The Residential Long-Term Care Role in Health Care Transitions

Diane E. Berish¹, Robert Applebaum¹, and Jane K. Straker¹

Abstract
The objective of the current study is to describe the activities long-term care facilities are undertaking to reduce hospital admissions and readmissions by working to improve health care transitions. The data were collected via an online survey from 888 nursing facilities (NFs) and 527 residential care facilities (RCFs) that completed the care integration module of the Ohio Biennial Survey of Long-Term Care. Questions focused on partnerships, current work, type of care model, and perceived barriers to reducing hospital readmissions. More than nine in 10 (93.1%) of NFs and 63.6% of RCFs reported being engaged in a program to reduce hospital admissions/readmissions. Evidence-based care models were utilized by two thirds of NFs and one third of RCFs. Financial barriers were the most frequently cited challenges faced by facilities. Long-term care settings are increasingly becoming transitional care stops for short-term stay residents. Ensuring that facilities are well versed in current transition research and practice is critical to improve system outcomes.

Keywords
transitional care, hospital readmissions, long-term care facilities

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Health care transitions are characterized by multiple staff, employed by different service providers, attending to an individual moving across distinct health care delivery systems and settings. The movement of a person through different care settings creates the need for good communication and coordination of care across settings and providers (Callahan et al., 2012; Counsell, Callahan, Buttar, Clark, & Frank, 2006; Naylor, 2000). For those with chronic health conditions, many of whom are older and covered by Medicare and/or Medicaid (Anderson, 2010), transitioning back and forth between care settings, such as emergency rooms, acute care hospitals, nursing facilities (NFs), or home health providers, is common, and the complexity of their care makes these transitions difficult (Bogaisky & Dezieck, 2015; Newcomer et al., 2016; Volland, Schraeder, Shelton, & Hess, 2012). Although some care transitions are seen as positive, such as transitioning from the hospital to home, others, particularly unplanned hospital readmissions, are seen as negative outcomes for the person, the provider, and the payer (Mor, Intrator, Feng, & Grabowski, 2010). In addition, there is increasing evidence that at least some of these unplanned transitions could be prevented (Toles, Abbott, Hirschman, & Naylor, 2012; Toles et al., 2014; Walsh et al., 2012). For example, a study by Jencks, Williams, and Coleman (2009) estimated that re-hospitalizations were costing the Medicare program US$17.4 billion annually, and a large percentage of these readmissions were potentially avoidable if better supports were available during the transition between health care settings.

Efforts to improve health care transitions and reduce avoidable hospital readmissions have received considerable attention in the last decade. A recent report by the Institute of Medicine found that there is substantial variation across regions in the average amount of Medicare spending per beneficiary and that most of this variation was driven by differences in post-acute care spending, suggesting this is an area that could produce cost savings through reforms such as improved transitional care (Newhouse & Garber, 2013). There has also been growing interest in reforming Medicare readmission policy. In particular, there has been a move to alter Medicare payment mechanisms for hospital readmissions. Starting in 2013, hospitals with high readmission rates (Butcher, 2009; Counsell, 2011; Jweinat, 2010) began experiencing lower Medicare reimbursement for three medical conditions (Axon & Williams, 2011). In addition, the Affordable Care Act (ACA) made federal funds available to support community-based transitional care for Medicare beneficiaries (Naylor et al., 2013).

