**Barriers to Successful Care Transitions Associated with Cognitive and Mood Impairment**

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**Abstract**

The current project was designed to help Maryland stakeholders better understand two common transitions in care that occur for older patients: from hospital to nursing homes, and again, from nursing homes to community living situations. Skilled nursing staff (N = 58) representing at least 38 post-acute nursing facilities responded to online survey questions pertaining to short stay rehabilitation residents. Based on the survey findings, seven recommendations were provided for improving these care transitions in Maryland.

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**Barriers to Successful Care Transitions Associated with Cognitive and Mood Impairment**

Patients with cognitive impairment appear to be particularly vulnerable to perilous care transitions from hospital to post-acute care facilities.1 For patients in general, the Office of the Inspector General found that 22% of those transitioning from a hospital to a skilled nursing facility experienced an adverse event, and 59% of these were preventable with better information and processes.2 Moreover, the 30-day hospital readmission from nursing homes (26%) is higher than the rate for patients who were discharged home.The number of adverse events for transitioning patients with dementia or significant cognitive impairment are even more alarming. In their recent comprehensive review of this topic, as it pertains to patients with dementia, the American Medical Directors Association (AMDA) identified several barriers to safe transitions from hospital to nursing home that negatively impact nursing home care.3 Chief among these is that nursing homes that admit newly discharged hospital patients often lack essential information, particularly regarding cognitive status, that impacts person-centered care.

Two plausible explanations for the fact that post-acute nursing homes often do not receive adequate information regarding the cognitive functioning of residents coming from hospitals are: (1) the failure to administer psychometrically robust cognitive assessment instruments prior to hospital discharge (a failure of knowledge), and (2) suboptimal communication of patients’ cognitive deficits from hospital to post-acute center (a failure of information transfer). There is evidence that hospitals typically do not adequately assess the cognitive abilities of patients prior to discharge.4 Inadequate assessment of older patients’ cognitive functioning may be the result of (1) the use of general cognitive screening tools (rather than more robust cognitive tests) that are not sensitive to specific cognitive domains (e.g., memory, executive functions) that influence functional abilities (IADLs, ADLs); and more commonly, (2) the failure to use any standardized cognitive instrument.5 In terms of transferring information regarding patients’ known cognitive functioning, there is ample evidence that such information is transferred simultaneous to the arrival of the transferred patient, not prior to admission. One of the recommendations from the AMDA white paper regarding such hospital to post-acute settings is to transfer vital patient information *prior* to post-acute admission to better prepare treatment plans.

There is also ample evidence that post-acute rehabilitation patients who have cognitive impairment are particularly vulnerable to adverse effects when they transition from nursing home to the community, especially risk for hospital re-admission.6 The importance of improving care transitions for patients with cognitive impairment making this *second* transition is less studied, but no less important than the first transition (hospital to post-acute setting). Each year, more than 1.5 million Americans (mostly older adults) transition from hospitals to sub-acute rehabilitation programs in nursing homes and approximately one million then transition from the nursing home to community dwellings.7 Two common patient clinical characteristics that are known to complicate both post-acute outcomes and successful post-nursing home transitions are cognitive impairment and mood dysfunction (especially depression and anxiety). Given the high base rate of impairment in both spheres,8 it is vital that useful information regarding cognition and mood be part of the “information transfer” between care settings. As the AMDA report makes clear, this is not currently happening. One way to correct this problem is to identify what types of information regarding cognitive and mood functioning is needed to improve nursing home care and reduce adverse events both in the post-acute facilities and in community dwellings.

The current project was designed to help Maryland stakeholders better understand how two transitions in care occur for Maryland patients: post-acute short stay rehabilitation patients who transition from hospital to center, and again from center to home in the community. Our aim was to ask key staff in post-acute nursing homes about the quality, quantity, and timeliness of discharge information they receive from hospitals and subsequently provide in their discharges post-nursing home care, especially as it pertains to cognitive and mood functioning. We investigated five basic questions. Those that relate to cognitive information track closely to the AMDA white paper literature review and recommendations with respect to hospital discharge to post-acute settings. We added questions about spousal caregivers and about mood functioning, as both impact on adverse events for discharging patients.

Through an online survey, participants representing 38 skilled nursing facilities (inclusive of one Continuing Care Retirement Community), answered questions about short stay rehabilitation residents. This study was designed to identify how post-acute rehabilitation centers rated the importance and quality of cognitive and mood information as it pertains to their residents. A final goal of this project was to create a tool kit of preferred or “best practice” features regarding the transition processes from hospital to nursing home, and from nursing home to community dwelling.

