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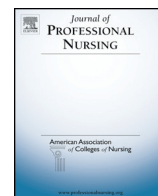
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## Roles enacted by Clinical Nurse Leaders across the healthcare spectrum: A systematic literature review☆

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## ABSTRACT

The Clinical Nurse Leader (CNL) is a master's prepared nurse envisioned to provide clinical leadership at the microsystem level to ensure safe, high quality patient-centered care. The American Association of Colleges of Nurses defined ten 'fundamental aspects' of CNL practice, but as the certified CNL population grows, data suggest they are filling a variety of positions besides formally designated CNL roles. This article reports the results of a systematic review of CNL literature to better understand what roles and activities certified CNLs are enacting when not hired into formally designated CNL roles. Sixty-nine articles met inclusion criteria. Roles identified include: faculty, 62%; clinical management/executive, 12%; specialty clinician, 11%; and staff nurse, 9%. In these roles, certified CNLs are reviewing literature, conducting research, and/or writing commentaries on CNL education and practice and other health foci such as alarm fatigue, insulin practices, and physical exercise for cancer-related fatigue. Results indicate that despite a lack of formal tracking of certified CNLs over time, the available information identifies a variety of roles and job titles used by this group of professional nurses. The study findings add to the body of knowledge informing overall understanding of the CNL initiative.

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## Introduction

The Clinical Nurse Leader (CNL) is the first new nursing role to be introduced in the U.S. in over thirty-five years (AACN, 2004; Gabuat, Hilton, Kinnard, & Sherman, 2008; Harris, Roussel, & Thomas, 2018; Jeffers & Astroth, 2013). The American Association of Colleges of Nursing (AACN) introduced the role in 2007, in its *White Paper On The Education And Role Of The Clinical Nurse Leader*:

The CNL is a leader in the healthcare delivery system across all settings in which healthcare is delivered... The CNL functions within a microsystem and assumes accountability for healthcare outcomes for a specific group of clients within a unit or setting through the assimilation and application of research-based information to design, implement, and evaluate client plans of care. The CNL is trained to identify the clinical and cost outcomes that will improve safety, timeliness, effectiveness, efficiency, quality and patient-centeredness.

[(AACN, 2007, pp. 6–7)]

Since the fall of 2007, the Commission on Nursing Certification (CNC) has offered a national CNL certification examination for qualified graduates of CNL education programs (AACN, 2015). The CNC received National Commission for Certifying Agencies accreditation for the CNL certification examination in 2014. The education and certification was developed with a specific formal CNL practice in mind, functioning at the microsystem level and focused on the 10 "fundamental aspects" of practice: (1) clinical leadership for patient-care practices and delivery; (2) participation in identification and collection of care outcomes; (3) accountability for evaluation and improvement of point-of-care outcomes; (4) risk anticipation and mitigation; (5) lateral integration of care; (6) evidence-based practice; (7) team leadership, management and collaboration; (8) information management; (9) resource stewardship; and (10) advocacy for patients, communities, and the health professional team (AACN, 2013).

Data suggest that many certified CNLs are not practicing in formally titled or designated CNL roles (Ailey, Lamb, Friese, & Christopher, 2015; Moore & Spence Cagle, 2012; Beauvais & Frost, 2014b, 2014a; Karas-Irwin & Hoffmann, 2014; O'Grady & VanGraafeiland, 2012). This fact leads to questions about what other roles and/or job titles certified CNLs are enacting, and how these roles are aligned with and/or advancing the overall CNL initiative. To answer these questions, we conducted a systematic review of the literature focused on the certified Clinical Nurse Leader (CNL) who is not hired into a formal CNL role.

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## Methods

### Literature search

A comprehensive and systematic review was conducted using the guidelines set forth in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement (Moher, Liberati, Tetzlaff, & Altman, 2009). The data sources included PubMed and the Cumulative Index to Nursing and Allied Health Literature (CINAHL). The key words included “Clinical Nurse Leader” and “CNL”. The Boolean operator OR was used to maximize the penetration of terms searched (e.g., ‘Clinical Nurse Leader OR CNL’; ‘All fields’). We used the “Customize range” feature to set a time parameter of 2006 through 2016 because the CNL certification exam was first administered in 2006.

