	0.004

Count of discharges	Beneficiaries	Percentage
Total	94,945	100.0
5+	1,931	2.0
4	1,388	1.5
3	2,799	2.9
2	6,155	6.5
1	14,960	15.8
0	67,712	71.3

COMPUTER OUTPUT: nc24tbl4._discharges.out

SOURCE: RTI analysis of January 2010 through December 2010 100% Medicare Claims Files and Enrollment Datasets.

Table 2-4 (PY1)
Distribution of annualized Medicare expenditures[1,2,3] per NC-CCN comparison group beneficiary
Performance Year One

Summary statistic	PBPY	PBPM
Mean[4]	$13,012	$1,084
Standard deviation[4]	$23,808	—
Standard error[4]	$79	—

Range	Beneficiaries	Percentage
Total	94,945	100.0%
$308,000	141	0.1
$121,001–307,999	448	0.5
$121,000	2,292	2.4
$85,000–120,999	1,636	1.7
$50,000–84,999	4,236	4.5
$25,000–49,999	8,140	8.6
$10,000–24,999	12,555	13.2
$5,000–9,999	12,349	13.0
$2,000–4,999	18,862	19.9
$500–1,999	23,304	24.5
$0–499 [5]	10,982	11.6

NOTES:

[1] Annualized Medicare expenditures per beneficiary are calculated by dividing actual by the fraction of the year the beneficiary is alive and are capped accordingly.
The expenditures for non-ESRD beneficiaries are capped at $121,000, the weighted 99th percentile of the 2010 claims distribution for beneficiaries without ESRD.
The expenditures for ESRD beneficiaries are capped at $308,000, the weighted 99th percentile of the 2010 national claims distribution for beneficiaries with ESRD.

[2] Expenditures have been rounded to the nearest dollar for presentation purposes. Performance payment calculations will use additional precision, i.e., expenditures will not be rounded to the nearest dollar.

[3] Inpatient pass through amounts (e.g., direct graduate medical education and organ acquisition costs) are not included in total annualized Medicare expenditures.

[4] Weighted by the eligibility fraction.

[5] Some assigned beneficiaries have positive allowed charges but zero expenditures, because of the Medicare Part B deductible.

COMPUTER OUTPUT: nc24tbl5._expend.out

SOURCE: RTI analysis of January 2010 through December 2010 100% Medicare Claims Files and Enrollment Datasets.

Table 2-5 (PY1)
Components of annualized Medicare expenditures [1,2,3] per NC-CCN comparison group beneficiary
Performance Year One

Expenditure component	Mean	Standard deviation	Standard error	Percentage of total $	Percentage of beneficiaries with zero $ for component
Inpatient	5,343	19,138	63.9	38.4%	71.3%
Hospital Outpatient	2,197	6,699	22.4	15.8	16.4
Part B Physician/Supplier[4]	3,122	7,048	23.5	22.4	1.1
Skilled Nursing Facility	1,420	7,074	23.6	10.2	91.2
Home Health	793	3,243	10.8	5.7	87.5
Hospice	451	5,279	17.6	3.2	96.9
Durable Medical Equipment	595	2,504	8.4	4.3	55.9

NOTES:

[1] Annualized Medicare expenditures per beneficiary are calculated using eligibility fractions. Component expenditures are not capped as total expenditures are in Table 2-4.

[2] Expenditures have been rounded to the nearest dollar for presentation purposes. Performance calculations will use additional precision, i.e., expenditures will not be rounded to the nearest dollar.

[3] Inpatient pass through amounts (e.g., direct graduate medical education and kidney acquisition costs) are not included in components of annualized Medicare expenditures.

[4] An Assigned Beneficiary may have zero Part B Physician/Supplier payments if he or she has a qualifying visit, but is below the Part B deductible so that Medicare payments are zero.

COMPUTER OUTPUT: nc24tbl6._components.out

SOURCE: RTI analysis of January 2010 through December 2010 100% Medicare Claims Files and Enrollment Datasets.

