

A Statewide Survey Report of Roles and Responsibilities in Current Utah Care Management Processes

Brenda Luther, PhD, RN, Marc-Aurel Martial, MPH, BSN, RN, and Joyce Barra, PhD, RN

ABSTRACT

Purpose of the Study: Measure current roles and responsibilities of care managers in the state of Utah.

Primary Practice Setting: All settings of health care including inpatient, outpatient, community, payer, post-acute, and transitional care settings.

Methods and Sample: A quantitative descriptive survey design was used to assess and describe current care management roles and responsibilities of 191 care managers within the state of Utah. Quantitative variables of roles and responsibilities were collected in an electronic database (REDCap).

Results: Major results conclude that care managers spend most of their time on direct patient interactions including discharge planning, population care, and utilization review. These care managers are highly experienced in their field, with most being in their professional practice for more than 10 years. Most of the care managers are bachelor's prepared nurses.

Implications for Care Management and Care Coordination Practice: To create or expand care management processes to meet the goals of health care reform, systems first need to know what care managers/coordinators are doing and where their current focus on care resides. Educators, leaders, and, indeed, the care managers themselves are a part of preparing this dynamic workforce. The major responsibility of care management continues to be direct patient interactions, meaning that care managers are performing vital interpersonal patient interaction needed to achieve highly personalized patient care with assurances of quality and safety. No matter the name—care management, case management, or care coordination—these activities are an essential part of health care, with highly specialized skills that promote patient engagement and activation.

Key words: care coordination, care management, case management, descriptive research, measurement, responsibilities, roles, survey, transitional care, workforce preparation

Care coordination acts as “the glue that makes the healthcare system a safe and coherent place” (Lamb, 2014, p. xvi). Health care systems are optimizing the care coordination and care management processes to improve care for patients in all health care settings. Care managers are vital members of the interdisciplinary health care team and now work in many patient arenas such as inpatient, outpatient, post-acute, transitional, and rehabilitation facilities. They focus on improving care by way of improving patient engagement and activation, eliminating redundant tests and procedures, reducing readmissions, facilitating safe transitions in care, and identifying high-risk and high-user patients. In many health care systems, care management processes are also designed to meet the needs of utilization review (UR), discharge planning (DP), and resource allocation. Care managers' most important impact is that of helping ensure that patients' needs and preferences are understood by all and sharing vital information with all providers involved in the patients' care (National Priorities Partnership, 2008).

“Care management” is an umbrella term used to include care coordination, case management, and transitional care (TC; Powell & Tahan, 2010). These are not new concepts to health care or nursing, but now they often correspond to new roles in new settings. Case management evolved from legislative and payment reform as early as the 1980s and focused attention on UR and appropriate use of resources in the acute care setting (Powell & Tahan, 2010). The newer terms of “care management” and “care coordination” are also now specifically referred to in regulatory ways. The Affordable Care Act of 2010 has defined roles of care coordination in acute (hospital-based) and primary (community-based) care settings

Address correspondence to Brenda Luther, PhD, RN, College of Nursing, University of Utah, 10 South 2000 East, Salt Lake City, UT 84112 (brenda.luther@nurs.utah.edu).

The authors report no conflicts of interest.

DOI: 10.1097/NCM.0000000000000207

Care managers' most important impact is that of helping ensure that patients' needs and preferences are understood by all and sharing vital information with all providers involved in the patients' care.

and focuses on coordinating care across systems to avoid redundancies (Lamb, 2014). At the same time, the Institute for Healthcare Improvement's (IHI's) Triple Aim Initiative guides care management processes to goals of improved patient experiences, improved health of populations, and reduction of overall health care costs (IHI, n.d.).

Care managers improve health outcomes by identifying patient needs and goals of care, promoting communication of identified needs and plans of care across systems and settings, and assisting patients as they navigate all of their systems of care over time (IHI, n.d.). Care managers also work to improve care outcomes for populations or groups of patients. Care managers use decision-support technology to stratify the risks associated with these population groups, and they employ evidence-based practice interventions based on risk factors.

One of the major challenges for health care leaders and administrators is to design effective care management teams that blend the roles and responsibilities of the past with the emerging competencies of the future. A common question focuses on what aspects of past roles and responsibilities should remain and what new roles and responsibilities need to be added. When designing effective care management teams, the following foundational processes of care management should be assessed and new concepts should be included (Lamb, 2014; Naylor, Aiken, Kurtzman, Olds, & Hirschman, 2011; Powell & Tahan, 2010; Press, Michelow, & Macphail, 2012):

- Interprofessional communication and collaborative relationships within and between health care systems;
- Direct patient interaction (DPI) including assessment and patient care plan development, determining a patient's level of self-management, medication management, health coaching strategies, and end-of-life planning;
- Transitional care processes, including participation in and coordination of DP;
- Population health management, including steps of risk stratification; and
- Utilization review and resource management.

