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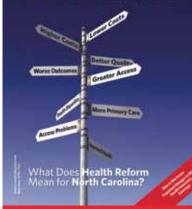
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The Effect of Patient Age on Perceived Resuscitation Outcomes by Practitioners

John E. Snyder, MS, MD, FACP; A. Lukas Loschner, MD; Hayden O. Kepley, PhD

Abstract

Background: When health care practitioners assist patients with decisions about advance directives, the risks and benefits of resuscitation options are often discussed. Whether practitioners have accurate perceptions about in-hospital resuscitation success rates is not known, nor is the effect of patient age on these perceptions. Age on its own has not been definitively associated with decreased inpatient survival after resuscitation. The goal of this study was to compare perceived resuscitation success rates with the actual observed rates at our hospital and to assess the effect of patient age on the perceived rates.

Methods: A survey-based observational study of on-duty hospital-based faculty, internal medicine resident physicians, and critical care nurses was performed over a week-long recruitment period to estimate their perception of in-hospital resuscitation success rates for patients of different ages. The survey response rate was 100%.

Results: Patient survival to hospital discharge following in-hospital resuscitation during a three-year period at New Hanover Regional Medical Center was 29.22% for patients < 70 years old and 20.13% for patients \geq 70. The perceived in-hospital resuscitation success rates were 38.76% for patients < 70 and 21.24% for patients \geq 70. This corresponds to a statistically significant overestimation of resuscitation success rates for patients < 70 years old (p < 0.001), although predictions were fairly accurate for patients \geq 70. When posed with one of two clinical scenarios where the only different variable was patient age, participants were statistically more likely to predict success for the younger patient. Subgroup analysis showed general agreement in the estimates between the three major types of practitioners, and factors such as length of experience in their current position and time since their last Advanced Cardiac Life Support (ACLS) recertification course did not have a significant impact on these perceptions.

Conclusions: Practitioners may overestimate resuscitation success rates in patients younger than 70. Disseminating information about ACLS success rates to clinicians, and what factors affect or do not affect these rates, seems essential.

Keywords: resuscitation; survival; critical care; code status

ospital-based health care practitioners often have to inform patients and their families about prognosis and the risks and benefits associated with procedures and other interventions. Due to the high acuity of illness in hospitalized patients, information about the likelihood of survival from providing cardiopulmonary resuscitation to a patient during unanticipated arrest may be discussed by practitioners to guide patients and their families through decisions about which treatments are ultimately desired (i.e., determining "code status"). This is particularly true when the patient has not previously considered such choices or completed a living will or other advance directives paperwork. Decisions made by patients and their families

about code status are complex and often based on more than physician-provided information, with personal or religious beliefs also playing an important role.¹ Data presented by the health care practitioner, particularly when that practitioner believes that resuscitation efforts may be futile, can also play an important role in the choices made.² In addition, it has been suggested that overly optimistic views of success rates may lead to futile resuscitation attempts or may give families a false sense of optimism.³ Whether discussions by the practitioner about code status are based on accurate outcomes evidence is unclear.

Previous studies have examined the resuscitation outcome beliefs of multidisciplinary residents and attendings

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at large, urban, university-based medical centers, some of which included medical students.³⁻⁵ These studies suggest that such practitioner groups are generally not accurate at predicting survival after a cardiopulmonary arrest and that accuracy does not seem to be related to level of training or experience. Of note, emergency medicine (EM) residents had more accurate estimates than non-EM residents (including internal medicine, family medicine, pediatrics, and other specialties) in one small study.³ Whether hospital-based practitioners in an academic community medical center setting have accurate perceptions about in-hospital resuscitation success rates is unclear as this has not been specifically examined.

Additionally, factors that influence practitioner estimations of resuscitation success have not been wellstudied. In one publication, residents and attendings were surveyed on resuscitation success rates for various medical diagnoses and were asked whether these perceptions affected their own desire for such interventions-which they did not.⁶ A previous meta-analysis suggested that there are in fact several factors that are associated with decreased patient survival to discharge after resuscitation, including patient functional status and certain underlying medical illnesses.7 Although the studies that examined the association of patient age and resuscitation survival had conflicting results, age as a continuous variable predicting survival from resuscitation was not one of the factors that reached statistical significance in the metaanalysis. Despite the lack of clear evidence that age itself predicts resuscitation survival, do-not-resuscitate (DNR) orders have been shown to be assigned more often to older patients, even when adjusting for factors such as underlying illness or functional impairment.8 Additionally, the likelihood that resuscitation may be used in a seriously ill hospitalized patient is higher if the patient is younger.9

Given the results of studies that have been published on factors influencing survival from resuscitation and on practitioner beliefs about resuscitation outcomes, we developed a study to investigate how patient age affected practitioners' perceptions of outcomes. Specifically, our study aimed to determine the accuracy of perceptions of hospital-based practitioners about inpatient cardiopulmonary resuscitation success rates (resulting in an eventual discharge for the patient) and how the age of a patient influenced those perceptions. Our hypothesis was that practitioners would predict greater resuscitation success rates in younger patients and lower rates in older patients.

Materials and Methods

Study Site

New Hanover Regional Medical Center (NHRMC) is a 628-bed community-based teaching hospital affiliated with the University of North Carolina at Chapel Hill School of Medicine. It is a Level II trauma center and a regional referral

hospital for seven counties in southeastern North Carolina. The hospital houses four intensive care units (ICUs) with 69 total ICU patient beds. When a rapid response sequence is called at our hospital, it is most often attended by an intensive care attending physician, the on-call internal medicine residents, and critical care nurses. The involved hospitalbased physician is also frequently present. All five general internal medicine attending faculty at our residency program are based full-time in the inpatient setting (hospitalists), and there are eight full-time intensive care attendings based at our hospital. Our internal medicine residency program has NHRMC as its sole inpatient teaching site and trains a total of 23 residents: eight at the post-graduate year one level (PGY-1), seven residents each at the PGY-2 and PGY-3 levels, and one PGY-4 chief medical resident.

Actual Hospital Survival Data

Data used for this analysis were NHRMC records compiled as part of a registry for all in-hospital cardiopulmonary arrests. The data include patient outcomes and eventual dispositions, in accordance with accreditation guidelines for medical centers. Data on hospital survival rates for all hospital inpatients (medical floor and ICU) who had experienced a cardiopulmonary arrest at NHRMC during the years 2005-2007 was obtained from the medical records office. Only data from adults ages 18 and over were used in this analysis. Resuscitation survival was defined in our study as when a hospital inpatient suffered a cardiopulmonary arrest and was eventually discharged from the hospital.

Survey Participants

In our institution, as in many others, it is the residents and attending physicians in internal medicine, pulmonarycritical care physicians, and critical care nurses who are the practitioners most likely to be providing ongoing care to critically ill patients in the inpatient setting. Therefore, they are most likely to be involved with counseling patients and their families about advance directives choices and resuscitation outcomes. This same group of practitioners was also more likely to attend rapid-response calls or cardiopulmonary arrests for patients in the ICU and on the inpatient ward services. Therefore, we focused our study on these specific caregivers.

Participants for this study were recruited over a one-week period and were eligible to participate if they were on-duty at the hospital during that week. During the recruitment period, 68 health care practitioners from NHRMC were eligible for the study. This included a total of 30 physicians, nine of whom were faculty attending physicians in internal medicine (n=4) or pulmonary-critical care (n=5) and 21 of whom were resident physicians in internal medicine (PGY-1 = 7; PGY-2 = 6; PGY-3 = 7; PGY-4 = 1). These physicians represented the entire faculty and resident members of the internal medicine residency program who were not also investigators in the study (Dr. Snyder and Dr. Loschner), with the exception of three pulmonary-critical care physicians who were unavailable during the study's participant recruitment phase. Additionally, participants included all 38 registered nurses in the medical-surgical critical care units who were available during the week-long participant recruitment. All eligible candidates were approached by a study investigator during the week-long recruitment, and all candidates agreed to participate and complete the survey, resulting in a 100% response rate.

All study participants had completed ACLS certification between 2006 and 2008, with an average length of time since that training of 1.33 years. Health care practitioners at NHRMC are trained in ACLS with a certification or recertification course by an American Heart Association (AHA) instructor, using the AHA training materials.¹⁰ Attendings in our study averaged 8.5 years in their positions, residents averaged 1.8 years in their positions, and registered nurses had an average 9.6 years in their positions. This study received approval from the NHRMC Institutional Review Board.

Survey Instrument

A survey instrument was developed to assess health care practitioners' perceptions of in-hospital resuscitation outcomes (see Figure 1, page 202). The instrument consists of open-ended questions asking respondents to estimate the success rates for in-hospital resuscitation efforts, leading to an eventual discharge from the hospital, in all hospitalized patients both greater and less than 70 years of age. Participants also received a brief, hypothetical description of either a 58-year-old or 85-year-old patient with a known history of chronic kidney disease, who is admitted for community-acquired pneumonia and suffers a cardiopulmonary arrest on a general medical telemetry floor. The respondent is asked whether or not they believe the likely success rate for resuscitation, leading to an eventual hospital discharge for the patient, is \geq 30% (answered 'yes' or 'no'). This last question was developed to more closely examine how the age of the patient in question, isolated from other contributing factors, played a role in a practitioner's estimate of resuscitation success. These two ages were chosen indiscriminately as one was less than 70 years old and the other was greater, and we had chosen 70 years old as the split point for our analysis to divide 'younger' and 'older'

patients. This split point is the same as that used in other resuscitation studies, such as the one by Ebell and colleagues.⁷ The 30% success rate was chosen based on average estimates of resuscitation survival by non-emergency medicine residents in a small, similarly sized study about resuscitation predictions.³

The survey also collected data on the respondent's position in the

hospital, the number of years in that position, and their most recent ACLS certification date. Although a large number of factors may have an effect on a practitioner's perception of resuscitation success rates, we wanted to assess if such practitioner attributes influenced the accuracy of perceived resuscitation outcomes outside of patient characteristics. Data on the duration of time since the practitioner's most recent ACLS training and certification/recertification was collected and analyzed to assess if practitioners more recently trained in ACLS felt more confident that their resuscitation efforts would be successful.

Procedure

Participants were randomly assigned to one of two patient age conditions (58 years or 85 years) by their position in the hospital (i.e., attending, resident, or nurse) so that each position would have an equal number of participants in each age condition. Flip-of-the-coin determined whether the participant received the questionnaire describing a 58-year-old or 85-year-old. All other aspects and questions on the measure were identical. Participants were recruited during their hospital shift by a study investigator and asked to participate in the study. Once informed consent was obtained, the participant was asked to complete the written questionnaire and return it anonymously to the researchers. As previously reported, our response rate was 100%.

Statistical Analysis

Actual hospital survival data were obtained as previously described and classified by age group (under 70 and 70 or over). Chi square analysis was performed to ascertain if actual differences existed between the two age groups. Once a difference was established, the actual survival rates were compared with the perceived rates as reported by the participants in this study. Survey data were first analyzed descriptively to calculate the survey respondents' perception of in-hospital resuscitation success by age group. Related samples t-tests were performed to test the hypothesis that younger patients would have greater perceived resuscitation success rates and older patients would have lower perceived rates. These t-tests were also used to compare the perceived differences in success rates for both age groups with the actual observed hospital rates. Once perceived differences in the groups due to age were established, univariate analyses

Table 1.
Perceived Versus Actual Rates of Survival for In-Hospital
Resuscitation by Age Group

Age Group	Perceived	Actual	Difference
Less than 70 years	38.76%	29.22%	9.54%*
70 years and older	21.24%	20.13%	1.11%
Overall			8.43%*
* p < 0.001.			

Form V 9-12

Cardiopulmonary Resuscitation Survey

Please check your appropriate title:

O Resident Please circle current postgraduate year: I II III IV

○ Attending Physician, Pulmonary-Critical Care (Intensivist)

○ Attending Physician, Internal Medicine

 \bigcirc Intensive Care RN

Number of years in current position_____

Date of most recent ACLS re/certification_____

Perceived in-hospital CPR success rate, leading to hospital discharge

for hospitalized patients greater than 70 years of age_____%

for hospitalized patients less than 70 years of age_____%

A 58-year-old male with known history of chronic kidney disease is admitted for community acquired pneumonia, suffers a cardiopulmonary arrest on a general medical telemetry floor. I believe the likely success for CPR leading to hospital discharge for this patient is \geq 30%

YES 🔿

NO \bigcirc

of other demographic variables were investigated (i.e., number of years in current position, type of professional, and years since ACLS certification) to determine if these variables affected perceived rates of success. Lastly, the final question of the survey was analyzed with a chi-square analysis to determine if age had an impact on outcome.

Results

Hospital Survival Data

Actual hospital survival rates for resuscitated inpatients for cardiopulmonary arrest were collected at NHRMC during the years 2005-2007. For adults 70 years and older who had suffered a cardiopulmonary arrest, 64 were alive and discharged and 254 had died. Of the 318 total patients in this age group, this yielded a 20.13% survival rate. For adults less than 70 years of age during this same three-year period, 109 were alive and discharged while 264 had died. Of the 373 total patients in this age group, this yielded a 29.22% hospital survival rate. The overall survival rate for all patients, regardless of age, was 25.04%. A chi-square analysis indicated a significant difference (p < 0.01) between age groups (under 70, and 70 and over). Patients in the 70 years and older group in our hospital were more likely to not survive resuscitation efforts than patients in the under 70 group. These actual survival rates were then compared with the perceived rates as reported by the participants in this study.

Survey Results and Analysis

The answers to survey questions represented an appropriately wide range of responses and the data were normally distributed (by visual inspection of distributions and relatively symmetric box plots). The mean perceived in-hospital resuscitation success rate for patients under 70 was 38.76% (SD=23.51) and the mean perceived in-hospital resuscitation success rate for patients 70 and over was 21.24% (SD=17.14). See Table 1 for a summary of perceived versus actual rates. The results of the related samples t-test indicated different perceived success rates based on patient age. The mean percentage difference score (defined as the perceived rate minus the actual rate) for the under 70 population was 9.54%, and for the 70 and over population was 1.11%. There was a statistically significant difference in the impression of survival rates between the two populations of under 70 years and 70 years and over (p < 0.001). In other words, survey participants were significantly more accurate at predicting the survival rates for the 70 and over group than for the under 70 group. Participants, as a whole, overestimated the likelihood a patient under 70 would survive in-hospital resuscitation. The overall mean difference in predicted success rates between the age groups was 8.43 percentage points (when comparing the estimated survival rates of 9.54% and 1.11%).

Although our study sample was small, further analysis was attempted to determine if certain characteristics of the participants correlated with their opinion on patient survival

rates after in-hospital resuscitation. Although there are likely numerous influences on the perception of resuscitation success, three specific variables were chosen for the purposes of this study: number of years on the job, type of professional (attending physicians, registered nurses, and resident physicians), and how recently the participant had been trained in ACLS. Tests of correlation (simple linear regression to test the relationship between years on job and perception of CPR success; univariate ANOVAs for type of professional and ACLS training date) were conducted to analyze each demographic variable, and all results were non-significant. This suggests that, in our study sample, the ability to successfully predict success rates for patients under or over 70 was the same, regardless of the years of job experience, practitioner type, or how recently ACLS certification was completed.

For the final question in the survey, half of the participants were randomly assigned to receive the question based on a patient scenario with a 58-year-old patient and the other half were randomly assigned to receive the same information about an 85-year-old patient. First, cross-tabulation of responses revealed that for the group receiving the 58-yearold, 21 reported likely resuscitation success rates of \geq 30%, while 13 reported likely success rates lower than that. For the group receiving information about the 85-year-old, 6 reported likely resuscitation success rates of \geq 30%, while 28 reported lesser success rates. Chi-square analysis of this data indicated a significant difference in perceived survival between the two patients (p < 0.001). Participants receiving the 58-year-old patient question were significantly more likely to indicate a high success rate for resuscitation than those receiving the 85-year-old patient. Thus, age is a primary determinant of perceived survival of in-hospital resuscitation.

Discussion

Rates of success for in-hospital resuscitation at New Hanover Regional Medical Center, resulting in a patient being discharged alive from the hospital, were examined for a three-year period and found to be 29.22% for patients under 70 years of age and 20.13% for patients 70 years old or older (25.04% across all age groups). These rates are slightly higher than those seen in a study of an academic medical system in Canada (13.4-22.4%)¹¹ and in two US reports at the national level (17%¹² and 18.1%¹³) as reported from data in the National Registry of Cardiopulmonary Resuscitation. A meta-analysis by Ebell and colleagues of 41 studies looking at survival data for in-hospital resuscitation suggested that only about 13.4%-14.6% of adult patients survive resuscitation to be discharged from the hospital.⁷ In this meta-analysis, and specifically in the 10 papers meeting the authors' strict inclusion criteria, several factors were associated with decreased survival to discharge. These included a diagnosis of sepsis within the day preceding the arrest; a diagnosis of dementia, cancer, or metastatic cancer; dependent status of the patient; African American race; and serum creatinine greater than 1.5 mg/dl. In the studies evaluated by Ebell and colleagues that met their minimal inclusion criteria for analysis, patients greater than 70 years of age were less likely to survive to hospital discharge. However, age greater than 70 was not a statistically significant factor in studies meeting their strict inclusion criteria, and age as a continuous variable did not correlate with survival. The slightly higher success rate for resuscitation that was measured in our hospital when compared to other published rates could be related to many factors that were not specifically examined in our research study. It is possible that in the period studied our hospital had a larger proportion of respiratory arrests than cardiac arrests, resulting in higher survival rates. A higher percentage of witnessed versus unwitnessed arrests could have this effect as well. Additionally, we did not control for other factors that may have played an important role, such as patient functional status and comorbid conditions. It is possible that controlling for such factors might have reduced the age effect we observed on our resuscitation outcomes. As we were focused on examining practitioner perceptions of resuscitation success for all cardiopulmonary arrests they were likely to participate in the treatment of, and specifically the effect of patient age on these beliefs, we chose not to analyze data on these other factors. Another potential limitation of our study may be the lack of detail about the medical condition of the patient in the case scenario. By not specifying, for example, the stage of chronic kidney disease for the patient in the survey question, a study participant may have assumed a more severe disease stage for a patient that was older.

Practitioners in our hospital, including attending faculty physicians, medical residents, and critical care nurses, overestimated this success rate if the patient in question was younger than 70 years old. Patients younger than 70 years old are in fact more likely to survive a cardiopulmonary arrest and be discharged from our hospital according to collected data. Practitioners were significantly more accurate at predicting the success rate for patients over 70 years old (21.24% perceived versus 20.13% actual). When participants were randomized to a clinical scenario where the only difference was the age of the patient, the group believed that resuscitative efforts were more likely to be successful in the younger patient. Although we had hypothesized that participants might incorrectly predict lower success rates for older patients undergoing resuscitation, we did not observe this particular form of age bias in our study. Still, the age of the patient in question was the only important criterion affecting practitioner perception of survival rates that was measured in our study. Hence, the potential for unsubstantiated age-based assumptions should be considered when practitioners counsel patients about resuscitation options and the factors that influence them.

Subgroup analysis suggested that there was general agreement in the estimates of resuscitation success rates between the three subgroups of practitioners in our study, and years of experience in current position and length of time since last ACLS recertification did not have a significant impact on these perceptions. Notably, more senior physicians were not overall more accurate than residents or nurses in their predictions. The interpretation of these particular results in our study must be done with caution as such results are limited by the relatively small size of our institution (with a small number of total surveyed participants and a weighting towards more nursing staff survey participants) and hence a reduced statistical power to detect such differences. However, these results raise an interesting point. Our research questions are exploratory in nature, and a more extensive, multisite study looking at these or other practitioner characteristics could be undertaken to look at such variables further.

Previous studies that examined practitioner estimates of resuscitation success have shown that these estimates are generally not accurate at predicting survival after a cardiopulmonary arrest, and that accuracy does not seem to be related to level of training or experience.³⁻⁵ To our knowledge, only one small study has published data on resuscitation outcome prediction and included patient age in the results, although this study did not specifically analyze differences in age-based perceptions among practitioners.³

A patient's decisions about code status and other advance directive choices are complicated and based on multiple factors that may include their personal belief system, including their cultural and spiritual background, as well as information shared with them by their health care practitioners about their health status. For a practitioner to be proficient in having advance directive discussions with patients and their families requires many skills including displaying cultural sensitivity and using effective communication techniques. Additionally, evidence-based counseling about the potential benefits, risks, or even the futility of interventions such as resuscitation may assist a patient and their family in making these difficult decisions.

Many factors have been suggested to affect survivability rates after resuscitation, and patient age is not often one of those factors.⁶ However, patient age may influence whether or not a DNR order is obtained or resuscitation is performed.^{8,9} Hence, the presence of potential age biases by the practitioner need to be considered. Disseminating information about ACLS success rates to clinicians and what factors affect or do not affect these rates seems essential. This is especially true for those practitioners who both provide resuscitative care and counsel patients about advance directive and code status choices. Resuscitation success rate data is available from many sources, including from the National Registry of Cardiopulmonary Resuscitation database,¹⁴ and hospital-specific data is tracked as part of the National Hospital Quality Measures by the Joint Commission.¹⁵ A current publication from the American Heart Association used to train health care practitioners at our institution for ACLS does not include information about the likelihood of survival for a patient that suffers a cardiopulmonary arrest.¹⁰ Perhaps estimates of survival rates from resuscitation and information on what patient characteristics affect these rates can be incorporated into future editions of the AHA's ACLS training manuals.

In our hospital, patients under 70 years of age are more likely than those over 70 to survive a cardiopulmonary arrest and ultimately be discharged from the hospital. Hospitalbased personnel, who often provide resuscitative care to patients and who counsel patients on code status choices, may have the tendency to overestimate the likelihood that a hospital inpatient will survive a cardiopulmonary arrest. This is particularly true for patients under 70 years of age. In our study, the age of the patient in question seemed to significantly influence a practitioner's perception that a successful resuscitation outcome may be obtained. Practitioner characteristics such as position, years on the job, or time since ACLS training did not affect these perceptions. **NCMJ**

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Disparities in Colorectal Cancer Stage of Diagnosis among Medicaid-Insured Residents of North Carolina

Jeremy W. Snyder; Kristie L. Foley, PhD

Abstract

Objective: To evaluate the individual and community factors correlated with local disease among the North Carolina Medicaidinsured population diagnosed with colorectal cancer between 1998 and 2002.

Methods: North Carolina residents diagnosed with first primary, SEER-staged colorectal cancer between 1998-2002 and enrolled in Medicaid were included in this study. Secondary data from the North Carolina Central Cancer Registry linked to Medicaid claims were utilized for this study. Descriptive and logistic regression analyses were conducted.

Results: One out of every three individuals insured by Medicaid with colorectal cancer between 1998 and 2002 in North Carolina were diagnosed with local stage disease. Factors associated with increased likelihood of diagnosis with local disease included age \geq 65 (OR = 1.48, 95% Cl, 1.27-1.72) and living in an urban area (OR = 1.19, 95% Cl, 1.03-1.36). Persons with race defined as non-white and non-black were significantly less likely than non-Latino whites to be diagnosed with local disease (OR = 0.49, 95% Cl, 0.27-0.91).

Limitations: Reliance on secondary data limits the utility of data regarding factors contributing to late-stage diagnosis.

Conclusions: Interventions to increase early diagnosis of colorectal cancer among the Medicaid-insured are needed. More research is needed to confirm and explain our finding that individuals < 65 years of age and persons living in rural areas insured by Medicaid are more likely to be diagnosed at a later stage. The benefit of aging into Medicare among the Medicaid-insured population needs further elucidation.

Keywords: colorectal; cancer screening; Medicaid; rural; disparities

n North Carolina, there were 4,380 new colorectal cancer cases in 2008 and 1,400 deaths.¹ Colorectal cancer is responsible for 9% of all cancer deaths, making it the third leading cancer death among women and men. Although there has been a recent increase in colorectal cancer screening, low utilization of screening endoscopy persists. According to a 2005 National Health Interview Survey (NHIS), 44.2% of adults ages 50 to 64 underwent any type of colorectal cancer screening (e.g., endoscopy, FOBT) test within the last 10 years.¹ Unlike early detection for other prevalent cancers (e.g., breast, prostate), colorectal cancer screening may prevent the progression of colorectal polyps to cancer, thus reducing both incidence and mortality due to colorectal cancer.²⁻⁵

Many factors influence late-stage diagnosis of colorectal cancer. Among these, racial and ethnic disparities in colorectal cancer screening prominent and well-documented.⁶⁻¹¹ Whites are significantly more likely to

undergo screening than blacks and Latinos.⁶ Similarly, blacks and Latinos are up to 60% more likely to be diagnosed with late stage (stage III or IV) colorectal cancer than whites.⁷⁸

Racial disparities in cancer screening are partially explained by socioeconomic disparities.^{12,13} Hoffman-Goetz and colleagues (1998) reported that social class was a strong predictor of cancer screening.¹³ Late-stage diagnosis is also correlated to residence in medically underserved areas (MUAs); MUAs are those areas lacking adequate health care services.^{6,14-16} Further, residency in a designated MUA is a strong predictor of breast, cervical, and colorectal cancer.¹⁶ People living in areas with lower per capita income are less likely to receive colorectal cancer screening than those living in areas with higher per capita income.⁶ The likelihood of screening increases with increasing household income in the area of residence.¹⁴

Although screening rates have increased in recent years, disparities in cancer stage at diagnosis persist. This

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study evaluates the individual and community factors correlated with stage of diagnosis among the North Carolina Medicaid-insured population diagnosed with colorectal cancer between 1998 and 2002. We specifically explore the relationship between individual demographic and community characteristics that may better explain disparities in cancer stage of diagnosis among low-income North Carolina residents.

Methods

This is a retrospective study of North Carolina residents diagnosed with first primary, Surveillance, Epidemiology, and End Results (SEER)-staged colorectal cancer (C180, C181, C182, C183, C184, C185, C186, C187, C188, C189, C199, and C209) between 1998 and 2002 and who were enrolled in Medicaid during this time period.

This study was approved by the Institutional Review Boards at Davidson College, Davidson, North Carolina, by Wake Forest University Health Sciences, Winston-Salem, North Carolina, and by the North Carolina State Division of Medical Assistance (the Medicaid office in North Carolina). The North Carolina Central Cancer Registry also reviewed the study protocol. A data use agreement was established in 2007 for a limited use dataset for the conduct of this research study.

Data Sources

The North Carolina Central Cancer Registry is mandated by state law to register all incident cancer cases and first courses of treatment and follow the requirements of the North American Association of Central Cancer Registries. In addition to cancer-related information, North Carolina Central Cancer Registry address data are geocoded using the TeleAtlas GC Geocode Layer (2004 with the ESRI ArcGIS geocoding engine. Where street address level geographical information is not available, Census data are imputed from ZIP codes.

North Carolina Medicaid covers all adults participating in cash assistance programs (e.g., Work First Family Assistance, Supplemental Security Assistance), those 65 and older at 100% below the federal poverty level, and the disabled. In North Carolina, Medicaid is almost entirely feefor-service with one small managed care program.

Data Merge and Sample

A probabilistic match routine was run against the Medicaid eligibility file based on social security number to the North Carolina Central Cancer Registry data. After the match, data were de-identified prior to data analysis and a limited use dataset was provided to the research team. Cases for this analysis were excluded if they were missing stage of disease at diagnosis (n=344) or missing data related to race (n=4), gender (n=1), or community poverty status (n=1). Data were also excluded if missing a facility identifier (n=8), which was used for cluster analysis. The final analytic sample size was n=3,777.

Measures

The main outcome of interest in this analysis was stage at diagnosis, using SEER summary stage local, regional, and distant data from the North Carolina Central Cancer Registry database.¹⁷ SEER generally corresponds to the American Joint Committee on Cancer Tumor/Nodes/Metastases (TNM) staging system as follows: local (AJCC TNM stage I, II A, and II B), regional (AJCC TNM stage III A, B, and C), and distant (stage IV). More simply, local refers to disease confined to the primary site, regional refers to lymph node involvement or spread directly beyond the primary site, and distant refers to metastatic disease. While AJCC TNM staging is more common in clinical settings, registries are more likely to have consistent data collection using SEER staging.

Potential factors associated with local stage of disease at diagnosis were grouped into individual and community characteristics. Individual characteristics included age at diagnosis (< 65, ≥ 65), sex (male, female), and race (white, black, other races). Community characteristics included percent in poverty (defined as < 25th percentile, the interquartile range, and > 75th percentile), urban residence (yes, no), and residence in a medically underserved area (yes, no). Medically underserved areas are designated by the US Department of Health and Human Services using a weighted scoring algorithm employing four indicators: ratio of primary medical care physicians per 1,000 population, infant mortality rate, percentage of the population with incomes below the poverty level, and percentage of the population age 65 or over.¹⁸ Bivariate correlations among urban, MUA, and poverty categories revealed correlation coefficients of r < 0.11, indicating that the three measures represent distinct constructs.

Data Analysis

Bivariate analyses were computed to determine factors associated with SEER-defined local, regional, and distant colorectal cancer. Statistical significance was computed using the chi-square statistic. Diagnosis with local colorectal cancer disease (yes, no) was regressed on the individual and community characteristics using logistic regression, controlling for clustering based on where first course of treatment was conducted. A subsequent, exploratory analysis was conducted to test whether age served as an effect modifier between significant independent correlates and stage of diagnosis. All analyses were performed using Intercooled Stata for Windows 9.2.¹⁹

Results

Characteristics of samples of Medicaid-insured North Carolina residents are displayed in Table 1 (page 208). The

Table 1.

Description of Medicaid-Insured North Carolina Residents Diagnosed with Colorectal Cancer (1998-2002), by Stage at Diagnosis^a

	Overall	Local n=1,337 (35.4%)	Regional n=1,744 (46.2%)	Distant n=696 (18.4%)	X2	р
	%	%	%	%		
Demographic Characteristics		•			•	
Age at diagnosis					90.59	< 0.001
< 65	37.7	29.5	44.7	25.8		
≥ 65	62.3	39.0	47.0	14.0		
Sex					8.29	0.016
Male	39.6	33.1	46.6	20.3		
Female	60.4	36.9	45.9	17.2		
Race					17.77	0.001
White	61.4	36.1	47.2	16.7		
Black	36.7	35.0	44.3	20.8		
Other	1.9	21.1	50.7	28.2		
Community Characteristics		•		•	•	
Residence in an urban area	51.5	37.5	44.4	18.2	7.91	0.019
Residence in a medically underserved area	51.2	35.7	45.5	18.8	0.75	0.687
Poverty status of individual's community					3.82	0.430
Lowest 25th percentile (< 9.8%)	24.6	36.3	46.9	16.8		
Interquartile range (9.8%-18.37%)	49.8	34.9	46.7	18.4		
Highest 75% percentile (>18.37%)	25.6	35.5	44.5	20.0		

majority of individuals were non-Latino white (61.4%),^a female (60.4%), and \geq 65 years of age (62.3%). Approximately half of the sample resided in urban (51.5%) or medically underserved areas (51.2%).

Factors Associated with Diagnosis at Local Stage

Thirty-five percent of individuals in this sample were diagnosed with local stage colorectal cancer. There were significant differences in likelihood of local stage diagnosis by age, race, and location of residence. Table 2 shows that individuals ages \geq 65 are 48% more likely to be diagnosed

with local disease compared to those < 65 years of age (OR = 1.48, 95% Cl, 1.27-1.72). Among patients ages under 65, 29.5% were diagnosed with local stage disease, while 39% of those ages 65 or older were diagnosed with local disease.

Among this population, 36% and 35% of whites and blacks respectively, were diagnosed with local disease. However, of the 71 participants classified as neither white nor black (i.e., "other race"), only 21% were diagnosed with local disease. These individuals are predominately American Indian (n = 44 of 71).^b In multivariate analyses, those

a. Less than 1% of Medicaid-insured whites in North Carolina were recorded as Latino in the North Carolina Central Cancer Registry.

classified as "other race" were half as likely to be diagnosed with local disease as non-Latino whites (OR = 0.49, 95% CI, 0.27-0.91). Although being female was associated with local stage at diagnosis in bivariate analyses, this finding did not remain significant in the multivariate model.

Individuals living in urban versus non-urban areas were more likely be diagnosed with local disease (37.5% vs. 33.2%, p = 0.02) in bivariate analysis. This finding remained significant after controlling for other individual and community level characteristics (OR = 1.19, 95% CI, 1.03-1.36) (see Table 2). However, no significant differences were observed between residence in a designated MUA, poverty, and local diagnosis of colorectal cancer.

Table 3 (page 211) displays the stratified analysis (< 65 vs. \geq 65), which showed that men were 29% less likely than women to have local disease among persons under age 65 (OR = 0.71, 95% CI, 0.54-0.93). This finding was not observed among those 65 and older. In addition, among persons \geq 65, blacks were significantly less likely than non-Latino whites to be diagnosed with local disease (OR = 0.82, 95% CI, 0.68-0.99). Further, among the elderly, persons living in urban areas were more likely to be diagnosed with local disease than persons living in rural areas (OR = 1.29, 95% CI, 1.09-1.53).

In order to test whether these agerelated differences were significantly different, we conducted a multivariate model which included interaction terms of age multiplied by race and age multiplied by urban residence. In this model, the age multiplied by race interaction effect was significant (OR = 0.65, 95% CI, 0.50-0.91). Being older was associated with an increased likelihood of local stage at diagnosis for all racial groups, but was most pronounced among non-Latino whites (see Figure 1, page 210). Only 28% of non-Latino whites under age 65 were diagnosed with local disease compared to 41% of non-Latino whites age 65 and older. Thirty-three percent of blacks under age 65 were diagnosed with local disease compared to 37% of blacks 65 and older. The test for interaction between urban residence and age was not significant (OR = 1.24, 95% Cl, 0.93-1.65).

Discussion

Approximately 13.9% (398,700) of nonelderly North Carolinians are insured by Medicaid.²⁰ In addition, 15% of North Carolina's elderly (295,051) are dually-eligible for Medicaid and Medicare. Prior studies have shown that individuals with Medicaid are less likely than privately insured patients to be diagnosed with local stage colorectal cancer.²¹⁻²² In a national study, Halpern (2008) found that Medicaid or uninsured patients were twice as likely to be diagnosed with advanced-stage colon cancer compared to those with private insurance.²¹

In this retrospective study from 1998-2002, we found that 35% of North Carolinians insured by Medicaid had local disease at time of diagnosis with colorectal cancer, lower than the national average of 39%. Several important findings are noted below. Individuals ages 65 and older were 48% more likely to be diagnosed with local disease. There are several possible explanations for this finding. First, older people are more likely to interact with the health care system for other needs, and therefore have greater opportunities to be recommended for screening.²³ Second, younger individuals may be less likely to take the needed time from work to

Table 2. Individual and Community Factors Associated with Diagnosis with Local (Versus Regional or Distant) Colorectal Cancer Among Medicaid-Insured North Carolina Residents Between 1998-2002 (n=3,777)^a

Odds Ratio	95% Confidence Interval
•	
1.48	1.27-1.72
0.91	0.78-1.06
0.94	0.83-1.07
0.49	0.27-0.91
•	
1.19	1.03-1.36
1.06	0.92-1.21
1.06	0.90-1.25
1.04	0.85-1.28
	Ratio 1.48 0.91 0.94 0.94 1.19 1.06 1.06

a. Standard errors adjusted for 128 clusters. Cluster defined by reporting treatment facility. Note that clustering did not change the results in any significant or meaningful way, but are reported to present the most conservative standard errors.

b. If individuals identified as "other" they had the opportunity to fill in their race/ethnicity in an adjacent comment field. It is through this comment field that we identified that 44 of the 71 "other" respondents were American Indian.

undergo an endoscopy, which requires a full day's absence from work and/or childcare responsibilities.²⁴ Retirees may have more time to address their preventive health needs. Third, younger individuals diagnosed with colorectal cancer may also have a more aggressive disease type because they are screened for diagnostic (i.e., symptom-driven) versus preventive reasons. Thus, younger persons may present with more advanced disease at time of diagnosis. Fourth, Medicare provides higher reimbursements rates for endoscopy compared to Medicaid. Although reimbursement should not affect access to preventive care, it is possible that the costs may factor into access to screening or the decision to screen.²⁴

Individuals are automatically enrolled in Medicare Part A (hospital coverage) when they turn 65 years of age. Enrollment in Medicare Part B, which covers colorectal cancer screening, is the responsibility of the individual. For individuals who are dually-eligible for Medicaid and Medicare, the Medicaid program supplements Medicare coverage (the first payer) by providing services and supplies that are available under the Medicaid program. Dual eligibility often means that individuals do not have to pay their monthly Medicare premiums, deductibles, or coinsurance, which increases payment for services for the health care providers and may be related to increased access to preventive health care. Therefore, individuals dually-eligible for Medicaid and Medicare are less hindered by preventive care costs, and may be more likely to receive screenings than those eligible for only one program.

Age (i.e., dual eligibility) was also an effect modifier in this study. Males were significantly less likely than females to be diagnosed with local disease among those under 65. This finding was not observed among persons 65 years or older. Women are generally believed to be more proactive in terms of preventive health care, but in terms of colorectal screening, gender differences may only be true for the under 65 population.²⁵ Further, older (\geq 65) urban dwellers are significantly more likely to be diagnosed with local disease; this was not found among younger (< 65) urban dwellers. Although a formal test of an interaction between age and urban residence was not significant, there was a trend in the expected direction. Underutilization of colorectal cancer screening among rural residents has previously been shown, and highlights the importance of targeting interventions to this population that would ensure earlier stage at diagnosis.²⁶

We also note that individuals not described as white or black were significantly less likely to be diagnosed with local colorectal cancer, regardless of age. In North Carolina, 'other races' insured by the Medicaid program are predominately classified as Native Americans. However, the very small sample of 'other races' included in the Medicaid population suggests additional research among American Indian and other non-black minorities is warranted.

Noteworthy is the lack of a main effect difference between blacks and non-Latino whites among the younger (< 65) population, suggesting that black-white differences in stage at diagnosis disappeared in the North Carolina Medicaid population that controlled (via study design) for socioeconomic status. Medicaid, through its consistent means-tested program, provides a reasonably good approximation of socioeconomic status. However, in the model that evaluated the potential interaction between age and race, we find that being 65 years of age or older significantly improves the odds of diagnosis in an early stage of the disease and that this effect is most pronounced among non-Latino whites. One hypothesis deserving of further testing is whether whites may be more likely than blacks to benefit from the dual-eligibility status of Medicare-Medicaid coverage. The lack of data on factors that may contribute to local stage of diagnosis in this sample (e.g., access to screening, quality of screening modality, access to diagnostic services for symptoms, or lack of younger patients' awareness regarding the need for early detection or symptom management) preempts solid conclusions. Nevertheless, these findings do raise important questions that deserve attention.

This paper provides important information on cancer screening among the poor in North Carolina, particularly the

role of age, race, and place of residence cancer on colorectal screening opportunities. However, there are several limitations that must be acknowledged. First, the analysis relied exclusively on secondary data and does not take into consideration individual preferences for colorectal cancer screening nor provider recommendations. Second, the small sample of 'other races' limits meaningful recommendations that could pertain to non-black minority residents of North Carolina. Finally, these data have limited generalizability given that the study focuses exclusively on the North Carolina Medicaid-insured population.

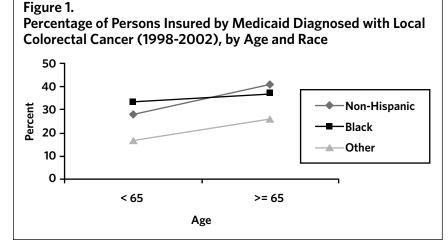


Table 3.

Individual and Community Factors Associated with Diagnosis with Local (Versus Regional or Distant) Colorectal Cancer Among Medicaid-Insured North Carolina Residents Between 1998-2002, Stratified by Age^{a,b}

	Less than 65 Years Old n=1,423		65 Years Old or Greater n=2,354		
	Odds Ratio	95% Confidence Interval	Odds Ratio	95% Confidence Interval	
Demographic Characteristics			-		
Sex (female, referent)					
Male	0.71	0.54-0.93	1.08	0.92-1.26	
Race (white, referent)					
Black	1.22	0.99-1.50	0.82	0.68-0.99	
Other	0.49	0.26-0.93	0.52	0.21-1.27	
Community Characteristics		•			
Residence in an urban area	1.01	0.79-1.30	1.29	1.09-1.53	
Residence in a medically underserved area	0.95	0.75-1.21	1.14	0.97-1.34	
Poverty status (interquartile range, referent)					
Lowest 25th percentile (< 9.8%)	1.13	0.85-1.51	1.05	0.86-1.29	
Highest 75th percentile (> 18.37%)	1.09	0.84-1.41	1.02	0.79-1.30	

a. In a multivariate model that tested for interaction effects between age*race and age*urban, being older and black was significantly correlated with local stage of diagnosis (OR = 0.68, 95% CI, 0.50-0.90). Black race (OR = 1.22, 95% CI, 1.00-1.49), other race (OR = 0.50, 95% CI, 0.226-0.97), and age 65+ (OR = 1.55, 95% CI, 1.22-1.97) remained independent, significant correlates of diagnosis at local stage disease. The age*urban interaction was not significant and urban was no longer independently associated with local stage of disease among those 65+ in this analysis.

b. Standard errors adjusted for 118 clusters in the < 65 group and 123 clusters in the \geq 65 group.

