Improving the Effectiveness of Ambulatory Care Nurse Leaders

Kathleen M. Mertens

Oregon Health & Science University

Abstract

The Institute of Medicine (IOM) landmark report *The Future of Nursing: Leading Change, Advancing Health* emphasizes the critical role of nurse leaders in redesigning health care and preparing nurses to lead (IOM, 2011; Altman, Butler & Shern, 2016). Swan and Moye (2009) reiterate the importance of ambulatory care succession planning that includes identifying and developing emerging leaders. Nursing must evaluate strategies to advance leadership as a dimension of practice and as part of lifelong learning (Scott & Miles, 2013). Significant gaps remain in understanding nurse leader and aspiring leader roles, practice, perceptions, and succession planning in the ambulatory care setting. This exploratory descriptive research design involved a nationwide convenience sample of American Academy of Ambulatory Care Nursing (AAACN) members. A one-time web-based survey was conducted between April and May 2017. Current leader respondents were well educated, sought their roles, were confident in their leadership, felt they could influence nursing's visibility and leadership status, and were willing to mentor. Aspiring leaders were generally younger and also well educated, but were less confident and less likely to have taken leadership development courses or know of leadership resources. Neither group was diverse. Aspiring leaders saw lack of advancement opportunities and accessible leadership education. Few organizations had succession plans in place. Both leaders and aspiring leaders reported low involvement in health policy. Communication, leading change, and knowledge of the health care environment were identified as priority leadership competencies necessary for success. Action is needed to develop younger and more diverse leaders in key competency areas. Ambulatory care nurses also must take steps to increase their visibility and policy making influence, and communicate nurse value as the health care environment transforms.

Problem

Health care reform brings greater emphasis on care outside of the acute care setting and toward accountable care, patient-centered medical homes, and ambulatory care nursing. Swan and Haas (2011) call the signing of the 2010 Patient Protection and Affordable Care Act (ACA) the "start of a golden age for ambulatory care nursing" (p.331). They appeal to ambulatory care nurse leaders to be proactive in defining new care models and to stay abreast of regulatory and other safety, quality, and access demands in the rapidly changing environment. The ACA has increased health care access and affordability and now government efforts are focusing more on alternative payment models, greater teamwork, care coordination across settings, and population health (Burwell, 2015). Pioneer Accountable Care Organizations (ACOs) report the need for new nursing leadership structures as care shifts from a volume to a value based approach and as nursing practice increasingly crosses the continuum (Pittman & Forrest, 2015).

Nurse leader roles, practice, and policy focus in implementing new delivery models and approaches are emerging in many areas. In integrated systems, nurse executives are developing care models across complex organizational structures and continuums, while other nurse leaders are increasing collaboration with community partners to improve population health (American Nurses Association (ANA), 2016). The hospital nurse executive key role as a change agent in care transformation is described (Morjikian, Kimball, and Joynt (2007; Clement-O'Brien, Polit & Fitzpatrick, 2011). Business case development, effective communication, and organizational agility are among strategies the nurse leader must utilize. Others illustrate nurse leader roles in new models that involve cross continuum community outreach and academic-practice partnerships (Dyess, Opalinski, & Saiswik, 2016), home health nurse role change toward population health coordination (Christopher, 2014), patient-

centered medical home development (Martin, 2014; Vlasses & Smeltzer, 2007), and ambulatory intensive care for high risk primary care patients (Vlasses & Smeltzer, 2007). Collaboration across professional nursing organizations is explained by Shulman (2015). She outlines leadership competencies for care coordination and transition management developed by the American Academy of Ambulatory Care Nursing (AAACN) and the American Organization of Nurse Executives (AONE). Emerging system chief nursing officer positions that may include ambulatory care responsibilities also are described (Bradley, 2014; Caroselli, 2008; Clark, 2012; Hafeman, 2015). While nurse leader roles and practices are depicted in the literature (particularly hospital based chief nurse executives), there is a paucity of ambulatory care nurse leader descriptions.

The involvement of ambulatory care nurse leaders is critical at this juncture. The value of inpatient nursing has come to the forefront via measured nurse sensitive outcomes, yet indicators in ambulatory care are still needed to demonstrate nurses' value in this arena (Mastal, Matlock & Start, 2016; Rapin, D'Amour & Dubois, 2015; Start, Matlock & Mastal, 2016; Swan, Conway-Phillips, Griffin, 2006; Swan, Haas & Chow, 2010). Ambulatory care nurse leaders must be involved in measurement of medical home and accountable care outcomes (Swan & Haas, 2011).

Current data are needed on numbers of nurse leaders in the United States and where they practice (Altman, Betler, & Shern, 2016). The most recent national nursing survey was done in 2008 (Health Resources and Services Administration, 2010). It found that 30% of nurses work in non-acute care settings, and overall 12.5% of nurses hold management and administration titles, with 2.4% holding senior management titles. In the American Nurses Credentialing Center (ANCC) 2014 national sample survey of nurses credentialed as ANCC-certified nurse executives, approximately 20% of the respondents worked in ambulatory hospital based areas,

private practice, surgical centers, outpatient behavioral health, home health, and hospice palliative care (ANCC, 2015).

The aging work force also exposes the need to understand the number of nurse leaders and ongoing leader development for succession planning at the nurse executive, manager and other levels (Ponti, 2009; Titzer, Phillips, Tooley, Hall & Shirey, 2013). Swan and Moye (2009) reiterate the importance of succession planning in ambulatory care that includes identifying and developing emerging leaders as more emphasis is placed on outpatient care. Scott and Miles (2013) note that nursing must evaluate strategies in education and practice to advance leadership as a dimension of practice and as part of lifelong learning. Nurse leaders must respond to business imperatives with formal succession planning best practices to achieve staff engagement, leadership continuity, and improved operational effectiveness (Trepanier & Chrenshaw, 2013).

Project Statement

Given the importance of ambulatory care nurse leadership in a dynamic health care landscape, the need for leader development, and the limited understanding of ambulatory care nursing leadership practice and supports, this DNP Project seeks to describe current and emerging ambulatory care nurse leaders' roles, perceived influence, challenges, development priorities, and succession planning efforts. Factors that contribute to nurse leaders' success and perceived barriers to leadership need identification. Based on the project findings, recommendations for maximizing ambulatory care nurse leadership development and practice will be offered.

Literature Review

In their seminal work 20 years ago, Haas and Hackbarth (1997) reported national survey results of current (at the time) and projected future roles of nurse managers in

ambulatory care organizations. Role dimensions included daily staffing and supervision, managing human and material resources, personnel development, planning, interacting with multiple stakeholders, enhancing quality, and appreciating research. They found similarities to responsibilities of hospital based nurse managers via comparison with AONE competencies. Huston's (2008) nurse leaders competencies for 2020 also are embraced (Swan and Moye, 2009; Duva, 2014). (See attachment A).

More recently others, including professional nursing organizations, have identified leader competencies required for designing new models of care such as care coordination across the continuum, high risk care management, and population health. These competencies may be applied to ambulatory nurse executives (Bower, 2016; Care Continuum Alliance, 2012; Rushton, 2015, Shulman, 2015). Competency domains include knowledge of health systems, legal, regulatory and administrative areas, understanding of social and environmental determinants of health, analytics, process improvement and design, and interprofessional relationship skills (Harris, Puskarz, and Golab (2016). As new models of care have developed, AONE released nurse executive competencies for population health (Carlson, Kline, & Zangerle, 2016) and system nurse executives (Meadows, 2016). Leadership, professionalism, and business skills are among its competency domains that include visionary thinking for population health and supporting the role of Accountable Care Organizations (ACOs). Top leadership competencies were solicited in a Florida survey of nurse leaders and include communication (72%), knowledge of the health care environment (53%), clinical experience (26%), understanding health policy (25%) and business acumen (18%) (Denker, Sherman, Hutton-Woodland, Brunnell & Medina, 2015).

Practice Interventions

In its detailed evidence review for the best practice guideline *Developing and Sustaining Nursing Leadership* (Registered Nurses' Association of Ontario (RNAO), 2013), the RNAO notes that while the guidelines are for nurses all settings and roles, the majority of studies were done in hospitals and studies in community settings are needed. The RNAO leadership conceptual model includes personal attributes and transformational leadership practices.

Others have profiled the influential role of nurse leaders in developing innovative care delivery models that span sites of care. Kimball and Joynt (2007) recognized early on the importance of nurse leaders producing measurable results, involving direct care staff in model development, and galvanizing staff to take bold steps. Common elements in each successful model were elucidated and contain an elevated RN role, sharpened focus on the patient, smoothing handoffs, and leveraging technology. McCarthy, Ryan and Klein (2015) in their evidence synthesis of implementation of 15 care models for high-need, high-cost patients also describe common attributes of successful models. Of note to nurse executive practice is the finding that context matters (customizing the approach to the local context). Managing uncertainty, ambiguity and conflict are leadership practices noted by Vlasses and Smeltzer (2007) in their discussion of strategies for leading change.

The Florida Nursing Action Coalition explored nurse leader perceptions of top contributors to nurse leaders' success (Denker, Sherman, Hutton-Woodland, Brunnell & Medina, 2015). Contributors identified were experience (75%), education preparation (54%), mentoring (37%), having vision (26%), being at the right place at the right time (25%), and informal leadership (24%). The absence of nurse visibility in policy making was a major barrier reported.

Supportive Structures

Nurses increasingly have opportunities to hold executive positions beyond the governance of nursing (Duva, 2014). Duva adds that positional power facilitates leadership effectiveness. It enhances the ability to drive a future direction for nursing interventions as new work environments emerge. Systems thinking and teamwork are required. The RNAO (2013) describes organizational supports that influence the success of leadership practices. These supports include valuing the nurses' role, supplying sufficient human and financial resources, providing information and decision support, and creating a culture and climate for effective and efficient care.

Health care reform and new payment structures are facilitating the focus on redesign. With the rapid changes in care, new roles (with new titles) are emerging. Role titles for domain of nursing leadership, including nurse administration, leadership, and management are not consistent and practice is crossing traditional role boundaries (Frederickson and Nickitas, 2011). One recommendation for role titles is not found in the literature. Most often "nurse executive" or "nurse administrator" titles are utilized to describe the higher levels of formal nursing leadership. The ANA (2016) suggests that level of oversight or sphere of influence is more fundamental than specific nurse leader title. It also explains that nurse administrators share common frameworks to guide practice and organizational structure and setting complexity inform how positions are operationalized. Variations in role tiles may result in role confusion (a barrier), yet also innovation if they bring new opportunities for the nursing profession to lead in care transformation.

