

III. Research To Support Case-Mix Refinements to the IRF PPS

A. Research on IRFs

As described in the August 7, 2001 final rule, we contracted with the RAND Corporation (RAND) to analyze IRF data to support our efforts in developing the CMG patient classification system and the IRF PPS. As discussed below, we are continuing our contract with RAND to support us in developing refinements to the classification and PPS, and in developing a system to monitor the effects of the IRF PPS. In addition, under a separate contract, we are developing and defining measures to monitor the quality of care and services provided to Medicare beneficiaries receiving care in an IRF.

B. RAND Research Background

In 1995, the RAND Corporation (RAND) began extensive CMS-sponsored research to assist us in developing a per-discharge based inpatient rehabilitation PPS model using patient classification system known as Functional Independence Measures-Functional Related Groups (FIM-FRGs) using 1994 data. Initial results of RAND's earliest research were revealed in September 1997 and are contained in two reports available through the National Technical Information Service (NTIS). The reports are entitled "Classification System for Inpatient Rehabilitation Patients—A Review and Proposed Revisions to the Functional Independence Measure-Function Related Groups," NTIS order number PB98-105992INZ; and "Prospective Payment System for Inpatient Rehabilitation," NTIS order number PB98-106024INZ.

In summarizing these reports, RAND found in the research based on 1994 data that, with limitations, the FIM-FRGs were effective predictors of resource use based on the proxy measurement: length of stay. FRGs based upon FIM motor score, cognitive scores, and age remained stable over time. Researchers at RAND developed, examined, and evaluated a model payment system based upon FIM-FRG classifications that explains approximately 50 percent of patient costs and approximately 60 percent to 65 percent of the costs at the facility level. Based on this earlier analysis, RAND concluded that an IRF PPS using this model is feasible.

In July 1999, we contracted with RAND to update the earlier study. The update used their earlier research and included an analysis of FIM data, the FRGs, and the model rehabilitation PPS using more recent data from a greater

number of IRFs. The purpose of updating the earlier research was to develop the underlying data necessary to support the Medicare IRF PPS based on case-mix groups for the proposed rule. RAND expanded the scope of their earlier research to include the examination of several payment elements, such as comorbidities, facility-level adjustments, and implementation issues, including evaluation and monitoring. This research was used in our development of the IRF PPS. RAND issued a report on its research which can be found on our Web site at <http://cms.hhs.gov/providers/irfpps/research.asp>.

C. Continuing Research

RAND's data efforts over the past year were concentrated on archiving data from the first phase of the project, constructing the analytic files for monitoring special studies, and preparing for post-IRF data that will be used for monitoring and for refinement. RAND's monitoring effort seeks to measure changes in IRF, post-IRF, and post-acute care after implementation of the IRF PPS. The refinement effort necessitates that the methods used to create the initial set of CMGs weights, and facility adjustments be applied to more recent IRF data.

Section 125(b) of the BBRA provides that the Secretary shall conduct a study of the impact on utilization and beneficiary access to services of the implementation of the IRF prospective payment system. A report on the study must be submitted to the Congress not later than 3 years after the date the IRF prospective payment system is first implemented. Accordingly, to continue RAND's research, data from other health care settings are needed to assess the impact on utilization and beneficiary access to services because the IRF PPS can have an impact among other settings that deliver rehabilitative services. If we only analyzed data from IRFs, our assessment of utilization and access would not be complete. In addition to the data obtained from the IRF Medicare claims, functional measures from the IRF PAI, and cost reports, other data are required that shows the utilization and access of rehabilitative services delivered in other settings, such as skilled nursing facilities, long-term care facilities, home health agencies, and outpatient rehabilitation facilities. Analysis of these data may show changes in utilization of inpatient rehabilitation services and if the types or severity of patients treated in IRFs differs significantly from the data used to create the CMGs, case-mix refinements may be needed.

In the next phase of their research, RAND will be developing and testing possible improvements to the payment system using existing data. This analysis will focus on potential improvements to the methods used to establish the CMGs, facility adjustments (such as teaching, rural, and low-income adjustments), and comorbidities.

In constructing the CMGs for the IRF PPS, one of our primary goals was to create payments that would match payment to resource use as closely as possible. It is important to continue to examine the IRF PPS to ensure that the system remains a good predictor of resource use over time. Further, more complete data will be available in which we can assess the reliability and validity of the IRF PPS. We also expect improvements with certain data elements. For example, prior to implementation of the IRF PPS, IRFs were not required to code comorbidities. As a result of implementing the IRF PPS, we expect that IRFs will improve coding comorbidities because they may affect their payment amount. These improved data will allow us to determine the effects various conditions have on the cost of a case.

RAND will use post-IRF PPS data when it becomes available, as well as existing data to support their research. RAND research includes: analyses of methodological improvements in the creation of CMGs, methodological improvements to the statistical approaches used to derive payment adjustments and characterizing IRFs into groups based on their case mix. As mentioned in Section I of this proposed rule, currently, RAND does not have enough post-IRF PPS data to analyze potential modifications to the classification and payment systems. Further, we will need a sufficient amount of these data to be able to determine our future refinements, if any are needed. Because IRFs began to be paid under the IRF PPS based on their cost report start date that occurred on or after January 1, 2002, sufficient data will not be available for those facilities whose cost report start date occurs later in the calendar year. Therefore, in this proposed rule, we are not proposing to change the CMG classification system or the facility level and case level adjustments, other than the wage adjustment. The proposed changes for the wage adjustment are discussed in detail in Section VI of this proposed rule.

D. Staff Time Measurement Data

As described in the August 7, 2001 final rule, we contracted with Aspen Systems Corporation (ASPEN) to collect