Medicaid is a joint federal-state program, which means that state funding for its Medicaid program and reimbursement profiles vary state to state.

Despite these limitations, we feel this paper demonstrates the important need for efforts to improve the timing of diagnosis of colorectal cancer among the Medicaid population given that two in three people were diagnosed with regional or advanced disease. Five-year survival rates drop from 89.7% (local) to 68.4% (regional) to 10.8% (distant) as colorectal cancer progresses.¹ Efforts to increase screening at the recommended age (50+) for average risk populations have the potential to increase the likelihood of earlier diagnosis and to improve survival probability. **NCMJ**

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Introduction

POLICY FORUM What Does Health Reform Mean for North Carolina?

On March 23, 2010, the Patient Protection and Affordable Care Act (PPACA) was signed into law by President Obama. This legislation is the most influential, comprehensive piece of health care reform that has been passed in over 50 years. This complex and lengthy piece of legislation was built in an atmosphere of controversy and heated debates. Its passage took months of hearings and debates as Congress considered many competing proposals that were melded into a compromise package that, even as it passed, had to be reconsidered through the reconciliation process. Even after its passage, 14 state Attorneys General announced they would sue to block its implementation.

The passage of PPACA was not easy but was made possible by the urgency of the need to address three core problems with our health care system in the United States: access, quality, and cost. Those three issues provide the organizing themes for this special issue of the *North Carolina Medical Journal*.

Access: This past year, almost 50 million Americans lacked health insurance coverage. Through the use of health insurance exchanges, Medicaid expansion, tax incentives for employer-based insurance coverage, individual mandates, and subsidies for low-income individuals, PPACA attempts to expand access to coverage to 32 million of Americans by 2019.

Quality: PPACA will address quality improvement through investments in preventive medicine, comparative effective research, and the use of health care data to guide decision-makers on improving quality and outcomes. The legislation will drive the system to greater transparency by making data readily available to the general public so they can make informed decision about their health care. This will help drive quality improvement as consumers and purchasers see what they are buying and select the highest value and best quality of care.

Costs: The first questions that many people ask about the health reform bill are usually about cost. How much is health reform going to cost? Will it contain spiraling health care costs? Will it curb our spending? The Congressional Budget Office estimates that PPACA will cost \$938 billion over the next decade. However, the good news is that due to new revenues, reduced costs of care from market pressures, and cuts to certain programs, the cost of PPACA will be covered and then some. PPACA will promote cost containment by testing new models of delivering and organizing health care, as well as through investments in health information technology including the promotion and implementation of electronic medical records.

Like most Americans, you probably have questions about how health reform will affect you and your family. This issue of the *Journal* is dedicated to explaining PPACA in more detail and describing how it will affect individuals, providers, employers, the insurance industry, communities, and the state of North Carolina. This issue also includes information about an array of funding opportunities that are available to organizations, institutions, and government agencies. Future issues of the *North Carolina Medical Journal* will feature individual contributions by various stakeholders in the state who will describe how health reform will affect their particular industry. This is our way of keeping the conversation alive and fostering the debate over how best to implement reform. In addition, we welcome letters to the editor describing how health reform is affecting you.

With this current collection of commentaries from authors in various sectors—medicine, public health, law, government, and beyond—we hope to broaden your understanding of this massive and monumental piece of legislation.

Thomas C. Ricketts III, PhD, MPH Editor-in-Chief Christine Nielsen, MPH Managing Editor

Understanding Health Reform: A Work in Progress

Pam Silberman, JD, DrPH; Catherine E. Liao, MSPH; Thomas C. Ricketts III, PhD, MPH

n March 23, 2010, President Obama signed HR 3590, the Patient Protection and Affordable Care Act. This legislation, followed closely by amendments to the legislation through HR 4872, the Health Care and Education Reconciliation Act of 2010, is certainly the most sweeping piece of health care legislation since the enactment of Medicare and Medicaid in 1965, and is perhaps the most comprehensive piece of health care legislation in the history of the country. By now, most people have heard or read

about provisions of this legislation that will require most people to have health insurance coverage or prohibit insurers from excluding people from coverage based on their pre-existing conditions. But, in reality, this legislation is far more comprehensive and includes provisions that touch all aspects of our health care system.

According to the nonpartisan Congressional Budget Office, the Patient Protection and Affordable Care Act (PPACA)^a will expand coverage to

an additional 32 million people by 2019 (92% of all residents or 94% of all legally present non-elderly residents). PPACA does not cover all Americans. Even after the Act is fully implemented, there will still be 23 million uninsured people. The expansion of Medicaid coverage and subsidies to help certain individuals purchase coverage is estimated to cost \$788 billion over the next 10 years (2010-2019).^b While PPACA includes significant new expenditures on health, it also includes concurrent cuts in health spending and in longer-term cost containment. As a result, the combined health-related provisions in PPACA and in the reconciliation bill are expected to reduce the federal budget deficit by \$124 billion over the next 10 years, and \$1.2 trillion over the next 20 years.¹

There are three critical aspects that must be addressed to achieve meaningful health reform: access, quality, and

...the Patient Protection and Affordable Care Act... is perhaps the most comprehensive piece of health care legislation in the history of the country.

> cost. PPACA addresses all three, albeit some issues receive more attention than others. This issue brief attempts to summarize the various aspects of PPACA, recognizing that we may not fully understand all aspects of this legislation for years to come, and describes some of the legislation's primary financing mechanisms. The issue brief includes references to sections of PPACA (HR 3590), as well as

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a. The formal title of the bill that details most of the changes described here is the Patient Protection and Affordable Care Act. That was then amended and extended by the Health Care and Education Reconciliation Act of 2010. This issue brief will refer to the combination of bills as the "Patient Protection and Affordable Care Act," or PPACA.

b. The total cost for expanded insurance coverage and subsidies is estimated to be \$938 billion over 10 years. However, PPACA will also generate revenues from the coverage provisions (including the penalty payments paid by uninsured individuals or employers who are not otherwise exempt from purchasing or providing coverage). These revenues are expected to generate \$149 billion over 10 years, leaving a net revenue cost of \$788 billion.

related sections from the reconciliation bill (HR 4872). In addition, the sidebar at the end of this issue brief includes a listing of other useful summaries of the bills.

PPACA includes new funding to expand coverage, as well as other funding to support other health-related initiatives. If the Act includes direct *appropriations*, it means the funding is immediately available. If the Act includes *authorizations*, it means that Congress authorized spending for that purpose but must appropriate funds for that purpose in a future appropriations bill. Paul Mandsager includes a listing of all the funding provisions in PPACA in his article in this issue of the *Journal* and notes whether funding was appropriated or authorized.

Coverage and Access

Of the three key components of health reform, PPACA concentrates on coverage and access. The legislation focuses on expanding health insurance coverage to nonelderly individuals, as 93% of the elderly (age 65 or older) had Medicare coverage in 2008, while most of the rest had other forms of insurance. Less than 2% of older adults are uninsured.^{2,3}

In contrast, approximately 17% of the non-elderly, or 46 million Americans, were uninsured in 2008. The non-elderly obtain coverage through a variety of sources. Nationally, 62% of the non-elderly have employer-based coverage, 6% have non-group coverage, 15% have Medicaid, 3% have Medicare (for people with disabilities), and 3% have military coverage.³ (These numbers amount to more than 100% because some people have more than one source of insurance coverage.)

In 2008, the percentage of the non-elderly covered through employer-sponsored insurance was somewhat lower in North Carolina than the nation (59% compared to 62% nationally). Approximately 7% of North Carolinians had non-group coverage, 15% had Medicaid, 4% had Medicare, and 6% had military coverage. According to the US Census, approximately 17% of North Carolina's non-elderly population, or 1.4 million people, were uninsured ecent estimate of the numbers of uninsured, which incorporates the large jump in unemployment rates between 2007-2009.^{c,4} Our more recent estimates suggest that in 2009 there were approximately 52 million uninsured

nationwide, with 1.75 million (21%) uninsured non-elderly North Carolinians.

Expanding Health Insurance Coverage

PPACA includes many provisions to expand health insurance coverage to the uninsured by building on our current multiplatform health insurance structure. It maintains and expands public coverage for low-income people, strengthens employer-based coverage, and makes health insurance more affordable for small businesses and for people who purchase coverage directly. PPACA expands Medicaid to cover more low-income people. In addition, PPACA directs the Secretary of the US Department of Health and Human Services (DHHS) to develop a minimum essential benefits package so that the insurance people buy provides the coverage needed to address most health care needs. The Act also provides subsidies to people with incomes below 400% of the federal poverty level (FPL) who are not covered through a governmental program or their employer, and creates health insurance exchanges (HIEs) where small businesses and individuals can purchase private health insurance coverage. Large employers are required to offer coverage or pay a penalty; however, smaller employers with 50 or fewer employees are exempt from this provision. In addition, the Act makes a number of essential changes to the insurance industry and expands access to coverage for many with pre-existing health conditions. With these changes, most people in this country will be required to either purchase health insurance coverage or pay a tax to the federal government.

Public Health Insurance Coverage for Low-Income Families and Children

Effective 2014, PPACA expands the Medicaid program to cover all non-elderly low-income citizens and many lawfully permanent residents with incomes below 133% FPL (see Table 1).⁵ The new law removes all of the categorical restrictions that in the past excluded many low-income people (primarily childless adults) from coverage.^d For most people, eligibility will be determined solely based on income and whether the person is a citizen or has been a lawful permanent resident residing in the United States for five years or more. Undocumented immigrants continue to be

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c. North Carolina's unemployment rates increased from 4.7% in January 2007 to 9.7% in January 2009.

d. Medicaid is an entitlement program that is funded jointly between the federal and state governments. The federal government sets broad program rules and gives the states flexibility to design their programs within those broad rules. Each state's Medicaid eligibility rules are different. In the past, Congress limited Medicaid coverage to certain types of low-income people (i.e., children under age 21, the parents of dependent children, pregnant women, people who were 65 or older, or people who were disabled). States had considerable latitude in setting income and resource eligibility limits. Childless adults, who were not yet 65 or disabled, were not eligible for Medicaid in most states, regardless of income. Because of the categorical, income, and resource restrictions, Medicaid only covered, on average, 42% of all low-income people in the country (2008) or 40.7% of all low-income people in North Carolina (2007-2008). (The Henry J. Kaiser Family Foundation. Medicaid coverage rates for the nonelderly by federal poverty level (FPL), states (2007-2008), US (2008). Statehealthfacts.org website. http://www.statehealthfacts.org/comparetable.jsp?ind=161&cat=3. Accessed April 26, 2010.)

Table 1.Medicaid Income Limits(133% Federal Poverty Level)

1	\$14,404
2	\$19,378
3	\$24,352
4	\$29,327
Each additional person	\$3,740

ineligible for regular Medicaid coverage. Low-income adults who become eligible as a result of PPACA will be entitled to the essential benefits package (defined in a later section of this issue brief) and not full Medicaid coverage.

The federal government will pay 100% of the costs for the new eligibles for the first three years to help offset the new costs that states will incur due to this expansion. This federal match rate phases down to 90% over time (until 2020). The NCIOM worked with Mark Holmes at the Department of Health Policy and Management, Gillings School of Global Public Health, to develop estimates of the numbers of people who will be eligible for, and enroll in, Medicaid beginning in 2014 (see Running the Numbers in this issue of the Journal). Dr. Holmes estimates that that in 2014 there will be approximately 340,000 new people eligible for Medicaid in North Carolina as a result of this expansion. Of these, approximately 257,000 will enroll. In addition, Dr. Holmes estimates that there are already approximately 320,000 people who are currently eligible for but not enrolled in Medicaid. Of these, approximately 167,000 will enroll. The federal government will pay its regular match rate (approximately 64%) for individuals who enroll as a result of the new law but who were already eligible for Medicaid under existing laws.^e

PPACA also includes other provisions that should help expand access to services for low-income people. States must increase the Medicaid reimbursement rate for primary care procedures to 100% of the Medicare rates beginning in 2013.^f North Carolina already pays 95% of Medicare rates for primary care services under Medicaid; however many states pay primary care providers far less, which has contributed to access barriers.⁶ Low-income children will continue to receive Medicaid or NC Health Choice (North Carolina's Children's Health Insurance Program, or CHIP), depending on their age and income, up until 2019. Currently, children between birth and age 5 are eligible for Medicaid if their family income is less than 200% FPL. Children between the ages of 6-18 are eligible for Medicaid with incomes up to 100% FPL. Those with incomes between 100%-200% FPL are eligible for NC Health Choice. Effective January 1, 2014, children of all ages with incomes below 133% FPL will be transitioned into Medicaid. Children with incomes between 133%-200% FPL will remain in NC Health Choice until October 1, 2019.⁷ Thereafter, children will gain coverage through their parents' employer-sponsored insurance or, if not available, through the HIE (described more fully later in this issue brief).

PPACA also includes many provisions to streamline and simplify the Medicaid and CHIP enrollment and reenrollment processes. For example, the state Medicaid agency must allow people to apply for Medicaid through the internet, screen people who are ineligible for Medicaid or NC Health Choice for the subsidies offered through the HIEs, and conduct outreach to vulnerable populations.⁸ States also are permitted to give hospitals the authority to make presumptive eligibility determinations for all Medicaid eligible populations, thereby facilitating enrollment for people who present at the hospital.⁹

Private Coverage

Congress recognized that most people receive their insurance coverage from employers and then directly from insurers. Thus, at the same time that the legislation expands Medicaid to make health insurance affordable to lowerincome people, the Act also expands access to affordable coverage in the private market. PPACA directs the DHHS Secretary to establish a minimum essential benefits package to ensure that adequate coverage is available in the private market. States will be directed to create HIEs where individuals and small businesses can purchase coverage. Subsidies will be available to help many people purchase coverage if they are buying health insurance on their own or if they do not have access to affordable coverage through their employers.

The bill does not require individuals to change insurance coverage if they are satisfied with the health insurance coverage they had on March 23, 2010 (either through their employer or in the individual market). These existing plans

e. The federal match rate for North Carolina was 64.05% in fiscal year (FY) 2008. The match rate was enhanced in FY 2009 and FY 2010 because of the downturn in the economy (to 73.55% and 74.98%, respectively); however, the enhanced match rate is scheduled to expire December 31, 2010 (or may be extended to June 30, 2011, with legislation currently pending in Congress). Thereafter, the federal medical assistance percentage (FMAP) rate will be reduced to its regular level.

f. Primary care services include evaluation and management services that are procedure codes for services designated as Evaluation and Management in the Healthcare Common Procedure Coding System and services related to immunization administration (Sec. 2303 of PPACA, as amended by Sec. 1202 of Reconciliation).

Health Reform: Provisions for Immediate Implementation

Catherine E. Liao, MSPH

The Patient Protection and Affordable Care Act (PPACA) will be phased in over the next four years (2010-2014). However, some of the provisions are scheduled to take effect within the next year. The following is a short description of those provisions that will go into effect over the next 18 months. This summary does not include information about grant opportunities provided in the bill. (See Paul Mandsager's article for more information about new grant funding available under PPACA.)

Information presented here was obtained from North Carolina Institute of Medicine (NCIOM) staff analysis of the legislation and from the Kaiser Family Foundation timetable.¹ More information on federal health reform is available on the NCIOM website at http://www.nciom.org/data/healthreform.php.

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- Small businesses with up to 25 full-time employees with average annual wages of up to \$50,000 are eligible for sliding-scale tax credits to help offset the costs of providing health insurance coverage to employees. To qualify, employers must pay at least 50% of the premium costs. The tax credit is effective January 1, 2010.²
- Medicare beneficiaries who reach the Part D prescription drug donut hole receive a \$250 rebate. This provision applies to individuals "who as of the last day of a calendar quarter in 2010 has incurred costs for covered Part D drugs so that the individual has exceeded the initial coverage limit."³
- Insurers must submit proposed premium increases to state Commissioners of Insurance for review to determine reasonableness. This provision takes effect upon enactment and applies to the 2010 plan year.⁴
- Employers with 50 or more employees must provide break time and a place for breastfeeding mothers to express milk, effective upon enactment.⁵

are considered to be "grandfathered" plans and do not need to meet all the same insurance requirements as newly created health plans.^g While many people will maintain their existing coverage, others will be able to purchase insurance through newly created HIEs. PPACA also reforms the insurance industry by eliminating many of the insurance practices that have prevented individuals with pre-existing conditions from obtaining affordable coverage.

Effective July 1, 2010

- \$5 billion in new funding is available to establish a high risk pool for uninsured people with pre-existing conditions.⁶ (See Michael Keough's sidebar for more information about how this will operate in North Carolina.)
- \$5 billion in new funding is available to create a temporary reinsurance program to help offset some of the claims costs for employers who provide health insurance coverage to early retirees ages 55-64.7
- The Secretary of the US Department of Health and Human Services creates a website to help consumers identify affordable health insurance in each state.⁸
- Tanning salons pay an extra 10% tax on indoor tanning services.⁹
- Some time before March 2011, the federal government will provide grants to states to begin planning for the creation of state health insurance exchanges.¹⁰
- National advisory groups are created to develop strategies for health workforce, quality improvement, prevention, and comparative effectiveness research.¹¹

Effective for Health Plans Issued After September 23, 2010

- Insurers are prohibited from imposing lifetime caps on the dollar value of essential health benefits for any participant or beneficiary.¹²
- Insurers are prohibited from dropping coverage of people when they get sick.¹³
- Insurers are prohibited from denying coverage to children under age 19 with pre-existing conditions or imposing preexisting condition exclusions based on health status.¹³
- New private plans must cover preventive services and not charge cost sharing. Preventive services include clinical services that have received a rating of "A" or "B" from the US Preventive Services Task Force; immunizations recommended by the Advisory Committee

Essential Benefits Package

PPACA directs the DHHS Secretary to develop an essential health care benefits package that includes a comprehensive set of services.¹⁰ All qualified health plans offered through the HIE must provide at least the essential benefits. (The essential health benefits provision does not apply to grandfathered plans or to Employment Retirement Income Security Act (ERISA) plans.) The Act requires the DHHS Secretary to include certain core services in the

g. The bill does not specify what types of changes can be made to an existing health insurance plan and still be considered a "grandfathered" plan. Therefore, the DHHS Secretary will need to promulgate rules to clarify, for example, whether a health insurance plan will be considered to be grandfathered if an employer or insurer changes the cost sharing or services covered under the plan. (Fernandez B. *Grandfathered Health Plans Under PPACA (P.L. 111-148)*. Washington, DC: Congressional Research Service; 2010. Report R41166. http://www.ncsl.org/documents/health/GrandfatheredPlans.pdf. Accessed May 14, 2010.)

on Immunization Practices; and evidence-informed preventive care and screenings recommended by the Health Resources and Services Administration for infants, children, adolescents, and women.¹⁴

- Young people up to the age of 26 years can be covered by their parents' health plan.¹³
- Insurers are required to spend at least 80% (individual and small group) or 85% (large group market) of premium dollars on medical services.¹⁵ (Note: This provision does not apply to self-funded or ERISA plans.)
- Enrollees can select any primary care provider from participating providers, cannot be charged more for outof-network emergency services, and can self-refer to an OB-GYN.¹⁶

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- Medicare beneficiaries with Part D prescription drug plans receive a 50% discount on brand-name drugs and biologics in the donut hole.³
- Medicare is expanded to cover more screening and preventive services, including an initial preventive physical exam, with no cost sharing.¹⁷
- Primary care physicians and general surgeons practicing in underserved areas receive a 10% bonus payment from Medicare, effective 2011 through 2015.¹⁸

- Insurers are required to provide a rebate to enrollees if the health insurance issuer spends less than 80% (individual and small group) or 85% (large group market) of premium dollars on medical services.¹⁶ (Note: This provision does not apply to self-funded or ERISA plans.)
- The Secretary of the US Department of Health and Human Services creates a new voluntary, public long-term care insurance program, called Community Living Assistance Services and Supports (CLASS).¹⁹
- Payments to Medicare Advantage plans are frozen at 2010 levels and reduced annually thereafter.²⁰
- Pharmaceutical companies pay new annual fees based on branded prescription drug sales.²¹
- Chain restaurants and vending machines must provide nutritional content of standard menu and other food items. Not later than one year after the date of enactment, the Secretary of the US Department of Health and Human Services will promulgate regulations to carry out this provision.²²

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- 2. Secs. 1421, 10105 of PPACA.
- 3. Sec. 3301 of PPACA, as amended by Sec. 1101 of Reconciliation.
- 4. Sec. 1003 of PPACA.
- 5. Sec. 4207 of PPACA.
- 6. Sec. 1101 of PPACA.
- 7. Secs. 1102, 10102 of PPACA.
- 8. Sec. 1103 of PPACA.
- 9. Sec. 10907 of PPACA.

- 10. Sec. 1311 of PPACA.
- 11. Secs. 3011-3012, 4001, 4003, 5101, 6301, 10501 of PPACA.
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- Reconciliation. 13. Secs. 1001, 1201, 10103(e) of PPACA.
- 14. Sec. 1001 of PPACA.
- 15. Secs. 1001, 10101 of PPACA.
- 16. Sec. 10101 of PPACA.
- 17. Sec. 4104 of PPACA.
- 18. Sec. 5501 of PPACA.
- 19. Secs. 8001-8002 of PPACA.
- 20. Secs. 1102-1103 of Reconciliation.
- 21. Sec. 9008 of PPACA, as amended by Sec. 1404 of Reconciliation.
- 22. Sec. 4205 of PPACA.

essential benefits package, including hospital services; professional services; prescription drugs; rehabilitative and habilitation services; mental health and substance abuse services in parity with other benefits; preventive services and vaccines; and maternity care. In addition, for children under age 21, the essential benefits package also must include well-baby, well-child, oral health, vision, and hearing services.^{10,11} Further, the plan must cover preventive services with no cost sharing (as described more fully later).¹²

Qualified health plans offered through the HIE must offer four levels of benefits.¹³ The lowest cost plan—the "bronze" plan—must ensure that the plan covers 60% of the actuarial costs of the essential health benefits. "Silver" plans must cover 70%, "gold" plans must cover 80%, and "platinum" plans must cover 90% of the benefit costs. In general, the higher the level of plan, the more a person will pay in premiums, but the less they will pay in out-of-pocket costs.

Health Insurance Exchanges

States will be required to create two HIEs—one for individuals (American Health Benefit Exchange) and one for small businesses with 100 or fewer employees (Small Business Health Options, or SHOP)—although states have the option of merging these two exchanges into one.¹⁴ These HIEs are intended to make it easier for individuals and small businesses to purchase coverage. The HIEs are required to offer standardized information to help consumers choose between plans based on quality and costs; offer "navigators" to provide information to the public about health plan choices and assistance with enrollment; determine eligibility for the health insurance premium tax credit (subsidy, discussed more fully below); and certify if someone meets the exemption from the health insurance mandate. HIEs also must certify qualified health plans to let them offer their insurance in the exchange. In addition, exchanges will offer at least two multistate or nationwide qualified health plans, at least one of which will be nonprofit.¹⁵

Notably, the Act envisions a "no-wrong door" approach to health insurance. People who first seek coverage through the HIE will be screened for eligibility for Medicaid or NC Health Choice and enrolled directly into those programs if eligible. Conversely, if a person applies for Medicaid or NC Health Choice at a local department of social services and is found to be ineligible but meets the requirements for the premium subsidy, then they should be enrolled directly into the subsidy program.¹⁶

Employer-Based Coverage

As noted earlier, most people obtain coverage through their employer. PPACA requires large employers (with more than 50 employees) to either offer coverage to their employees and dependents or pay a penalty.¹⁷ Employers with more than 50 employees and that do not offer affordable coverage that meets the statutory minimum requirements will be required to pay \$2,000 for each full-time employee, excluding the first 30 employees.

Notably, the Act does not require employers to pay any share of the premium for their employees or dependents. However, employers can be penalized if any of their employees qualify for and receive a premium tax credit in the HIE. As described later in this issue brief, individuals with access to employer-based coverage are generally ineligible for premium subsidies unless: (1) the coverage does not provide coverage for at least 60% of the actuarial cost of the health care package, or (2) the employee's share of the premium exceeds 9.5% of his or her annual income.¹⁸ If one of these situations occurs *and* the employee has a family income less than 400% FPL, then he or she is eligible for a subsidy in the exchange. Employers are required to pay \$3,000/year for each full-time employee who receives a subsidy, even if the employer otherwise offers coverage.^{h,17}

Employers who offer and pay for coverage for their employees also are required to provide certain employees with a "free choice" voucher.¹⁹ The voucher is equal to the amount that the employer would have contributed for the individual and his/her dependents if the person chose to enroll in the employer-sponsored insurance. Employees are eligible for this voucher if their share of the premium cost is between 8%-9.8% of their household income. In this event, the employee can choose to take the voucher and purchase coverage in the HIE or can opt to enroll in the insurance offered by the employer. Employers who provide a free choice voucher do not pay a penalty for individuals who seek coverage through the exchange.

Small businesses with fewer than 50 full-time employees are exempt from the requirement to offer coverage.¹⁷ However, the bill provides a tax credit for certain small employers to help them pay for coverage for their employees.^{1,20} To qualify, a business must have 25 or fewer employees and average annual wages of less than \$50,000. The small business tax credit will be implemented in two phases:

- Phase I (2010-2013): Small, for-profit businesses will be eligible for a tax credit of up to 35% if the employer provides coverage and pays at least 50% of the total premium cost. The full tax credit is available to small businesses with 10 or fewer employees and average annual wages of less than \$25,000. The credit is phased out for employers with up to 25 employees or for those firms with higher average wages (not to exceed \$50,000/ year). Nonprofit organizations are also eligible for a sliding scale payroll tax credit; however, the maximum tax credit is 25% for nonprofits.
- Phase II (2014-on): Small businesses are eligible for a 50% tax credit for up to two years. Aside from the increased maximum amount of tax credit, the program rules are similar to those in Phase I, with the maximum credit available to small businesses with 10 or fewer employees with an average annual wage of \$25,000 or less. Nonprofits will be eligible for a maximum tax credit of up to 35%.

Individual Responsibility

A lot of the criticism of the bill has focused on the individual "mandate." In this issue of the *Journal*, Barak Richman discusses the legal challenges that have been filed to prevent implementation of the bill based on this mandate. In reality, the Act does not require anyone to purchase insurance coverage. However, most citizens and legal immigrants will have to pay a financial penalty starting in 2014 if they do not have health insurance that meets the requirements for minimum essential benefits.²¹ While this provision applies to many individuals, there are certain groups who are exempt from the individual mandate, including but not limited to those who are not required to pay taxes, those who have a religious exemption, and individuals for whom the lowest cost plan exceeds 8% of their annual income.²²

h. The maximum that an employer will have to pay is the equivalent of \$2,000 per full-time employee (the same amount the employer would have had to pay if the employer did not offer coverage).

i. More information about the small business tax credit is available at http://www.irs.gov/newsroom/article/0,,id=220839,00.html.

Individuals can purchase insurance coverage either inside or outside the exchange.²³ Further, individuals can maintain existing coverage if they were enrolled in a policy as of March 23, 2010.²⁴ These latter plans are considered to be "grandfathered" plans and are not required to follow all the same requirements as new plans offered in the individual or non-group market.

The amount of the penalty will increase over time. In 2014, an individual must pay \$95/person or 1% of their taxable income (whichever is greater). When the penalties are fully phased in (2016), an individual will have to pay \$695 per individual or 2.5% of income (whichever is greater). Families with three or more people will pay the greater of the percentage of income or three times the penalty amount.²⁵

Premium Subsidies

Low- and moderate-income individuals who do not have access to employer-sponsored insurance, and who are not eligible for publicly subsidized insurance (including Medicaid, NC Health Choice, Medicare, or TRICARE), may be eligible for premium subsidies. PPACA provides refundable and advanceable premium credits to individuals with incomes up to 400% FPL on a sliding scale basis.^{j,18} The subsidy is based on the second lowest cost silver plan. To qualify, an individual must verify his or her income, citizenship, and immigration status. Employees also are eligible for the premium coverage if they are offered coverage by an employer that does not meet the requirements for minimum essential coverage (i.e., the plan does not cover 60% of the costs of the benefits) or if the premium exceeds 9.5% of the employee's annual income.

The sliding scale subsidies cover the costs of premiums, cost sharing (i.e., copayments, coinsurance), and out-of-pocket cost sharing limits.¹⁸ Table 2 shows the available subsidies.

To demonstrate how this would work, assume the Smith family has four people and a family income that equals \$33,075/year (150% FPL in 2009). They want to purchase a family policy with a premium cost of \$12,300/year (the approximate average amount of family premiums in North Carolina in 2008).²⁶ Let's assume the plan has an 80% medical loss ratio (which means that 80% of the premium costs are used to cover medical expenses, and the remaining 20% are for administrative expenses and profits). Thus, of the \$12,300 in premiums, \$9,840 would be spent, on average, for medical expenses. Let's also assume that this insurance policy met the requirements for a silver level plan (which means that the policy covers, on average, 70% of a family's health care costs covered by the plan). That means that the total average health care costs for this family plan would be

Table 2.

Premium, Out-of-Pocket Cost Shar	ng, and Out-of-Pocket Limits fo	r People Eligible for Subsidies

Individual or family income*	Maximum individual or family premiums	Out-of-pocket cost sharing ^a government pays (individual or family pays)	Out-of-pocket cost sharing limits per year ^b (individual/family)
< 133% FPL	2% of income	94% (6%)	\$1,983 / \$3,967 (one-third HSA amount)
133% up to 150% FPL	3%-4%	94% (6%)	\$1,983 / \$3,967
150% up to 200% FPL	4%-6.3%	87% (13%)	\$1,983 / \$3,967
200% up to 250% FPL	6.3%-8.05%	73% (27%)	\$2,975 / \$5,950 (one-half HSA amount)
250% up to 300% FPL	8.05%-9.5%	70% (30%)	\$2,975 / \$5,950
300% up to 400% FPL	9.5%	70% (30%)	\$3,967 / \$7,934 (two-thirds HSA amount)

a. Out-of-pocket costs include deductibles, coinsurance, and copays.

b. Maximum out-of-pocket limit includes the amount spent on deductibles, coinsurance, and copays. Premiums are not included in the out-of-pocket limits. The Health Savings Account (HSA) limits are currently set at \$5,950 per individual and \$11,900 per family (2010 and 2011); however this amount will increase over time.

* Any person or family whose household income level is equal to the upper threshold of the FPL range is considered part of that income tier.
 Thus, for example, a person whose income is exactly 150% FPL will fall into the 133% up to 150% FPL income tier.
 Source: Secs. 1401 and 1402 of PPACA, as amended by Sec. 1001. (The Henry J. Kaiser Family Foundation. Summary of New Health Reform Law.

The Henry J. Kaiser Family Foundation website. http://www.kff.org/healthreform/upload/8061.pdf. Publication no. 8061. Published April 21, 2010. Accessed May 28, 2010.)

j. The 2009 federal poverty levels are: \$10,830/year for an individual or \$22,050/year for a family of four. Thus, 400% of the federal poverty level is \$43,320/year for an individual or \$88,200 for a family of four.

approximately \$14,057/year: \$9,840 would be covered by the premium, and the other \$4,217 would be passed along to the family through cost sharing expenses (deductible, copayments, and coinsurance). Because of the premium subsidy, the Smith family is required to pay \$1,323/year (\$110.25/month) or 4% of their income in premiums (rather than the full \$12,300). Assuming the Smith family spends the average amount on health care that year (\$14,057), they would pay an additional \$843 in out-of-pocket costs (6% of the \$14,057). If, however, they incur more than an average amount of health care costs, their total out-of-pocket costs for covered benefits (excluding the premium) would be capped at \$3,967/year for the family.^k Once the family reaches this out-of-pocket limit, the plan would begin to pay 100% of all covered health care costs. If the Smiths were earning \$66,150/year (300% FPL), they would be required to pay 9.5% of their income, or \$6,284/year in premiums (\$524/month). If they incur average health care costs, they would also pay \$4,217/year in out-of-pocket health care expenses (or up to \$5,950 if they incurred catastrophic health care costs). Table 3 provides the premiums and outof-pocket spending amounts for individuals and families with different incomes (as a percentage of FPL). Note that,

for purposes of the example, we assumed that the second lowest cost silver plan had a premium cost of \$4,460/year for an individual¹ or \$12,300 for a family (the amount North Carolinians paid, on average, for employer-sponsored health insurance in 2008).

Congress enacted two additional provisions to ensure that health plans are affordable to young adults and children. First, PPACA includes an option for catastrophic coverage that is limited to people younger than age 30 or to those who are exempt from purchasing coverage because the lowest cost plan exceeds 8% of their annual income.²⁷ Catastrophic plans have lower cost premiums because the insurer does not begin to pay for most covered services until the person's health care costs exceed a high deductible level (currently set at \$5,950 for an individual or \$11,900 for a family).^m Second, insurers that offer qualified health plans in the exchange must also offer similar plans to children only.²⁸

Insurance Reforms

In the past, many health insurers excluded people in the non-group market from insurance coverage if they had pre-existing health problems. These practices were implemented, at least in part, to reduce adverse selection.

Table 3.

Premium and Out-of-Pocket Spending for Individuals and Families at Different Incomes
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	Average total health care cost	Total yearly premium costs without subsidy	Yearly premium costs with subsidy (% of income)	Average out-of- pocket costs (cost sharing) without subsidy	Out-of pocket cost sharing with subsidy (% of income)	Maximum out-of- pocket limit without subsidy	Maximum out-of- pocket limit with subsidy
150% FPL							
Individual (\$16,245/yr)	\$5,097	\$4,460	\$650 (4%)	\$1,529	\$306 (6%)	\$5,950	\$1,983
Family of four (\$33,075/yr)	\$14,057	\$12,300	\$1,323 (4%)	\$4,217	\$843 (6%)	\$11,900	\$3,967
300% FPL							
Individual (\$32,490/yr)	\$5,097	\$4,460	\$3,087 (9.5%)	\$1,529	\$1,529 (30%)	\$5,950	\$2,975
Family of four (\$66,150/yr)	\$14,057	\$12,300	\$6,284 (9.5%)	\$4,217	\$4,217 (30%)	\$11,900	\$5,950

Source: Average individual premium in North Carolina (2008). MEPS. Table II.C.I. (2008). http://www.meps.ahrq.gov/mepsweb/data_stats/ summ_tables/insr/state/series_2/2008/tiic1.pdf.

Average family premium in North Carolina (2008). MEPS. Table II.D.1 (2008). http://www.meps.ahrq.gov/mepsweb/data_stats/summ_tables/insr/state/series_2/2008/tiid1.pdf.

m. The high deductible is tied to the HSA deductibles. PPACA exempts preventive services and three primary care visits from the deductible (in other words, the catastrophic plan will cover these costs before the person meets the deductible).

k. This assumes that the insurer sets the maximum allowable out-of-pocket cost limit. An insurer could offer a plan with a lower out-of-pocket cost limit, in which case, the family's out-of-pocket costs would be capped at a lower limit.

I. For purposes of this example, we assumed that \$3,568 of the individual premium (\$4,460) would be spent on medical expenses. Assuming that this plan met the requirements for a silver plan, the total actuarial value of the plan would be \$5,097.

Without pre-existing condition exclusions, people could wait until they were seriously ill before purchasing insurance coverage. This would lead to fewer healthy people in the insurance pool, driving up the health care costs for those who remained in the pool (further discouraging healthy people from purchasing insurance). Insurers have used pre-existing condition exclusions to discourage people from waiting until they were sick to purchase coverage. In addition, insurers typically charged people more based on their health status and age. This practice made coverage more affordable to people who are younger and healthier but much more expensive for those who were older or sick. To further control the costs of health care premiums, insurers often imposed annual or lifetime limits on the amount of money they would pay out on behalf of an individual during the year (or during the person's lifetime).

PPACA changes these practices. Insurers will no longer be able to deny coverage to children under age 19 with preexisting conditions, beginning with plans that begin after September 23, 2010. In addition, PPACA prohibits plans from imposing lifetime caps, restricts the use of annual caps for essential benefits, and extends coverage to young adults up to age 26 under their parents' coverage.^{n,29} Insurers are also prohibited from dropping coverage for people when they get sick, a practice that appears to have been more common in other states than in North Carolina. PPACA also appropriated \$5 billion in funding to help support a high risk pool for people with pre-existing conditions.³⁰ In this issue of the Journal, Michael Keough discusses plans for implementing the federal high risk pool in North Carolina as well as the differences between the state high risk pool (Inclusive Health) and the newly-created federal high risk pool.

When the bill is fully implemented (January 1, 2014), insurers will no longer be able to exclude people or groups, or set premium costs, based on a person's pre-existing conditions or use of health services.³¹ Further, insurers can only vary premiums based on age (3:1 differential),^o geographic area, family composition, and tobacco use (limited to 1.5:1) in the individual and small group market. Insurers must submit their premium rate increases to the Department of Insurance for review and/or approval if allowed under state law.³² Further, insurers may not impose annual or lifetime limits.³³ The North Carolina Department of Insurance will be primarily responsible for enforcing most of these new provisions. Insurance Commissioner Wayne Goodwin discusses the new insurance provisions and the creation of a state HIE in his commentary in this issue of the *Journal*.

Other Coverage Provisions

Medicare

PPACA does not change eligibility for Medicare. However, it does expand the services that are offered and changes some of the cost sharing provisions. Effective January 1, 2011, Medicare beneficiaries will be eligible for a personalized prevention plan without cost sharing. The plan will include, but not be limited to, clinical preventive services recommended by the US Preventive Services Task Force and immunizations recommended by the Advisory Committee on Immunization Practices, with no cost sharing.³⁴ Medicare will also begin to cover an annual wellness visit as part of a personalized prevention plan (effective January 1, 2011). Further, the Act provides some additional protections for people enrolled in a Medicare Advantage plan. Effective January 1, 2011, Medicare Advantage plans cannot charge more in cost sharing (copayments, deductibles, or coinsurance) for Medicare-covered services than is allowed under traditional Medicare.^{p,35}

In addition, Medicare will begin phasing out the Part D prescription drug "donut hole." The donut hole is a gap in Medicare prescription drug coverage in which Medicare Part D enrollees, after reaching an initial coverage limit, must pay 100% of total drug costs before catastrophic coverage begins. Effective this year, Medicare recipients who reach the donut hole will receive a \$250 rebate for the costs of medications purchased in the coverage gap.³⁶ The donut hole will be phased out between now and 2020. In 2020, Medicare recipients will be required to pay 25% of the costs of their medications (similar to what they currently pay initially for drug coverage) until they reach the catastrophic level, at which point Medicare will pay 95%. Bob Jackson describes the Medicare provisions in more detail in his commentary in this issue of the *Journal*.

Long-Term Care

Historically, private health insurance has not covered long-term care services. Long-term care services include services provided by nursing homes, intermediate care facilities for people with intellectual and/or other developmental disabilities, or home- and community-based

n. These provisions are effective for health plan years that begin after September 23, 2010.

o. The compression of the rating bands based on age could have the effect of reducing premiums for older adults (ages 55-64), but increasing the rates for younger adults (ages 18-30). However, with all the other changes in PPACA—including the larger risk pools—it is uncertain whether rates will increase for younger adults. PPACA does allow younger adults under age 30 to purchase catastrophic plans. These plans should have lower premium rates than the bronze, silver, gold, or platinum plans offered through the HIE.

p. Approximately 17% of North Carolina Medicare beneficiaries were enrolled in Medicare Advantage plans in 2009. This compares to a national average of 22.5%. (The Henry J. Kaiser Family Foundation. Medicare Advantage (MA) plan penetration, 2009. Statehealthfacts.org website. http://www.statehealthfacts.org/comparetable.jsp?ind=329&cat=6. Accessed April 28, 2010.)

services for people who need assistance with activities of daily living.^q In the past, individuals who wanted long-term care insurance had to purchase a separate policy for those benefits. Low-income people and other individuals with more resources could qualify for Medicaid to cover long-term care services only after exhausting most of their own income and resources.

PPACA begins to address this problem. Congress created a new public long-term care insurance program effective January 1, 2011 to help with home- and community-based services, called the Community Living Assistance Services and Supports (CLASS).³⁷ CLASS will be financed through a payroll deduction. Everyone will be enrolled automatically; those who do not want this coverage can opt-out. The amount of a person's payroll deduction will be based on his or her age when they first enroll." People are vested once they have paid into CLASS for five years. To receive benefits, a person must have difficulties with at least two or three activities of daily living, need substantial supervision due to cognitive impairments, or have a similar level of functional limitations. CLASS will pay cash benefits of not less than \$50/day to purchase non-medical services and supports. The actual amount of the services will vary based on functional ability.