Another challenge is that nurses are seen as sources of health care information by national opinion leaders and not as leaders in the development of health care systems and delivery models (Khoury, Blizzard, Moore, Hassmiller, 2011). For example, they note the lack of

nurses on boards. Yet top healthcare opinion leaders also want nurses to increase their involvement in decision making (Hassmiller, 2011).

Rapid health care changes may also take their toll on leaders. Shirey (2016) reports an executive "turnover crisis" when she describes 2014 survey results by the American College of Healthcare Executives that reported an 18.1% executive turnover (the highest in 30 years). She also references another report that found 38% of chief nursing officers (CNOs) having left their positions. Batcheller (2010) notes trends in increasing complexity of the role, financial management issues and chief operating officer transitions all influence CNO turnover. She concludes that a competency model and roadmap are needed to help nurses become transformational leaders. Cline (2015) discusses the need for nurse leaders to develop competencies that build resiliency in order to improve retention (and prevent burnout).

Frameworks for Leadership Development

Not only are nurse leaders needed in executive roles, but formal and informal nursing leaders are needed at all levels (IOM, 2011; Scott & Miles, 2013, Wilmoth & Shapiro, 2014). Scott and Miles (2013) reference a 2006 leadership emergence developmental model by Hannah that includes readiness, motivation, goal orientation, and leader self-efficacy to actualize leadership roles (see appendix B). Wilmoth and Shapiro (2014) explain that a consensus framework is lacking and they propose a conceptual framework – the Model for Intentional Development of Nurse Leaders (p. 337) (see appendix C.). The development starts at a bachelor's of nursing level of education, proceeds through small unit leadership, and onward toward strategic leadership. Nursing school curricula that cover leadership topics as well as lifelong efforts and intention toward leadership development are needed (Scott & Miles, 2013; Wilmoth & Shapiro, 2014).

The IHI high-impact leadership model (Swensen, Pugh, McMullan, & Kabcenell, 2013) contains three interdependent dimensions of leadership that are needed at all levels of leadership to achieve the triple aim: new mental models, high-impact leadership behaviors, and a high-impact leadership framework (see appendix D). New mental models include the importance of individuals and families partnering in their care, competing on value with cost reductions, reorganizing services to align with new payment systems, and the notion that everyone is an improver. Five critical leader behaviors (with examples) also are identified: person-centeredness, front line engagement, relentless focus on vision and strategy, transparency about results, progress, aims and defects, and boundarilessness (i.e. encouraging and practicing systems thinking and collaboration across sectors that include non-health care entities). The importance of establishing and shaping organizational culture through role-modeling and developing leaders supports achievement. These frameworks - the leadership emergence developmental model, the model for intentional development and the IHI high-impact leadership model provide underpinnings for this DNP project.

Policy Issues and Implications

Expanding opportunities for nurses to lead and innovate in care redesign, strengthening the collection of work force data, promoting nurse (and nurse leader) diversity, implementing nurse residencies (including ambulatory care), and removing barriers to practice are among issue areas for policy development and action named in the future of nursing reports (Altman, Stith Butler & Shern, 2016; IOM, 2011). In addition, these reports call for nurse advocacy and funding to increase nurse education (bachelors and graduate education). Nurse leaders with advanced degrees are needed to lead care redesign in all health care sectors (Lathrop & Hodnicki, 2014; Scott & Yoder-Wise, 2013). The ANA

(2016) espouses that nurse administrators should have a graduate-level degree in management, nursing, policy or administration.

Gaps in the Literature

Despite some examples, gaps remain in understanding specific roles and practice descriptions of the nurse leaders in the ambulatory care setting. Their roles, competencies, and practice are frequently not differentiated nor described in detail. Thus, the ambulatory care nurse leaders' influence and specific contributions to leadership practice in emerging care redesign such as population health, medical home, and ACO models remain unclear. While exploring hospital nurse leader's understanding of community health and cross-continuum care, Watson-Dillon and Mahoney's research (2015) showed that nurse executives are still hospital centric in their focus.

If ambulatory care nurses are to lead in care redesign across the care continuum and into the community, their leadership development priorities, barriers to leadership, and contributions must be elucidated. Given limited information about ambulatory care leader and emerging leader roles and practice in the research literature, the focus of this project was to utilize an exploratory descriptive design to explain roles, perceptions of influence, priority leadership competencies, barriers to practice, success factors, and succession planning practices of ambulatory care nurses who are leaders or want to be leaders. Based on the study findings, recommendations for maximizing ambulatory care nurse leadership development and practice will be offered.

Implementation

Institutional Review Board

Institutional Review Board (IRB) approval for protection of human subjects was obtained from Oregon Health & Sciences University (OHSU) before study procedures were initiated. An expedited study approval with waiver of consent was sought for a nationwide survey of ambulatory care nurses. Participation was voluntary and anonymous. The OHSU Minimal Risk Protocol Template and a waiver of consent checklist (HRP-300) were completed. The study was approved by the OHSU IRB on March 24th, 2017 (Study #00016741).

Setting

This study utilized a one-time web-based survey of ambulatory care nurses who were members of the American Academy of Ambulatory Care Nursing [AAACN]. AAACN is a specialty nursing association with a mission "to advance the art and science of ambulatory care nursing" (AAACN, 2016a). Ambulatory care nursing and the settings where these nurses work are multifaceted. Independent and collaborative practice occurs in hospital-based clinics/centers, group medical practices, ambulatory surgery and diagnostic centers, telehealth centers, university and community clinics, military and veterans administration outpatient settings, free standing facilities, care coordination organizations, patient centered medical homes, multispecialty health organizations, integrated health care systems, accountable care organizations, and the patient's home (AAACN, 2016a; Mastal, 2010; AAACN, 2017). Ambulatory care nurses, including their nurse leaders, have a broad span of reach both geographically, in system structure, in practice venue (i.e. virtual or face-to-face), and also in a broad definition of care recipients (individuals and populations).

Participants

The target population was ambulatory care nurse leaders and aspiring leaders who were AAACN members in the active membership category. This group includes nurses in clinical

practice, education, and research roles as well as those in management and administration. In 2016, AAACN reported 3574 active members with 526 (16%) who identified themselves as administrators/directors and 827 (25%) who identified themselves as managers/supervisors on membership applications (AAACN, 2016). A cross-sectional convenience sample of member nurses was utilized for ease of implementation in the project time period and the potential generalizability due to a national membership base.

Inclusion Criteria for Survey

- Members of the AAACN professional association, in the "active" category in the membership database
- Proficiency in English
- Capable of taking an electronic survey
- Current e-mail address in member database

Exclusion Criteria for Survey

- All other AAACN membership categories other than "active" in the membership database.
- Inability to effectively complete an electronic survey

Size and Rationale

This descriptive exploratory designed study used nonprobability sampling. Nurses who were active members of the AAACN and participated in the survey may not be reflective of all ambulatory care nurse leaders, aspiring leaders, and other ambulatory care nurses (including those AAACN members who do not respond). For web-based surveys, a 30-40% response rate is common (UWQI, 2010) and this is influenced by various survey tactics used. The "rule of 30" informed the work (Mateo & Foreman, 2014) in that a minimum of 30 elements for each variable

of interest must be in the sample to be reported (though in this project the sample is not a random sample**).**

Facilitators, Barriers, and Challenges

Project facilitators included the support and interest of the AAACN organizational leadership, the defined cohort of active ambulatory care nurse members, as well as the organization's assistance with recruitment of survey participants (emailing the survey link to members). Agency sponsorship increases survey response (VanGeest & Johnson, 2011). Other facilitators included the lower cost and timeliness (collecting responses more quickly) with a web-based survey (Dillman, Smyth & Christian, 2014). The survey was designed in Survey Monkey® by the author.

A drawback of web based surveys is that they are skewed to internet users. The target population may not be skilled in the technology or may differ in how it reads email (UWQI, 2010). The usual practice of AAACN is to distribute key information to members via email and this increased the likelihood that members were email users and had up-to-date email addresses with AAACN.

Other challenges in conducting the project included the limited time frame for completion and the Institutional Review Board (IRB) review processes. In general, other survey challenges include the potential for coverage, sampling, measurement, and non-response errors (Dillman, Smyth, & Christian, 2014). Nursing surveys have had declining response rates due to time constraints, poor perceived survey value, confidentiality issues, and perceptions of bias (VanGeest & Johnson, 2011). Attention to survey design and shorter survey length, use of an anonymous survey, and recruitment text that conveyed the survey reason were implemented in

this study as these qualities are noted to improve survey response (Dillman, Smyth, & Christian, 2014; VanGeest & Johnson, 2011).

Recruitment Methods

The survey recruitment messages sent to active AAACN members included a brief introduction to the survey and the survey link (see appendix E). The messages were sent by the AAACN administrative office. Initially the recruitment plan included a survey start in late January or February 2017 but due to delays in the IRB review process, the survey did not launch until April 7th, 2017. The first recruitment email was followed by two emailed survey reminders (April 14th and April 27th). As planned, the survey remained open for four weeks until May 6th, 2017 to allow AAACN members who infrequently reviewed email greater opportunities to see and respond to the study solicitation. While there was not a procedure to prevent soliciting the same nurse more than once, nurses were advised in reminder emails to disregard the survey if they had already completed it.

Protection of Participants

The survey was voluntary and anonymous therefore met IRB minimal risk criteria. When clicking on the survey link, the participants viewed the *Consent Information Sheet* on the introductory screen. The information stated that by clicking the "next" button nurses would give their consent to participate and proceed to the survey. They were informed that they could stop the survey or skip questions at any time. Neither participant names nor email addresses nor other contact information from the survey were collected nor stored in this study.

Survey Instrument

The survey instrument was a modification of one developed by the Florida Action Coalition (FAC) in 2013 for a State Implementation Project study titled "Promoting Nurse

Leadership to Influence Health and Health Policy" (Denker et al, 2015, p. 405). The original 56 question survey was designed through use of existing leadership tools in the literature and via expert input. It also was pilot tested for clarity and content validity by FAC members before implementation. Use of a previously tested and validated survey increases the likelihood of question clarity and it supports more accurate responses (Dillman, Smyth & Christian, 2014). Permission to utilize and adapt the survey was obtained (M.L. Brunell, personal communication, November 21, 2016).

