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“Striving for excellence”: MDS coordinators’ perceptions of their role in the nursing home

Ragnhildur I. Bjarnadottir, MPH^a [PhD Candidate], Patricia K. Semeraro, MS^a [PhD Candidate], Carolyn T.A. Herzig, MS^{a,c} [Project Director], Monika Pogorzelska-Maziarz, PhD^b [Assistant Professor], Eileen Carter, PhD^{a,d} [Associate Research Scientist], Catherine C. Cohen, BSN^a [PhD Candidate], Jasmine Travers, MS^a [PhD Candidate], and Patricia W. Stone, PhD^a [Centennial Professor of Health Policy]

^aCenter for Health Policy, Columbia University School of Nursing, 630 West 168th Street, Mail Code 6, New York, NY 10032, USA

^bJefferson School of Nursing, Thomas Jefferson University, 130 S. Ninth Street, Room 847, Philadelphia, PA 19107, USA

^cDepartment of Epidemiology, Columbia University Mailman School of Public Health, 722 West 168th Street, New York, NY, 10032, USA

^dNewYork-Presbyterian Hospital, 630 West 168th Street, New York, NY, 10032, USA

Abstract

The purpose of this study was to explore how Minimum Data Set (MDS) coordinators perceive their role and the assessment process. Eleven MDS coordinators from ten geographically dispersed nursing homes (NH) were interviewed between May and September 2013. Four broad themes emerged from the content analysis: 1) information gathering, 2) interdisciplinary coordination, 3) role challenges and 4) resources. The first two themes referred to key components and competencies in the MDS coordinators’ role, the third theme dealt with certain challenges inherent in that role and the fourth theme highlighted resources that helped address these challenges. This study provides insight into how MDS coordinators perceive their role, as well as some of the challenges they face to successfully enact that role. Findings from this study can help inform NH management staff, such as directors of nursing and NH administrators and policy makers on how best to support MDS coordinators’ work to enable efficient and accurate resident assessment processes.

Keywords

nursing home; older adult; MDS coordinators; quality of care

Introduction

Minimum Data Set (MDS) coordinators are pivotal in ensuring that appropriate, quality care is provided to residents in nursing homes (NH). In particular, they are responsible for coordinating and overseeing the interdisciplinary assessment and care planning processes for all residents in Medicare and Medicaid certified NHs (Straker and Bailer, 2008; AANAC, 2011). MDS coordinators also play a key role in assuring the accuracy of information used for NH quality measures and payment systems. While the process of completing the MDS assessments is structured and well-defined, little research has focused on how the role of the MDS coordinator is implemented in individual NHs (Dellefield, 2008; Piven et al, 2006). In light of the clinical, financial and regulatory significance of the MDS coordinator role and scarcity of research on this topic, further examination is warranted. Therefore, this qualitative descriptive study explored how MDS coordinators from across the United States perceived their role.

Background

With the passage of the Omnibus Budget Reconciliation Act of 1987 (OBRA) sweeping reforms were instituted to improve the quality of care in United States NHs, including the requirement to conduct comprehensive individualized assessments for all residents (Section 1819. [42 United States Code 1395i-3]). The Resident Assessment Instrument (RAI), implemented in 1991, addresses OBRA requirements and consists of three components: 1) MDS Assessment Process, 2) Care Area Assessment (CAA) Process and 3) RAI Utilization Guidelines. Together, these provide a comprehensive assessment of each resident's functional capabilities and help NH staff identify health problems. The instrument has undergone changes and revisions since its initial implementation, most recently in 2010 with the transition from MDS 2.0 to MDS 3.0.

The MDS is the core of the RAI and includes approximately 450 items that address the basic physical (e.g., medical conditions, mood, and vision), functional (e.g., activities of daily living, behavior) and psychosocial (e.g., preferences, goals, and interests) health status of residents to identify actual or potential areas of concern. The CAA involves a thorough and in-depth assessment of care areas that are triggered as a result of the MDS assessment and provides the foundation upon which a resident's individual care plan is formulated (Centers for Medicare and Medicaid Services, 2014a). MDS assessments are generally completed upon resident admission, every quarter, annually and when the resident is discharged. In addition, assessments must be completed if the resident shows a significant change in status or if a correction is made to a previous assessment (Rahman & Applebaum, 2009).