**Core questions**

**Transfer from hospital to post-acute nursing home.**

1. Do nursing homes receive adequate information from hospitals regarding the patients’ cognitive status *before* patients present for nursing home admissions? This question is predicated on the person-centered concept that accurate knowledge of patients’ cognitive status prior to admission can improve the development of effective and efficient care plans.
2. Do nursing homes receive adequate information from hospitals regarding the patients’ mood status *before* patients present for nursing home admissions? Similar to the first question, this second question is based on the person-centered concept that accurate knowledge of patients’ mood status prior to admission can also improve effective and efficient care plans.
3. To what extent do nursing home staff think that receiving accurate cognitive and mood information as part of the “information transfer” would improve nursing home care? Additionally, when should they receive such information?

**Transfer from post-acute nursing home to community home.**

1. When discharging nursing home residents to the community, is *current* cognitive functioning assessed (shortly before discharge)? Are cognitive tests used that are designed to identify key cognitive domains (e.g., memory, executive functions)? There is ample evidence that specific cognitive domains, such as executive functions and contextual memory, are predictive of performance of basic and instrumental activities of daily living.
2. When discharging nursing home residents to the community, are the cognitive statuses of the caregivers assessed? There is often an assumption made that patients with dementia who have a spousal caregiver are not at risk for adverse events because someone else is managing their affairs. However, many spousal caregivers are age cohorts of discharged patients and may also experience cognitive loss. Therefore, risk may not be adequately mitigated by not assessing, or at least inquiring, about the cognitive functioning of the caregivers.

**Methodology**

**Participants**

Facility staff (N = 58) from post-acute nursing homes that provide short stay rehabilitation services participated in the survey. Participants indicated their job title as directors of nursing (33.4%), administrator (29.2%), nurse (12.5%), social work discharge planner (8.3%), rehabilitation therapists (8.3%), or other (8.3%).

**Measures and Materials**

Participants responded to an online *Qualtrics* survey. The survey was completed by each participant in approximately 15 minutes. This brief time duration was determined by balancing the quality and quantity of questions with brevity. The researchers were made aware that compliance with the survey would be improved if the time demands in completing it were minimal.

**Procedure**

The Beacon Institute and Mansbach Health Tools LLC recruited fifty post-acute facilities. Staff from 38 facilities completed surveys. All participating post-acute facilities were provided a written description of the study outline and participation responsibilities. Several post-acute facilities contacted Mansbach Health Tools, LLC for clarification of the project. Descriptive statistics were performed to report participant characteristics and survey data.

**Results**

**Transfer from hospital to post-acute nursing**

As previously mentioned, the AMDA white paper on this transition period recommends the transfer of relevant patient information *prior* to post-acute admission to improve treatment planning. However, nursing staff reported receiving a hospital discharge or transfer summary for residents before post-acute admission less than half of the time(*M* percent = 46.0), and this estimate widely varied (*SD* = 36.5). Nursing staff reported receiving a hospital discharge or transfer summary for residents after admission 7.5% (*SD* = 15.2) of the time and not at all 3.9% (*SD* = 14.1) of the time. Only 11.4% of nursing staff strongly agreed with getting sufficient information from hospital discharge or transfer summaries necessary to optimize care for nursing home residents. Interestingly, 37.1% of nursing staff reported that the information that they receive in hospital discharge or transfer summaries is inadequate for optimizing nursing home care. As presented in Table 1, nursing staff consistently indicated that they do not receive useful information from hospital discharge or transfer summaries regarding the cognitive, mood, and functional status of residents.

*Table 1.* *“Consider the information you receive from hospital discharge/transfer summaries about residents. Do you receive useful information about…”*

|  |  |  |
| --- | --- | --- |
|   | Yes | No |
| Executive function  | 17.14% | 82.86% |
| Memory  | 22.86% | 77.14% |
| Global cognition | 28.57% | 71.43% |
| General mood | 28.57% | 71.43% |
| Depression | 40.00% | 60.00% |
| Instrumental ADLs | 40.00% | 60.00% |
| Anxiety | 45.71% | 54.29% |
| Basic ADLs | 48.57% | 51.43% |