The purpose of this quantitative descriptive study was to assess current roles and responsibilities

in existing care management processes within the state of Utah. This research study will be followed by a comparison of current roles and responsibilities with new roles and responsibilities that are emerging from national initiatives and evidence-based literature. The need for this research study arose from a liaison with key health care industry leaders such as chief nursing officers and directors of care and case management processes. After a yearlong collaboration, these leaders asked what the care managers/coordinators were doing in our state and what these managers and coordinators were going to need to do in the future. Thus, the research questions guiding this study were as follows: (1) What are the major roles and responsibilities of Utah care managers/care coordinators? and (2) Do these roles and responsibilities align with emerging literature about care management/care coordination? The first research question is presented in this article, and the second will be reported elsewhere.

METHODS

Design and Sample

A quantitative descriptive survey design was used to assess and describe current care management roles and responsibilities within the state of Utah. Quantitative variables of roles and responsibilities were collected through an electronic survey and stored in REDCap, a browser-based electronic database that supports collaborative access, user authentication, and central data storage and export (Harris et al., 2009).

The target sample consisted of care coordinators, case managers, and care managers from four major health care systems based in Utah. The managers of these systems estimated a possible participant pool of 800–900 employees, who were mostly nurses and social workers. One hundred forty-one participants responded. Participants were informed that their consent to participate was implicit in the completion of the survey, and approval to participate was obtained from the care management administrative staff of each of the four health care systems in the state. Response rate for this survey was estimated at 25%.

Care managers use decision-support technology to stratify the risks associated with these population groups, and they employ evidence-based practice interventions based on risk factors.

Instrument

The electronic survey was based on a literature search in health care databases and texts, as well as an Internet search of national organizations and initiatives discussing care coordination and management. The survey consisted of 88 questions organized into five domains: DPI, DP, population health management, TC, and UR/utilization management (UM). Some example questions were as follows: “What percentage of your time do you spend in direct patient interaction?” Next, the participants were asked questions further describing DPIs asking how much time is performed in assessment—“patient care preferences,” “patient identified needs,” or “patient knowledge,” to mention a few. Also asked of DPI and assessment of the patient was how and how often care managers documented these activities; whether they used electronic health records or paper within the patient’s medical record.

Data Collection and Analysis Process

The survey was placed into REDCap. A link to the survey was e-mailed to the key care management stakeholders/leaders in the participating hospitals and health systems in Utah. These leaders forwarded the link to their own workforces. The survey was open and available for 4 months. Frequencies and distributions of the de-identified data were used to describe the main domains of roles and responsibilities as reported by the participants.

SURVEY RESULTS

Sample Demographics

One hundred ninety-nine participants started the survey, and 141 (71%) completed all of the survey questions. Of the 141 respondents, 122 (85.5%) were registered nurses, 18 (12.8%) were social workers, and 1 (0.7%) was a respiratory therapist (see Figure 1). Eighty-nine nurses (72%) had completed a bachelor’s degree in nursing, 16 (13%) reported that they had completed an associate degree in nursing, 13 (10%) had completed a master’s degree in nursing, and 1 nurse (1%) had completed a doctorate in nursing practice (see Figure 2). Sixty-seven care managers (48%) were in an outpatient setting, 46 (33%) were in an inpatient setting, and 24 (17%) were in both settings (see Figure 3). One-hundred-six respondents (76%) had 10 or more years of professional practice, 20 (14%) were in the 6- to 10-year range, and 14 (10%) fell within the 2- to 5-year range (see Figure 4). Most respondents reported that they had been in the care management role for between 2 and 5 years (see Figure 4). Most

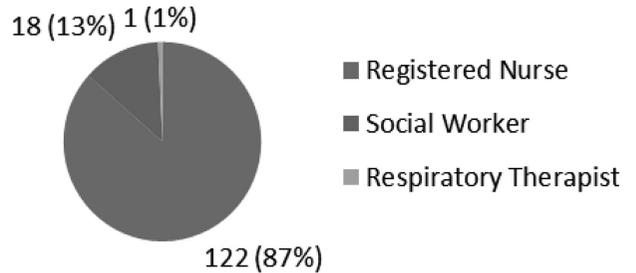


FIGURE 1
Professional background of survey participants ($n = 141$).

important findings from the demographic data confirmed that the care management workforce in Utah is baccalaureate-prepared nurses who have been working in their profession for more than 10 years and have been working as care managers from 2 to 5 years.

