Healthcare technologies are rapidly moving into the home. Recently, the Wall Street Journal reported that as much as 30% of healthcare traditionally provided in a hospital may be delivered in the home.\(^1\)

In addition to lower costs, lower infection rates, and lower stress levels, the potential benefits of care delivery outside of clinical environments include greater convenience, more autonomy, and potentially better outcomes. Home care often involves telemedicine, which enables remote monitoring, consultations with experts, quicker interventions, and predictive health analytics.

Realizing the benefits, however, will require a coordinated industry response among product developers, the healthcare sector, and patients.

Most complex technologies are designed to be operated by highly trained healthcare professionals in clinical settings. Although some products are specifically designed for use outside a clinical setting, most products are ill-suited for use in a home by a layperson.

The healthcare sector uses a coordinated approach to the transition of care from the clinical to nonclinical setting that includes discharge planning, care coordination, device selection, patient education, and payment. Without optimized systems to manage these handoffs, unprepared patients can be sent home to self-administer care with only a patchwork of support.

To address this, AAMI and the Food and Drug Administration held a summit on healthcare technology in nonclinical settings in 2013.\(^2\) As a follow-up, the AAMI Foundation convened a team of subject matter experts to propose solutions for the safe transition of devices from clinical to nonclinical settings and chose to focus first on infusion therapy. The final report is slated to be published this fall.

As members of the infusion therapy working group, we believe that this approach should be extended to other therapies and technologies. We offer two recommendations that were at the heart of the infusion therapy success.

First, fully engage all stakeholder voices. The infusion therapy work was only possible because of the time and dedication of a cross-functional working group of patient advocates, nurses, physicians, pharmacists, home infusion agencies, medical equipment suppliers, regulators, reimbursement specialists, industry trade groups, and safety and quality testing organizations. The group had the knowledge and experience to uncover systemic root causes and devise a smooth and safe “transition of care” model.

Second, develop a “jobs-based” process model with generally applicable phases and steps. We focused on “what” needs to be done, rather than on the “who,” “how,” or “when.” The team documented 26 “jobs” across four phases that must be done in the infusion therapy transition of care. This process model was flexible to different needs, timing, technology, workflows, and personal preferences. It was consistent across the current and future state and served as an effective framework for organizing gaps and best practices.

To accommodate the ever-expanding list of home use devices, the team developed a broadly applicable transition approach. By evaluating other devices and therapies with this same model, we will be able to identify trends that inform both on-the-ground decision making and federal-level policy discussions. Along the way, we will improve the process model and discover any device-specific implementation challenges. If you're interested in the future of home healthcare, we welcome hearing from you. We can suggest some ways of getting involved.

References