Nursing staff estimated that hospital discharge/transfer summaries contain information about cognitive or mood functioning (other than a diagnosis) only 22.9% (*SD* = 20.4) and 16.7% (*SD* = 15.3) of the time, respectively. Even fewer of them reported receiving hospital discharge or transfer summaries with the results of a cognitive or mood measure: 14.2% (SD = 19.1) of the time for cognitive measures and 8.0% (*SD* = 13.3) of time for mood measures. Yet, all nursing staff underscored the importance of the accurate assessment of residents’ current cognitive and mood functioning either prior to or at the time of admission. In fact, 84.8% of nursing staff reported that accurate cognitive assessment is ‘very important’ (15.2%, ‘somewhat important’) and 66.7% rated accurate mood assessment as ‘very important’ (33.3%, ‘somewhat important’). Tables 2 and 3 illustrate the ways that receiving adequate cognitive and mood assessment information at or before admission could improve aspects of post-acute resident care.

*Table 2. “Adequate cognitive assessment information could improve…”*

|  |  |  |
| --- | --- | --- |
|   | Yes | No |
| Person-centered care | 93.94% | 6.06% |
| Efficiency of rehabilitation for short stay residents | 93.94% | 6.06% |
| Effectiveness of rehabilitation for short stay residents | 93.94% | 6.06% |
| Improve the education of family caregivers | 93.94% | 6.06% |
| Improve the discharge process | 90.91% | 9.09% |
| Improve resident compliance with care | 71.88% | 28.13% |

*Table 3. “Adequate mood assessment information could improve…”*

|  |  |  |
| --- | --- | --- |
|   | Yes | No |
| Person-centered care | 93.94% | 6.06% |
| Effectiveness of rehabilitation for short stay residents | 93.94% | 6.06% |
| Improve the education of family caregivers | 93.94% | 6.06% |
| Efficiency of rehabilitation for short stay residents | 90.91% | 9.09% |
| Improve the discharge process | 81.82% | 18.18% |
| Improve resident compliance with care | 78.79% | 21.21% |

In summary, nursing staff indicated that (1) they receive transfer summaries *less* than half the time prior to admission; (2) they generally fail to receive important cognitive, mood, and functional information prior to, during, or after admitting residents; and (3) receiving such information would likely enhance person-centered care, improve family caregiver education, and facilitate more effective discharges from the nursing home to community dwelling.

**Transfer from post-acute nursing home to community home**

Nursing staff rated the relative importance of post-discharge outcomes (see Appendix 1). Nursing staff rated five resident outcomes as the most important features of a successful discharge: (1) the receipt of adequate supervision when needed, (2) safety at home, (3) regular attendance at doctor appointments, (4) fewer re-hospitalizations, and (5) successful management of medications. In contrast, they rated shopping alone, keeping track of current events, and handling finances as less important indicators of a successful discharge.

Accurate and sensitive information is essential to successful discharge planning. To accomplish this, nursing home staff appear to rely on and highly value several sources of information sources during the discharge planning process (see Table 4). Discharge planners indicated that the most important sources of information are from the rehabilitation and nursing teams, resident, families and other caregivers.

*Table 4. Relative importance of various information sources for discharge planning*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | Very important | Important | Somewhat important | Not Important |
| Rehabilitation team | 89.29% | 7.14% | – | 3.57% |
| Resident | 85.71% | 10.71% | – | 3.57% |
| Resident's family | 82.14% | 14.29% | – | 3.57% |
| Nursing team | 82.14% | 14.29% | – | 3.57% |
| Caregivers | 82.14% | 14.29% | – | 3.57% |
| Discharge planner | 78.57% | 10.71% | 3.57% | 7.14% |
| Attending physician | 75.00% | 14.29% | 3.57% | 7.14% |
| Chart | 67.86% | 21.43% | 7.14% | 3.57% |
| Behavioral health specialists | 67.86% | 14.29% | 10.71% | 7.14% |

Discharge planners also highlighted the importance of cognitive assessment in the nursing home discharge planning process. They rated the risk of several potentially adverse events occurring as a function of cognitive impairment. As shown in Table 5, nursing staff almost unanimously agreed that residents with cognitive impairment are often at risk for medication management errors, re-hospitalization, and missed doctor appointments. Appendix 1 lists other risks associated with cognitive impairment identified by nursing staff.