Survey modifications included a change of focus to an ambulatory care nurse audience via demographic questions on workplace and role. In addition, the list of priority leadership competency items was modified to add competency areas noted as important for nurse leaders in more recent literature – "leading change", "delivery system model redesign", "medical staff relationships", "human resource management", and "evidence based practice". Some survey questions not pertaining to this project were omitted. The final survey was shortened to 32 close-ended questions with some options to add specific content for "other" responses. Skip logic was embedded to feed relevant questions to subgroups of AAACN members based on employment and leadership interest. Only those identifying themselves as current nurse leaders were offered all 32 questions. Initial logic delimited respondents who were employed and those not employed. The latter group was not a focus of this analysis. Of those employed, those respondents who were "current leaders", those who "wanted to be leaders", and those who were "not interested in being a leader" were offered pertinent questions to answer (a total of 32, 24, and 17 questions respectively). All respondents were offered questions on their perceptions of nurses' influence and visibility, as well as demographic identifiers. (See appendix F for the modified survey).

Profile questions about personal demographic, span of control, and workplace data were close ended. In addition, nominal quantitative data, selected by respondents from lists of items, included perceptions of leadership development resources, competency priorities, success factors, and leadership behaviors. Questions about nurses' influence and visibility, barriers to attaining leadership roles, leadership confidence, and succession planning perceptions utilized ordinal data in the form of Likert scale responses. The scales were converted to numeric data for further analysis and comparison of means (two sample t-tests). Chi-squared tests of proportions also were utilized in this analysis. Survey data were analyzed in Survey Monkey® and were downloaded to the author's password protected computer for additional quantitative analysis with Microsoft Excel®. All data are reported in aggregate.

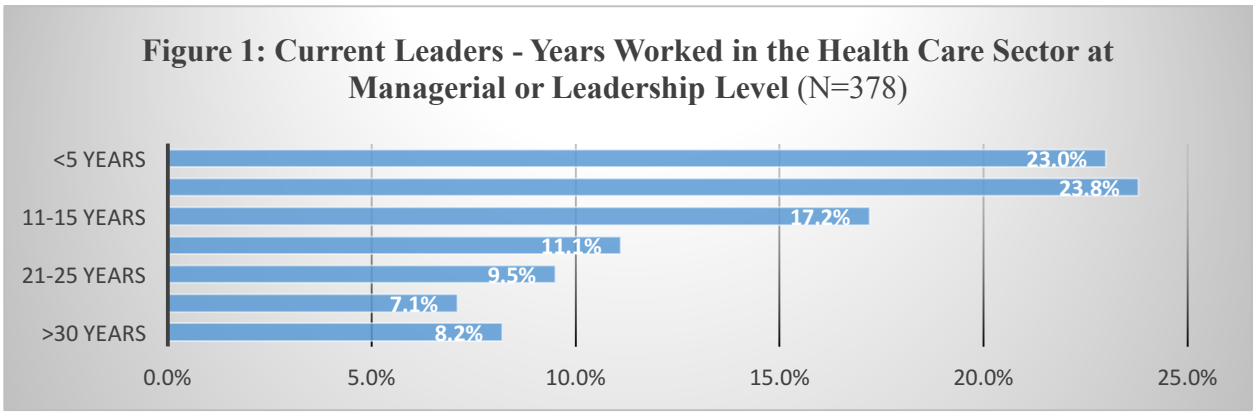
Outcomes

Analysis

Respondents. The survey link was emailed to 3,929 active AAACN members of which 627 completed it for a response rate of 16%. This response accounts for deletion of four incomplete surveys based on missing answers to the two questions that implemented the skip logic to delineate subsets (employment and leadership interest). In other survey responses, the denominator was adjusted in the reporting to account for missing data. Sixteen respondents indicated they were not employed and were excluded from the analysis. Of the remaining 611 respondents, 379 (62%) identified themselves as a current leader, 130 (21%) wanted to be a leader, and 102 (17%) had no interest in being a leader. For purposes of this paper, only the data subset of respondents who were a current leader (CL) or who wanted to be a leader (Aspiring Leader - AL) were analyzed, compared, and reported (N=509).

Current leaders (CLs). CLs were predominately female (97%), White non-Hispanic (83%), over 50 years of age (63%), and had over 20 years of nursing experience (70%) (Table 1). They were well educated – 54% had a graduate degree in nursing. The most frequently reported CL roles were nurse manager (34%) and nurse executive/administrator/director (32%).

Most CLs worked in academic medical center outpatient (36%) and physician office/group practice (17%) settings. CLs were distributed across all four regions of the United States (Midwest, Northeast, South and West) (Appendix G, Table 2). In terms of years in health care at a managerial or leadership level, 36% reported over 15 years while 47% reported 10 years or less (Figure 1). The majority of CLs supervised (directly or indirectly) between 16 and 40 staff (29%), yet 17% also supervised over 100 (Figure 2).



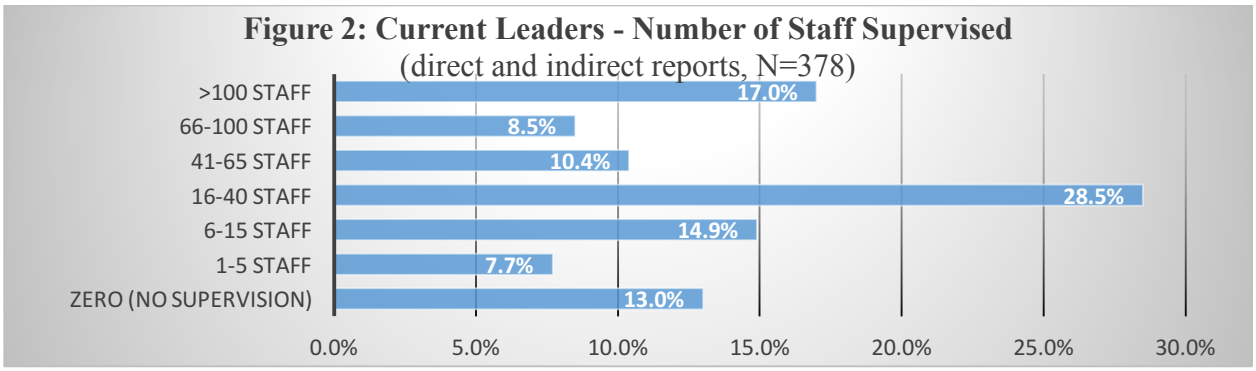


Table 1: Sample Demographics – Current Leaders and Aspiring Leaders Subsets

	Current Leaders	Aspiring Leaders
Gender	N=373	N=128
Female	96.8%	96.9%
Male	3.2%	3.1%
Age (years)	N=373	N=130
≤ 30	2.1%	6.2%
31-40	14.2%	16.2%
41-50	20.9%	25.4%
51-60	44.5%	43.1%
≥ 61	18.2%	9.2%
Ethnicity	N=373	N=130
White / non-Hispanic	83.4%	76.2%
Black / non-Hispanic	8.6%	13.1%
Caribbean Islander / non-Hispanic	0.5%	1.5%
Hispanic / Latino	2.1%	4.6%
Asian	1.3%	0.0%
American Indian / Alaska Native	1.1%	0.8%
Native Hawaiian / Pacific Islander	0.3%	1.5%
Other (includes mixed)	2.7%	2.3%
Years Nursing Experience	N=371	N=129
< 5	0.8%	8.5%
5-10	7.8%	16.3%
11-15	8.9%	7.0%
16-20	12.7%	11.6%
21-25	12.7%	15.5%
26-30	14.0%	14.7%
>30	43.1%	26.4%
Highest Nursing Degree Earned	N=373	N=130
Diploma	2.9%	1.5%
ASN/ ADN	6.2%	14.6%
BSN	36.7%	48.5%
MN/ MS/ MSN	44.5%	30.8%
DNP	7.0%	3.8%
PhD	2.7%	0.8%

Aspiring leaders (ALs). ALs also were predominately female 97% and White /non-Hispanic (76%). Table 1 shows that as a group they were relatively younger than CLs - 48%

were 50 years old or younger. ALs had less nursing experience than CLs as 25% had 10 or fewer years. The majority had a BSN (48%), yet 35% also had graduate degrees (Table 1). Their main roles were staff nurse (42%) and care coordinator (31%). Most worked in a physician's office/group medical practice (24%), academic medical center outpatient (19%), and Veteran's Administration outpatient (15%), or community health clinics (11%) (Appendix G, Table 2). They also were distributed across all regions of the U.S.

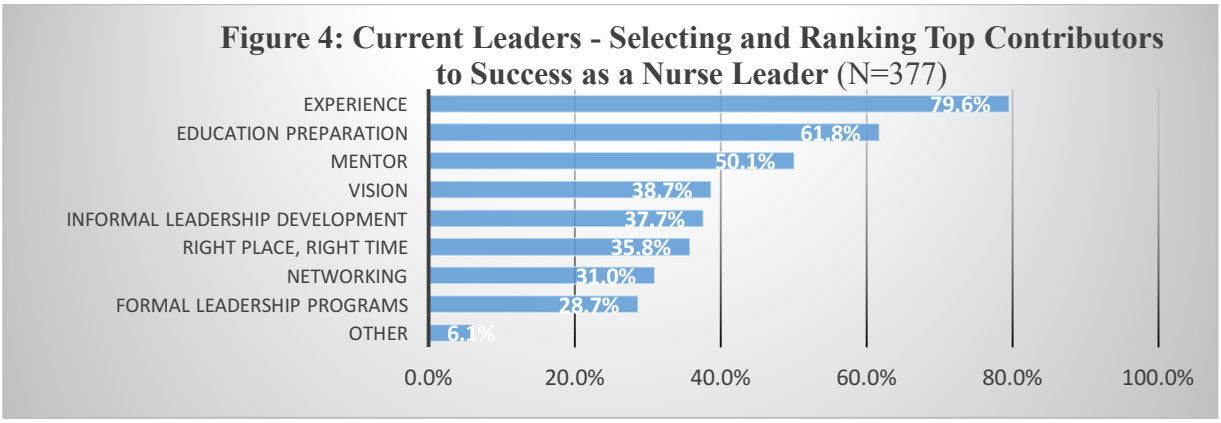
Skills and competencies. Both CLs and ALs ranked "communication", "inspiring and leading change", and "knowledge of the health care environment" as the top three leadership competency areas necessary for success in today's health care environment (Appendix H, Figure 5). As expected, CLs had significantly greater confidence in their knowledge and practice of leadership compared to ALs (Table 3). Table 3 also shows that compared to ALs, the CLs were more in agreement that nurses at their workplace are confident in their knowledge of leadership. The CLs (96%) were significantly more likely ($p<0.01$) to have taken a course, seminar or webinar to enhance leadership knowledge and skills compared to ALs (86%).

