



# Improving Home Health Care Through Innovative Technology- Enabled Care Transitions



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## What are care transitions and why are they important in home health?

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A care transition is a patient's move from one mode of care to another as their condition and care needs change. Care transitions from home health to the community are more than just a checklist item; they are critical moments to ensure patient safety and success. Lack of proper care and attention in these critical moments can deteriorate patient trajectories, lower an agency's quality measures, and hurt the bottom line.

The transition out of home health care to community care is a unique transition in the care continuum. Unlike other health care transitions, a discharge from home care is primarily a handoff to the patient, not new professional. The home care team needs to ensure patient readiness more than at any other transition. Value-based health care policies and practices—including national discussions about total beneficiary spend, shared risk, and integrated systems—link provider financial stability to success with discharging patients from home care. Implementation of a successful care transitions program improves patient care throughout an episode and decreases the likelihood of complications at, and post, discharge to the community. A lack of attention to care transitions planning during a patient's home health care episode, or an ineffective or inefficient program, may lead to unnecessary re-hospitalizations and diminished quality of care.

The National Transitions of Care Coalition outlines critical components of effective health information technology to improve care transitions. Standardized processes, good communication, incorporating required performance measures, establishing accountability, and supporting strong care coordination must all be addressed for health information technology to maximize effect on care transitions.<sup>1</sup> Leaders who implement care transitions programs that are effective at leveraging technology to meet these standards will be at the forefront of home health care delivery.



## Current models of technology use in home health care transitions

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To enhance the likelihood of care transition success, the Visiting Nurse Associations of America (VNAA) Blueprint for Excellence offers a module on best practices for discharge to community.<sup>2</sup> Recommendations from the module include developing a standardized series of transitions of care protocols. One important area of focus for these protocols is medication management and reconciliation. This includes a comprehensive evaluation of a patient's medication regimen in an effort to avoid medication errors,

particularly duplications or omissions. Electronic-based programs for medication reconciliation during care transitions, such as those tested by Cristina Roure Nuez and colleagues, show the promising impact of technological interventions to reduce errors that may result in poor outcomes and/or re-hospitalizations.<sup>3</sup> The program uses a clinical decision support tool that is integrated into the electronic medication prescribing process at discharge. The study compared the positive results of those using an electronic medication reconciliation versus a manual process. Implementing electronic medication reconciliation tools during the home health episode of care is just one way to leverage technology to improve care transitions and enhance quality.

Another study of technology's role in improving care transitions is that of eCaring's partnership with Morningside House Long-Term Home Healthcare.<sup>4</sup> Morningside House provided a trial group of eight Medicare and Medicaid dual-eligible patients an iPad loaded with eCaring's care-tracking systems, providing real-time data to patients, caregivers, and clinicians. Over the 90-day trial, the group found that the program prevented nine emergency room visits, three hospitalizations, twelve doctor visits, and three unplanned nursing visits.



## Technology use in care transitions for cardiac patients

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A key area technology can assist in care transitions is with cardiac patients. Two selected technology activations for telehealth have shown promising results in cutting costs, preventing hospitalizations, and improving overall quality in care transitions at home.

One promising activation in telehealth is the partnership between the Visiting Nurse Association of Somerset Hill and Summit Medical Group, a local physician-owned practice.<sup>5</sup> The two groups partnered on a joint telehealth program with 24 heart failure (HF) and three chronic obstructive pulmonary disease (COPD) patients who were monitored for 90 days. None of the 22 patients who completed the program were re-admitted to the hospital, which generated a significant expected cost savings.

Additionally, the Visiting Nurse Association of Western New York (VNA of WNY) worked with Medtronic Care Management Services (formerly Cardiocom) on a comprehensive hospital-to-home telehealth program for HF and COPD patients.<sup>6</sup> Over the course of the three-year program, VNA of WNY saw acute care hospitalization rates drop from 29 percent to 18 percent—a 38 percent reduction from the baseline rate. The Centers for Medicare & Medicaid Services (CMS) home health patient experience survey reported VNA of WNY ratings of 9-10 (10

being the highest), at or above national and NY state benchmarks. These cases detail just some of the many applications of technology to improve care transitions that show improved patient experiences, bolstered outcomes, and lower costs. Forward-thinking home health agencies aiming to improve outcomes and bring costs down for the overall episode would benefit from further exploring opportunities to experiment with technological innovations like these.



