Curatio : Journal of Advanced and Specialized Nursing, and Care Planning
E- ISSN : 3064-4089
Volume. 2 Issue 3 July 2025
Page No: 149-161

Digitally Enabled Nursing: Evaluating Remote Patient Monitoring for Post-Discharge Risk Reduction

Rusman
Universitas Islam Makassar, Indonesia
Correspondent: rusman.dty@uim-makassar.ac.id

Received : June 5, 2025
Accepted : July 18, 2025
Published : July 31, 2025

Citation: Rusman, (2025). Digitally Enabled Nursing: Evaluating Remote Patient Monitoring for Post-Discharge Risk Reduction. Curatio : Journal of Advanced and Specialized Nursing, and Care Planning, 2(3), 149-161.

https://doi.org/10.61978/curatio.v2i3.1401

ABSTRACT: Transitional care presents heightened risks of readmissions and adverse events. Remote Patient Monitoring (RPM) offers a promising solution by enabling continuous data collection and real-time alerts during this vulnerable period. This study evaluates the impact of RPM on nursing workflow efficiency and patient safety in post-discharge settings. Using a mixed-method observational design, 200 discharged patients were divided into RPM and non-RPM groups. Nurses tracked patient vitals, workflow time, and clinical outcomes, while interviews captured qualitative insights into system usability and staff adaptation. RPM integration reduced readmission rates from 15% to 8% and increased early clinical interventions by 116%. Nursing time for manual vital checks decreased by 72%, while time spent interpreting data increased. Although nurses reported increased cognitive load and occasional alarm fatigue, they also expressed greater confidence in decision-making. Data analysis tools and alert customization were cited as key enablers. Challenges included false positives and the need for enhanced training. Workflow redesign and policy support emerged as critical factors in sustaining RPM's benefits. RPM significantly improves patient safety and nursing efficiency in transitional care when supported by appropriate training and organizational alignment. These findings highlight the need for systemic integration strategies that promote sustainability and clinical impact.

Keywords: Remote Patient Monitoring, Transitional Care, Nursing Workflow, Readmission Prevention, Digital Health, Early Warning Systems.

INTRODUCTION

The transition from hospital to home represents a critical juncture in the continuum of patient care. During this phase, individuals are particularly vulnerable to adverse health outcomes, often due to fragmented communication, insufficient follow-up, and complexities in managing chronic or multiple comorbid conditions. As healthcare systems increasingly shift toward shorter hospital stays and outpatient recovery models, the role of nursing in ensuring safety during transitional care has become both prominent and challenging. The rising incidence of hospital readmissions during this period underscores the pressing need for more efficient, accurate, and proactive care strategies.

Transitional care carries a notable risk for adverse events, particularly for older adults and those burdened with complex health needs. Evidence suggests that this period is frequently marred by medication errors, lapses in care coordination, and limited access to timely interventions (Acosta et al., 2023; Sezgin et al., 2020). Patients discharged with cognitive impairments face additional obstacles, as they are often placed in environments lacking adequate support, further heightening their risk of complications and readmission (Burke et al., 2016). Studies affirm that unplanned hospital readmissions resulting from such vulnerabilities remain a systemic challenge, with implications for both individual outcomes and healthcare resource utilization (Duncan et al., 2021).

Conventional post-discharge nursing practices, while foundational, rely heavily on resource-intensive approaches. These include follow-up telephone calls, home visits, and the coordination of community-based support, all aimed at preserving continuity of care (Yang et al., 2022). Nurses routinely perform medication reconciliation, health education, and risk screening efforts that are central to preventing complications arising from non-adherence or misunderstanding of discharge instructions (McNab et al., 2017; Schnipper et al., 2020). The involvement of pharmacists in transitional teams has also emerged as a significant factor in reducing medication-related errors, reinforcing the importance of interprofessional collaboration (Layman et al., 2020). However, these traditional approaches are often limited in scalability and lack the immediacy required to address early signs of clinical deterioration.

Remote Patient Monitoring (RPM) technologies have emerged as transformative tools within transitional care frameworks. RPM enables the continuous collection and transmission of physiological data such as blood pressure, oxygen saturation, and body weight providing clinicians with timely insights into a patient's evolving condition. Studies have shown that RPM interventions not only reduce readmissions but also foster patient engagement, improve adherence to therapeutic regimens, and support early clinical interventions (Bashi et al., 2017; Couture et al., 2024). The evidence from systematic reviews confirms RPM's utility in chronic disease management, particularly when applied to patients with heart failure, diabetes, or COPD conditions often implicated in post-discharge complications (Bashi et al., 2017).