In addition to the CLASS program, PPACA also gives states new options and financial incentives to expand homeand community-based services through the Medicaid program. Effective October 1, 2011, states can implement the Community First Choice Option.38 This Medicaid optional program provides home- and community-based attendant services and supports to individuals who would otherwise need institutional care if they have incomes that do not exceed 150% FPL (\$16,245/year for an individual or \$21,855/year for a couple in 2009). Funding is only available to support people in a home or community setting (not an institutional setting). The state receives an enhanced federal match rate if they adopt this option. States have additional Medicaid options to expand home- and community-based services to frail older adults and people with disabilities to help them remain in the community.^{s,39}

Safety Net

Most of the coverage expansion will occur in 2014. However, there are between 47 million (2009 US Census estimates) and 52 million (NCIOM estimates) people who lack insurance coverage nationwide. What kinds of coverage will these people have while the benefit expansion phases in?

To try to begin expanding access to care, Congress authorized new funding for safety net providers. These are health care providers with a mission or legal obligation to serve uninsured and other underserved populations. Last year, as part of the American Recovery and Reinvestment Act (ARRA), Congress appropriated \$2 billion to expand federally qualified health centers (FQHCs, also known as community and migrant health centers).40 Most of the funding in ARRA was for construction, repairs, and renovation; new equipment; and to purchase health information technology (HIT). As part of PPACA, Congress appropriated a total of \$9.5 billion over five years (\$1 billion in FY 2011 increasing to \$3.6 billion by FY 2015) in operational costs to support expansion of FQHCs.⁴¹ In addition, Congress appropriated another \$1.5 billion over five years for construction and renovation of FQHCs and made several other changes to enhance the financial viability of these safety net providers. In his commentary, E. Benjamin Money discusses these new provisions.

In addition, PPACA appropriated \$50 million in each year (FY 2010-2013) to support capital and construction of school-based health centers. Other funds are authorized (but not appropriated) to support operational costs.42 In 2009, North Carolina had 56 school-based or schoollinked health centers in 26 Local Education Agencies serving approximately 28,000 students.43 To receive the new federal funding, school-based health centers must provide comprehensive primary care, including assessment, diagnosis, and treatment of minor, acute, and chronic medical conditions, and referrals to specialists and dental providers. School-based health centers must also provide assessments for mental health and substance abuse disorders, crisis intervention, counseling, treatment, and referrals for more specialized mental health and substance abuse treatment services. The new federal funding is targeted to communities that have historically demonstrated difficulty in accessing health, mental health, and substance abuse disorder services, and to communities with a large population of uninsured, underinsured, or individuals enrolled in public insurance programs. Constance N. Parker discusses how these provisions can support North Carolina school-based and school-linked health centers in her sidebar.

Additionally, PPACA includes several provisions aimed at hospitals. Hospitals are leading safety net providers in North Carolina and across the country. Under the federal

q. Activities of daily living include eating, dressing, bathing, toileting, transferring, and continence.

r. Premiums will not increase with age as long as the person stays continuously enrolled; however, the DHHS Secretary can call for an across-the-board premium increase if needed to ensure the financial solvency of the plan.

s. PPACA provides states with additional Medicaid home- and community-based options. For example, PPACA allows states to provide home- and community-based services to people with incomes up to 300% FPL (\$32,490/year for an individual, \$43,710/year for a couple in 2009) without a federal Medicaid waiver. The Act expands the Money Follows the Person Rebalancing Demonstration, which provides enhanced federal funding to help people transition from an institutional setting back to the community after spending at least 90 days in an institution. PPACA creates the State Balancing Incentive Program, which provides states with enhanced federal match rates to increase the proportion of long-term care dollars spent on home- and community-based services (rather than institutional care).

Emergency Medical Treatment and Active Labor Act (EMTALA), hospitals that participate in Medicare must screen anyone who seeks services at a hospital emergency department, regardless of ability to pay.⁴⁴ If the person has a medical emergency, then the hospital must either stabilize the condition or transfer the person to another hospital, as appropriate. PPACA includes several provisions aimed at expanding funding for trauma centers, emergency care coordination, and emergency services for children.⁴⁵

Many hospitals also have charity care policies to provide free or reduced cost services to low-income uninsured people. In FY 2008, North Carolina hospitals provided \$694 million in free care. Sixty-four percent (72 of 112) of community hospitals in North Carolina have some information about financial assistance policies online, and 39 (35%) have comprehensive policies online.⁴⁶

More North Carolina hospitals will be required to have and publicize their charity care policies as a result of PPACA. Beginning with the taxable year after the date of enactment, tax-exempt hospitals will have to meet new requirements to maintain their tax-exempt status.⁴⁷ In addition to providing emergency services, these hospitals must conduct a community needs assessment at least once every three years and adopt an implementation strategy to address those needs. They must also have a financial assistance policy that describes the eligibility criteria for this assistance and is publicized to the community. Finally, they must limit charges to people eligible for assistance to amounts generally billed. Hospitals that do not meet these requirements can be assessed a tax equal to \$50,000 and can have their tax-exempt status revoked.

The Act also expands the 340B discount drug program.⁴⁸ The 340B program provides deeply discounted outpatient drugs to certain safety net providers, including FQHCs, health departments, and some hospitals. PPACA expands the types of hospitals that are eligible for this deeply discounted prescription drug program to include children's hospitals, free-standing cancer hospitals, critical access hospitals, and sole community hospitals. This expansion will be particularly helpful to the 23 critical access hospitals in North Carolina, which can now qualify for deeply discounted outpatient drugs.

PPACA includes statutory language that gives the DHHS Secretary the authority to award grants to eligible entities to support community-based collaborative care networks to provide comprehensive, coordinated, and integrated health care services for low-income populations.⁴⁹ North Carolina should be well-positioned to capture some of these grant funds if funding is later appropriated for this purpose. This new program closely mirrors the North Carolina initiative to create community collaborations of care for low-income uninsured people. North Carolina currently has 36 public and private funded networks of care servicing low-income uninsured North Carolinians in 68 counties across the state. t,50,51

Health Professional Education

Congress recognized that more people are likely to seek services as they gain health insurance coverage. This may exacerbate any existing health professional shortages and create new demands on other providers.

PPACA includes many provisions to address workforce shortages. However, unlike many other sections of the Act, PPACA primarily authorizes rather than appropriates new funding to expand and strengthen the health care workforce. PPACA authorizes funding to create a National Health Care Workforce Commission to identify workforce needs over the next 10 and 25 years and to identify strategies to address these needs.⁵² The Commission is charged with looking at all types of health care workers, including health care professionals (e.g., physicians, nurses, physician assistants, and mental health and substance abuse professionals), as well as paraprofessionals (e.g., direct care workforce and patient navigators). The Act authorizes funding to expand training of the primary care workforce,53 geriatrics,54 pediatrics,⁵⁵ mental health and substance abuse providers,⁵⁶ public health professionals,57 allied health,58 dentistry,59 nursing,60 underrepresented minorities and/or low-income populations,⁶¹ direct care workers,⁶² and patient navigators.⁶³ The Act also authorizes new initiatives to increase the cultural competency of the existing workforce, teach health care professionals to meet the needs of people with disabilities, and enhance training for quality improvement and patient safety.64

PPACA also includes provisions to address the maldistribution of health care providers. For example, PPACA increases Medicare reimbursement rates (FY 2011-2015) for primary care providers and general surgeons practicing in underserved areas.⁶⁵ The Act also ties Medicaid reimbursement for primary care procedures to Medicare rates (thus also effectively increasing Medicaid rates for primary care providers in rural and underserved areas).⁶⁶ Further, PPACA *appropriates* \$1.5 billion over five years (FY 2011-2015) to expand the National Health Service Corps (NHSC) to provide loans or scholarships to health care professionals who agree to practice in underserved areas.⁶⁷ In this issue of the *Journal*, John Price discusses the new NHSC provisions. The bill also authorizes new funding to help train, recruit, and retain health care professionals

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t. Most (31 of the 36) community collaborations receive some state funding from HealthNet (administered through the Office of Rural Health and Community Care), and many also receive foundation or community funds to help support their operations. Technical assistance to these community collaboratives is provided by the Care Share Health Alliance or the Office of Rural Health and Community Care.

in underserved areas.⁶⁸ Thomas C. Ricketts and Elizabeth Walker discuss the workforce provisions in the health reform legislation more thoroughly in their commentary.

Quality

PPACA also includes funding and new requirements to improve health care quality. It builds on the funding to promote diffusion and implementation of HIT that was part of the American Recovery and Reinvestment Act. The HIT provisions are explored more extensively in Steve Cline's commentary in this issue of the *Journal*. PPACA invests heavily in prevention and comparative effectiveness research. The Act also directs the DHHS Secretary to establish quality measures, requires providers to report data on these measures, provides more meaningful quality information to the public, and begins to pay providers and insurers for improved quality.

Prevention

PPACA includes \$500 million in FY 2010, increasing to \$2 billion in FY 2015, to create a Prevention and Public Health Fund that will be used to expand prevention, wellness, and public health activities.⁶⁹ The nationwide prevention activities will be led by a new National Prevention, Health Promotion, and Public Health Council, which will include the secretaries or heads of the federal agencies with jurisdiction over issues that affect health.^{4,70} The Council is charged with "developing a national prevention, health promotion, public health, and integrative health care strategy that incorporates the most effective and achievable means of improving the health status of Americans and reducing the incidence of preventable illness and disability in the United States."⁷¹

The Prevention and Public Health Fund can be used for many purposes specified in the Act, including broad-based education campaigns. For example, the Fund can be used to plan and implement a national outreach and education campaign to promote health improvement,⁷² and to develop a five-year national oral health prevention and education campaign.⁷³ The Fund can also be used to award competitive grants (i.e., community transformation grants) to state and local governmental agencies and community-based organizations to implement evidence-based, multifaceted community preventive health activities.⁷⁴ Entities that compete for this grant must propose a comprehensive intervention that policy, multifaceted includes environmental, programmatic, and infrastructure changes to promote healthy living, reduce disparities, and prevent chronic diseases. The state and local communities can seek community transformation grants to create healthier school environments (including healthy food options and physical activity); promote healthy lifestyles and emotional wellness; assess and implement worksite wellness programs and incentives; and reduce racial and ethnic disparities and the social, economic, and geographic determinants of health. The Fund also can be used to increase immunization rates among children, adolescents, and adults.⁷⁵

The Act also authorizes, but does not provide direct appropriations for, worksite wellness,⁷⁶ dental caries management,⁷³ epidemiology laboratory capacity,⁷⁷ healthy aging for the pre-Medicare population,⁷⁸ community-based diabetes prevention initiatives,⁷⁹ congenital heart disease surveillance system,⁸⁰ and a young women's breast health awareness and support program.⁸¹ It is possible that some of these programs may be funded through the Prevention and Public Health Fund.

In addition to the funding appropriated to the Prevention and Public Health Fund, Congress appropriated additional funding for specific prevention activities. For example, PPACA appropriates \$75 million in each FY 2010-2014 for grants to states and some competitive demonstration grants for personal responsibility education that includes comprehensive sexuality education (including abstinence), contraception education, and adulthood preparation.82 Congress appropriated \$100 million (FY 2010) increasing to \$400 million (FY 2014) for maternal, infant, and early childhood home visiting programs,83 and \$25 million in each FY 2010-2019 for pregnancy assistance funds to assist pregnant and parenting teens and women who are in high school or college.⁸⁴ Additionally, PPACA mandates that chain restaurants and vending machines provide nutritional content that is prominently displayed,⁸⁵ and that employers provide new breastfeeding mothers time and a private location to express milk for up to one year after a child is born.⁸⁶ In his commentary, State Health Director Jeffrey Engel explains how the prevention provisions in PPACA can help improve population health in the state and how the new funding opportunities can be used to support the implementation of many of the recommendations included in the state's Prevention Action Plan.87

In addition to the population health prevention efforts, the Act includes more comprehensive coverage of clinical preventive services. For example, the Act requires private insurers and Medicare to cover clinical preventive services without any cost sharing. This includes all of the services that are recommended by the US Preventive Service Task Force (USPSTF) with an "A" or "B" rating and immunizations that are recommended by the Advisory Committee on

u. The new Council will include the secretaries of the US Department of Health and Human Services, Agriculture, Education, Transportation, Labor, and Homeland Security, as well as the Chair of the Federal Trade Commission, Administrator of the Environmental Protection Agency, Director of the Office of National Drug Control Policy, Director of the Domestic Policy Council, Assistant Secretary for Indian Affairs, Chair of the Corporation for National and Community Service, and the head of any other agency the Chairperson determines is appropriate.

Immunization Practices. In addition, private insurers must provide coverage for preventive care and screenings for women and for infants, children, and adolescents that are recommended by the Health Resources and Services Administration (i.e., the Bright Futures Initiative) and additional preventive care and screenings recommended by the USPSTF for Medicare beneficiaries.⁸⁸ State Medicaid programs are already required to provide preventive services to children under age 21 without cost sharing as part of the Early Periodic Screening, Diagnosis, and Treatment (EPSDT) requirements. However, state Medicaid programs are not required to provide preventive services to adults, although many cover a number of the recommended preventive screenings and services.⁸⁹ Further, state Medicaid agencies can impose modest copayments or other cost sharing for preventive services provided to adults. In order to encourage state Medicaid agencies to provide comprehensive coverage of preventive services for adults, PPACA enhances the federal match rate for states that choose to cover all the recommended preventive services with no cost sharing.90

Comparative Effectiveness Research

PPACA creates a new Patient-Centered Outcomes Research Institute.91 This Institute is charged with establishing research priorities and funding comparative clinical effectiveness research to evaluate and compare health outcomes and the clinical effectiveness, risks, and benefits of two or more treatments, services, drugs, and biologicals, or medical devices. The Act is very specific that the Institute does not have the authority to use the research to mandate coverage, reimbursement, or other policies for public or private payers. The DHHS Secretary, however, can use evidence or findings from the comparative clinical effectiveness research in determining coverage, reimbursement, or incentive programs for Medicare from among alternative treatment options, as long as the Secretary does not use the research in a manner that treats the life of an older adult, a person with disabilities, or someone with a terminal illness as having lower value than that of a person who is younger, nondisabled, or not terminally ill. PPACA appropriates \$10 million in FY 2010, increasing to \$150 million in FY 2012, and assesses insurers, self-funded plans, and Medicare thereafter to support this research. The findings from the comparative effectiveness research are to be widely distributed to physicians, health care providers, patients, and other groups. In this issue of the Journal, Tim Carey discusses the importance of comparative effectiveness research and the involvement of North Carolina research groups in conducting this research. In addition, North Carolina State Senator Josh Stein discusses the North Carolina Comparative Effectiveness Study Committee in his sidebar.

Quality and Outcome Data

Under PPACA, the DHHS Secretary must develop a strategy to improve the delivery of health services, patient health outcomes, and population health. As part of this effort, the Secretary must develop strategies to increase the use of health care data to improve quality, outcomes, efficiency, and transparency; change federal payment policies to incentivize quality and efficiency; disseminate best practices to improve patient safety and reduce medical errors, preventable admissions and readmissions, and health care acquired infections; and reduce health disparities.⁹² The Secretary is required to submit a report annually to Congress on the progress in achieving these goals and any changes to the short- and long-term goals. In addition, PPACA directs the President to convene an Interagency Working Group on Health Care Quality to assist with the goals of improving health care quality.93

The DHHS Secretary is also directed to develop quality measures to assess the performance and health outcomes of health plans or providers of services.94 PPACA directs the Secretary to seek public input into the measures before finalizing the use of any quality measure.95 Ultimately, the goal is to make these data available to the public through standardized websites.96 For example, not later than January 1, 2011, the Secretary must develop a Physician Compare website with information on physicians enrolled in the Medicare program and other professionals who participate in the Physician Quality Reporting Initiative.97 Similarly, the Secretary will develop reporting requirements for group health plans and health insurance issuers by March 23, 2012.98 The Secretary is also directed to develop quality measures and reporting requirements for longterm care hospitals, inpatient rehab hospitals, prospective payment system-exempt cancer hospitals, and hospice;99 skilled nursing facilities and home health agencies;100 and ambulatory surgical centers.¹⁰¹

PPACA clearly puts greater emphasis on collecting and reporting quality data than we have in our current health care system. However, the Act goes further by directing the DHHS Secretary to begin paying health care professionals, hospitals, and health plans based on the health outcomes they achieve, rather than payments based purely on the procedures or services provided. This is one of the ways in which the Act begins to change the way we organize and pay for health care. For example, Medicare will begin paying physicians based on a composite of quality-based measures beginning in 2013.¹⁰² Similarly, physicians are provided financial incentives if they have successfully completed their Maintenance of Certification program assessment.¹⁰³ Beginning in FY 2013, hospitals will have an across-the-board cut to diagnosis-related group (DRG) payments. However,

v. The quality measures will be based on care provided to people with acute myocardial infarction, heart failure, pneumonia, surgical infections (measured by the Surgical Care Improvement Project), and health care associated infections.

hospitals that are meeting certain quality standards will receive enhanced payments.^{v,104} Certain hospitals will see their payments reduced for health care acquired conditions and excess hospital readmissions.¹⁰⁵ Similarly, Medicare Advantage plans will experience cuts in their reimbursement beginning in 2012.¹⁰⁶ However, Medicare Advantage plans that are providing high quality care will be rewarded through higher reimbursement.

In his commentary, Stephen Wallenhaupt discusses the new provisions in PPACA that address quality and reflects on how well-positioned the state is to meet these new requirements based on our pre-existing efforts to improve quality and patient safety.

Cost Containment

The Act strives to "bend the health care cost curve" by testing new models of organizing and paying for health care. PPACA creates a new Center for Medicare and Medicaid Innovation within the Centers for Medicare and Medicaid Services to test innovative payment and service delivery models to reduce program expenditures.¹⁰⁷ Congress appropriated \$5 million for the design and implementation of these models in FY 2010 and \$10 billion to implement and evaluate the models in FY 2011-2019. The Act includes many new models of care delivery to be tested in the Medicare and Medicaid programs as part of this effort to change the structure and financing of our health care delivery system. For example, PPACA directs the DHHS Secretary to establish a shared savings program with "accountable care organizations" (ACOs), organizations of providers who agree to assume responsibility for the quality, cost, and overall care of their Medicare fee-for-service beneficiaries. The ACO will be eligible for shared savings if it meets certain quality standards and if the estimated expenditure for the beneficiary is below an applicable benchmark expenditure.¹⁰⁸ The Act also directs the DHHS Secretary to establish a national pilot program on payment bundling (which includes inpatient, physician services, outpatient hospital services, and post-acute care services).¹⁰⁹ In addition, PPACA directs the Secretary to develop an independence at home demonstration project, which will have primary care teams visit high-risk, chronically ill Medicare beneficiaries at home to prevent future hospitalizations.110,111 In addition, the Act creates a hospital readmissions reduction program¹¹² and a community-based care transition program to provide transition services across a continuum of care to high-risk Medicare beneficiaries who have multiple chronic illnesses or other risk factors associated with hospital readmissions.¹¹³

PPACA also makes changes in the Medicaid program to support or test new models of care. Perhaps the most important provision for North Carolina is the state option

to provide a medical or health home for Medicaid enrollees with chronic conditions. This model is similar, in most respects, to our existing Community Care of North Carolina model.¹¹⁴ A provider, or a health team, can be designated as the individual's "health home" and receive additional permember per-month payments for use on comprehensive care management, care coordination, and health promotion; comprehensive transitional care; patient and family support; referral to community and social services; and use of HIT. States that elect this option are eligible for an enhanced federal match rate of 90% for the first eight fiscal year quarters in which the plan amendment is in effect.¹¹⁵ The DHHS Secretary is also directed to establish a demonstration project to test bundled payments in Medicaid;¹¹⁶ a Medicaid global payment demonstration project to test the impact of changing payments from fee-for-service to global capitation;¹¹⁷ a pediatric accountable care demonstration project;¹¹⁸ a five-year period for demonstration projects to test models to better coordinate care for dual-eligible beneficiaries;¹¹⁹ and a Medicaid emergency psychiatric demonstration project to pay for emergency services provided to individuals in private institutions for mental illnesses.120

These demonstrations are intended to test and evaluate new models to improve care coordination, transitions of care from one care setting to another, quality, health outcomes, and cost effectiveness of the care provided. However, as small scale demonstrations they have limited ability to control overall health care spending. Thus, Congress gave the DHHS Secretary the authority to expand these models if the Secretary determines that the model improves quality of patient care and reduces spending.¹⁰⁷

The bill also cuts certain payments to Medicare Advantage plans and certain health care providers. For example, the Congressional Budget Office (CBO) estimates that the plan will reduce Medicare payments by \$156.6 billion over 10 years by reducing annual market basket updates for inpatient acute hospitals, home health agencies, skilled nursing facilities, hospice, and other Medicare providers.^{w1,121} Additionally, PPACA is estimated to save \$135.6 billion over 10 years by cutting excess payments to Medicare Advantage plans.¹ Independent studies have shown that Medicare Advantage plans are paid, on average, 14% more than traditional Medicare for comparable beneficiaries.¹²² PPACA phases out these excess payments to plans over time while concurrently providing bonus payments to Medicare Advantage plans that achieve certain quality ratings.

The Actalso anticipates significant cost savings by reducing Medicare and Medicaid payments to hospitals. Historically, hospitals that serve a higher proportion of Medicaid, lowincome, and uninsured patients than other hospitals received

v. The quality measures will be based on care provided to people with acute myocardial infarction, heart failure, pneumonia, surgical infections (measured by the Surgical Care Improvement Project), and health care associated infections.

w. Market baskets are estimates developed to update provider reimbursement in order to adjust for inflation.

higher reimbursement from Medicare and Medicaid. These hospitals received extra "disproportionate share hospital" (DSH) payments because Congress recognized that they had less ability to shift the uncompensated costs of caring for the uninsured or Medicaid patients onto other commercially insured patients. The DSH payments to hospitals will be phased down over time as the numbers of uninsured people decline in each state. CBO estimates that the reduction in DSH payments will save \$14 billion over 10 years in the Medicaid program¹²³ and \$22.1 billion over 10 years in the Medicare program.^{1,124} Further, PPACA increases drug rebates in the Medicaid program, which is estimated to reduce federal costs by \$38.1 billion over 10 years.¹²⁵

PPACA includes provisions to streamline health insurance administration and implement HIT.¹²⁶ The DHHS Secretary is directed to develop standards for eligibility verification, claims and encounter information, enrollment and disenrollment in health plans, prior authorization, claims payment, and reduction in the number and complexity of forms for patients and providers. The CBO estimates that administrative simplification will reduce overall costs to the federal government by \$11.6 billion over 10 years (\$7.3 billion for the Medicaid program and \$4.3 billion for spending in the HIE).¹ The Act also includes new provisions and funding to support more aggressive efforts to eliminate fraud and abuse and to recover overpayments.¹²⁷

Financing

As noted earlier, CBO estimates that the costs of the new coverage provisions and the other health-related spending would amount to \$938 billion over 10 years.¹ However, this cost is more than offset by new revenues and other cuts to the Medicaid and Medicare program. For example, CBO estimates that individuals who are not exempt from the coverage mandate would pay \$17 billion in penalties from 2015 to 2019, and employers would pay \$52 billion. PPACA also includes an excise tax on high-premium insurance plans (the so-called "Cadillac plans"). This tax limits the tax deductibility of any employer-sponsored plan that exceeds \$10,000 for individual coverage or \$27,500 for family coverage (effective 2018).^{x128} The excise tax on high-cost plans is expected to yield \$32 billion between 2018-2019, and more in the following decade.

In addition to the coverage provisions, there are other provisions which would increase taxes on higher income individuals. Beginning in 2011, Medicare beneficiaries earning more than \$85,000/year and couples earning more than \$170,000/year will have to pay higher premiums for their Medicare Part D prescription drug benefits.¹²⁹ Individuals of any age will pay an additional 0.9% increase in their payroll taxes for any annual earnings in excess of \$200,000 for an individual or \$250,000 for a couple and will have to pay a 3.8% Medicare tax on their unearned income.¹³⁰ Over the next 10 years, PPACA is expected to raise \$60.1 billion in fees on insurers;¹³¹ \$27 billion in fees on pharmaceutical companies;¹³² \$20 billion in fees on manufacturers of medical devices;¹³³ and \$2.7 billion in taxes on tanning salons.^{134,135}

In total, the provisions that affect direct spending (i.e., Medicaid and Medicare) are expected to reduce the costs of those programs by \$511 billion, and the other provisions affecting revenues would reduce the deficit by \$420 billion, thus leading to an overall reduction of the federal deficit by \$143 billion over 10 years (or \$124 billion, not counting the education provisions in the reconciliation bill).

Conclusion

PPACA addresses all three key components of health reform. The legislation does the most to improve access to care by expanding Medicaid to those with lower incomes and making health insurance coverage more affordable to those with incomes up to 400% FPL who are not covered through their employer. In this issue of the Journal, Adam Searing and Adam Linker discuss the impact of PPACA on consumers and the uninsured. PPACA also invests in expanding the health care safety net and includes provisions that, if funded, will expand and strengthen provider supply. The Act will help improve the quality of care we receive, which should lead to better health outcomes through the legislation's investments in prevention, integrative care, comparative effectiveness research, and enhanced quality measurement and reporting. PPACA should lead to reduced fraud and abuse and begin to reduce unnecessary costs in the system including excess administrative costs. However, while the legislation is expected to reduce the federal deficit by \$124 billion over the next 10 years, the legislation does less

Useful Resources

- Patient Protection and Affordable Care Act (HR 3590, signed into law March 23, 2010). http://frwebgate. access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_ bills&docid=f:h3590enr.txt.pdf.
- Health Care and Education Reconciliation Act of 2010 (HR 4872, signed into law March 30, 2010). http://frwebgate.access.gpo.gov/cgi-bin/getdoc. cgi?dbname=111_cong_bills&docid=f:h4872eh.txt.pdf.
- Kaiser Family Foundation. Focus on Health Reform: Summary of New Health Reform Law. Publication no. 8061. http://www.kff.org/healthreform/upload/8061. pdf.
- Congressional Budget Office. Manager's Amendment to Reconciliation Proposal. http://www.cbo.gov/ ftpdocs/113xx/doc11379/AmendReconProp.pdf.

x. The reconciliation bill included higher thresholds for people in high-risk professions or for retirees.

in the area of cost containment than in the areas of access and quality. PPACA creates the necessary infrastructure that can lead to longer-term health care cost savings by testing new health care delivery models and payment systems. But, until these systems are tested, evaluated, and, if successful, implemented more broadly, we are unlikely to experience significant reductions in the health care cost curve.

Not surprisingly, PPACA is not a perfect bill and does not address all of our current health system woes. All of us, whether providers, consumers, insurers, business, or community leaders, are touched by the health care system and feel deeply about how health care is financed and delivered. PPACA was a product of significant political compromises, as we would expect with any comprehensive legislation that affects 17.3% of the country's gross domestic product.¹³⁶ Our understanding of the legislation will change over time, as many of the details are yet to be worked out through federal regulations. Further, we should expect revisions as we learn, over time, what works well and what needs to be changed. Despite these immediate shortcomings, the legislation begins to address some of the fundamental flaws in our current health care system. **NCMJ**

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- 19. Sec. 10108 of PPACA.
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- 31. Sec. 1201 of PPACA.
- 32. Sec. 1003 of PPACA.
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On the Constitutionality of Health Care Reform

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n March 23, 2010, President Obama signed into law the Patient Protection and Affordable Care Act ("Patient Protection Act"), promising that it "will set in motion reforms that generations of Americans have fought for and marched for and hungered to see."¹ Minutes later, 14 state Attorneys General sued to prevent implementation of the Act, arguing that it is unconstitutional.^{a,2}

The lawsuits might be considered the most recent chapter in the post-1965 health reform saga, in which intense political battles have stymied efforts to address the nation's growing health care crisis. As this recent battle leaves Congress and heads to the courts, we are reminded of that famous quote: "The law is what the judge says it is."b Similarly, the Constitution is what the Supreme Court says it is, or rather, what a majority of Supreme Court Justices says it is. This commentary describes both the Attorneys General claims and the legal framework in which they will be examined, should their claims proceed to a court's scrutiny. It must be recognized, however, that any legal analysis of a dispute of this magnitude is inherently connected to the political context in which such a dispute arises. Accordingly, policy experts need to understand both the relevant law and the underlying politics, and any constitutional analysis of the Patient Protection Act rests, as a foundational matter, on the ultimate determination of nine Justices.

Political Background

As is well known, the Patient Protection Act navigated through highly partisan currents and passed Congress on a narrow party-line vote. Despite repeated exhortations from both Republicans and Democrats that bipartisan consensus is both possible and desirable in any health care reform package,^c and despite oft-repeated statements by leaders of both parties that Democrats and Republicans are primarily in agreement on most foundational matters,^d the Act was approved amid highly contentious, and often vitriolic, accusations. Senate Minority Leader Mitch McConnell (R-Kentucky) called the bill "a monstrosity held together by special deals, a rejection of the clear will of the voters, and presidential appeals to put party first."³ Senator Jim DeMint (R-South Carolina) called it a "trillion dollar assault on our freedoms [and an] arrogant power grab [that] proves that the President and his party care more about government control than the will of the American people."4 Even months after passage, Republican campaign materials continue emphasizing the Act's promotion of government largess, describing the Act as a "government takeover of health care."5 (Democrats, it must be noted, engaged in equally sharp and immoderate language, accusing Republicans of "[standing] with insurance companies and their Washington lobbyists and against reform."6)

a. The Florida Attorney General filed a suit on behalf of 13 state Attorneys General, and the Virginia Attorney General filed a separate suit. Additional constitutional challenges against the Patient Protection Act were filed by the Association of American Physicians and Surgeons, Inc., New Jersey Physicians, Inc., and the Thomas More Law Center. The complaint filed by the Florida Attorney General was amended on May 14, 2010, to include two more state Attorneys General and five governors (plus the National Federation of Independent Businesses) bringing the total of state plaintiffs to 20.

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b. This quote is sometimes attributed to Oliver Wendell Holmes, as emblematic of the philosophy of legal realism. See Brigham J, Harrington C. Realism in the authority of law. *Social Epistemology*. 1991;5(1):20-25 (describing quote as "Holmes's dictum"). Other sources attribute the quote to Lord Reid, in: Reid L. The judge as law maker. *J Socy Pub Tchrs L*. 1972;12(22):22-29.

c. See, e.g., Chaddock GR. A bipartisan health care plan? 'Yes we can,' say former senate leaders. *Christian Science Monitor*. June 17, 2009 (describing a bipartisan proposal by former Senators Daschle, Dole, and Baker as "a counterpoint to the first Senate markup of health care legislation, which fell out along sharply partisan lines").

d. See, e.g., Berger J. McCain nudges Obama toward his party's health plans. New York Times. January 24, 2010 (reporting that Republican Senator John McCain, whom Obama defeated in the 2008 presidential election, urged Democrats to join Republicans in bipartisan negotiations, saying "[t]here are things we can agree on"); Obama BH. Remarks at the Opening Session of a Bipartisan Meeting on Health Care Reform [transcript]. http://www.gpo.gov/fdsys/pkg/DCPD-201000122/pdf/DCPD-201000122.pdf. Published February 25, 2010. ("[W]hen I look at the ideas that are out there, there is overlap. It's not perfect overlap, it's not a hundred percent overlap, but there's some overlap.")

Republican fears of unconstrained and corrupting government expansions of power are echoed in the state Attorneys' General suits.^e The complaint filed by the Florida Attorney General, which was amended on May 14th and now is on behalf of 20 state plaintiffs, decries the Patient Protection Act as "an unprecedented encroachment on the liberty of individuals" and "an unprecedented encroachment on the sovereignty of the states."⁷ Accompanying lawsuits challenging the Patient Protection Act's constitutionality

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further charged that the Act "imposes unprecedented government mandates that restrict the personal and economic freedoms of American citizens,"⁸ "forc[es] the collectivization of health care and the establishment of a system of socialized health care in this country,"⁹ and requires judicial relief "to preserve individual liberty and choice under Social Security, as well as to prevent... bankrupting the United States generally and Medicare and Social Security specifically."¹⁰

Behind the complaints' sweeping rhetoric are important legal issues that implicate nothing less than foundational

constitutional principles. The Constitution creates a federal government of only limited authority, and thus any federal action must rest on one of the enumerated powers listed in the Constitution. But the Constitution also places additional independent limits on federal powers, and any federal action that transgresses these limits is unconstitutional even if it is otherwise within one of the enumerated powers. Accordingly, a constitutional analysis of the Patient Protection Act will proceed in two parts: (1) does the authority to implement

> the Act reside within one of the federal government's enumerated powers? And if so, (2) does the implementation of the Act transgress one of the Constitution's independent limits on federal power? The constitutional provisions that will be interpreted and applied in this analysis are the provisions intended to preserve the nation's federalist system.

> The constitutional challenges to the Patient Protection Act rest primarily on two arguments, each corresponding to one of the steps in the above constitutional analysis.^f The first argument charges that the Patient Protection Act relies on federal powers that are beyond those enumerated in the Constitution. The second argument claims that the Act encroaches upon the sovereignty of the states and thereby

transgresses independent constitutional limits on federal power. Thus, two related and fundamental constitutional principles—limits to federal power and protections of state sovereignty—serve as the foundations to the legal attacks on the Patient Protection Act. They also have been the focus of what were likely the Rehnquist Court's^g most significant decisions. All of the Rehnquist Court's seminal cases that delineated its federalism jurisprudence were divisive five-tofour decisions, and even though four of the Rehnquist Court's nine Justices have since retired, the Court's current make-up (assuming Elena Kagan is confirmed as the next Justice and

e. Additional partisan tension has erupted within individual states. Four Democratic governors promptly distanced themselves from their own Attorneys General, stating their support for health reform and calling the Act "the single most important reform of our health care system in decades." Pennsylvania Office of the Governor. Governor Rendell joins other governors in offer to help US Attorney General defend legality of new national health care act [press release]. Published March 26, 2010. http://www.portal.state.pa.us/portal/server.pt/gateway/PTARGS_0_789728_0_0_18/Governor%20Rendell%20Joins%20Other%20Governors%20 in%20Offer%20to%20Help%20U.S.%20Attorney.doc (reprinting governors' letter to US Attorney General Eric Holder). Meanwhile in Georgia, the Democratic Attorney General refused the request of the state's Republican governor to challenge the federal health reform law. See Baker TE. *Letter to Governor Sonny Perdue*. Published March 24, 2010. http://law.ga.gov/vgn/images/portal/cit_79369762/157880827Response%20to%20Perdue.pdf. ("This litigation is likely to fail and will consume significant amounts of taxpayers' hard-earned money in the process.")

f. The collection of legal challenges to the Patient Protection Act include other legal arguments in addition to these two constitutional claims, including the Thomas More Center's claims that the Patient Protection Act violates the Equal Protection Clause, the Due Process Clause, and the Free Exercise Clause, and additionally amounts to an unconstitutional tax; the Association of American Physicians and Surgeons' claims that the Act was passed in violation of federal officials' fiduciary duties to the United States; and the New Jersey Physicians, Inc.'s claim that the Act "denies the republican nature of our system of government."

g. Chief Justice William Rehnquist; member of USSC from September 26, 1986-September 3, 2005.

votes similarly to President Obama's first selection) appears to be unchanged on matters of federalism. It might even be said that on these contentious matters, the Supreme Court has been as partisan as Washington's other politicians.

Thus, there is an ideological parallel between the legislative politics that surround passage of the Patient Protection Act and the judicial politics underlying the Rehnquist Court's new federalism. However, perhaps unlike the nation's elected officials, the Supreme Court features the admirable quality that even when bitterly divided, the Court's majorities and dissents must justify their votes on principled and detailed legal arguments. The Court puts on an intellectually transparent process, and any judicial action is expected to relate to current law and be attendant to values that reflect the foundation of our system of government. Accordingly, those legal principles and political values deserve serious discussion.

Enumerated Powers

The search for enumerated constitutional powers that authorize Congress to pass the Patient Protection Act includes a clever lawyer's trick: the matter of characterization. The lawsuits aimed at the Act include a challenge to the "individual mandate," the requirement that each American (subject to certain exceptions and subsidies) is required to purchase health insurance. Congress' authority to require such a mandate would fall under Congress' power to regulate interstate commerce. However, some cleverly observe that the so-called individual mandate is merely a tax (and, at a maximum of \$2,250 per family per year, not a very large tax) that is assessed on those who opt not to purchase health insurance, much like a fine the Environmental Protection Agency might impose on those who fail to comply with certain environmental regulations. If the "mandate" is nothing more than a tax, then Congress' power to impose such a mandate-cum-tax falls under its general taxing powers. Accordingly, how one characterizes what Congress has done can meaningfully determine whether Congress has the power to do it.

The Commerce Clause

The Commerce Clause grants the federal government the power "to regulate commerce with foreign nations and among the several States."¹¹ The Supreme Court in the previous century took the Commerce Clause on a jurisprudential rollercoaster, first reading the Clause narrowly to authorize Congress to regulate strictly commercial matters that indisputably involved interstate transactions, and then reading the Clause broadly to authorize Congress to regulate any conduct that indirectly affected interstate prices and commercial exchange (which is virtually everything). The Rehnquist Court pulled the pendulum back in the 1995 seminal case *United States v. Lopez*,¹² both reasserting limits to Congress' commerce power and reiterating that the federal government is endowed only with enumerated powers.

In United States v. Lopez, the Court ruled that Congress did not have the authority under the Commerce Clause to pass the Gun Free School Zones Act of 1990, which prohibited the possession of a firearm in a school zone. Writing for the five-member majority, Chief Justice Rehnquist concluded that "[t]he Act neither regulates a commercial activity nor contains a requirement that the possession be connected in any way to interstate commerce."¹³ The Court went on to rule that unless a disputed congressional action squarely regarded a channel or instrument of interstate commerce, then Congress' authority under the Commerce Clause is limited to activities that "substantially affect" interstate commerce.¹⁴

Lopez, much more than invalidating the Gun Free School Zones Act of 1990, reestablished limits to Congress' commerce power,^h and it accordingly holds great appeal to conservative jurists and politicians who object to laws that restrain or dictate economic conduct. Many opponents of the Patient Protection Act invoke these conservative principles in objecting to the Act's "individual mandate" for the purchase of health insurance, arguing that requiring individuals to purchase any good or service infringes on economic liberties and amounts to a government intrusion into the personal sphere. Accordingly, invoking Lopez, they argue that such a government mandate is beyond the powers allocated to Congress by the Constitution. Georgetown Law Professor and libertarian jurist Randy Barnett argues that the Commerce Clause authorizes Congress to regulate only commercial activities, and that "the health care mandate does not purport to regulate or prohibit activity of any kind, whether economic or noneconomic. To the contrary, it purports to 'regulate' inactivity."15 Conservative legal commentator David Rivkin offers a more existential argument, decrying that "the problem with an individual insurance purchase mandate... is that it does not regulate any transactions at all. It regulates human beings, simply because they exist."¹⁶ And John Yoo, who served as Deputy Attorney General under President George W. Bush, puts it in blunt and colloquial terms: "the Court has never upheld a federal law that punishes Americans for exercising their God-given right to do absolutely nothing."17

Jurists supportive of the Patient Protection Act are predictably both more sympathetic to exercises of federal power and more expansive in interpreting what federal powers are authorized under the Commerce Clause. Some, such as the American Constitutional Society's Simon

h. The Supreme Court, in another bitter five-to-four decision, reaffirmed these limits on Congress' commerce power in *United States v. Morrison* (2000), which invalidated certain provisions of the Violence Against Women Act of 1994.

Lazarus, argue that even under *Lopez*, the individual mandate is squarely within the powers authorized by the Commerce Clause. Since insurance markets often require regulation to facilitate risk pooling, avoid adverse selection, and organize efficient claims administration, Lazarus concludes that the individual mandate is an "eminently lawful" exercise of the Commerce Clause's power.¹⁸ Noted liberal scholar and dean of the University of California Irvine School of Law, Erwin Chemerinsky, frames the conservative argument in terms of individual rights rather than on limits on federal power, and argues that "there is no constitutionally protected freedom to be able to refuse to be insured or to avoid paying for the benefits provided."¹⁶

Within the debates interpreting the scope of *Lopez* and the meaning of the Patent Protection Act's individual mandate, an ideological divide emerges that parallels the divide among the legislators who debated it in Congress. Although legal analysis is often depicted as a technical and non-ideological enterprise, it should not be surprising that one's political philosophy—and perhaps one's opinion of the underlying legislation—shape one's legal analysis.ⁱ What might distinguish this constitutional debate from typical political clashes, however, is how necessarily forward-looking it is. It is—or should be—recognized that whatever the Constitution authorizes a Democratic Congress to do today, it theoretically authorizes a Republican Congress to do tomorrow.