### Inclusion criteria

Inclusion criteria contained the following: the reports were written in English, and articulated roles certified CNLs are enacting outside of formally designated CNL roles. In this study, the CNL role is defined as one who functions within a formally designated job title as a master’s prepared nurse with specific education based on the AACN Clinical Nurse Leader Competencies and Curricular Expectations (2013) and CNL certification through the Commission on Nurse Certification (AACN). We defined roles outside of this formal designation as “not hired as” (NHA) CNL. The exclusion criteria applied to reports that did not contain any information about NHA CNL roles. The process of exclusion included the researchers reading the title, abstracts, author affiliations, the text itself and the acknowledgements. An audit trail of this process was documented and maintained in a comprehensive Excel workbook.

### Quality appraisal

The focus of the review was to identify NHA CNL roles, not synthesize research reports to obtain effect sizes, so appraisal was not focused on the quality of any article’s methodology. Quality control measures were instituted by reviewing the documents for duplicates of direct object identifiers and multiple publications with slightly different titles. Additional quality control measures were taken when one author (JCH) assigned NHA CNL role classification and a second author (MB) independently assigned such classifications and the two sets of classifications were subsequently compared and agreement found.

### Data extraction

After we created our inclusion list, we extracted data on: publication year, first author, title, story-summary, theme, NHA CNL role description, role type, broad role type, duplicate author, roles NHAs were filling, NHA CNL Summary, and CNL competencies. The reason we chose the headings of the year of publication, first author and title was to efficiently identify each of the included reports in this study. The story summary and theme headings provided a brief description of the content of the article and the perspective of the article as it related to the CNL role. The role types were extracted because it allowed the researchers to identify and categorize among the many NHA roles reported in the studies. The rationale for extracting data on the NHA CNL role description, role filled, and summary was to clarify what NHAs were doing and to remain focused on our research question that asked what roles NHA CNLs are enacting. The duplicate author criteria informed us of how often NHAs are involved in writing varied types of articles as single authors or co-authors.

### Data analysis

For all data extracted, we conducted descriptive statistics to determine frequencies and/or rates of data categories, for example NHA CNL activities counts and percent of total. To derive the categories of NHA CNL roles, we used qualitative content analysis to identify and label NHA roles. Content analysis is a means to categorize data through close reading of text (Elo & Kyngas, 2008). It is an appropriate method to use for inquiry into informational content of relevant texts, such as the information provided about NHA CNL roles in the literature (Forman & Damschroder, 2008). For this review, once an article’s title, abstract, main content, author’s information, or acknowledgement section indicated that a certified CNL was involved, the entire article was read and all places where a CNL was involved were highlighted. The article was subsequently reviewed again to delineate the specific role and/or title of the highlighted CNL involvement. When CNL involvement was found to be outside of a formally designated role, i.e. an NHA CNL, that article was retained for inclusion in the final set of articles, and data was extracted. Both investigators iteratively developed categories of NHA roles based on close reading of the texts and cross comparison of NHA roles across all texts.

## Results

### Article selection and characteristics of included articles

Fig. 1 demonstrates that our initial search resulted in 519 reports. The reviewers read all titles and abstracts and removed 100 duplicate reports. The researchers then reviewed the full text of the remaining 419 documents and found that 350 did not contain any information about the NHA CNL role. This selection process yielded a final number of 69 reports that were included in this systematic review. Table 1 details included report characteristics. The types of articles included reports/research on some aspect of CNL education or practice (46%), articles describing the potential of CNLs in practice (20%), and non-CNL research reports (25%). The majority (77%) of reports were published in 2011 or later.