In parallel with the integration of these technologies, the nursing profession is undergoing a significant transformation. Nurses are acquiring digital competencies that expand their roles beyond traditional bedside care to include remote surveillance, data interpretation, and digital communication (Araya et al., 2023; Guilcher et al., 2020). This evolution supports a more patient-centered and anticipatory model of care, where nurses can act on real-time alerts and trends to initiate early interventions (Khoiriyati et al., 2021; Wray & Jones, 2023). The shift toward digital nursing practice underscores the profession's adaptability and its essential role in health system innovation.

Despite the promise of RPM, barriers to its effective implementation persist. A major concern lies in the digital divide, particularly among older adults or populations in rural and underserved areas who may lack access to the requisite technology (Gilmartin et al., 2022). Interoperability issues between different health systems further complicate integration efforts, impeding seamless data sharing and real-time decision-making (Khoiriyati et al., 2021). Patient apprehension and resistance to using unfamiliar technology have also been documented, often rooted in anxiety, low health literacy, or a perceived burden of engagement (Duncan et al., 2021). These challenges must be addressed to realize the full potential of RPM as a mainstream transitional care solution.

Importantly, RPM systems are proving to be instrumental in the early detection of clinical deterioration. Continuous monitoring allows for the identification of subtle but significant changes in a patient's vital signs, enabling timely clinical responses that can avert more serious health events (Bashi et al., 2017). This proactive approach is especially critical for patients with chronic illnesses, whose conditions may fluctuate unpredictably and require dynamic adjustments in care plans (Wray & Jones, 2023). By alerting healthcare providers to deviations from normal ranges or patterns, RPM empowers the nursing workforce to intervene promptly, thereby improving safety, enhancing outcomes, and potentially lowering healthcare costs (Bashi et al., 2017).

In light of the above, this study explores the integration of digital monitoring tools into nursing workflows during transitional care. The research investigates how RPM affects nurse workload, task distribution, and patient safety outcomes, particularly the rate of early interventions and hospital readmissions. The novelty of this study lies in its focus on workflow adaptation a crucial but often overlooked dimension of digital health implementation. By examining not only the clinical outcomes but also the operational implications for nursing practice, this research contributes to the emerging discourse on data-driven, patient-centered care. We hypothesize that embedding RPM into transitional care pathways will reduce the burden on nurses while simultaneously enhancing patient safety through earlier detection and response to clinical risks.

METHOD

Study Design

This research employed a mixed-method observational study to evaluate the integration of Remote Patient Monitoring (RPM) tools into transitional nursing care. Mixed-method designs offer a comprehensive approach to assessing healthcare technology by combining objective outcome measures with subjective user experiences (Cho et al., 2022). Specifically, this study followed an explanatory sequential approach, first collecting quantitative data on safety outcomes and workflow metrics, then conducting qualitative interviews to contextualize and interpret the results. This dual strategy is particularly suited for healthcare technology evaluations, as it reveals not only the measurable impact but also the operational and emotional dimensions experienced by clinical staff (Racy et al., 2021; Redley et al., 2020).

Study Setting and Participants

The study was conducted across two settings: hospital discharge units and affiliated home care services. A total of 200 patients recently discharged from medical wards were enrolled and stratified into two equal groups: 100 received standard post-discharge care, and 100 were assigned RPM-supported transitional care. RPM kits included Bluetooth-enabled devices (blood pressure cuff, pulse oximeter, and digital scale), accompanied by a mobile app for daily symptom reporting. Participating nurses included hospital discharge planners and community care coordinators responsible for post-discharge monitoring.

Data Collection Procedures

Quantitative Data

Data collection focused on three primary datasets:

- Clinical Metrics: Included systolic and diastolic blood pressure, oxygen saturation (SpO_2), body weight, and patient-reported symptoms. These were transmitted daily from RPM devices to the clinical monitoring dashboard.
- Workflow Logs: Nurses recorded time spent on manual vital checks, documentation, and interpreting RPM data. This was complemented by automated system logs to verify task durations.
- Patient Safety Outcomes: Metrics included 30-day hospital readmission rates, number of early interventions (e.g., medication changes, urgent referrals), and nurse-reported safety incidents.

Standardization of safety metrics such as readmissions and incident reporting was critical for comparison and ensured consistency with best practices in RPM studies (Schroeder et al., 2020).

