Challenges in Transitional Care Between Nursing Homes and Emergency Departments

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Objective: To obtain opinions of knowledgeable professionals involved in the emergency care of nursing home (NH) residents.

Design: Structured focus group interviews.

Participants: Five provider categories, including NH staff, NH physicians and nurse practitioners, emergency medical services (EMS) providers, emergency department (ED) nurses, and ED physicians.

Setting: Two NHs, 2 EDs, and a county-wide EMS system.

Analysis: Audiotaped discussions were transcribed and analyzed independently by 2 authors.

Results: Themes included barriers to providing high-quality care, data needed when residents are transported in both directions between EDs and NHs, and possible solutions to improve care. Communication problems were the most frequently cited barrier to providing care. Residents are often transported in both directions without any written documentation; however, even when communication does occur, it is often not in a mode that is useable by the receiving provider. ED personnel need a small amount of organized, written information. When residents are released from the ED, NH personnel need a verbal report from ED nurses as well as written documentation. All groups were optimistic that communication can be improved. Ideas included use of (1) fax machines or audiotape cassette recorders to exchange information, (2) an emergency form in residents’ charts that contains predocumented information with an area to write in the reason for transfer, and (3) brief NH-to-ED and ED-to-NH transfer forms that are accepted and used by local NHs and EDs.

Conclusion: The transitional care of NH residents is laden with problems but has solutions that deserve additional development and investigation. (J Am Med Dir Assoc 2006; 7: 499–505)

Keywords: Nursing homes; emergency service, hospital; emergency medical services; patient transfer

Each year more than 25% of nursing home (NH) residents are transferred at least once to an emergency department (ED) for evaluation. As many as two thirds of NH residents cared for in the ED are cognitively impaired, and both the NH and ED perform tests, provide services, and establish treatment plans that directly affect care in the other site. For those reasons, both EDs and NHs have a responsibility to share important information. However, 10% of NH residents are transported to the ED without any documentation, and essential patient data are usually missing in the other 90%. Inadequate communication is not limited to the NH-to-ED transfer. NH personnel similarly report that residents often return from the ED without notification or written documentation.

Transitional care has been defined as “a set of actions designed to ensure the coordination and continuity of healthcare as patients transfer between different locations or different levels of care within the same location.” Regrettably, however, health care settings, such as NHs and EDs, operate independently of one another, often providing care without the benefit of complete information on the patient’s condition or medical history, services provided in the other setting, or medications prescribed in the other site of care. Poorly
executed transitions are associated with inefficiencies and duplication of services that needlessly increase the cost of care and may lead to greater use of health care services. Most importantly, it is in unsuccessful transitions that patient safety is quite vulnerable.

A Society for Academic Emergency Medicine (SAEM) Geriatric Task Force recommended that emergency providers be proactive in resolving these problems in transitional care. A standardized transfer form has been proposed to improve information exchange. In the first published study to evaluate the use of a transfer form, the investigators designed a 1-page NH-to-ED transfer form that was to be completed by NH personnel and then accompany NH residents to the ED. Emergency nurses and physicians reported that the completed forms made patient care easier, patients’ chief complaints clearer, and current medications easier to identify. Providers also reported the ability to find important patient information more quickly. However, the study was not designed to assess the effectiveness of the transfer form in increasing information transfer or to measure the compliance of NH staff in completing the form. In the only other published study to examine the use of a standardized 1-page transfer form, the form was found to increase the transmission of important written information from NHs to the ED. However, the form was used in only one third of transfers.

Although a standardized transfer form may be part of the solution, the low compliance in use of the form indicates that it alone is insufficient. Progress in transitional care is unlikely until investigators have a richer understanding of the underlying problems and needs from the perspective of health care providers and testable mechanisms to improve communication during transitional care have been developed. The purpose of this study was to do just that. It used focus group methodology to (1) characterize the nature of the problems as viewed by knowledgeable respondents who provide care during the 2-way transition between NHs and EDs, (2) understand the information needs of the various groups of providers, and (3) discover ideas to improve care that are promising from their viewpoints and are testable in future interventional trials.