Table 2-6 (PY1)
Demographic and eligibility characteristics of NC-CCN's comparison group beneficiaries, Performance Year One

Population	Beneficiaries	Percent
Total assigned beneficiaries	94,945	100.0%
Beneficiary deaths	4,394	4.6
Beneficiaries survived	90,551	95.4
Medicare eligibility:		
Total	94,945	100.0
Aged	50,941	53.7
Disabled	41,724	43.9
ESRD	2,280	2.4
Original reason for entitlement among current aged[1]:		
Total	51,727	100.0
Originally disabled	12,784	24.7
Not originally disabled	38,943	75.3
Medicaid eligibility[2]:		
Total	94,945	100.0
Medicaid eligible at least one month	94,945	100.0
Not Medicaid eligible for any months	0.0	0.0
Hospice status:		
Total	94,945	100.0
Hospice	2,997	3.2
Non-Hospice	91,948	96.8
Gender:		
Total	94,945	100.0
Male	31,871	33.6
Female	63,074	66.4
Age:		
Total	94,945	100.0
Age < 65	43,218	45.5
Age 65–74	23,105	24.3
Age 75–84	18,132	19.1
Age 85 +	10,490	11.0

(continued)

Table 2-6 (PY1)
Demographic and eligibility characteristics of NC-CCN's comparison group beneficiaries, Performance Year One (cont.)

Population	Beneficiaries	Percent
Race:		
Total	94,945	100.0
White	55,010	57.9
Black	34,594	36.4
Asian	3,347	3.5
Hispanic	940	1.0
North American Natives	99	0.1
Other	838	0.9
Unknown	117	0.1

NOTES:

[1] Original reason for Medicare entitlement among beneficiaries currently entitled to Medicare by age. Includes beneficiaries eligible by both age and ESRD.

[2] During first two performance years, all assigned beneficiaries are eligible for Medicaid.

COMPUTER OUTPUT: nc24tbL7_demogr.out

SOURCE: RTI analysis of January 2010 through December 2010 100% Medicare Claims Files and Enrollment Datasets.

Table 2-7 (PY1)
Distribution of NC-CCN comparison group beneficiaries by county of residence
Performance Year One

County name	County code [1]	Beneficiaries	Percentage
Total	—	94,945	100.0%
Georgia Area (total)	—	29,068	30.6
Baker	11020	63	0.1
Catoosa	11200	838	0.9
Chatham	11220	3,631	3.8
Clarke	11260	1,795	1.9
Clay	11270	75	0.1
Columbia	11310	746	0.8
DeKalb	11370	6,607	7.0
Fulton	11470	8,858	9.3
Habersham	11540	966	1.0
Hancock	11560	288	0.3
Harris	11580	378	0.4
Houston	11600	2,004	2.1
Lamar	11651	346	0.4
Laurens	11660	1,496	1.6
Quitman	11833	41	0.0
Taliaferro	11881	64	0.1
Washington	11950	519	0.5
Wilkes	11972	353	0.4
Kentucky Area (total)	—	13,877	14.6
Bath	18050	449	0.5
Butler	18150	425	0.4
Carlisle	18190	222	0.2
Clark	18240	804	0.8
Fayette	18330	3,737	3.9
Fleming	18340	604	0.6
Harrison	18480	493	0.5
Henderson	18500	1,064	1.1
Hickman	18511	183	0.2
Jessamine	18560	784	0.8
Lee	18640	464	0.5
Mason	18800	595	0.6
Montgomery	18860	796	0.8

(continued)

Table 2-7 (PY1)
Distribution of NC-CCN comparison group beneficiaries by county of residence
Performance Year One (cont)

County name	County code [1]	Beneficiaries	Percentage
Kentucky Area (continued)			
Morgan	18861	632	0.7
Owsley	18931	431	0.5
Robertson	18973	68	0.1
Rowan	18975	814	0.9
Russell	18976	1,031	1.1
Woodford	18992	281	0.3
South Carolina Area (total)	—	13,242	13.9
Abbeville	42000	558	0.6
Allendale	42020	274	0.3
Barnwell	42050	701	0.7
Beaufort	42060	1,225	1.3
Edgefield	42180	447	0.5
Greenwood	42230	1,563	1.6
Jasper	42260	401	0.4
Lee	42300	839	0.9
Marlboro	42340	1,452	1.5
Newberry	42350	867	0.9
Richland	42390	4,502	4.7
Saluda	42400	413	0.4
Tennessee Area (total)	—	23,243	24.5
Anderson	44000	1,631	1.7
Carroll	44080	1,303	1.4
Dyer	44220	1,632	1.7
Hamilton	44320	6,546	6.9
Henderson	44380	1,218	1.3
Knox	44460	6,370	6.7
McNairy	44540	1,648	1.7
Moore	44630	90	0.1
Putnam	44700	2,805	3.0