### “Not Hired As” (NHA) CNL role types

Table 1 details role types by article. The role types described in the included reports spanned across clinical and non-clinical roles. Importantly, each individual article many times described more than one NHA CNL role, so the frequencies add up to more than 69 (the number of included articles). The most frequently reported role, *faculty*, refers to CNLs who are formally working as professors, assistant professors, lecturers, program directors, and adjunct instructors. There were 59 (62%) NHA CNLs identified practicing in a faculty role. The second most frequently identified role was the *clinical management* role (12%), such as chief nursing officer, clinical executive director, and unit manager. Then came *specialty clinical* roles (11%) that included advanced practice nurses, clinical administrators, clinical educators, clinical coordinators, and informatics specialists. The traditional *staff nurse* role was the next most frequently reported role (9%), followed by a variety of other roles ( $N = 5, 5\%$ ). There were 13 NHA CNLs that were represented in more than one article. The majority described the same NHA role across articles, but 15% ( $N = 2$ ) reported different roles across articles over time.

### NHA CNL role activities

Table 1 details role activities by article. In reviewing the included articles, the researchers found that NHAs are involved with a host of activities. The most frequent activity was expert commentary (33%) on topics such as: potential for CNL practice in new settings or with unique patient populations; pain management outcomes for total

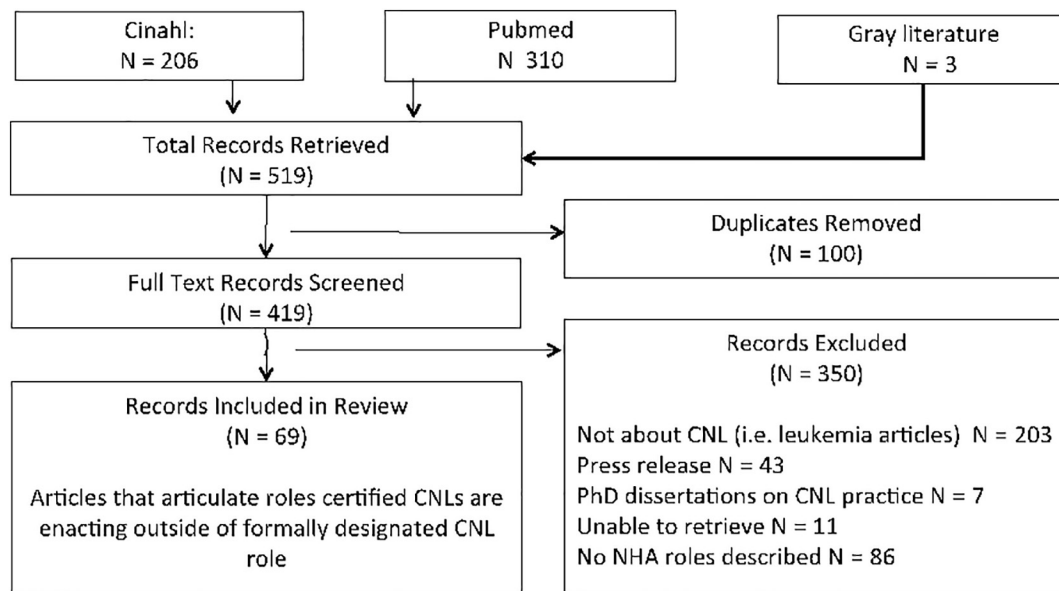


Fig. 1. Article consort flowchart.

knee replacement patients; and in-person peer review. Many NHA CNLs (22%) are actively involved in developing and implementing academic curriculum, including CNL immersion experiences and accelerated nursing programs. NHA CNLs are also involved in developing and/or reporting on CNL implementation in health systems across the nation (18%). Finally, NHA CNLs were also involved in conducting systematic literature reviews (10%) and research (14%) on topics such as CNL practice, dyspnea management for hospice patients, COPD and ventilator-associated pneumonia, and the impact of depressive symptoms on quality of life.