Qualitative Data

Semi-structured interviews were conducted with 12 nurses involved in transitional care. These interviews explored perceptions of workload, usability of RPM interfaces, and changes in patient interaction. Data from these sessions were transcribed and thematically analyzed. The use of qualitative methods, including narrative accounts and reflective dialogue, aligns with practices recommended for context-sensitive evaluations of health technology (Redley et al., 2020).

Measures and Instruments

Nurse Workload Assessment

Workload was evaluated using both objective and subjective tools:

- Nursing Activities Score (NAS): Captured the frequency and complexity of direct and indirect nursing tasks.
- NASA Task Load Index (NASA-TLX): Provided subjective ratings on mental, physical, and temporal demands, allowing correlation with actual workflow data.
- Time-Motion Observations: Observers conducted random shadowing of nurses to validate log-reported and system-recorded task times.

Patient Safety Metrics

Patient safety was primarily assessed through:

- 30-day readmission tracking (electronic health records)
- Number of early clinical interventions prompted by RPM alerts
- Incident reports filed by nurses regarding adverse events or near misses

Continuous feedback loops between clinical users and study monitors enabled adaptive refinement of protocols during the study, following best practice in healthcare technology evaluation (Ivziku et al., 2021).

Data Analysis

Quantitative data were analyzed using descriptive statistics and paired t-tests for within-group comparisons. Between-group comparisons (RPM vs. non-RPM) used independent sample t-tests and chi-square tests, as appropriate. Time variables were normalized to patient-days to account for variability in monitoring duration.

Qualitative data were analyzed using thematic content analysis. Codes were developed inductively based on interview transcripts and organized into thematic clusters related to workflow adaptation, digital burden, and safety perception. Investigator triangulation was used to ensure reliability of interpretations.

Ethical Considerations

The study protocol was approved by the institutional ethics committee. Informed consent was obtained from all patient and nurse participants. Data privacy and system security were ensured in accordance with health data protection standards.

Limitations of the Methodology

While the mixed-method design provides depth, the short-term monitoring window and potential observer bias during time-motion studies represent limitations. Additionally, generalizability may be constrained by technology infrastructure and staff training levels at participating sites.

RESULT AND DISCUSSION

RPM Monitoring Outcomes

The integration of RPM technologies during transitional care enabled the collection of a wide array of physiological and symptomatic data in near-real-time. Among the 100 patients assigned to the RPM group, a total of 230 alerts were generated over the 30-day post-discharge period. These alerts were triggered based on thresholds such as systolic BP > 130 mmHg or diastolic BP > 80 mmHg, SpO_2 < 90%, and weight gain of more than 2 kg in 48 hours criteria consistent with current clinical guidelines (Park et al., 2019).

Table 1: Distribution of RPM Alerts by Vital Sign Type and Frequency

Vital Sign	Number of Alerts	% of Total Alerts	Most Common Trigger Condition
Blood Pressure	78	34%	Systolic > 140 mmHg
SpO_2	65	28%	SpO_2 < 92%
Weight	42	18%	Gain > 2kg in 48 hours
Symptom Reports	45	20%	Dyspnea, fatigue
Total	**230**	**100%**	

Patients generally responded positively to the symptom-reporting interface. Feedback indicated increased engagement and a sense of control over their recovery process (Basch et al., 2020). Nonetheless, some patients noted issues with app navigation and the frequency of prompts.

False-positive rates were estimated at approximately 18%, aligning with previous findings that minor fluctuations often trigger unnecessary alerts (Coffey et al., 2021). Improvements in algorithmic sensitivity and user-specific calibration could further mitigate this issue.

Clinicians reported that trend-based analysis of RPM data allowed earlier identification of deterioration signals e.g., concurrent increases in heart rate and weight flagged patients at risk for readmission (Howell et al., 2020).

Workflow Efficiency Metrics

Time-motion analysis revealed significant shifts in nursing workflows post-RPM integration. Nurses spent less time on routine vital sign assessments and documentation and more time on interpreting digital trends and coordinating care plans.

Table 2: Change in Nursing Task Time Before and After RPM Integration

Task Category	Before RPM (min)	After RPM (min)	% Change
Manual Vital Checks	18	5	-72%
Documentation Time	12	6	-50%
Data Interpretation/Follow-up	4	9	+125%
Total Time	**34**	**20**	-41%

Nursing time logs were supported by system-generated reports and NAS-based scoring, which showed a reduction in lower-complexity activities and an increase in clinical reasoning tasks.

Task-shifting was also evident; RPM allowed nursing aides or family caregivers to assume some basic data entry roles, freeing registered nurses for critical decision-making.

While RPM automated some aspects of documentation, new obligations emerged related to alert review and escalation reporting (Craig et al., 2021). Nurses required additional training to manage these new digital responsibilities effectively (Moradian et al., 2018).