Along with acute care hospitals, long-term care providers play a vital role in many health care transitions and their hospital readmission rates have also come under scrutiny (Allen, 2012; Mor et al., 2010; Ouslander et al., 2011). Thus far, most long-term care providers have not been affected by changes in
federal regulations as directly as acute care hospitals. However, as hospitals continue to focus on their readmission rates, they are more likely to refer consumers to long-term care providers with lower re-hospitalization rates and steer consumers away from those facilities with higher re-hospitalization rates, creating an indirect effect for long-term care providers (Allen, 2012, 2013). Moving forward, however, new regulations regarding hospital readmission rates will affect the long-term care industry more directly (Carnahan, Unroe, & Torke, 2016). With the passage of the Protecting Access to Medicare Act of 2014, the Centers for Medicare & Medicaid Services (CMS) has taken steps to implement a Skilled Nursing Facility Value-Based Purchasing Program, including adoption of a 30-Day all-cause risk-standardized readmission measure effective in October of 2015 (Smith et al., 2015), along with an all-condition, risk-adjusted potentially preventable hospital readmission rate by October of 2016 (Federal Register, 2015). Under this value-based program, readmission rates will be publicly reported, and by fiscal year 2019, a performance standard will be established. Medicare will then begin making value-based incentive payments to skilled nursing facilities (SNFs) based on performance (Federal Register, 2015).

In addition to reimbursement changes, long-term care facilities have also seen changes in the characteristics of their consumer population that necessitate a focus on transitional care. Nationally, between 2000 and 2006, the number of Medicare recipients admitted to SNFs grew from 1.3 million to 1.79 million (Mor et al., 2010). During this same time, overall nursing facility occupancy has been declining as more people utilize home- and community-based services and supports (Centers for Medicare & Medicaid Services, 2013). Although SNFs are heavily involved in post-hospital rehabilitation activities and are more directly impacted by federal changes to Medicare reimbursement rates, the expansion of assisted living and the assisted living Medicaid waiver has been dramatic. For example, in Ohio, the number of residential care facilities (RCFs), which is the licensing category for assisted living, has increased by 130% and the number of available beds has increased by 332% since 1995 (Nelson, Applebaum, Mehdizadeh, & Straker, 2015). The Assisted Living Medicaid Waiver has grown from 500 individuals per day in 2008 to more than 4,500 in 2015 (Nelson et al., 2015). With today’s efforts to completely skip or to shorten the nursing facility rehabilitation stay post-hospital, the transitional care practices of residential care facilities have the potential to impact an increasing number of older adults. As more individuals require short-term rehabilitation, the frequency and complexity of health care transitions will only grow (Mehdizadeh, Deacon, Nelson, Applebaum, & Straker, 2013).
There are many factors that may influence the hospitalization decision in a long-term care setting making the process complex and potentially difficult to change (Lamb, Tappen, Diaz, Herndon, & Ouslander, 2011; Ouslander & Maslow, 2012; Ouslander et al., 2016a). Nursing staff have to negotiate the concerns of several different stakeholders, from the internal organization (SNF or RCF) and external organization (such as hospitals or payer sources), to the consumer and his or her family (Abrahamson, Mueller, Davila, & Arling, 2014). However, despite the many factors at play in the process, a recent study by Ouslander and colleagues (2016b) reported that SNF staff rated 25% of all 30-day hospital readmissions as potentially avoidable by efforts such as improved transitional care.

There are a growing number of studies on care transition interventions and their effectiveness in reducing avoidable hospital readmissions (Enderlin et al., 2013; Langwell, 2014; Peikes, Lester, Gilman, & Brown, 2012). Some previous studies have shown significant cost savings associated with transition interventions and these suggest several promising interventions (e.g., Boccuti & Casillas, 2015; Coleman, Parry, Chalmer, & Min, 2006; Jack et al., 2009; LeGrain et al., 2011). Replication of these results is not, however, automatic (Altfeld et al., 2013; Kwok et al., 2004; Jacob & Poletick, 2008; Naylor, 2000). A recent evaluation of the 48 CMS grant programs designed to reduce hospital readmissions found that only four projects saw significant reductions in readmission rates within the first year of implementation (Langwell, 2014).

