



# Effective Health Care Predictive Modeling Systems for Post-Acute Care Management Nomination Summary Document

## Results of Topic Selection Process & Next Steps

- Predictive modeling systems for post-acute care management is not feasible for a full systematic review due to the limited data available for a review at this time.

## Topic Description

**Nominator:** Organization

**Nomination Summary:** The nominator is interested in the comparative effectiveness of using predictive modeling data versus traditional care management systems for optimal management of post-acute patient care.

**Staff-Generated PICO:**

**Population(s):** Medicare eligible individuals who have been hospitalized and need post-acute care

**Intervention(s):** Post-acute care management based on a predictive modeling system such as SeniorMetrix products which include: LiveSafe-Frailty and Recovery Management Solutions, LiveSafePro-Postacute Quality and Utilization Management, and LiveSafe Home - Community Based Frailty Management

**Comparator(s):** Traditional care management systems (including functional and needs assessment)

**Outcome(s):** Clinical, utilization, and cost outcomes, as well as patient empowerment

**Key Questions from Nominator:** 1. Compare the effectiveness of using predictive modeling data versus traditional care management systems to empower patients that need care after hospital discharge with information.

## Considerations

- The topic meets EHC Program appropriateness and importance criteria. (For more information, see <http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/>.)
- Millions of patients are discharged from acute care hospitals into post-acute care settings each year in the US. These patients include medically frail elderly patients who have suffered from an acute event such as a stroke or a fall resulting in hip fracture, all of whom are judged unable to return to their

homes without further care. Both clinical and nonclinical factors influence the type, duration, and intensity of post-acute care. There is no current standardized patient assessment tool available at discharge from the acute care setting; therefore, there is significant variation in post-acute care management among patients in the US.

- While this topic is important, only a few publications were found on the nominator's predicative modeling system of interest. These studies were not evaluating the effectiveness of the system but are validation studies of functional measurement via a retrospective analysis of secondary data from an administrative dataset provided by the nominator's system. Furthermore, a broader search of the literature for tools that predict post-acute care placement and outcomes did not yield any relevant comparative effectiveness literature. Therefore, the topic of predictive modeling systems versus other proprietary programs or traditional care management services is not feasible for a full systematic review due to the limited data available of a review at this time.