Reduce emergency and hospital utilization among the senior population

Research shows predictive analytics combined with tailored interventions reduces avoidable hospitalizations and costs.¹

**At a glance**

**Objective**
Utilizing a randomized controlled trial, evaluate the impact of predictive analytics and tailored interventions on healthcare utilization of mid-acuity patients.

**Patient population**
370 mid-acuity patient sample with similar demographics divided into:
- Intervention group receiving tailored intervention
- Control group receiving care as usual

**Results**

- 61% fewer 90-day readmissions with corresponding triple decrease of proportion of patients with any 90-day readmission.²
- 46% decrease in 180-day readmissions
- 49% decrease in 180-day Emergency Medical Services (EMS) encounters
Reducing avoidable hospitalizations and costs

Philips and Partners HealthCare initiated a randomized controlled trial (RCT)\(^1\) to identify senior patients at high risk, leveraging the Philips Cares Senior Care Management solution to trigger personalized care interventions for those patients. The study evaluated healthcare utilization, measured by 90- and 180-day hospitalizations and re-hospitalizations, and healthcare cost, along with other measures, demonstrating both a decrease in readmission rate and Emergency Medical Services (EMS) encounters.

The study population was randomized into control and intervention groups, with 3 months of observation period followed by 6 months of active intervention and engagement. While the control group received care as usual, the intervention group received care according to the “Stepped-care approach” depicted in Figure 1.

Any patient in the intervention group flagged as high risk through the Philips Cares predictive analytics algorithm was triaged by the study nurse who completed a needs assessment with the patient. Based on the needs identified and clinician’s input, if needed, a personalized intervention plan was assigned to the high risk patient. The intervention plan assigned may have included patient education over a four-week period, home visits or tele-monitoring.

Compared with the control group, the intervention group had:

- 61% fewer 90-day readmissions with corresponding triple decrease of proportion of patients with any 90-day readmission\(^2\)
- 46% fewer 180-day readmissions
- 49% fewer 180-day EMS encounters

Philips Cares predictive analytics helps identify patients at emerging risk and, combined with tailored interventions, helps prioritizes senior patients needing care across the mid-acuity segment. With lower-cost solutions to proactively manage patients in their home and intervene before their health conditions escalate to needing emergency transport, you can help reduce the burden on your care teams and improve outcomes.

Figure 1 - The Stepped-care approach

Contact your sales representative for publication of trial results and to explore how the Philips Cares Senior Care Management solution can help your organization reduce avoidable hospitalizations and costs.

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\(^{2}\) 10.4% control vs. 3.1% intervention group