Major Survey Responses

In this study, we reported the combined responses for each setting (inpatient and outpatient) and also stratified by setting for comparisons (see Figure 5). We found that, on average, respondents spent most of their time (35%) on *direct patient interaction*. When we analyzed the data by patient setting, outpatient respondents reported that, on average, 40% of their time was spent on DPI; inpatient respondents reported an average of 24%. The category with the next highest amount of time spent was *utilization review/utilization management*. On average, the respondents spent 28% of their time on UR/UM, with outpatient respondents spending an average of 25% and inpatient respondents spending an average of 36%. Time spent on *discharge planning* and *population care* (PC) was reported nearly equal (DP at 20% and PC at 17%). However, when stratified by setting, the average time spent on DP activities was reported at 33% for outpatient respondents and 10% for inpatient. Outpatient respondents reported spending more time on PC (an average of 23%) than inpatient respondents (9%). The last major category measured was *transitional care*, with all respondents spending an average of 11% of their time in the category. Each major domain is presented in the following text.

Direct Patient Interaction

Direct patient interaction definitions were gathered from the literature describing past, current, and even future roles of care managers. Direct patient interaction interactions range from screening/assessing patient needs to assessing patient understanding of care processes and care needs, as well as patients’ personal preferences related to care planning (Powell & Tahan, 2010). Direct interaction could also include patient and family education related to illness care or anticipatory

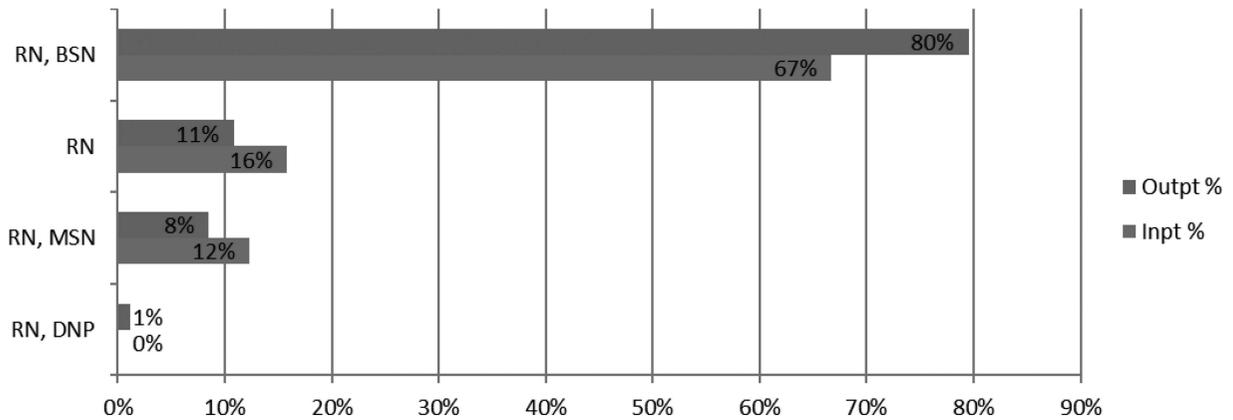


FIGURE 2
Level of education.

teaching of common and expected care trajectories (Lamb, 2014). Direct patient interactions in this study were measured in 11 subdomains (see Figure 6).

Outpatient and inpatient care managers reported that, on average, 40% and 24%, respectively, of their time on DPI. Direct patient interaction was reported in 11 activities (see Figure 6). Although no one of the 11 subdomains was significantly reported more than the other, care managers reported spending from 22% to 26% of their time working directly with patients and families as they determine patient preferences, supporting goal of care, providing vital patient education, health coaching, and evaluating patients for needs and services.

Utilization Review/Utilization Management

Utilization review/utilization management, the category with the second highest amount of time spent, is described in this study as actions that, through the “evaluation of medical necessity, appropriateness of level of care, efficiency, and quality of healthcare services” (Cohen & Cesta, 2005, p. 8), safeguard patients and systems against unnecessary or inappropriate use of health care services. An integral component of

nursing care management models is an emphasis on managing the patient’s environment through coordination and monitoring (Cohen & Cesta, 2005).

Within these activities, care managers reported spending, on average, 22% of their time evaluating medical necessity for services and 19% obtaining authorization for those services. When obtaining authorization for services, care managers spent 20% on retrospective chart reviews and 12% on monitoring appeals for denials of service. Related to UR/UM is monitoring the overuse and underuse of services. Care managers reported spending 18% of their time monitoring overuse of services and 10% monitoring underuse of services.

Discharge Planning

The American Nurses Association definition of “discharge planning” was used to guide the study. In “Cochrane Review Brief: Discharge Planning From Hospital to Home,” An (2014) notes that DP is a process of planning for management of care for the patient as he or she leaves the acute care settings, as well as planning related to ensuring continuity of care processes that prepare the patient for the next phase of care, recovery, and reentry into the community. As expected, DP was different between settings, with inpatient care managers spending, on average, 33% of their time on DP and outpatient care managers spending 10%. Upon further examination, 18% of inpatient care managers reported spending at least half of their time on DP.