Table 3: Current and Aspiring Leaders Compared - Confidence in Leadership Knowledge and Practice (Two sample t-test comparison of means)

	Current Leaders				Aspiring Leaders				
	Strongly agree & agree	**N**	**Mean** [#]	**S.D.**	**Strongly agree & agree**	**N**	**Mean** [#]	**S.D.**	***P* value means**
Confidence nursing leadership knowledge	86.0%	372	1.87	0.71	63.8%	130	2.38	0.90	*P*<.01
Confidence in nursing leadership practice	89.2%	371	1.80	0.66	60.0%	130	2.35	0.94	*P*<.01
Nurses at my workplace confident of leadership knowledge	48.1%	374	2.70	0.93	26.2%	130	3.12	0.96	*P*<.01

[#]1= strongly agree, 2=agree, 3=neither agree nor disagree, 4=disagree, 5=strongly disagree

Contributors and barriers to leadership. CLs selected and ranked the top three contributors to their success as a nurse leader from a list of nine factors. The top contributors identified most frequently were experience, educational preparation, and having a mentor (Figure 4). Both CLs and ALs also ranked 16 items as to the degree they were barriers (major, minor, not a barrier) to nurses attaining leadership roles (Appendix I, Table 4). Overall, Table 4 shows the top three perceived major barriers were similar for CLs and ALs. These included nurses not being seen as revenue generators, a focus of resources on acute care rather than preventive care and health maintenance, and the visibility of nurses in policy making.



Significant differences between CLs and ALs in perceptions of leadership barriers were also seen. Table 4 shows that ALs were more likely than CLs to rate as greater barriers nurse education compared to physicians, a lack of opportunities for nurses to advance into leadership positions, current compensations rates for nurses, a perception of lack of long term strategic vision from nurses, and the level of accessible leadership education for nurses. ALs (41%) were less likely compared to CLs (53%) to report readily available resources to enhance leadership skills for nurses ($p = 0.014$).

Influence and visibility. CLs (64%) were more satisfied about the nursing profession's influence and visibility compared to ALs (50%) ($p < .01$). They also were more likely to think

they can influence nursing's visibility and leadership status (78%) compared to ALs (59%) ($p<.01$). Both CLs and ALs reported low involvement in health policy or leadership advocacy (44% and 35% respectively). CLs were significantly more likely to have contacted legislators about nursing issues (49% vs 39%; $p<0.5$). `

Succession planning. Over 63% of the CL respondents were older than 50 years old, with 59% planning to retire in the next 10 years and 18% in the next three years. In terms of perception (strongly agree or agree), 67% of CLs were concerned about nurses' lack of skills to assume leadership positions in the future, only 21% felt that nurse education prepares nurses to be leaders, 49% felt their organizations were not at all prepared for leadership succession, and 73% thought that given their responsibilities and span of control, the nurse leader role in their area needed re-evaluation. Eighty two percent of CLs were willing to mentor other nurses who were interested in advancing their leadership.

Discussion and Implications

Similar to reports elsewhere (Denker et al., 2015; IOM, 2011), the ambulatory care nurse leaders and aspiring leaders in this study were not diverse – the vast majority were white and female. Increasing diversity of the nursing workforce and nurse leaders is a goal of *The Future of Nursing, Campaign for Action* (2017) so that nurses reflect the population demographics to better meet their needs and provide care that is culturally relevant. While progress has been made in increasing nurse ethnicity and gender diversity, recent data show that these areas are still lagging and need increased focus (Campaign for Action, 2017). Among ways to increase nurse leader diversity include targeted recruitment and advancement within careers, as well as mentorship and social support for these nurses (Altman, Butler, & Shern, 2016).

This study also found current leader respondents were well educated, sought their roles, and were confident in their leadership. Yet over 59% were planning to retire within 10 years. The imminent retirement of nurse leaders and the need to fill their roles is widely reported (Hader, 2007; IOM, 2011; Sverdlik, 2012). The aspiring leaders in this study were somewhat younger and also were well educated but were less confident in their leadership knowledge. Leadership programs targeted to these aspiring leaders to increase their competence and confidence may help them assume leadership roles to fill the impending gap.

One drawback for leadership development may be the availability of leadership programs. Limited opportunities for nurse managers to acquire leadership skills have been reported (Titzer, Phillips, Tooley, Hall & Shirey, 2013). An environmental scan of over 100 leadership programs found none targeted nurses working in community settings and frontline leaders perceived a shortage as most programs were focused toward inpatient nurse executives (O'Neil, Morjikian, Cherner, Hirschkorn, & West, 2008). This supports the perception of lack of accessible leadership education opportunities by the aspiring leaders in this study. Deliberate and strategic nurse leader succession planning, a defined procedure for advancement, and mentoring and coaching are needed for developing potential leaders so that a pipeline is established (Griffith, 2012; Sverdlik, 2012; Titzer, Phillips, Tooley, Hall & Shirey, 2013), including a pipeline in ambulatory care settings (Swan & Moye, 2009). Given that current ambulatory care leaders in this study were willing to mentor, they may be an untapped resource to utilize.

The priority leadership competencies selected by nurses in this study also may help focus a leadership program. Two of the top three (communication and knowledge of the healthcare environment) are similar to the priority competencies identified by nurse leaders in Florida (Denker, et. al., 2015). Communication skills are among the leadership competencies in formal

education for succession planning identified in an evidence synthesis (Titzer, Phillips, Tooley, Hall & Shirey, 2013). A third top competency found in this study was "inspiring and leading change." California nurse executives identified visionary leadership, leading complexity, and effective teams among highest ranked competencies (Leach & McFarland, 2014) and these are components of leading change. This study shows top leadership competency needs appear similar for nurse leaders, including those leaders in ambulatory care settings.

The challenge of succession planning is not just to identify nurses for leadership, but also to motivate nurses to pursue these roles. Sverdlik (2012) calls for recognizing and removing barriers, as well as identifying skill sets so that supportive educational programs can be built. Competencies and perceived barriers to ambulatory care leadership roles were identified in this study and should focus development initiatives. Two of the perceived barriers indicated most frequently were lack of nurse revenue generation and focus on acute care versus prevention and health maintenance. In the rapidly transforming health care environment attention on population health and value based care are changing emphasis away from these perceived barriers. Nurse leaders have increased opportunities to influence health care redesign in these areas and they must seize these moments.

Another top barrier in this study was the perceived lack of nurses in health policy development. Both current leaders and aspiring leaders reported relatively low involvement in health policy making. Nurse leaders must understand both the policy process and how to influence decision makers (Catallo, Spalding, & Haghiri-Vijeh, 2014; Woodward, Smart, Benavides-Vaello, 2016). They must use their positional power to describe nurses' value and drive future direction. Professional nursing organizations provide great opportunity to influence health policy via collective membership (Catallo, Spalding, & Haghiri-Vijeh, 2014).

As a next step, further analysis of the survey results is warranted. Additional analysis may look at other demographics subsets (such as nurse managers, compared to nurse supervisors and nurse executives/administrators, or subsets by age) to learn if there are group differences that may further inform leadership development and succession planning. Given the *Future of Nursing* (IOM, 2011) espouses formal and informal nurse leaders at all levels, it would be interesting to analyze the survey responses of those nurses who indicated they were not interested in being a leader, to learn of their characteristics and perceptions. Further statistical analysis also may be used to explore other comparisons among survey questions. The author intends to share the results of this analysis with AAACN leadership and members to garner their impressions of the findings and solicit ideas for potential next steps, such as the development of leadership initiatives. In addition, with the support of the primary investigator, publication in a nursing journal will be pursued.

Limitations

This cross-sectional exploratory design does not allow for causal inferences between factors examined in this study. While this study utilized a national survey, there could be response bias with the use of a convenience sample. In addition, the survey asked nurses about their perceptions and these perceptions may not always be accurate reflections of reality.

Conclusion

This study offers a snapshot of ambulatory care nurse leader and aspiring leader roles, perceptions of influence, priority competencies, barriers to practice, and success factors. Opportunities abound for ambulatory care nurses to lead in the current health care environment. Significant gaps were identified in nurse leader diversity, nurse influence and visibility, health policy development activities, aspiring leader preparation, and succession planning. Current

ambulatory care nurse leaders were well educated and confident in their leadership knowledge and practice so they should proactively drive results in these areas. But given their impending retirement, it is imperative they also embrace the challenge of preparing future leaders.

Succession planning is lacking and must be addressed. Given the rapid changes in health care and the increased focus of care outside the hospital, these survey results may inform development of strategies to increase aspiring leader competencies and confidence so that ambulatory care succession planning builds a pipeline for the future. Encouraging awareness and participation in leadership development courses and mentoring by nurse leaders (who were willing to do so) may drive these aspiring leaders to seek and embrace leadership roles. Attention and priority focus must be given to nurses who are gender and ethnically diverse so they are recruited, have advancement opportunities, and are mentored.

The ambulatory care nurse leaders in this study felt they could influence nurse's visibility and leadership status, yet both leaders and those aspiring leaders had low involvement in health policy advancement. Given that few non-nurse leaders believe nurses have much influence in health care reform (Khoury, Blizzard, Wright Moore & Hassmiller, 2011), it is critical that ambulatory care nurses proactively seize these opportunities. Use of the top competencies identified – communication skills, inspiring and leading change, and knowledge of the health care environment would support them in these endeavors. Professional nursing organizations should foster involvement in policy making, emphasize the importance of collective influence, and provide leadership opportunities. Nursing schools and health care organizations also must seek opportunities to prepare the pipeline. Continued work is needed to identify the most effective strategies to support ambulatory care nurse leader and aspiring leader development, practice, influence and visibility.