Another limitation of earlier studies is that most of these models originate in the acute care hospital setting and strive to identify those Medicare patients at risk of readmission due to their diagnosis, past history, and demographic characteristics (e.g., Boccuti & Casillas, 2015; Coleman et al., 2006; Jack et al., 2009; LeGrain et al., 2011; Rooney, Markovitz, & Packard, 2011). Because nursing facilities and to a lesser extent, residential care facilities, have such an important role in post-acute hospital care, a better understanding of their roles in transitional care is critical. Although some recent programs have been designed for, or adapted with, long-term care providers in mind (Allen, 2013; Ouslander et al., 2011; Stefanacci & Haimowitz, 2014), understanding the nursing facility and residential care facility role in transitions has been limited. Within the context of this uncertainty lies the question about the role of the broader long-term care industry in health care transitions. For example, today’s nursing facility serves a high number of individuals posthospital discharge. Data from our recent study in Ohio found that the state, with 92,000 certified nursing home beds, had 215,000 admissions of which 145,000 (67%) were Medicare hospital discharges (Nelson et al., 2015). Despite this volume, the average nursing facility’s role in working to prevent readmissions both during and after the stay is relatively unknown.
Although residential care facilities do not see the same types of post-acute care consumers as SNFs, in Ohio, 67.3% of RCFs report providing post-acute care to their residents, compared with 76.1% nationally, with 7.4% of all admissions coming from hospitals (Nelson et al., 2015). Little information exists on the transition interventions being implemented throughout the nursing facility and residential care industries and the barriers faced by these providers.

This work describes the results of a survey of nursing homes and residential care facilities in Ohio regarding their activities related to care transitions, specifically hospital admissions and readmissions. Activities used by these organizations to reduce hospital admissions and readmissions through improved care transitions are explored.

**Method**

**Participants**

To address these questions, this study surveyed all nursing facility and residential care facility administrators in Ohio in 2014. An online survey was sent to 962 NF and 609 RCF administrators. The survey completion rate for NFs was 95.6% and for RCFs was 90.0%. Slightly fewer facilities, 888 NFs (response rate 92.3%) and 527 RCFs (response rate 86.5%), completed the care integration module of the survey. Response rates were high as a result of several factors. First, this is the 12th wave of an industry-wide study that allows for widespread awareness of, and familiarity with, the survey. Second, the Scripps Gerontology Center provided extensive follow-up with industry providers to boost response rates. Third, the survey is supported by the Ohio legislature, the Ohio Department on Aging, and the four provider associations within Ohio. Post hoc analyses showed that non-responders to the care integration module were not significantly different than responders on ownership type, being part of a multi-facility chain, facility size, or being part of a continuing care retirement community (CCRC, $p > .05$ for all). The remaining analyses are conducted on the 888 NFs and 527 RCFs that completed the care integration module. See Table 1 for a description of respondent facilities (Nelson et al., 2015).

The survey examined four health care transition topic areas within the long-term care industry: (a) Partnerships—what partners within the health care industry are you working with to address this issue? (b) Current work—to what extent are you actively engaged in care transition work related to reducing hospital admissions and readmissions, and how much progress have you made in this work? (c) Care models—are you using an evidence-based
model or a more informal method to assist with reducing hospital readmissions and avoidable admissions? (d) Barriers—what are the barriers and problems facing these administrators as they work to improve care transitions and reduce hospitalizations?

Results

Nine in 10 NFs (93.1%, _n_ = 827) reported “yes” to the initial yes/no question about being engaged in a program to reduce hospital readmission or admissions. For RCFs, the percentage who responded “yes” was smaller than NFs, with 63.6% (_n_ = 335) reporting being engaged in programs to reduce hospital readmissions or admissions. Results examining how much progress facilities have made in this work are shown in Figure 1. Facilities were asked to report their level of progress toward reducing hospital readmissions and avoidable admissions. Response choices included “do not plan to work on this,” “planning to work but haven’t begun,” “working on but haven’t completed,” or “completed.” Nearly four in 10 (39%) NFs reported treating residents under a transitional care program compared with 21% of RCFs. Conversely, only 5% of NFs reported having no work on any programs to reduce hospital