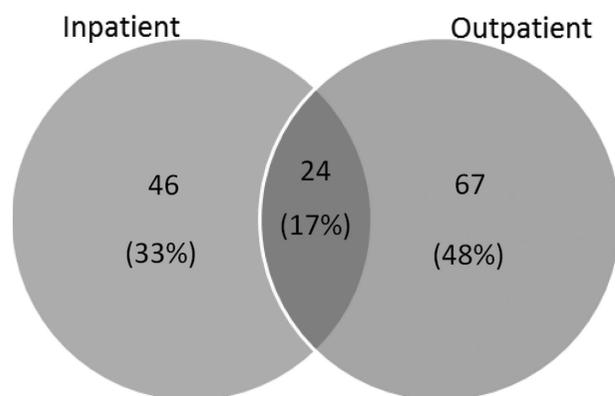


FIGURE 3
Participants grouped by patient setting.

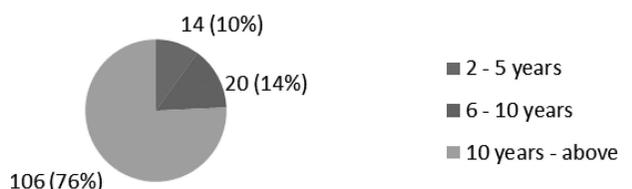


FIGURE 4
Years of professional practice (n = 140).

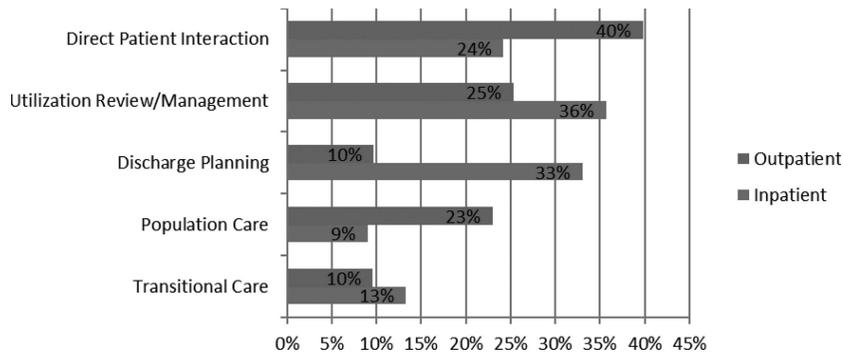


FIGURE 5
Average percentage of time spent on activities practice ($n = 141$).

Although there is a difference of time spent in planning for discharge between inpatient and outpatient settings, these results demonstrate that DP is not solely accomplished in inpatient settings but often begins or ends in outpatient settings as well. Attention to DP is important as we focus on providing safe patient transitions of care and also work to improve discharge teaching—all with the goal of supporting the ability of patients and their families to attain optimal self-management after discharge from the hospital. Important to note in this study, TC was also a reported domain of care managers' activity. In retrospect, these domains could have been more aligned together to help describe the importance of both of these activities.

Population Care

Care managers were asked how their roles and responsibilities contribute to managing population health care. The definition of population health used in this study involved assessing the level and distribution of disease, as well as the functional status and well-being of a population group (Parrish, 2010).

The activities assessed in the study involved monitoring group health outcomes, organizing health care teams (e.g., medical assistants [MAs], health coaches, educators, advocates, or navigators) to interact with defined population groups, and alerting primary care providers of potential problems within population groups. Outpatient care management reported spending 23% of their time on population health activities.

The most common activity in caring for populations in this sample reported, on average, spending 28% of their time alerting primary care providers of potential problems in identified populations. These respondents also reported spending, on average, 22% of their time on identifying high-cost or high-risk patients and, on average, 14% of their time organizing others (MAs or health coaches/advocates) to track or interact with patients. In addition, they spent 11% of their time monitoring the health outcomes of population groups.

Risk stratification was measured in this category as well. Less than half (49%) of the respondents reported that their institution provides them with ongoing risk stratification to direct their resources and activities. The two most commonly reported risks were alerts