Patient Safety Outcomes

Patient safety outcomes improved notably in the RPM group. Readmission rates within 30 days were reduced from 15% in the control group to 8% in the intervention group. Additionally, early clinical interventions increased from 12 to 26 cases, with nurse-reported incidents falling from 8 to 3.

Table 3: Comparative Patient Safety Outcomes: RPM vs. Non-RPM Groups

Outcome Metric	RPM Group (n=100)	Non-RPM Group (n=100)	Difference
30-day Readmission Rate	8%	15%	-7%
Early Intervention Events	26	12	+14
Nurse-Reported Incidents	3	8	-5

These findings support evidence that RPM contributes to reduced hospital utilization and improved chronic disease management. Interventions triggered by early alerts were successful in roughly 65% of cases, particularly when nurses responded within one hour.

Without RPM, prior literature indicates that up to 26% of patients experience post-discharge complications, highlighting the critical gap addressed by continuous monitoring (Morgan et al., 2017).

Nurses expressed mixed sentiments about alert management. While some felt empowered by timely information, others reported alert fatigue, which impeded their responsiveness. Structured training and streamlined protocols were cited as necessary improvements to enhance alert handling confidence (Park et al., 2019).

The implementation of Remote Patient Monitoring (RPM) during transitional care has demonstrated measurable improvements in both patient safety outcomes and nursing workflow efficiency. However, these benefits are accompanied by significant changes in the cognitive demands placed on nurses, as well as operational challenges related to alert management, workflow redesign, and organizational support. This discussion explores the implications of these findings and situates them within the broader literature on digital health integration in nursing practice.

One of the most notable transformations observed in this study was the shift in the cognitive workload of nurses. RPM systems generate continuous streams of patient data, requiring nurses to monitor trends, interpret fluctuations, and make clinical judgments in real-time. While this data is invaluable for proactive care, it introduces substantial mental demands, as nurses must simultaneously manage multiple data streams and apply clinical reasoning to prioritize responses (Vegesna et al., 2017). These responsibilities, layered atop traditional nursing tasks, can exacerbate cognitive overload particularly in time-sensitive transitional care settings (Marko et al., 2016). The need to integrate technology-derived insights with holistic patient knowledge further amplifies this complexity, highlighting the necessity of cognitive support tools.

To address this issue, the development of user-friendly interfaces and decision-support systems becomes critical. As suggested by Selvaraju et al. (2022), such tools can assist nurses in identifying critical alerts more effectively, reducing cognitive strain. Prioritization features that highlight deviations requiring urgent attention can facilitate rapid decision-making without requiring exhaustive manual trend analysis. These enhancements are not only necessary for improving patient outcomes but also for preserving nurse well-being and sustaining engagement with digital systems.

Closely tied to the challenge of cognitive workload is the phenomenon of alarm fatigue. As demonstrated in this study, the volume of alerts many of which may not require immediate action can lead to desensitization among clinical staff. Alarm fatigue has long been recognized as a threat to patient safety, with overlooked or ignored alerts resulting in missed opportunities for early intervention (Chu et al., 2024). Strategies to mitigate this issue include deploying intelligent alert systems that stratify alarms based on urgency and severity, thereby reducing noise and increasing clinical relevance (Bunch et al., 2020).

Moreover, involving frontline nurses in the design and customization of alert systems enhances both usability and acceptance. When nurses can adjust thresholds or filter low-priority alerts, the system aligns more closely with their workflow and clinical judgment (Es et al., 2024). Training initiatives that clarify alarm response protocols and explain the rationale behind alert algorithms are also essential for maximizing the effectiveness of such systems (Smith et al., 2023).

Beyond individual-level adaptations, system-wide workflow redesign is essential for realizing the full potential of RPM. This study found that RPM reduced time spent on manual tasks and increased time allocated to interpretive and clinical decision-making roles. For these benefits to be sustained, organizational workflows must be recalibrated to support such role shifts. Standardizing protocols for data review, care escalation, and documentation ensures consistency and promotes confidence among nursing staff (Dcruz & Yeh, 2024).

Integrating RPM platforms with electronic health record (EHR) systems further supports workflow efficiency by minimizing duplicate data entry and enhancing continuity of care. Seamless integration reduces cognitive switching between platforms and enables real-time updates that inform multidisciplinary team decisions. Iterative workflow evaluations, guided by nurse feedback, are especially effective in tailoring systems to the unique needs of transitional care environments (Omboni et al., 2021).