**METHODS**

**Study Design**

This investigation collected data via structured focus group interviews, a qualitative group discussion format. The investigation was approved by the IUPUI/Clarian Institutional Review Board via expedited review, and signed informed consent was obtained from all subjects.

**Study Setting and Population**

We defined “emergency care of nursing home residents” as care they receive immediately before and during an ED visit and after the ED visit if returned directly to the NH without hospital admission. This care takes place in NHs, ambulances, and EDs. Study subjects included 5 groups engaged in the emergency care of NH residents: (1) NH physicians and nurse practitioners; (2) NH staff, including registered nurses, licensed practical nurses, and social workers; (3) emergency medical service (EMS) providers; (4) ED nurses; and (5) ED physicians. As is most often done in focus group research, we interviewed the 5 groups separately to increase the within-group homogeneity, and thereby increase their comfort and candor when discussing particular topics. The NH physicians and nurse practitioners were members of the Indiana University (IU) Geriatrics clinical program. This group covers 27 NHs in the Indianapolis area. This focus group replaced the monthly IU Geriatrics NH meeting, and the subjects, therefore, were the health care professionals who normally attend the meeting, in addition to particular invitees of the meeting’s chair. The NH staff included nurses and social workers who were employees of 1 of 2 NHs in Indianapolis. They were identified in collaboration with the NH administrators and directors of nursing at the 2 facilities. These 2 facilities send patients to multiple local EDs. The EMS personnel were identified in collaboration with the local EMS leadership. The ED nurses were volunteers from a group e-mail solicitation from an ED nursing director or personal invitees of the nursing director. In each case, the individuals who assisted with recruitment of subjects were asked to invite providers who in their judgment were the most experienced and knowledgeable regarding the emergency care of NH residents. The emergency physicians were faculty physicians in the IU Department of Emergency Medicine. They were recruited through a group e-mail solicitation for volunteers. The Department of Emergency Medicine physicians cover 2 inner-city Indianapolis EDs that receive NH residents from dozens of local facilities.

**Measured Outcomes**

The outcomes were the opinions, perceptions, and insights of health care providers in the 5 categories. Prior to collecting data, the 4 major themes to be discussed in the focus group interviews were: (1) factors that contribute to ED visits by NH residents, (2) barriers to providing high-quality emergency care to NH residents, (3) information needed by health care providers when residents are transported between EDs and NHs, and (4) ideas to improve the emergency care of NH residents. We decided on these themes a priori but were open to discussing and including other pertinent topics if they were raised by subjects.

**Focus Group Process**

We developed questions related to the 4 themes and included them in the question guides. Because each of the 5 categories of health care providers has a different role in the emergency care of NH residents, we developed 5 slightly different question guides that nonetheless covered the 4 themes. Table 1 shows the question guide we used in the NH staff group discussions. During each focus group session, the moderator used well-accepted methodology, along with question guides, to lead structured group interviews. All focus group discussions were audiotaped.
Audiotapes were transcribed verbatim. The transcripts were systematically coded and analyzed using conventional methodology. Each author (an emergency physician and a geriatrician) independently and systematically coded the transcripts. Coding involved highlighting important quotations in each transcript and placing each highlighted section of text into a category. Each category was then placed into 1 of the 4 thematic areas listed in the Measured Outcomes section. For example, an NH nurse described how inadequate ED communication with families affects the NH. She said, “I’ve got these families crying, going, ‘I have no idea what’s going on and what happened to my loved one? What did they do over there?’” We categorized this statement as “inadequate or ineffective communication between ED and families” and then placed it under the theme “barriers to providing high-quality emergency care to NH residents.” The authors discussed discrepancies in highlighting, coding, and categorizing and came to consensus. After analyzing the theme “decisions to transfer to the ED,” we found that we confirmed previously known reasons for transfer to the ED. Consequently, we focused this manuscript on the 3 other themes that were discussed during the focus group interviews.

RESULTS

The subjects in this investigation included the groups listed in Table 2. We studied 5 different health care provider categories, including a total of 42 subjects, in 7 focus group interviews.