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<th>Table 1. Breakdown of Respondent Facilities’ Characteristics.</th>
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*Note. NF = nursing facility; RCF = residential care facility; ADL = activities of daily living.*

^aNumber represents participants in Assisted Living Waiver Program only.
readmissions or admissions compared with 30% of RCFs. Nursing facilities with an active program were more likely to be proprietary (83.4% vs. 75.9%, \( p < .001 \)), located more often in urban counties (81.2% vs. 74.1%, \( p < .001 \)), and were more often part of a multi-facility chain (75.8% vs. 65.9%, \( p < .001 \)). Urban counties were defined according to 2010 Census data as analyzed by the Office of Management and Business (OMB). OMB defines a metropolitan statistical area as a county containing a core urban area with 50,000 or more in population (U.S. Census Bureau, 2013). NFs with an active transition care program also reported slightly greater average annual Medicare days (4,752 total days vs. 3,887 total days, \( p = .183 \)), but did not significantly differ in size (105 average beds vs. 92 average beds, \( p = .907 \)) when compared with NFs without a program. When comparing RCFs with an active transitional care program against those without, they also tended to be part of a multi-facility chain (66.7% vs. 59.8%, \( p = .004 \)) and located more often in urban counties (80.6% vs. 75.7%, \( p = .030 \)), but with slightly fewer admissions from a hospital (6.2% vs. 7.5%, \( p = .162 \)) and did not differ significantly in average size (74.5 beds vs. 77.5 beds, \( p = .904 \)).

Survey findings on the nature of facility partnerships surrounding hospital admissions or readmissions are shown in Table 2. Not unexpectedly, on average NFs reported more formal partnerships than RCFs. The most often cited formal partner for NFs were individual physicians (51.3%), Medicare

**Figure 1.** Progress on care transition intervention implementation. 
*Note.* Care transition intervention implementation progress responses, reported as percentage of respondents, for NF and RCF. Percentages represent total responses for any type of transitional care program. NF = nursing facilities; RCF = residential care facilities.
Advantage plans (49.8%), and Medicaid Managed Care (49.5%) with the most frequently cited informal partners being individual hospitals (60.3%), other NFs (58.0%), and home care agencies (57.2%). RCFs on average reported more informal partnerships than formal. The most frequently cited informal partners of RCFs were individual hospitals (63.2%), hospitals or health care systems (59.8%), and individual physicians (59.1%), while the most frequently cited formal partners were area agencies on aging (31.3%), individual physicians (29.5%), and home care agencies (26.1%).

Information about models of care, such as using an evidence-based model or a more informal method to assist with reducing hospital readmissions and avoidable admissions, is shown in Table 3. About seven in 10 nursing homes (71.7%) and four in 10 RCFs (41.8%) have begun working on or have already chosen and implemented an evidence-based practice model. Only one model, Interventions to Reduce Acute Care Transitions (INTERACT), was chosen with any regularity (Ouslander et al., 2011). This approach was used by 28%
of RCFs and nearly two of three (64%) NFs were using an evidence-based practice. One quarter (25.5%) of RCFs reported using none of 10 suggested models, but developed a new model or a hybrid and nearly half (45.4%) reported not knowing on which model, if any, their program was based. Comparatively, the percentages for NFs were lower with 17.3% reporting using none of the suggested models or a hybrid and 16.5% not knowing which model provided the basis for their program. That three in 10 nursing homes did not use a proven model to assist with transitional care is important given the critical role that nursing homes now play in the short-term rehabilitation environment. Although RCFs play a less prominent role in transitions, the finding that less than one quarter of facilities use an established model also indicates an important area for further study.