(continued)

Table 2-7 (PY1)
Distribution of NC-CCN comparison group beneficiaries by county of residence
Performance Year One (cont)

County name	County code [1]	Beneficiaries	Percentage
Virginia Area (total)	—	15,515	16.3
Accomack	49000	1,126	1.2
Albemarle	49010	628	0.7
Appomattox	49050	336	0.4
Botetourt	49110	358	0.4
Brunswick	49120	652	0.7
Fairfax	49290	5,845	6.2
Floyd	49310	322	0.3
Franklin	49330	886	0.9
Goochland	49370	189	0.2
Highland	49450	53	0.1
James City	49470	169	0.2
Lunenburg	49550	356	0.4
Northumberland	49660	301	0.3
Nottoway	49670	533	0.6
Orange	49680	663	0.7
Prince Edward	49730	670	0.7
Prince William	49750	1,473	1.6
Roanoke	49800	377	0.4
Surry	49900	121	0.1
York	49981	457	0.5

NOTES:

[1] State and county codes used by the Social Security Administration (SSA)

COMPUTER OUTPUT: nc24tbl8_table8_demo_area.out

SOURCE: RTI analysis of January 2010 through December 2010 100% Medicare Claims Files and Enrollment Datasets.

NC-CCN COMPARISON GROUP PROFILE TABLES BASE YEAR

Table 2-1 (BY)
NC-CCN comparison group beneficiary assignments and exclusions, Base Year

Beneficiaries and exclusions	Beneficiaries					
	Total	Georgia Area	Kentucky Area	South Carolina Area	Tennessee Area	Virginia Area
Beneficiaries[1]						
1. Beneficiaries residing in all five comparison group state areas[2]	959,964	300,196	104,207	136,503	201,697	217,361
2. Beneficiaries covered by Medicaid in the assignment period[3]	161,276	52,314	19,620	23,101	43,207	23,034
Exclusions (from line 2)- By Criterion[4]						
Exclusions during assignment period (October 2008-September 2009)						
Not alive on January 1, 2009	2,440	818	264	396	592	370
At least one month of Part A-only or Part B-only coverage	2,263	762	183	268	521	529
At least one month of Medicare Advantage enrollment	32,209	12,351	2,037	5,362	9,976	2,483
Had coverage under employer-sponsored group health plan	1,477	459	149	188	485	196
Total exclusions during assignment period	37,972	14,204	2,629	6,138	11,452	3,549
Additional exclusions during base year (Calendar Year 2009)[5]						
At least one month of Part A-only or Part B-only coverage	150	48	19	13	61	9
At least one month of Medicare Advantage enrollment	783	192	24	81	469	17
Had coverage under employer-sponsored group health plan	20	4	3	1	6	6
Not covered by Medicaid	1,490	511	159	316	210	294
Total exclusions during the base year	2,429	749	202	410	745	323
3. Total number of comparison group beneficiaries excluded from comparison group	40,401	14,953	2,831	6,548	12,197	3,872
4. Beneficiaries eligible for assignment to the comparison group (line 2- line 3)	120,875	37,361	16,789	16,553	31,010	19,162
5. Comparison group beneficiaries: Beneficiaries eligible for assignment who were provided at least one office or other Outpatient E&M service by a Primary Care Physician[6]	97,354	28,204	13,936	13,568	25,985	15,661

NOTES:

[1]Performance year one financial reconciliation is performed on Outpatient and Part B Carrier Claims for the calendar year 2009. Per protocol §2.3, beneficiary assignment is performed on claims October 2008-September 2009.

[2]Present in Denominator File, Calendar Years 2008 and 2009.

[3]The assignment period is October 2008-September 2009.

[4]Exclusions are not mutually exclusive. A beneficiary may be excluded for more than one reason.

[5]Exclusions during the performance year ensure that beneficiaries meet the general eligibility requirements outlined in protocol §2.1.1 during the entire performance year, not only during the assignment period.

[6]Primary Care Physicians include those in family medicine, general medicine, internal medicine, geriatric medicine, and physician assistant, nurse practitioner, or clinical nurse specialist who provides primary care services.

COMPUTER OUTPUT: nc25tbl1_Table1.out

SOURCE: RTI analysis of October 2008 through December 2009 100% Medicare Claims Files and Enrollment Datasets.