Organizational policies play a pivotal role in supporting and scaling RPM integration. This study underscores the importance of institutional support through structured training programs that encompass both technical skills and clinical application (Gao et al., 2024). Equipping nurses with competencies in data interpretation and digital communication ensures that the benefits of RPM are not lost due to inadequate preparation.

Policies must also foster interprofessional collaboration, ensuring that responsibilities are clearly defined across care teams and that communication pathways are established for interpreting and responding to RPM data. An organizational culture that embraces innovation and supports experimentation with digital tools can further ease the transition and encourage widespread adoption (Hazim et al., 2024).

Finally, policy frameworks should prioritize interoperability and data sharing across clinical departments. As patients transition between acute care, primary care, and home-based monitoring, ensuring continuity of information is critical. Robust data exchange capabilities allow for more informed clinical decision-making and prevent gaps that can arise when systems operate in silos (Chen et al., 2016).

In summary, while the integration of RPM into transitional nursing care offers clear advantages in terms of patient safety and workflow efficiency, its success hinges on strategic responses to increased cognitive demands, alert management, workflow alignment, and organizational readiness. Addressing these domains holistically will be essential for sustaining RPM's long-term impact and enhancing the role of nurses in digitally supported care models.

CONCLUSION

The integration of Remote Patient Monitoring (RPM) technologies into transitional nursing care presents a transformative opportunity to improve both patient outcomes and clinical workflows. This study demonstrated that RPM tools significantly reduced 30-day hospital readmission rates and enhanced the timeliness of early clinical interventions. These outcomes affirm the role of continuous monitoring in mitigating the risks commonly associated with the post-discharge period.

From a nursing workflow perspective, RPM shifted time allocation away from manual and repetitive tasks toward more analytical and interpretive roles. This shift not only improved workflow efficiency but also redefined nursing responsibilities, aligning with the profession's ongoing evolution toward digitally augmented practice. The use of data visualization and algorithmic alerts empowered nurses to make more informed, timely decisions, although the increased cognitive demands and potential for alarm fatigue must be managed proactively.

To sustain these benefits, workflow redesign and institutional support are paramount. Organizations must invest in robust training programs that develop digital competencies and establish protocols that standardize RPM data interpretation and response. Equally important is the customization of alert systems and interfaces to better align with nursing practice and reduce unnecessary burden.

The study's findings contribute to the growing body of evidence supporting the integration of digital health tools in clinical settings. It underscores the need for policy frameworks that promote interoperability, collaborative team structures, and a culture of innovation that facilitates continuous feedback and system refinement.

In conclusion, RPM technologies hold considerable promise for enhancing transitional care when embedded within thoughtfully designed workflows and supported by strategic organizational change. This research advances the conversation on digitally enabled nursing care and highlights practical pathways for safe and effective RPM implementation.

REFERENCE

Acosta, A. M., Nora, C. R. D., Fontenele, R. M., Aued, G. K., Silveira, C. d. S., & Sanseverino, A. X. (2023). Transition and Continuity of Care After Hospital Discharge for COVID-19 Survivors. *Revista Da Escola De Enfermagem Da Usp*, *57*. https://doi.org/10.1590/1980-220x-reeusp-2023-0083en

Araya, A., Thornton, L. R., Kwon, D., Ferguson, G. M., Highfield, L., Hwang, K. O., Holmes, H. M., & Bernstam, E. V. (2023). Medication Reconciliation During Transitions of Care Across Institutions: A Quantitative Analysis of Challenges and Opportunities. *Applied Clinical Informatics*, *14*(05), 923–931. https://doi.org/10.1055/a-2178-0197

Basch, E., Stover, A. M., Schrag, D., Chung, A. E., Jansen, J., Henson, S., Carr, P., Ginos, B., Deal, A. M., Spears, P. A., Jönsson, M., Bennett, A. V, Mody, G. N., Thanarajasingam, G., Rogak, L. J., Reeve, B. B., Snyder, C., Kottschade, L. A., Charlot, M., … Dueck, A. C. (2020). Clinical Utility and User Perceptions of a Digital System for Electronic Patient-Reported Symptom Monitoring During Routine Cancer Care: Findings From the PRO-TECT Trial. *Jco Clinical Cancer Informatics*, (4), 947–957. https://doi.org/10.1200/cci.20.00081

Bashi, N., Karunanithi, M., Fatehi, F., Ding, H., & Walters, D. (2017). Remote Monitoring of Patients With Heart Failure: An Overview of Systematic Reviews. *Journal of Medical Internet Research*, *19*(1), e18. https://doi.org/10.2196/jmir.6571