#### NHA CNL role activity by role type

There was a surprising level of diversity in the activities each NHA CNL role was accomplishing. First, the review revealed that NHA CNLs are often working under multiple job titles and fulfilling several roles. For example, one review article would demonstrate the NHA CNL in the role of faculty and another review article would demonstrate the same NHA CNL in the role of researcher as a primary investigator (e.g. Bender, Connelly, Glaser, & Brown, 2012; Bender, Williams, & Su, 2016; Bender, Williams, Su, & Hites, 2016; Sherman 2008, 2010). More generally NHA CNLs were contributing to many different activities across roles (see Table 2). Faculty showed the greatest diversity of activities being involved in CNL implementation, general research, literature reviews, writing expert commentaries on diverse topics alongside more expected activities such as curriculum development and implementation. NHA CNLs in specialty clinical roles were also diversely involved in activities such as CNL implementation, curriculum development and testing, expert commentary and research on the CNL. Even certified CNLs who identified as staff nurses were conducting research and writing expert commentaries and literature reviews. Overall, NHA CNLs were found to be conducting a diverse amount of academic and clinical scholarship.

#### Discussion

We have comprehensively reviewed the literature related to roles certified CNLs are enacting who are not hired into officially titled CNL roles. In terms of the types of NHA (not hired as) CNL roles we identified, the findings align with, yet also diverge from, other recent reports on certified CNL practice.

#### Comparing findings with recent CNL demographic research

A recent study (Bender et al., 2016) surveyed the population of certified CNLs. The respondents represented 18% of the total certified CNL population at the time of the study. More than 57% of respondents reported practicing in formally designated CNL roles, meaning 43% were practicing in NHA roles. NHA CNL roles included “clinical practice” (18%), management (43%), and education (27%) (Bender et al., 2016). These values are similar to what we found in this review, although faculty is represented to a much larger extent in this review (62%) than in the study (27%), and management represented more in the study (43%) than in this review (18%). In the study, there was a statistically significant difference in the perceived accountability for seven of the nine CNL areas of competence (based on AACN, 2013) between respondents practicing in formally designated CNL roles and those that were not: overall, CNLs in formal CNL roles had higher rates of accountabilities for each competency (Bender et al., 2016). In this literature review, NHA CNLs were accomplishing activities such as expert commentary, research, and curriculum development/testing. These activities conceivably benefit from a CNL competency skillset, but it can be argued that they are not required, which aligns with the previous study results. One potential inference is that CNLs accountable for CNL competencies may use their competencies differently than CNLs without direct accountability, for example NHA CNLs. This raises interesting questions for further inquiry about the dimensionality of CNL competencies, and how this dimensionality might play out in formal CNL roles vs. NHA CNL roles.

#### Comparing findings with CNL job analyses

The CNC conducted two job analyses to support the relevance, validity, and legal defensibility of the CNL examination by establishing a link between CNL competencies enacted by CNLs in their practice settings and the CNL certification examination content (CNC, 2016). The 2011 analysis surveyed the entire certified CNL population ( $n = 1560$  at the time) and achieved a response rate of 16.7%, considered an excellent response rate for an unsolicited survey (CNC, 2011). In that survey 40% described their current role as a CNL, followed by staff nurse (18%), faculty and academe (14.4%), and manager/director (10%). However, when asked what their specific job title was, only 26% of respondents answered “CNL”. These conflicting results suggest that while certified