Table 2-2 (BY)
Distribution of qualified office or outpatient E&M visits for NC-CCN comparison group beneficiaries
Base Year[1,2]

Office or other outpatient E&M visits[3]	
Mean	9.91
Standard deviation	8.14
Standard error	0.026

Count of visits	Beneficiaries	Percentage
Total	97,354	100.0%
21+	8,722	9.0
16-20	8,932	9.2
11-15	18,012	18.5
7-10	21,761	22.4
4-6	21,485	22.1
3	7,170	7.4
2	6,542	6.7
1	4,730	4.9
0	—	0.0

NOTES:

[1] Qualifying E&M visits are listed in § 9.1 of the Protocol.

[2] Qualifying E&M visits are counted regardless of the performing physician's specialty.

[3] Visits to Federally Qualified Health Centers (FQHC) and to Rural Health Clinics (RHC) are counted as one E&M visit.

COMPUTER OUTPUT: nc25tbl3_table3_E&M_visit.out

SOURCE: RTI analysis of January 2009 through December 2009 100% Medicare Claims Files and Enrollment Datasets.

Table 2-3 (BY)
Distribution of hospital discharges for NC-CCN comparison group beneficiaries
Base Year

Mean	0.57
Standard deviation	1.27
Standard error	0.004

Count of discharges	Beneficiaries	Percentage
Total	97,354	100.0
5+	1,959	2.0
4	1,546	1.6
3	2,948	3.0
2	6,311	6.5
1	15,311	15.7
0	69,279	71.2

COMPUTER OUTPUT: nc25tbl4._discharges.out

SOURCE: RTI analysis of January 2009 through December 2009 100% Medicare Claims Files and Enrollment Datasets.

Table 2-4 (BY)
Distribution of annualized Medicare expenditures[1,2,3] per NC-CCN comparison group beneficiary
Base Year

Summary statistic	PBPY	PBPM
Mean[4]	$12,574	$1,048
Standard deviation[4]	$23,063	—
Standard error[4]	$76	—

Range	Beneficiaries	Percentage
Total	97,354	100.0%
$306,000	151	0.2
$118,001–305,999	410	0.4
$118,000	2,443	2.5
$85,000–117,999	1,542	1.6
$50,000–84,999	4,283	4.4
$25,000–49,999	8,167	8.4
$10,000–24,999	12,731	13.1
$5,000–9,999	12,485	12.8
$2,000–4,999	19,355	19.9
$500–1,999	23,791	24.4
$0–499 [5]	11,996	12.3

NOTES:

[1] Annualized Medicare expenditures per beneficiary are calculated by dividing actual by the fraction of the year the beneficiary is alive and are capped accordingly.
The expenditures for non-ESRD beneficiaries are capped at $118,000, the weighted 99th percentile of the 2009 claims distribution for beneficiaries without ESRD.
The expenditures for ESRD beneficiaries are capped at $306,000, the weighted 99th percentile of the 2009 national claims distribution for beneficiaries with ESRD.

[2] Expenditures have been rounded to the nearest dollar for presentation purposes. Performance payment calculations will use additional precision, i.e., expenditures will not be rounded to the nearest dollar.

[3] Inpatient pass through amounts (e.g., direct graduate medical education and organ acquisition costs) are not included in total annualized Medicare expenditures.

[4] Weighted by the eligibility fraction.

[5] Some assigned beneficiaries have positive allowed charges but zero expenditures, because of the Medicare Part B deductible.

COMPUTER OUTPUT: nc25tbl5._expend.out

SOURCE: RTI analysis of January 2009 through December 2009 100% Medicare Claims Files and Enrollment Datasets.

Table 2-5 (BY)
Components of annualized Medicare expenditures [1,2,3] per NC-CCN comparison group beneficiary
Base Year

Expenditure component	Mean	Standard deviation	Standard error	Percentage of total $	Percentage of beneficiaries with zero $ for component
Inpatient	5,315	20,290	66.9	39.2%	71.2%
Hospital Outpatient	2,051	6,209	20.5	15.1	16.3
Part B Physician/Supplier[4]	3,006	6,587	21.7	22.2	1.2
Skilled Nursing Facility	1,370	7,160	23.6	10.1	91.4
Home Health	747	3,174	10.5	5.5	88.0
Hospice	445	5,325	17.6	3.3	96.9
Durable Medical Equipment	613	2,153	7.1	4.5	55.2

NOTES:

[1] Annualized Medicare expenditures per beneficiary are calculated using eligibility fractions. Component expenditures are not capped as total expenditures are in Table 2-4.