Bunch, A., Ardila, F., Castaño, R., Quiñonez, S., & Corzo, L. (2020). Through the Storm: Automated Peritoneal Dialysis With Remote Patient Monitoring During COVID-19 Pandemic. *Blood Purification*, *50*(3), 279–282. https://doi.org/10.1159/000511407

Burke, R. E., Whitfield, E., Hittle, D. F., Min, S., Levy, C., Prochazka, A. V, Coleman, E. A., Schwartz, R. S., & Ginde, A. A. (2016). Hospital Readmission From Post-Acute Care Facilities: Risk Factors, Timing, and Outcomes. *Journal of the American Medical Directors Association*, *17*(3), 249–255. https://doi.org/10.1016/j.jamda.2015.11.005

Chen, L., Dubrawski, A., Wang, D., Fiterau, M., Guillame-Bert, M., Bose, E., Kaynar, A. M., Wallace, D. J., Guttendorf, J., Clermont, G., Pinsky, M. R., & Hravnak, M. (2016). Using Supervised Machine Learning to Classify Real Alerts and Artifact in Online Multisignal Vital Sign Monitoring Data*. *Critical Care Medicine*, *44*(7), e456–e463. https://doi.org/10.1097/ccm.0000000000001660

Cho, H., Sagherian, K., Scott, L. D., & Steege, L. M. (2022). Occupational Fatigue, Workload and Nursing Teamwork in Hospital Nurses. *Journal of Advanced Nursing*, *78*(8), 2313–2326. https://doi.org/10.1111/jan.15246

Chu, F., Stark, A., Telzak, A., & Rikin, S. (2024). Patient Experience in a Remote Patient Monitoring Program for Hypertension: A Qualitative Study. *American Journal of Hypertension*, *37*(11), 861–867. https://doi.org/10.1093/ajh/hpae086

Coffey, J., Christopherson, L. A., Glasgow, A. E., Pearson, K. K., Brown, J. K., Gathje, S. R., Sangaralingham, L. R., Porquera, E. M. C., Virk, A., Orenstein, R., Speicher, L. L., Bierle, D. M., Ganesh, R., Cox, D. L., Blegen, R. N., & Haddad, T. C. (2021). Implementation of a Multisite, Interdisciplinary Remote Patient Monitoring Program for Ambulatory Management of Patients With COVID-19. *NPJ Digital Medicine*, *4*(1). https://doi.org/10.1038/s41746-021-00490-9

Couture, V., Germain, N., Côté, É., Lavoie, L., Robitaille, J., Morin, M., Chouinard, J., Couturier, Y., Légaré, F., Hardy, M., Chartier, L. B., Brousseau, A.-A., Sourial, N., Mercier, É., Dallaire, C., Fleet, R., LeBlanc, A., Melady, D., Roy, D., … Archambault, P. (2024). Transitions of Care for Older Adults Discharged Home From the Emergency Department: An Inductive Thematic Content Analysis of Patient Comments. *BMC Geriatrics*, *24*(1). https://doi.org/10.1186/s12877-023-04482-0

Craig, K. J. T., Willis, V. C., Gruen, D., Rhee, K., & Jackson, G. P. (2021). The Burden of the Digital Environment: A Systematic Review on Organization-Directed Workplace Interventions to Mitigate Physician Burnout. *Journal of the American Medical Informatics Association*, *28*(5), 985–997. https://doi.org/10.1093/jamia/ocaa301

Dcruz, J. G., & Yeh, P. (2024). The Accuracy of Pulse Oxygen Saturation, Heart Rate, Blood Pressure, and Respiratory Rate Raised by a Contactless Telehealth Portal: Validation Study. *Jmir Formative Research*, *8*, e55361. https://doi.org/10.2196/55361

Duncan, I., Fitzner, K., Zhao, E., & Shtein, Y. (2021). Patient Post-Discharge Transitions and Inpatient Readmissions Impose Costly Burdens for Employers and Carriers. *Population Health Management*, *24*(6), 722–726. https://doi.org/10.1089/pop.2021.0037

Es, V. A. A. van, Lathauwer, I. L. J. De, Kemps, H., Handjaras, G., & Betta, M. (2024). Remote Monitoring of Sympathovagal Imbalance During Sleep and Its Implications in Cardiovascular Risk Assessment: A Systematic Review. *Bioengineering*, *11*(10), 1045. https://doi.org/10.3390/bioengineering11101045

Gao, X., He, P., Zhou, Y., & Qin, X. (2024). Artificial Intelligence Applications in Smart Healthcare: A Survey. *Future Internet*, *16*(9), 308. https://doi.org/10.3390/fi16090308