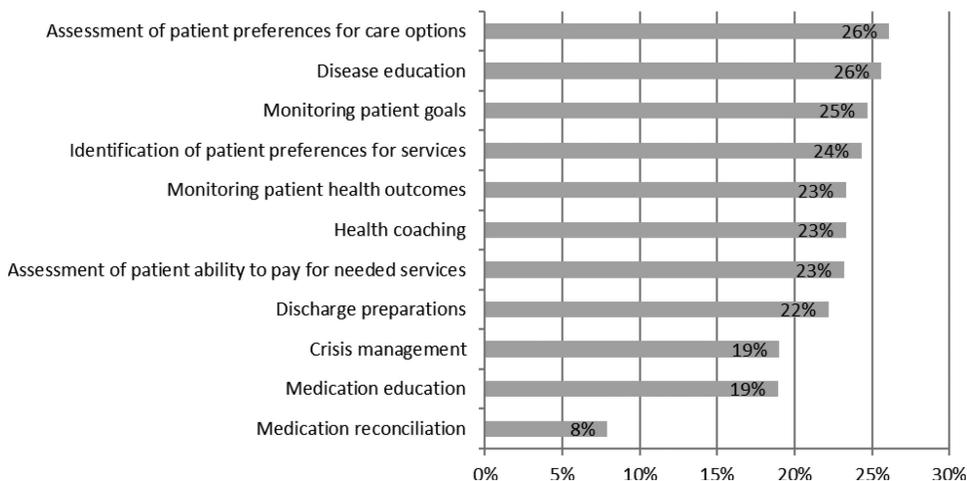


FIGURE 6
Average percentage of time spent in direct patient interaction activities ($n = 141$).

regarding patients with multiple chronic conditions and frequent users (both at 77%), closely followed by reports of risk of readmission (73%), inappropriate use (62%), and inappropriate cost (52%).

Transitional Care

Care managers in this study reported that TC activities required, on average, 11% of their overall time. This study uses the definition of TC from Naylor et al. (2011):

Transitions, or “handoffs,” are vulnerable exchange points.... Transitional care is defined as a broad range of time-limited services designed to ensure health care continuity, avoid preventable poor outcomes among at-risk populations, and promote the safe and timely transfer of patients from one level of care to another or from one type of setting to another. (pp. 746–747)

Although only, on average, 11% of respondents’ time was taken doing transitions of care, 65% reported that they do some level of TC. Transitional care can involve discharge to home, home health, acute rehabilitation units, psychiatric, or skilled nursing facilities. As noted in the earlier description, effective TC could be assessed by two points: (1) transition from one level to another; and (2) focus on at-risk populations (Naylor et al., 2011). The responses indicated that patients are transitioned to the following “other facilities”: skilled nursing facilities (43%), long-term care facilities (20%), and other like institutions (11%). As stated earlier, DP is an important part of TC; thus, these two domains are theoretically related to each other and, in this study, represent up to 46% of work for inpatient care managers and 20% for outpatient care managers.

Patient Assessment, Case Finding, Care Planning, and Follow-Up

Although assessment, case findings, care planning, and follow-up were not a part of the major group findings, they are areas of interest. The survey asked respondents to describe whether they initially evaluate patients (Yes = 82%) and reevaluate patients (Yes = 84%). Sixty-four percent reported that their institution has specific assessment forms to complete, and 95% of respondents complete those forms electronically. Respondents reported that they assess for patient needs, resources, preferences, knowledge, goals, and strengths.

Responses to case-finding questions suggest that most patients are referred to a care manager for care management needs (33%); yet, care managers also responded that they identify patients they would like to see (24%). Twenty-seven percent reported that

Transitions are often episodes of uncoordinated and fragmented care. The findings of this study suggest that care managers are working in concert across settings now more than ever to identify discharge needs and prepare patients during admissions and transition episodes.

their institution alerted them of patients to see, and 15% said that patients were preidentified in patient groups. Once a patient is identified through case finding, the most frequent screening activities were (1) assessing a barrier to care (87%), (2) assessing a clinical need (85%), (3) assessing financial support (81%), or (4) assessing psychological support (79%).

Interestingly, 89% of respondents reported that they create care plans. Often these care plans are electronic, and respondents often share them with their patients (84%). Respondents reported that 77% of outpatient care managers and 33% of inpatient care managers have follow-up visits with their patients, and 61% of their patients can make an appointment with them by calling the respondents’ institutions. Follow-up with patients can be problematic; thus, respondents were asked how they identify lost patients for follow-up. Most respondents (34% of inpatient care managers and 40% of outpatient care managers) reported that they keep their own tracking tool to identify lost patients; only 2% of inpatient care managers and 6% of outpatient care managers reported that they are alerted of missed appointments.

DISCUSSION

Care Management Roles and Responsibilities

Major roles and responsibilities of care managers, their current levels of expertise and education, and their level and professional development such as certification have been reported in the literature (Tahan, Watson, & Sminkey, 2015, 2016) through professional organizations such as the Commission for Case Manager Certification (CCMC). This survey, when compared with the CCMC 2014 national survey, was almost identical in the description of the demographics of care managers in Utah. The care management workforce is a well-prepared and experienced professional group, largely made up of registered nurses, as well as nurses who have years of experience in care management (see Figures 1–4). Results found, as similar to the CCMC 2014 national survey, how

case management roles and responsibilities are covering concepts such as measurement of quality, outcome evaluation, and, mostly, working directly with patients and family delivering care management. Care management is a maturing and vital role in health care, especially in light of health care reform and attaining value-driven outcomes for our patients.