Although a majority of facilities reported being engaged in work aimed at reducing hospital readmissions, respondents did identify a series of barriers and problems. Facilities could rank each barrier as a little bit of a barrier, somewhat, major, or enough of a barrier to stop efforts. Figure 2 displays the top 10 barriers cited as major concerns for NFs and RCFs, respectively. Perhaps because they have a more extensive involvement with transitions, NFs more frequently reported major barriers overall compared with RCFs. The most frequently cited major barriers for both RCFs and NFs reflected financial (e.g., establishing fair and sufficient reimbursement rates, 18.3%
RCFs, 29.5% NFs) and health care system culture (e.g., competition within the health care community, RCFs 13.3%, NFs 24.1%) issues.

To further explore these barriers, the data were divided by those facilities that reported having a formal hospitalization reduction program in place and those that did not for both RCFs and NFs. The most frequently cited major barriers for RCFs that had a formal program in place tended to be financial in nature (e.g., establishing fair and sufficient reimbursement rates, 20.9%, additional funds required to implement program, 18.4%). For those RCFs without a formal program, the largest major barriers related to the health care system culture (e.g., resistance of hospital staff to working with RCF, 21.3%) and technology (e.g., differences in technology used by partners, 15.1%). There was less knowledge about all aspects of hospitalization reduction work among those RCFs without a formal program in place with more than 20% responding “not familiar with this issue” to 16 of the 25 listed barriers. For RCFs without a formal program in place, the patterns between those facilities with a formal transitional care program in place and those without such a program were similar. Financial barriers accounted for four of the top five major barriers for both NFs with hospitalization reduction

**Figure 2. Top 10 reported major barriers to care transition intervention implementation.**

Note. Top 10 barriers cited as “major barriers,” reported as percentage of respondents, for NF and RCF. NF = nursing facility; RCF = residential care facility.
program and without. Overall those NFs without a formal program in place indicated higher levels of unfamiliarity with all aspects of this work, though at lower rates than their RCF counterparts (less than 18% for all listed barriers).

Discussion

Successfully navigating a health care transition necessitates cooperation and communication across different settings and health care providers. Establishing a program to improve care transitions, resulting in reduced hospitalizations and readmissions, requires long-term care providers to work collaboratively with their health care partners. Both RCFs and NFs reported utilizing partnerships with entities they would already be engaged with in other health care work. Individual physicians, Medicare managed care, area agencies on aging, and hospitals already work closely with RCFs and NFs in their communities.

It is notable that, despite extensive research on evidence-based care transition programs, a sizable number of facilities did not utilize an established care transition model. As these established models may offer a track record of success, training, and support, as well as a guide for implementation, it is unclear whether unfamiliarity with these programs or some other barrier is preventing facilities from adopting them. The one model cited with some level of frequency was the INTERACT model, which may be particularly appealing to those in the long-term care industry as it was designed specifically from the nursing facility perspective (Ouslander et al., 2011).

Reducing hospital admissions has been highlighted on a national level as an important area for working toward Medicare’s triple aim of improving care, improving outcomes, and reducing cost (Ouslander, 2013; Ouslander & Maslow, 2012; Sanna & Reuben, 2013). The current study seeks to describe the state of this work in Ohio’s skilled nursing and residential care facilities. Our results indicate there are higher levels of transitional care work being done in facilities located in urban versus rural counties, which may be due to differences in how hospital financial penalties are applied.

As we would expect, NFs with a much more extensive health care component, report higher levels of involvement than RCFs. NFs also reported greater frequency of work at all phases of program implementation and greater progress in that work. Despite NFs’ much greater involvement in transitional care programming (only 6.9% of NFs reported no work to reduce hospital readmissions and admissions), nearly two thirds (63.6%) of RCFs report engaging in transitional care work, indicating it is an area of concern for both types of residential long-term care providers.
The trend that NFs are more frequently and extensively involved in reducing hospitalizations than RCFs is an extension of the closer alignment with a hospital/medical model in NFs than RCFs. NFs offer more extensive care options and receive more residents with significant medical conditions who have the potential for hospital readmission. RCFs tend to cater to residents who have lower levels of disability, experience less acute illness, and who may be less likely to need hospitalization or re-hospitalization.