Summary

Increasingly, health care is focusing on value and new care models are developing in a rapidly changing landscape. These transformational changes are impacting current and emerging nurse leader roles. Ambulatory care nurses have great opportunities to impact the future of care for better population health but they must be proactive, utilize their strengths, influence policy, and overcome barriers to leadership. Communication, inspiring and leading change, and knowledge of the health care environment are priority competencies they have identified as important to success. Current ambulatory care leaders are well educated, are confident in their leadership, and are willing to mentor others. Yet they are also are considering retirement and their organizations are not prepared for the loss of leaders. While there is a cadre of aspiring nurse leaders, they are less confident in their leadership, they don't see advancement opportunities, nor accessible leadership resources. Strong leadership development opportunities and succession planning are needed to develop a pipeline of more diverse nurse leaders for the future. Health care organizations, educational institutions, and professional nursing associations have critical roles to play to prepare these future leaders.

Appendix A – Leadership Competencies

Eight Nursing Leadership Competencies:
1. Global perspective related to emerging nursing and health care trends
2. Technology and informatics knowledge, skills and competency
3. Expert decision making for complex environments based on evidence
4. Ability to create organizational cultures to support quality and safety
5. Political savvy and skills
6. Collaborative and team building skills
7. Balanced authenticity and performance expectations
8. Ability to envision and proactively adopt

Huston's 2008 Competencies adapted by Swan and Moye (2009, p. 252)

Appendix B – Leadership Emergence Developmental Model

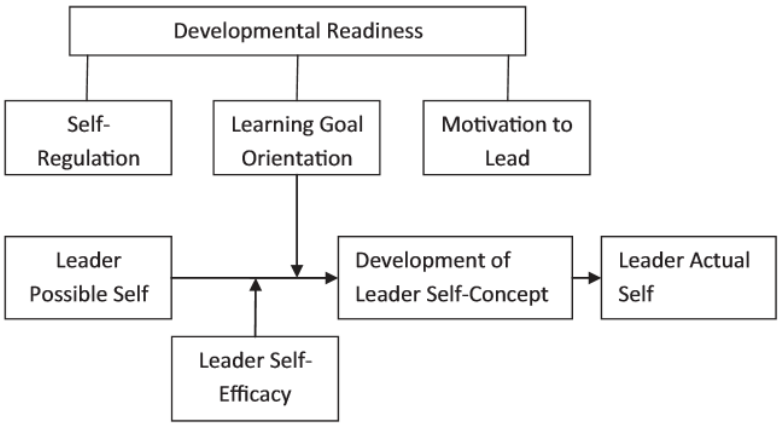
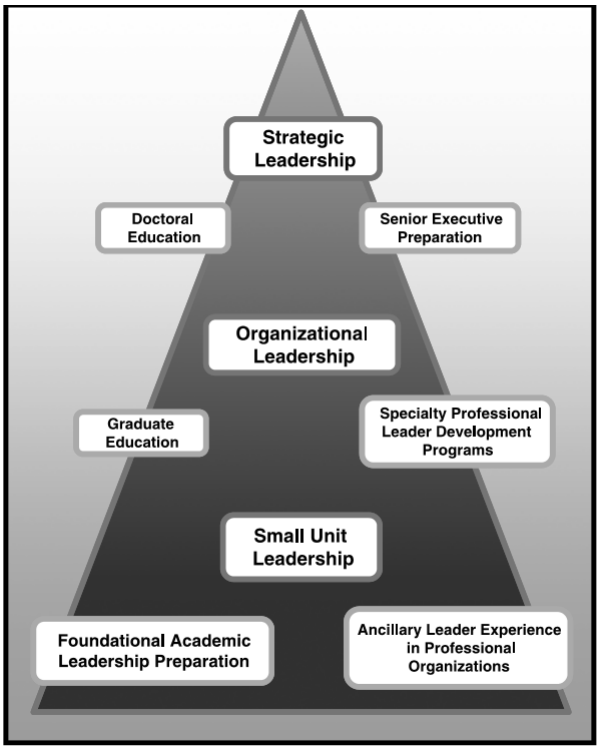


Figure. Leadership emergence developmental model.

Scott & Miles (2013, p. 80)

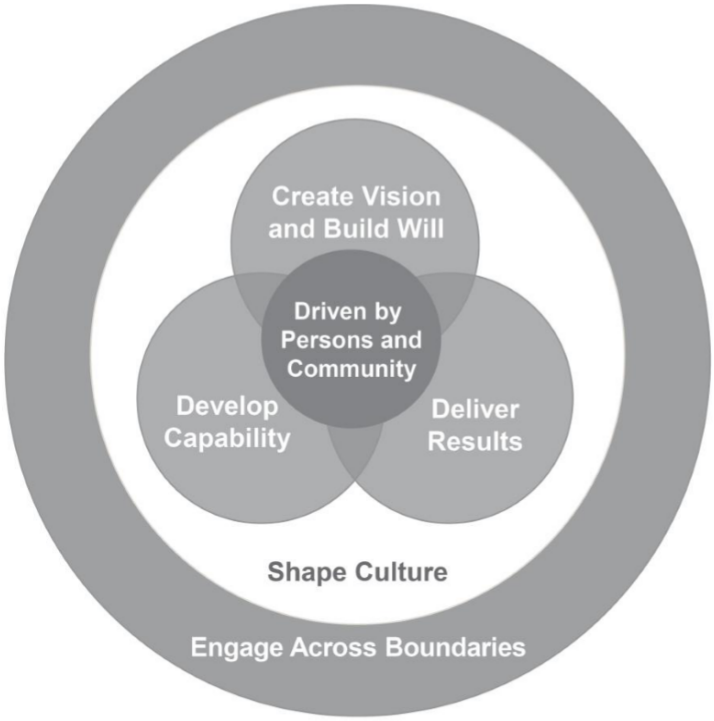
Appendix C – Model for Intentional Development of Nurse Leaders



Wilmoth & Shapiro. (2014, p 337)

Appendix D – IHI High-Impact Leadership Framework

Figure 4. IHI High-Impact Leadership Framework



Swensen, Pugh, McMullan, & Kabcenell (2013, p.18)

Appendix E – Survey Invitation / Recruitment

1. Initial survey invitation sent April 7, 2017 to active AAACN members

Subject line: Nurse Leadership Survey invitation

Your help is needed for *Improving Ambulatory Care Nurse Leadership Effectiveness*. As an AAACN member you are invited to take a one-time DNP research survey about your leadership experiences and opinions on roles, influence, priorities, challenges, and success factors. The study will inform the development of strategies to increase leadership effectiveness in line with the Institute of Medicine report '*The Future of Nursing: Leading Change, Advancing Health."* The survey should take about 5-10 minutes or less to complete. To begin the anonymous survey, simply click the SURVEY link:

https://www.surveymonkey.com/r/ambnurseleader

Your input is extremely valuable. We hope you choose to complete the survey.

Kathy Mertens, MN, MPH, RN
Oregon Health & Science University
School of Nursing, DNP Student

P.I. Katherine Bradley PhD, RN
Associate Professor, OHSU School of Nursing
IRB#:00016741

2. First survey reminder email send to AAACN members April 14, 2017

Subject line: Your thoughts about nurse leadership

Recently you were sent an email asking for your input on *Improving Ambulatory Care Nurse Leadership Effectiveness*. This DNP survey study will collect information about your leadership experiences and opinions on roles, influence, priorities, challenges, and success factors to inform future leadership development efforts. By providing the survey link, we hope it makes it easy for you to respond if you have not already done so. To complete the survey by May 5th simply click the SURVEY link.

https://www.surveymonkey.com/r/ambnurseleader

This survey is anonymous and your study participation is voluntary.

Many thanks,

Kathy Mertens, MN, MPH, RN
OHSU DNP Student

P.I. Katherine Bradley PhD, RN
IRB#: STUDY00016741

3. Final survey reminder email to AAACN members on April 27, 2017

Subject line: Last chance - Nurse Leadership Survey

Recently you were sent an e-mail asking you to complete the *Improving Ambulatory Care Nurse Leadership Effectiveness* DNP research survey by May 5th. If you have already completed it, thank you very much! The study will collect information about your leadership experiences and opinions on roles, influence, priorities, challenges, and success factors to inform future leadership development efforts. It should only take 10 minutes or less to complete. Simply click the SURVEY link below.

https://www.surveymonkey.com/r/ambnurseleader

This survey is anonymous and your participation is voluntary.

Sincerely,

Kathy Mertens, MN, MPH, RN
OHSU DNP Student

P.I. Katherine Bradley PhD, RN
IRB#: STUDY00016741

Appendix F – Survey

Improving Ambulatory Care Nurse Leadership Effectiveness Survey

1. **How satisfied are you by the nursing profession's influence and visibility?**
    - Very satisfied
    - Satisfied
    - Neutral
    - Dissatisfied
    - Very dissatisfied

2. **In your opinion, what is the likelihood that YOU can influence nursing's visibility and leadership status?**
    - Very likely
    - Likely
    - Undecided
    - Unlikely
    - Very unlikely

3. **How would you rate the general public's knowledge of the contribution of nurse leaders in policy making?**
    - Excellent
    - Very good
    - Good
    - Fair
    - Poor

4. **In your opinion, are resources readily available to enhance leadership skills for nurses?**
    - Yes
    - No

5. **Please select the <u>top 3 leadership competencies</u> necessary for success in today's health care environment, from the following:**

    - Communication
    - Knowledge of the health care environment
    - Business acumen
    - Financial skills
    - Information management & technology
    - Academic relationships
    - Medical staff relationships
    - Decision making
    - Networking and collaborating
    - Clinical experience
    - Quality improvement
    - Understanding of health policy
    - Inspiring and leading change
    - Delivery system model design
    - Human resource management
    - Evidence-based practice
    - Other

    Other: please specify_____

6. **Please assess the following as to their effect on nurses attaining leadership roles**.