The results of this survey additionally offer current literature a more detailed report of what care managers are actually doing while they are face to face with patients and families. This survey collected discreet variables of the roles and responsibilities for care management while they perform care management such as roles supporting improving patient outcomes, as well as ensuring accurate payment for services or transitions in care. Previous literature has minimal data driving down to describing the segments of the work that care coordinators actually do. Lamb (2014) lists population health, comprehensive assessment and care planning, interpersonal communication, education/coaching, knowledge of benefits and resources, and quality improvement/evaluation skills as critical care management roles. Care managers in this study reported active engagement in Lamb's list of skills, with the most frequent role involving DPI rooted within a comprehensive assessment and care plan. It is important to note that the care managers in our study are electronically documenting assessments and plans, paving the way for helping interdisciplinary teams share these assessments and plans and also to measure care management-sensitive outcomes.

Direct Patient Interaction

One of the most important activities described in this study is that of DPI. This clearly was highlighted as an important role of a care manager. Care management has grown from case management and UR, where many activities and tasks were in the background of the patient's care such as ensuring payment for services or connecting with services after discharge and also previously done with minimal patient interaction. Now care managers perform most of their work directly interacting with patients and team members,

making vital relationships and links with patients and families, assessing their needs, or planning for care within the walls of their hospital system or beyond these walls to connect with other necessary resources within hospital systems and the community. Care managers are working to ensure continuity of care across time and across systems of care while also providing coaching, educating, monitoring goal progression, and ensuring we are providing services that align to our patients' preferences.

No one system or service provides all that a patient or family may need to achieve optimal and effective care; optimizing all resources based on our patients' and their families' needs and preferences is essential to patient/family-centered care. To assess these needs and wishes, care managers need to be in consistent and frequent contact with their patients. The care managers in this study, especially outpatient care managers, demonstrated that the majority of their time is spent working directly with patients and families. Their work is actively assessing and guiding care in real time, engaging patients in the management of their care, no longer monitoring from retrospective patient care records in the background of care activities.

Discharge Planning

Respondents from both inpatient and outpatient settings reported DP activities, with those in inpatient settings concentrating on these more than respondents at outpatient settings. These results show that DP is occurring in outpatient settings. Both inpatient and outpatient care managers are preparing patients and their families for admissions and working to follow-up on patient needs after discharge. In the past, care management activities preparing patients for admissions were conducted in silos, with neither care management team aware of the planning and preparation of the other. Transitions are often episodes of uncoordinated and fragmented care. The findings of this study suggest that care managers are working in concert across settings now more than ever to identify discharge needs and prepare patients during admissions and transition episodes.

Results found, as similar to the CCMC 2014 national survey, how case management roles and responsibilities are covering concepts such as measurement of quality, outcome evaluation, and, mostly, working directly with patients and family delivering care management. Care management is a maturing and vital role in health care, especially in light of health care reform and attaining value-driven outcomes for our patients.

Population Health

Most of the care managers reported that they had access to databases to help them measure and stratify risks of large population groups and consequently to target populations that need additional monitoring and guidance. Having information technology (IT) support for risk stratification ideally helps identify, target, and monitor high-risk patients, high users of care, those at risk for readmissions, and even those who may underutilize systems of care. With IT, care managers are able to tailor interventions to these specific groups. In this study, just over one third of respondents (35%) had some IT support to help them examine trends and identify and monitor patient groups or even to alert them to at-risk patients requiring care management processes. Informatics is not commonly addressed in care management literature, but it is clearly a crucial need identified by these participants.

Transitional Care

Almost two thirds of care managers who completed the survey acknowledged being involved in patient TC; yet, they reported spending only, on average, 11% of their time in TC. This low measure is similar in both settings, occupying, on average, 13% and 10%, respectively, of inpatient and outpatient care managers' time. Care transitions is currently a key point identified for leveraging patient care outcomes as targeted TC processes demonstrate improved patient outcomes and cost savings, thus achieving goals of bundled care processes (Naylor et al., 2011). Many at-risk populations, such as the elderly, those with multiple chronic and complex conditions, or those who are discharged to post-acute care settings, are vulnerable to disconnected care and adverse outcomes due to poorly executed transitions.

Naylor's Transitional Care Model is one model that has demonstrated improvement in patient outcomes and cost savings for at-risk patient types as they transition from hospitals to post-acute care settings or home (Naylor et al., 2011). A TC nurse acts as the primary coordinator of care by providing a comprehensive in-hospital assessment and plan, followed by regular home visits and 24/7 telephone contact for at least 2 months postdischarge, as well as other actions of continuity, communication, and engagement.