## Technology and financial outcomes at home health agencies

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Results of these and many other pilot efforts, demonstrate the case for technology's role in improving quality within care transitions. As payment is further tied to quality of care and outcomes, investment in technology will also be driven by financial interests. Strong leadership decisions on technology and investment can help shape care transitions programs that improve quality of care, save future costs, set norms and expectations for patients and their families as they transition from home health to their communities. These choices are crucial to the long-term success of care transitions programs and ultimately an agency's ability to compete in shifting outcome-emphasized payment models. Opportunities abound for home health agencies to leverage technology in creative and innovative ways during an episode of care to improve discharge to community and promote higher quality care while reducing costs. An agency that integrates technology effectively into its existing care transitions program is one that will be well equipped to adapt to changing care and financial models in the future.



## Four recommendations for investing in technology to support care transitions

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There are a number of considerations when investing in technology for care transitions. In the near term, clear goals, team decision-making, and collaboration with all stakeholders are key to successful implementation of new technology. Leaders must invest in strong communication with staff, vendors, and policymakers, and must be continuous and include formal evaluation. The successful home health agency will implement a technology program that aligns with current needs and future goals to improve care transitions.

## 1. Speak with your staff

Ultimately the success of any care transitions program depends on the staff and clinicians' acceptance for effective implementation. It is vital to partner with these groups before investing in any technology. Ask questions of your staff that seek to understand where technology could make their jobs easier and help them better care for patients.

Next, start with small investments based on your initial findings and collect feedback. By starting small and iterating along the way, you can determine the biggest areas of need, get staff comfortable integrating technology into the care plan, and determine whether the type of technology being utilized is successfully addressing the needs of staff and patients, making necessary changes quickly. Basic precautions such as ensuring nurse and staff laptops and tablets are fully functioning and up-to-date will make a marked difference, and will be vital to the success of larger-scale technology activations in the future.

## 2. Ask questions of your technology partners

Before investing in technology to improve care transitions, it is important to ask questions of potential vendors that go beyond the basics of cost and function, in order to understand which service may be best for your agency. Asking how the company intends to develop the service over time, about their depth of experience serving home health agencies, for examples of how their service has helped other organizations, and about quality of training for your staff will save future dollars and create a more streamlined—and likely more successful—process for implementation.

### Questions to ask your vendor

- What can this technology do? What can it not do?
- How is this technology currently being utilized?
- Is the service interoperable? With what other systems and software is it compatible?
- What are future applications for this technology?
- Is there evidence that it will help us achieve our goals as an agency? How strong is that evidence?
- How is the feedback from patients and customers?
- Will this require continued investment in the next two to four years?
- Do you offer trainings for staff? Are these included?
- What are the minimum requirements needed to implement this technology?
- How is the system security evaluated, measured, and monitored?

### 3. Advocate

Early adopters and leaders in technology investment to support care transitions will be at the forefront of the industry and will be able to guide the second generation of innovation and application. With CMS continuing to emphasize communication and connection across the continuum of care, technology is the only practical solution to the growing regulatory burden.

Given the move to programs such as value-based purchasing, bundled payment arrangements, and the passage of the IMPACT Act of 2014, which requires the reporting of patient assessment data that must be standardized and interoperable across post-acute care and other settings, the need for new technology has increased considerably.

The Office of the National Coordinator for Health Information Technology (ONC) released a roadmap for interoperability in 2015 that outlined the needs and goals of creating an interoperable network for providers.<sup>7</sup> Policy, however, has been slow to fund these needs, and as of yet, home health especially has been left out of potential reimbursement. With strong advocacy, however, this could change.

Without incentives there is a very real concern that even as technology improves and continues to demonstrate its ability to improve care transitions across settings and to the community, a lack of funding will prevent full optimization of these programs. It is incumbent upon home health agency leaders to speak with representatives and CMS about the need to include home health in programs that fund technology utilization and for industry standards that make interoperability by vendors a necessity. Use what you have learned from your own care transitions programs to demonstrate the role of technology and the need for investment across the spectrum, not just as a piecemeal tool, but as a critical component of care transitions.

### 4. Re-evaluate

The work is not done once a program is up and running. Implement an annual or semi-annual process for evaluating the technology in which you invest, according to pre-determined success metrics. Utilize patient survey information and staff recommendations to discover what is working and what is not. Outcomes data will also be crucial, but do not overlook patient and staff success, especially in limited enrollment programs where outcomes data may not tell the whole story early.

Understanding what does and does not work for patients and staff is crucial when considering larger-scale technology activations. This regular evaluation process will not only help determine whether current technology activations are successful, but whether there is the possibility for further investment to assist your agency in achieving its goals.



## Summary

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Technology innovation and applications in home-based care can positively impact many facets of providing care, including the critical moments associated with care transitions. Leaders seeking a strategy to ensure future success need to balance patient safety and satisfaction, quality measurement, cost containment, and regulatory demand. Attention to transitions in care, particularly the transition from discharge to the community is a critical point for these issues. New and evolving technology is key to managing this transition and building success for the coming years.



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