	Major barrier	Minor barrier	Not a barrier
Education compared to physicians	○	○	○
Varying education levels among nurses	○	○	○
The media's depiction of nurses compared to other health professions	○	○	○
The stereotypes of nursing compared to other health professions	○	○	○
A lack of a single voice among nurses in speaking on issues	○	○	○
A lack of opportunities for nurses to advance into leadership positions	○	○	○
A focus of resources on acute care, rather than preventive care and health maintenance	○	○	○
Current compensation rates for nurses	○	○	○
Public perception of nurse roles, as compared to physicians, as important health care decision makers	○	○	○
Nurses, as compared to physicians, are not seen as revenue generators	○	○	○
Perception of a lack of long term strategic vision from nurses	○	○	○
High proportion of women in the nursing field	○	○	○
Level of confidence among nurses	○	○	○
Visibility of nurses in policy making	○	○	○
Level of accessible leadership education for nurses	○	○	○
Diversity among nurses	○	○	○

7. **Do you believe you were ever passed over for a leadership position for any of the following reasons:**
    - Ethnicity
    - Age
    - Gender
    - Educational preparation
    - Not applicable

8. **Are you currently employed?**
    - Yes
    - No

If question 8 "Yes"" – continues on with Question 9

If question 8 "No" – skips to Question 27

The following questions will gather information on your leadership interest and/or experience.
Leadership experience includes position titles in institutions (such as administrative, managerial or supervisory positions) and volunteer leadership.
Leadership interest also includes those who have not had the opportunity to serve in a leader role but aspire to do so.

9. **Which of the following best describes you?** [Answer to this question develops main skip pattern based on the 3 response choices below]
    - Currently work in a position of leadership at my place of employment (such as Ambulatory Chief Nursing Officer, Director of Nursing, Manager, Supervisor, etc.)
    - Want to be a leader
    - Not interested in being a leader

10. **How would you best describe your <u>current work role</u>? If you are employed in multiple roles, please select the one role that is your primary source of income.**

    - Nurse Executive/Administrator/Director
    - Advanced Practice Nurse
    - Care Coordinator
    - Consultant
    - Educator
    - Nurse Manager
    - Nurse Supervisor
    - Nurse Faculty
    - Staff nurse

- Other (please specify)_____

11. Work setting:

- Academic medical center/University hospital outpatient
- Community health clinic
- College/education setting
- Community hospital outpatient
- Free standing facility
- Health care consulting
- Home health
- Managed care\HMO\PPO
- Military outpatient
- Physician's office/Group medical practice
- Public health
- School health
- Telehealth Call Center
- Veteran's administration outpatient
- Other: (Please specify) _____

If question 9 "Currently work in a position of leadership" – continue on with question 12 and proceed to end

If question 9 "Want to be a leader" – skip to question 20 and proceed to end

If question 9 "Not interested in being a leader" – skip to question 27 and proceed to end

12. How long have you worked in the health care sector in a managerial or leadership level?

- Less than 5 years
- 5-10 years
- 11-15 years
- 16-20 years
- 21-25 years
- 26-30 years
- More than 30 years

13. How did you attain your leadership role?

- Sought out position (applied)
- Asked to take permanent position
- Asked to take interim position

14. **How many people do you supervise?** Include all departments, direct, and indirect reports.
    - 1-5 staff
    - 6-15 staff
    - 16-40 staff
    - 41-65 staff
    - 66-100 staff
    - More than 100 staff
    - Zero (do not serve in a supervisory capacity)

15. **In how many years do you plan on retiring or leaving your leadership role?**
    - Less than a year
    - 1-3 years
    - 4-6 years
    - 7-10 years
    - More than 10 years
    - No plans to retire

16. **In your opinion, how prepared is your organization for the loss of key nurse leaders?**
    - Well prepared
    - Somewhat prepared
    - Not at all prepared
    - I don't know

17. **Please rate your level of agreement with the following statements:**

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Based on my knowledge of staff, I worry about who will have the skills to take leadership positions in the future.	○	○	○	○	○
As part of succession planning, the scope of responsibilities and span of control in my area, the nurse leader role needs to be reevaluated.	○	○	○	○	○
Nurse education adequately prepares nurses to serve as leaders	○	○	○	○	○

18. **From your perspective, please select and rank the top 3 contributors to your success as a nurse leader, from the following:** (Choose your selections 1, 2 or 3; one in each column).

	1	2	3
Educational preparation	○	○	○
Mentor	○	○	○
Experience	○	○	○
Right place, right time	○	○	○
Formal leadership programs	○	○	○
Informal leadership development	○	○	○
Vision	○	○	○
Networking	○	○	○
Other:	○	○	○

Other: Please specify _____

19. **Would you be willing to mentor other nurses who are interested in advancing their leadership?**

    - ○ Yes
    - ○ No
    - ○ I don't know

20. **Have you ever taken a course, seminar, or webinar in a leadership or other activity to enhance your leadership knowledge and skills?**

    - ○ Yes
    - ○ No

21. **In the past year, how often have you visited a nursing organization website?**

    - ○ Never
    - ○ 1-3 times
    - ○ 4 or more times

22. **Have you ever contacted your legislators to express your opinion about nursing issues?**

    - ○ Yes

- No

23. Have you ever been involved in health policy or leadership advocacy?

- Yes
- No

24. I am confident in MY knowledge of nursing leadership.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

25. I am confident in MY practice of nursing leadership

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

26. **Nurse at my workplace are confident in their knowledge of leadership**.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

27. Your age

- 30 years of age or less
- 31-40 years of age
- 41-50 years of age
- 51-60 years of age
- 61-70 years of age
- More than 70 years of age

28. Gender

- Male
- Female

29. Ethnicity (select all that apply)

- White / non-Hispanic
- Black / non-Hispanic
- Caribbean Islander / non-Hispanic
- Hispanic / Latino
- Asian
- American Indian / Alaska Native
- Native Hawaiian / Pacific Islander
- Other (please specify)_____

30. Number of years of nursing experience

- Less than 5 years
- 5-10 years
- 11-15 years
- 16-20 years
- 21-25 years
- 26-30 years
- More than 30 years

31. Your highest nursing degree earned:

- Diploma in nursing
- ASN/ ADN
- BSN
- MN/ MS/ MSN
- DNP
- PhD

32. **In which State do you currently live?** (drop down list)

- Alabama
- Alaska
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Delaware
- District of Columbia
- Florida
- Georgia
- Hawaii
- Idaho
- Illinois
- Indiana
- Iowa

- Kansas
- Kentucky
- Louisiana
- Maine
- Maryland
- Massachusetts
- Michigan
- Minnesota
- Mississippi
- Missouri
- Montana
- Nebraska
- Nevada
- New Hampshire
- New Jersey
- New Mexico
- New York
- North Carolina
- North Dakota
- Ohio
- Oklahoma
- Oregon
- Pennsylvania
- Rhode Island
- South Carolina
- South Dakota
- Tennessee
- Texas
- Utah
- Vermont
- Virginia
- Washington
- West Virginia
- Wisconsin
- Wyoming
- Out of United States

Appendix G

Table 2: Role, Work Setting, and Region Comparison - Current Leaders and Aspiring Leaders

	Current Leaders	Aspiring Leaders
Roles	N=379	N=130
Nurse Executive/Administrator/Director	31.9%	0.0%
Nurse Manager	34.3%	3.1%
Nurse Supervisor	9.5%	0.8%
Care Coordinator	4.0%	30.8%
Staff nurse	1.0%	41.5%
Educator	7.9%	9.2%
Faculty	0.8%	1.5%
Other	10.3%	13.1%
Work Setting	N=379	N=130
Academic Medical Center Outpatient	36.1%	19.2%
Physician's Office/ Group Medical	16.6%	23.9%
Community Hospital Outpatient	8.4%	7.7%
Telehealth Call Center	6.7%	3.9%
Veteran's Administration Outpatient	5.8%	14.6%
Community Health Clinic	5.0%	10.8%
Military Outpatient	3.4%	1.5%
Free Standing Facility	1.9%	3.9%
Managed Care/HMO/PPO	1.6%	3.1%
Home Health	0%	2.3%
College/Education setting	2.1%	4.6%
Health Care Consulting	0.3%	0.8%
School Health	0.5%	0.8%
Public Health	0.5%	0%
Other	10.8%	3.1%
Region*	N=357	N=129
Midwest	27.7%	30.2%
Northeast	16.8%	18.6%
South	28.3%	20.1%
West	26.6%	30.2%
Out of United States	0.6%	<0.1%

