

Nurse-Led Telehealth Model for Chronic Care Management in Correctional Facilities:

A Quality Improvement Capstone Project

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Abstract

Incarcerated adults face barriers to timely chronic care due to staffing shortages and costly off-site transfers. This quality improvement project proposes a nurse-led telehealth model at a medium- to maximum-security facility to improve access to care for chronic conditions (i.e., hypertension, diabetes, hepatitis C, asthma, etc.). Evidence supports reduced transfers and follow-up delays, with ethical safeguards and Healthcare Effectiveness Data and Information Set (HEDIS) benchmarking ensuring equity. The project aligns with the American Association of Colleges of Nursing (AACN) Essentials competencies in quality/safety, informatics, and health equity, preparing advanced practice nurses to lead innovative solutions for vulnerable populations.

Keywords: telehealth, nurse-led, correctional, chronic care management, health equity.

Introduction

Inadequate, timely, and equitable healthcare access for chronic conditions in United States correctional facilities poses a significant challenge to nursing practice. Staffing shortages, limited on-site specialists, and reliance on off-site transfers contribute to prolonged symptoms, higher costs, security risks, and worsened disparities, particularly in an aging population where incarcerated individuals experience high rates of chronic illnesses, often undertreated compared to the general population (Winny & Rosen, 2023).

As outlined in the American Association of Colleges of Nursing (AACN) Essentials, professional nursing education at the MSN level emphasizes competencies in quality improvement, systems-based practice, informatics, and health equity to prepare nurses for leading evidence-based innovations in complex environments (AACN, 2021). This capstone proposes a nurse-led telehealth model to address these gaps, enhancing continuity of care and aligning with advanced practice expectations for patient-centered, technology-enabled care.

Background & Literature Review

Chronic conditions are prevalent among incarcerated adults, yet undertreatment during incarceration increases mortality and incarceration recidivism (Novisky et al., 2025). In a medium- to maximum-security facility (~1,200 inmates), baseline issues include 15 off-site transfers per 100 inmates/month for low-acuity needs and specialist follow-up delays ≥ 14 days. These problems are exacerbated by challenges in rural physician recruitment (Rosen et al., 2023).

Systematic evidence supports the effectiveness of telehealth in prisons: improved access, high satisfaction, cost savings from reduced transport, enhanced continuity of care for diabetes/hypertension, and sustained outcomes amid disruptions (Tierney et al., 2023). Nurse-led

models reduce wait times by >25% and reduce reliance on off-site specialists through remote access to specialists and hybrid workflows (Hewson et al., 2024). These align with AACN (2021) Essentials domains of Scholarship for Nursing Discipline (evidence translation) and Informatics/Healthcare Technologies (technology integration for care delivery). Benchmarks include National Commission on Correctional Health Care (NCCHC) standards for chronic care management/timely access, the National Committee for Quality Assurance (NCQA) HEDIS, and the Comprehensive Diabetes Care measures (National Commission on Correctional Health Care [NCCHC], 2022; National Committee for Quality Assurance [NCQA], n.d.).

Telehealth implementation in correctional settings has also demonstrated significant reductions in transportation-related security risks and overall healthcare costs, while maintaining clinical outcomes comparable to those of in-person care (Tierney et al., 2023). Recent studies highlight that nurse-facilitated telehealth models are particularly effective in rural and resource-limited facilities by leveraging on-site staff for vital signs, guided exams, and real-time documentation, thereby addressing both access barriers and workforce shortages (Hewson et al., 2024). Furthermore, the integration of telehealth aligns with NCCHC's (2022) position statements, which emphasize timely specialty care and continuity of care for chronic disease management in prisons. This body of evidence provides a strong foundation for scaling nurse-led telehealth interventions to improve equity and efficiency in correctional healthcare delivery.

Ethical & Policy Considerations

Correctional telehealth raises ethical risks due to vulnerability, power dynamics, and potential disparities. The model upholds AACN Essentials competencies in ethical decision-making, social responsibility, and equity by prioritizing voluntary consent, Health Insurance Portability and Accountability Act (HIPAA) compliant platforms, equity audits, and

cultural/linguistic adaptations (i.e., interpretation services, low-literacy materials) (AACN, 2021; National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 2022). Additionally, the model incorporates safeguards for privacy and confidentiality, such as dedicated private consultation spaces and protocols ensuring care quality equivalent to in-person encounters, to protect sensitive health information and maintain ethical standards in this high-security context.