*Table 5. “Residents with cognitive impairment are typically at risk for…”*

|  |  |  |
| --- | --- | --- |
|   | Yes | No |
| Falls | 96.00% | 4.00% |
| Improper medication management | 92.00% | 8.00% |
| Re-hospitalization | 92.00% | 8.00% |
| Missed doctor appointments | 88.00% | 12.00% |

Exploring how discharge planners assess cognitive functioning is important because cognitive deficits among nursing home residents increase the potential risk of a number of adverse events post-discharge. The primary formal source of cognitive functioning information for discharging nursing home residents is the Brief Instrument for Mental Status (BIMS). The BIMS is the mandated cognitive assessment used in U.S. nursing homes. Fifty-seven percent of nursing staff indicated that they *do not* routinely use cognitive instruments other than the BIMS as part of nursing home discharge planning. This suggests that the BIMS is the *de facto* measure of cognitive functioning. Nevertheless, 50% of the discharge planners rated the BIMS as “not relevant” or only “somewhat relevant” for discharge planning.

Discharge planners reported using cognitive instruments to understand residents’ cognition and daily functioning. As presented in Table 6, nursing staff most commonly used cognitive instruments during discharge planning to assess resident’s memory functioning (70.8%). Discharge planners reported using cognitive instruments were less frequently used to assess IADL functioning (62.5%), ability to provide self-care (58.3%), and judgment (54.2%),

*Table 6. “Do you routinely use information from a cognitive instrument to assess the following areas during discharge planning?”*

|  |  |  |
| --- | --- | --- |
|   | Yes | No |
| Memory | 70.83% | 29.17% |
| Ability to perform instrumental ADLs | 62.50% | 37.50% |
| Ability to provide self-care | 58.33% | 41.67% |
| Judgment | 54.17% | 45.83% |

In summary, discharge planners reported that: (1) safety at home, appropriate medication management, and reduced rates of re-hospitalization are indicators of a successful nursing home discharge; (2) successful nursing home discharges are based on vital information from multiple sources, especially the rehabilitation team, resident, and caregivers, inclusive of family members; (3) cognitive assessment is important in discharge planning; (4) more than half of them deemed the BIMS to be only somewhat relevant or not relevant, yet (5) it is the only cognitive instrument used by over half of participating nursing staff.

**Spousal caregivers**

More than half of nursing staff (52.0%) reported that the spouse of discharged nursing home residents is often in the role of caregiver. Only 9% of nursing staff rated spousal caregivers as having an “accurate” understanding of the resident’s *cognitive* functioning. Similarly, only 9% of nursing staff indicated that spousal caregivers often have an accurate understanding of residents’ *mood* functioning*.*

Participating discharge planners estimated that more than half (51.3%) of residents’ spousal caregivers are at least somewhat cognitively impaired. Eighty-eight percent of nursing staff agreed that assessing the cognitive functioning of a patient's spousal caregiver, as part of the discharge planning, would improve the general nursing home discharge process for residents. Nursing staff agreed that cognitive assessment of spousal caregivers would improve discharged residents’ medication compliance (72.0%) and reduce the likelihood of unnecessary re-hospitalizations (76.0%). Nevertheless, only 12% of nursing staff (or a member of their interdisciplinary team) formally assessed the cognitive functioning of spousal caregivers using a validated cognitive instrument.

Nursing staff may avoid cognitive assessments of spousal caregivers as part of the discharge planning process because they perceived caregivers to be reluctant to undergo such testing. Only 16% of nursing staff predicted that spousal caregivers would be willing to participate in an assessment of their own cognitive functioning to inform discharge planning, with 36% indicating that they “might or might not.” A slightly higher number of participants (20%) indicated that spousal caretakers might be open to receiving a self-assessment measure of cognitive functioning, although 40% were undecided.

Finally, nursing staff were asked to respond to the following scenario designed to further investigate the importance of cognitive assessment of spousal caregivers to the nursing home discharge process: *“Suppose you are discharging a subacute resident to her home in the community. She has cognitive impairment and a caregiver who is aged 65 or older.”* All discharge planners endorsed the importance of knowing the spousal caregiver’s cognitive status as part of discharge planning. Seventy-six percent of nursing staff rated the priority of this knowledge as very important and 24% rated it as moderately important. Most nursing staff (92%) agreed that having a fuller understanding of the caregiver’s cognitive abilities would improve the potential success of the discharge plan.

In summary, discharge planners reported that: (1) spousal caregivers often have limited insight into the current cognitive and mood functioning of discharging nursing home residents; (2) approximately half of the spousal caregivers of cognitively impaired discharging nursing home residents are also cognitively impaired themselves; (3) nursing staff rarely conduct a formal assessment of spousal caregivers’ cognitive functioning as part of the discharge planning processes; (5) possibly because they perceive spousal caregivers as unwilling to participate in cognitive testing, (6) nursing staff view spousal caregiver’s cognitive status as a vital as part of discharge planning, particularly for residents with cognitive impairment.

**Discussion**

 Improving transitions in care has become a galvanizing force in the U.S. healthcare system. Stakeholders in both the public and private sectors have increasingly focused efforts toward improving the processes underlying these transitions with the goal of reducing adverse post-discharge outcomes for patients. This goal is both care- and financially-based. With respect to the latter, under the Patient and Protection and Affordable Care Act,8 hospitals currently face financial penalties associated with unacceptable high readmission rates for Medicare and Medicaid patients. Of course, hospital readmissions are just one of several important adverse events that have been associated with poor transitions in care.

 The current study was designed to help establish best practices in transitioning patients from hospital to nursing homes, and again, from nursing homes to community living situations. Based on an online survey completed by staff from 38 Maryland nursing homes, we offer seven recommendations that can provide a foundation for improving these transitions in Maryland (Appendix 2).

**Recommendation #1: Core transition records should be transferred prior to nursing home admissions**

In our study, participants were asked to indicate when they typically receive transfer/discharge summaries from the referring hospital. Participants indicated that nursing homes receive discharge information prior to the patient’s arrival only 46% of the time. This allows limited opportunity for the nursing home to adequately prepare to meet the individual needs of their new resident. The Centers of Medicare and Medicaid Services’ new payment model involves financial incentives based on quality of care and integration of services. Consequently, nursing homes who participate in the bundled payment system (Bundling and Coordinating Post-Acute Care Act of 2015) may be particularly disadvantaged by delayed reception of key transfer information. Efficiency and quality outcomes are best achieved by integrating timely health information. Certainly, when nursing homes have key information about incoming residents, they have better opportunities to create a resident-centered care plan.

**Recommendation #2: Core transition records should include information about cognitive status (inclusive of specific cognitive domains)**

 Study participants reported that medical information transferred from hospitals lacks critical information about the cognitive functioning of transferring patients. This view applied to both global cognition as well as specific cognitive domains, such as memory and executive skills. From a more global perspective, 100% of the participants indicated that receiving cognitive information as part of the transfer information is important, and 85% reported that it is “very important.” It is interesting to note that the study participants strongly endorsed the importance of having cognitive information for improving person-centered care (94%), effectiveness of rehabilitation (94%), improving caregiver education (94%), and discharge planning (91%). These results are congruent with the summary report from the Transitions of Care Consensus Conference (TOCCC),9 which advocates for the development of an agreed upon, standard minimum data set that hospitals would use in discharging patients. The TOCCC recommends data pertinent to the patient’s cognitive status as one of the five core elements in hospital transition records.

 It is also important to make a distinction between receiving subjective or objective cognitive screening information versus information from cognitive tests that provide more specific cognitive domain insights. Specifically, participants indicated that having information about memory and executive skills could improve nursing home care and the discharge process.

**Recommendation #3: Core transition records should include detailed information about mood status**

 Studies that have investigated the base rate of depressive episodes and generalized anxiety in short stay nursing home residents indicate occurrence rates between 20% and 30% for both conditions.8 Given the fact that depressive and anxiety symptoms are common among this population, it is alarming that participants in our study reported that they receive useful mood status information from the discharging hospital less 50% of the time (40% for depression, 46% for anxiety). These residents do receive depression screening via the Patient Health Questionnaire – 9 (PHQ-9) during their nursing home stays, but do not routinely receive anxiety screening. We recommend that hospitals include mood and anxiety status information as part of the information transfer, and that this information contains measurement of specific depressive *and* anxiety symptoms. This could be accomplished by using separate depression and anxiety screening instruments, or by administering a screening tool that is sensitive to both conditions (e.g., Brief Anxiety and Depression Scale; BADS).

**Recommendation #4: Formalize a system to educate residents and their caregivers about cognitive and mood status**

Critical to effective person-centered care and resident voice is sharing essential information with the resident and caregivers regarding health status. This should be done throughout the course of post-acute rehabilitation, and especially prior to discharge. With respect to this last point, there is clear evidence that cognitive deficits are associated with difficulties in performing activities of daily living.10 Prior to discharge from the nursing home, residents who have cognitive or mood challenges be given brief written educational material (e.g., “one-pager” for mood, “one-pager” for cognition) about symptoms and signs of impairment. These sources should also contain basic daily management ideas as well as information about when and how to seek professional care in their communities. This information should also be shared with caregivers.

To optimize the effectiveness of this material, it should be actively reviewed with them as part of the discharge process rather than passively transferring information. This active approach allows residents and their caregivers to ask questions about the material and their discharges. Conveying and discussing information to residents and their caregivers can also be accomplished through a DVD or internet link. This second approach would allow for actual training in symptom management. For cognitively impaired residents who exhibit behavioral and psychological symptoms of dementia (e.g., aggression), training caregivers in basic behavioral management skills could be critically important. One innovative approach to training caregivers, especially unpaid ones (e.g., family members, spouses), is the suite of on-demand training videos developed by the BCAT Research Center. These videos, called *iCARE @ HOME*, focus on behavioral management and meaningful engagement skills. An example of an online video-based resource that is less concerned with training and focuses more on support is the video caregiving program sponsored by the Retirement Research Foundation ([www.videocaring.org](http://www.videocaring.org/)). Another resource that provides educational videos can be found at the Alzheimer’s Association website (<http://www.alz.org/maryland/in_my_community_16103.asp#videos>).

**Recommendation #5: Discharge planning should include a formal cognitive instrument to assess current functioning and incorporate the data into the plan**

Fifty-seven percent of the participants indicated that they do not routinely use cognitive instruments (other than the BIMS) as part of nursing home discharge planning. Yet, they reported that cognitive impairment places residents at particular risk for improper medication management (92%), hospital readmission (92%), missed doctor appointments (88%), and falls (96%). It is possible that improvement in these adverse events may be enhanced when discharge planners (or a member of the team) administer a cognitive instrument that is sensitive to memory and executive abilities shortly before discharge. Both cognitive domains have been demonstrated to predict ADL and IADL risks.10 There are challenges in relying on BIMS scores as the primary cognitive instrument for discharging residents. While the BIMS can identify residents with severe cognitive impairment, its ability to correctly identify residents with milder cognitive impairment is more limited.11 We recommend adding a cognitive instrument to the discharge planning process that has more predictive power. For example, the Brief Cognitive Assessment Tool (BCAT) has been found to predict an additional 47% of the variance in cognitive diagnoses over and above the BIMS scores.11

**Recommendation #6: Encourage spousal caregivers to participate in a cognitive self-assessment or formal cognitive assessment as part of the resident’s discharge plan**

The importance of caregivers for persons with dementia or significant cognitive impairment is hard to overstate. The Alzheimer’s Association reports that there are over 15 million unpaid caregivers supporting 5 million people with dementia in the US.12 How capable are these caregivers? Recent studies show that there is cause for concern. There is growing evidence that spousal caregivers often have cognitive deficits, and these deficits may be further compromised by caring for loved ones who have dementia.13

In our study, approximately 50% of participants reported that discharging nursing home residents who have cognitive impairment often have a spousal caregiver. The participants estimated that more than half of these caregivers (51%) have some degree of cognitive impairment. Seventy-six percent agreed that cognitive assessment of caregivers would likely improve the likelihood of unnecessary hospital readmissions, and 72% thought that spousal assessment would improve medication compliance. Perhaps even more striking, only 12% of the participants (or a member of the interdisciplinary team) formally assess spousal caregivers’ cognitive functioning. While 92% of participants agreed that a resident’s discharge process would be improved if the cognitive functioning of spousal caregivers was known prior to discharging the resident, only 16% thought that spousal caregivers would be willing to receive a cognitive assessment. The degree of resistance spousal caregivers may have toward cognitive self-assessment warrants further empirical investigation. In the meantime, strategies to encourage such assessment need to be developed.

 Encouraging spousal caregivers to participate in a cognitive screen may represent a “heavy lift.” However, willingness to do so may be improved if: (1) older adults truly receive a cognitive assessment during their Annual Wellness Visits (AWV); one of the mandated features of the AWV is cognitive screening, though it appears that this feature has not been routinely or adequately addressed; (2) cognitive assessments are offered online from the privacy of one’s home, as these may be more comfortable for spousal caregivers; and (3) nursing homes educate families about the frequency of cognitive deficits in caregivers and the possible negative consequences.

**Recommendation #7: Improve training of nursing home staff by requiring continuing education that emphasizes meaningful engagement and behavioral management skills for residents with cognitive impairments**

Hospital to nursing home transfers facilitated by communicating key resident cognitive information can provide a foundation for optimal person-centered care. To be truly effective, this information must be communicated to facility staff, especially nursing assistants who provide the majority of personal care to residents. In addition to recognizing cognitive impairments in their residents, nursing staffs must also understand how to manage difficult behaviors (i.e., behavioral and psychological symptoms of dementia; BPSD) when they emerge. One of the most common BPSD observed in nursing homes is behavioral dyscontrol. Caregivers who are trained in behavioral management will reduce the frequency and severity of resident behaviors, and can play a vital role in person-centered care.14

 Meaningful engagement interventions facilitated by nursing staff is one evidenced-based method for mitigating BPSD. Meaningful engagement is a construct that refers to the qualitative benefits of specific types of interpersonal or social experiences. The need for meaningful engagement is part of human nature. Research suggest that residents who experience activities high in meaningful engagement are healthier physically and psychologically than those who do not.15 Relative to cognitively healthy older adults, residents with cognitive impairment may not possess the social or mental abilities necessary for seeking out and finding such opportunities. This fact places a direct responsibility on facility staff to create meaningful engagement opportunities for more vulnerable and cognitively challenged residents.

Interactions (e.g., between nursing staff and resident) and activities (e.g. recreation groups) that are high in meaningful engagement emphasize: (1) interpersonal connections that fulfill a sense of belonging and affiliation, (2) content that is associated with residents’ past roles and interests, (3) activation of old and preserved memories, and (4) active resident participation. Opportunities for meaningful engagement occur both informally and formally. Informal opportunities include nursing aides helping residents with their personal care. Formal opportunities occur during structured recreation activities.

**Conclusion**

We hope that the information presented in this report will contribute to improvement in care transitions for patients leaving hospitals for nursing homes, and again for residents leaving nursing homes for their community dwellings. It is clear that in both care transitions, cognitive and mood functioning is not adequately or routinely assessed and integrated into the discharge planning process. A next step for improving care transitions is to share the seven recommendations made here with hospitals and nursing homes in the state of Maryland. Adoption of these best practices would help direct and improve person-centered care, enhance family caregiver education, and lead to more effective discharges.

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*Appendix 1.* Supplemental survey responses

*“When a patient has been appropriately discharged from the nursing home, they are well-positioned to... Please select all below that apply.”*

* Receive adequate supervision (if needed): 92.59%
* Be safe at home: 85.19%
* Maintain doctor appointments: 70.37%
* Avoid re-hospitalized within 30 days: 66.67%
* Move around as needed: 66.67%
* Manage medications: 62.96%
* Play a game or hobby: 51.85%
* Socially engage with others: 48.15%
* Use household appliances: 40.74%
* Prepare a balanced meal: 40.74%
* Remember appointments: 40.74%
* Handle finances (bills, taxes): 29.63%
* Keep track of current events: 25.93%
* Shop alone (clothes, groceries): 14.81%

*“Please indicate other risks associated with having cognitive impairment.”*

* “Isolation, poor nutritional intake, hygiene concerns”
* “Residents are at risk for elder abuse by family, friends and strangers.”
* “Injury/accident. Depression/Anxiety”
* “Poor intake, wandering outside in inclement weather, driving when they shouldn't”
* “Safety awareness with ADLs”
* “All kinds of accidents and hazards that could put themselves and potentially others at risk.”
* “Falls, safety, nourishment”
* “Difficulty with managing ADLs & transfers”
* “Safety”
* “Elopement”

*Appendix 2.* Recommendations

1. Core transition records should be transferred prior to nursing home admissions
2. Core transition records should include information about cognitive status (inclusive of specific cognitive domains)
3. Core transition records should include detailed information about mood status
4. Formalize a system to educate residents and their caregivers about cognitive and mood status
5. Discharge planning should include a formal cognitive instrument to assess current functioning and incorporate the data into the plan
6. Encourage spousal caregivers to participate in a cognitive self-assessment or formal cognitive assessment as part of the resident’s discharge plan
7. Improve training of nursing home staff by requiring continuing education that emphasizes meaningful engagement and behavioral management skills for residents with cognitive impairments