*Regions per ANCC (2015) definitions

Appendix H

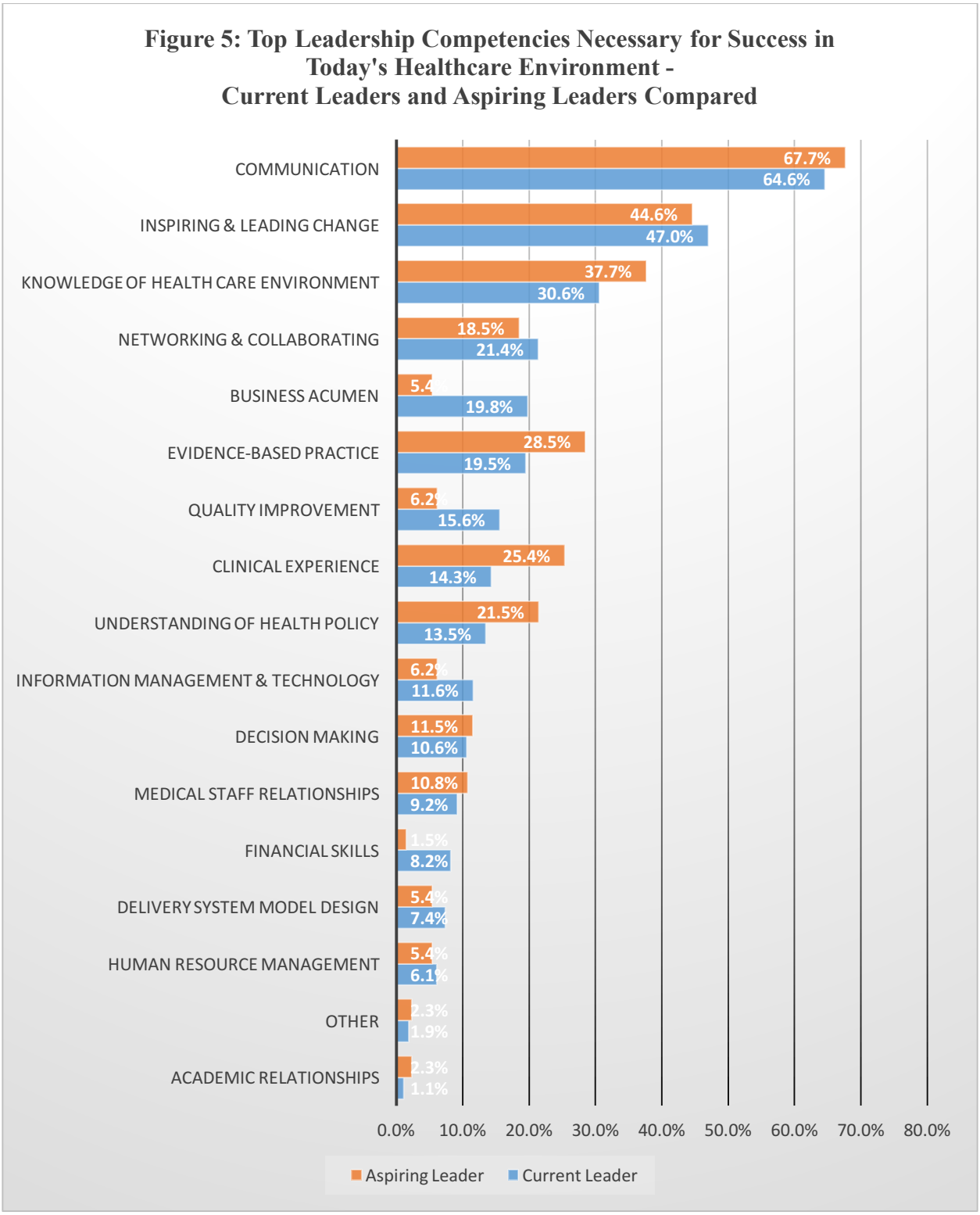


Figure 5: Top Leadership Competencies Necessary for Success in Today's Healthcare Environment - Current Leaders and Aspiring Leaders Compared
COMMUNICATION
67.7%
64.6%
INSPIRING & LEADING CHANGE
44.6%
47.0%
KNOWLEDGE OF HEALTH CARE ENVIRONMENT
37.7%
30.6%
NETWORKING & COLLABORATING
18.5%
21.4%
BUSINESS ACUMEN
19.8%
EVIDENCE-BASED PRACTICE
28.5%
19.5%
QUALITY IMPROVEMENT
15.6%
CLINICAL EXPERIENCE
25.4%
14.3%
UNDERSTANDING OF HEALTH POLICY
21.5%
13.5%
INFORMATION MANAGEMENT & TECHNOLOGY
11.6%
DECISION MAKING
11.5%
10.6%
MEDICAL STAFF RELATIONSHIPS
10.8%
9.2%
FINANCIAL SKILLS
8.2%
DELIVERY SYSTEM MODEL DESIGN
7.4%
HUMAN RESOURCE MANAGEMENT
OTHER
1.9%
ACADEMIC RELATIONSHIPS
1.1%
0.0% 10.0% 20.0% 30.0% 40.0% 50.0% 60.0% 70.0% 80.0%
Aspiring Leader
Current Leader

Appendix I

Table 4: Barriers to Leadership Ranked and Compared - Current Leaders and Aspiring Leaders (Means compared two sample t-test)

Perceived Barriers	Current Leaders				Aspiring Leaders				
	Scored "major barrier" (%)	N	Mean[#]	S.D.	Scored "major barrier" (%)	N	Mean[#]	S.D.	*P* value means
1. Nurses, as compared to physicians are not seen as revenue generators	79	328	1.25	0.51	83	130	1.19	0.45	p=0.2341
2. Focus of resources on acute care rather than preventive care & health maintenance	66	377	1.40	0.59	70	130	1.34	0.55	p=0.3095
3. Visibility of nursing in policy making	65	376	1.38	0.56	66	130	1.36	0.53	p=0.7221
4. Public perception of nurse roles as compared to physicians, as important health care decision makers	64	378	1.42	0.59	60	129	1.47	0.62	p=0.4124
5. Lack of single voice among nurses in speaking on issues	56	377	1.53	0.65	63	130	1.42	0.59	p=0.0893
6. Perception of a lack of long-term strategic vision from nurses	51	377	1.55	0.61	60	130	1.43	0.55	p=0.0480*
7. Current compensation for nurses	50	377	1.58	0.62	60	130	1.45	0.58	p=0.0366*
8. Varying educational levels among nurses	44	378	1.66	0.65	50	130	1.60	0.66	p=0.1575
9. Stereotypes of nursing compared to other professions	36	378	1.82	0.71	45	130	1.72	0.74	p=0.1712
10. Lack of opportunities for nurses to advance to leadership positions	34	377	1.85	0.71	58	130	1.46	0.58	p<0.0001*
11. Level of accessible leadership education for nurses	34	377	1.83	0.70	48	129	1.64	0.68	p=0.0076*
12. Level of confidence among nurses	32	378	1.85	0.68	33	129	1.88	0.72	p=0.6702
13. Media's depiction of nurses compared to other health professions	30	375	1.98	0.36	37	130	1.87	0.77	p=0.1651
14. High proportion of women in the nursing field	24	377	2.00	0.72	29	130	2.03	0.78	p=1.000
15. Education compared to physicians	16	378	2.21	0.69	37	130	2.03	0.77	p=0.0131*
16. Diversity among nurses	16	378	2.24	0.70	16	127	2.17	0.67	p=0.3249

[#]1 = major barrier, 2 = minor barrier, 3 = not a barrier; lower mean score indicates perception of greater barrier

*indicates statistical significance p <.05

References

Altman, S. H., Butler, A. S., & Shern, L. (Eds.). (2016). *Assessing progress on the Institute of Medicine report The Future of Nursing*. Washington, D.C.: National Academies Press. Retrieved from http://www.nap.edu/download/21838

American Academy of Ambulatory Care Nursing (AAACN). (2016a). About AAACN. Retrieved from https://www.aaacn.org/about-aaacn

American Academy of Ambulatory Care Nursing (AAACN). (2017). American Academy of Ambulatory Care Nursing position paper: The role of the registered nurse in ambulatory care. *Nursing Economic$*, 35(1), 39-47.

American Nurses Association (ANA). (2016). *Nursing administration: Scope and standards of practice (2nd Ed.).* Silver Spring, MD: ANA.

American Nurses Credentialing Center (ANCC). (2015). *2014 Nurse executive role delineation study summary report.* Silver Spring, MD: American Nurses Credentialing Center. Retrieved from http://docplayer.net/6125517-Nurse-executive-role-delineation-study-summary-report.html

American Organization of Nurse Executives. (2015). AONE Nurse executive competencies. Chicago, IL: Author. Retrieved from www.aone.org/resources/nec.pdf

Batcheller, J. (2010). Chief nursing officer turnover: an analysis of the literature. *Nursing Clinics of North America*, *45*(1), 11-31. Doi: http://dx.doi.org/10.1016/j.cnur.2009.10.004

Bower, K. A. (2016). Nursing leadership and care coordination: Creating excellence in coordinating care across the continuum. *Nursing Administration Quarterly*, *40*(2), 98-102. doi: 10.1097/NAQ.0000000000000162

Bradley, C. (2014). Leading Nursing through influence and structure: The system nurse executive role. *Journal of Nursing Administration* Care, *44*(12), 619-621. doi: 10.1097/NNA.0000000000000136

Burwell, S.M., (2015). Setting value-based payment goals – HHS efforts to improve U.S. health care. *New England Journal of Medicine*. 372(10), 897-899). doi:10.1056/NEJMp1500445

Campaign for Action. (2017, January 27). Increasing diversity in nursing. Retrieved from https://campaignforaction.org/issue/increasing-diversity-in-nursing/#progress

Care Continuum Alliance. (2012). *Implementation and evaluation: A population health guide for primary care models*. Washington, D.C.: Care Continuum Alliance. Retrieved from http://www.populationhealthalliance.org/publications/population-health-guide-for-primary-care-models.html

Carlson, E., Kline, M., & Zangerle, C. M. (2016). AONE competencies: Preparing nurse executives to lead population health. *Nurse Leader*, *2*(14), 108-112. doi: 10.1016/j.mnl.2016.01.004

Caroselli, C. (2008). The system chief nurse executive, more than the sum of the parts. *Nurse Administration Quarterly*, 32(3), 247-252. doi: 10.1097/01.NAQ.0000325183.02214.f7

Catallo, C., Spalding, K., & Haghiri-Vijeh, R. (2014). Nursing professional organizations: What are they doing to engage nurses in health policy?. *Sage Open*, *4*(4), 1-9. doi:10.1177/2158244014560534

Christopher, M. A. (2014). The role of nursing and population health in achieving the triple aim: How nurses are helping to drive patient-centered, community-based care. *Home Healthcare Now*, *32*(8), 505-506. doi: 10.1097/NHH.0000000000000130

Clark, J. (2012). The system chief nurse executive role: Sign of the changing times? *Nurse Administration Quarterly*, 36(4), 299-305. doi:10.1097/NAQ.0b013e3182669440

Clement-O'Brien, K., Polit, D. F., & Fitzpatrick, J. J. (2011). Innovativeness of nurse leaders. *Journal of Nursing Management*, *19*(4), 431-438. doi:10.1111/j.1365-2834.2010.01199.x

Cline, S. (2015). Nurse Leader Resilience: Career Defining Moments. *Nursing Administration Quarterly*, *39*(2), 117-122. doi: 10.1097/NAQ.0000000000000087

Denker, A. L., Sherman, R. O., Hutton-Woodland, M., Brunell, M. L., & Medina, P. (2015). Florida nurse leader survey findings: Key leadership competencies, barriers to leadership, and succession planning needs. *Journal of Nursing Administration*, *45*(7/8), 404-410. Doi:10.1097/NNA.0000000000000222

Dillman, D., Smyth, J. & Christian, L. (2014). *Internet, phone, mail and mixed mode surveys: The tailored design method,* (4th Ed.). Hoboken, NJ: John Wiley & Sons, Inc.

Duva, I. (2014). The role of nursing leaders in advancing care coordination. In G. Lamb (Ed.), *Care coordination: The game changer, how nursing is revolutionizing quality care* (pp. 97-112). Silver Spring, MD: American Nurses Association.