**Table 1**  
Article characteristics and CNL role descriptions

| Year  | First author      | Article title  | Article category                      | NHA role category                    | NHA CNL activities             | NHA CNL role description  |
|-------|-------------------|--|---------------------------------------|--------------------------------------|--------------------------------|---|
| 2015  | Ailey             | Educating nursing students in clinical leadership  | Report/research on CNL education      | Faculty CNL Program                  | Curriculum development/testing | SA is an Assistant Professor in the Department of Adult Health and Gerontological Nursing, College of Nursing that is currently the Project Director, Better Care Teams and her primary teaching and clinical instruction responsibilities are in the GEM program |
|       |                   |  |                                       | Faculty CNL program                  | Curriculum development/testing | TF is an Assistant Professor in the College of Nursing and Vice Chair of the Rush University Medical Center's LGBTQ Health Committee that is an expert in LGBTQ issues, individuals with disabilities, active duty, reserve, and retired US military              |
| 2011  | Baernholdt        | The clinical nurse leader - new nursing role with global implications.   | CNL explanatory commentary in journal | Faculty CNL program                  | Literature review              | MB is an Assistant Professor, School of Nursing, Department of Public Health Sciences, University of Virginia, Charlottesville  |
|       |                   |  |                                       | Staff nurse                          | Literature review              | SC is a Clinician II, Emergency Services, Duke University Hospital, Durham, NC  |
| 2015  | Baker             | A collaborative model for the CNL and CNS  | Report/research on CNL education      | Specialty Clinical                   | CNL implementation             | JR is a case manager at Harrison Medical Center in Bremerton, Washington  |
| 2015  | Beasley           | Dyspnea management of hospice patients   | Non CNL-related report/research       | Faculty CNL program                  | Literature review              | MS is a professor, Capstone College of Nursing, University of Alabama, Tuscaloosa, Alabama  |
| 2014b | Beauvais          | Reducing the fear of falling through a community evidence-based intervention   | Non CNL-related report/research       | Faculty CNL program                  | EBP project                    | AB is the director of the undergraduate nursing program at Sacred Heart University, Fairfield, Connecticut that was first author of this report   |
| 2014a | Beauvais          | Saving our backs: safe patient handling and mobility for home care   | Non CNL-related report/research       | Faculty CNL program                  | Literature review              | AB is an assistant professor and the director of the undergraduate nursing program at Sacred Heart University, Fairfield, Connecticut that is first author of this report   |
| 2013  | Bender            | Interdisciplinary collaboration: the role of the clinical nurse leader   | Report/research on CNL practice       | other NHA                            | Research                       | MB was a doctoral student, University of San Diego, Hahn School of Nursing and Health Science   |
| 2012  | Bender            | Clinical nurse leader impact on microsystem care quality   | Report/research on CNL practice       | Specialty Clinical                   | Research                       | MB was a doctoral student, University of San Diego, Hahn School of Nursing and Health Science   |
| 2014  | Bender            | The current evidence base for the clinical nurse leader: a narrative review of the literature                            | Report/research on CNL practice       | Faculty                              | Literature review              | MB was a Lecturer, University of San Diego Hahn School of Nursing and Health Science, San Diego, CA. and an Outcomes Research Specialist, Outcomes Research Institute, Sharp Healthcare, San Diego, CA.   |
| 2010  | Bombard           | Answering the question, "what is a clinical nurse leader?": transition experience of four direct-entry master's students | Report/research on CNL practice       | Specialty Clinical Clinical director | Research                       | EB is a Lactation Counselor, Exeter Hospital, Exeter, NH  |
|       |                   |  |                                       | Specialty Clinical Staff nurse       | Research                       | MD is the Director of Quality and Site Administration, Lamprey Health Center, Newmarket, NH   |
|       |                   |  |                                       | Unit manager                         | Research                       | DW is a Team Leader, Canon City Dialysis, Canon City, CO  |
| 2015  | Burtson           | Author's response regarding "sitter reduction through mobile video monitoring"   | Non CNL-related commentary in journal | Unit manager                         | Expert commentary              | KC is a Staff Nurse, Wentworth-Douglass Hospital, Dover, NH   |
| 2015  | Centrella-Nigro   | Effective collaboration among magnet hospitals: a win-win for nurses and institutions                                    | Non CNL-related report/research       | Clinical director                    | Expert commentary              | LV is a nurse manager at UCSD   |
| 2013  | Coleman           | Integrating quality and breast cancer care: role of the clinical nurse leader  | CNL explanatory commentary in journal | Faculty CNL program                  | Expert commentary              | ML is the director of research in the nursing department at Jersey City Medical Center in Jersey City, CC is an adjunct professor, School of Nursing, University of San Francisco, CA that is a Doctor of Nursing Practice candidate                              |
| 2010  | Edouard-Trevathan | The clinical nurse leader: a catalyst in community healthcare transformation.  | CNL explanatory commentary in journal | Faculty CNL program                  | Expert commentary              | EET is an ambulatory care nurse manager at the VA Palo Alto, CA and adjunct faculty at the University of San Francisco, San Francisco, CA   |
| 2013  | Eggenberger       | Discharge phone calls: using person-centred communication to improve outcomes  | Report/research on CNL practice       | Faculty CNL program                  | EBP project                    | TE is the Lead Faculty CNL Concentration, and Assistant Professor, Christine E. Lynn College of Nursing, Florida Atlantic University, Boca Raton, FL  |
| 2014  | Frank             | Attention and memory deficits in breast cancer survivors: implications for nursing practice and research                 | Non CNL-related report/research       | Faculty CNL program                  | Literature review              | AJ is an Associate Professor, School of Nursing University of Alabama, Birmingham, AL   |