Workforce Characteristics

Care managers in this study were largely nurses (86%) who held bachelor's degrees (73%), have been in their professional practice for at least 10 years (76%), and have worked specifically in care management for

2–5 years (46%). As stated earlier, these findings mirror the 2014 CCMC national survey data as well. The workforce in this survey also demonstrates that care management is a highly experienced and educationally prepared cohort, above the typical nursing workforce; yet, they are an aging workforce, bringing to the forefront of health care industry needs of developing a qualified workforce in a rapidly growing field. Examination of this survey and future practice analysis are vital to developing our future workforce. The job of preparation needs to be a concerted effort between education and professional organizations moving forward to discovered pathways of education for new care managers, as well as promote the skills of leadership for experienced care managers.

Limitations

This exploratory survey was designed and administered to care managers/coordinators in the state of Utah. These results represent only care managers in Utah and only those who agreed to complete the whole survey. More than 70% of the participants completed the survey once they agree to participate. Some of the questions were left unanswered possibly because they may not have been applicable to each participant. Others were not specific in regard to certain populations and levels of care or did not solicit additional information. Some of these limitations were handled prior to data analysis by eliminating incomplete surveys, reviewing each response and carefully assigning a zero value to blanks and calculating averages.

Despite its limitations, the care management survey answered many questions about roles and responsibilities of care managers/coordinators and provided useful descriptions of what care managers do on a daily basis in the state of Utah. The survey findings can inform health care organizations, academic and research institutions, and regulatory agencies about specific improvement opportunities.

CONCLUSION

Research about patient outcomes, assessment of patient safety and quality of care, and even measures of patient satisfaction has driven almost every health care system to look at the roles within care management such as care coordination and TC to improve patient and system outcomes. Care management will certainly continue to grow, change, and expand. Developing a workforce's ability to engage in all roles and responsibilities in care management requires examination of what they do now. These study results shine a positive light on Utah in that:

1. care managers responding to the survey from this state are experienced professionals with bachelor's degrees or higher, and
2. have been working as care managers for at least 2 years, with many being in care management for more than 6 years.

Their major responsibility in health care systems is DPI, meaning that care managers are performing vital interpersonal patient interactions needed to achieve highly personalized patient care with assurances of quality and safety.

Preparing the workforce for current and future roles and responsibilities is the next step for all those designing health care reform initiatives. For researchers, the next step is to identify care management-sensitive outcomes that can help measure workforce effectiveness in many places, settings, and systems. And the next step for educators is to prepare graduates with knowledge and background of essential of care management activities by way of didactic and clinical experiences in care management, as well as advanced interpersonal skills of working with patients to achieve optimal self-management in a complex environment.

All roles, current and future, also need support from industry leaders and educators in a variety of ways, such as professional development within the health care system or encouraging staff to obtain advanced degrees and/or certifications. Although nursing was a predominant occupation in this survey, it may very well not be so predominant in all settings and all systems. Developing interdisciplinary collaboration within care management teams is essential in activating patients to their health care goals, promoting patient satisfaction in all health care experiences, and ensuring access to health care for those we serve.