The General Welfare Clause

Congress' power to tax falls within the General Welfare Clause, which empowers Congress "To lay and collect Taxes, Duties, Imposts, and Excises, to pay the Debts and provide for the Common Defence and general Welfare of the United States."¹⁹ If the "individual mandate" is little more than a tax (that can be avoided if insurance is purchased), then the constitutionality of the mandate-cum-tax is assessed under the General Welfare Clause.^j

The General Welfare Clause has not (yet) undergone the same jurisprudential swings as the Commerce Clause. Although the Supreme Court in the 1930s and 1940s concurrently expanded Congress' authority under both clauses, the Rehnquist Court pulled back only on the Commerce Clause power. In contrast, the Court has not departed from its New Deal rulings that granted Congress broad authority and discretion to tax under the General Welfare Clause.

The leading authority continues to be the 1936 case of *United States v. Butler*,²⁰ in which the Court, echoing Alexander Hamilton during the Constitutional Convention, ruled that the General Welfare Clause gives Congress "a substantive power to tax and to appropriate, limited only by the requirement that it shall be exercised to provide for the general welfare of the United States."²¹ The Court later gave Congress additional latitude under the Clause, ruling that Congress also had the discretion to decide whether certain taxes or expenditures advance "the general welfare."²² This constitutional threshold is much more easily satisfied than the *Lopez* test, and thus current interpretations of the General Welfare Clause likely support Congress' authority for instituting the tax embedded within the Patient Protection Act's insurance mandate.^{k,23}

Of course, what the Supreme Court giveth it can also taketh away. Some have advocated that *Lopez* and the Rehnquist Court's other federalism watershed decisions should be extended to *Butler*, and thereby limit Congress' authority under the General Welfare clause.²⁴ It certainly is possible that the Court might reign in Congress' other powers, including those under the General Welfare Clause, and continue the Rehnquist Court's reconceptualization of federalism. While such a ruling would likely expose many laws to new constitutional scrutiny, it also would reduce the sometimes artificial distinction between mandates from taxes.

Independent Limits to Federal Power—Anti-Commandeering and the 10th Amendment

Even if the power to pass the Patient Protection Act does fall within Congress' enumerated powers, independent constitutional limits on federal authority might nonetheless make the Act unconstitutional. The state Attorneys General invoke a number of constitutional provisions—including Article 1 Sect. 1, Article 1 Sect. 2, and Amendments 5, 9, and 10—that, they claim, are designed to preserve their states' sovereignty against overreaching federal policy.

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This phenomenon might be related to "cognitive biases" exhibited by other professionals, such as how environmental forces and preexisting beliefs have been shown to frequently shape physician diagnoses. See, for example, Wennberg D, Dickens J Jr, Soule D, et al. The relationship between the supply of cardiac catheterization laboratories, cardiologists and the use of invasive cardiac procedures in northern New England. J Health Serv Res Policy. 1997;2(2):75-80.

j. Perhaps the leading commentator who characterizes the mandate as a tax (for constitutional purposes) is Jack Balkin, a professor at Yale Law School and creator of the popular Balkinization blog for constitutional legal analysis.

k. Even if the individual mandate is, for constitutional purposes, merely a tax, some of the complaints allege that it is an unconstitutional tax, prohibited by Article I, Sect. 2 and Sect. 9. These constitutional provisions prohibit direct capitation taxes on individuals, such as head taxes, if they are not apportioned by the states. Critics of the Patient Protection Act argue that the mandate-cum-tax is a direct capitation tax because it is assessed on each individual. Defenders say it is a penalty tax, not a capitation tax, because it does not tax the general population but rather a subset of individuals based on their conduct. The Supreme Court has narrowly defined direct taxes and thus limited the taxes that would require state apportionment, but it has spoken very infrequently on the distinctions among permissible and impermissible taxes since the 16th Amendment, authorizing Congress to impose an income tax, was ratified in 1913.

The length of this list of constitutional provisions suggests that the argument in defense of state sovereignty is based as much on the structure of the Constitution as it is on any single clause. But more than any competing provision, the 10th Amendment represents the Constitution's protections of state sovereignty, and the leading cases that protect that authority are derived primarily from that Amendment.

The 10th Amendment, in its entirety, reads "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people."²⁵ Justice Story¹ famously described the Amendment as "a mere affirmation of what, upon any just reasoning, is a necessary rule of interpreting the Constitution," and saying little more than "what is not conferred, is withheld, and belongs to the state authorities."²⁶ Nonetheless, the 10th Amendment has come to represent the "Court's consistent understanding [that] 'the States unquestionably do retai[n] a significant measure of sovereign authority."²⁷

The 1992 case of New York v. United States²⁸ is a modern and seminal expression of the Court's recent 10th Amendment jurisprudence. The case arose when New York State objected to its obligations under the Level Radioactive Waste Policy Amendments Act of 1985, in which Congress required states to devise plans to dispose of waste generated within their borders. After conceding that "the Court's jurisprudence in this area has traveled an unsteady path,"29 a five-member Supreme Court majority ruled that the 10th Amendment prohibited full implementation of the 1985 Act. The Court concluded that the 10th Amendment restricts how the federal government may "use the States as implements of regulation," and that it specifically proscribes Congress from "commandeer[ing] the legislative processes of the States by directly compelling them to enact and enforce a federal regulatory program."30 The Act accordingly violated the 10th Amendment by "commandeering" the states' legislatures to implement the federal waste disposal policies. The Supreme Court, in an identical and equally contentious five-to-four decision, reiterated the 10th Amendment's "anti-commandeering" protections of state sovereignty in Printz v. United States (ruling, in 1997, that the 10th Amendment prohibits Congress from commandeering state executives to implement federal policy) and Alden v. Maine (ruling, in 1999, that the 10th Amendment similarly prohibits the commandeering of state courts).

It is this resistance to being "commandeered" by federal policy, and the anti-commandeering principles embedded in *New York* and related 10th Amendment cases, that motivate

the state Attorneys' General second species of constitutional challenges to the Patient Protection Act. This same inclination to assert state autonomy motivated the State of Virginia to enact a "nullification statute" stating that "no resident of this Commonwealth...shall be required to obtain or maintain a policy of individual insurance coverage."³¹ (Idaho and Utah have enacted similar statutes, and at least 33 states are reportedly considering other measures.)³² The constitutional challenges to the Patient Protection Act arise from the states' attempts to assert sovereignty over their own health policy.

The state Attorneys' General complaints specifically protest the Patient Protection Act's charging states to establish local insurance exchanges, in which state residents can purchase, and the state's insurance companies can market, health insurance policies. The complaints allege that setting up these exchanges will require state budgetary and personnel resources, and that the Patient Protection Act's expansion of Medicaid benefits will burden already-strained state Medicaid programs. These requirements amount, according to the complaint drafted by the Florida Attorney General, to "effectively co-opting the Plaintiffs' control over their budgetary processes and legislative agendas through compelling them to assume costs they cannot afford, and ...depriv[ing] them of their sovereignty and their right to a republican form of government."⁷

Defenders of the Patient Protection Act first observe that Medicaid is a voluntary program from which states may opt out, if they are willing to forgo their share of the very substantial federal Medicaid funds.^m Moreover, they observe that states are merely invited to set up their exchanges, and that the federal government will set one up for them if they fail to do so. These legislative provisions might reflect what the *New York Times* described as the Patient Protection Act's "careful" drafting process, designed for the new law "to withstand just this kind of challenge.

Perhaps a larger legal obstacle to these assertions of state autonomy is the Supremacy Clause, which states that Congressional Acts 'shall be the supreme Law of the Land.''³⁴ Writing in the *New England Journal of Medicine*, Timothy Jost, a professor at Washington and Lee University School of Law, cites unsuccessful examples of state nullification laws throughout history, suggesting that "although the [Virginia] bill is phrased in the passive voice, its intent is clearly to block the implementation of a federal mandate requiring all individuals to carry health insurance. But achieving this aim is constitutionally impossible."³⁵ Accordingly, the federal government's authority is supreme so long as it operates

I. Chief Justice Joseph Story; member of USSC from November 18, 1811-September 10, 1845.

m. The Supreme Court in New York reiterated that Congress retains broad authority to induce certain action from states by placing conditions on federal funding. 505 US 144, 166-67. It has been observed that the growth of the federal government might mean that giving Congress broad "spending power" could undermine any remaining federalism limit on federal authority, and thus the Supreme Court might ultimately reign in this broad authority as well. See Siegel NS. Dole's future: a strategic analysis. Sup Ct Econ Rev. 2008;16:165-204.

within its enumerated powers and does not encroach upon an independent constitutional limit, and just as the federal government might be limited from making state policy, the states are prevented from making (or blocking) federal policy. Thus, although parts of the Constitution are clearly designed to protect state sovereignty, other—arguably more potent—parts clearly limit it.

Next Steps? Political Rhetoric, Legal Parsing, and Substantive Policy

Some conservative legal scholars have said publicly that the Attorneys' General suits (and likewise similar arguments by conservative jurists) are politically motivated and are unlikely to garner judicial sympathy. Charles Fried, who served as Solicitor General under President Ronald Regan, was quoted for saying of the legal challenge, "I am prepared to say it's complete nonsense."36 But most Court watchers were surprised when the Court handed down Lopez, the first judicially-imposed limit on Commerce Clause authority since the New Deal, and the Court's recent expansion of the 10th Amendment similarly reversed prior constitutional trends and expectations. Given the Court's often unpredictable penchant for leveraging a five-member majority to achieve potent and far-reaching constitutional shifts, the legislative significance of the Patient Protection Act might attract, rather than deter, Supreme Court scrutiny." Of course, since most of the Patient Protection Act's provisions won't go into effect until 2014, the identity and proclivity of that fivemember majority remains unknown.

Yet there remain at least two tragic disconnects in this rhetorical debate over federal power. The first is the irony between the states' assertions of sovereignty and the states' true potential to shape health care policy. The real source of frustration to advocates of state sovereignty in health policy is that, at least since 1965, American health policy has been largely federal policy. It has become conventional policy wisdom that meaningful health reform requires federal action, whereas state action is sought primarily by those pursuing incremental reform or experimental tinkering. Yet state law governs a host of important implements of health policy—including professional licensure, medical torts, insurance regulation, and the administration of Medicaidthat arguably exceeds the significance of federal policy. Because the size and influence of the federal budget swamps what states can afford, it is predictable and understandable that the federal government has the oversized influence on health policy (and most policies) that it does. But this need not be so. To the contrary, it might be in state experimentsparticularly the fusion of health policy with the instruments of other policy, such as education and public safetythat holds the greatest promise for redressing America's health crisis. The nation continues to invest in health care expenditures without recouping returns in improved health, so perhaps it is the non-medical and ground-level reforms-which are in the domain of the states-that will have the greatest impact.° Thus, those seeking to assert state sovereignty in making health policy both have a broad menu of meaningful policy options available and should be encouraged to thoughtfully exercise that sovereignty.

The second disconnect is between the rhetoric and reality of the Patient Protection Act, which is commonly presumed to be (even if constitutional) an expansive exercise in federal power. In budgetary terms, and perhaps in constitutional terms, it arguably is. But it can barely be expected to put a dent into America's growing and consuming health care crisis. The nation's health care system is commonly characterized as a three-dimensional crisis of insufficient access, excessive costs, and inadequate quality. The Patient Protection Act might amount to a meaningful expansion in health care access, but it does nothing to reduce the costs of health care or improve the quality of health care services. For a nation that now spends over 17% of its gross domestic product on health care and over twice the per capita average of the 10 richest nations,³⁷ yet exhibits health outcomes that are worse than nearly all of its OECD colleagues,^p laurels cannot rest following an expansion of access. Far from being either "reforms that generations of Americans have fought for"1 or a "trillion dollar assault on our freedoms,"4 the Patient Protection Act is more likely a mere first step in a desperately needed overhaul of our health care system. Unless health care expenditures are contained, and unless our health care system can more efficiently improve the nation's heath, then the Act's expansion of access to health insurance will mean little more than accelerating

n. Shortly after the Bill's passage, Georgia's Republican Senator Saxby Chambliss insisted, "There are such significant issues that the court could very well declare the bill unconstitutional." See, "Healthcare reform may reach high court." UPI.com website. http://www. upi.com/Top_News/US/2010/03/29/Healthcare-reform-may-reach-high-court/UPI-22701269882434/. Published March 29, 2010. But George Washington University Law professor Orin Kerr took a pragmatic view of the chances a challenge would actually make it to the Supreme Court: "there would first need to be a circuit court that would vote to strike down the mandate. Presumably you'd have to bring the challenge...; pray you get a panel with at least two of the circuit's more aggressive conservatives; and then hope you can get past a rehearing vote. But the odds of that are pretty low. There's a chance, I think, but it's a relatively low one." Kerr O. More on the chances courts would strike down individual mandates. The Volokh Conspiracy website. http://volokh.com/2010/03/23/more-on-the-chances-courts-would-strike-down-the-individual-mandate/. Published Mar. 23, 2010.

My own foray into this topic is: Richman B. Behavioral economics and health policy: understanding Medicaid's failure. Cornell L Rev. 2005;90(3):705-768.

p. Some health statistics detailing how the United States compares to other OECD nations are available at: http://stats.oecd.org/Index.as px?QueryName=254&QueryType=View.

overspending and squeezing out other social investments. Hopefully any debate over the constitutionality of the Patient Protection Act will not distract the public from the substantial work that remains. **NCMJ** **Acknowledgement:** The author thanks Jennifer Behrens, for what has become routinely superior research support, and Neil Siegel, for his genuine expertise on the Constitution. Many errors were avoided because of their help, and all remaining errors are in spite of it.

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Federal Health Care Reform Legislation Establishes Consumer Protections, Health Insurance Exchanges

Wayne Goodwin

s we all know, health insurance has been the focus of many national, state, and local policy discussions. With the passage of the Patient Protection and Affordable Care Act (PPACA) and the subsequent reconciliation bill last month, it's an interesting time to be involved with the health insurance field.

There are still a lot of unknowns when it comes to the health care reform bill and its requirements. The North Carolina Department of Insurance is currently working to identify the most immediate changes that will go into effect.

We also recognize that implementing the federal guidelines at the state level will involve other agencies beyond the Department of Insurance.

Several of the more consumer-friendly pieces of the reform are slated for implementation within six months of enactment. Among the most immediate points that need to be addressed by insurance carriers are the removal of annual and lifetime limits, the elimination of rescissions, and the complete elimination of preexisting conditions for all plans. Undoubtedly, the elimination of pre-existing conditions has gotten the most attention. For children under the age of 19, this change will go into effect on September 23, 2010. For adults, the law provides the establishment of high risk pools within 90 days to provide coverage for adults until the state insurance exchanges are established. In North Carolina, we already have Inclusive Health, which serves as a high risk pool. Inclusive Health has been selected to contract with the Department of Health and Human Services (DHSS) and administer the federal high risk pool.

Another immediate change is the extension of adult dependent coverage. This is also slated to go into effect on September 23, 2010. There is still some guidance needed from the federal government on who exactly qualifies as a dependent. As soon as we know more, we will, of course, pass that information along to the public.

The reform package also requires insurance companies to provide plain-language explanations and access to data

and information about claims practices, enrollment data, rating practices, and more. We will look to DHHS to provide guidelines and clarification. The assumption is that there will be a uniform template for companies to use when reporting their data.

Several of these new requirements will cause some adjustments to the way insurance carriers report data and submit filings to the Department of Insurance. We are working to identify how insurers should amend their filings to the North Carolina Department of Insurance to address

Among the most immediate points that need to be addressed by insurance carriers are the removal of annual and lifetime limits, the elimination of rescissions, and the complete elimination of pre-existing conditions for all plans.

these changes. Again, as soon as we have finalized this, we will be in touch with the industry.

While there are many provisions that will be implemented this year, several are not required to be implemented until 2014. One such provision is the establishment of health insurance exchanges. According to the National Association of Insurance Commissioners (NAIC) and PPACA, exchanges are the central mechanisms created to help individuals and small businesses purchase health insurance coverage.

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What Does the Temporary National High Risk Pool Mean for North Carolina?

Michael Keough

The Patient Protection and Affordable Care Act (PPACA) was enacted March 23rd, 2010. US Department of Health and Human Services (DHHS) Secretary Kathleen Sebelius is charged with establishing a temporary high risk health insurance program within 90 days after enactment. This national risk pool is intended to serve as a transitional coverage vehicle for individuals with pre-existing conditions who are not otherwise able to find affordable health insurance until full implementation of health reform on January 1, 2014. It is designed to expand on the work of the 35 state high risk pools that currently serve just over 200,000 individuals nationwide.

The North Carolina General Assembly, with the support of the medical, hospital, and insurance broker communities, established the North Carolina Health Insurance Risk Pool in August 2007. The program, also known as Inclusive Health, was the last state high risk pool established prior to enactment of the PPACA. The program started covering eligible state residents on January 1, 2009 and as of June 1st had 3,663 enrollees with pre-existing conditions. They are enrolled in one of four benefit plans, which consist of three PPOs and a High Deductible Health Plan with deductibles ranging from \$1,000 to \$5,000.

Members pay a monthly premium that is capped at 150% of the standard risk rate or the average individual market rate in North Carolina for a person without pre-existing conditions. The State of North Carolina contributes a portion of the increase in insurer premium taxes each year to help subsidize these rates along with an annual payment from the State Health Plan. Thanks to the willingness of almost 25,000 physicians and other health care providers and over 100 hospitals statewide to provide services at Medicare reimbursement rates, Inclusive Health is able to spread these funds even further to enroll and assist this target population.

Following the enactment of health reform, Secretary Sebelius issued a letter to state governors and independent

Beginning in 2014, an exchange will be established in each state to help consumers make valid comparisons between plans that are certified to have met benchmarks for quality and affordability. The exchanges will also administer the new health insurance subsidies and facilitate enrollment in private health insurance, Medicaid, and the Children's Health Insurance Program (CHIP). Nobody will be required to purchase health insurance through the exchange, though subsidies will only be available for plans sold through the exchange. If you would rather buy your insurance through an insurance agent or broker, you will be free to do so. If not, you will be able to purchase insurance in a matter of minutes on the exchange's website. insurance commissioners, including Governor Perdue and Commissioner Goodwin, asking for an expression of their intent to work with the DHHS on the national pool. She laid out a handful of options for administering the national pool in our state, including running it side by side with the existing state high risk pool. States were asked to submit a Letter of Intent summarizing their response to Secretary Sebelius' letter. The DHHS will directly administer the temporary high risk pool in states that opt not to do it themselves.

Governor Perdue and Commissioner Goodwin have determined that the best of the options proposed by Secretary Sebelius is to ask Inclusive Health to run the national pool in order to build on the successful work of the past 17 months in the state high risk pool. In May, Inclusive Health responded to a solicitation from DHHS that includes the details of how the national pool will be run in North Carolina. Proposals submitted to DHHS by the end of May are eligible for approval with funding by July 1st.

So what does this temporary national high risk pool mean for North Carolina? It should be good news for those who qualify by virtue of having been uninsured for the previous six months. The national risk pool will offer less restrictive coverage at a significantly better price than the state high risk pool currently offers. Monthly premium rates under the national pool will be set at 100% of the standard risk rate, or the average for the North Carolina individual health insurance market, compared to 150% for the state risk pool. National pool applicants will face no pre-existing condition waiting periods.

The six-month uninsured eligibility requirement means that North Carolinians who have maintained coverage are not immediately eligible for the new and improved pool. This crowd-out provision eliminates covered individuals from seeking this insurance option, including HIPAA eligible individuals who have exhausted COBRA coverage as well as the state risk pool's own enrollees. Waiting six months to qualify for the national pool is a risky option for high-risk

Each state will also establish a Small Business Health Options Program (referred to as a "SHOP Exchange") to assist qualified employers in facilitating the enrollment of employees in small group qualified health benefits plans. States may choose to establish a single exchange that performs both individual coverage and SHOP Exchange functions. States may also jointly form regional exchanges or may form multiple subsidiary exchanges if each one serves a distinct geographic area. Exchanges may contract with entities with demonstrated experience in the individual and small group markets and in benefits coverage if the entity is not an insurer, controlled by an insurer, or with the state Medicaid agency. individuals who have average annual health care costs of \$10,000 or more.

The new pool is genuinely good news for uninsured North Carolinians with pre-existing medical conditions, who have not flocked to the state pool in as large numbers as originally hoped. Historically, only 20% of Inclusive Health state pool members are uninsured at the time they apply to the pool, perhaps owing to the pool's price point that, until May 1st, was 175% of the standard risk rate. Though this is 50% or more below what these members would be paying in the individual commercial market for similar coverage, the average monthly premium of about \$600 for a 50-year-old enrollee is still significant for an uninsured individual.

What the national pool means for North Carolina will come down to how its uninsured target population responds to its availability. Opinions vary on how strong the enrollment uptake will be, with the chief actuary from the Centers for Medicare and Medicaid Services predicting that the \$5 billion in federal funding will be exhausted during 2011. If experience from other states and recent Congressional Budget Office study data hold true, however, there may not be a stampede to enroll. The targeted uninsured population may prove to be a challenging audience to reach and entice into purchasing coverage, even with these reduced eligibility and price barriers. Inclusive Health expects to undertake a full-scale outreach and marketing effort in collaboration with the medical, hospital, broker, and advocacy community to ensure that no eligible North Carolinian is unaware of this new coverage opportunity.

Whatever the success of this outreach effort, North Carolina will have a \$145 million allocation to work with out of the \$5 billion nationwide budget. This amount is based on a formula patterned after the Children's Health Insurance Program (CHIP). Unused amounts are expected to be reallocated after two years so that states that are successful in exhausting their allocation, as North Carolina did under CHIP, can access other states' unused funds. Preliminary estimates show that North Carolina may be able to afford to enroll about 8,000 individuals.

Inclusive Health looks forward to embarking on this important step in improving the lives and health insurance coverage of North Carolinians with pre-existing conditions who have difficulty finding affordable coverage in the commercial health insurance market.

Michael Keough is the executive director of the North Carolina Health Insurance Risk Pool. He can be reached at michael.keough (at) inclusivehealth.org.

Table 1. Comparison of Risk Pool Characteristics

Feature	Federal PPACA Risk Pool	NC Inclusive Health
Eligibility	 Must have been uninsured for six months 	 Uninsurable HIPAA (those exhausting 18 months of COBRA coverage) Those impacted by trade
Benefits	 No pre-existing conditions No annual maximums 	 12-month pre-existing condition waiting period for uninsured (persons without coverage within the last 63 days) Lifetime maximum of \$1 million Annual specialty-drug maximum of \$100,000
Rates	•100% of the standard risk rate	• 150% of the standard risk rate

The specifics of each state's exchange are still unknown at the present, but the PPACA does require several provisions that must be included in the state exchanges. First and foremost, the legislation establishes and defines a qualified health plan as being certified by the exchange through which it is offered. A plan must provide the essential benefits package and must be offered by an issuer that is in good standing in the state. The exchange will offer at least one silver and one gold plan (see the list of levels below) and charge the same premium whether the plan is sold by the exchange or outside of the exchange. Qualified health plans also may be called a co-op plan or a multi-state plan and their premiums may vary by rating area.

According to PPACA's provisions, the essential benefits package must cover the following general groups of services:

- Ambulatory patient services
- Emergency services
- Hospitalization
- Maternity and newborn care
- Mental health and substance abuse disorder services, including behavioral health treatment
- Prescription drugs
- Rehabilitative and habilitative services and devices
- Laboratory services
- Preventive and wellness services and chronic disease management
- Pediatric services, including oral and vision care

Further, the PPACA defines the levels of coverage as follows:

- Bronze level: Must provide coverage that provides benefits that are actuarially equivalent to 60% of the full actuarial value of benefits under the plan.
- Silver level: Must provide coverage that provides benefits that are actuarially equivalent to 70% of the full actuarial value of benefits under the plan.
- Gold level: Must provide coverage that provides benefits that are actuarially equivalent to 80% of the full actuarial value of benefits under the plan.
- Platinum level: Must provide coverage that provides benefits that are actuarially equivalent to 90% of the full actuarial value of benefits under the plan.

We have heard in our discussions with the NAIC that exchanges must consult with relevant stakeholders, including consumers, those with experience facilitating coverage in qualified health plans, representatives of small businesses, state Medicaid offices, and advocates for enrolling hard-to-reach populations. They also must publish online an accounting of their administrative costs, including funds lost to waste, fraud, and abuse.

Of course there are other provisions required of the exchanges, but many are still unknown at this time. Ultimately, it will be up to the North Carolina General Assembly to decide our state's level of participation in the exchange. But it will be up to all of us-the North Carolina Department of Insurance as regulator, the health insurance industry, health care providers, and others-to come together and make the transition run as smoothly as possible. Legislation determining North Carolina's participation will need to occur during the 2011 long session of the General Assembly; the Department of Insurance is already working on recommendations for 2011.

Whatever the General Assembly deems appropriate for North Carolina's participation, I believe the Department of Insurance should have the lead role in administering the exchange. Our current regulatory oversight and role as a consumer watchdog will continue to provide the best possible consumer protection for North Carolinians.

I know that you are probably receiving questions from your patients, friends, family members, and others-we are too. If you find yourself taking the same questions repeatedly and are having a hard time coming up with specific answers, please let my staff at the Department of Insurance know. We are in constant contact with the National Association of Insurance Commissioners, and we are collaborating on identifying frequently asked questions. This reform is too big of a shift for any one of us to feel that we are on our own when answering questions and moving forward. I encourage you to send your patients and others with questions to our Consumer Helpline, 800.546.5664, as well as our website at http://www.ncdoi.com/healthcarereform. It's imperative that we continue to work together. NCM



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Health Reform Impacts and Improvements Affecting Medicare Beneficiaries

Bob Jackson

ithout a doubt, Medicare has been a huge success and has provided a strong health care package for those eligible for coverage. It is impossible and unreasonable to go back and say we should have done it all differently. Over the decades, since its adoption in 1965, benefits have been added, eliminated, enhanced, and weakened—and still overall costs have risen steadily. For years, Medicare has been a political football caught in the middle of the entitlement debate. And make no mistake; it will

continue to be a focus of attention as the costs of care rise and the solvency of the trust funds continue to be threatened.

While the new Patient Protection and Affordable Care Act (PPACA) takes considerable steps to enhance Medicare benefits and address long-term solvency, the system's costs and needs remain great. This bill solves only part of the projected costs and needs. This commentary focuses on those Medicare enhancements, including issues of costs and controls, fraud and abuse, prescription coverage, prevention services, long-term care, Medicaid, and workforce development.

There are many ways to control costs. Those addressed by the PPACA are designed to keep Medicare financially stable for almost a decade longer than if no law had been passed. Some of those cost containment strategies include:

- A new Independent Payment Advisory Board (IPAB) that will examine extending Medicare solvency, slowing cost growth, improving quality, and identifying waste throughout the health care system to help hold down costs for people in Medicare and for those not yet eligible, while seeking to reduce the deficit. The IPAB must meet various spending targets in the second 10 years of its existence, and the AARP (among other groups) is concerned about the unintended impact these savings might have on beneficiaries' access to or quality of care.
- An adjustment to Medicare Advantage (MA) reimbursements that will be phased in over the next seven years. Since 2003 and the passage of the Medicare

Modernization Act, MA plans have been reimbursed at an average of 14% more than traditional fee-for-service Medicare. Over the first seven years of the PPACA, payments to MA plans will be reduced incrementally until they are paid the same as traditional Medicare. At the same time, MA plans will be eligible for performance bonuses to reflect differences in quality and geographic location.

While the new Patient Protection and Affordable Care Act takes considerable steps to enhance Medicare benefits and address long-term solvency, the system's costs and needs remain great. This bill solves only part of the projected costs and needs.

- Increased funding to fight waste, fraud, and abuse in Medicare and the rest of the health care system by providing additional prosecutors as well as computer system enhancements to catch perpetrators more quickly.
- A new Community-Based Care Transitions Program to provide care transition services to high-risk Medicare beneficiaries to help ensure smooth transitions to home or other settings after a hospital discharge and reduce unnecessary re-hospitalizations.

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There are several benefit enhancements designed to provide better care at a lower cost. Two critical improvements include dramatic changes to Medicare Part D and the adding of critical preventive services. In 2003 the Medicare Prescription Drug, Improvement, and Modernization Act created Medicare Part D, the new prescription package for Medicare beneficiaries. From the beginning, the structure of that plan was attacked, and the new reform package addresses a significant gap in the Part D benefits.

The infamous coverage gap or "doughnut hole" will be remedied in several ways. In 2010, a Part D enrollee who enters the doughnut hole will receive a one-time rebate of \$250. Beginning in 2011, the PPACA will provide 50% discounts for brand-name drugs and biologics for enrollees while they are in the doughnut hole. Also beginning in 2011, the coverage gap will begin to close so that by 2020 it will be gone entirely and beneficiaries will only be responsible for 25% of their prescription drug costs (both brand and generic) from the time they enter the initial coverage period (i.e., after meeting their deductible) to the time they enter catastrophic coverage at which point they are responsible for 5% of their drug costs. Importantly, the law adjusts the indexing of the out-of-pocket threshold (i.e., the point where enrollees enter catastrophic coverage) between 2014 and 2019 to help slow its growth.

Additionally, the PPACA will improve guaranteed Medicare benefits by adding free preventive services (with no copayments or deductibles) for such procedures as colonoscopies, mammograms, bone density screenings, and annual check-ups. Also, payments will be improved for doctors and hospitals in rural communities, and payments for primary care physicians will be enhanced by 10%.

A number of new long-term care and Medicaid benefits and enhancements are being introduced, including:

- The Community Living Assistance Services and Supports (CLASS) Act, which is a national self-sustaining, voluntary, payroll deduction-based insurance program beginning in 2011 to help individuals pay for services and supports that will help them live independently in their homes and communities.
- An enhanced federal Medicaid match for states if they provide home- and community-based attendant services and supports to individuals eligible for institutional care under Medicaid. There are additional incentives to states for expanding home- and community-based services, and the Money Follows the Person Rebalancing Demonstration grants will continue for five more years through 2016.
- The rate at which Medicaid reimburses primary care providers will be increased to the Medicare rate in 2013 and 2014 in those states that do not already do so.

Regarding the training of geriatricians and direct care workers, Medicare has traditionally only paid for the training

of physicians (approximately \$8 billion per year) and of diploma-level nursing programs (approximately \$150 million per year). With PPACA, the first opportunity for funding graduate-level nursing education will be the Medicare Graduate Nursing Education (GNE) Demonstration Program. This four-year program is funded at \$200 million and is available for hospitals that partner with nursing schools and community-based health clinics to increase the number of advanced practice registered nurses who can provide primary care, chronic care management, women's health care, and pain management to Medicare beneficiaries and their families.

In addition to ongoing Medicare funding for physicians and for the GNE Demonstration Program, the PPACA has authorized funding for other education and training programs to help bolster the health care workforce to provide care for the additional 32 million Americans who will be newly covered. The PPACA has authorized \$338 million (almost \$100 million more than FY 2010 funding) for nursing education scholarships and loans to help increase the number of nurses and nursing faculty who can teach the influx of nursing students. The PPACA has also created a mandatory \$7 billion fund for community health centers and directed another \$1.5 billion in guaranteed funding for the National Health Service Corps to recruit more physicians and nurses to provide health care in community health centers that are located in health professional shortage areas. This \$1.5 billion will go toward scholarships for medical and nursing students who commit to providing two to four years of service in these critical areas. It also provides loan repayment programs for physicians and nurses who serve in these areas.

Another important workforce item related to Medicare is the PPACA-awarded grants to up to six states to conduct three-year demonstration projects to develop core training competencies and certification programs for personal or home care aides. PPACA appropriates \$5 million for each FY 2010-2012 to be used for the personal or home care aide training demonstrations.

Several other workforce programs were authorized by PPACA but not funded. They include:

- Grants to entities (educational institutions in partnership with long-term care providers) to provide new training opportunities for direct care workers in long-term care settings. Funds are to be used to provide assistance to workers to offset the costs of tuition and fees.
- Grants of \$150,000 to not more than 24 geriatric education centers to offer a fellowship program with short-term intensive courses on geriatrics, chronic care management, and long-term care for medical school faculty and other health professions schools. In addition, the grantee must offer either family caregiver and direct care provider training (at no or nominal cost to enrollees) or develop best practice materials on mental disorders,

medication safety, and management of dementia among older adults.

- Grants to advanced practice nursing, clinical social work, pharmacy, or psychology students who are pursuing a doctorate or other advanced degree in geriatrics who agree to teach or practice in the field of geriatrics, longterm care, or chronic care management for a minimum of five years. It also expands the scope of individuals eligible for geriatric academic career awards to include health professionals with junior faculty appointments in accredited health professions schools.
- Expands the Comprehensive Geriatric Education grants to educational institutions that establish traineeships for individuals who are preparing for advanced education

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nursing degrees in geriatric nursing, long-term care, geropsychiatric nursing, or other nursing areas that specialize in care of the elderly.

These new and enhanced benefits to Medicare are designed to improve care through prevention, quality incentives, and improved access; adjust reimbursements to health care providers; amend some benefits; cut overall costs; and extend the solvency of Medicare. It was a hard fought battle to finalize these provisions and the final regulations guiding the implementation will be closely monitored. We all are part of the system and are a critical part of the solution. NCM



We ask questions everywhere we go, yet at the doctor's office, we clam up. Ask questions. For a list of 10 everyone should know, go to AHRQ.gov. Questions are the answer.

North Carolina's Safety Net in the New World of Health Reform

E. Benjamin Money, MPH

he Community Health Center Program is a 45-year-old federal initiative that receives bipartisan support and high marks for effectiveness from the White House Office of Management and Budget.¹ In the last 10 years, funding for the program has doubled and twice as many patients are being served.² Also known as federally qualified health centers (FQHCs), these patient-governed nonprofit primary care facilities offer medical services and, in many places, dental care, pharmacies, and an emerging behavioral health package of services in a medical home setting. Community health centers provide services on a sliding fee scale and accept Medicaid, Medicare, and private insurance.³

In 2008, the section of the Public Health Service Act that

authorizes the centers. Section 330, provided \$51.3 million to support the cost of primary medical, dental, pharmacy, and enabling services to uninsured patients served by North Carolina's FQHCs. This funding represented 30% of their total revenue and enabled North Carolina's health centers to serve 389,841 patients in the year, 93% of whom were medically indigent.3 With awards of up to \$650,000 annually, Section 330 grants provide substantial recurring support for primary care services in a comprehensive health care home. However, Section 330 health centers are only in 42 North Carolina counties, and no new Section 330 grants have been opened since 2007. While North Carolina represents 3.04% of the The passage of the health reform bill presents a unique opportunity to expand community health centers and create integrated medical homes in areas where safety net primary care is provided by local health departments, rural health centers, and free clinics.

US population and 3.17% of the US uninsured,⁴ our state received only 2.7% of the grant awards for new organizations or new sites of existing health centers during the 2002-2009 period of expansion. At present there are 27 FQHC and two FQHC look-alike organizations in North Carolina.

Expanding Primary Care Access

The Patient Protection and Affordable Care Act permanently authorized the Community Health Center Program and created a Community Health Centers Trust Fund totaling \$11 billion in new, dedicated funding for the Health Centers program over five years.⁵ The majority (\$9.5 billion) of this funding will allow health centers to expand their

operational capacity to serve nearly 20 million new patients and to enhance their medical, oral, and behavioral health services.⁶ This appropriation is in addition to existing funding of \$2.19 billion in fiscal year 2010.

Anticipating the passage of this legislation, the Kate B. Reynolds Charitable Trust provided a grant of \$400,000 in February 2010 to the North Carolina Community Health Center Association (NCCHCA) to prepare communities for the competitive application process for Section 330 funding. The North Carolina Health Center Development Incubator Program inclusive is an 18-month process bringing safety net providers including health departments, rural health centers, free clinics, hospitals, and existing health centers to the table for community-level planning and federal Section 330 application development. Assisting NCCHCA in these

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Health Reform's Effect on School-Based Health Centers

Constance N. Parker, MSN

Almost 2,000 school-based health centers (SBHCs) across the country, including 55 in North Carolina, provide access to high quality, comprehensive medical care, mental health services, preventive care, social services, and youth development to approximately 1.7 million children and adolescents in 44 states and the District of Columbia.¹ These services are provided without concern for students' ability to pay in a location that serves children and adolescents where they are much of the day: in or near schools.

In these SBHCs, developmentally appropriate health services are provided by qualified health professionals, incorporating the principles and practices of pediatric and adolescent health care recommended by the American Medical Association, the American Academy of Pediatrics, and the American Academy of Family Physicians. A recent longitudinal study showed that SBHCs have positive impacts on student achievement, including increasing grade point averages and attendance.²

Funding challenges have put many SBHC patients across the country at risk. Several centers in North Carolina are at risk of cutting services or even closing due to the current economic downturn due to staff layoffs or freezes, insufficient reimbursement for their mostly adolescent patient services, and reduced state, foundation, and/or local funding.

The North Carolina School Community Health Alliance (NCSCHA), an affiliate of the National Assembly on School-Based Health Care (NASBHC), has represented the state's school health centers over the past decade. They join a growing national movement that views SBHCs as a vital part of health care and a key element of health care reform. After years of providing critical care to the nation's youth, SBHCs became an authorized federal program (Title IV, Subtitle B, Sec.4101 (b)) under the Patient Protection and Affordable Care Act. The health reform legislation allows eligible SBHCs to receive funds for:

- management and operation of programs;
- salaries for health care professionals and other personnel;
- purchase or lease of equipment;
- construction projects and purchase of trailers or manufactured buildings installed on school property; and
- training.

A second provision authorizing \$200 million (\$50 million per year over four years) to SBHCs is restricted to capital projects

(Sec.4101(a)) although the original intent of Senator Debbie Stabenow (D-Michigan), who sponsored this section, was to provide emergency funds for centers in distress or facing possible closure.

Becoming a federally authorized program is a historic victory for SBHCs, as it recognizes them as part of the federally supported health care system that serves populations with reduced access, helps address national disasters, and serves vulnerable patient populations in times of economic downturn. However, the SBHC authorization must be followed by appropriations if the centers are to continue serving our nation's youth. Until funds are appropriated, only limited federal support exists for SBHC operations, leaving little hope for the expansion that is called for by US Department of Health and Human Services' Secretary, Kathleen Sebelius: "We are thrilled that part of the [health reform] legislation calls for an expanded footprint of school-based health clinics...I can't think of a better way to deliver primary and preventive care to not only students, but their families, than through school-based clinics."3

NASBHC and the NCSCHA are pushing for a \$50 million Congressional appropriation to fund the SBHC authorization for federal fiscal year 2011. In the current economic climate, states such as North Carolina are struggling to maintain the limited amount of support for the centers they currently fund, much less expanded operations. Federal appropriations would keep hundreds of centers open-serving thousands of the nation's neediest young people. The school health center organizations are also expressing concern and requesting that operational funding be added to the \$200 million now targeted for capital expenses. Some centers and communities do have a need for capital funds, but operational funds will offer flexible, critical resources to help keep centers open and to assist communities that desire to open health centers at their schools. Grant instructions for the \$200 million are expected to be released in June, and centers in North Carolina are looking forward to the opportunity for funding, whether for staff support, operational expenses, or capital funds to provide needed resources, such as electronic health record systems.

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efforts are the North Carolina Office of Rural Health and Community Care, Health Net, and the Care Share Health Alliance.

Section 330 Community Health Center grants are awarded after an extremely competitive national application process.⁷ The federal Bureau of Primary Health Care (BPHC) prioritizes grants to applicants that demonstrate the greatest likelihood for successful implementation and program compliance at the time of application. In addition, the BPHC requires funded organizations to be up and running 120 days after the issuance of grant funding. This has proven to be a major stumbling block for many new health centers.8 The aim of the Incubator Program is not simply to prepare competitive applications, but to prepare organizations to be viable and successful FQHCs. NCCHCA will focus resources on communities with primary care access needs, organizations most ready to compete for the Section 330 grant, collaborating communities, and organizations that participate in Incubator Program activities. These activities will include group trainings and individual technical assistance to communities.

Fostering Collaboration Yields Returns

North Carolina is poised to take advantage of this unique opportunity because of the six year effort of the North Carolina Safety Net Advisory Council (SNAC). Formed as a result of the first Community Health Grant appropriation by the North Carolina General Assembly in 2004, SNAC initially served as a committee to establish an equitable grant process for all safety net providers. Established by the North Carolina Office of Rural Health and Community Care and facilitated by the North Carolina Institute of Medicine, SNAC evolved into a forum for safety net providers to gain mutual understanding, build trust, and partner to advance the interests of the patients they serve. An example of this is a symbiotic co-location and collaboration model established between several FQHCs and free clinics. This model is quickly being adopted to position communities to be strong candidates for new federal funding. In these arrangements an FQHC can lease facility space from the free clinic in preparation to establish a new site of the FQHC funded through Section 330. With the FQHC as a tenant, the free clinic has a consistent revenue stream to cover overhead and other facility expenses. The community has enhanced primary care services and a medical home for new and existing patients. The free clinic retains its 501(c)(3) organizational identity but focuses its attention on recruiting volunteers for specialty care services. Through its established relationships, the free clinic supports the FQHC in brokering discount services for indigent and sliding scale fee patients. The free clinic also continues existing relationships with local and philanthropic organizations to enhance services generating a greater impact in the community.