Table 1 (continued)

| Year | First author | Article title  | Article category                      | NHA role category   | NHA CNL activities             | NHA CNL role description   |
|------|--------------|--|---------------------------------------|---------------------|--------------------------------|--|
| 2012 | Gerard       | Course strategies for clinical nurse leader development  | Report/research on CNL practice       | Faculty CNL program | Curriculum development/testing | SG is Assistant Professor/Track Coordinator Clinical Nurse Leader, Fairfield University School of Nursing, North Benson Road, Fairfield, CT                  |
| 2015 | Gilmartin    | A self-efficacy scale for clinical nurse leaders: results of a pilot study   | Report/research on CNL practice       | Other NHA           | Research on CNL                | Of the 147 research study participants, 55% noted that their job title was one other than CNL  |
| 2011 | Harris       | The clinical nurse leader: addressing health-care challenges through partnerships and innovation.  | CNL explanatory commentary in journal | Clinical executive  | CNL implementation             | JLH is the Deputy Chief Nursing Officer at the Department of Veterans Affairs in Washington, DC  |
| 2008 | Harris       | Building the business case for the clinical nurse leader role.   | CNL explanatory commentary in journal | Clinical director   | CNL implementation             | JLH is the Program Director of Leadership Development in the Office of Nursing Services, VA in Washington, DC  |
| 2009 | Hix          | Clinical nurse leader impact on clinical microsystems outcomes.  | Report/research on CNL practice       | Faculty CNL program | Research on CNL                | LM is an Assistant Professor University of Tennessee Health Science Center, Memphis;   |
| 2014 | Hynds        | The affordable care act 2010: educational needs of bedside nurses  | Non CNL-related report/research       | Faculty CNL program | Expert commentary              | JGS is an Associate Professor, University of New Hampshire, NH   |
| 2013 | Jordan       | The clinical nurse leader: an innovative role.   | CNL brief in newsletter               | Faculty CNL program | Expert commentary              | KJ is faculty at University of central Arkansas  |
| 2013 | Jukkala      | Creating innovative clinical nurse leader practicum experiences through academic and practice partnerships.                                  | Report/research on CNL education      | Faculty CNL program | Curriculum development/testing | AJ is an Associate Professor, School of Nursing University of Alabama, Birmingham, AL  |
| 2014 | Karas-Irwin  | Facing the facts: in-person peer review  | Non CNL-related report/research       | Faculty CNL program | Expert commentary              | RLH is an Assistant Professor and Clinical Nurse Leader Coordinator, University of Pittsburg School of Nursing, Pittsburg, PA                                |
| 2013 | King         | Holistic clinical nurse leader.  | CNL explanatory commentary in journal | Faculty CNL program | Expert commentary              | MOK is a Professor, Xavier University School of Nursing, Cincinnati, OH, that is a certified Advanced Holistic Nurse, Gerontological Nurse                   |
| 2011 | L'Ecuyer     | Educating students for a new nursing role: the clinical nurse leader.  | CNL brief in newsletter               | Faculty CNL program | Expert commentary              | BH Clinical Faculty, Xavier University School of Nursing Cincinnati, OH  |
| 2010 | Lammon       | Innovative partnerships: the clinical nurse leader role in diverse clinical settings   | Report/research on CNL education      | Faculty CNL program | Curriculum development/testing | KL is faculty at St Louis University   |
| 2014 | Lampe        | Timing is everything: results to an observational study of mealtime insulin practices  | Non CNL-related report/research       | Faculty             | Curriculum development/testing | CL is an Associate Professor and CNL Curriculum Coordinator, Capstone College of Nursing, University of Alabama, Tuscaloosa, AL                              |