Communication Barriers and Potential Solutions

The groups identified numerous barriers to providing high-quality emergency care to NH residents; however, communication problems were the most frequently cited barriers to high-quality care, according to all groups. The communication problems were multiple, complex, and potentially rapidly dynamic (e.g., abrupt change in code status of an acutely ill resident). In addition to NH, EMS, and ED providers, the patient and family are often involved in the matrix of essential communication. In this section, we discuss (1) the communication problems that occur between different groups of providers, (2) the manner in which groups would prefer to receive information (i.e., written and/or oral), and (3) the unfavorable effects of insufficient communication.

Nursing Home-to-Emergency Department Communication

Communication difficulties arise before the patient arrives in the ED. Before the resident departs to the ED in an

<table>
<thead>
<tr>
<th>Group</th>
<th>Composition of Group</th>
<th>Dates of Focus Group Interviews</th>
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<tbody>
<tr>
<td>Emergency physicians</td>
<td>8 faculty physicians</td>
<td>May 2, 2005</td>
</tr>
<tr>
<td>Nursing home physicians and nurse practitioners</td>
<td>2 geriatricians</td>
<td>May 27, 2005</td>
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<tr>
<td></td>
<td>1 second-year geriatrics fellow</td>
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<tr>
<td></td>
<td>3 nurse practitioners</td>
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<tr>
<td></td>
<td>1 geriatrics administrator</td>
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<tr>
<td>Nursing home staff</td>
<td>15 nurses</td>
<td>May 27, 2005</td>
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<tr>
<td></td>
<td>2 social workers</td>
<td>July 21, 2005</td>
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<tr>
<td>Emergency department staff</td>
<td>3 nurses</td>
<td>August 3, 2005</td>
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<tr>
<td>Emergency medical services personnel</td>
<td>2 emergency medical technicians</td>
<td>August 31, 2005</td>
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<tr>
<td></td>
<td>5 paramedics</td>
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NH = nursing home; ED = emergency department.
ambulance, NH staff noted that they call the ED triage nurse to give report, and many NH physicians and nurse practitioners call the emergency physician to provide pertinent clinical information. The ED providers were divided in whether this communication helps them care for a patient who may not arrive for an hour or more. At the time of the call, the ED triage nurse doesn’t know which nurse will care for the patient when he or she arrives from the NH. The ED physician receiving the call often doesn’t provide care to the incoming patient, and there is no reliable mechanism to internally communicate this information to other providers in the ED. Providers noted that shift changes can unfavorably influence this information exchange. On the other hand, a few emergency physicians welcomed calls from the NH provider, because it provides them important information and a physician to contact if questions arise.

Once the patient arrives, emergency physicians and nurses agreed that written information from NHs is less useful than it could be. The issue centers on both the amount and the organization of information. The ED providers were divided in whether this communication helps them care for a patient who may not arrive for an hour or more. At the time of the call, the ED triage nurse doesn’t know which nurse will care for the patient when he or she arrives from the NH. The ED physician receiving the call often doesn’t provide care to the incoming patient, and there is no reliable mechanism to internally communicate this information to other providers in the ED. Providers noted that shift changes can unfavorably influence this information exchange. On the other hand, a few emergency physicians welcomed calls from the NH provider, because it provides them important information and a physician to contact if questions arise.

Emergency nurses and physicians sometimes call the NH to obtain patient information. From the perspective of the emergency physicians, when calling the NH staff, “You get in touch with somebody who wasn’t the person who sent the person in... and has very limited information.” The ED physicians noted that the NH physician may also know little about the patient. According to NH physicians and nurse practitioners, the call schedule determines whether they will know the patient. During evenings, nights, and on weekends, the call service refers questions to the on-call provider. They cover hundreds of NH residents from dozens of NHs, and it isn’t possible to know all of their partners’ patients.

Rather than receiving a phone call prior to arrival of the patient, most emergency providers would prefer well-organized, concise, written information that includes the data listed in Table 3. There was consensus in the ED nurse and physician groups that these particular pieces of information are important for ED care.

**Communication With EMS Providers**

EMS personnel stated that when they arrive at the NH, there generally isn’t an NH staff member to supply information about the patient. EMS providers indicated that a brief report from NH staff that specifies the reason for transfer and pertinent recent events would help them during transport and allow them to supply better information to the ED. They also need some information (preferably written), so they can complete their required paperwork. EMS providers agreed that this information includes patient name, date of birth, past medical history, medications, code status, and baseline mental status.

