



# Risk assessment for repeated hospital admission: Pra and PraPlus

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## Prediction of Health Assessment Survey Predicts Hospital Readmission Risk for Elderly Patients

The Probability of Repeated Admission (Pra<sup>TM</sup>) elder health assessment survey identifies senior citizens who are at high risk of repeated hospital admissions and extensive use of health care services. The early prediction of hospital readmission risk helps those patients receive better medical attention, which will result in better health for them, and lower expenses for hospitals and senior health insurance programs.

### The Pra<sup>TM</sup> Elder Health Assessment Includes:

- A health questionnaire
- A software-based scoring formula for interpreting the health survey responses
- Survey administration instructions for both mail and telephone surveys
- General survey usage instructions

This elder health assessment survey has been widely adopted by hundreds of health care organizations, insurance companies and universities throughout the United States.

## Repeated Admission Risk Questionnaire Reduces Hospital and Insurance Costs

In the United States, a chronically ill minority of the elderly population accounts for the major part of the group's hospital expenses. Five percent of people enrolled in Medicare, a health insurance program for senior citizens administered by the United States government, incur 55% of the group's hospital days and 62% of its hospital expenses. Of seniors who are hospitalized each year, 33% - 44% are readmitted in the subsequent 1 to 3 years. However, hospitals don't have effective health risk assessment tools for seniors and therefore, fail to provide special care when necessary. By identifying patients at high risk of hospital readmission, the Pra<sup>TM</sup> elder health assessment survey provides guidance to avoid the need for future hospitalization, thereby reducing hospitalization and health insurance costs. The Pra<sup>TM</sup> screening instrument predicts not only hospital use, but also mortality and the use of physicians, ambulances, emergency services and costs of care. This health assessment survey has been validated over time, is inexpensive, fast, and easy to use.

## Screening Criteria in the Pra<sup>TM</sup> Health Assessment Questionnaire

The Pra<sup>TM</sup> elder health assessment survey was developed from extensive data analysis from the Longitudinal Study of Aging (LSOA) conducted by the National Center for Health Statistics and

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## Category

Life Sciences/Medical Devices  
Life Sciences/Research Tools  
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the National Institute on Aging (NIA). The LSOA conducted in-depth interviews with 7527 elderly Americans and then tracked their use of health services through the records of the Medicare program for six years. From the study, eight factors emerged as risks for repeated hospital admission:

- Age
- Male gender
- Poor self-rated general health
- Availability of an informal caregiver
- Having ever had coronary artery disease
- Having had diabetes during the previous year
- A hospital admission during the previous year
- More than six doctor visits during the previous year

Pra™ consists of eight questions based on the risk factors stated above. A scoring formula was developed to estimate the probability of hospital readmission within four years based on the answers to these eight questions.

The PraPlus™ contains nine additional questions about medical conditions, functional ability, living circumstances, nutrition and depression. Responses to these questions give further insight to the risk of hospital readmission for elderly patients.

### **Probability of Repeated Hospital Admissions Questionnaire Widely used in Industry**

The Pra™ elder health assessment survey was developed in 1992 and has been tested over time through separate studies. It has been used by hundreds of healthcare organizations throughout the United States. A report from the Robert Wood Johnson Foundation recommended the Pra™ as the primary indicator of risk for Medicare Health Maintenance Organizations (HMOs). The Health Care Financing Administration (HCFA) requires its use as a condition for federal support of relevant national demonstration projects. The Blue Cross Blue Shield Association recommends its use by its constituent health plans. Health care management consulting corporations recommend the Pra™ to their Medicare HMO clients.

### **References**

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