Where Are the Providers?

The experience with comprehensive health reform in Massachusetts is instructive in forecasting what may take place when federal reform is implemented. Community health centers in that state saw a dramatic increase in the number of patients seeking care as a result of their state's health reform.⁹ All the plans to create new primary care access points are moot unless there is an adequate supply of providers selecting primary care residencies and willing to serve in shortage designated communities. Inequalities in salaries, coupled with an average indebtedness at graduation of \$156,456,¹⁰ result in fewer physicians electing primary care residencies, thus exacerbating the dearth of primary care providers.

The health reform package includes a total of \$1.5 billion in new, dedicated funding for the National Health Service Corps over five years. This funding will enable an estimated 15,000 primary care physicians, dentists, and other critically needed providers to access loan repayment and scholarship opportunities in return for service in shortage areas across the country. Provisions come into effect in the later years of health reform to improve the reimbursement to primary care providers; however, much needs to occur now in order to assure the needed supply of providers. Plans to expand medical school classes at the University of North Carolina at Chapel Hill and East Carolina University have been on hold for two years due to limited state funding.

In the summer of 2009, the North Carolina Office of Rural Health and Community Care, North Carolina Area Health Education Centers (AHEC), Eastern AHEC, the Brody School of Medicine, and NCCHCA developed a successful application to create Student Experiences and Rotations in Community Health (SEARCH). This is a state-based program funded through the National Health Service Corps in the Health Resources and Services Administration and enables students and residents to serve clinical rotations on multidisciplinary health care teams in underserved communities across the United States and its territories. SEARCH was launched through Eastern AHEC in the fall of 2010.

Within the health reform bill are initiatives to expand the use and practice of mid-level providers in primary care. The transition in practices towards electronic medical records may bring greater acceptance to this approach. The health reform legislation also creates a new Section 340H of the Public Health Service Act and appropriates \$230 million over five years to establish a Teaching Health Centers Program.¹¹ This new program will create primary care residency programs in ambulatory patient care centers, primarily FQHCs. To assure a management workforce prepared to lead complex FQHC organizations with their unique array of grant and reimbursement structures, a Health Center Management Certificate Program is being developed through the Brody School of Medicine.

Need Will Continue to Exist

Medicaid expansion and health insurance exchanges resulting from health reform will provide more Americans with access to affordable health insurance coverage. Many current health center patients will have health insurance for the first time. The quality of care, customer service, and established relationships will be key factors in retaining patients in the centers. Reimbursement rates and regulatory processes will be the major determinants of whether private primary care providers will accept former center patients. Poverty, health disparities, and disenfranchisement will not be eliminated through health reform. There will continue to be individuals and communities best served through high quality, culturally competent community health centers providing integrated services under one roof.

Improving the Health of the Community

The passage of the health reform bill presents a unique opportunity to expand community health centers and create integrated medical homes in areas where safety net primary care is provided by local health departments, rural health centers, and free clinics. Through collaboration and coordinated resource allocation, safety net providers can enhance what they do best and maximize the impact of available resources. In this new environment, rural health clinics would link administrative and clinical services as part of a regional primary care network with FQHCs; free clinics would leverage volunteer and philanthropic support to fill gaps in care for individuals; and health departments would be freed from the burden of providing personal care services and focus on community-based prevention efforts. It is only through a tightly integrated continuum of prevention, early intervention, and treatment that we will begin to make a positive impact on preventable chronic diseases and make North Carolina a healthier state. NCMJ

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Health Reform and Workforce: The North Carolina Connection

Thomas C. Ricketts III, PhD, MPH; Elizabeth Walker, MSPH

he health reform legislation passed in March of this year, the Patient Protection and Affordable Care Act (P.L. 111-148), was the focus of intense debate largely because of provisions that changed the way we provide health insurance coverage and regulate the insurance industry. Some provisions received very little attention both because they were less controversial and also because they

were simply not of a scope that would draw the attention of the media or of most interest groups. One of the issues that "flew under the radar" is health workforce—the policies that guide the training and deployment of health care professionals.

North Carolina is often thought of as the "cradle" for innovative workforce programs. The state has been and continues to be a pioneer in the Area Health Education Centers (AHEC) movement; North Carolina was the location of the first nurse practitioner program to graduate students at the University of North Carolina (UNC) at Chapel Hill; the physician assistant profession was created at Duke University; and the East Carolina University Brody School of Medicine became one of the first primary carefocused medical schools developed

in the expansion of medical education in the 1970s. North Carolina has also been a leader in the development of allied health training networks, the mobilization of its community college system for health professions training, and the development of a strong primary care-focused system in its Medicaid program. Almost every one of the workforce provisions in the reform bill will have very strong effects in the state, and the federal government and other states will look to North Carolina for guidance on how to make the promise of the health reform legislation come into being.

Health workforce legislation has a history even older than Medicare and Medicaid. Congress passed legislation

to support the training of nurses in the 1950s, then followed with a series of funded programs that supported medical and other health professions training. In 1970, the National Health Service Corps (NHSC) was created, setting a pattern of support not only for training but also for deploying of primary care physicians and other primary care professionals to underserved areas. Congress, in a series of health workforce

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> programs passed into law in the 1970s, recognized that not enough generalist physicians were being trained in the United States and that they were not practicing in the places they were needed. With the 1976 passage of the Health Professions Educational Assistance Act (P.L. 94-484), Congress has recognized that we have an ongoing problem with the geographic and specialty distribution of physicians.

> The need for federal support for nurse training was recognized as early as 1964 with the Nurse Training Act (P.L. 88-581), which established Title VIII of the Public Health Service Act. Subsequent programs supporting nurses fall under that section of the Public Health Service Act.

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The National Health Service Corps – A Critical Component of Provider Recruitment in North Carolina's Rural and Underserved Communities

John Price, MPA

Since the mid-1970s, the National Health Service Corps (NHSC) has been an invaluable resource for recruiting primary care providers in North Carolina. NHSC scholars have served in various practice settings across the state including free-standing sites, community health centers, or as private practice option providers. All of these are located in places where there are fewer practitioners and severe barriers to access to primary care, areas designated as Health Professional Shortage Areas (HPSAs) by the federal government. The program offers scholarships to students to attend medical school as well as guaranteed repayment of loans. The scholarship program reached its height in the late 1970s and early 1980s in North Carolina and the nation due in part to a spirit of Peace Corps volunteerism.

In the mid-1980s, the NHSC shifted its primary focus as a scholarship program for medical students to offering fewer scholarships and expanding the programs for loan repayment for medical providers who had completed training. This transition allowed the NHSC to contract for obligated service at a point when providers were more focused on personal and professional needs than when they accepted scholarship funding early in their medical school training. NHSC loan repayment offered another recruitment approach to attract primary care providers to rural and underserved communities where income, lifestyle, and other factors made recruitment more difficult.

Over the years, the NHSC loan repayment program has faced several challenges. Funding has been a major determinant for site eligibility. HPSA designation scores, based on the level of shortage, were used to allocate scarce resources and many providers from areas with low HPSA scores were unable to receive loan repayment due to the funding limitations. In addition, NHSC loan repayment required full-time practice, thus eliminating some candidates who were unable to make a full-time commitment. Finally, the NHSC would not consider loan repayment until a candidate was already in practice. These factors restricted the potential placements through the program.

The American Recovery and Reinvestment Act of 2009 (ARRA) provided the NHSC with an additional \$300 million in funding over a two-year period. The NHSC has used this funding to increase the number of loan repayment contracts available to providers. The NHSC's stated goal was to double their field strength through this initiative. The HPSA designation scores, full-time practice status, and the requirement that the candidate already be on-site are no longer required for NHSC loan repayment. These changes have already had a tremendous positive effect on recruitment efforts in North Carolina.

The passage of the Patient Protection and Affordable Care Act (HR 3590), the health care reform legislation of 2010, appropriated \$1.5 billion to the NHSC through 2015 (Section 10503 (b)(2)). Section 5207 authorized over \$4 billion through 2015. Given this significant investment, the NHSC has been charged with bolstering the nation's recruitment efforts in light of the estimated 32 million individuals who will be insured under the law. Until supply can meet demand, competition among communities will grow. With expanded NHSC loan repayment and the potential for additional scholars, rural and underserved HPSA communities will have a recruitment tool that will allow them to compete in an environment where salary and lifestyle opportunities may be limiting. This is very good news for rural and underserved communities in North Carolina as the nation moves toward the implementation of health care reform.

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In 1972, the AHEC program was created as one mechanism to coordinate the many emerging federal and state programs related to health workforce development. By the 1980s these were bundled under the rubric of Title VII (referring to a subsection of the Public Health Service Act) for physicians, dentists, and other non-nursing health professions. The recent health reform legislation has amended, extended, or enlarged many programs under Titles VII and VIII and has created some new programs that are classified under those sections. Other components of the overall bill touch on or will have important effects on the workforce, but this commentary will focus mainly on the elements under those two parts of the Public Health Service Act. One of the recognized problems in health workforce policy has been the lack of coordination across programs. In the discussions leading up to the passage of health reform there were several proposals to create some form of coordinating mechanism. In the end, the legislation establishes a National Health Workforce Commission charged with reviewing health workforce supply and demand, evaluating existing programs, and making recommendations on policies and priorities. That commission will consist of 15 members drawn from a range of stakeholder groups, but with health professionals mentioned as only one of the eight groups. The commission is to provide recommendations to Congress and the Administration on national health workforce priorities, goals, and policies via annual reports. The prescribed structure and powers of the Commission is weaker and more limited than other proposals, but it is the first federally mandated body that is to address all health professions policy at the national level. As of June 2010, Congress has not voted any appropriations to support the Commission but the Administration is moving ahead with the appointment process.

There are many specific programs that are created or modified under the bill that will have direct relevance to North Carolina—almost all of the provisions directly related to Title VII and VII programs will touch the state as multiple programs and institutions in North Carolina are recipients of funds or are guided by federal rules and policy. Two completely new programs created by the law will likely be implemented in the state given our track record of leadership in health workforce.

First, the law creates "teaching health centers" under Title VII to train primary care medical and dental residents in community health centers, with funding authorized for grants to develop these centers and to support the costs of training residents. This is a very important departure from how physicians and dentists have previously been paid for their graduate training. The Medicare Graduation Medical Education (GME) system has focused almost entirely on the in-hospital experience and this has tended to create a cadre of physicians who are oriented to specialty-focused hospital care and inpatient conditions. The teaching health centers will try to balance the current hospital-focused GME training of physicians with the realities of ambulatory care by giving them more exposure to patients in outpatient settings and to systems that are trying to provide more continuity of care as well as a primary care emphasis. North Carolina has a very active network of community health centers that will be eligible for this program, and most are already working closely with health professions schools across the state in training physicians, nurses, pharmacists, dentists, and allied health professionals. The North Carolina AHEC system will likely play a key role in helping develop these programs, as they are a specifically mentioned "eligible entity" for grants under the legislation (§749A(f)), but it will also require the full involvement of the academic schools and departments, particularly in family medicine. The eventual structure of these programs will require substantial negotiation and inter-organizational coordination to meet all of the specific requirements of the bill. The long history of collaboration among academic programs and the primary care community will serve us well in responding to this new opportunity.

Another innovation is the primary care extension program (\$5405 of the bill adding \$399w to Part P of Title III of the Public Health Service Act). Interestingly, this is being established under the Agency for Healthcare Research and Quality (AHRQ) to "...provide support and assistance to primary care providers to educate providers about preventive medicine, health promotion, chronic disease management, mental and behavioral health services (including substance abuse prevention and treatment services), and evidencebased and evidence-informed therapies and techniques, in order to enable providers to incorporate such matters into their practice and to improve community health by working with community-based health connectors...." The legislation calls for the creation of "state hubs" that include the state health department and Medicaid agency and at least one health professions training program department as well as other stakeholders. Again, the law only authorizes funds for this program and it will not be established without followon appropriations. The program is also given a six-year development timeline after which states are to support these activities. For North Carolina, the AHEC system functions in much the same way as the proposed extension program.

North Carolina has been very active in overall workforce development and in coordinating programs at community colleges with the needs of health care delivery systems and health related industries. The state has a network of workforce development boards established under the Workforce Investment Act (P.L. 105-220). Section 5102 of the health reform bill provides grants for planning and implementation to help integrate health care more closely with those boards. Again, North Carolina enjoys a role as a leader in cooperation and coordination in health workforce development and can build on an existing network of stakeholders across the state and among agencies and institutions.

While we have mentioned the AHEC program many times, we cannot forget that the Area Health Education Centers legislation is subject to regular reauthorization by Congress. Section 5403 of the new law extends the authorization for AHECs through 2014. Further, the bill states for the first time that it is the intent of Congress that every state have an AHEC. The bill authorizes grants for extending and improving the work of the AHECs and provides much greater specificity to guide the programs in their work. North Carolina is seen as the national leader and model for a state AHEC system and will provide examples as well as technical assistance to other states. Within our own program, the specific language that calls for innovative primary care training programs and community-based participatory research provides opportunities for the many creative thinkers in health care and medical education in the state to try out groundbreaking strategies.

North Carolina has also been a leader in rural-focused training with East Carolina University ranked in the top five nationally for rural medical education. Section 10501 (subpart I) creates a special grant program for medical schools to "establish, improve, or expand rural focused education and training" and support the recruitment of rural residents into medicine.

A new United States "public health sciences" track for medical, dental, nursing, public health, and behavioral and mental health professional students is authorized to support programs that "grant advanced degrees (in public health) in a manner that uniquely emphasizes team-based service, public health, epidemiology, and emergency preparedness and response," (\$5315 of the bill). This offers opportunities for the UNC Gillings School of Global Public Health and the public health programs at East Carolina University, UNC Greensboro, and Wake Forest University to extend the programs. The tradition of engaged public health training in the state will make North Carolina institutions likely recipients of these program funds. The bill also provides authority to expand Centers for Disease Control and Prevention fellowship programs in epidemiology, lab science, public health informatics, and the epidemiologic intelligence service; again, the existing graduate programs at those institutions will be well-positioned to take part in this program.

The reform bill includes very substantial landmark legislation expanding nurse training and the legislation recognizes expanded roles for nurses. An amendment to Medicare laws provides for a demonstration project under which hospitals may receive payment to cover costs of providing training to advanced practice nurses. This is an innovative approach to supporting the costs of training of nurses and builds on the example of Medicare GME. When Medicare was passed in 1965 there was a concern that there wouldn't be enough doctors to treat the newly insured population; thus, in follow-up legislation, Medicare GME was set up to support the training of physicians via add-on to payments for teaching hospitals. This nurse GME program builds on that experience but without a direct link to the Medicare reimbursement system. This program will be limited to five eligible hospitals across the nation and a report on its progress will be due in October 2017. The training programs are directed to conduct at least half of the training in community-based setting unless the institution is in a rural or underserved area and that requirement is not feasible.

The bill also includes additional extensions or expansion of Title VII support to nursing including a threeyear demonstration program that trains family nurse practitioners in federally qualified health centers (FQHCs) or nurse managed health centers. A separate section funds grants to nurse managed clinics (\$5208), providing an opportunity for a new and innovative approach to primary care training. North Carolina has long been supportive of independent nurse practitioner practice and, combined with its strong nurse training programs, will be a likely place for these programs to emerge.

Other provisions in the law create opportunities for expanding primary care dentistry training, extending and expanding existing Title VII programs (\$5303), and creating a grant program to support training or employment of "alternative dental providers in rural underserved areas." This may affect North Carolina in areas where we continue to struggle to expand access to dental care and where there are plans for community-based dentist training.

Although certain workforce programs have had funding appropriated in the health reform legislation, most of the workforce provisions will need separate appropriations action in Congress. Health workforce programs with funding already appropriated include:

- A series of provisions on loan repayments and scholarships intended to promote health workforce diversity.
- Demonstration projects to provide health profession and home care aide training to people with low incomes.
- The graduate nurse education demonstration project described above.

The law creates a community health center fund to be administered by the US Secretary of the Department of Health and Human Services to provide for expanded and sustained national investment in community health centers. This fund will indirectly affect the health workforce because it will provide many more opportunities for communitybased, team-oriented primary care practice in more than 8,000 sites across the nation. This section of the bill includes greatly expanded support for the NHSC that has the potential to double its field strength. This will benefit the recruitment programs of the state's Office of Rural Health and Community Care and other programs and institutions that seek to bring health care professionals into their communities. Revisions to the laws covering the NHSC will also allow for part-time service over an extended period, providing greater flexibility for loan repayment.

Primary care training grants under Title VII are modified and expanded and include grants for demonstration projects providing training to physicians and physician assistants in new competencies, such as providing care in a patient-centered medical home setting. North Carolina has the programs in place that can make immediate use of these funds. The law calls for priority in awarding grants to programs that have formal relationships with FQHCs, AHECs, and rural health clinics. The state has networks and programs like the Care Share Alliance that can serve as immediately available structures to facilitate new and expanded programming.

The health reform bill includes many provisions that require action at the state level, including reauthorization of state and regional workforce centers to collect and analyze data; grants for states to assess and expand their health care labor markets; and grants for primary care extension program "state hubs" to coordinate outreach efforts to primary care providers. North Carolina is well-positioned to take advantage of the opportunities as well as lead the way in making many of these proposed programs a reality. **NCMJ**

Information Technology Reform IS Health Reform

Steve Cline, DDS, MPH

he computer is fast becoming one of the most important instruments of modern medicine for providers of all types. The federal government is using health information technology (HIT) to drive health reform. New HIT developments will result in changes to how health care is delivered that are designed to increase quality, improve health outcomes, control costs, and empower health care consumers.

With a few notable exceptions, health care providers have, so far, been slow to embrace the "information age," and this is true in North Carolina as well. Medical *care* technology is advancing at a staggering rate. Medical *information*

technology has made similar advances, but they are much less evident in health care practices. We readily accept and even expect sophisticated utilization of personal electronic information in other parts of our lives. For example, Amazon. com knows what books I purchased online five years ago and sends me an email notice about similar books as soon as they are published. They also have all my contact information and confidential billing information so I can have the book on my doorstep in two days with just the click of the mouse. In addition, I can look up all my previous transactions at any time. My local grocery store uses information technology through my barcoded loyalty card to know what foods I typically purchase at different times of the year and reminds me when they are

on sale. The grocery store uses this data to perform complex analyses of their market demographics and purchasing trends so they can predict consumer behavior. There are very few things more sensitive or more critical than our personal finances, yet I can manage all of my banking needs instantly from any computer in the world by simply accessing the secure internet. In summary, we live in a highly automated world. If you don't believe me, ask a teenager. Why is HIT lagging behind?

Some might say—and I would agree—that health care and groceries are not the same. However, from a technology

perspective, collecting, securing, and analyzing sensitive private information is the same no matter what purpose it is used for. The computer recognizes secure data as secure data. Technological capacity is not the issue. It is more an issue of people's comfort level with new technology and a fear of change. The technology already exists to allow us to better use information technology that will improve health; we just need to learn how to use it.

Patient privacy and security of personal health information is required for any HIT system to be effective. Confidentiality and protection of information must be addressed to achieve consumer confidence. I believe there are three additional

True health care reform cannot happen without HIT reform. North Carolina is well-positioned...to take full advantage of federal funding and the tremendous opportunity that health reform and HIT investments can offer.

driving forces that will shape the success of HIT reform in North Carolina and therefore the success of health reform:

(1) Value Proposition for Electronic Medical Record (EMR) Adoption. The first step and the cornerstone for building an effective statewide HIT network of systems is how successful we are in getting health care providers to adopt EMRs. The patient-specific clinical information needed to coordinate care, prevent unnecessary duplication of efforts, and build a system of continuous quality improvement is based on having the right information at the right time in the right place. This information must be captured in the EMR

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so it can be collected, shared, and used appropriately; these bring value to the use of IT. This is no small task. Converting and fully utilizing EMRs in an established health care practice is hard work and costs money to implement. It will fundamentally change how care is delivered, how patients flow through the office, and how the business of health care is managed. Health care providers must see a return on investment for making these difficult changes.

(2) Information Overload. Thanks to advances in medicine and information technology, the knowledge bank surrounding health has expanded exponentially. It is no longer humanly possible for health care providers to know everything they could possibly know about every patient, their family history, their history of health care services, and the most current research on every disease process without computer assistance. When molecular medicine comes of age, it is also reasonable to expect that health care providers will want access to the patient's entire genotype which is a staggering amount of information. This is what computers do best. They manage large amounts of data from multiple sources and can, if well-programmed, distill it down to what is important for each situation. Better information leads to better decisions and better health outcomes, but health care providers need practice-based, user-friendly computers to help them manage the information overload.

(3) Advanced Analytics. How we describe the use of information has evolved. First we talked about collecting data electronically for ready access, but then we realized that both bad data and too much data are no help at alland can even be harmful. Next we talked in terms of turning volumes of data into useful information-information that helped decision-makers to manage the problems they were facing. Now the industry buzz is turning an endless supply of information into knowledge. Most of the data currently used to understand health and health care are retrospective studies and claims-based data from clinical assessments of patients and health services delivered in the past. This is not adequate for putting the best knowledge possible into the hands of providers who must predict what is best for the patient now and in the future. Knowledge is the combination of complex statistical analysis, predictive data modeling, and the ability to forecast with some degree of certainty what will happen to the patient. The health care provider, with the help of effective HIT systems that deliver knowledge at the bedside, will be able to take advantage of the best scientific evidence as they make decisions about their patient's health.

HIT is not a magic bullet. Practicing good medicine will always be the art of combining an understanding of the individual patient's situation and the provider's knowledge and ability to apply sound science on a case-by-case basis. What is increasingly true is that the breadth and depth of relevant science is growing vastly. New HIT tools can make more and better information readily available to guide decisions. And, as an added benefit, the experience of one provider taking care of his or her patient will be added to the knowledge bank for the next time any other provider is faced with a similar situation.

The American Recovery and Reinvestment Act of 2009

Health reform is intimately associated with health information technology, but the investment in IT started before March 2010. The federal government is using provisions of the American Recovery and Reinvestment Act of 2009 (ARRA) to drive changes in HIT that they believe are essential to transforming health care. ARRA contains authorization for approximately \$38 billion in funding for HIT infrastructure over the next six years. The specifics of how this unprecedented investment in HIT is to be spent are set forth in the Health Information Technology for Economic and Clinical Health (HITECH) portion of ARRA. The overall goal of the HITECH provisions is to create a nationwide health information infrastructure that enables electronic health information to be recorded, shared, and utilized in a way that improves health.

Of the total authorized funding, the largest portion roughly \$34 billion—is entitlement funds in the form of incentive payments by Medicare and Medicaid to eligible providers (including hospitals) for implementing HIT in their practices. More specifically, to qualify for these incentive payments, providers must adopt a certified EMR system and demonstrate meaningful use of the EMR in their practices. There is a complex graduated payment formula for these payments that begins in 2011. If an eligible Medicaid provider fully satisfies the criteria for meaningful use, they would receive \$63,000 over four years, \$44,000 for Medicare providers, and hospitals would receive even more. In 2016 the incentive payments will end and providers would receive reduced payments if they are *not* utilizing HIT appropriately.

The majority of the remaining portion of ARRA funding roughly \$2 billion—was appropriated to the Office of the National Coordinator (ONC). North Carolina has aggressively and successfully pursued federal funding to support these HIT initiatives. In fact, very few states have received funding in as many competitive categories as North Carolina. The category of funding available and North Carolina's successes include:

HIT Regional Extension Centers

In February 2010, the North Carolina Area Health Education Centers (NC AHEC) Program at the University of North Carolina at Chapel Hill was awarded \$13.6 million dollars over two years to establish the North Carolina Regional Extension Center (NC REC), which will allow NC AHEC to reach at least 3,465 priority primary care physicians and assist with practice assessment, workflow redesign, and the selection and implementation of electronic health records. NC AHEC will expand its consulting workforce throughout the nine regions of the state to help practices implement technology and/or use previously existing technology to meet the federal standards of meaningful use in order to achieve incentive payments from the Centers for Medicare and Medicaid Services (CMS) between 2011 and 2015. NC REC is collaborating with the Carolinas Center for Medical Excellence, the North Carolina Medical Society Foundation, and the North Carolina Institute of Public Health.

State Health Information Exchange

Governor Perdue's Executive Order No. 19, dated July 16, 2009, authorized the North Carolina Health and Wellness Trust Fund Commission (HWTF) as the State Designated Entity (SDE) to apply for and receive federal funding under HITECH. The HWTF Commission established the HIT Collaborative with specific membership to provide a representative body to advise and guide the application for HIT funding under HITECH. On September 11, 2009, the HWTF submitted a Letter of Intent to the ONC expressing the state's intent to submit a completed application for the North Carolina Health Information Exchange Program (HIE) by October 16, 2009. The application was completed and submitted to ONC and included an HIE Strategic Plan to be followed by an HIE Operational Plan. On February 8, 2010, HWTF was notified that North Carolina had been awarded \$12.9 million for building HIE capacity.

Subsequently the HWTF Commission worked with the Governor's Office to establish a new CEO-level governance board as part of a new nonprofit organization. This new HIE organization is a public-private partnership that is responsible for execution and oversight of the North Carolina HIE strategy. This includes establishment of a state HIT coordinator position in state government and submission of a NC HIE Strategic and Operational Plan by August 31, 2010.

State Medicaid HIT Plan

The North Carolina Division of Medical Assistance (DMA) is responsible for building the system that evaluates the provider's meaningful use of EMRs and administers incentive payments to eligible Medicaid providers. DMA submitted the Advanced Planning Document (APD) to request the initial funding for system design to the CMS on January 29, 2010 and was approved by CMS effective February 4, 2010. CMS approved a budget of \$2,288,648, of which \$255,512 is in state matching funds. The North Carolina Office of Medicaid Management Information Systems is managing the contract with an HIT vendor to accomplish this eight-month planning project. The vendor is responsible for developing the Implementation APD which will support the request to CMS for funds to build the new system. The Implementation APD is expected to be submitted to CMS before the end of the year.

Workforce Development

The ONC released a funding opportunity announcement for \$80 million to build the capacity of training programs nationwide. A collaboration of educational institutions led by the North Carolina Community Colleges System, North Carolina Area Health Education Centers, and the Governor's Office met to coordinate an application for North Carolina workforce development. North Carolina was grouped with other southern states to submit one regional application.

Pitt Community College (PCC) successfully applied to become the lead institution in the ARRA funding opportunity, Information Technology Professionals in Health Care: Community College Consortia to Educate Information Technology Professionals in Health Care for the 13 state region comprised of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, and Texas and as a partner with several other organizations applying for the lead capacity for this same funding opportunity. PCC will receive \$10.9 million for HIT training programs in 21 colleges in the 13 states.

In addition, Duke University, in partnership with East Carolina University, successfully competed for the ARRA Information Technology Professionals in Health Care Curriculum Development Centers funding opportunity. Duke will receive \$1.8 million to develop curricula for the new training programs and \$2.1 million to develop highly specialized HIT training programs.

Both of these grant programs will help provide thousands of health care and IT professionals with the skills necessary to take advantage of new HIT in their practices.

Broadband Technologies Opportunity Program

Through ARRA, \$7.2 billion in funding was allocated to the US Department of Commerce and the US Department of Agriculture to promote the deployment and use of broadband technologies to underserved populations in the United States. The Department of Commerce administers \$4.5 billion of this broadband recovery funding through the National Telecommunications and Information Administration's (NTIA) Broadband Technologies Opportunities Program (BTOP). The majority of this funding is for deploying last mile and middle mile broadband infrastructure to underserved consumers and to community anchor institutions such as schools, libraries, health care facilities, and other facilities of public importance.

The Microelectronic Center of North Carolina (MCNC) is the lead agency for the ARRA broadband initiatives. MCNC is a nonprofit organization established by the North Carolina General Assembly in 1980. One of MCNC's main activities is to operate the North Carolina Research and Education Network (NCREN). NCREN provides broadband communications technology services and support to all 115 K-12 school districts, 20 of 58 North Carolina community colleges, all 17 University of North Carolina system institutions, 24 of 36 of North Carolina's private colleges and universities, and public health facilities across the state.

On January 20, 2010, the NTIA announced that MCNC had been awarded \$28.2 million (BTOP infrastructure) in

Shared Vision The Governor's Health Information Technology Strategic Planning Task Force

June 24, 2009

In April 2009, Governor Perdue authorized the Health Information Technology Strategic Planning Task Force to develop a statewide vision and strategy for advancing health information technology (HIT) to improve health. The HIT Task Force envisions a future in which all residents of North Carolina are afforded ready access to and equal opportunity for accurate and secure health information wherever it is needed. Technology exists to design and build a fully integrated and connected health information system that will enhance efficiency, quality, and effectiveness of the delivery of health care. Setting aside the issues of cost, these are the guiding principles upon which such a system must be founded. Each of these issues must be adequately addressed before HIT will be widely used and accepted.

Privacy and security must be guaranteed. Individual personal health information must be protected. The public will accept sharing sensitive personal information if it is done on their behalf to assure that the right information is shared, at the right time, and for the right reasons.

Automating what we already do will not work. We can not expect to get better health outcomes by simply applying information technology on top of the existing system of inefficiencies, silos, and uncoordinated care. A reengineered HIT system seeks to eliminate the costs associated with redundant care or care not supported by clinical/scientific evidence.

Better health, not just better health care, must be the goal. Better health requires looking beyond just HIT and the traditional practices of health care providers and payers to create a virtual "health home" where care is coordinated and collaborative. Prevention is the key. It must be a shared commitment of public and private employers, non-governmental organizations, communities, and individuals.

HIT investments must support improved individual health as well as population health. Use the federal stimulus funds to drive the changes needed in the overall system that will create sustainable and continuous quality health improvements. The new HIT system should leverage existing investments in technology and take advantage of innovations that already exist.

The system must be patient-centered. Engaged patients will have easier access to and more control over their individual health records, and they will be able to play a more active role

middle mile broadband recovery funds. MCNC's funded proposal includes the construction of 500 new miles of fiber in 37 counties in the rural southeastern and western parts of the state. The main goal of this fiber build will be to offer virtually unlimited amounts of bandwidth to the public education institutions served by NCREN at stable costs for the next two decades, even though demand for in managing their own health. Sharing information between multiple providers and across disciplines will improve the decisions providers make and continuity of care. The system must allow every North Carolinian access to a personal health record.

The system must be inclusive. The system must be standardsbased. Whether physical or behavioral health, long-term or shortterm care, public or private provider, insured or uninsured, veteran or civilian, rural or metropolitan, all can be part of the system. The HIT system is provider-neutral. Its design and implementation does not favor or disadvantage any provider type.

The system must be collaborative. No single entity can accomplish the HIT vision alone. Working together, North Carolina's hospitals, providers, educational institutions, public agencies and non-profit organizations will improve the health of residents and communities. Collaboration among communities will enhance North Carolina's response to public health threats, disasters, state and national emergencies. The ability to analyze and share data across entities will result in reduced duplication of services, identification of best practices, better utilization of resources, better practice management, and inform future policy and planning decisions and expenditures.

Innovation will be required. Ongoing research and analysis of changing needs and technologies will keep the system dynamic and timely. Implementation and continuous improvement strategies will require an iterative approach that maximizes resources and follows national standards and certification requirements.

Sustainability is the key. The system will be sustained by a network of supports to provide technical and professional training and consultation. The long-term stability of HIT will be built upon financial incentives and value added functionality rather than a mandate to participate.

This is a marathon not a sprint. *HIT systems will be built* incrementally. Every stakeholder in the process must be able to move ahead from where they are on the continuum of minimum *HIT* to fully electronic. This means the small independent community practitioner is making progress by deciding to implement an EHR in the practice while progress for a large hospital health system with a sophisticated IT would mean something very different.

bandwidth among these institutions is growing at 30%-40% annually.

Because of its success in round one, MCNC has been asked by the state to apply for round two BTOP funding for the middle mile fiber build in additional counties. No funding decisions for round two have been announced to date.

Beacon Community Program

On December 3, 2009, United States Department of Health and Human Services Secretary Kathleen Sebelius announced plans to award \$220 million in HIT grants to 15 communities that can serve as models for the development of a national HIT network. Applicants must demonstrate a track record of collaboration and leadership in the adoption and meaningful use of EMRs including sharing clinical health information and quality reporting. Four North Carolina communities submitted applications to be considered for one of the 15 communities nationwide to receive Beacon Community funding: (1) Western North Carolina Health Network; (2) Sandhills Community Care Network; (3) Southern Piedmont Community Care Plan; and (4) Coastal Connect Health Information Exchange.

The funding awards were announced on May 4, 2010 and the Southern Piedmont Community Care Plan (SPCCP) in Concord, North Carolina was one of the funded communities. SPCCP will receive \$15.9 million to improve care coordination for patients with diabetes, heart disease, hypertension, and asthma by engaging patients and providers in bidirectional data sharing through a health record bank, empowering patients to participate in self-management, and expanding access to care managers.

North Carolina Telehealth Network

The North Carolina Telehealth Network (NCTN) is a collaboration of North Carolina health care providers, both public and private, that organized prior to ARRA for the purpose of responding to federal funding opportunities with the Federal Communications Commission. The North Carolina Institute for Public Health is taking a leading role in coordinating the multiple partners and stakeholders. The NCTN has developed a statewide plan using a subscriber-based sustainability model and matching funds to connect

hospitals, health departments, community health centers, and free clinics. The NCTN is in the RFP stage of development.

Comparative Effectiveness Research

Multiple academic medical centers and researchers across the state are preparing individual applications for federal comparative effectiveness research funding based on their specific expertise and area of interests. ARRA designated approximately \$12 million to the Agency for Healthcare Research and Quality for this purpose. There is currently no centralized approach for North Carolina agencies to apply.

Loan Program

The ARRA legislation included the concept of a state loan fund to provide financial support to health care providers to purchase and implement EMRs in their practice. The Office of the National Coordinator for Health Information Technology has not yet released details on how a statebased loan fund would operate. The executive director of the North Carolina Health and Wellness Trust Fund convened a group of private foundations in North Carolina to discuss the potential for a North Carolina-specific loan fund to assist health care providers with the upfront costs of acquiring and implementing an EMR. However no decisions have been released pending the funding announcements from ONC.

True health care reform cannot happen without HIT reform. North Carolina is well-positioned with strong health partnerships, expertise, and infrastructure to take full advantage of federal funding and the tremendous opportunity that health reform and HIT investments can offer. All told, more than \$90 million in federal funds are already coming to North Carolina for HIT-related development. The promise of HIT is great; the challenge is getting us there all together. **NCMJ**

Prevention in Health Care Reform: The Time Has Come

Jeffrey Engel, MD

he Patient Protection and Affordable Care Act (PPACA), passed by Congress and signed into law by the President, has in it provisions that "ensure that all Americans have access to free preventive services under their health insurance plans and invests in prevention and public health to encourage innovations in health care that prevent

illness and disease before they require more costly treatment."¹ What I intend to discuss and list in this commentary are the specifics of prevention and the investments in the public health infrastructure in the PPACA and crosswalk how certain provisions will help in the implementation of many of the recommendations of the North Carolina Institute of Medicine's *Prevention for the Health of North Carolina: Prevention Action Plan.*²

Prevention Services in Private Health Insurance Plans

The majority of the PPACA concerns the health insurance industry and mandates on the coverage of preventive health services. These mandates intend to promote preventive health care and improve public health by helping people live healthier lives, which will restrain the growth of health care costs over time. In the private sector, the law provides so-called first dollar (meaning only premium costs) coverage by eliminating cost sharing requirements (co-pays or deductibles) for recommended preventive care and screenings including:

- Current recommendations with a rating of "A" or "B" by the United States Preventive Services Task Force (USPSTF).³
- Immunizations recommended by the Advisory Committee on Immunization Practices (ACIP) to the federal Centers for Disease Control and Prevention (CDC).⁴
- Preventive care and screenings, including oral and vision care, for children and adolescents, supported by the Health Resources and Services Administration (HRSA).⁵
- Additional preventive care and screenings recommended for women and supported by HRSA.⁵

For the patient and the family, first dollar coverage removes the financial barrier of having to pay upfront in order to receive evidence-based preventive services and screenings (e.g., vaccines or mammography). For children, expanding access to these services will help implement two priority recommendations of the *Prevention Action Plan*:

The majority of the PPACA concerns the health insurance industry and mandates on the coverage of preventive health services. These mandates intend to promote preventive health care and improve public health by helping people live healthier lives, which will restrain the growth of health care costs over time.

- Recommendation 9.1: Increase immunization rates. Copays and deductibles often discourage families from immunizing children with the non-required vaccines.
- Recommendation 11.4: Increase the high school graduation rate. Requiring coverage of not only basic pediatric services under all health plans, but also oral and vision care, will improve a child's ability to learn and perform at school.

In addition to removing financial barriers, the PPACA allows employers to offer premium discounts and other awards for up to 30% of the total premium to individuals

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who satisfy a health standard (such as quitting smoking, maintaining a body mass index below the level of obesity, and/or having a regular medical home where blood pressure, cholesterol, and diabetes can be managed) and includes provisions to ensure that discriminatory practices do not occur. There is also a requirement for the CDC to study, evaluate, and educate employers on the benefits of worksite health promotion. These measures will facilitate Recommendation 12.3 of the *Prevention Action Plan*: create the North Carolina worksite wellness collaborative and tax incentives for small businesses.

The timeline for implementation of these changes will be January 1, 2014 for grandfathered plans and September 23, 2010 (six months after passage of the PPACA) for new plans. Any existing health plan coverage at the time PPACA was signed into law on March 23, 2010 is considered a grandfathered plan. New coverage plans issued after the enactment date would have to provide such benefits by the September date.

Prevention Services in Government Health Insurance Plans: Medicaid and Medicare

The PPACA expands preventive health service coverage in the government-entitled health insurance plans in Medicaid (mainly for low-income women and children) and Medicare (for the elderly and disabled). Because these are federal programs run by the US Department of Health and Human Services Centers for Medicare and Medicaid Services (CMS), the expansions will not occur through mandates as in the private sector, but rather through policy and rule changes in CMS. Thus they can be implemented more rapidly. The preventive health services added to the CMS programs by the PPACA include:

- Under Medicare, the Act provides seniors with free annual wellness visits and personalized prevention plan services.
- Under Medicaid, the Act:
 - Provides coverage for comprehensive tobacco cessation services for pregnant women.
 - Offers incentives to beneficiaries who successfully complete certain healthy lifestyle programs targeting chronic disease risk factors such as high blood pressure, high cholesterol, and diabetes.

Since Medicaid programs require implementation at the state level (through the Division of Medical Assistance in the North Carolina Department of Health and Human Services) with state matching dollars, the PPACA also provides incentives to states to implement the Medicaid expansions of preventive health services coverage. These incentives include:

The provision of a one percentage point increase in the federal medical assistance percentage (FMAP, or the federal portion of the match) to states that offer Medicaid coverage for all USPSTF recommended services and immunizations recommended by the ACIP.

Requires the Secretary of the US Department of Health and Human Services to issue guidance to states and health care providers about Medicaid's coverage of obesity-related services and preventive services and requires each state to design a public awareness campaign on such services.

These changes in the CMS programs will help implement the following recommendations in the *Prevention Action Plan*:

- Recommendation 3.4: Expand access to cessation services, counseling, and medications for smokers who want to quit. Implicit in the expanded Medicaid service for pregnant women who smoke will be a reduction in premature birth and infant mortality, two outcomes linked to maternal smoking.
- Recommendations 4.1 through 4.12: All the recommendations for the reduction of childhood obesity will be facilitated by the Medicaid changes.
- Recommendation 9.1: Increase immunization rates. As with the mandates to the private health plans, the Medicaid provisions should remove barriers to getting children immunized.

Population Health and Public Health Infrastructure Improvements

Independent of reforms centered on prevention in health insurance plans, the PPACA devotes several sections to health promotion with the goal of improving the factors that contribute the most to death and disability in the United States (tobacco use and obesity). In the legislation, population health improvement will be facilitated by new federal authorities to reduce tobacco use and promote weight loss.