Prior to transporting a resident back to the NH, EMS personnel reported the need for a brief report from ED nurses that includes a brief description of what occurred in the ED, the patient’s baseline mental status, new medications added in the ED, and the name of the NH provider who received report from the ED nurse. This would help them during transport and inform them of whom to contact when they return to the NH. After arriving at the NH, the EMS personnel indicated a desire to more formally transfer care of the patient to NH staff, but more often than not there isn’t anyone to receive the information. They are uncomfortable putting the resident in his or her room and departing without dialogue with the NH provider.

**Emergency Department-to-Nursing Home Communication**

The NH staff also indicated that they receive inadequate communication when residents are released back to the NH. They infrequently receive a verbal report from ED nurses, and residents occasionally arrive at the NH unexpectedly after an ED evaluation. NH staff also noted that many times residents return without any or with only scarce documentation, and when they do receive paperwork, it is often illegible. One NH nurse stated, “A lot of times we just get, ‘Resume previous meds.’” A nurse practitioner stated, “One of my frustrations has been that we know that an individual has gone to the ER and now they are back at the nursing home. We talk to the [NH] nurses and they say, ‘Well, I don’t know what they did.’ So with further investigation, we find that no note has even been sent [from the ED].”

Before patients are released from the ED, NH staff indicated that a brief verbal report from the ED nurses would help inform the NH staff of the diagnosis and the care needed after release, ensure that the reason for transfer was addressed, and provide time to get equipment and materials (eg, an IV pole

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**Table 3. Nursing Home Patient Information That Emergency Nurses and Physicians Need**

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<tr>
<th>Information</th>
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<tr>
<td>Patient name</td>
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<tr>
<td>Date of birth</td>
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<tr>
<td>Reason for transfer</td>
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<tr>
<td>Past medical history</td>
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<tr>
<td>Medications</td>
</tr>
<tr>
<td>Allergies</td>
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<tr>
<td>Baseline mental and physical functioning</td>
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<tr>
<td>Code status or living will</td>
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<tr>
<td>Most recent vital signs</td>
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<tr>
<td>Recent lab work with results</td>
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<tr>
<td>Nursing home name and phone number</td>
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<tr>
<td>Wing and room number of the resident</td>
</tr>
<tr>
<td>Nursing home nurse contact</td>
</tr>
<tr>
<td>Physician phone number and pager</td>
</tr>
<tr>
<td>Power of attorney or closest family member’s phone number</td>
</tr>
<tr>
<td>Capabilities of the nursing home (eg, ability to give intravenous antibiotics)</td>
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</tbody>
</table>
and IV medication) before the resident returns. Both NH staff and physicians agreed that legible written documentation is also essential so it can go into the resident’s chart for the nurse, physician, social worker, or others to access. Table 4 lists the information that NH physicians, nurses, or social workers agreed they need when residents are returned from the ED.

**Impact of Insufficient Information Exchange**

The groups identified several adverse consequences that result from ineffective communication. The ED personnel feel as though they are working without adequate clinical information, direction as to the purpose of the ED visit, guidance regarding general level of care, or participation by the NH in the episode of emergency care. When making disposition decisions in particular, emergency physicians’ concerns about follow-up and lack of understanding of what can be accomplished at NHs may lead to unnecessary hospital admissions. They are aware that some NHs can provide intravenous antibiotics or physical therapy; however, with dozens of local NHs, they can’t remember which have those capabilities. One summarized the breadth of challenges she confronts in making disposition decisions for NH patients. “You feel more like the onus is on you to basically make the disposition, figure out what needs to be done at the nursing home, hope that it can be done at the nursing home . . . , and hope that the follow-up will be accomplished.”

Inadequate communication also has an unfavorable impact on NH staff’s ability to provide information to residents’ families. One nurse noted that after residents and their families return from the ED, families often look to the NH staff for information. She’s had families ask, “I have no idea what’s going on and what happened to my loved one. What did they do over there?” Another stated that after the resident returns, families “come back here and go, ‘OK. So what exactly happened?’” They cannot adequately care for residents or inform families because of the scarce information they often receive.