Finally, reporting engagement in health care planning work does not necessarily mean that work will be completed. Both RCFs and NFs reported several barriers that could potentially stand in the way. In general, NFs reported more barriers than RCFs. However, this could be due to NFs’ greater overall levels of engagement in health care transition planning work, which would cause them to experience barriers more regularly. Health care culture and financial resources were most often cited as major barriers to carrying out health care transition interventions. These were identified by both facilities with formal programs currently in place and those without.

Health care culture barriers were seen as having a large impact on system integration. For many years, each segment of the delivery system had responsibility for their specific sector, with very limited collaboration. As an example, hospitals were focused on their responsibilities for the acute care activities that happened within their walls, and discharge planning was evaluated primarily on speed. Although we have seen an expansion of post-hospital models to reduce readmissions, there has been a long history of little to no follow-up after the patient left the hospital. Nursing homes, which have seen a dramatic change in their day-to-day business through the expansion of rehabilitation care, are still heavily focused on the work that they do inside their facility, with limited discharge planning efforts and again almost no follow-up post-discharge. Even Medicare home health agencies operated with a limited purview dictated by Medicare. Thus, the culture of the system was driven by a very limited view of organizational responsibility. Changing this culture of caring in your own yard serves as a major barrier to successful transitional care programs. For nursing homes, particularly those with long-standing directors of nursing and administrators who saw the nursing home role in a traditional and limited manner, this translated into a very limited view of the role of the nursing home.

The financial barriers may be even more daunting. Under the current reimbursement system, nursing homes have been reimbursed for rehabilitation activities in the facility, but have not had incentives to worry about outcomes after the individual left the facility. Residential care facilities have had even less of a financial incentive, as they received no reimbursement from Medicare to assist with transition back to the community. The expansion of Medicare Advantage
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has placed even more pressure on nursing homes providing rehabilitation to reduce length of stay, with limited incentives for post-discharge care. Recent efforts to reduce hospital readmissions through financial penalties could eventually reduce hospital referrals to poorly performing nursing homes and eventually could impact practice. So far, efforts to maximize reimbursement by a struggling industry have trumped other changes in practice. The bundled payment demonstrations, that provide an all-in reimbursement to the hospitals, are also an attempt to address these barriers by creating a strong financial incentive to make care efficient and effective. Under the current system, particularly as Medicaid funding has been cut, nursing homes and residential care facilities, while believing that transitional care is important for their residents, report limited financial incentives to spend resources on these activities.

The health and long-term care systems are undergoing tremendous change. The nursing home industry, which was once referred to as “last home for the aged” (Tobin & Lieberman, 1976), is now transitional care for many. Our length of stay findings in Ohio found 43% of nursing home admissions were discharged in 3 months, and less than one third were still residents after 6 months (Mehdizadeh et al., 2013). The high rate of discharges was driven by a tremendous increase in short-term Medicare rehabilitation admissions, increasing from 30,000 in the early 1990s to 145,000 in 2014. The high volume of short-term residents indicates that ensuring that nursing facilities are well versed in up-to-date transition research and practice will be critical in efforts to improve system outcomes. Despite some progress in this arena, it is clear that we have a long way to go in creating a system that successfully integrates care across settings.

As a final caveat, it is worth noting that although the current study does represent a comprehensive effort to assess the current state of rehospitalization work in the long-term care industry in Ohio, the amount of federal regulation is different between the parts of the long-term care industry (i.e., NF vs. RCF). Federal initiatives linking hospital readmissions to Medicare reimbursement will have significant impacts on nursing homes, while having no financial effects on RCFs. In addition, there could be substantial variation in policy and regulation across states, particularly for those less federally regulated industries such as RCFs, which may impact health transitions care and policy. Further research based on the barriers offered in the current survey may explain why certain facilities choose not to engage and how best to encourage and support future hospitalization reduction programs.

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