Health Care Utilization Outcomes for LifeCourse Patients

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LIFECOURSE
• Builds upon an expanded set of palliative care domains to promote whole person care
• Uses a family-oriented approach to understand needs, leverage strengths, and empower families to effectively support their loved ones
• Asks patients and caregivers to articulate individualized goals and take part in decision making
• Includes a trained lay healthcare worker as the primary contact across settings and over time

BACKGROUND
Health systems in the U.S. are faced with increased utilization for patients in their last years of life. Care for patients with serious illness is complex and requires a greater number of clinicians and care settings. This can contribute to duplicative and unwanted medical procedures. As a large portion of the population approaches retirement, health systems must redouble efforts to better serve patients as they near the end of life.

RESEARCH OBJECTIVE
To evaluate the effects of a late life care model on healthcare utilization and cost in a large healthcare delivery system.

STUDY
LifeCourse is a patient-centered intervention which leverages a layperson care guide to build upon an expanded set of palliative care domains. Care guides meet with patients, their family members and clinicians to help patients articulate goals, take part in decision making, and connect with resources. LifeCourse is a non-randomized prospective study of 450 intervention and 452 usual care patients followed between October 2012 and August 2016. Patients and controls were selected based on diagnosis, disease progression, and comorbidity mix (Table 1).

ANALYSIS
Using zero-inflated negative binomial regression models we tested whether participation in LifeCourse resulted in decreased utilization and total cost of care claims data available was selected from within the healthcare system’s patient population and from the full study sample for the cost analysis. Cost controls were matched using propensity scores. To assess the potential impact of the intervention on cost, we examined expenditures in the follow-up period by applying multivariable gamma regression models with a log link and a vertical reference line indicate lower utilization in LifeCourse patients compared to usual care.

FINDINGS
On average, patients in the intervention group experienced:
• 16% fewer ED visits (IRR = 0.84; 95% CI: 0.71-0.99)
• 27% fewer inpatient stays (IRR = 0.73; 95% CI: 0.61-0.88)
• 57% fewer ICU stays (IRR = 0.43; 95% CI: 0.24-0.75)

Overall, % 42.8 17.3 48.6 43.2 0.426
Heart Failure 24.9 44.4 38.9 0.514
Cancer 32.8 58.8 56.5 0.863
Dementia 26.3 49.0 25.0 0.613
LOS, median days 18.7 18.0 27.5 17.0 0.041

LIMITATIONS
• Utilization models reflect internal metrics only. Any healthcare utilization at external networks will be unmeasured
• Findings may not be representative of the experience for all patients. As a result, the findings should be interpreted with caution and cannot be reliably extrapolated to the entire population

CONCLUSION
Our findings suggest that when a whole-person approach to care is used and patients’ preferences are known there is a beneficial impact on health care utilization and total cost of care in late-life.

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