REFERENCES

- An, D. (2014). Cochrane Review Brief: Discharge planning from hospital to home. *OJIN: The Online Journal of Issues in Nursing*, 20(2). Retrieved from <http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/Columns/Cochrane-Review-Briefs/Discharge-Planning.html>
- Cohen, E., & Cesta, T. (2005). *Nursing case management from essentials to advanced practice applications*. St. Louis, MO: Elsevier Mosby.
- Harris, P., Taylor, R., Thielke, R., Payne, J., Gonzalez, N., & Conde, J. (2009). Research electronic data capture (REDCap)—A metadata-driven methodology and workflow process for providing translational research informatics support. *Journal of Biomedical Informatics*, 42(2), 367–381.
- Institute for Healthcare Improvement (IHI). (n.d.). *Triple Aim Initiative: Better care for individuals, better health for populations, and lower per capita costs*. Retrieved from <http://www.ihl.org/engage/initiatives/TripleAim/Pages/default.aspx>
- Lamb, G. (2014). *Care coordination: The game changer*. Silver Spring, MD: American Nurses Association.
- National Priorities Partnership. (2008). *National priorities and goals: Aligning our efforts to transform America's healthcare*. Washington, DC: Author.
- Naylor, M. D., Aiken, L. H., Kurtzman, E. T., Olds, D. M., & Hirschman, K. B. (2011). The importance of transitional care in achieving health reform. *Health Affairs*, 30(4), 746–754. doi:10.1377/hlthaff.2011.0041
- Parrish, R. G. (2010). Measuring population health outcomes. *Prevention of Chronic Disease*, 7(4), A71.
- Powell, S., & Tahan, H. (2010). *Case management: A practical guide for education and practice*. Philadelphia, PA: Wolters Kluwer Health.
- Press, M., Michelow, M., & Macphail, L. (2012). Care coordination in accountable care organizations: Moving beyond structure and incentives. *The American Journal of Managed Care*, 18(12), 778–780.
- Tahan, H., Watson, A., & Sminkey, P. (2015). What case managers should know about their roles and functions: A national study from the Commission for Case Managers Certification: Part 1. *Professional Case Management*, 20(6), 271–296.
- Tahan, H., Watson, A., & Sminkey, P. (2016). Informing the content and composition of the CCM Care Managers Certification Examination: A national study from the Commission for Case Managers Certification: Part 2. *Professional Case Management*, 21(1), 3–21.
- Brenda Luther, PhD, RN**, is the Director of the Masters and Certificate Care Management Specialty and Associate Professor at the College of Nursing and within the Gerontology Interdisciplinary Program at the University of Utah. Dr. Luther is Associate Professor, Director Care Management Programs, College of Nursing, University of Utah. Dr. Luther teaches courses in care management, evidence-based practice, and health promotion. Dr. Luther has specialized disability care and care management, working with children and their families at Shriners Hospital for Children, Intermountain Hospital in Salt Lake City, UT. She started her career in care coordination at Shriners working with public, private, and nonprofit agencies to bring about coordinated and connected services for children in Utah, Idaho, Montana, Wyoming, Arizona, and Colorado. Her research interests are care management, successful transition to adulthood for children with disabilities, and health promotion for children with physical disabilities.
- Marc-Aurel Martial, MPH, BSN**, is a clinical instructor at the University of Utah College of Nursing. He teaches transitional care and global health topics. His clinical background includes systems project management and informatics. He is also a PhD student at the college, with his research focus on care management roles and responsibilities and global health.
- Joyce Barra, PhD, RN**, is currently Assistant Professor in the graduate program at Weber State University where she teaches courses in educator socialization, assessment, and teaching strategies. She also manages the Executive Leadership students in their master's practicum. Dr. Barra's past experiences include directorships in ADN, BSN, and MSN programs. Her interests include specialized accreditation, both domestic and international, and interdisciplinary collaboration. Dr. Barra has a background in adult Med-Surg Nursing and a love of qualitative research, especially related to teaching and learning.

For more than 50 additional continuing education articles related to Case Management topics, go to NursingCenter.com/CE.

Instructions:

- Read the article. The test for this CE activity can only be taken online at www.nursingcenter.com/ce/PCM. Tests can no longer be mailed or faxed.
- You will need to create (its free!) and login to your personal CE Planner account before taking online tests. Your planner will keep track of all your Lippincott Williams & Wilkins online CE activities for you.
- There is only one correct answer for each question. A passing score for this test is 13 correct answers. If you pass, you can print your certificate of earned contact hours and access the answer key. If you fail, you have the option of taking the test again at no additional cost.
- For questions, contact Lippincott Williams & Wilkins: 1-800-787-8985.

Continuing Education Information for Certified Case Managers:

This Continuing Education (CE) activity is provided by Lippincott Williams & Wilkins and has been preapproved by the Commission for Case Manager Certification (CCMC)

for 1.0 clock hours. This CE is approved for meeting the requirements for certification renewal.

Registration Deadline: April 30, 2018

Continuing Education Information for Certified Professionals in Healthcare Quality (CPHQ):

This continuing education (CE) activity is provided by Lippincott Williams & Wilkins and has been approved by the National Association for Healthcare Quality (NAHQ) for 1.0 CE Hours. CPHQ CE Hours are based on a 60-minute hour. This CE is approved for meeting requirements for certification renewal.

This CPHQ CE activity expires on April 30, 2018.

Continuing Education Information for Nurses:

Lippincott Williams & Wilkins, publisher of *Professional Case Management* journal, will award 1.0 contact hours for this continuing nursing education activity.

LWW is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

This activity is also provider approved by the California Board of Registered Nursing, Provider Number CEP 11749. LWW is also an approved provider by the District of Columbia, Georgia, and Florida CE Broker #50-1223.

Your certificate is valid in all states.

The ANCC's accreditation status of Lippincott Williams & Wilkins Department of Continuing Education refers only to its continuing nursing educational activities and does not imply Commission on Accreditation approval or endorsement of any commercial product.

Registration Deadline for Nurses: May 31, 2019

Disclosure Statement:

The authors and planners have disclosed that they have no financial relationship related to this article.

Payment and Discounts:

- The registration fee for this test is \$12.95

DOI: 10.1097/NCM.0000000000000227