First, to organize and allocate new resources, the PPACA establishes the National Prevention, Health Promotion, and Public Health Council. The Council will provide leadership on an expanded and sustained national investment in prevention and public health programs, direct the creation of a national prevention and health promotion strategy, and expand the independent Community Preventive Services Task Force to review scientific evidence on the effectiveness and appropriateness of community preventive interventions.¹

Second, PPACA elevates the National Center on Minority Health and Health Disparities at the National Institutes of Health from a center to a full institute, reflecting an enhanced focus on minority health.¹ It codifies into law the Office of Minority Health within the US Department of Health and Human Services and establishes a network of minority health offices within the Department to monitor health, health care trends, and quality of care among minority patients and evaluate the success of minority health programs and initiatives.¹

Implementation at the state level will focus on grants that promote individual and community health through prevention efforts. Many of these provisions in PPACA authorize Congress to fund these initiatives but do not appropriate funds, thus timelines are not yet defined. Nevertheless, the following list of individual and community health promotion initiatives in PPACA has the potential to greatly benefit the health of North Carolinians and advance many recommendations of the *Prevention Action Plan*. Specifically, PPACA addresses the following:

- Authorization of states to purchase adult vaccines under CDC contracts (30% less than the private market), as well as a state demonstration program to improve adult immunization coverage.
- Expansion of the CDC Epidemiology and Laboratory Capacity grant to state health departments.
- Appropriation of \$25 million in funding for the Childhood Obesity Demonstration Project, which was established through the Children's Health Insurance Program (CHIP) legislation. Grants will be awarded to develop community models for reducing childhood obesity.
- Appropriations for maternal, infant, and early childhood home visiting programs using evidence-based strategies that lower infant mortality and improve school readiness.
- Authorization of a grant program for the operation and development of school-based health clinics, which will provide comprehensive and accessible preventive and primary health care services to medically underserved children and families.
- Creation of an oral health care prevention education campaign at CDC to target key populations, including children and pregnant women.
- Grants for programs for people ages 55 to 64 to evaluate chronic disease risk factors, conduct evidence-based public health interventions, and help at-risk individuals receive clinical treatment.
- Funding for a pilot program to test the impact of providing individualized wellness plans for at-risk populations who use community health centers.
- Competitive grants to the state and local level for programs that promote individual and community health by reducing chronic disease rates, addressing health disparities, and developing a strong evidence-base of effective prevention programming.
- Creation of a national public-private partnership that addresses prevention and health promotion outreach including:
 - An education campaign that raises public awareness on health improvement across all ages.
 - Outreach that addresses proper nutrition, regular exercise, smoking cessation, and the five leading causes of death in the United States.

- Creation of a national science-based media campaign to advance health promotion and disease prevention.
- Creation of a web-based prevention tool to help individuals make informed health decisions and create a personalized prevention plan.
- Award community transformation grants that focus on healthier school environments, active living communities, and access to nutritious foods.
- Requirements for certain chain restaurants to display calorie counts of their meals on menus and menu boards and to provide specified nutritional information upon request.

This list of initiatives strikes at the core of the *Prevention Action Plan*: implementing and sustaining evidence-based strategies aimed at the major causes of death and disability in North Carolina. In addition to the tobacco use, diet, and physical inactivity recommendations, PPACA will help implement Recommendation 10.1: Fund evidence-based programs to meet the needs of diverse populations. Health disparities, including socioeconomic factors like race and ethnicity, educational achievement, and income and wealth, are the major determinants of poor health outcomes. Creation of infrastructure at the federal Department of Health and Human Services will soon have its impact at the state and local level.

The public health infrastructure will be advanced by workforce development provisions in PPACA. These include loan repayment programs to public health students who agree to work three years in a public health agency or who serve in underserved areas. Authorization for funding of training for mid-career public health professionals, preventive residency programs, and public health fellowships is also included.

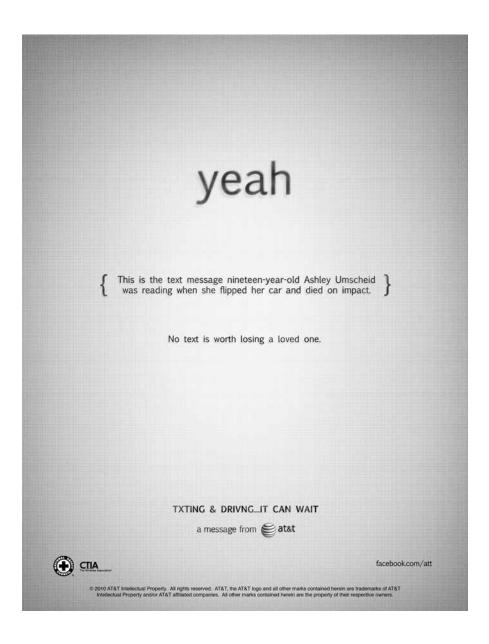
Opportunities and Challenges

The North Carolina Institute of Medicine's *Prevention Action Plan*, published in October 2009, contained 45 recommendations for improving the health of North Carolina, 11 of which were deemed priority by the Task Force. The *Plan* focused on reducing the leading determinants of death and disability by implementing evidence-based prevention strategies that have been shown to improve population health. Many recommendations came with a sizable investment of public funds and it seemed that during these tough economic times it would be years before key elements of the *Plan* and a path to a healthier state were realized.

The PPACA is in many ways an embodiment of the *Prevention Action Plan*. Either through changes in health insurance plans or direct funding to prevention and public health infrastructure, in one way or another it will facilitate or help implement all 45 recommendations. The challenge will be to smoothly implement programs across federal, state, and local jurisdictions without creating duplication and redundant bureaucracy. **NCMJ**

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Comparative Effectiveness Research in the Era of Health Reform

Tim Carey, MD, MPH

Ithough the provisions of the recently passed health reform bill (the Patient Protection and Affordable Care Act) addressing access to health insurance have received the most publicity, a critical component of the package of initiatives will certainly affect the way clinicians practice medicine, the way care will be organized, and potentially the way health care will be reimbursed. Many of these provisions are contained under the broad rubric of "comparative effectiveness research" (CER).

Comparative effectiveness research is nothing new. Clinicians have always compared treatments with each other. We want to provide our patients with the best treatments available, taking into account issues of convenience, relative benefits, relative harms, cost, and accessibility. The marked increase and interest in CER over the past several years is the result of several existing forces:

- The large increase in the number of treatments available. Providers and patients have more choices and they need assistance in determining which treatments or diagnostic tests are best.
- The rapid rise in health care costs and the marked variability in utilization of treatments across geographic areas have led to recognition for potential cost savings when less expensive treatments are available.
- Experience has demonstrated that research results conducted in tertiary care settings, often examining highly selected populations, may not be generalizable to the broader public which is much more diverse in age, demographics, and associated conditions.
- Broad recognition that effective treatments may be underutilized in the US and some ineffective or only marginally effective treatments may be overutilized. We may provide the wrong treatment to the wrong patient at the wrong time.

Comparative Effectiveness Research

While there are several published definitions of CER, the most accepted definition was provided by the Institute of Medicine of the National Academies in 2009: "Comparative effectiveness research is the generation and synthesis of evidence that compares the benefits and harms of alternative methods to prevent, diagnose, treat, and monitor a clinical condition or to improve the delivery of care. The purpose of CER is to assist consumers, clinicians, purchasers, and policymakers to make informed decisions that will improve health care at both the individual and population levels."¹

While older literature on comparative effectiveness research focused on "drug A vs. drug B" comparisons as a major characteristic of comparative effectiveness, the above current definition is much broader.² Not just treatments will be examined; we can also compare different methods of

CER can and should be used as one component of decision-making processes around the structure and function of the health care system.

preventing disease. For example, comparing the pros and cons of strategies of fecal occult blood tests vs. colonoscopy vs. virtual colonoscopy (a radiographic procedure) would be an example of a prevention-focused, not a treatmentfocused, CER study. The question for such a study is not whether colorectal cancer screening prevents cancer or saves lives (that has been established) but rather which type of colorectal cancer screening strategy is the most effective. Similarly, monitoring a clinical condition in chronic disease or enhancing methods of care delivery are also potential CER topics. For example, we know that treatment of mental health disorders such as depression improves patient well-being, but issues of organizing that treatment in real-world settings of primary care are still unclear. Much of the recent literature has focused on systems of integrated or collaborative care in which a mental health professional practices very closely with, or sometimes in the same office as, the primary care

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provider in treating common mental health diagnoses. What method of care delivery is the most effective and efficient?³ CER can address such questions of more effectively and efficiently delivering care to patients. All too often there is a lag of many years between demonstrating that a treatment is effective and its implementation in practice.

Types of Comparative Effectiveness Research

Systematic Literature Review

Prior to embarking on expensive and time-consuming new data collection, it is critical to document what we already know about a clinical problem and its treatments. Fortunately, methods of systematic review and meta-analysis are now well-developed. The federal Agency for Healthcare Research and Quality (AHRQ) has, for almost 15 years, supported 14 Evidence-Based Practice Centers (EPCs) in North America. Two EPCs are in North Carolina: one at Duke University and another shared EPC between Research Triangle International and the University of North Carolina at Chapel Hill (RTI-UNC). These reviews address specific key questions, work within a theoretical framework, and generally take up to one year to complete. All products from these reviews are published both online and in peer-reviewed medical journals. Systematic review topics in CER range from the relatively narrow (comparing biologic treatments in rheumatoid arthritis) to reviews examining policy level interventions such as the above-mentioned use of integrated care in mental health.⁴ One of the most important components of such systematic review is identifying the research gaps identified from the review of the literature. What are the most important questions that need to be answered? What type of study design would be most appropriate? What are the main methods problems with the prior research? A challenge over the next several years will be speeding the cycle of research from literature review and identification of research gaps to new study implementation. If CER is to be one of the components of health reform implementation, then we must disseminate and implement its results more quickly.

Clinical Trials

Clinical trials for Federal Drug Administration (FDA) approval of a new medication in the US generally compare a new pharmaceutical with a placebo or inactive treatment. In comparative effectiveness research, the comparison study is between two different *active* treatments. Such CER trials may be quite large since the differences in treatment effect between the two active treatments may be relatively modest. Careful issues of study design, appropriate outcome measure used, and study setting characterize CER trials. The outcomes measured should be patient-oriented outcomes such as functioning, avoidance of hospitalization, or longevity. Biologic measures such as variation in a blood test may not correlate with patient-oriented outcomes and may not be appropriate as primary outcomes. For example, studies in diabetes which address only blood glucose control, which may not correlate with patient-oriented outcomes such as feelings of well-being or heart attack rates. These would not be considered comparative effectiveness trials. Similarly, study setting and population matter. Study settings should involve practices and populations which reflect individuals affected by the disease in terms of their demographics and comorbidites. In addition, the setting should reflect where patients are usually seen with the disease (often in primary care settings). Specialty-oriented conditions such as transplants may only be seen in tertiary settings. Finally, the study should be conducted over a sufficient period of time so that the patient-oriented outcome will appear. An example of a CER trial is the Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) which compared different types of antipsychotic medications for the treatment of schizophrenia.5

Observational Studies

While the randomized clinical trial (RCT) remains the optimal method of demonstrating the efficacy, and sometimes the effectiveness, of an intervention, not all patient-oriented or policy questions can or should be addressed by RCTs. Trials may not enroll broadly generalizable populations and are often not large enough to detect some treatment effects or harms. Observational studies can also be used to evaluate strategies of care as opposed to changes in isolated care components. In the past, observational studies in CER have been hindered through almost sole reliance on administrative or pharmaceutical claims data. Analytic techniques to evaluate these data have markedly improved over the past five years.⁶ Since patients are, by definition, not randomized in observational studies, statistical techniques may be used to partially adjust for the lack of randomization. While observational studies should not be used as a substitute for appropriate randomized trials, they are a useful adjunct. The rapid rise in the use of electronic health records (EHRs) will be an important addition to observational studies.7 The availability of generalizable laboratory and clinical data will substantially assist clinicians in evaluating the effectiveness and harms of treatments in everyday practice. The technical challenges of linking across multiple EHR platforms and of linking EHR information with administrative claims data are substantial, but the gain in terms of assessing clinical outcomes more rapidly would be of tremendous public health value.

Dissemination: The Missing Link

While the research outlined above is substantial and exciting, its value to providers and patients will be minimal unless it is disseminated and utilized in practice. An anecdote may help to illustrate the costs of not conducting timely CER studies. Vertebral compression fractures are a common and disabling disorder in the elderly; they are closely related to osteoporosis. Over 10 years ago, a technique called vertebroplasty was

Spending Limited Health Care Dollars on What Works Best: The Promise of Comparative Effectiveness Research

Senator Josh Stein

Imagine sitting in your doctor's office. Your chest is tight again. The pain you feel is exceeded only by your fear: Will you survive? What will happen to your family if you don't? Your doctor talks to you about the two main options for treating your chronic chest pain—angioplasty or bypass surgery—and then makes a recommendation. What did your doctor recommend?

Surprisingly, the answer may depend on the location of your doctor's office, not the cost or effectiveness of the treatments themselves. If you live in Morganton, you are much more likely to get bypass surgery than if you resided just down NC Highway 64 in Rutherfordton.

According to a recent analysis of Medicare data by the North Carolina Health Access Coalition, Medicare patients in Morganton were more than twice as likely to receive a cardiac bypass as Medicare patients in Rutherfordton (6.24 per 1,000 Medicare patients in Morganton vs. 2.87 per 1,000 patients in Rutherfordton).¹ These findings indicate widely divergent treatment practices for chronic chest pain across neighboring counties in North Carolina.

I am not a doctor or a health researcher so I do not know which treatment is more appropriate under which circumstances, but dramatic disparities like these indicate that too often in our health care system, treatment decisions are based on reasons other than empirical evidence.

As a society, we want patients to receive the most effective tests and treatments in the most appropriate settings: we want medical care that improves patient health and contains costs. In other words, we want cost effective medical care that works. Unfortunately, too often in North Carolina and across the country, what happens in health care is underuse of proven medical tests and treatments and overuse of unproven medical tests and treatments that don't help the patient and, even worse, sometimes harm the patient.

As a result, nationally, we are spending billions of dollars in wasted treatments. Recent studies indicate that as much as 30% of all expenditures in Medicare are wasted on unnecessary tests, treatments, and procedures that do not improve health outcomes.²

Last summer, the *New Yorker* published an article that explored why McAllen, Texas is the second most expensive health care market in the nation.³ Medicare spent \$15,000 per enrollee in McAllen, almost twice the national average and twice the rate of El Paso, Texas, which is demographically and economically similar to McAllen. Yet even with the extra spending, Medicare enrollees in McAllen did not see any benefit in health outcomes compared to those in El Paso. The cause for this disparity was simply across-the-board overuse of medicine in McAllen.

Other national studies have confirmed that, as a nation, we are spending health care dollars unwisely. A 2003 study by Dartmouth researchers concluded that patients in higher-spending regions received 60% more care than elsewhere, but did no better than the patients in the lower-spending regions in terms of survival, ability to function, or satisfaction.⁴ If anything, they fared worse. Another Dartmouth study found that the more money Medicare spent per person in a given state, the lower the state's quality ranking tended to be.⁵

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developed, which involved strengthening the compressed bone through injection of cement. Case series studies that were restricted to a before-after comparison of patient outcomes demonstrated that they felt much better after the injection. Over 1,000 patients per year received this treatment in North Carolina. It was not until the summer of 2009 that randomized trials demonstrated that the level of improvement in patient well-being was similar whether they received the cement injection or a sham injection of lidocaine.8 There is still a great deal that we don't know about vertebroplasty. It remains possible that some subsets of patients may benefit from the treatment, but lack of information for almost a decade exposed many patients to a treatment of essentially unknown efficacy that also carries some risk. Well-conducted trials 10 years ago might have led to much better current information about treatment options for patients and providers.

How are we to avoid the fate of CER studies winding up on a shelf or in a library? Physicians are exposed to hundreds of research articles each week. Dissemination of the highest quality information in an unbiased fashion will be critical if CER is to positively affect care patterns in the US. Past federal efforts have been on a relatively small scale and dissemination efforts have been disappointing to date. However, funding from the American Recovery and Reinvestment Act (ARRA) stimulus bill and especially the new health reform legislation will significantly increase the visibility of CER. This will include not only peer-reviewed journal articles but also direct dissemination of results to providers and patients.

Combining CER information with electronic health records is an obvious extension of these joint efforts. The challenge of providing information to physicians and patients in a convenient format, at a time close to the provision of

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When making treatment decisions, we need to do what is best for the patient, not just order up more care that does not improve health. But how do we know what works best?

Comparative effectiveness research (CER) promises to provide us with this information. Comparative effectiveness is an approach that analyzes how health care is provided across broad populations and identifies those procedures, medications, and treatments that are most effective for a given situation. CER asks not whether a certain procedure or pharmaceutical is better than a placebo (doing nothing), but whether it is better than alternative procedures or pharmaceuticals—in other words, which treatment works best.

The federal government has prioritized CER. As part of the Recovery and Reinvestment Act of 2009, the federal government is investing more than \$1 billion in CER through the US Department of Health and Human Services, the Agency for Healthcare Research and Quality, and the National Institutes for Health.

We are fortunate here in North Carolina because we are home to some of the most respected and active CER researchers in the nation. A conservative figure for the amount of federal funds already awarded to in-state institutions for CER training, studies, and clinical trials taking place over the next three years totals roughly \$40 million. This number is almost certain to rise because additional funding for this field is anticipated to grow substantially in the coming years. This past legislative session, recognizing the emerging importance of this research, the North Carolina General Assembly created the Comparative Effectiveness Study Commission. Representative Bob England and Lare co-chairing this Commission, which is comprised of other legislators and includes an advisory board made up of researchers, third party payers, medical providers, and others.

The Commission is tackling a number of questions, including the following:

- How can we position North Carolina to benefit economically from increased federal investment in this type of research?
- How can we enhance researchers' access to broad ranges of health care data to advance this important research while guaranteeing patient privacy?
- How can we improve dissemination of CER to health care providers?
- How can we ensure that the state's health care dollars are spent wisely?

Our fundamental objective, however, is to identify ways to improve the health of the people of the state. As the Commission continues its deliberations, Representative England and I would welcome hearing your ideas to promote this most basic and most critical of goals.

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care, and in a way that not does significantly slow down the process of care will require significant testing and process of care modification. We have a lot of work to do.

How is This All Going to Get Done?

The US has significant resources in CER. Fortunately, the ARRA stimulus bill and the health reform legislation have substantial training funds to increase the pool of researchers to conduct this work. Significant work is occurring in North Carolina including randomized trials through industry and at all of the state's academic health centers. Duke University, Research Triangle International, and the University of North Carolina at Chapel Hill all have significant ongoing activities through AHRQ, which to date has been the major federal agency engaged in CER. Both of North Carolina's Clinical and Translational Science Award (CTSA) centers at UNC and Duke (funded by NIH) have significant engagement with CER.

The health reform legislation establishes a new entity, the Patient Centered Outcome Research Institute, which will "assist patients, clinicians, purchasers, and policymakers in making informed health decisions by advancing the quality and relevance of the evidence concerning the manner in which diseases, disorders, and other health conditions can effectively and appropriately be prevented, diagnosed, treated, monitored, and managed through research and evidence synthesis that considers variations in patient subpopulations, and the dissemination of research findings with respect to relative health outcomes, clinical effectiveness, and appropriateness of medical treatment...."9 This new Institute will be governed by a board of governors from public and private entities including representation from federal agencies, the practice community, industry, and payers. Funding for this research will be substantial, probably over \$350 million per year, but there is likely to be a period of considerable uncertainty as the new Institute starts up, develops relationships with other federal agencies, and devises its own internal policies. In the interim, providers should expect significantly more activity and collaboration across payers in order to improve care patterns. While CER has often been described as a means of decreasing health care costs by reducing utilization of relatively expensive treatments, some findings of CER have demonstrated underutilization of treatments. Once such underutilization is identified, short-term health care costs may rise, although long-term costs may be ameliorated through reduction in future hospitalizations.

Ongoing engagement from clinicians, policymakers, and payers will be needed to assure that the information and dissemination materials are relevant to practicing clinicians and their patients. How payers will respond to this new information is not yet clear. Federal legislation has mandated that CER research should not be used as a tool to deny care to patients, reflecting the heterogeneity and the complexity of clinical care. However, CER can and should be used as one component of decision-making processes around the structure and function of the health care system. Treatments that are harmful or have no benefit over alternatives which may be less invasive or less expensive should obviously be discouraged. Study designs can be adapted so that they can be conducted much earlier in the development of technology using techniques such as "coverage with evidence development" which would expand the information gathered from patients when they receive a new procedure or technology.¹⁰ This would allow treatments to be used for patients in need, but would also provide significantly more information to providers and policymakers. Finally, the availability of additional information on treatment effectiveness in populations who are relatively understudied in the current health care system, such as the elderly over age 75 and certain minority populations, is greatly needed.

Comparative effectiveness research is not new, but its utilization to date has been modest. The increased emphasis on CER in both the public and private sectors has the potential to assist patients and providers in making better choices regarding diagnostic tests and treatments. Over the next four to five years, we will need to make sure that this potential is realized. **NCMJ**

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Reform Speeds Up an Already Accelerating Transformation: The Effect on Health Care Quality

Stephen Wallenhaupt, MD

s health care the last major industry that proves value can be delivered at a lower price and with improved service? The answer may be "yes." And it is my belief that everyone who cares for patients and supports the delivery of health care must embrace this value proposition because our industry has forever changed and will never return to the not-so olden days of reimbursing health care services based on price alone.

As a not-for-profit, integrated health care system, Novant Health believes the safety and quality of care delivered to our patients should be our top priority. I know few health care providers who prioritize anything else.

The recently passed Patient Protection and Affordable Care Act will dramatically change the health care industry. What remains to be seen is how it will change our nation's delivery system—for the better or the worse? The new law contains a number of quality provisions that flew under the public's radar as national attention focused on insurance reforms, decreasing the number of the nation's uninsured, and a host of very emotional issues that often engulfed the debate.

Signed into law by President Barack Obama, the new law contains a number of pilot projects, demonstrations, and other programs that call for providers to be paid based on the quality, rather than the quantity, of services. This emphasis on quality and accountability is long overdue and these inclusions throughout the reform package comprise an important step in the right direction. A strong national focus on quality of services will result in better outcomes for the individuals who entrust their care to us during the most vulnerable times of their lives. Our consumers increasingly expect higher quality, better service, more affordability and, it should go without saying, an expectation that we do not harm them.

First though, let's acknowledge exactly how health care providers will be rewarded for achievements in providing quality care: low performers will pay penalties and high performing organizations will avoid those penalties. In other words, health care organizations who do not meet national quality standards will be penalized by government payers and those fines will help pay for federal health coverage expansion. For example, two quality provisions in the new law will remove approximately \$8.5 billion from Medicare reimbursements to providers over a 10-year period. That's in addition to the \$147 billion in further reductions to hospital Medicare and Medicaid payments over 10 years that will also help fund expanded coverage. Government leaders who designed the legislation expect these payment reductions to be offset by helping 32 million uninsured people acquire health insurance and consequently reduce health care providers' charity care and bad debt expenses. We hope this quid pro quo occurs, but early estimates predict additional payment losses for providers rather than a neutral impact.

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In a nutshell, quality will be perversely rewarded by fining health care providers with poor performance and allowing high performing organizations to escape with a neutral impact to their Medicare reimbursement rates, which in most cases do not currently cover the actual cost of providing care to our nation's seniors.

With that being said, there's a tremendous amount of work ahead in hammering out details for the overall concept of pay-for-quality (also known as pay-for-performance or P4P). As with other large, complicated pieces of legislation, the majority of provisions will need to go through the rulemaking process where the particulars of each of these new programs and reforms will be decided and, therefore, where these programs' chance of success or failure will be determined. If done thoughtfully and with input from the individuals who provide patient care everyday, the significant changes that health care needs could be on a horizon that we see in our lifetimes. However, if developed and implemented incorrectly, then rural and metropolitan communities and their health care safety nets could be adversely altered for decades to come.

All health care providers own the responsibility to make their opinions and experiences known during this regulatory process. The individuals on the government frontlines who are creating the details and policies for these new programs may not possess the knowledge needed to make the most appropriate decisions.

I was particularly pleased to see an aggressive emphasis on public reporting and transparency included in the final legislation. Our health system supports public reporting and our motivation for transparency is simple: the patient deserves as much information as possible for making an informed decision. We welcome the movement in this direction and believe that holding hospitals and other health care providers more accountable will undoubtedly move all of us to improved performance.

Some hospitals and health systems have already begun efforts to publish more quality indicators than are required by Medicare. Novant Health is preparing to publish a panel of additional quality indicators on our websites, including our hospitals' serious safety event rates, employee hand hygiene compliance, health care acquired MRSA rate, ICU central line associated bloodstream infection rate, and other key measures. We believe this additional level of transparency will, by itself, accelerate change and improve quality. Consumers will be able to access this data and, even more importantly, our own staff in all 12 hospitals and 360 physician practice locations will be able to compare their performance with others throughout our health system.

A few organizations have even attempted publishing pricing information for consumers, but this challenge continues to be mired in differences between health plan deductibles, co-pays, discounts off charges, and other complex factors. Another component of the Patient Protection and Affordable Care Act includes a Value Based Purchasing (VBP) program for hospitals. This program is scheduled to begin in fiscal year 2013 and will use 2012 data to hold hospitals accountable for measures that are part of the hospital quality reporting program. Although the VBP program has been described as improving quality by incentivizing hospitals, the program will be completely financed by withholding reimbursements from hospitals. These withheld funds will be returned to hospitals in the form of incentives. While Novant certainly supports the concept of holding hospitals accountable for quality measures, we also think this objective should be accomplished with actual incentives, not by simply holding back part of a hospital's existing Medicare reimbursement.

The new law also contains an initiative to penalize organizations with high rates of hospital acquired conditions (HACs). While we were pleased to see reform directly address the issue of hospital acquired conditions, we have concerns about how the penalties will be implemented. The legislation calls for hospitals in the low performing quartile for frequency of HACs to be financially penalized. This policy will eventually need to transition away from identifying the poorest performing quartile to instead having more absolute benchmarks in which all systems are held accountable to a best practice standard. By using a national comparative database in which hospitals should rapidly improve over time, even high performing facilities with low infection rates could eventually fall into the poorest performing quartile.

Novant Health and its hospitals have worked relentlessly to reduce our incidence of HACs over the past five years. We have significantly decreased MRSA infections from 2005 to the present, due in part to hard-hitting hand hygiene education and internal staff monitoring. Our current MRSA rate is 0.16 per 1,000 patient days, which is extremely low based upon other organizations who voluntarily report this data. This type of national target, rather than a quartile ranking, which does not establish best practices for preventing hospital acquired conditions such as MRSA, should be established to truly reward hospitals for quality.

For Novant's efforts, The Joint Commission honored our staff with the prestigious national Ernest A. Codman award for patient quality and safety. We established a website (http://www.WashingHandsSavesLives.org) where anv hospital or health care organization can access our hand hygiene campaign materials and use them free of charge. Several thousand organizations from the United States and approximately 70 countries have accessed materials from the website. We believe it's an obligation to share success and best practices among health care providers. National efforts to improve quality must encourage this type of clinical exchange. We fear that competitive databases, instead of the establishment of best practice standards, won't foster the sharing of ideas.

Health reform also attempts to address the problem of excessive readmissions to hospitals. Again, most health care providers believe this should be a priority that needs aggressive action in order to minimize the incidence of inappropriate patient readmissions to the hospital setting. We wholeheartedly support the concept; however, as with the other reform provisions, it contains a draconian flaw. The legislation calls for steep penalties for excessive readmissions in the areas of heart attack, heart failure, and pneumonia. Unfortunately, no consideration is given to whether the readmission is related to the original admission. In addition, if a hospital experiences even one more readmission than the "expected" number, all Medicare reimbursements will be reduced for that facility.

We accept our responsibility to provide the best possible care to our patients and to discharge them back to their normal lives. However, if a hospital and physician appropriately readmit a patient for a condition that is completely unrelated to his or her initial hospitalization, and that readmission puts the facility one case over the expected rate, all of the hospital's Medicare reimbursements will be penalized. It's difficult to understand why legislators thought this process would be fair. Fortunately, this provision as well as others will be subject to rule-making, and therefore health care providers hope to influence the final outcome before a flawed policy is implemented.

Our individual hospitals, outpatient centers, and physician practices continue to improve medical care and services for our patients. We hold ourselves accountable for improving the quality and safety of patient care during every encounter. We believe strongly in sharing knowledge and best practices among health care systems and providers. The new reform law has permanently changed health care, especially with the components that focus on linking quality with payment. This emphasis can positively affect our industry if science and fairness intersect during the development process. **NCMJ**



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Implementing National Health Reform in North Carolina

Adam Searing, JD, MPH; Adam Linker

ational reform will not upend the way North Carolinians obtain insurance or health care. Most people will still receive coverage through work or purchase a policy from a private insurer on the individual market. Seniors will still get their guaranteed Medicare benefits. Nevertheless, reform is a revolutionary shift in how we think about health care. No longer will we focus on whether or not a particular person qualifies for a public program or is eligible for private insurance. Instead, we will work to find where different individuals fit into the system. It will be assumed that every one qualifies for coverage.

This is important because right now our health care system has too many holes and not enough nets. Over the next three years, health reform reverses this trend by building broader and stronger safety nets while narrowing the cracks through which too many families fall.

After reform is fully implemented in 2014, health care will be more accessible than at any other time in our state's history. That is why North Carolina health advocates and analysts are elated by the passage of comprehensive national reform. Reform will inevitably help millions of people across our nation, but the true test of this legislation is how it unfolds on the ground. How will it help the people caught in the whirlwind of everyday experiences?

Over the past year, the North Carolina Justice Center's Health Access Coalition has traveled the state talking to people of every political stripe about their health care experiences. Here are a few stories that demonstrate the problems people face everyday in our current system. None of the problems are simple. Just as our health system is complicated, so too are the struggles families face in accessing care. But if health reform can extend relief to these people, then this historic bill will qualify as a success.

Michael Byrus is a 23-year-old man living in Apex. He is a college student with a painful chronic ailment called Crohn's disease. His inflammations are serious and difficult to control, although he is careful with his diet and ...right now our health care system has too many holes and not enough nets. Over the next three years, health reform reverses this trend by building broader and stronger safety nets while narrowing the cracks through which too many families fall.

self-administers his regular injections. During a recent extended stay in the hospital while he recovered from major surgery, Michael's insurance company threatened to drop his coverage. Because Michael's condition makes him virtually uninsurable, this was a serious threat.

How was the insurance company able to withdraw Michael's coverage just when he needed it most? He is insured by his mother's policy, but to stay on that plan he must maintain his status as a full-time student. But Michael's surgery and subsequent recovery would keep him out of school for most of the semester. The insurance

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The work of the North Carolina Justice Center and of Mr. Searing and Mr. Linker can be found online at http://www.nchac.org, nchealthaccess (Twitter), http://pulse.ncpolicywatch.org (blog), and http://www.youtube.com/adamsearing (video).

company questioned his student status and said he was no longer eligible to remain on his mother's plan.

Despite his illness, Michael worked with his college and with individual instructors to conduct class work, remain a student, and maintain coverage.

Susan Smith in Hickory has labored over the last several years, helping her 25-year-old daughter Rachael afford the care she requires. Rachael Smith has systemic lupus. Lupus makes it difficult for her to work, which means that a group policy is unobtainable and Rachael's condition makes purchasing insurance on the individual market impossible.

After one particularly frightful bout in the hospital, Rachael was left with a \$30,000 bill. Neither Susan nor her daughter had the money to pay. Collection agents hounded them. Susan was only able to cover the debt with her husband's small life insurance policy after he passed away.

They finally had a brief respite before Rachael was hospitalized again. Susan says a 48-hour stay stuck them with another \$30,000 bill. They were devastated.

This time Susan thought to ask about a charity care policy at the nonprofit hospital. She was never told about financial assistance by anyone at the hospital. Susan is now applying for charity care, hopeful for help but nervous that another episode will result in bankruptcy.

Matthew Potter is a 22-year-old who has cerebral palsy. The Potter family moved to North Carolina while Matthew earned an undergraduate degree at Wake Forest University.

When the Potters relocated to Winston-Salem they discovered that the state does not impose the same modified community rating restrictions that New Jersey requires. Insurance companies here are allowed to raise premiums prohibitively on those with pre-existing medical conditions. Matthew's premiums increased more than 700% over what his family paid in New Jersey for the same coverage.

The Potters had limited choices for insurance. While Blue Cross and Blue Shield of North Carolina offered a plan with steep premiums, it was the only company willing to offer the Potters a plan without lifetime caps. Because of Matthew's condition, the family could not consider any plan that capped benefits.

Now Matthew is considering graduate school and he is forced to consider the insurance regulations of different states as he decides where he should continue his studies.

Health reform includes immediate changes that protect the Potter and Smith families and Michael Byrus. Starting in 2010, Byrus can remain on his mother's insurance regardless of his student status. If his illness forces him out of school he can still get the care he needs. Rachael Smith will now qualify for a temporary high risk pool and, as reform is implemented, Medicaid or subsidized insurance will place caps on out-of-pocket spending. Also, Susan and Rachael will appreciate new charity care policy "disclosure to patients" requirements for hospitals. Reform imposes an adjusted community rating system on all states so that the Potters will not have to consider local insurance regulations before relocating, and insurance policies will not include lifetime caps on benefits.

These are the protections written into the national law that passed this year. But health reform inevitably will be judged on how these regulations are translated into action. Shortly after President Obama signed reform into law, some insurance companies announced that they did not think the law required them to enroll children with pre-existing conditions. Administration officials countered this effort to wriggle out of reform, but more conflicts will arise. This is not due to shortcomings in the law; it's just the way regulation battles are fought.

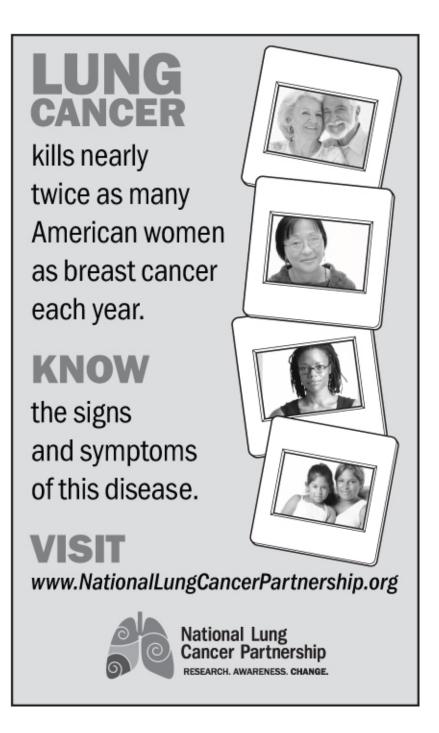
We are pleased with national health reform. We are happy for the relief it will provide for the people we work with every day. But we still have concerns about the strength of consumer protections. There is more work to do here in North Carolina to make sure national reform is implemented quickly, fairly, and comprehensively. As our health system moves toward 2019, when insurance coverage is projected to expand to 95% of the population, we will focus on improving a few key provisions:

- Before new insurance industry regulations are introduced, North Carolinians are still responsible for paying unsubsidized premiums. Anecdotal evidence and news reports suggest that premiums are increasing by 40% or 50%, especially for small businesses. Also, after 2014, subsidies are only granted to those with household incomes less than 400% of federal poverty guidelines, or \$88,000 for a family of four. Households with higher incomes will still pay the full premium costs for insurance. That means the North Carolina Department of Insurance needs immediate strong rate review authority to keep insurance companies from unfairly raising rates.
- As part of reform, North Carolina needs a strong consumer protection agency to help people navigate health plan options, subsidies for coverage, small business tax credits, and similar reform issues. We envision that this organization would operate like the Managed Care Patient Assistance (MCPA) Program at the Attorney General's Office. An independent board with people drawn from all walks of life, consumer advocates, and other stakeholders should advise this office. It should also be larger and more robust than the MCPA program.

North Carolina's health insurance exchange should be structured fairly to maximize consumer choice. The state should create one exchange that combines small businesses and individual consumers to spread risk more broadly and make insurance more accessible. A single health insurance company should not be allowed to dominate the exchange.

When President Obama signed health reform into law it was not the end of a journey, but the beginning of a journey

long delayed. There is still much to do. But we are now moving our health care system out of its stasis. The North Carolina Justice Center's Health Access Coalition is going to help channel reform in ways that benefit people long shut out of the system. Other organizations will undoubtedly try to shape reform to favor the interests they represent. That is how our political system works. But we should all remember that if reform does not benefit Michael Byrus, Rachael Smith, and Matthew Potter, then we are doing them, and ourselves, a great disservice. **NCMJ**



Health Reform: Funding Provisions

Paul Mandsager

he Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act of 2010 include funding provisions to support the development and implementation of many of the provisions in the legislation. This article describes the timing and phasing of the funding. The article does not cover changes in the tax laws (i.e., the small business tax credits) or mandatory expansion of entitlement programs (i.e., the Medicaid expansion of individuals up to 133% of the federal poverty level (FPL) or the phasing out of the Medicare Part D donut hole). Rather, this article is intended to provide information about new funding opportunities that may be made available to North Carolina or to specific organizations within the state.

This article is divided into 10 sections: insurance reform; Medicare, Medicaid, and the Children's Health Insurance Program (CHIP); prevention; health professional workforce training and support; quality; testing new models of care; safety net; long-term care, aging, and disability; malpractice; and Indian Health Services. It is important to distinguish between *appropriations* and *authorizations*. If the provision includes a direct appropriation (or transfers funds from one program to another), it means that Congress included funds to support the specific initiative in the health reform legislation. On the other hand, if Congress only authorized the specific provision, it means that Congress will need to appropriate funds sometime in the future to support the initiative. An authorization gives some indication of the intent of Congress to support a program, but it is not the same as a direct appropriation.

The following sections give a brief description of potential funding opportunities. In most instances, Congress appropriated funding (or authorized new programs) within the US Department of Health and Human Services (DHHS). The actual program rules, as well as application or request for proposals, will be issued by the various DHHS agencies. Groups interested in potential funding to keep track of grant opportunities should check the federal grants website at http://www.grants.gov.

INSURANCE REFORM

High Risk Insurance Pool (Section 1101)

Authority:	DHHS
Year:	Within 90 days of enactment until January 1, 2014.
Appropriations:	Appropriates \$5 billion to pay claims.
Summary:	To provide temporary assistance to those with pre-existing conditions who are uninsured.
Eligible Entities:	States and nonprofits.

Reinsurance for Early Retirees (Sections 1102 and 10102)

Authority:	DHHS
Year:	Within 90 days of enactment until January 1, 2014.
Appropriations:	Appropriates \$5 billion to pay claims.
Summary:	Temporary reinsurance program to provide reimbursement to participating employers to pay a
	portion of the costs for covering early retirees.

Eligible Entities: States, local government agencies, and employers.

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Health Insurance Consumer Information (Section 1002)

Authority:	DHHS
Year:	Beginning fiscal year (FY) 2010.
Appropriations:	Appropriates \$30 million in FY 2010 and authorizes additional funding as may be necessary for each
	following year.
Summary:	Grants to help states establish, expand, or provide support for offices of health insurance consumer
	assistance or health insurance ombudsman programs.
Eligible Entities:	State offices of consumer assistance or health insurance ombudsman programs.

Ensuring that Consumers Get Value for their Dollar (Section 1003)

Authority:	DHHS
Year:	FY 2010-FY 2014.
Appropriations	: Appropriates \$250 million for the period FY 2010-FY 2014.
Summary:	Grants to support state review of unreasonable increases in health insurance premiums.
Eligible Entities	: State Commissioners of Insurance.

Affordable Choices of Health Benefits Plans (Sections 1311 and 10104)

Authority:	DHHS
Year:	Within one year of enactment until January 1, 2015.
Appropriations:	Any money in the Treasury not otherwise appropriated.
Summary:	Grants to states to help plan and establish health insurance exchanges (HIEs) by January 1, 2014.
	Exchanges shall award grants to patient navigators to assist individuals with enrollment in qualified
	health plans (money for patient navigators comes from operational funds, not federal funds).
Eligible Entities:	States are eligible for grants to establish the HIEs. Entities eligible for patient navigator grants may
	include trade, industry, and professional associations; commercial fishing industry organizations;
	ranching and farming organizations; community and consumer-focused nonprofit groups; chambers
	of commerce; unions; resource partners of the Small Business Administration; other licensed

Program to Help Establish and Operate Member-Run, Nonprofit Health Insurance Issuers (Co-Ops) (Sections 1322 and 10104)

insurance agents and brokers; and other capable entities.

Authority:DHHSYear:Not later than July 1, 2013.Appropriations:Appropriates \$6 billion.

Summary: Loans for start-up costs and grants to meet solvency requirements to member-run, nonprofits that will offer qualified health plans. Insurers and government organizations that existed as of July 16, 2009 are prohibited from qualifying.

Eligible Entities: An organization that is organized under state law as a nonprofit, member corporation.

State Option to Establish Basic Health Programs for Low-Income Individuals Not Eligible for Medicaid (Sections 1331 and 10104)

Authority:DHHSYear:Upon enactment and each year a state has a program.

- Appropriations: Transfers 95% of tax credits and cost sharing subsidies that would have gone to individuals to the state.
- Summary: States can contract with health plans that enroll individuals with incomes less than 200% of the federal poverty level (FPL) and are not Medicaid eligible. If states develop a basic health program, they will receive 95% of the tax credits and cost sharing subsidies that the federal government would have provided to individuals with incomes less than 200% FPL. Legal immigrants with incomes less than 133% FPL, who are not eligible for Medicaid because they are in five-year waiting period, are eligible for this program.