Inadequate communication can also preclude providers from being able to respect the wishes of NH residents during medical emergencies. An emergency physician described a situation she encountered. The patient was “a no-code, but somebody has for some reason sent them in and the ball is rolling to figure out if something changed. Did the family suddenly say, ‘Oh, we want everything done?’ It becomes very complicated very quickly.” An NH nurse indicated that she has seen those scenarios transpire. She described situations in which patients previously decided not to be resuscitated, but then they or their families suddenly change their mind when the patient is acutely ill. For example, the resident “may have said, ’I don’t want anything done.’ But when push comes to shove and he can’t breathe anymore, [he says], ‘Send me!’”

**Possible Solutions**

All groups were optimistic that communication can be improved and had several ideas to provide higher quality emergency care to NH residents. NH staff in 2 focus groups recommended the use of fax machines to send and receive transfer documentation, and therefore improve communication both to and from the NH. The advantage they expressed is that a fax machine would reduce the number of hands through which the paperwork needs to travel, and the information would pass with greater likelihood and fidelity across changes in shifts. A second idea from an NH nurse was to have NH staff use “a cassette tape recorder and just tell you, ‘This is Mr. Smith. He’s a 70-year-old male. He has coronary artery disease . . . ’ and just hand that cassette [to the EMS personnel]. I could do that a whole lot faster than trying to write . . . and still get you what you need.”

To increase NH-to-EMS and NH-to-ED communication, a paramedic advocated placing an emergency form in each resident’s NH chart. She advised having an area at the top to write in the reason for transfer. The rest of the form could contain predocumented information, such as the resident’s medical history, medications, and other pertinent information that could be periodically updated.

Most emergency physicians and nurses advocated the use of 1-page NH-to-ED and ED-to-NH transfer forms that are used by local NHs and EDs. Despite their knowledge of the limited success of previous trials, they stressed that use of a standardized form is necessary because (1) NHs and EDs would then receive the same recognizable piece of paper on all patients; (2) they value clear, concise written communication; and (3) they recognized NHs’ needs for information from the ED. ED physicians stated that they would willingly complete a brief ED-to-NH form with check boxes and an area to write a short note. They sensed that NH staff would be more likely to complete a brief form if they knew that the ED would do the same when sending patients back to the NH. However, if this proved unsuccessful, then they mentioned that mandates for form completion, such as legislation or tying reimbursement to form completion, may be necessary to receive completed transfer forms. In addition to compliance in form completion, an obstacle acknowledged by the groups would be to successfully convince local NHs and EDs to agree on a single form.

**DISCUSSION**

The transitional care of NH residents has been increasingly discussed in the medical literature over the past several years.3–8,11,12,18–24 Despite the knowledge gained from these studies, providers are still working within a system that remains poorly equipped to provide high-quality emergency care to NH residents. The limited success of seemingly promising interventions, such as the introduction of standardized...
transfer forms,11,12 discourages the premature introduction of new strategies that may be expensive and further disruptive of care and advocates fundamental work to understand both the complexity of these care environments and how to successfully introduce new communication methods. The present investigation gives clinicians and researchers a greater understanding of the ED-NH interface. It is the first to provide insights into the opinions, preferences, and suggestions of different groups of providers who are involved in the complex bidirectional transition between NHs and EDs. This study extends existing knowledge by (1) providing additional, valuable details regarding communication difficulties known to exist between the two sites of care; (2) identifying the information that health care professionals need to provide higher quality care; (3) indicating the adverse impact that poor-quality information exchange has on providers, patients, and their families; and (4) identifying strategies that may improve the transitional care of NH residents. All of this information was generated from the perspective of health care providers who are engaged in this transitional care.

Although communication problems between NHs and EDs have been described previously,3–5,9,10,25–27 this is the first report documenting that, even when information is transmitted to the ED, it is often so disorganized that it is of little use. To be effective, information must be provided in a form that is manageable under the constraints and circumstances of the receiving provider. With a clear knowledge of their unique needs and environments, subjects imparted the specific information they need to provide high-quality emergency care to NH residents and the form in which it would be most useful.