Gilmartin, H., Warsavage, T., Hines, A., Leonard, C., Kelley, L., Wills, A., Gaskin, D. E., Motta, L. U., Connelly, B., Plomondon, M. E., Yang, F., Kaboli, P. J., Burke, R. E., & Jones, C. D. (2022). Effectiveness of the Rural Transitions Nurse Program for Veterans: A Multicenter Implementation Study. *Journal of Hospital Medicine*, *17*(3), 149–157. https://doi.org/10.1002/jhm.12802

Guilcher, S. J. T., Fernandes, O., Luke, M. J., Wong, G., Lui, P. C., Cameron, K., Pariser, P., Raco, V., Kak, K., Varghese, S., Papastergiou, J., & McCarthy, L. (2020). A Developmental Evaluation of an Intraprofessional Pharmacy Communication Partnership (PROMPT) to Improve Transitions in Care From Hospital to Community: A Mixed-Methods Study. *BMC Health Services Research*, *20*(1). https://doi.org/10.1186/s12913-020-4909-0

Hazim, A., Ruan, G., Pritchett, J. C., Anderson, B., Leventakos, K., & Egan, A. (2024). Remote Patient Monitoring for Early Detection of Immune Checkpoint Inhibitor Therapy-Related Pneumonitis in High-Risk Patients: A Pilot-Feasibility Study. *Journal of Clinical Oncology*, *42*(16_suppl), e13806–e13806. https://doi.org/10.1200/jco.2024.42.16_suppl.e13806

Howell, D., Rosberger, Z., Mayer, C., Faria, R., Hamel, M., Snider, A., Bryant-Lukosius, D., Montgomery, N., Mozuraitis, M., & Li, M. (2020). Personalized Symptom Management: A Quality Improvement Collaborative for Implementation of Patient Reported Outcomes (PROs) in 'Real-World' Oncology Multisite Practices. *Journal of Patient-Reported Outcomes*, *4*(1). https://doi.org/10.1186/s41687-020-00212-x

Ivziku, D., Ferramosca, F. M. P., Filomeno, L., Gualandi, R., Maria, M. D., & Tartaglini, D. (2021). Defining Nursing Workload Predictors: A Pilot Study. *Journal of Nursing Management*, *30*(2), 473–481. https://doi.org/10.1111/jonm.13523

Khoiriyati, A., Sukartini, T., Kusnanto, K., & Kurniawati, N. D. (2021). Barriers in the Process of Care Transition From Hospital to Home in Post-Acute Coronary Syndrome: Patients' Perspective. *Bali Medical Journal*, *10*(3), 1308–1312. https://doi.org/10.15562/bmj.v10i3.2908

Layman, S. N., Elliott, W. V, Regen, S. M., & Keough, L. A. (2020). Implementation of a Pharmacist-Led Transitional Care Clinic. *American Journal of Health-System Pharmacy*, *77*(12), 966–971. https://doi.org/10.1093/ajhp/zxaa080

Marko, K., Krapf, J. M., Meltzer, A. C., Oh, J., Ganju, N., Martinez, A., Sheth, S., & Gaba, N. D. (2016). Testing the Feasibility of Remote Patient Monitoring in Prenatal Care Using a Mobile App and Connected Devices: A Prospective Observational Trial. *Jmir Research Protocols*, *5*(4), e200. https://doi.org/10.2196/resprot.6167

McNab, D., Bowie, P., Ross, A., MacWalter, G., Ryan, M., & Morrison, J. (2017). Systematic Review and Meta-Analysis of the Effectiveness of Pharmacist-Led Medication Reconciliation in the Community After Hospital Discharge. *BMJ Quality & Safety*, *27*(4), 308–320. https://doi.org/10.1136/bmjqs-2017-007087

Moradian, S., Krzyzanowska, M. K., Maguire, R., Morita, P. P., Kukreti, V., Avery, J., Liu, G., Cafazzo, J. A., & Howell, D. (2018). Usability Evaluation of a Mobile Phone–Based System for Remote Monitoring and Management of Chemotherapy-Related Side Effects in Cancer Patients: Mixed-Methods Study. *Jmir Cancer*, *4*(2), e10932. https://doi.org/10.2196/10932

Morgan, J. M., Kitt, S., Gill, J., McComb, J. M., Ng, G. A., Raftery, J., Roderick, P., Seed, A., Williams, S. G., Witte, K. K., Wright, D. J., Harris, S., & Cowie, M. (2017). Remote Management of Heart Failure Using Implantable Electronic Devices. *European Heart Journal*, *38*(30), 2352–2360. https://doi.org/10.1093/eurheartj/ehx227

