Executive Summary: Nurse Practitioner Clinical Engagement Pathway

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Main Points

- Patients engaged by nurse practitioners (NPs) post-telehealth experienced an 81.8% drop in hospitalizations, versus 71% for non-engaged patients, indicating NP follow-up may influence outcomes.
- Risk scores stayed the same despite fewer hospital admissions, likely because recent admissions kept patients classified as high-risk.
- Improved NP Job Satisfaction: After the intervention, NPs reported a 73.7% increase in job satisfaction and a 37.5% rise in perceived impact on patient care, indicating professional benefits from deeper engagement.
- Out of 15 patients, 10 were contacted, and only one completed all four follow-ups, highlighting difficulties in maintaining engagement.
- NPs noted patients valued follow-up care, citing successes like timely wound interventions and improved care coordination.
- Feasibility Concerns: NPs said 1–3 follow-up calls per patient were manageable; more contacts may be unfeasible due to workload and patient contact issues.
- The project aligned with organizational goals to reduce hospitalizations without extra staff, showing potential for scalable integration if supported by leadership and workflow support.

Background and Problem

End-Stage Renal Disease (ESRD) affects over 800,000 individuals in the United States, many of whom require dialysis (Adeyemi et al., 2022). This population faces a substantial risk of hospitalization and readmission, particularly within thirty days following discharge.

Approximately 35.4% of ESRD patients are readmitted within this timeframe, incurring costs to Medicare exceeding $12 billion annually (Li et al., 2021). Hospitalizations are frequently associated with comorbid conditions such as diabetes, hypertension, cardiovascular disease, and issues related to poor treatment adherence (Surasura, 2024). Despite the recognized importance of post-discharge care, nurse practitioners (NPs) within the partnering organization have traditionally only performed annual telehealth assessments with limited follow-up. This lack of continuity represents a missed opportunity to prevent avoidable hospital admissions.

Purpose and Objectives

The goal of this Doctor of Nursing Practice quality improvement project was to develop and implement a Nurse Practitioner Clinical Engagement Pathway to:

- Reduce hospitalizations and readmissions in high-risk ESRD patients.
- Enhance patient engagement and continuity of care after telehealth visits
- Enhance NP job satisfaction and their perceived impact on patient care

The central intervention involved NP-initiated follow-up phone calls at multiple intervals following the annual telehealth assessment.

Methods

This project used a retrospective cohort design and the Plan-Do-Study-Act (PDSA) model to guide implementation. The intervention lasted 12 weeks and included:

- Participants: 15 ESRD patients identified as high utilizers (≥3 hospitalizations within 180 days) or at risk of readmission (hospitalized within the past 90 days)
- NP Involvement: 5 NPs made 4 follow-up phone calls per patient over a 10-week period.

- Data Collected: patient demographics, contact status, hospitalization records, risk scores, and NP satisfaction surveys

Calls included health assessments, care coordination, education reinforcement, and documentation in the EHR. NPs attempted three calls per check-in and logged outreach results.

Results

Patient Outcomes:

- Hospitalizations among engaged patients dropped by 81.8% (from 1.1 to 0.2 per patient)
- Non-engaged patients experienced a 71% decrease (from 1.1 to 0.4).
- Engaged patients experienced an 11% reduction in hospitalization rate after the intervention.
- No notable changes in risk scores.

NP Outcomes:

- Job satisfaction increased by 73.7% (from 3.8 to 6.6)
- Perceived patient impact increased by 37.5% (from 6.4 to 8.8)

Discussion

The intervention led to fewer hospitalizations among ESRD patients who received follow-up calls, supporting the role of NPs in enhancing outcomes through ongoing engagement. Although risk scores remained unchanged, the reduction in admissions is clinically significant. NPs also reported higher satisfaction and perceived greater impact, which could help reduce burnout. Limitations of the study included challenges in engaging patients and a short implementation period.

Implications for Practice

This model is scalable, cost-effective, and seamlessly integrates into NP workflows. Benefits include cost savings, improved continuity of care, enhanced patient outcomes, and increased workforce satisfaction.

Recommendations and Next Steps

1. Expand follow-up protocols to include 1–2 standard NP calls post-telehealth

2. Update NP workflows

4. Utilize data tools to identify high-risk patients effectively

5. Extend engagement timelines to assess long-term outcomes more effectively.

References

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