Each NH is required to ensure that they have a registered nurse (RN) on staff to coordinate the MDS assessment process, often entitled MDS coordinators. The MDS coordinator is accountable for the coordination of the full MDS process, including all MDS assessments as well as care planning and coordination. Federal regulations require that a RN sign off on each MDS assessment once it is completed. However, since there is limited availability of RNs in this setting, MDS coordinator positions are sometimes held by licensed practical or vocational nurses (LPN/LVN), with the support and oversight of a RN on staff. Nurses are

not legally required to become certified in order to hold an MDS coordinator position, however, several organizations offer MDS coordinator certification programs to train and prepare both RNs and LPNs for the role. The American Association of Nurse Assessment Coordination (AANAC) is one of the more recognized organizations, offering programs accredited by the American Nurses Credentialing Center. Beyond these regulations and resources, very little is known about MDS coordinators and their demographics in terms of education, experience and certification (AANAC, 2011).

The role of the MDS coordinator has evolved and increased in complexity in response to growing emphasis on improved quality measures, direct resident input and a greater focus on residents' quality of life (Straker and Bailer, 2008; AANAC, 2011). In addition to the assessments becoming broader and more comprehensive, the MDS coordinator role has also changed to address the federal focus on cost containment strategies (AANAC, 2011). To ensure appropriate reimbursement for services rendered, MDS data must be accurately documented and submitted to the Centers for Medicare & Medicaid Services (CMS) and these assessments can significantly impact the financial well-being of a NH. Inaccuracies can contribute to over- or underestimated reimbursements, and may even result in citations and monetary penalties (Levinson, 2012). MDS data are also increasingly used for health services research (Dellefield, 2008; Shin & Scherer, 2009), further extending the potential of these data to influence policy and practice.

Despite the growing importance of the MDS assessment process, to our knowledge, only two studies have examined how MDS coordinators carry out their role. Piven et al (2006) explored MDS coordinators' relationship patterns in two NHs using case study methods. They found that positive relationships between MDS coordinators and other staff contributed to system-wide improvements in clinical processes, whereas poor relationships made it difficult for MDS coordinators to advocate for improvements. Similarly, Dellefield et al. (2008) explored the work of 24 MDS coordinators in their organization and highlighted the importance of communication and positive interpersonal relationships for the quality of care in NHs. Furthermore, they identified training, workload, turnover and technological resources as important factors for the MDS coordinators' effort in quality improvement. While both studies provided some important insight into the work of MDS coordinators, each focused on narrow aspects of their role, i.e. communication and organizational climates. Furthermore, these studies were conducted before the transition from MDS 2.0 to 3.0 and CMS' implementation of their three phase Electronic Health Record (EHR) Incentive program, both factors that potentially influenced the role of MDS coordinators. Finally, neither study used a purposive national sample. One study explored only two NHs within one state (Piven et al, 2006) whereas the other study, while nationally diverse, utilized convenience sampling rather than a purposive sampling method (Dellefield, 2008).

A greater, more comprehensive understanding of how the MDS coordinator role is currently implemented in NHs, and the structures and processes that influence their work, will help direct continuing efforts to improve the quality of NH care. Therefore, the purpose of this study was to explore how MDS coordinators perceive their role and the assessment process.

Methods

Design

This was a qualitative study designed to identify emergent themes related to MDS coordinators' perceptions of their roles in verbatim transcripts of in-depth interviews. The interviews were conducted as part of a larger mixed methods study (R01NR013687) to explore the phenomena of infection control and prevention in NHs. Various personnel involved in infection control and surveillance were interviewed, including MDS coordinators. The detailed methods for the larger study have been previously described (Stone et al, 2015). All procedures were approved by Columbia University Medical Center's Institutional Review Board and written informed consent was obtained from all participants.