Omboni, S., Ballatore, T., Rizzi, F., Tomassini, F., Panzeri, E., & Campolo, L. (2021). Telehealth at Scale Can Improve Chronic Disease Management in the Community During a Pandemic: An Experience at the Time of COVID-19. *Plos One*, *16*(9), e0258015. https://doi.org/10.1371/journal.pone.0258015

Park, C., Otobo, E., Ullman, J., Rogers, J., Fasihuddin, F., Garg, S., Kakkar, S., Goldstein, M., Chandrasekhar, S. V, Pinney, S., & Atreja, A. (2019). Impact on Readmission Reduction Among Heart Failure Patients Using Digital Health Monitoring: Feasibility and Adoptability Study. *Jmir Medical Informatics*, *7*(4), e13353. https://doi.org/10.2196/13353

Racy, S., Davidson, P. M., Peeler, A., Hager, D. N., Street, L., & Koirala, B. (2021). A Review of Inpatient Nursing Workload Measures. *Journal of Clinical Nursing*, *30*(13–14), 1799–1809. https://doi.org/10.1111/jocn.15676

Redley, B., Douglas, T., & Botti, M. (2020). Methods Used to Examine Technology in Relation to the Quality of Nursing Work in Acute Care: A Systematic Integrative Review. *Journal of Clinical Nursing*, *29*(9–10), 1477–1487. https://doi.org/10.1111/jocn.15213

Schnipper, J. L., Samal, L., Nolido, N., Yoon, C., Dalal, A. K., Magny-Normilus, C., Bitton, A., Thompson, R., Labonville, S., & Crevensten, G. (2020). The Effects of a Multifaceted Intervention to Improve Care Transitions Within an Accountable Care Organization: Results of a Stepped-Wedge Cluster-Randomized Trial. *Journal of Hospital Medicine*, *16*(1), 15–22. https://doi.org/10.12788/jhm.3513

Schroeder, K., Norful, A. A., Travers, J., & Aliyu, S. (2020). Nursing Perspectives on Care Delivery During the Early Stages of the Covid-19 Pandemic: A Qualitative Study. *International Journal of Nursing Studies Advances*, *2*, 100006. https://doi.org/10.1016/j.ijnsa.2020.100006

Selvaraju, V., Spicher, N., Wang, J., Ganapathy, N., Warnecke, J. M., Leonhardt, S., Swaminathan, R., & Deserno, T. M. (2022). Continuous Monitoring of Vital Signs Using Cameras: A Systematic Review. *Sensors*, *22*(11), 4097. https://doi.org/10.3390/s22114097

Sezgin, D., Ó'Caoimh, R., Liew, A., O'Donovan, M., Illario, M., Salem, M. A., Kennelly, S., Carriazo, A. M., López-Samaniego, L., Arnal, C., Rodríguez-Acuña, R., Inzitari, M., Hammar, T., & Hendry, A. (2020). The Effectiveness of Intermediate Care Including Transitional Care Interventions on Function, Healthcare Utilisation and Costs: A Scoping Review. *European Geriatric Medicine*, *11*(6), 961–974. https://doi.org/10.1007/s41999-020-00365-4

Smith, W. H., Caven, D., Ewing, A., & Albano, A. W. (2023). Abstract P332: Asynchronous Management of Hypertension: The Effectiveness of Remote Patient Monitoring in Mixed Populations. *Hypertension*, *80*(Suppl_1). https://doi.org/10.1161/hyp.80.suppl_1.p332

Vegesna, A., Tran, M.-Q., Angelaccio, M., & Arcona, S. (2017). Remote Patient Monitoring via Non-Invasive Digital Technologies: A Systematic Review. *Telemedicine and E-Health*, *23*(1), 3–17. https://doi.org/10.1089/tmj.2016.0051

Wray, C. M., & Jones, C. D. (2023). Bridging the Know-Do Gap in Hospital Care Transitions. *Jama Internal Medicine*, *183*(5), 424. https://doi.org/10.1001/jamainternmed.2023.0069

Yang, R., Xu, Y., Hou, W., Wang, L., Xiao, S., Li, C., Shao, H., Fei, X., & Wang, Z. (2022). Transitional Care for Patients With Portal Hypertension: A Multicenter Study of Intervention for Post-Tips Patients. *Clinical Nursing Research*, *32*(4), 785–796. https://doi.org/10.1177/10547738221112746

.