Eligible Entities: States.

Multi-State Plans (Sections 1334 and 10104)

Authority: Director of the Office of Personnel Management

Year: Upon enactment.

Appropriations: Authorizes such sums as may be necessary.

Summary: Contracts with health insurance issuers to offer at least two multi-state qualified health plans through each health insurance exchange.

Eligible Entities: Health insurance issuers.

MEDICARE/MEDICAID/CHIP

Health Information Technology (HIT) Enrollment Standards and Protocols (Section 1561)

Authority: Centers for Medicare and Medicaid Services (CMS)

Year: Standards developed within 180 days of enactment.

Appropriations: Does not specify appropriations or authorizations.

Summary: Grants to develop new technology systems and adopt existing technology systems to implement HIT enrollment standards and protocols. Also requires development of standards in federal and state programs.

Eligible Entities: State or local government entities.

MEDICARE

Funding, Outreach, and Assistance for Low-Income Programs (Section 3306)

Authority:	CMS
Year:	FY 2010-FY 2012.
Appropriations:	Appropriates in each of the FY 2010-FY 2012: \$15 million to the CMS Program Management Account; \$15 million to Area Agencies on Aging; \$10 million to Aging and Disability Resource
	Centers; and \$5 million to National Benefits Outreach and Enrollment.
•	Provides funding for outreach and education activities to enroll low-income beneficiaries in Medicare Part D.
Eligible Entities:	Area Agencies on Aging and Aging and Disability Resource Centers.

MEDICAID

Improving Access to Preventive Services for Adults in Medicaid (Section 4106)

Incentives for	Prevention of Chronic Disease in Medicaid (Section 4108)
Eligible Entities:	States.
	sharing for such services, will receive a higher FMAP.
Summary:	services. States that choose to cover all recommended preventive services and vaccines, and prohibit cost
Appropriations:	One percentage point increase in the federal medical assistance percentage (FMAP) for preventive
Year:	Beginning January 1, 2013.
Authority:	CMS

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Authority:	CMS
Year:	Beginning January 1, 2011.
Appropriations:	Appropriates \$100 million for a five-year period beginning January 1, 2011.
Summary:	Grants to states to provide incentives for Medicaid beneficiaries to participate in prevention
	programs.
Eligible Entities:	States.

CHIP (NC HEALTH CHOICE)

Additional Federal Financial Participation in CHIP (Sections 2101 and 10203)

Authority:	CMS
Year:	FY 2010-FY 2015.
Appropriations:	Appropriations increase from \$100 million to \$140 million for the period FY 2010-2015.
Summary:	\$40 million in additional funding available to support CHIP outreach and enrollment grants.
Eligible Entities:	States, local government agencies, national, state, local, or community-based public or nonprofit private organizations; American Indian and tribal organizations; federal safety net organizations; faith-based organizations or consortia; and elementary or secondary schools.

PREVENTION

Prevention and Public Health Fund (Section 4002)

Prevention an	a Public Health Fund (Section 4002)
Authority:	DHHS
Year:	Beginning in FY 2010.
Appropriations:	Appropriates \$500 million in FY 2010, \$750 million in FY 2011, \$1 billion in FY 2012, \$1.25 billion in FY 2013, \$1.5 billion in FY 2014, and \$2 billion in FY 2014 and thereafter.
Summary: Eliaible Entities:	To provide an expanded and sustained investment in prevention and public health programs. DHHS to increase funding for programs authorized by the Public Health Service Act (PHSA) for prevention, wellness, and public health activities including prevention research and health screenings (e.g., the Community Transformation grant program, the Education and Outreach Campaign Regarding Prevention Benefits, and immunization programs). Entities receiving money through PHSA prevention, wellness, and public health activities.
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Education and	d Outreach Campaign Regarding Prevention Benefits (Section 4004)
Authority:	Centers for Disease Control and Prevention (CDC)
Year:	Not later than one year after enactment.
Appropriations:	Authorizes such sums as may be necessary.
Summary:	Provides for the planning and implementation of a national public-private partnership for a prevention and health promotion outreach and education campaign.
Eligible Entities:	CDC will run a national campaign and award grants to states to design public awareness campaigns to educate Medicaid enrollees about availability and coverage of preventive and obesity-related services.
Community T	ransformation Grants (Sections 4002, 4201 and 10403)
Authority:	CDC
Year:	FY 2010-FY 2014.
Appropriations:	Authorizes such sums as may be necessary, although the Prevention and Public Health Fund can be used to fund the Community Transformation grant program.
Summary:	Competitive grants to promote the implementation, evaluation, and dissemination of evidence- based community preventive health activities. Grants aimed at reducing chronic disease rates, preventing the development of secondary conditions, addressing health disparities, and developing a stronger evidence base of effective prevention programming.
Eligible Entities:	State and local governmental agencies; national networks of community-based organizations; state or local nonprofit organizations; and American Indian tribes.

Healthy Aging, Living Well (Section 4202)

Authority:	CDC
Year:	FY 2010-FY 2014.
Appropriations:	Authorizes such sums as may be necessary.
Summary:	Grants to state or local health departments and American Indian tribes to carry out five-year pilot
	programs to provide public health community interventions, screenings and, where necessary,
	clinical referrals for individuals who are between the ages of 55 and 64.
Eligible Entities:	State or local health departments and American Indian tribes.

Evaluation and Plan for Community-Based Prevention and Wellness Programs for Medicare Beneficiaries (Section 4202)

Authority:	DHHS
Year:	Beginning FY 2010.
Appropriations:	Transfer of \$50 million from the Medicare Hospital Insurance Trust Fund and the Medicare
	Supplemental Medical Insurance Trust Fund to CMS; amounts transferred available until expended.
Summary:	Funds shall be used to develop a plan for promoting healthy lifestyles, chronic disease self-
	management, and evaluation of community-based prevention and wellness programs for Medicare
	beneficiaries.
Eligible Entities:	Evidence-based programs that are sponsored by the Administration on Aging and have

demonstrated potential to help Medicare beneficiaries reduce their risk of disease, disability, and injury.

Demonstration Project to Improve Immunization Coverage (Section 4204)

Authority:	CDC
Year:	FY 2010-FY 2014.
Appropriations:	Authorizes such sums as may be necessary.
Summary:	Grants to states to improve the provision of recommended immunizations for children, adolescents,
	and adults.
Eligible Entities:	States.

Epidemiology Laboratory Capacity Grants (Section 4304)

Authority:	CDC
Year:	FY 2010-FY 2013.
Appropriations:	Authorizes \$190 million annually for each FY 2010-FY 2013.
Summary:	Grants to strengthen epidemiologic capacity, enhance laboratory practices, improve information systems, and develop outbreak control strategies.
Eligible Entities:	State and local health departments, tribal jurisdictions, and academic centers that assist state and eligible local and tribal health departments.
Research for	Optimizing Delivery of Public Health Services (Section 4301)
Authority:	CDC
Year:	No date specified.

- Appropriations: Does not specify appropriations or authorizations.
- Summary: Funding for research in public health services and systems. Research supported under this section shall be coordinated with the Community Preventive Services Task Force and build on existing partnerships within the federal government while also considering initiatives at the state and local levels and in the private sector.

Eligible Entities: Not listed.

Childhood Obesity Demonstration Project (Section 4306)

Authority: DHHS (in consultation with CMS)

Year: FY 2010-FY 2014.

Appropriations: Appropriates \$25 million for the period FY 2010-FY 2014 (originally appropriated \$25 million for the period FY 2010-FY 2013).

Summary: Extends the availability of appropriations for the Children's Health Insurance Reauthorization Act of 2009 Childhood Obesity Demonstration Project through FY 2014.

Eligible Entities: Communities, counties, American Indian tribes; local or tribal educational agencies; accredited universities, colleges, or community colleges; federally qualified health centers; local health departments; health care providers; community-based organizations; or other entity determined appropriate by the DHHS Secretary.

Personal Responsibility Education (Section 2953)

Authority: DHHS

Year: FY 2010-2014.

- Appropriations: Appropriates \$75 million annually for each FY 2010-FY 2014, of which \$10 million shall be reserved for innovative strategies.
- Summary: Formula grants to states (based in part on the state youth population) for programs to educate adolescents on abstinence, contraception, STDs, and adult preparation (including healthy relationships, adolescent development, financial literacy, parent-child communication, educational and career success, and healthy life skills). Ten million dollars is reserved for innovative youth pregnancy strategies that target high-risk, vulnerable, and under-represented youth; 5% is reserved for American Indian tribes or tribal organizations; and 10% for research, training, technical assistance, and evaluation.
- *Eligible Entities:* States, American Indian tribes, or tribal organizations. Local entities and faith-based organizations are eligible if the state does not apply for a grant.

Restoration of Funding for Abstinence Education (Section 2954)

Authority:	DHHS
Year:	FY 2010-FY 2014.
Appropriations:	Appropriates \$50 million annually for each FY 2010-FY 2014.
Summary:	This section restores funding for abstinence education.
Eligible Entities:	States.

Maternal, Infant, and Early Childhood Home Visiting Programs (Section 2951)

 Authority:
 DHHS

 Year:
 FY 2010-FY 2014.

 Appropriations:
 Appropriates \$100 million in FY 2010, \$250 million in FY 2011, \$350 million in FY 2012, and \$400 million in FY 2013 and FY 2014.

 Summary:
 Grants to develop and implement one or more evidence-based home visitation program.

Eligible Entities: States, American Indian tribes, tribal organizations, urban American Indian organizations, and nonprofits (if a state has not been approved for a grant by FY 2012).

Pregnancy Assistance Fund (Sections 10212, 10213, and 10214)

Authority:	DHHS
Year:	FY 2010-FY 2019.
Appropriations:	Authorizes \$25 million annually for each FY 2010-FY 2019.
Summary:	Established for the purpose of awarding grants to states to assist pregnant and parenting teens and women. States may use grants to make funding available to eligible institutions of higher education to enable the eligible institutions to establish, maintain, or operate pregnant and parenting student services. Academic institutions shall contribute an amount equal to 25% of the funding provided. States may use grant money to assist in providing intervention services and supportive social services for eligible pregnant women who are victims of domestic violence, sexual violence, sexual assault, and stalking.
Elizible Entities	States: institutions of higher education: local governments: law enforcement agencies: professionals

Eligible Entities: States; institutions of higher education; local governments; law enforcement agencies; professionals in legal, social service, and health care settings; nonprofits; and faith-based organizations.

Program for Early Detection of Certain Medical Conditions Related to Environmental Health Hazards (Section 10323)

Authority: DHHS

- Year: FY 2010-FY 2019.
- *Appropriations*: Appropriates \$23 million for the period FY 2010-FY 2014 and \$20 million for the period FY 2015-FY 2019.
- Summary: Establishes grants to screen at-risk individuals for medical conditions related to environmental health hazards and for disseminating public education and information concerning the availability of screenings; the detection, prevention and treatment of environmental health conditions; and the availability of Medicare benefits for individuals diagnosed with environmental health conditions.

Eligible Entities: State or local government agencies, hospitals, community health centers, federally qualified health centers, American Indian Health Service facilities, National Cancer Institute-designated cancer centers, nonprofits, or any other entity that the DHHS Secretary determines appropriate.

DISEASE SPECIFIC INITIATIVES

Oral Health Care Prevention Activities (Section 4102)

Authority:	CDC
Year:	FY 2010-FY 2014.
Appropriations:	Authorizes such sums as may be necessary.
Summary:	Demonstration grants to test the effectiveness of research-based dental caries disease management activities.
Eligible Entities:	Community-based provider of dental services including federally qualified health centers; a clinic that is hospital-owned or operated by a state; state or local health departments; a dental program of the Indian Health Service; an American Indian tribe or tribal organization; a health system provider; a private provider of dental services; medical, dental, public health, nursing, or nutrition educational institutions; and national organizations involved in improving children's dental health.

Diabetes Prevention Program (Section 5316)

Authority:	CDC
Year:	FY 2010-FY 2014.
Appropriations:	Authorizes such sums as may be necessary for each fiscal year.
Summary:	Establishes a national diabetes prevention program targeted at adults at high risk for diabetes.
Eligible Entities:	State or local health departments, tribal organizations, a national network of community-based
	nonprofits focused on health and well-being, academic institutions, or other entities as determined
	by the DHHS Secretary.

Support, Education, and Research for Postpartum Depression (Section 2952)

Year: FY 2010-FY 2012.

Appropriations: Authorizes \$3 million in FY 2010 and such sums as may be necessary for FY 2011 and FY 2012.

Summary: Funding to provide support services for women suffering from postpartum depression, education for women concerning these issues, and support for research.

Eligible Entities: Public or nonprofit private entities, which includes state or local governments, public-private partnerships, recipients of Healthy Start Initiative grants, public or nonprofit private hospitals, community-based organizations, hospices, ambulatory care facilities, community health centers, migrant health centers, public housing primary care centers, or homeless health centers.

Centers of Excellence for Depression (Section 10410)

Authority: Center for Mental Health Services

- Year: FY 2011-FY 2020.
- Appropriations: Authorizes \$100 million annually for each FY 2011-FY 2015 and \$150 million annually for each FY 2016-FY 2020.
- Summary: Grants to Centers of Excellence in the treatment of depressive disorders. Requires matching funds of \$1 for every \$5 of federal funds.

Eligible Entities: Institutions of higher education, public or private nonprofit research institutions.

Programs Relating to Congenital Heart Disease (Section 10411)

Authority:	CDC
Year:	FY 2011-FY 2015.
Appropriations:	Authorizes such sums as may be necessary.
Summary:	Allows enhancement and expansion of existing infrastructure to track the epidemiology of
	congenital heart disease.
Eligible Entities:	Public or private nonprofit entities with specialized experience in congenital heart disease.

Automated Defibrillation (Section 10412)

Authority:DHHSYear:Through FY 2014.Appropriations:Authorizes \$25 million annually for each FY 2011-FY 2014.Summary:Reauthorizes public access defibrillation programs in Section 312 of the Public Health Service Act.Eligible Entities:States, political subdivisions of states, American Indian tribes, and tribal organizations.

Young Women's Breast Health Awareness and Support of Young Women Diagnosed with Breast Cancer (Section 10413)

Authority:	CDC
Year:	FY 2010-FY 2014.
Appropriations:	Authorizes \$9 million annually for each FY 2010-FY 2014.
Summary:	Develops a national education campaign about breast health and risk factors and supports
	prevention research activities at CDC on breast cancer in younger women (ages 15-44). Also
	authorizes the DHHS Secretary to award grants to support young women diagnosed with breast
	cancer.
Eligible Entities:	Grants to organizations and institutions to provide information and assistance to young women

diagnosed with breast cancer and pre-neoplastic breast diseases.

Grants for Small Businesses to Provide Comprehensive Workplace Wellness Programs (Section 10408)

Authority:DHHSYear:FY 2011-FY 2015.Appropriations:Authorizes \$200 million for the period of FY 2011-FY 2015.Summary:Authorizes grants for small businesses to provide their employers with access to comprehensive
workplace wellness programs.Eligible Entities:Small businesses (including nonprofits) with 100 or fewer employees who work 25 hours or more
per week.

HEALTH PROFESSIONAL WORKFORCE TRAINING AND SUPPORT

STATE WORKFORCE INITIATIVES

State Health Care Workforce Development (Section 5102)

Authority:	Health Resources and Services Administration (HRSA)
Year:	Beginning FY 2010.
Appropriations:	Authorizes \$8 million for planning grants and \$150 million for implementation grants in FY 2010 and
	such sums as may be necessary for each subsequent year.
Summary:	Planning and implementation grants to enable comprehensive planning and to support approaches
	to increase the number of health care workers. Requires a 15% match rate from states for planning
	grants and 25% match rate for implementation grants.

Eligible Entities: States and state workforce investment boards.

Health Care Workforce Assessment (Section 5103)

Authority:	DHHS
Year:	FY 2010-FY 2014.
Appropriations:	Authorizes \$4.5 million annually for each FY 2010-FY 2014 for state and regional centers and such sums as necessary for longitudinal evaluation.
Summary:	Creates a national center for health care workforce analysis. Awards grants to state and regional centers to collect, analyze, and report data to the national center. Also increases funding for the longitudinal evaluation of individuals who have received education, training, or financial assistance from programs under this title.
Eligible Entities:	States, state workforce investment boards, public health or health professions schools, academic health centers, or appropriate public or private nonprofit entities.

WORKFORCE INITIATIVES TO ADDRESS MALDISTRIBUTION/UNDERSERVED AREAS

Funding for National Health Service Corps (Sections 5207 and 10503)

Authority:	DHHS
Year:	FY 2011-FY 2015.
Appropriations:	Appropriates \$290 million in FY 2011, \$295 million in FY 2012, \$300 million in FY 2013, \$305 million
	in FY 2014, and \$310 million in FY 2015.
Summary:	Funding for the expansion of the National Health Service Corps through loan forgiveness for
	individuals agreeing to serve in health professional shortage areas.
Eligible Entities:	Primary care providers, dentists, dental hygienists, psychologists, licensed clinical social workers,
	psychiatric nurse specialists, marriage and family therapists, and licensed professional counselors.

Continuing Educational Support for Health Professionals Serving in Underserved Communities (Section 5403)

Authority:	HRSA
Year:	FY 2010-FY 2014.
Appropriations:	Authorizes \$5 million annually for each FY 2010-FY 2014.
Summary:	Grants to improve health care, increase retention, increase representation of minority faculty,
	enhance practice environment, and provide education for health professionals serving in
	underserved communities.

Eligible Entities: Medical schools, teaching hospitals, health professions schools, and state and local governments.

Rural Physician Training Grants (Sections 5606 and 10501)

Authority:	HRSA
Year:	FY 2010-FY 2013.
Appropriations:	Authorizes \$4 million annually for each FY 2010-FY 2013.
Summary:	Grant program to assist in recruiting students likely to practice medicine in underserved rural
	communities.
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Eligible Entities: Accredited schools of allopathic or osteopathic medicine.

PRIMARY CARE

Federally Supported Student Loan Fund (Sections 5201 and 10501)

Authority:	HRSA
Year:	No date specified.
Appropriations:	Does not specify appropriations or authorizations.
Summary:	Eases criteria for schools and students to qualify for loans, shortens payback periods, and changes
	the noncompliance provision to make the primary care loan program more attractive to students.
Eligible Entities:	Not listed.

Training in Family, General Internal and General Pediatric Medicine, and Physician Assistantship (Section 5301)

Authority:	HRSA
Year:	FY 2010-FY 2014.
Appropriations:	Authorizes \$125 million for FY 2010 and such sums as may be necessary for FY 2011 through FY
	2014.
-	Establishes grants to develop and operate primary care training programs, provide financial assistance to trainees, enhance faculty development in primary care, and establish, maintain, and
	improve academic units in primary care.
Elicible Entition	Accordited public or paperofit private boggitals, schools of modicine or establishing modicine

Eligible Entities: Accredited public or nonprofit private hospitals, schools of medicine or osteopathic medicine, academically-affiliated physician assistant training programs, or public or private nonprofit entities the DHHS Secretary has determined are capable of carrying out such grants.

Primary Care Extension Program (Section 5405)

Authority: Agency for Healthcare Research and Quality (AHRQ)

Year: FY 2011-FY 2014.

- Appropriations: Authorizes \$120 million annually for each FY 2011 and FY 2012 and such sums as may be necessary for FY 2013 and FY 2014.
- Summary: Grants to establish primary care extension program state hubs, which will educate and provide technical assistance to primary care providers about evidence-based therapies, preventive medicine, health promotion, chronic disease management, and mental health.

Eligible Entities: State or multi-state entities.

Demonstration Grants for Family Nurse Practitioner Training Programs (Sections 5316 and 10501)

Authority:	DHHS
Year:	FY 2011-FY 2014.
Appropriations:	Authorizes such sums as may be necessary for each FY 2011-FY 2014.
Summary:	Establishes a training demonstration program for family nurse practitioners to train nurses for
	careers as providers in federally qualified health centers and nurse-managed health clinics.
Eligible Entities:	Federally qualified health centers or nurse-managed health clinics.

GERIATRICS

Geriatric Education and Training (Section 5305)

Authority:	HRSA
Year:	FY 2011-FY 2014.
Appropriations:	Authorizes \$10.8 million for the period FY 2011-FY 2014 for workforce development and \$10 million
	for the period FY 2011-FY 2013 for career incentives.
Summary:	Grants to geriatric education centers to support training in geriatrics, chronic care management, and
	long-term care. Also establishes career incentive awards to health care providers who agree to teach
	or practice in the field of geriatrics or long-term care.
Eligible Entities:	Workforce development awards: geriatric education centers. Career incentive awards: advanced
	practice nurses, clinical social workers, pharmacists, or students of psychology who are pursuing a
	doctorate or other advanced degree in geriatrics or a related field in an accredited health professions
	school.

PEDIATRICS

Health Care Workforce Loan Repayment Programs (Section 5203)

Authority:	HRSA
Year:	FY 2010-FY 2014.
Appropriations:	Authorizes \$30 million annually for each FY 2010-FY 2014 for pediatric students and \$20 million annually for each FY 2010-FY 2013 for mental and behavioral health students.
Summary:	Establishes a loan program for pediatric sub-specialists and mental and behavioral health providers who will work in underserved areas.
Eligible Entities:	Pediatricians and child and adolescent mental and behavioral health providers.

RESIDENCY PROGRAMS

Teaching Health Centers Development Grants (Section 5508)

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Authority:	HRSA
Year:	Beginning FY 2010.
Appropriations:	Authorizes \$25 million in FY 2010, \$50 million in FY 2011, \$50 million in FY 2012, and such sums as may be necessary for each subsequent year.
Summary:	Supports new or expanded primary care residency programs and funding to cover indirect and direct expenses of qualifying teaching centers related to training in new or expanded programs in order to increase teaching capacity.
Eligible Entities:	Teaching health centers (community-based or ambulatory care centers), federally qualified health centers, community mental health centers, rural health clinics, health centers operated by the Indian Health Service or tribal organizations, and entities receiving funds under Title X of the Public Health Service Act.

Payments to Qualified Teaching Health Centers (Section 5508)

Authority:	HRSA
Year:	FY 2011-FY 2015.
Appropriations:	Appropriates \$230 million for the period FY 2011-FY 2015.
Summary:	Program of payments to teaching health centers that operate graduate medical education programs
	in order to increase teaching capacity.
Eligible Entities:	Teaching health centers that operate graduate medical education programs.

MENTAL HEALTH AND SUBSTANCE ABUSE WORKFORCE

Mental and Behavioral Health Education (Section 5306)

Authority:	HRSA
Year:	FY 2010-FY 2013.
Appropriations:	Authorizes, for the period FY 2010-FY 2013, \$8 million for social work, \$12 million for psychology,
	\$10 million for child and adolescent mental health, and \$5 million for paraprofessionals.
Summary:	Grants for development, expansion, or enhancement of programs in social work, psychology, child
	and adolescent mental health, and paraprofessional child and adolescent training.
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Eligible Entities: Institutions of higher education.

US Public Health Sciences Track (Section 5315)

Authority:	DHHS	(Office of the	Surgeon	General)
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- Year: Beginning FY 2010.
- Appropriations: Transfers such sums as may be necessary from Public Health and Social Services Emergency Fund.

Summary: Established to train physicians, dentists, nurses, physician assistants, nurse practitioners, pharmacists, mental and behavioral health specialists, and public health professionals by providing tuition remission and stipends to students accepted as Commissioned Corps officers with a two year commitment.

Eligible Entities: Accredited, affiliated health professions education training programs at academic health centers located in regions of the United States determined appropriate by the Surgeon General.

Public Health Workforce Recruitment and Retention Programs (Section 5204)

Authority:	HRSA
Year:	FY 2010-FY 2015.
Appropriations:	Authorizes \$195 million for FY 2010 and such sums as may be necessary for FY 2011-FY 2015.
Summary:	Establishes a loan repayment program to assure an adequate supply of public health professionals.
Eligible Entities:	Public health professionals working in federal, state, local, or tribal public health agencies.

Preventive Medicine and Public Health Training Grant Program (Sections 5606 and 10501)

Authority: HRSA (in consultation with CDC)

Year: FY 2011-FY 2015.

- Appropriations: Authorizes \$43 million for FY 2011 and such sums as may be necessary for each FY 2012-FY 2015.
- *Summary:* Grants to provide training to residents in preventive medicine.
- *Eligible Entities:* Accredited schools of public health, medicine, or osteopathic medicine; accredited public or private nonprofit hospitals; and state, local, or tribal health departments.

Fellowship Training in Public Health (Section 5314)

Authority:	CDC
Year:	FY 2010-FY 2013.
Appropriations:	Authorizes \$39.5 million annually for each FY 2010-FY 2013.
Summary:	Addresses workforce shortages through expansion of fellowships in state and local health
	departments in applied public health epidemiology, public health lab science and informatics, and
	epidemic intelligence services.
Eligible Entities:	State and local health departments.

Grants for State and Local Programs (Section 5206)

Authority:	DHHS
Year:	FY 2010-FY 2015.
Appropriations:	Authorizes \$60 million for FY 2010 and such sums as may be necessary for FY 2011-FY 2015.
Summary:	Awards scholarships to mid-career public and allied health professionals employed in public and
	allied health positions at the federal, state, tribal, or local level to receive additional training or
	education.
Eligible Entities:	Accredited educational institutions that offer a course of study, certificate program, or professional
	training program in public or allied health or a related discipline, as determined by the DHHS

Allied Health Workforce Recruitment and Retention Programs (Section 5205)

Authority:	HRSA
Year:	No date specified.
Appropriations:	Does not specify appropriations or authorizations.
Summary:	Establishes a loan repayment program to assure an adequate supply of allied health professionals
	employed in public health settings or in underserved areas.
Eligible Entities:	Allied health professionals employed with a federal, state, local, or tribal public health agency, or in
	settings located in health professional shortage areas, medically underserved areas, or medically
	underserved populations, as recognized by the DHHS Secretary.

DENTISTRY

Dentistry Training (Section 5303)

Secretary.

Authority:	HRSA
Year:	FY 2010-FY 2015.
Appropriations:	Authorizes \$30 million in FY 2010 and such sums as may be necessary for each FY 2011-FY 2015.
Summary:	Dental schools and education programs to receive grants for training, faculty development, dental
	faculty loan repayment, and to support academic administrative units.
Eligible Entities:	Schools of dentistry, public or nonprofit private hospitals, or public or private nonprofit entities the
	DHHS Secretary has determined are capable of carrying out the funded activities.
Altornativo D	ental Health Care Provider Demonstration (Section 5304)

Alternative Dental Health Care Provider Demonstration (Section 5304)

Authority:DHHSYear:Within two years of enactment.Appropriations:Authorizes such sums as may be necessary.Summary:Demonstration program to establish training programs for alternative dental health care providers to
increase access to dental care in rural, tribal, and underserved communities.Eligible Entities:Institutions of higher education (including community colleges), public-private partnerships,
federally qualified health centers, Indian Health Service facilities, tribes or tribal organizations,
states or county public health clinics providing dental services, and public hospitals or health
systems.

NURSING

Authorization of Appropriations for Parts B through D of Title VIII of the Public Health Service Act (Section 5312)

Authority:	DHHS
Year:	FY 2010-FY 2016.
Appropriations:	Authorizes \$338 million in FY 2010 and such sums as necessary for FY 2011-FY 2016.
Summary:	Authorizes appropriations for Parts B, C, and D of Title VIII of the Public Health Service Act, which
	authorizes grants to support nurse education and enhance nursing workforce diversity.
Eligible Entities:	Schools of nursing, nursing centers, academic health centers, state or local governments, and other
	public or private nonprofit entities determined appropriate by the DHHS Secretary.

Nursing Student Loan Program (Section 5202)

Authority:	HRSA
Year:	No date specified.
Appropriations:	Does not specify appropriations or authorizations.
Summary:	Increases loan amounts and updates the years for nursing schools to establish and maintain student
	loans.
Eligible Entities:	Nursing schools.

Advanced Nursing Education Grants (Section 5308)

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Authority:	HRSA
Year:	Upon enactment.
Appropriations:	Does not specify appropriations or authorizations.
Summary:	Amends the Public Health Service Act to make nurse midwifery programs eligible for advanced
	nurse education grants.
Eligible Entities:	Nurse midwifery programs accredited by the American College of Nurse-Midwives Accreditation
	Commission for Midwifery Education.

Nurse Practice, Education, and Retention Program (Section 5309)

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Authority:	HRSA
Year:	FY 2010-FY 2012.
Appropriations:	Authorizes such sums as may be necessary annually for each FY 2010-FY 2012.
Summary:	Awards grants to nursing schools to strengthen nurse education and training programs and to
	improve nurse retention.

Eligible Entities: Accredited schools of nursing, health care facilities, or a partnership of such a school and facility.

Loan Repayment and Scholarship Program (Section 5310)

Authority:	HRSA
Year:	Upon enactment.
Appropriations:	Does not specify appropriations or authorizations.
Summary:	Faculty at nursing schools is eligible for loan repayment and scholarship programs.
Eligible Entities:	Faculty in accredited schools of nursing.

Nurse Faculty Loan Program (Section 5311)

Authority:	HRSA
Year:	FY 2010-FY 2014.
Appropriations:	Authorizes such sums as may be necessary annually for each FY 2010-FY 2014.
Summary:	Establishes a student loan repayment program for nurses with outstanding debt who agree to teach.
Eligible Entities:	A United States citizen, national, or lawful permanent resident who holds an unencumbered license
	as a registered nurse and has either already completed a masters or doctorate nursing program at an
	accredited school of nursing or is currently enrolled on a full- or part-time basis in such a program.

Nursing Workforce Diversity Grants (Section 5404)

Authority:	HRSA
Year:	Upon enactment.
Appropriations:	Does not specify appropriations or authorizations.
Summary:	Expands nursing diversity grants to include completion of associate degrees, bridge or degree
	completion programs, or advanced degrees in nursing, as well as preparation and retention activities.
Eligible Entities:	Schools of nursing, nursing centers, academic health centers, state or local governments, and other
	public or private nonprofit entities determined appropriate by the DHHS Secretary.
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Graduate Nurse Education Demonstration (Section 5509)

Authority:	DHHS
Year:	FY 2012-FY 2015.
Appropriations:	Appropriates \$50 million annually for each FY 2012-FY 2015.
Summary:	Establishes a graduate nurse education demonstration program under which eligible hospitals may
	receive payment for the provision of qualified clinical training to advance practice nurses.
Eligible Entities:	Demonstration in up to five eligible hospitals, which are defined as an eligible hospital or critical
	access hospital that has a written agreement in place with one or more applicable schools of nursing

access hospital that has a written agreement in place with one or more applicable schools of nursing and two or more applicable non-hospital community-based care settings.

COMMUNITY COLLEGE CAREER TRAINING

Community College and Career Training Grant Program (Section 1501 of Reconciliation)

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Authority:	US Department of Labor				
Year:	FY 2011-FY 2014.				
Appropriations:	Appropriates \$500 million a	nnually for e	each F	Y 2011-FY 2014.	
Summary:	New appropriations to the Co	ommunity C	ollege	e and Career Training Grant Program	n for community
	colleges to develop and impr	ove educati	onal o	or career training programs.	
Eligible Entities:	Community colleges.				

igible Entities: Community colleges.

DIRECT CARE WORKERS, PERSONAL HOME CARE AIDES, COMMUNITY HEALTH WORKERS, AND PATIENT NAVIGATORS

Training Opportunities for Direct Care Workers (Section 5302)

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Authority:	HRSA
Year:	FY 2011-FY 2013.
Appropriations:	Authorizes \$10 million for the period FY 2011-FY 2013.
Summary:	Establishes training grants for direct care workers providing services and support in long-term care settings.
Eligible Entities:	Accredited institutions of higher education that have established a public-private educational partnership with a nursing home or skilled nursing facility, agency, or entity providing home- and community-based services to individuals with disabilities, or other long-term care providers.
Demonstratio	n Projects to Address Health Professions Workforce Needs (Section 5507)
Authority:	DHHS
Year:	FY 2010-2012.
Appropriations:	Appropriates \$5 million annually for each FY 2010-FY 2012.
Summary:	Demonstration project to award grants to develop core training competencies and programs for personal home care aides.

Eligible Entities: The DHHS Secretary shall enter into agreements with not more than six states to conduct demonstration projects.

Grants to Promote the Community Health Workforce (Sections 5313 and 10501)

Authority:	CDC
Year:	FY 2010-FY 2014.
Appropriations:	Authorizes such sums as may be necessary annually for each FY 2010-FY 2014.
Summary:	Grants to promote positive health behaviors and outcomes in medically underserved areas through
	the use of community health workers.
Eligible Entities:	Public or nonprofit private entities including state or local governments, public health departments,
	free health clinics, hospitals, federally qualified health centers, or a consortium of any such entities.

Demonstration Projects to Train Low-Income Populations to Address Health Professions Workforce Needs (Section 5507)

Authority:	DHHS
Year:	FY 2010-FY 2014.
Appropriations:	Appropriates \$85 million annually for each FY 2010-FY 2014.
Summary:	Demonstration project to provide aid to low-income individuals with the opportunity to obtain
	education and training in health care occupations with labor shortages.
Eligible Entities:	States, American Indian tribes or tribal organizations, institutions of higher education, local
	workforce investment boards, sponsors of apprenticeship program under National Apprenticeship
	Act, and community-based organizations.

Grants for the Development and Operation of Demonstration Programs to Provide Patient Navigator Services (Section 3510)

Authority:	HRSA
Year:	FY 2010-FY 2015.
Appropriations:	Authorizes \$3.5 million for FY 2010 and such sums as necessary for FY 2011-FY 2015.
Summary:	Reauthorizes funding for the Patient Navigator Program, which provides grants to develop and
	operate programs to provide patient navigator services.
Eligible Entities:	Public or nonprofit private health centers, health facilities operated by the Indian Health Service,
	hospitals, cancer centers, rural health clinics, academic health centers, or nonprofit entities that
	provide patient navigator services.

Cultural Competency, Prevention, and Public Health and Individuals with Disability Training (Section 5307)

Authority:	HRSA
Year:	FY 2010-FY 2015.
Appropriations:	Authorizes such sums as may be necessary annually for each FY 2010-FY 2015.
Summary:	Funding for the development, evaluation, and dissemination of research, demonstration projects, and
	curricula for training in cultural competency, prevention, public health proficiency, reducing health disparities, and aptitude for working with individuals with disabilities.
Eligible Entities:	Health professions schools, academic health centers, state or local governments, or other
	appropriate public or private nonprofit entities (or consortia of entities, including entities promoting

multidisciplinary approaches). The DHHS Secretary may accept applications from for-profit private entities as determined by the DHHS Secretary.

DIVERSITY, UNDERREPRESENTED MINORITIES, INTERDISCIPLINARY TRAINING, AND IMPROVED QUALITY

Centers of Excellence (Section 5401)

HRSA
Beginning FY 2010.
Authorizes \$50 million annually for each FY 2010-FY 2015 and such sums as may be necessary for each subsequent year.
Grants to health professions schools and other educational entities for the purpose of assisting the schools to support health professions education for underrepresented minorities.
Schools of medicine, osteopathic medicine, dentistry, pharmacy, or graduate programs in behavioral or mental health.

Health Care Professionals Training for Diversity (Section 5402)

rical care r	Tolessionals manning for Diversity (Section 5402)
Authority:	HRSA
Year:	FY 2010-FY 2014.
Appropriations:	Authorizes \$51 million in FY 2010 for scholarships, \$5 million annually for each FY 2010-FY 2014
	for faculty assistance, \$60 million in FY 2010 for educational assistance, and such sums as may be necessary for FY 2011-FY 2014.
	Provides grants to schools to offer scholarships for disadvantaged students who agree to work in medically underserved areas, to stipulate loan repayment and fellowships for individuals who will serve as faculty, and to provide grants for educational assistance for individuals from disadvantaged backgrounds.
Eligible Entities:	Schools of medicine, osteopathic medicine, dentistry, nursing, pharmacy, podiatric medicine,

Eligible Entities: Schools of medicine, osteopathic medicine, dentistry, nursing, pharmacy, podiatric medicine, optometry, veterinary medicine, public health, chiropractic, or allied health; schools offering a graduate program in behavioral and mental health practice; or entities providing programs for the training of physician assistants; and other public or private nonprofit health or educational entities.

Interdisciplinary, Community-Based Linkages (Section 5403)

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Authority:	HRSA
Year:	FY 2010-FY 2014.
Appropriations:	Authorizes \$125 million annually for each FY 2010-FY 2014.
Summary:	Grants to initiate health care workforce educational programs and to maintain and improve the effectiveness and capabilities of area health education center programs. Monies must be used to recruit individuals from underrepresented and rural backgrounds into health professions, develop community-based training to educate a workforce prepared to deliver high-quality care in underserved areas or for populations affected by health disparities, conduct interdisciplinary training, recruit high school students into health careers, provide continuing education, and implement effective outcomes measurement and evaluation strategies. Requires matching funds that are not less than 50% of costs of the program at least 25% is required to be in cash.
	that are not less than 50% of costs of the program; at least 25% is required to be in cash.
Flinible Entities	Schools of medicine or osteopathic medicine, an incorporated consortium of such schools, or the

Eligible Entities: Schools of medicine or osteopathic medicine, an incorporated consortium of such schools, or the parent institutions of such schools.

Demonstration Program to Integrate Quality Improvement and Patient Safety into Clinical Education of Health Professionals (Section 3508)

Authority:	DHHS
Year:	No date specified.
Appropriations:	Authorizes such sums as may be necessary.
Summary:	Grants to develop and implement quality improvement and safety education into clinical education.
	Provision requires matching funds of \$1 for every \$5 of federal funds.
Eligible Entities:	Health professions schools; schools of public health, social work, nursing, pharmacy, and health care
	administration; and institutions with a graduate medical education program.

QUALITY

Quality Measure Development (Section 3013 and 10303)

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Authority:	DHHS (in consultation with CMS and AHRQ)
Year:	FY 2010-FY 2014.
Appropriations:	Authorizes \$75 million annually for each FY 2010-FY 2014.
Summary:	Grants and contracts to develop quality measures for use in federal health programs.
Eligible Entities:	Entities with a demonstrated expertise and capacity in the development and evaluation of quality
	measures.

Collection and Analysis of Data for Quality and Resource Use Measures (Section 3015)

Authority:	DHHS
Year:	FY 2010-FY 2014.
Appropriations	: Authorizes such sums as may be necessary for each FY 2010-FY 2014.
Summary:	Funding to support collection, aggregation, and analysis of data on quality and resource
	use measures. The provision requires matching funds of \$1 for every \$5 from the federal
	government.
Eligible Entities	: Multi-stakeholder entities that coordinate the development of methods and implementation
	plans for the consistent reporting of quality and cost information; entities capable of submitting
	such summary data for a particular population and providers (such as a disease registry, regional
	collaboration, health plan collaboration, or other population-wide source); or federal Indian Health

Service programs or health programs operated by an American Indian tribe.

Adult Health Quality Measures (Section 2701)		
Authority:	AHRQ	
Year:	FY 2010-FY 2014.	
Appropriations:	Appropriates \$60 million annually for each FY 2010-FY 2014.	
Summary:	Established to develop a set of core health quality measures for Medicaid eligible adults. Also establishes a Medicaid quality measurement program that awards grants for the development, testing, and validation of innovative evidence-based quality measures. Health quality measures must be developed not later than January 1, 2011, and grant programs should be established within 12 months of development of health quality measures.	
Eligible Entities:		

Health Care Delivery System Research (Section 3501)

Authority:	AHRQ
Year:	FY 2010-FY 2014.
Appropriations:	Authorizes \$20 million for the period FY 2010-FY 2014.
Summary:	Funding to identify, develop, evaluate, disseminate, and provide training in innovative health care
	delivery methods and strategies. This provision requires matching funds equal to \$1 for each \$5 in
	federal funds.
Summary:	Funding to identify, develop, evaluate, disseminate, and provide training in innovative health care delivery methods and strategies. This provision requires matching funds equal to \$1 for each \$5 in

Eligible Entities: National, state, multi-state, or multi-site quality improvement networks.

Quality Improvement Technical Assistance and Implementation (Section 3501)

- Authority: AHRQ
- Year: No date specified.

Appropriations: Authorizes such sums as may be necessary.

- *Summary:* Establishes technical assistance and implementation grants to support health care institutions in implementing quality improvement models and practices.
- *Eligible Entities:* Technical assistance grants are available to health care providers, health care provider associations, professional societies, health care worker organizations, American Indian health organizations, quality improvement organizations, patient safety organizations, local quality improvement collaboratives, academic health centers, universities, physician-based research networks, primary care extension programs, Indian Health Service programs, health programs operated by an American Indian tribe, or any other entity identified by the DHHS Secretary. Implementation grants are available to hospitals or other health care providers or consortium of providers.

Patient-Centered Outcomes Research (Section 6301 and 10602)

- Authority: Patient-Centered Outcomes Research Institute
- Year: Beginning FY 2010.
- Appropriations: Appropriates \$10 million in FY 2010, \$50 million in FY 2011, and \$150 million in each FY 2012-FY 2019; transfers revenues from new fees on health insurance policies and self-insured plans of \$1 per covered life in FY 2013 and \$2 per covered life annually in each FY 2014-FY 2019; also transfers \$1 per Medicare beneficiary in FY 2013 and \$2 per beneficiary in FY 2014-FY 2019 from the Medicare Trust Fund.
- *Summary:* Establishes the Patient-Centered Outcomes Research Institute, which will identify research priorities and fund comparative effectiveness research.

Eligible Entities: Academic and private sector research or study-conducting organizations.

Advancing Research and Treatment for Pain Care Management (Section 4305)

Authority:	DHHS
Year:	FY 2010-FY 2012.
Appropriations:	Authorizes such sums as may be necessary annually for each FY 2010-FY 2012.
Summary:	The DHHS Secretary may make awards of grants, cooperative agreements, and contracts for the
	development and implementation of programs to provide education and training to health care
	professionals in pain care.
Eligible Entition	Health professions schools, besnices, and other public and private entities

Eligible Entities: Health professions schools, hospices, and other public and private entities.

Cures Acceleration Network (Section 10409)

- Authority: National Institutes of Health (NIH)
- Year: Beginning in FY 2010.

Appropriations:Authorizes \$500 million in FY 2010 and such sums as may be necessary for subsequent fiscal years.Summary:Authorizes the Cures Acceleration Network within NIH to award grants to develop cures and
treatments of diseases. Grant recipients shall contribute \$1 for every \$3 of federal money awarded.

Eligible Entities: Public or private entities which may include private or public research institutions, institutions of higher education, medical centers, biotechnology companies, pharmaceutical companies, disease advocacy organizations, patient advocacy organizations, or academic research institutions.

TESTING NEW MODELS OF CARE

Establishment of Center for Medicare and Medicaid Innovation Within CMS (Sections 3021 and 10306)

Authority:	CMS
Year:	FY 2010-FY 2019.
Appropriations:	Appropriates \$5 million in FY 2010 and \$10 billion for the period FY 2011-FY 2019.
Summary:	Establishes center to research, develop, test, and expand innovative payment and delivery
	arrangements to improve quality and reduce cost of care.
Eligible Entities:	Entities testing selected payment and delivery models.

MEDICARE

Independence at Home Demonstration Program (Section 3024)

Authority:	CMS
Year:	FY 2010-FY 2015.
Appropriations:	Transfer of \$5 million annually for each FY 2010-FY 2015 from the Federal Hospital Insurance Trust
	Fund to CMS.
Summary:	Demonstration program to test a payment incentive and service model that utilizes primary care
	teams in the homes of high-risk Medicare beneficiaries with two or more chronic illnesses, prior
	hospitalization, and functional dependencies.
Elicible Entition	Qualified independence at home modical practices

Eligible Entities: Qualified independence at home medical practices.

Community-Based Care Transitions Program (Section 3026)

Authority:	CMS
Year:	FY 2011-FY 2015.
Appropriations:	Transfer of \$500 million for the period FY 2011-FY 2015.
Summary:	Funding to support improved care transition services for high-risk Medicare beneficiaries.
Eligible Entities:	Eligible hospitals and community-based organizations that provide care transition services.

Revisions to Home Health Care Provisions (Sections 3131 and 10315)

Authority:	CMS
Year:	Beginning January 1, 2014.
Appropriations:	Appropriates \$500 million for the period FY 2015-FY 2018.
Summary:	Establishes a study on home health care agency costs involved with providing ongoing care to low-
	income Medicare beneficiaries or beneficiaries in medically underserved areas. Based on this study,
	the DHHS Secretary may provide for a demonstration project to test whether making payment
	adjustments for home health services under Medicare would substantially improve access to care
	for patients with severe illnesses or for low-income or underserved individuals.
Eligible Entities:	Does not specify eligible entities for potential demonstration program.

Medicare Hospice Concurrent Care Demonstration (Section 3140)

Authority: CMS

Year: Does not specify beginning date.

Appropriations: Does not specify appropriations or authorizations (potentially may be funded through CMS Center for Innovation funds).

Summary: Establishes a Medicare Hospice Concurrent Care Demonstration Program for Medicare beneficiaries.

Eligible Entities: The DHHS Secretary shall select not more than 15 hospice programs.

MEDICAID

State Option to Provide Health Homes for Enrollees with Chronic Conditions (Section 2703)

Authority:CMSYear:Beginning January 1, 2011.Appropriations:90% FMAP for first eight quarters; specifies maximum of \$25 million to be spent on planning grants
but does not specify appropriated or authorized amount.Summary:Provides states the option of enrolling Medicaid beneficiaries with chronic conditions into a
health home. States will receive 90% FMAP for the first eight quarters for the program costs. Also
establishes grants to states to develop a plan to do this. Requires, as part of receiving a grant, that
states contribute amount equal to state matching percentage.Eligible Entities:States.

Integrated Hospital Care Demonstration Projects (Section 2704)

Authority:	CMS
Year:	January 1, 2012 through December 31, 2016.
Appropriations:	Does not specify appropriations or authorizations (potential to be funded through CMS Center for Innovation funds).
Summary:	Demonstration projects in up to eight states to study the use of bundled payments for hospital and physician services in Medicaid.
Eligible Entities:	States.

Medicaid Global Payment System Demonstration Project (Section 2705)

Authority:	CMS
Year:	FY 2010-FY 2012.
Appropriations:	Authorizes such sums as may be necessary (potential to be funded through CMS Center for
	Innovation funds).
Summary:	Demonstration projects in up to five states to study adjustment of payment structure for safety net
	hospitals from a fee-for-service model to a global capitated payment structure.
Eligible Entities:	States.

Pediatric Accountable Care Organization (ACO) Demonstration Project (Section 2706)

Authority:	CMS
Year:	January 1, 2012-December 31, 2016.
Appropriations:	Authorizes such sums as may be necessary (potential to be funded through CMS Center for
	Innovation funds).
Summary:	Demonstration project to allow qualified pediatric providers to be recognized and receive payments
	as ACOs under Medicaid.
Eligible Entities:	States.

Medicaid Emergency Psychiatry Demonstration Project (Section 2707)

Authority:	CMS
Year:	Three consecutive years after FY 2011.
Appropriations:	Appropriates \$75 million for FY 2011 (available until December 31, 2015).
-	Demonstration project, in up to eight states, where states would be required to reimburse non- publicly owned or operated institutions for mental illness for services to Medicaid beneficiaries ages 21 through 64 who need emergency assistance.

Eligible Entities: States.

GENERAL

Community Health Teams (Sections 3502 and 10321)

Authority:DHHSYear:No date specified.Appropriations:Authorizes such sums as may be necessary.Summary:Grants or contracts to establish community-based interdisciplinary, inter-professional teams to
support primary care practices, including obstetrics and gynecology.Eligible Entities:State or state-designated entities or American Indian tribes or tribal organizations.

Medication Management Services (Sections 3503 and 10328)

Authority:AHRQYear:Beginning May 1, 2010.Appropriations:Authorizes such sums as may be necessary.Summary:Supports medication management services by local providers in treatment of chronic diseases.Eligible Entities:Entities with appropriate settings for medication management.

Program to Facilitate Shared Decision Making (Section 3506)

Authority:	AHRQ, with CDC and NIH
Year:	Beginning FY 2010.
Appropriations:	Authorizes such sums as may be necessary.
Summary:	Contracts and grants to develop, update, and implement patient decision aids to engage patients
	and caregivers or authorized representatives in decision making; provide patients, caregivers,
	or authorized representatives with information about trade-offs among treatment options; and

facilitate the incorporation of patient preferences and values into the medical plan.

Eligible Entities: Shared decision-making resource centers to provide technical assistance and disseminate best practices; health care providers to implement shared decision-making techniques.

Co-Locating Primary and Specialty Care in Community-Based Mental Health Settings (Section 5604)

Authority: Center for Mental Health Services

Year: FY 2010-FY 2014.

Appropriations: Authorizes \$50 million in FY 2010 and such sums as may be necessary for FY 2010-FY 2014.

Summary: Grants for demonstration projects for coordinated and integrated services through the co-location of primary and specialty care in mental and behavioral health settings.

Eligible Entities: Qualified community mental health programs.

SAFETY NET

Community Health Centers (Section 10503, Section 2303 of Reconciliation)

Authority:	DHHS
Year:	FY 2011-FY 2015.
Appropriations:	Appropriates \$1 billion in FY 2011, \$1.2 billion in FY 2012, \$1.5 billion in FY 2013, \$2.2 billion in FY
	2014, and \$3.6 billion in FY 2015 for enhanced funding for community health centers. Appropriates
	\$1.5 billion for the period FY 2011-FY 2015 for construction and renovation of community health
	centers.
Summary:	Increases operational support for the Community Health Center program and expands funding for
	construction and renovation of community health centers.
Eligible Entities:	Community health centers and communities seeking to establish community health centers.

Individual Wellness Plan Demonstration Project (Section 4206)

Authority:	DHHS
Year:	No date specified.
Appropriations:	Authorizes such sums as may be necessary.
Summary:	Pilot program to test the impact of providing at-risk populations who utilize community health
	centers with an individualized wellness plan designed to reduce risk factors for preventable
	conditions.
Eligible Entities:	Not more than 10 community health centers nationally.

School-Based Health Centers (Section 4101)

Authority:	DHHS

Year: FY 2010-FY 2013.

Appropriations: Appropriates \$50 million in each FY 2010-FY 2013 for capital expenditures and authorizes such sums as necessary for FY 2010-FY 2014 for operations.

Summary: Supports school-based health centers through grants to eligible entities for capital expenditures and operational expenses. Entities receiving grants required to provide a matching amount equal to 20% of the grant awarded.

Eligible Entities: School-based health centers or sponsoring facilities.

Design and Implementation of Regionalized Emergency Care (Section 3504)

Authority:	DHHS (through Secretary for Preparedness and Response)
Year:	FY 2010-FY 2014.
Appropriations:	Authorizes \$24 million annually in each FY 2010-FY 2014.
Summary:	Grants for pilot projects that design, implement, and evaluate innovative models of regionalized, comprehensive, and accountable emergency care and trauma systems. Additionally, supports research for pediatric emergency care. Requires states to match funds of \$1 for every \$3 in federal funds.

Eligible Entities: States or a partnership of one or more states and one or more local governments, an American Indian tribe, or a partnership of one or more American Indian tribes.

Nurse-Managed Health Clinics (Section 5208)

Authority:	DHHS
Year:	FY 2010-FY 2015.
Appropriations:	Authorizes \$50 million in FY 2010 and such sums as may be necessary annually for each FY 2011-FY
	2015.
Summary:	Grant program to support nurse-managed health clinics, which are defined as providing primary care or wellness services to underserved or vulnerable populations and that are associated with a
	school, college, university, or department of nursing, federally qualified health center, or independent

nonprofit health or social services agency. *Eligible Entities:* Nurse-managed care clinics.

Community-Based Collaborative Care Networks (Section 10333)

Authority:	DHHS
Year:	FY 2011-FY 2015.
Appropriations:	Authorizes such sums as may be necessary annually for each FY 2011-FY 2015.
Summary:	Provides grants to develop networks of providers to deliver coordinated care to low-income
	populations.

Eligible Entities: Community-based collaborative care networks.

Support for Emergency Medicine Research (Section 3504)

Authority: DHHS (supporting NIH, AHRQ, HRSA, and CDC)

Year: FY 2010-FY 2014.

Appropriations: Authorizes such sums as may be necessary.

Summary: Supports research in emergency medical care systems and emergency medicine, including pediatric emergency care.

Eligible Entities: Entities receiving funding through NIH, AHRQ, HRSA, and CDC.

Trauma Care Centers and Service Availability: Grants to Trauma Centers (Section 3505)

Authority: DHHS

Year: FY 2010-FY 2015.

Appropriations: Authorizes such sums as may be necessary.

- Summary: Awards grants to qualified trauma centers to assist in defraying substantial uncompensated care costs, to further the core missions of such trauma centers, and to provide emergency funds to trauma centers.
- *Eligible Entities:* Qualified public, nonprofit Indian Health Service and American Indian tribal and urban American Indian trauma centers.

Trauma Care Centers and Service Availability: Grants to States (Section 3505)

Authority:	DHHS
Year:	FY 2010-FY 2015.
Appropriations:	Authorizes \$100 million annually for each FY 2010-FY 2015.
Summary:	Provides grants to states to enable states to award grants to enhance and support trauma care.
Eligible Entities:	States.

Reauthorization of the Wakefield Emergency Medical Services for Children Program (Section 5603)

Authority:DHHSYear:FY 2010-FY 2014.Appropriations:Authorizes \$25 million in FY 2010, \$26.25 million in FY 2011, \$27.5 million in FY 2012, \$28.9 millionin FY 2013, and \$30.3 million in FY 2014.

Summary: Reauthorizes program to award grants to states and medical schools to support emergency services for children.

Eligible Entities: States or accredited schools of medicine.

Demonstration Project to Provide Access to Affordable Care (Section 10504)

Authority: DHHS

Year: Within six months of enactment.

Appropriations: Authorizes such sums as may be necessary.

- *Summary:* Three-year demonstration project in up to 10 states to provide access to comprehensive health care services to uninsured persons at reduced fees.
- *Eligible Entities:* State-based, nonprofit, public-private partnerships that provide access to comprehensive health care services to the uninsured at reduced fees.

LONG-TERM CARE, AGING, AND DISABILITY

Funding to Expand State Aging and Disability Resource Centers (Section 2405)

Authority:	Administration on Agin	g
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FY 2010-FY 2014. Year:

Appropriations: Appropriates \$10 million annually for each FY 2010-FY 2014.

Summary: Funding to carry out and expand state Aging and Disability Resource Centers, as well as support efforts for the Centers and other entities to serve as benefits enrollment centers.

Eligible Entities: State Aging and Disability Resource Centers.

National Independent Monitor Demonstration Project (Section 6112)

Authority:	DHHS
Year:	Implemented not later than one year after enactment for two years.
Appropriations:	Authorizes such sums as necessary.
Summary:	A demonstration project to develop, test, and implement an independent monitor program to
	oversee interstate and large intrastate chains of nursing facilities. Participating nursing facilities shall
	pay a portion of the costs of the independent monitors.

Eligible Entities: Eligible skilled nursing facilities and nursing facilities.

National Demonstration Projects on Culture Change and Use of Information Technology in Nursing Homes (Section 6114)

Authority:	DHHS
Year:	Within one year of enactment for a period not to exceed three years.
Appropriations:	Authorizes such sums as necessary.
Summary:	The funding will support one demonstration project for the development of best practices in nursing
	facilities that are involved in culture change and one demonstration project for the development of
	best practices for the use of information technology.
Fliaible Entities :	Fligible skilled nursing facilities and nursing facilities

Eligible Entities: Eligible skilled nursing facilities and nursing facilities.

Nationwide Program for National and State Background Checks on Direct Patient Access Employees of Long-Term Care Facilities and Providers (Section 6201)

Authority: DHHS FY 2010-FY 2012. Year:

Appropriations: Appropriates not more than \$160 million for the period FY 2010-FY 2012.

Establishes a program to identify efficient, effective, and economical procedures to conduct Summary: background checks on long-term care facilities. Payment to each state will be three times the amount that the state guarantees to make available and not more than \$3 million.

Eligible Entities: States.

LONG-TERM CARE (MEDICAID PROVISIONS):

Community First Choice Option (Sections 2401 and 1205 of Reconciliation)

Authority:	CMS
Year:	Beginning October 1, 2010.
Appropriations:	Federal government will increase the FMAP by six percentage points for the costs of services
	provided under the Community First Choice option.
Summary:	Optional Medicaid service through which states can offer community-based services for
	beneficiaries with disabilities.

Eligible Entities: States.

Money Follows the Person Rebalancing Demonstration (Section 2403)

Authority: CMS Year: FY 2011-FY 2016. Appropriations: Appropriates \$450 million annually for each FY 2011-FY 2016. Summary: Extends the existing Money Follows the Person demonstration project through FY 2016. This demonstration helps support Medicaid-eligible individuals who need long-term care services with moving from an institutional setting back to a community setting. The law shortens the length of time that a person needs to live in an inpatient facility (including nursing facility) to no less than 90 consecutive days.

Eligible Entities: States.

Incentives for States to Offer Home- and Community-Based Services as an Alternative to Nursing Homes (Section 10202)

Authority:	CMS
Year:	FY 2012-FY 2015.
Appropriations:	North Carolina eligible for a two percentage point increase in the FMAP for home- and community-
	based services.
Summary:	Policy to create incentives for states to shift the proportion of Medicaid long-term care dollars from
	institutional-based care to home- and community-based care.
Eligible Entities:	States.

LONG-TERM CARE (ELDER JUSTICE ACT)

Establishment of Forensic Centers (Section 6703)

Authority:	DHHS
Year:	FY 2011-FY 2014.
Appropriations:	Authorizes \$4 million in FY 2011, \$6 million in FY 2012, and \$8 million annually in each FY 2013 and FY 2014.
Summary:	Authorizes grants to establish and support forensic centers related to elder abuse, neglect, and exploitation.
Eligible Entities:	State or local government agencies, American Indian tribe or tribal organizations, or any other public or private entity that is engaged in and has expertise in issues relating to elder justice or in a field necessary to promote elder justice efforts.
Adult Protect	tive Services Grant Program (Section 6703)
Authority:	DHHS
Year:	FY 2011-FY 2014.
Appropriations:	Authorizes \$100 million annually for each FY 2011-FY 2014 for general grants and \$25 million annually for each FY 2011-FY 2014 for demonstration programs.

Summary: Grants to enhance the provision of adult protective services and for state demonstration programs that test methods for detecting and preventing elder abuse and exploitation.

Eligible Entities: State and local governments.

Enhancement of Long-Term Care (Section 6703)

Authority:	DHHS
Year:	FY 2011-FY 2014.
	Authorizes \$20 million in FY 2011, \$17.5 million in FY 2012, and \$15 million annually in each FY 2013
	and FY 2014.
Summary:	Incentives for individuals to receive training, seek, and maintain employment providing direct care in
	long-term care settings. This includes grants to create career ladders and wage or benefit increases,
	increase staffing in long-term care, improve management practices, and adopt electronic health records.
Eligible Entities:	Long-term care facilities and community-based long-term care entities.

Long-Term Care Ombudsman Program Grants and Training (Section 6703)

Authority:	DHHS
Year:	FY 2011-FY 2014.
Appropriations:	Authorizes \$5 million in FY 2011, \$7.5 million in FY 2012, \$10 million in FY 2013 and FY 2014 for
	capacity building, and \$10 million annually in each FY 2011-FY 2014 for training.
Summary:	Grants to support the long-term care ombudsman programs and for programs to provide and improve ombudsman training with respect to elder abuse, neglect, and exploitation.
Eligible Entities:	State long-term care ombudsman programs.

Provision of Information Regarding, and Evaluation of, Elder Justice Programs (Section 6703)

Authority:	DHHS	
Year:	FY 2011-FY 2014.	
Appropriations:	Appropriations: Reserves portion of funds appropriated.	
Summary:	Provision requiring evaluations of programs authorized by the Elder Justice Act. The DHHS Secretary	
	shall reserve funds to provide assistance to eligible entities to conduct evaluations of activities.	
Eligible Entities	: Entities receiving money through the Elder Justice Act.	

Grants to State Survey Agencies (Section 6703)

Authority:	DHHS
Year:	FY 2011-FY 2014.
Appropriations:	Authorizes \$5 million annually in each FY 2011-FY 2014.
Summary:	Funding to state survey agencies to prioritize and respond to complaints and to optimize
	collaboration between local authorities, consumers, and providers.
Eligible Entities:	State agencies that survey nursing facilities.

MALPRACTICE

Demonstration Programs to Evaluate Alternatives to Current Medical Tort Litigation (Sections 6801 and 10607)

Authority:	DHHS
Year:	FY 2010-FY 2015.
Appropriations:	Authorizes \$50 million for the period FY 2010-FY 2015.
Summary:	Authorizes grants to states to test alternatives to current medical tort litigation.
Eligible Entities:	States.

INDIAN HEALTH SERVICES

Indian Health Care Improvement Act (Section 10221)

Authority:Indian Health ServiceYear:Beginning FY 2010.Appropriations:Authorizes such sums as may be necessary.Summary:Enacts into law Senate Bill 1790, the Indian Health Care Improvement Reauthorization and
Extension Act of 2009, to increase the American Indian health care workforce; develop programs
for innovative care delivery models, behavioral health care services, and new services for health
promotion and disease prevention; expand access to health care; provide for the construction of
American Indian health care facilities; and establish an American Indian youth suicide prevention
grant program.

Eligible Entities: American Indian tribes and tribal organizations.



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North Carolina Nurse-Family Partnership: Evidence-Based Nurse Home Visitation Program and Health Care Reform

M. Tina Markanda, FACHE, MBA, MSPH; Rhett Mabry; Veronica Creech, MSW, MPA; Anne Sayers, MSW; Allen Smart, MPH, CHES, FACHE; Kathy Higgins, MS; Katie Eyes, MSW; Catherine Joyner, MSW; Emmy A. Marshall, MS

or the last several years, there has been discussion in Congress about how to fund evidence-based home visitation programs that focus on proven results and improve quality and access for mothers and babies. Home visitation programs have been developed and implemented over the years, but as the new health care reform legislation was debated, one program, called Nurse-Family Partnership (NFP), was used as the benchmark to guide the design and expectations for programs.

NFP is a nationally recognized, evidence-based, nurse home visitation program that was developed by David Olds, PhD, a pediatrician and professor of pediatrics, psychiatry, and preventive medicine at the University of Colorado Denver. The program targets low-income, first-time mothers and pairs them with registered nurses who work with the mothers until their child's second birthday. Randomized controlled trials of the program were conducted with three diverse populations in Elmira, New York in 1977; Memphis, Tennessee in 1988; and Denver, Colorado in 1994, and they confirmed the efficacy of the approach.

The success of this model program led to a provision in the Patient Protection and Affordable Care Act (H.R. 3590) that provides \$1.5 billion over five years in funds that can be used to expand evidence-based home visitation programs. This funding, provided as grants, will be distributed to selected states in October 2010 with the purpose of reaching set outcomes, including improved maternal and child health, development, education, and economic self-sufficiency.

The inclusion of this appropriation in the federal legislation was the result of strong advocacy by a broad coalition of groups who support funding for evidence-based home visitation programs. The strength of NFP has allowed both sides of the political spectrum to agree on the positive impact the program has on participants and on the economic self-sufficiency for families and communities.

States are eager to understand how this funding for home visitation programs will be distributed. The more than 30 states that have NFP in place, including North Carolina, are well-positioned to receive a portion of this grant funding.

North Carolina and the NFP Program

In 2007, The Duke Endowment, Kate B. Reynolds Charitable Trust, Prevent Child Abuse North Carolina, North Carolina Partnership for Children, Inc., and the North Carolina Department of Health and Human Services joined, with support from the NFP National Service Office, to create a public-private partnership dedicated to expanding NFP to communities throughout North Carolina.

The first NFP site was introduced to the state during 2000 in Guilford County and will celebrate its 10-year anniversary this year. North Carolina NFP recognized the program as a model that could be successfully implemented. By 2008, the partnership announced the expansion of NFP in North Carolina to five new sites that serve a total of

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seven counties: Cleveland, McDowell, Mecklenburg, Polk, Robeson, Rutherford, and Wake.

Following the successful launch of these five new sites, the partnership was joined in early 2009 by a new funding partner, the Blue Cross and Blue Shield of North Carolina (BCBSNC) Foundation. The BCBSNC Foundation provided funding support for a seventh NFP site, located in Pitt County. The eighth NFP site was announced by the partnership in Buncombe County in September 2009. With the addition of the Buncombe County site, NFP now serves families in 10 of North Carolina's 100 counties.

North Carolina learned in early 2010 that it had been selected as one of four states to partner with the Pew Center on the States in its national campaign to promote investments in high quality home-based programs for new and expectant families. Our state was selected because of the commitment and support for NFP by the partner organizations involved, including Prevent Child Abuse North Carolina, which was chosen by the Pew to be the lead agency in bringing together a strong, collaborative proposal and in administering the grant.

North Carolina sites launched since 2008 have enrolled more than 500 mothers, welcomed more than 300 babies, and conducted more than 1,000 site visits. While still in their early stages, these sites are reporting outcomes on par with the positive results seen in the controlled trials.

There is solid support for NFP in North Carolina and strong leadership in place to lead the state forward. Efforts continue on behalf of all the partners to sustain NFP in the current eight sites and to identify opportunities to expand the program into additional North Carolina counties. Through this work at the North Carolina NFP sites, the state is poised to receive a share of this \$1.5 billion in federal funding.

The Beginning

Dr. David Olds created Nurse-Family Partnership in 1977 after seeing first-hand the risks and challenges low-income children face during their day-to-day lives. Olds worked during the 1970s in an inner-city daycare center in Baltimore and used this experience to guide him as he formed NFP.

While working with these low-income children, Olds began to understand and formulate what would become the foundation of NFP. He recognized that the children he was interacting with would benefit if there was more support in the home much earlier in their lives, even before birth. This concern for earlier intervention and support led Olds to create NFP.

Olds worked to develop and build the program. He proceeded to test the program in randomized controlled trials. Results from the trials showed that the program improved pregnancy outcomes, improved the health and development of children, and helped parents create a positive life course for themselves, including becoming economically self-sufficient.¹

Following the successful results of the three randomized controlled trials, Olds felt the program was ready to be introduced to local communities for implementation. After starting the program in several communities across the country, NFP thrived and expanded. Today there are NFP sites located in more than 30 states.

Today, Dr. Olds continues his work at the University of Colorado at Denver by studying the positive impacts of NFP and designing ways to strengthen the program.

How Nurse-Family Partnership Works

NFP is a voluntary program that pairs mothers early in pregnancy with a registered nurse, and together the mother and nurse begin home visits that last through the child's second birthday. Registered nurses visit weekly for the first month after enrollment and then every other week until the baby is born. Visits resume to weekly for the next six weeks after the baby is born, to help the mother transition into her new role, and then decrease to every other week until the child is 21 months old. The last three visits are monthly until the child is two years old.

Through this process, the nurses and agencies implementing the program work with the enrolled mothers to achieve three goals:

- Improving pregnancy outcomes by helping women engage in good preventive health practices, including receiving prenatal care from their health care providers, improving their diet, and reducing their use of cigarettes, alcohol, and illegal substances.
- Improving child health and development by helping parents provide responsible and competent care.
- Improving the economic self-sufficiency of the family by helping parents develop a vision for their own future, plan future pregnancies, continue their education, and find work.²

The emphasis of this program focuses on the relationship between the nurse and mother. This relationship forms the backbone of NFP and is the key component for the program's success. Nurses work closely with the mothers to build trusting relationships, something many of these mothers do not have in their lives. A relationship built on trust between the nurses and mothers helps empower mothers to create a better life for their children and families.

The program is also designed to incorporate the father and other members of the family. Nurses work with both mothers and fathers to teach parenting skills that will help them raise healthy babies. The proven outcomes of NFP emphasize the importance of the interaction between the nurse and mother, the involvement of the father and other members of the family, as well as the lessons learned during the home visitations sessions. as well as the lessons learned during the home visitation sessions.

Positive Results

Three randomized controlled trials were conducted to study the effects of the NFP model on maternal and child health and development by comparing the short- and long-term outcomes of mothers and children enrolled in the NFP program to those of mothers and children not participating in the program (the control group).³

Positive outcomes generated through this research include:

- Reductions in cigarette smoking during pregnancy.
- Increased employment in the workforce by NFP mothers.
- Increases in the number of high school graduates for those that enter the program with no degree or GED.
- Reductions in children's health care encounters for injuries.
- Increases in children's school readiness.

More specific outcomes generated through the trials include: $\ensuremath{^3}$

Improved Pregnancy Outcomes

Improvement in women's prenatal health: 79% reduction in preterm delivery for women who smoke and reductions in high-risk pregnancies as a result of greater intervals between first and subsequent births.

Improved Child Health and Development

- Reduction in criminal activity: 59% reduction in child arrests at age 15.
- Reduction in injuries: 39% fewer injuries among children; 56% reduction in emergency room visits for accidents and poisonings; 48% reduction in child abuse and neglect.
- Increase in children's school readiness: 50% reduction in language delays of children age 21 months; 67% reduction in behavioral/intellectual problems at age six.

Increased Economic Self-Sufficiency

- Fewer unintended subsequent pregnancies: 32% fewer subsequent pregnancies.
- Increase in labor force participation by the mother: 83% increase by the child's fourth birthday.
- Reduction in welfare use: 20% reduction in months on public assistance.
- Increase in father involvement: 46% increase in father's presence in household.
- Reduction in criminal activity: 60% fewer arrests of the mother; 72% fewer convictions of the mother.

Cost Benefit

In addition to the randomized controlled trials, several cost benefit analyses have shown positive results from NFP.

A 2005 RAND Corporation analysis found a net benefit to society of \$34,148 (in 2003 dollars) per family served, with the bulk of the savings accruing to government. This equates to a \$5.70 return for every dollar invested in NFP. The analysis also found that for the higher-risk families participating in the first trial in Elmira, New York, the community recovered the costs of the program by the time the child reached age four, with additional savings accruing throughout the lives of both mother and child.⁴

In a 2004 study by the Washington State Institute for Public Policy, NFP ranked highest in terms of cost return among pre-kindergarten, child welfare, youth development, mentoring, youth substance prevention, and teen pregnancy prevention programs at \$2.88 benefit per dollar of cost.⁴

What Does Health Care Reform Legislation Mean for Nurse-Family Partnership?

As a result of the new legislation and the mandatory funding to support home visitation programs, services will be expanded to help meet the maternal child care needs of vulnerable families across the country.

It is anticipated that the Health Resources and Services Administration (HRSA) will be the designated lead federal agency for the new Home Visiting Program and will collaborate with the Administration for Children and Families. States will be given the opportunity to apply for grants through the legislation to help implement evidencebased home visitation models that improve maternal and child health, development, education, and economic selfsufficiency, among other outcomes.⁵

The application process for these grants will set outcomes or benchmarks that must be met, including measurable improvements in health, educational, and economic disparities that are often factors that hinder vulnerable parents and their children from succeeding. States like North Carolina that have existing NFP programs are naturally well-positioned to secure federal grant funding to sustain and expand their programs.

The availability of the new federal funds would strengthen current NFP sites in North Carolina and provide the opportunity to expand the program to other communities across the state.

Moving Forward

NFP is a proven, tested program. The partnership supporting NFP in North Carolina recognizes this and continues to work on building the program and positioning it as a strong, viable home visitation program in North Carolina. The support provided by the partnership and the existing work happening at each of the state's NFP sites helps prepare the state as the federal grant money becomes available for home visitation programs.

The leadership and vision is in place, the program is proven, and the need exists throughout the state for the benefits a program like NFP can provide. **NCMJ**

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Running the Numbers

A Periodic Feature to Inform North Carolina Health Care Professionals about Current Topics in Health Statistics

Projected Changes in North Carolina Health Insurance Coverage due to Health Reform

One of the most visible changes due to the passage of the Patient Protection and Affordable Care Act is the expected expansion of health insurance coverage. The Congressional Budget Office (CBO) has projected the effects of these provisions on health insurance coverage for residents of the United States. For example, the CBO predicts that in 2014, 89% of nonelderly Americans will be insured. However, there are many reasons to expect that the national experience will differ from the experience in each state. The current policy landscape and demographics in each state not only affect the current coverage rate in each state, but also play a major role in how effective the various provisions will be in increasing health insurance coverage. For example, the proportion of individuals that is undocumented immigrants (and thus ineligible for many federal programs), current rating rules for nongroup insurance policies, current Medicaid eligibility, the income distribution, and the size of firms in the state all affect the current coverage as well as partially determine the magnitude of the coverage increase expected from the provisions.

We sought to develop estimates of the population that would be eligible, and ultimately take-up, insurance coverage under the various provisions. At the time of this writing, there are no state-specific estimates, although there are researchers across the country working on such estimates, each with slightly (sometimes considerably) different methodological approaches. For example, the CBO utilizes a microsimulation model to project coverage nationally out to 2019,¹ the North Carolina Division of Medical Assistance used various data sources to estimate Medicaid coverage,² and the Kaiser Commission on Medicaid and the Uninsured commissioned state-specific Medicaid estimates.³

More details on our approach are available by contacting the North Carolina Institute of Medicine directly, but the general approach is as follows:

- 1. Use the two most recent years of the Current Population Survey Annual Social and Economic Supplement, a representative sample of North Carolina residents.
- Project these data forward to 2011 and to 2014, adjusting age (based on the North Carolina Office of State Budget and Management projections) and insurance coverage (based on trends from 2000-2008).
- 3. Sequentially test each uninsured individual for eligibility and simulate take-up in the various insurance programs based on rates in published evidence.

The following insurance programs were used to project North Carolina's 2011 and 2014 populations with health coverage, respectively:

- "Woodwork"^a Medicaid: North Carolinians currently eligible for Medicaid, but not enrolled (2011 and 2014).
- Medicaid expansion: North Carolinians qualifying under the expansion to 133% of federal poverty level (FPL) (2014).

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a "Woodwork" refers to individuals who are currently eligible for Medicaid but "come out of the woodwork" due to an expansion.

- Dependent child under Employer Sponsored Insurance (ESI): North Carolinians ages 18-26 qualifying as a dependent under their parent's group coverage (2011 and 2014).
- Federal high risk pool: North Carolinians qualifying for the federal high risk pool (2011).
- Exchange subsidy: North Carolinians who qualify for a subsidy in the health insurance exchange (2014).
- Full and partial tax credit: Employees of small businesses whose firm qualifies for a full or partial tax credit and offers coverage that the employee accepts, but the firm would not have offered in the absence of the tax credit (2011 and 2014).
- Uninsured: North Carolinians who either do not qualify for any of the provisions or do not participate in those for which they do qualify.

Table 1 presents the estimated take-up in each program for 2011 and 2014. The "uninsured under status quo" is the number of North Carolinians who are projected to be uninsured under the status quo (without health reform provisions). The various provisions are projected to decrease the number of uninsured North Carolinians by roughly 250,000 in 2011 and 700,000 in 2014. Note that the table does not include the total take-up in each program, only those by the uninsured. For example, individuals who would be insured through a private plan without health reform who instead become covered under Medicaid under health reform ("crowd out") are not included in the estimates below.

Provision	2011	2014
"Woodwork" Medicaid	52,000	167,000
Medicaid Expansion	*	259,000
Dependent Child Under ESI	173,000	137,000
Federal High Risk Pool	7,000	*
Exchange Subsidy	*	106,000
Full Tax Credit	7,000	5,000
Partial Tax Credit	19,000	14,000
Uninsured	1,337,000	1,013,000
Uninsured Under Status Quo	1,596,000	1,701,000
Total Non-Elderly	8,505,000	8,870,000
Percent non-elderly uninsured (without health reform)	18.8%	19.2%
Percent non-elderly uninsured (with health reform)	15.7%	11.4%

Table 1.
Estimated Take-Up by the Uninsured in Specific Coverage Initiatives in 2011 and 2014

After the bulk of the coverage programs are enacted in 2014, 11.4% of nonelderly North Carolinians are projected to be uninsured, compared with the projected 19.2% if the health reform coverage initiatives were not implemented. Thus, the number of uninsured will be cut roughly in half. We would expect more of the uninsured to be covered in later years, as the financial penalty for those who are not exempt and do

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not have insurance increases from \$95/person or 1% of taxable income in 2014, to \$695/person or 2.5% of taxable income by 2016.

Who remains uninsured in 2014? The projected uninsured are roughly 21% undocumented immigrants (CBO estimates about one-third nationally), and about 50% are above 200% of the federal poverty level. Note that the individual penalties associated with lack of individual coverage increase throughout the period from 2014 to 2019.

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Contributed by Mark Holmes, PhD, Department of Health Policy and Management, UNC Gillings School of Global Public Health.

Readers' Forum

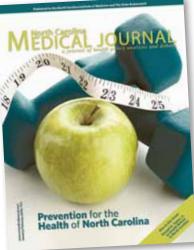
To the editor:

Thank you for highlighting health prevention in the January/February issue of the North Carolina Medical Journal. As a family doctor who practices outpatient and inpatient medicine, I believe in the adage "an ounce of prevention is worth a pound of cure." However I am often frustrated by the lack of payment for providing preventive measures, especially those for the treatment of obesity.

Obesity is known to cause, compound, or influence many major medical conditions that can cause mortality and significant health care costs and morbidity,

such as diabetes mellitus, hypertension, coronary artery disease, osteoarthritis, and infertility.¹ In America, as of 2008, more than 32% of adults and 17% of children ages 2-18 years are obese.² North Carolina's population has a 26% obesity rate among adults.¹ For the first time in history, there is speculation that children may not outlive their parents.

I appreciate the Prevention Action Plan and other initiatives mentioned in the issue that are in place to address physical inactivity and obesity. I believe we must move toward better reimbursement for nutritional consultation, medical office visits, and behavioral intervention when obesity is the primary diagnosis. Currently, insurance reimbursement for obesity treatment is dismal and inconsistent.³⁻⁵ The lack of coverage leaves thousands of children, adolescents, and



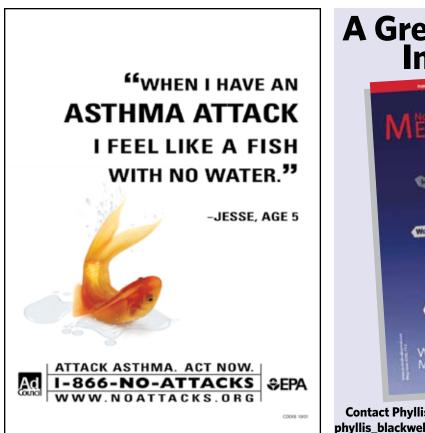
adults with this chronic disease who have no recourse to care except for the brief mention (if any) of preventive measures within the confines of a 15-minute acute care visit or a 30-minute well-check. There is not much opportunity to follow up to aid them in making healthy lifestyle changes and in navigating setbacks and regressions with evidence-based practices for treating obesity. Direct medical costs to the United States health care system are estimated at \$116 million for diabetes mellitus and \$76 billion for hypertension.^{6,7} The cost of

several office visits per year greatly underscores the cost of the multiple office visits, laboratory tests, medicines, and, possibly, specialty visits that accompany obesity-related conditions. We must further recognize the importance of health promotion and wellness with respect to insurance reimbursement for the treatment of obesity.

> Sincerely, Dellyse Bright, MD Assistant Professor, UNC Department of Family Medicine Director, Cabarrus Family Medicine Weight Management Program Concord, NC

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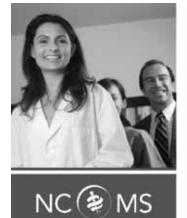
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Insuring Individuals with Medical Conditions

An estimated 1.8 million North Carolinians under age 65 are uninsured. But individuals with serious medical conditions now have a solution: Inclusive Health.

We were created by the State of North Carolina to provide more affordable health insurance coverage for those with pre-existing conditions who lack group coverage. Inclusive Health also covers those who have exhausted their COBRA coverage and trade displaced workers. With premiums capped by the state, we can provide a policy that is less expensive than private insurance coverage.

If you are sick, worry about your health and not your insurance. Call Inclusive Health today.





www.startwithyourheart.com



www.ncstrokeregistry.com

Every Second Counts

from the first moment stroke symptoms appear

If you're having any of the stroke warning signs, get care immediately. Congratulations to the 19 hospitals that have successfully achieved The Joint Commission's Primary Stroke Center Certification.

Carolinas Medical Center

Carolinas Medical Center – Northeast

Duke University Medical Center

First Health Moore Regional Hospital

Forsyth Medical Center and its Affiliates

Frye Regional Medical Center

Gaston Memorial Hospital

High Point Regional Health System

Iredell Memorial Hospital

Mission Hospitals, Inc.

Moses Cone Health System Novant Health, Inc./ Southern Piedmont Region/ Presbyterian Health Pitt County Memorial Hospital Rowan Regional Medical Center Stanly Regional Medical Center Thomasville Medical Center University of North Carolina Hospitals WakeMed Health and Hospitals Wake Forest University Baptist Medical Center

The Joint Commission maintains the current list of North Carolina health care organizations that have achieved a Certificate of Distinction for Primary Stroke Centers. To learn more, please visit <u>www.jointcommission.org</u>.

SPECIALIZED STROKE UNITS:

- Provide methodical and organized stroke care with a three-hour goal from transportation to treatment.
- Provide management of strokes by stroke specialists, including 24-hour access to a timely consult.
- Provide appropriate recognition and management of stroke complications by trained professionals.
- Meet the needs of stroke patients by trained ancillary staff who assist in problems related to health insurance, appointments, and rehabilitation services.
- Provide a better likelihood of recovery by patients as compared to hospital ICUs.

How Many Cases Has Your Attorney Tried?



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