[2] Expenditures have been rounded to the nearest dollar for presentation purposes. Performance calculations will use additional precision, i.e., expenditures will not be rounded to the nearest dollar.

[3] Inpatient pass through amounts (e.g., direct graduate medical education and kidney acquisition costs) are not included in components of annualized Medicare expenditures.

[4] An Assigned Beneficiary may have zero Part B Physician/Supplier payments if he or she has a qualifying visit, but is below the Part B deductible so that Medicare payments are zero.

COMPUTER OUTPUT: nc25tbl6._components.out

SOURCE: RTI analysis of January 2009 through December 2009 100% Medicare Claims Files and Enrollment Datasets.

Table 2-6 (BY)
Demographic and eligibility characteristics of NC-CCN's comparison group beneficiaries, Base Year

Population	Beneficiaries	Percent
Total assigned beneficiaries	97,354	100.0%
Beneficiary deaths	4,725	4.9
Beneficiaries survived	92,629	95.1
Medicare eligibility:		
Total	97,354	100.0
Aged	52,192	53.6
Disabled	43,012	44.2
ESRD	2,150	2.2
Original reason for entitlement among current aged[1]:		
Total	52,969	100.0
Originally disabled	13,030	24.6
Not originally disabled	39,939	75.4
Medicaid eligibility[2]:		
Total	97,354	100.0
Medicaid eligible at least one month	97,354	100.0
Not Medicaid eligible for any months	0.0	0.0
Hospice status:		
Total	97,354	100.0
Hospice	2,999	3.1
Non-Hospice	94,355	96.9
Gender:		
Total	97,354	100.0
Male	32,732	33.6
Female	64,622	66.4
Age:		
Total	97,354	100.0
Age < 65	44,385	45.6
Age 65–74	23,650	24.3
Age 75–84	18,678	19.2
Age 85 +	10,641	10.9

(continued)

Table 2-6 (BY)
Demographic and eligibility characteristics of NC-CCN's comparison group beneficiaries, Base Year (cont.)

Population	Beneficiaries	Percent
Race:		
Total	97,354	100.0
White	57,443	59.0
Black	34,955	35.9
Asian	3,090	3.2
Hispanic	834	0.9
North American Natives	97	0.1
Other	846	0.9
Unknown	89	0.1

NOTES:

[1] Original reason for Medicare entitlement among beneficiaries currently entitled to Medicare by age. Includes beneficiaries eligible by both age and ESRD.

[2] During first two performance years, all assigned beneficiaries are eligible for Medicaid.

COMPUTER OUTPUT: nc25tbL7_demogr.out

SOURCE: RTI analysis of January 2009 through December 2009 100% Medicare Claims Files and Enrollment Datasets.

Table 2-7 (BY)
Distribution of NC-CCN comparison group beneficiaries by county of residence
Base Year

County name	County code [1]	Beneficiaries	Percentage
Total	—	97,354	100.0%
Georgia Area (total)	—	28,204	29.0
Baker	11020	93	0.1
Catoosa	11200	854	0.9
Chatham	11220	3,656	3.8
Clarke	11260	1,660	1.7
Clay	11270	100	0.1
Columbia	11310	762	0.8
DeKalb	11370	6,158	6.3
Fulton	11470	8,395	8.6
Habersham	11540	961	1.0
Hancock	11560	309	0.3
Harris	11580	361	0.4
Houston	11600	1,902	2.0
Lamar	11651	344	0.4
Laurens	11660	1,556	1.6
Quitman	11833	38	0.0
Taliaferro	11881	73	0.1
Washington	11950	577	0.6
Wilkes	11972	405	0.4
Kentucky Area (total)	—	13,936	14.3
Bath	18050	472	0.5
Butler	18150	425	0.4
Carlisle	18190	215	0.2
Clark	18240	819	0.8
Fayette	18330	3,609	3.7
Fleming	18340	619	0.6
Harrison	18480	511	0.5
Henderson	18500	1,044	1.1
Hickman	18511	190	0.2
Jessamine	18560	747	0.8
Lee	18640	475	0.5
Mason	18800	621	0.6
Montgomery	18860	779	0.8

(continued)

Table 2-7 (BY)
Distribution of NC-CCN comparison group beneficiaries by county of residence
Base Year (cont)