These health care professionals also generated solutions that may improve communication between providers. They recommended use of fax communication, audiocassette cassette recorders, and standardized transfer forms. Fax machines and audio cassettes are not new technologies, and others have advised3,10 and even tested11,12 the use of a standardized transfer form. However, providers’ suggestions that researchers implement and test standardized transfer forms and fax and audiocassette technologies have important implications. First, although newer information technologies (eg, digital pagers, Internet-based information exchanges) are being developed and are available in some settings, providers wish to keep the communication process simple and comfortable. Most providers who work at an ED or NH have used a fax machine and an audiocassette recorder, but they may not be comfortable with newer technologies or interested in learning how to use them in their chaotic work environments. Second, the suggested solutions include technologies that are already accessible to NH and ED providers but not used routinely to communicate between NHs and EDs. This accessibility may facilitate their implementation and use in transitional care. Third, history suggests that nursing homes, in general, are not technology-rich environments and will be late adopters of newer technology. Fourth, contrary to the limited amount of available evidence, ED providers believe that a short, standardized form can be successfully implemented to improve communication during transitional care.

This study has the usual limitations of focus group research. The selection of subjects was not random. Random sampling generally isn’t appropriate in focus group research.15 Instead, researchers commonly use purposeful sampling, which involves selecting participants based on the purpose of the study. In this investigation, we sought knowledgeable volunteers through personal invitations and group e-mail solicitations. The most experienced and knowledgeable health care professionals were asked to participate. A second limitation is that the ideas generated by our subjects were largely speculative. However, qualitative research generally is done to facilitate the development of hypotheses that will be tested in future studies. Before spending additional time and resources on costly interventions, focus group research can help target the more promising interventions from the perspective of knowledgeable subjects. In this case, the ideas generated by providers will be used to direct future research to improve the emergency care of NH residents. A third limitation is that focus group studies, similar to all other types of research, carry some potential for bias. The moderator was an emergency physician. This familiarity with the topic is “both an asset and a liability.”15 Because the moderator knows about the topic and participants, he was better able to make comparisons, understand interrelationships, and derive meaning from comments. On the other hand, a moderator’s expertise in the area of research can lead to assumptions and inexact interpretations. Mitigating the risk of these possibilities, the moderator previously received formal training in moderating focus groups, potential biases, and analysis of focus group data. More importantly, both authors (an emergency physician and a geriatrician) independently and systematically analyzed the transcripts. The analysis was conducted by 2 investigators with differing backgrounds to ensure that the results reflect more than one perspective.

The findings of this investigation suggest some attractive ways to approach future interventional trials. To improve the communication process, the use of simple and familiar technologies may be the most appropriate starting point. The combination of fax communication and standardized, brief NH-to-ED and ED-to-NH transfer forms may prove successful. To expedite completion, the NH-to-ED form could contain some predocumented clinical information. Another approach that may prove successful is the use of voicemail communication via a centralized, secure voicemail system. Such a voice-based system has the advantages of the audiocassette suggestion but without the potential for lost audiocassettes. Using such a system, an NH provider could call and leave a voice message for ED providers that includes much or all of the information that they will need to care for the patient in the ED. When releasing a resident back to the NH, the ED provider could use the voicemail system to leave important information related to the ED visit for NH providers. Both voicemail and fax technologies reduce the number of hands through which the information must pass and allow asynchronous communication; that is, the providers would not need to be available at the same time for the communication to be successfully completed. Further, they could improve care during shift changes, because the faxed or voice-
mail information would also be available for the oncoming ED and NH providers. Regardless of the intervention that is implemented and tested, the support, commitment, and genuine ownership of providers affected by the research will be essential. Technology alone is not enough to cause meaningful, lasting change in complex systems. It must be developed and implemented in a manner that overcomes, or at least is not overwhelmed by, the complexities of the NH-ED interface. Developing a partnership with providers to seamlessly integrate the intervention into the NH and ED cultures will be vital to successfully implementing innovations to improve the emergency care of NH residents.

REFERENCES