Principles include autonomy (i.e., informed voluntary participation), beneficence (i.e., reduced delays/undertreatment), non-maleficence (i.e., technical redundancies), justice (i.e., disparity mitigation), and fidelity (i.e., trust-building). Policy advocacy includes targeted funding for correctional telehealth infrastructure, integration into NCCHC standards specifically for virtual chronic care delivery, and reimbursement reforms tailored to justice-involved populations to reduce disparities in access (NCCHC, 2022; Williams et al., 2024). These efforts collectively support the advancement of equitable, technology-enabled healthcare delivery in correctional settings and align with the AACN (2021) Essentials competencies for social responsibility and systems-based practice.

Proposed Intervention or Solution

The 12-week intervention (launch June 1st, 2026) targets adults (≥ 18) with chronic conditions in a medium-security facility. On-site RNs facilitate secure video consultations, such as tele-presenters (vitals, history, guided exams, education, electronic health record (EHR) documentation), and integrate remote monitoring tools to replace low-acuity off-site transfers (Williams et al., 2024). Sessions (3–5/week) cover follow-ups and management, with cultural tailoring and risk mitigation (i.e., Plan-Do-Study-Act (PDSA) cycles, trust sessions, redundancies) (Capodici et al., 2025). SMART goal: Achieve $\geq 30\%$ reduction in off-site transfers

(from 15 to ≤ 10.5 per 100 inmates/month) and decrease specialist follow-up wait times to ≤ 7 days, as measured by EHR and referral logs. This reflects AACN Essentials in Quality/Safety and Systems-Based Practice (AACN, 2021).

Implementation will begin with staff training on telehealth platforms and secure documentation protocols during the two weeks prior to launch. Weekly interdisciplinary huddles will monitor progress, address technical barriers, and adjust workflows in real time using PDSA cycles. Expected outcomes include improved continuity of care, higher patient satisfaction, and more efficient use of limited on-site resources, ultimately supporting better chronic disease management within the correctional setting.

Evaluation Plan

Quantitative measures will track key patient outcomes at the micro (clinic) level, including reduction in off-site transfers, average follow-up time (target ≤ 7 days), referral completion rate ($\geq 85\%$), no-show rate ($\leq 10\%$), chronic condition screening rate ($\geq 95\%$), and completion of individualized care plans ($\geq 95\%$). NCQA HEDIS Comprehensive Diabetes Care provides validated benchmarks (75th percentile targets) (NCQA, n.d.). Qualitative surveys anticipate themes of satisfaction and continuity (Hewson et al., 2024). PDSA cycles address challenges (i.e., documentation biases) (Rosen et al., 2023). This aligns with AACN Essentials in Scholarship outcome evaluation and Quality/Safety data-driven improvement (AACN, 2021).

Data collection will occur through secure EHR queries and standardized referral logs at baseline, week 6, and week 12 to enable timely trend analysis. Post-intervention semi-structured interviews with participating inmates and RN telehealth facilitators will supplement quantitative findings and identify contextual barriers unique to the correctional environment. Triangulation of these mixed-methods results will strengthen the validity of conclusions and inform scalability of

the telehealth model to other facilities (Williams et al., 2024). Overall, this evaluation framework ensures rigorous, evidence-based assessment while promoting continuous quality improvement in chronic disease management within a resource-constrained setting.

Conclusion

This project synthesizes evidence for nurse-led telehealth as an effective, sustainable solution to chronic care inequities in correctional settings. Key lessons learned include the power of structured quality improvement frameworks, such as SMART goals and PDSA cycles to drive measurable, lasting change; the necessity of unwavering ethical rigor when serving vulnerable populations where power imbalances and systemic disparities are pronounced; and the critical role of interdisciplinary collaboration among Psychiatric Mental Health Nurse Practitioners (PMHNPs), on-site RNs, and IT specialists in successfully navigating barriers like technical limitations, institutional resistance, and scheduling constraints (Edge et al., 2021).

At the sustainability level, the on-site nursing supervisor and facility medical director will be responsible for ongoing oversight. Outcomes will be reviewed quarterly through EHR audits and team meetings. The intervention will be considered successful and sustainable if the $\geq 30\%$ reduction in off-site transfers and ≤ 7 -day follow-up target are maintained for at least two consecutive quarters, with HEDIS benchmark achievement and stakeholder feedback scores $\geq 85\%$ satisfaction.

The AACN Essentials reinforce MSN-level competencies in leadership, innovation, equity, evidence-based practice, and systems-based practice, equipping advanced practice nurses to champion technology-enabled care models that extend beyond traditional boundaries (AACN, 2021). This capstone experience has deepened my understanding of how nurse-led innovations can directly address longstanding gaps in correctional healthcare, while simultaneously preparing

me to lead policy advocacy, secure sustainable funding, and integrate ongoing evaluation to scale effective interventions. This strengthens my personal and professional commitment to improving health outcomes for justice-involved populations, reducing the cycle of undertreated chronic illness, supporting safer community reentry, and advancing health equity for one of society's most marginalized groups (Novisky et al., 2025).

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