Dyess, S. M., Opalinski, A., Saiswick, K., & Fox, V. (2016). Caring across the continuum: A call to nurse leaders to manifest values through action with community outreach. *Nursing Administration Quarterly*, *40*(2), 137-145. doi: 10.1097/NAQ.0000000000000157

Frederickson, K., & Nickitas, D. (2011). Chief nursing officer executive development: A crisis or a challenge? *Nursing Administration Quarterly*, *35*(4), 344-353. doi:10.1097/NAQ.0b013e31822f8e5c

Griffith, M. B. (2012). Effective succession planning in nursing: A review of the literature. *Journal of Nursing Management*, *20*(7), 900-911. doi:10.1111/j.1365-2834.2012.01418.x

Haas, S.A., & Hackbarth, D.P. (1997). The role of the nurse manager in ambulatory care: Results of a national survey. *Nursing Economic$, 15(4), 191-203.*

Hader, R., Saver, C., & Steltzer, T. (2006). No time to lose. *Nursing Management*, *37*(7), 23-29.

Hafeman, P. (2015). What does it mean to be part of a system? The role of the chief nurse executive and shared governance. *Nurse Leader*, *13*(5), 69-72. doi:10.1016/j.mnl.2015.01.002

Hassmiller, S. B. (2011). Nursing leadership from bedside to boardroom: commentary. *Journal of Nursing Administration*, *41*(7/8), 306-308.

Harris, D., Puskarz, K., & Golab, C. (2016). Population health: Curriculum framework for an emerging discipline. *Population Health Management*, *19*(1), 39-45. doi:10.1089/pop.2015.0129

Health Resources and Services Administration. (2010). *Registered nurse population: Findings from the 2008 national sample survey of registered nurses*. U.S Department of Health and Human Services. Retrieved from http://bhpr.hrsa.gov/healthworkforce/rnsurveys/rnsurveyfinal.pdf.

Huston, C.J. (2008). Preparing nurse leaders for 2020. *Journal of Nursing Management*, 16(8), 905-911. doi: 10.1111/j.1365-2834.2008.00942.x

Institute of Medicine. (2011). *The future of nursing: Leading change, advancing health*. Washington, DC: National Academies Press. Retrieved from http://www.nationalacademies.org/hmd/Reports/2010/The-Future-of-Nursing-Leading-Change-Advancing-Health.aspx

Khoury, C. M., Blizzard, R., Moore, L. W., & Hassmiller, S. (2011). Nursing leadership from bedside to boardroom: a gallup national survey of opinion leaders. *Journal of Nursing Administration*, *41*(7/8), 299-305. doi:10.1097/NNA.0b013e3182250a0d

Kimball, B. and Joynt, J. (2007). The quest for new innovative care delivery models. *Journal of Nursing Administration*, 27(9), 392-398. doi:10.1097/01.NNA.0000285142.57118.56

Lathrop, B. & Hodnicki, D.R. (2014). The Affordable Care Act: Primary care and the doctor of nursing practice nurse. *Online Journal of Issues in Nursing*, 19(2), 2-2. doi: 10.3912/OJIN.Vol198No02PPT02

Leach, L. S., & McFarland, P. (2014). Assessing the professional development needs of experienced nurse executive leaders. *Journal of Nursing Administration*, *44*(1), 51-62. doi: 10.1097/NNA.0000000000000021

Martin, D. M. (2014). Interprofessional teams in the patient-centered medical home. *Nursing Administration Quarterly*, *38*(3), 214-220. doi:10.1097/NAQ.0000000000000040

Mastal, M. F. (2010). Ambulatory care nursing: Growth as a professional specialty. *Nursing Economic$*, *28*(4), 267.

Mastal, M., Matlock, A., & Start, *R*. (2016). Ambulatory care nurse-sensitive indicators series: Capturing the role of nursing in ambulatory care - the case for meaningful nurse-sensitive measurement. *Nursing Economic$, 34(2)* 92-97, 76.

Mateo, M.A & Foreman, M.D. (2014). *Research for advanced practice nurses, from evidence to practice (*2nd ed.). New York, NY: Springer Publishing.

McCarthy, D., Ryan, J., & Klein, S. (2015). *Models of care for high-need, high-cost patients: An evidence synthesis.* Issue brief (Commonwealth Fund), *31*, 1-19. Retreived from

http://www.commonwealthfund.org/publications/issue-briefs/2015/oct/care-high-need-high-cost-patients

Meadows, M. T. (2016). New Competencies for System Chief Nurse Executives. *Journal of Nursing Administration*, *46*(5), 235-237. doi:10:1097?NNA.0000000000000336

Morjikian, R. L., Kimball, B., & Joynt, J. (2007). Leading change: The nurse executive's role in implementing new care delivery models. *Journal of Nursing Administration*, *37*(9), 399-404. doi:10.1097/01.NNA.0000285141.19000.bc

O'neil, E., Morjikian, R. L., Cherner, D., Hirschkorn, C., & West, T. (2008). Developing nursing leaders: An overview of trends and programs. *Journal of Nursing Administration*, *38*(4), 178-183. doi: 10.1097/01.NNA.0000312754.61170.fa

Pittman, P., & Forrest, E. (2015). The changing roles of registered nurses in Pioneer Accountable Care Organizations. *Nursing Outlook*, *63*(5), 554-565. doi:http://dx.doi.org/10.1016/j.outlook.2015.05.008

Ponti, M. A. D. (2009). Transition from leadership development to succession management. *Nursing Administration Quarterly*, *33*(2), 125-141. doi:10.1097/NAQ.0b013e3181a10cc6

Rapin, J., D'Amour, D., & Dubois, C.A. (2015). Indicators for evaluating the performance and quality of ambulatory care nurses. *Nursing Research and Practice*. 2015. doi:10.1155/2015/861239

Registered Nurses' Association of Ontario (2013). *Developing and sustaining nursing leadership*, (2nd ed.). Toronto, ON: Registered Nurses' Association of Ontario. Retrieved from rnao.ca/bpg/guidelines/developing-and-sustaining-nursing-leadership

Rushton, S. (2015). The population care coordination process. *Case Management*, 20(5), 230-238. doi:10.1097/NCM.0000000000000105

Scott, E.S. & Miles, J.M. (2013). Advancing leadership capacity in nursing. *Nursing Administration Quarterly*, 37(1), 77-82. doi:10.1097/NAQ.0*b013e182751998*

Scott, E. S., Murphy, L. S., & Warshawsky, N. E. (2016). Nursing administration research priorities: findings from a Delphi study. *Journal of Nursing Administration*, *46*(5), 238-244. doi: 10.1097/NNA.0000000000000337

Scott, E. S., & Yoder-Wise, P. S. (2013). Increasing the intensity of nursing leadership: Graduate preparation for nurse leaders. *Journal of Nursing Administration*, *43*(1), 1-3. doi:10.1097/NNA.0b013e318278607c

Shirey, M. R. (2016). Leadership transitions and the first 90 days. *Journal of Nursing Administration*, *46*(4), 169-172. doi: 10.1097/NNA.0000000000000329

Shulman, K. M. (2015). Joint statement: The role of the nurse leader in care coordination and transition management across the health care continuum. *Nursing Economic$*, *33*(5), 281-282.

Start, R., Matlock, A.M., & Mastal, P. (2016). Ambulatory Care nurse-sensitive indicator industry report: Meaningful measurement of nursing in the ambulatory patient care environment. Pitman, NJ: American Academy of Ambulatory Care Nursing. Retrieved from https://aaacn.org/NSIReport

Sverdlik, B. (2012). Who will be our nursing leaders in the future? The role of succession planning. *Journal of Nursing Administration*, *42*(7/8), 383-385. doi:10.109/NNA.0b013e318261938b

Swan, B. A., Conway-Phillips, R., & Griffin, K. F. (2006). Demonstrating the value of the RN in ambulatory care. *Nursing Economic$, 24(6), 315-322.*

Swan, B. A. & Haas, S. A. (2011). Health care reform: current updates and future initiatives for ambulatory care nursing. *Nursing Economic$,* 29(6), 331-336.

Swan, B. A., Haas, S. A., & Chow, M. (2010). Ambulatory care registered nurse performance measurement. *Nursing Economic$*, *28*(5), 337-341.

Swan, B. A., & Moye, J. P. (2009). Growing ambulatory care nurse leaders: Building talent from the primed pipeline. *Nursing Economic$*, *27*(4), 251.

Swensen S, Pugh M, McMullan C, & Kabcenell A. (2013). *High-impact leadership: Improve care, improve the health of populations, and reduce costs.* Cambridge, Massachusetts: Institute for Healthcare Improvement. Retrieved from http://www.ihi.org/resources/Pages/IHIWhitePapers/HighImpactLeadership.aspx

Titzer, J., Phillips, T., Tooley, S., Hall, N., & Shirey, M. (2013). Nurse manager succession planning: Synthesis of the evidence. *Journal of Nursing Management*, *21*(7), 971-979.

Trepanier, S., & Crenshaw, J. T. (2013). Succession planning: a call to action for nurse executives. *Journal of Nursing Management*, *21*(7), 980-985.

University of Wisconsin Office of Quality Improvement. (2010). Survey fundamentals, A guide to designing and implementing surveys. Madison, WI: University of Wisconsin. Retrieved from http:/oqi.wisc.edu/resourcelibrary/uploads/resources/Survey_Guide.pdf

VanGeest, J. and Johnson, T. (2011). Surveying nursing: Identifying strategies to improve participation. *Evaluation & the Health Professionals*, 34(4). 487-511. doi:10.1177/0163278711399572

Vincent, D. & Reed, P.G. (2014). Affordable Care Act: Overview and implications for advancing nursing. *Nursing Science Quarterly*, 27(3), 254-259. doi:10.1177/0894318414534494

Vlasses, F. R., & Smeltzer, C. H. (2007). Toward a new future for healthcare and nursing practice. *Journal of Nursing Administration*, *37*(9), 375-380. doi:10.1097/01.NNA.0000285140.19000.f5

Watson Dillon, D. M., & Mahoney, M. A. (2015). Moving from patient care to population health: A new competency for the executive nurse leader. *Nurse Leader*, *13*(1), 30-36. doi:10.1016/j.mnl.2014.11.002

Wilmoth, M. & Shapiro, S. (2014). The intentional development of nurses as leaders: A proposed Framework. *Journal of Nursing Administration*, *44*(6). 333-338. doi:10.1097/NNA0000000000000078

Woodward, B., Smart, D., & Benavides-Vaello, S. (2016). Modifiable factors that support political participation by nurses. *Journal of Professional Nursing*, *32*(1), 54-61. doi:10.1016/j.profnurs.2015.06.005