County name	County code [1]	Beneficiaries	Percentage
Kentucky Area (continued)			
Morgan	18861	669	0.7
Owsley	18931	465	0.5
Robertson	18973	78	0.1
Rowan	18975	820	0.8
Russell	18976	1,088	1.1
Woodford	18992	290	0.3
South Carolina Area (total)	—	13,568	13.9
Abbeville	42000	575	0.6
Allendale	42020	280	0.3
Barnwell	42050	740	0.8
Beaufort	42060	1,248	1.3
Edgefield	42180	482	0.5
Greenwood	42230	1,538	1.6
Jasper	42260	435	0.4
Lee	42300	972	1.0
Marlboro	42340	1,584	1.6
Newberry	42350	892	0.9
Richland	42390	4,414	4.5
Saluda	42400	408	0.4
Tennessee Area (total)	—	25,985	26.7
Anderson	44000	1,746	1.8
Carroll	44080	1,441	1.5
Dyer	44220	1,902	2.0
Hamilton	44320	7,242	7.4
Henderson	44380	1,379	1.4
Knox	44460	7,251	7.4
McNairy	44540	1,903	2.0
Moore	44630	107	0.1
Putnam	44700	3,014	3.1

(continued)

Table 2-7 (BY)
Distribution of NC-CCN comparison group beneficiaries by county of residence
Base Year (cont)

County name	County code [1]	Beneficiaries	Percentage
Virginia Area (total)	—	15,661	16.1
Accomack	49000	1,153	1.2
Albemarle	49010	682	0.7
Appomattox	49050	363	0.4
Botetourt	49110	369	0.4
Brunswick	49120	663	0.7
Fairfax	49290	5,577	5.7
Floyd	49310	326	0.3
Franklin	49330	1,053	1.1
Goochland	49370	200	0.2
Highland	49450	66	0.1
James City	49470	173	0.2
Lunenburg	49550	391	0.4
Northumberland	49660	297	0.3
Nottoway	49670	566	0.6
Orange	49680	715	0.7
Prince Edward	49730	662	0.7
Prince William	49750	1,394	1.4
Roanoke	49800	390	0.4
Surry	49900	121	0.1
York	49981	500	0.5

NOTES:

[1] State and county codes used by the Social Security Administration (SSA)

COMPUTER OUTPUT: nc25tbl8_table8_demo_area.out

SOURCE: RTI analysis of January 2009 through December 2009 100% Medicare Claims Files and Enrollment Datasets.

NC-CCN PERFORMANCE PAYMENT RESULTS PERFORMANCE YEAR ONE

Table 3-1
Health Care Quality Demonstration performance payment results
NC-CCN, Performance Year One

Index	Component	Base year	Performance year one
Intervention Group (IG) Beneficiaries			
[A]	PBPM Expenditures	$1,126.60	$1,171.44
[B]	Demographic Factor	1.39471	1.40278
[C]	Standardized PBPM Expenditures	$807.77	$835.08
[D]	Number of Beneficiary Months	498,800	502,656
Comparison Group (CG) Beneficiaries			
[E]	PBPM Expenditures	$1,047.84	$1,084.31
[F]	Demographic Factor	1.38981	1.39555
[G]	Standardized PBPM Expenditures	$753.95	$776.98
[H]	Number of Beneficiary Months	1,102,186	1,076,793
Performance Payment Results			
[I]	Standardized Expenditure Ratio	1.071	—
[J]	Standardized Target	—	$832.44
[K]	PBPM Standardized Actual Expenditures	—	$835.08
[L]	Beneficiary Month Weight	—	1
[M]	Combined Standardized Target	—	$832.44
[N]	Combined Actual Expenditures	—	$835.08
[O]	Gross Savings (Target Minus Actual Expenditures)	—	-$2.64
[P]	Minimum Savings Requirement Percentage	—	2.96%
[Q]	Minimum Savings Requirement	—	$24.66
[R]	Net Savings	—	-$27.30
[S]	Net Savings Cap	—	—
[T]	Gross Savings Cap	—	—
[U]	Target Cap	—	—
[V]	Shared Savings	—	$0.00
[W]	Performance Payment Not Contingent on Quality Performance	—	$0.00
[X]	Maximum Performance Payment for Quality	—	$0.00
[Y]	Percentage of Quality Targets Met	—	77.78%
[Z]	Performance Payment for Quality	—	$0.00
[AA]	Earned Performance Payment (PBPM)	—	$0.00
[AB]	Total Earned Performance Payment	—	$0.00
[AC]	Medicare Savings Before Award	—	—
[AD]	Medicare Savings After Award	—	—

NOTES:
1 Statistics presented in this table are rounded for presentation purposes. Performance payment calculations use additional precision.
2 All dollar values with the exception of the Medicare Savings [AC] and [AD] are per beneficiary per month (PBPM) values.
3 Performance payment caps are not shown in [S], [T], and [U] because Net Savings [R] were negative.

Intervention Group (IG) Beneficiaries

[A] RTI calculations with BY, PY1 Medicare claims and enrollment data for beneficiaries assigned to the intervention group in panel 1 and their baseline.

[B] Demographic factor calculated by RTI.
[C] Expenditures divided by Demographic Factor. [A] / [B].
[D] Number of Beneficiaries Assigned to the Intervention Group in Panel 1 in Baseline period and Performance period.

Comparison Group (CG) Beneficiaries

[E] RTI calculations with BY, PY1 Medicare claims and enrollment data for beneficiaries assigned to comparison group in panel 1 and baseline.
[F] Demographic factor calculated by RTI.
[G] Expenditures divided by Demographic Factor. [E] / [F].
[H] Number of Beneficiaries Assigned to the Comparison Group in Panel 1 in Baseline period and Performance period.

Performance Payment Results

[I] The ratio of Standardized Intervention Group Expenditures in Baseline Period over Standardized Comparison Group Expenditures in Baseline Period [C for Baseline]/[G for Baseline] .
[J] The product of the Standardized Expenditure Ratio and Standardized Expenditures of the Comparison Group in the performance period [I] x [G in Performance Period]
[K] Expenditures divided by Demographic Factor. [A] / [B].
[L] For Panel 1: the number of beneficiary months in Panel 1 for PY2 divided by the sum of the number of beneficiary months in Panel 1 and Panel 2 for PY2. For Panel 2: the number of beneficiary months in Panel 2 for PY2 divided by the sum of the number of beneficiary months in Panel 1 and Panel 2 for PY2: [D PY2 Panel 1]/{[D PY2 Panel 1]+[D PY2 Panel 2]}; [D PY2 Panel 2]/{[D PY2 Panel 1]+[D PY2 Panel 2]}.
[M] The sum of [J for Panel 1] multiplied by [L for Panel 1] and [J for Panel 2] multiplied by [L for Panel 2].
[N] The sum of [J for Panel 1] multiplied by [C for Panel 1] and [J for Panel 2] multiplied by [C for Panel 2].
[O] Target Minus Actual Expenditures, which is equal to Gross Savings [M] - [N].
[P] Minimum savings requirement percentage is based on the 95% confidence interval for the difference between actual expenditures for the intervention group and the expenditure target.
[Q] The product of the Minimum Savings Requirement Percentage and Target Expenditures [M] x [P].
[R] The difference between gross savings and the minimum savings requirement [O] - [Q].
[S] Equal to 80% of net savings. 0.80 x [R].
[T] Equal to 50% of gross savings. 0.50 x [O].
[U] Equal to 8% of Target expenditures 0.08x [M].
[V] If Net Savings [R] are positive the lesser of the gross savings cap, net savings cap, and target cap (Lesser of [S], [T], and [U]). If Net Savings [R] are negative 0.
[W] Equal to 50% of shared savings in PY1 [V] x 0.50.
[X] Equal to 50% of shared savings in PY1 [V] x 0.50.
[Y] Calculated based on quality performance.
[Z] Product of the percentage of quality targets met and the maximum performance payment for quality [Y] x [X].
[AA] Sum of performance payment for efficiency and performance payment for quality [W] + [Z].
[AB] Equal to total earned performance payment (PBPM) multiplied by the number of beneficiary-months incurred by beneficiaries assigned to IG during the performance period. [AA]x[D for Combined Panels].
[AC] Equal to PBPM gross savings multiplied by the number of beneficiary-months incurred by beneficiaries assigned to IG during the performance period. [O]x[D for Combined Panels].
[AD] Equal to Medicare savings before award minus the award amount [AC]-[AB].

COMPUTER OUTPUT: nc31svn_savings.out

SOURCE: RTI analysis of October 2008 through December 2010 100% Medicare Claims Files and Enrollment Dataset sets.