| 2015 | Maresca      | Lessons learned: accessing the voice of nurses to improve a novice nurse program   | Non CNL-related report/research       | Faculty CNL program | Research                       | MS is a Professor and Assistant Dean of the Graduate Program, Capstone college of Nursing, University of Alabama, Tuscaloosa, AL                             |
| 2016 | McGowan      | Physical exercise and cancer-related fatigue in hospitalized patients: role of the clinical nurse leader in implementation of interventions. | CNL explanatory commentary in journal | Staff nurse         | Research                       | AB is an Assistant Professor of Nursing, Adventist University of Health Sciences, Orlando, FL  |
| 2011 | Moore L      | Second degree prelicensure master's graduates: what attracts them to nursing, their views on the profession, and their contributions.        | Non CNL-related report/research       | Faculty CNL program | Curriculum development/testing | TE is an Assistant Professor, Christine E. Lynn College of Nursing, Florida Atlantic University, Boca Raton, FL  |
| 2012 | Moore L      | Implementing the new clinical nurse leader role while gleaning insights from the past  | Report/research on CNL practice       | Faculty CNL program | Expert commentary              | KM is a nurse in the surgical intensive care unit at the University of Maryland Medical System in Baltimore, MD  |
| 2012 | Moore L      | Implementing the new clinical nurse leader role while gleaning insights from the past  | Report/research on CNL practice       | Faculty CNL program | Expert commentary              | LWM is an Associate Professor, Xavier University, Cincinnati, OH   |
| 2012 | Moore P      | The lived experience of new nurses: importance of the clinical preceptor   | Report/research on CNL practice       | Faculty CNL program | Expert commentary              | CWK is an Assistant Professor, Xavier University, Cincinnati, OH   |
| 2012 | Moore P      | The lived experience of new nurses: importance of the clinical preceptor   | Report/research on CNL practice       | Faculty CNL program | Expert commentary              | SS is a Professor, Xavier University, Cincinnati, OH   |
| 2012 | Moore L      | Implementing the new clinical nurse leader role while gleaning insights from the past  | Report/research on CNL practice       | Faculty CNL program | Research                       | CL Instructor, Xavier University School of Nursing, Cincinnati, OH   |
| 2012 | Moore P      | The lived experience of new nurses: importance of the clinical preceptor   | Report/research on CNL practice       | Faculty CNL program | Research                       | LWM is an Associate Professor, Xavier University, Cincinnati, OH   |
| 2012 | Moore P      | The lived experience of new nurses: importance of the clinical preceptor   | Report/research on CNL practice       | Faculty CNL program | Curriculum development/testing | PM is an Assistant Professor and lead teacher and Coordinator, CNL Graduate Program Harris College of Nursing, Texas Christian University, Fort Worth, Texas |

(continued on next page)

Table 1 (continued)

| Year | First author | Article title  | Article category                      | NHA role category              | NHA CNL activities             | NHA CNL role description   |
|------|--------------|--|---------------------------------------|--------------------------------|--------------------------------|--|
| 2013 | Moore P      | The academic story: introducing the clinical nurse leader role in a multifacility health care system                     | Report/research on CNL education      | Faculty CNL program            | Curriculum development/testing | PM is the lead teacher and coordinator, CNL Program, Texas Christian University, Cleburne, TX  |
| 2014 | Moore P      | Interdisciplinary preceptor teams to improve the clinical nurse leader student experience                                | Report/research on CNL education      | Faculty CNL program            | Curriculum development/testing | PM is an Assistant Professor of Nursing, Texas Christian University, Fort Worth, TX  |
| 2012 | Norris       | Using portfolios to introduce the clinical nurse leader to the job market  | Report/research on CNL education      | Faculty CNL program            | Curriculum development/testing | LH is an Assistant Professor of Nursing, