In January 2007, The Joint Commission received funding from the Robert Wood Johnson Foundation to test the implementation of the National Quality Forum (NQF) Endorsed Nursing-Sensitive Care (NSC) Performance Measure Set in a group of volunteer hospitals. During the 24 month period, in keeping with defined project activities and timeframes, the project staff:

- Convened a Technical Advisory Panel (TAP)
- Engaged the Joint Commission’s Nursing Advisory Council (NAC)
- Updated the Technical Specifications and Implementation Guide for the NQF Endorsed Nursing-Sensitive Care Performance Measures
- Recruited and enrolled test sites
- Developed and provided site training
- Developed an electronic data entry and transmission software for the pilot test
- Initiated and completed data collection and transmission
- Supported pilot test sites
- Conducted reliability test visits
- Administered a qualitative survey
- Developed and collected activity logs tracking resources
- Analyzed data and prepared reports

Project staff recruited and selected a stratified random sample of 55 pilot test sites consistent with the proposed project methodology. Site recruitment was initiated in May 2007 using multiple strategies including posting a notice on the Joint Commission web site in May 2007 and via a list serve to all Joint Commission accredited organizations. A total of 276 applications were received and checked for complete information. Of this total, 185 applications were processed through a regression model to randomly identify a sample population representing defined selection criteria. Characteristics of the selected sample of 54 sites include:

- 9 census regions
- 24 states
- 26 teaching hospitals
- 28 non-teaching hospitals
- 11 hospitals with operating beds<100
- 19 hospitals with operating beds 100-299
- 24 hospitals with operating beds 300+

The Colorado Hospital Association (CHA), the 55th test site, had contacted the Joint Commission to explore the possibility of member hospitals participating in the test. This was in response to the Governor of Colorado issuing an Executive Order in March 2007.
establishing a new Nurse Workforce and Patient Care Task Force. In follow-up to deliberations at the Colorado Capitol addressing nurse staffing issues, the Colorado Hospital Association (CHA) proposed establishing a task force to identify quality measures for patient care related to nursing in order to obtain meaningful data that could be publicly reported. Therefore, an additional 20 organizations under the umbrella of the Colorado Hospital Association volunteered to participate in the test.

A Technical Advisory Panel (TAP) was identified to provide advice with respect to project tools, materials and methodology, review the overall project analysis, and recommend potential modifications to the implementation guide for national implementation. An initial conference call with the TAP was held in May 2007 to welcome members, introduce the project, and inform them on activities completed and planned. In August 2007, an in-person meeting of the panel was held at Joint Commission Headquarters. Following an update on project activities, the balance of the day was focused on discussion of project evaluation strategies. Measurement outcomes were discussed and refined. Measure developers also shared experiences and offered resources for extant analysis activities from active measurement initiatives where applicable. Joint Commission statistical staff participated in these discussions.

The Joint Commission’s Nursing Advisory Council (NAC) was utilized throughout the project as a reactor panel to review project findings. The NAC was informed of project progress and findings during their meetings in May and October 2007, and March, June, and September 2008. The multiple perspectives on the NAC have provided insight and real world experience to the TAP respecting the perceived effectiveness of the measures as a set, the effect of the set in assessing and improving care, and the discrimination capabilities of the measure set.

In spring of 2007, each measure developer was contacted to inquire about and obtain any measure-specific changes since development of the implementation guide in 2005. These updates were added to the technical specifications for use in testing the set. The revised Implementation Guide for the NQF-Endorsed Nursing-Sensitive Care Performance Measures was distributed to all volunteer test hospitals in June 2007. Measure developers were contacted again in October 2008, so any measure updates that occurred during the testing period could be considered by the TAP in their final recommendations.

Site training was designed in multiple modules, over the course of the test period, following the framework for data collection. To support a phased-in approach to data collection, a schedule was developed based on data collection frequency and data source. Additionally, a series of conference calls were held to provide on-going support to organizations, as well as providing in-depth measure education. A representative of each measure developer was invited to serve as a guest expert for the respective discussions. Five initial training web cast/conference calls, and five training calls including measure developers were held between June 2007 and May 2008. A training manual was developed to act as a companion to the Implementation Guide and was distributed to all participant test sites.

An electronic tool for data entry and transmission was developed for site use during the test period. Sites were able to enter clinical data directly into the tool and upload administrative data. Sites received the tool and training in September 2007.
Pilot sites began the 12 month data collection period on August 1, 2007, and continued through July 31, 2008. Initially a July 1, 2007 start date was identified for data collection; however in response to site requests for additional start-up time, and to have a uniform data set between the initial 54 sites and Colorado Hospital Association (CHA) participating sites that joined in July 2007, the start date was adjusted to August, 2007. This change did not affect the completion date of the project.

Forty nine of the initial 74 participating sites submitted data for the project; 37 of the 54 pilot test sites and 12 of the 20 sites under the CHA umbrella. Of the 25 sites that did not submit data, reasons given included: lack of resources to collect and enter data; difficulty in the process of installing software or transmission of data; competing priorities necessitating withdrawal from voluntary projects. It should be noted that in other testing The Joint Commission has done recently there has been a similar trend observed. A primary reason for this trend may be related to the ever increasing demand resulting from multiple measurement initiatives at the national, state and local level.

In June 2008, pilot sites were asked to complete a qualitative survey using an on-line survey tool. Invitations were sent to all 74 sites that had initially enrolled in the project inviting them to participate in the survey. The survey was used to gather qualitative data respecting: perceived barriers and limitations to national implementation of the complete measure set; staff effort and resource utilization to collect and transmit the required data relative to the derived benefits; gaps in knowledge between nursing-related measurement and quality of care; staff perceptions respecting the potential for this measure set to influence improvements in nursing care; and, patient quality outcomes.

To assist in understanding resource utilization for the project, including individual measures, each hospital was requested to complete an Activity Status Log at defined monthly intervals between February and July, 2008. The log included information such as total hours dedicated to specific activities, type of individuals involved in project by activity, and activities by individual measure. The experience and lessons learned during the pilot project are of critical importance to the successful evaluation and implementation of the Nursing-Sensitive Care Performance Measures.

Twenty pilot sites were randomly selected for an on-site reliability assessment. Project staff completed 19 on-site reliability visits between April and August 2008. The first visit was used as a trial visit and one visit was not completed due to a last minute airline cancellation that could not be rescheduled within the needed timeframe.

From August through November 2008, the project staff analyzed data and prepared reports based on the reliability data, qualitative survey data, activity logs, and pilot site measure data in preparation for the November 12, 2008 TAP member meeting. The results will also be used to prepare a final report for the Robert Wood Johnson Foundation, update technical specifications in the Implementation Guide for the NQF-Endorsed Nursing-Sensitive Care Performance Measures posted on the Joint Commission web site, and for the upcoming NQF maintenance review process.
The Nursing-Sensitive Care (NSC) Technical Advisory Panel meeting was held at the Joint Commission Headquarters in November 2008. Following a detailed discussion of each individual measure, there was consensus among the members to recommend that each of the measures move forward. The NSC measure set is due to undergo a maintenance review by the National Quality Forum in early 2009. The Hospital Quality Alliance Principals adopted the measure set in December 2008, pending NQF endorsement. The Joint Commission is currently in the process of considering the set as an additional core measure selection option.