Sample

Ten NHs from across the United States were purposively sampled to obtain variation in geographic location, ownership status and bed size. The NHs were geographically dispersed, with four in the South, three in the Northeast and three in the West/Midwest. A majority of the NHs (60%) were for-profit facilities. The number of beds ranged from 40 to 204, with an average bed size of 124.

Data collection

MDS coordinators were interviewed individually and in person, using a semi-structured interview guide tailored specifically to their position. Examples of interview questions are provided in Table 1. Interviews were audio recorded and transcribed verbatim prior to analysis. The interviews lasted for an average of 47 minutes (SD=16, range 15–65 minutes).

Analysis

Transcripts were analyzed using content analysis, which allowed the researchers to “discover and describe the focus” of the respondents using the emerging themes from the text (Stemler, 2001). Two trained researchers (RIB and PKS) thoroughly reviewed the transcripts to familiarize themselves with the data and establish overall impressions. The researchers subsequently derived codes and systematically applied these codes to the transcripts using NVivo qualitative data analysis software (QSR International Pty Ltd. Version 10, 2012). The codes were further analyzed to identify emerging themes, which were continually refined until they were exhaustive and all of the data could be captured within one of the themes. To ensure the consistency of coding, two of the 11 transcripts were double coded and compared for inter-rater reliability. The mean percent agreement was 97.4% (SD=0.8%) and mean Kappa was 0.72 (SD=0.04).

Rigor

Several steps were taken to ensure methodological rigor in this study. Purposive sampling was employed to increase transferability and a geographically diverse sample was obtained (Creswell, 2013). However, transferability may be reduced due to heterogeneity among the NHs in terms of size, ownership and state and local policies (Shento, 2004). In this study, we used triangulation of sources by examining the consistency of different data from ten

NHs around the US. The triangulation served to increase the credibility of this study. Iterative questioning was used during the interviews. This included returning to previously raised issues, extracting related data by rephrasing questions and adjusting questions based on previous interviews with other respondents (Creswell, 2013). Biweekly team meetings with data coders and members of the larger study team were held throughout the data collection and analysis process to provide opportunity for peer scrutiny and feedback (Shento, 2004). Confirmability was enhanced with the use of two independent researchers in coding the data and discussing all discrepancies to achieve consensus (Shento, 2004; Creswell, 2013).

Results

Eleven MDS coordinators from ten NHs were interviewed between May and September 2013. Among the 11 MDS coordinators, eight were RNs and three were LPNs or LVNs. Two of the three LPN/LVNs reported being the only ones responsible for MDS coordination in their facility. Mean experience as an MDS coordinator was six years (ranging from two to nine years); information about MDS coordinators experience was missing for one respondent. Eight MDS coordinators reported having received MDS certification, of which five were AANAC certificates.

Four broad themes emerged from the content analysis: 1) information gathering, 2) interdisciplinary coordination, 3) role challenges and 4) resources. The first two themes referred to key components and competencies in the MDS coordinators' role, the third theme dealt with certain challenges inherent in that role and the fourth theme highlighted resources that helped address these challenges. Themes and representative quotes are shown in Table 2.

Information gathering

Information gathering emerged as a key component of the MDS coordinator role. The respondents emphasized collection and synthesis of multiple data sources as a core competency of their work and described thoroughly reviewing resident charts, talking to various staff involved in resident care and interviewing both residents and their families. As one respondent noted, data collection *"involves clinical competence... [and] observational and critical thinking"*. Another respondent also stressed the need to *"look at everything, because there are little things that people think are not important, but [are] important"*. MDS coordinators reported spending a great deal of time reviewing available information about each resident, and comparing different sources of information for consistency and accuracy before entering these information into the MDS assessment.

The importance of ensuring there was documentation to support the entered information was emphasized. As one coordinator noted: *"...a lot of times for nursing, if it's not documented, it's not done"*. This requirement for documentation appeared to pose some difficulty, particularly when discrepancies occurred between what was documented in residents' charts and what emerged from discussions with staff, family or the residents themselves. One respondent described instances when basic demographic information were incorrectly documented, emphasizing the need to confirm information with a resident: *"You at least*

need to have eyeballed them to actually see, because what could be on the hospital paperwork,...their gender or whatever, is wrong...You need to really go see them". In those cases, the information could be corrected after observing and interviewing the resident first hand. However, in cases when the documentation was more difficult to verify, another respondent noted: *"[Even] if I think the information is incorrect, I have to use what's documented. I can't put what I feel [is correct], because there is no documentation to support it".*

Interdisciplinary coordination

MDS coordinators described their responsibilities of coordinating meetings with the various disciplines within the facility in order to complete the MDS assessment process and to develop care plans. Leadership skills were seen as a necessary component of their role, *"to get it all together, as a team"* as one MDS coordinator expressed. MDS coordinators also described that they *"lead the interdisciplinary team"* and are *"responsible"* for everyone's input.

Communication skills were also emphasized as a crucial component of their work, especially the significance of having *"a lot of points of communication"*. This included the need to communicate with many different staff members within the facility and maintaining frequent communication, both formal and informal. To facilitate such frequent communication, respondents emphasized openness and friendliness as core competencies for their work. As one respondent noted: *"If you have that [open and friendly] attitude and you're very involved with the staff, then they will give you the things that you need, and they will be there for you".*

Role challenges

All of the MDS coordinators discussed the complex and varied challenges inherent to the MDS assessment processes. Eight coordinators spoke of the heavy workload they experienced and described having to conduct assessments on multiple residents daily, with each assessment taking anywhere from 30 minutes to three hours, depending on the type of assessment and condition of the resident. As one respondent put it: *"Sometimes there's not enough time in a day"*. However, two respondents described how having more than one MDS coordinator working in the same facility made the workload more manageable. One stated: *"I mean, we have a good team. There are four of us full-time, so it does help make things go"*.

Three coordinators talked about balancing the heavy workload with being thorough and accurate in their assessments and that taking one's time with each assessment was essential for accuracy: *"I'd say, at least if you want to do an accurate job [completing the assessment], you have to spend... at least a couple of hours"*. Consequently, accuracy can suffer when coordinators have too heavy a workload. As one respondent described: *"[some facilities] bomb the MDS assessors with too [many] MDS assessments to be done ... you can only do so much, so you tend to be rushing and then that really compromises accuracy"*.

Related to workload, the mandated assessment schedule created an important context for the MDS coordinators' assessment process, highlighted by all the respondents. Most of the respondents emphasized the importance of adhering to the required schedules and described strategies to keep track of each resident's schedule. This was most commonly done through developing a calendar indicating assessment schedules for each of the residents that they then shared with other staff to ensure they completed their part of the assessment in a timely manner. As one coordinator said: "[We] are responsible to make sure the other [members of the interdisciplinary team] do their sections. So it's kind of a little stressful because you have to meet a deadline".

One of the subthemes that emerged as part of role challenges was that the MDS coordinators perceived their role to be of great importance, which seemed to cause them added stress. This was due to the pressure to make sure that all the necessary work was being completed accurately and in a timely manner. Six respondents noted the significance of their role, describing themselves as key personnel because they "know exactly what is going on in the house". They also mentioned the important role they played in annual state inspections, as surveyors would reach out to them for their records and broad knowledge of the facility. Furthermore, several respondents noted how important their position was in terms of ensuring correct and timely reimbursements to the facility; in the words of one respondent: "I make sure that all staff enters all the services that are being provided to our residents to ensure proper reimbursement". This was perceived to be of great importance because, as one respondent phrased it: "Now we're talking about money that makes the world go round". While this great importance of the MDS coordinator role was described as an additional stressor, it was also a source of pride, with one respondent noting: "I'm proud of myself and I work hard" and another stating: "Really, we're striving for excellence".

Resources

The respondents spoke of strategies and sources of support to overcome challenges and enhance the efficacy of their role. Though they had varying levels of education and experience, they all noted the importance of continuous training, both formal and informal. Several described receiving continuous on-the-job learning, with many learning from senior staff members or predecessors with more MDS coordinator experience. As one respondent stated: "I used to ask the MDS [coordinator], my tutor, how I will be an excellent MDS [coordinator] and I do remember her response: by doing it".

In addition to the continuous, informal on-the-job training, many sought formal continuing education and training through seminars and webinars outside the facility, particularly when changes were made in MDS policy or procedures, such as the most recent shift from MDS 2.0 to the revised MDS 3.0. Furthermore, the RAI manual was commonly mentioned both as an important resource for on-the-job training and as a continuing source of information even for the more experienced MDS coordinators. Three respondents referred to the RAI manual as "our bible".

Access to outside consultants, either within the facility's corporate structure or with outside organizations, was commonly mentioned as a valuable resource. These outside resources

mainly served to assist with issues that were atypical or uncommon, as well as to “*know for sure that what I’m doing is correct*”.

The availability of computer technology also enhanced the efficacy of their role. Several mentioned the benefits of completing the MDS assessments electronically. As one respondent noted: “*It’s computerized, so it’s really not that hard to do once you sit down to do it, if you have all you need sitting in front of you*”. Various helpful features of MDS software were also described, such as automatically generated calendars to indicate the assessment schedule for each resident and electronic flags to indicate which fields of the MDS were incomplete.

While all MDS assessments are completed and submitted electronically, none of the facilities had fully implemented EHR. This was described as a barrier, as it required more work in acquiring the necessary information and records to complete the MDS assessments. Most of the respondents who discussed this spoke positively about the potential of having EHRs implemented at their facilities, as one coordinator stated: “*Computer charting and all that is going to be a jewel*”. Four of the facilities reported using a computerized charting software for Clinical Nurse Assistants’ charting. This was seen as beneficial, although it still required manually entering information from the computerized charting software into the MDS assessment form.

Discussion

This qualitative study explored MDS coordinators’ perceptions of their role. Respondents identified core components and competencies of the MDS role, highlighted some challenges inherent in the role and described resources to help overcome those challenges. The respondents in this study particularly emphasized the importance of communication in their work, the need to seek patient information from multiple sources and a heavy workload, which threatened the accuracy of the assessment process.

Consistent with findings from both Piven et al (2006) and Dellefield (2008) communication was a vital component of the MDS coordinator role. Respondents in this study highlighted the importance of keeping open lines of communication with all staff members involved in resident care in order to obtain accurate information about the residents they were assessing and receive timely updates when a resident’s condition changed. Both Dellefield (2008) and Piven et al (2006) also highlighted the importance of good relationships to empower the MDS coordinator to advocate for change within the facility, amend care processes and influence quality of care. Communication in the context of advocating for change within the facility was not discussed by any of our respondents, and respondents were not asked about this aspect specifically. Therefore, further research is needed to explore the importance of direct feedback from MDS coordinators to management staff, such as directors of nursing (DON) and NH administrators, on quality of care within facilities outside of the regular state inspections. Given that state inspections are conducted annually, whereas MDS coordinators have the opportunity to communicate with management staff more frequently, effective direct feedback from MDS coordinators to management staff could have a much quicker effect on the quality of care than state inspections.

Another facilitator of the MDS coordinator role identified in this study was the various sources of information MDS coordinators consult to complete thorough and accurate assessments. This is consistent with the findings of Dellefield (2008). Similarly, Straker and Bailer (2008) found that information gathering from multiple sources was key for a thorough MDS assessment. The MDS coordinators in Straker and Bailer's (2008) study added that of the different sources, the MDS coordinators in their study found direct patient interviews to be the most useful method of information gathering. The respondents in this present study also emphasized the importance of interviewing residents when possible, both to confirm documented information and collect supplementary details.

Respondents in our study discussed the challenges associated with relying on multiple different sources of data, which was considered both time-consuming and a potential threat to accuracy. Similarly, Dellefield (2008) reported the importance of charting systems to support the MDS assessment and noted that computerized charting systems feeding directly into the assessment systems were perceived to greatly influence the accuracy of the assessments. Even without EHR-MDS integration, EHRs are potentially beneficial because all pertinent information from the different disciplines involved in resident care could be found in one place. None of the participating facilities in this study had implemented EHRs at the time of the interviews. There is no federal mandate on EHR adoption for NHs and, consequently, NHs are not eligible for the CMS' EHR incentive programs (Centers for Medicare and Medicaid Services, 2014b). Cost has been identified as a major hindrance to EHR adoption (Cherry, Carter, Owen, & Lockhart, 2008) and consequently financial incentives seem to be a significant contributor to facilities' readiness to adopt EHRs (Wolf, Harvell, & Jha, 2012). The benefits of EHR adoption to the MDS process, as perceived by participants of this study, indicate that measures to financially incentivize EHR adoption in NH should be explored. Future researchers should examine how EHR implementation impacts MDS coordinator assessment processes, workload and accuracy along with overall efficiency in NHs and ultimately improved resident outcomes.

Several challenges in MDS coordinators' work were identified. The most notable challenges were the heavy workload and complexity of their role and having to juggle multiple residents who require different assessment schedules and types. This is consistent with the findings of Dellefield et al (2008), who identified workload as one of the structural factors adversely affecting MDS coordinators' work. In this present study, MDS coordinators remarked that lack of time and a heavy workload could result in inaccuracies in the MDS assessments. This is of particular concern due to the financial implications of such inaccuracies. For example, a 2012 report revealed that in 2009, inaccurate reimbursements to skilled nursing facilities cost Medicare billions of dollars. Consequently, CMS has begun applying civil monetary penalties and citations to NHs if it is discovered that inaccurate MDS assessments have been submitted (Levinson, 2012). This may be particularly useful for DON's to keep in mind when assessing staffing needs or advocating for improved staffing on behalf of nursing. To our knowledge, there are no federal or state regulations on minimum staffing of MDS coordinators in NHs. Given the potential effect of high workload on the accuracy of MDS assessments, and the tremendous cost of inaccuracies, minimum and optimal staffing in this field warrants further research.

MDS coordinators' stress related to the complexity of their role and heavy workload was further magnified by virtue of the importance of their role to multiple aspects of NH functioning. A similar finding emerged in Dellefield's (2008) study, although MDS coordinators in that study perceived that administrators were not well informed about the importance of the MDS process, causing some tension. This was not discussed by the respondents in our study. However, the MDS coordinators also described their role as empowering and many reported being proud of the work they do.

The respondents identified several strategies to overcome the challenges they described, such as developing comprehensive calendars to keep track of assessment schedules and working in teams to better manage workload. Furthermore, the respondents identified the RAI handbook as well as access to outside consultants as helpful resources to support their work. This is consistent with the findings of Straker and Bailer (2008), who reported that the RAI manual was cited as the most reliable source to resolve MDS issues. Given the reliance on the RAI manual, a continued emphasis should be placed on maintaining a current and accessible RAI manual for all NHs. Currently, up-to-date versions of the RAI manual are available for download on the CMS website and also accessible within the software used to submit the MDS assessments. However, MDS coordinators need to be alert and make sure to check regularly for updates (Centers for Medicare and Medicaid Services, 2014c).

Finally, while federal regulations require that a RN sign off on all MDS assessments, two of our respondents who were not RNs reported being solely responsible for MDS assessments. It is unclear whether someone else, not serving as an MDS coordinator, such as a DON, was signing off on the assessments in these instances to fulfill federal regulations. We do not have information about the reasons behind an LPN/LVN serving as an MDS coordinator in these two instances, although the well documented shortage of RNs in long term care (Juraschek et al., 2012) is likely a contributing factor. Further research is needed to explore the prevalence of LVN/LPNs serving as MDS coordinators and potential effects on the quality and accuracy of MDS assessments.

Conclusions

MDS coordinators play a major role in the reliability and accuracy of NH resident assessment data. This study provides insight into how MDS coordinators perceive their role, as well as some of the challenges they face in their work. Findings from this study can help inform NH administrators, DONs and policy makers on how best to support MDS coordinators' work to enable the development of high quality care plans and efficient, accurate and consistent resident assessment processes. This includes: maintaining an open line of communication between NH management staff and MDS coordinators, improving health information exchange through adoption of EHRs and continuing to ensure that the RAI manual is kept up to date, accessible and user friendly. Further study is needed to understand the work of MDS coordinators in NHs, given the growing complexity of the MDS coordinator role. Specifically, future research should explore the impact of EHR implementation on the work of MDS coordinators as well as further examine MDS coordinator communication with other staff and administrators and its potential impact on quality of care. Finally, additional research should examine the MDS coordinators'

workload as it may affect the accuracy of MDS assessments, which has tremendous financial implications.

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References

- The American Association of Nurse Assessment Coordination (AANAC). Defining the Role of nurse assessment coordinators: Beyond paperwork and reimbursement. 2011. Retrieved November 26, 2014 from <http://www.aanac.org/docs/white-papers/the-role-of-the-nurse-assessment-coordinator-%28april-2011%29.pdf?sfvrsn=2>
- Dellefield ME. The work of the RN Minimum Data Set coordinator in its organizational context. *Research in Gerontological Nursing*. 2008; 1(1):42–51.10.3928/19404921-20080101-04 [PubMed: 20078017]
- Centers for Medicare & Medicaid Services. Long-term Care Facility Resident Assessment Instrument User's Manual, Version 3.0. 2014a Oct. Retrieved November 11, 2014 from: <http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/MDS30RAIManual.html>
- Centers for Medicare & Medicaid Services. Overview of EHR Incentive Programs. 2014b. Retrieved November 14, 2014, from <https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/>
- Centers for Medicare & Medicaid Services. MDS 3.0 Technical Information. 2014c. Retrieved December 7, 2014 from: <http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/NHQIMDS30TechnicalInformation.html>
- Cherry B, Carter M, Owen D, Lockhart C. Factors affecting electronic health record adoption in long-term care facilities. *Journal for Healthcare Quality: Official Publication of the National Association for Healthcare Quality*. 2008; 30(2):37–47. [PubMed: 18411891]
- Creswell, JW. *Qualitative inquiry and research design_: choosing among five approaches*. 3. Los Angeles: SAGE Publications; 2013.
- Levinson, DR. Inappropriate payments to skilled nursing facilities cost Medicare more than a billion dollars in 2009. Washington, D.C: Department of Health & Human Services; 2012. Retrieved from <https://oig.hhs.gov/oei/reports/oei-02-09-00200.pdf>
- Juraschek SP, Zhang X, Ranganathan V, Lin VW. United States Registered Nurse Workforce Report Card and Shortage Forecast. *American Journal of Medical Quality*. 2012; 27(3):241–249. <http://doi.org/10.1177/1062860611416634>. [PubMed: 22102163]
- Piven ML, Ammarell N, Bailey D, Corazzini K, Colon-Emeric CS, Lekan-Rutledge D, Utley-Smith Q, Anderson RA. MDS coordinator relationships and nursing home care processes. *Western Journal of Nursing Research*. 2006; 28(3):294–309.10.1177/0193945905284710 [PubMed: 16585806]
- Rahman AN, Applebaum RA. The nursing home Minimum Data Set assessment instrument: manifest functions and unintended consequences--past, present, and future. *Gerontologist*. 2009; 49(6):727–735.10.1093/geron/gnp066 [PubMed: 19531805]
- Section 1819. [42 United States Code. 1395i–3]. Requirements for, and Assuring Quality of Care in, Skilled Nursing Facilities. Retrieved November 11, 2014 from http://www.socialsecurity.gov/OP_Home/ssact/title18/1819.htm
- Shento AK. Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*. 2004; 22(2):63–75.

- Shin JH, Scherer Y. Advantages and disadvantages of using MDS data in nursing research. *Journal of Gerontological Nursing*. 2009; 35(1):7–17. [PubMed: 19227098]
- Stemler S. An overview of content analysis. *Practical Assessment, Research & Evaluation*. 2001; 7(17) Retrieved from <http://pareonline.net/getvn.asp?v=7&n=17>.
- Stone, PW.; Herzig, CTA.; Pogorzelska-Maziarz, M.; Carter, E.; Bjarnadottir, RI.; Semeraro, PK.; Cohen, CC.; Travers, J.; Schweon, S. Understanding infection prevention and control in nursing homes: A qualitative study. *Geriatric Nursing*. 2015. Epub ahead of print <http://doi.org/10.1016/j.gerinurse.2015.02.023>
- Straker JK, Bailer AJ. A review and characterization of the MDS process in nursing homes. *Journal of Gerontological Nursing*. 2008; 34(10):36–44. [PubMed: 18942538]
- Wolf L, Harvell J, Jha AK. Hospitals Ineligible for Federal Meaningful-Use Incentives Have Dismally Low Rates of Adoption of Electronic Health Records. *Health Affairs*. 2012; 31(3):505–513.10.1377/hlthaff.2011.0351 [PubMed: 22392661]

Table 1**Examples of interview questions**

Tell me about your role as an MDS coordinator. What are your responsibilities?
Tell me about the process of preparing for scheduled assessments, and collecting and submitting MDS data at your facility.
What are the primary sources of information that you use to complete the MDS? What are some additional sources you might use?
About how many hours are spent completing MDS comprehensive assessments? Quarterly assessments?
About how many assessments (comprehensive and quarterly) are completed in this facility during a typical month?
Does your facility use electronic medical records, apart from MDS?
Are the MDS data that are collected and submitted used in any way by the facility (apart from fulfilling requirements)?
Please describe the training that you received as an MDS coordinator. Do you believe it was sufficient?
Tell me about any continued training you receive on a regular basis
If you have a question about how to complete an MDS assessment, to whom do you direct the question?

Table 2

Themes and representative quotes

Theme	Representative quote	Number of MDS coordinators endorsing theme N (%)
<i>Information gathering</i>		
Multiple data sources	I just go and try to find all the information from the nurses, from the charts and everywhere.	9 (82)
Importance of documentation	Everything that I put into the computer I have to have proof...I have to have written proof or something to back up everything I write in [the MDS assessment].	6 (55)
<i>Interdisciplinary coordination</i>		
Good communication skills	You have to be a very friendly and involved person, because you have to communicate with [everybody] in the building.	7 (64)
Leadership	I lead the interdisciplinary team in conducting thorough and accurate assessment for all the residents we have here at the nursing home.	7 (64)
<i>Role responsibilities</i>		
Assessment schedule	Every [resident] gets reviewed every three months...It's based on when they were admitted to the facility.	11 (100)
Workload	Sometimes there's not enough time in a day, but I always say [the work is] to be continued...We just do the best we can to get everything done.	8 (73)
Perception of role importance	I'm the one who is generating the five-stars, four-stars, three-stars in the facility.	6 (55)
<i>Resources</i>		
Continuous training	Every day you learn. Every week you learn something new.	11 (100)
Benefits of technological resources	Computer charting and all that is going to be a jewel...You won't have to really get up and make copies or anything. You [will] have everything right there at your fingertips.	7 (64)
Benefits of outside resources	I have to keep referring to the manual or making sure or talking to my consultant...So, I know for sure that what I'm doing is correct.	11 (100)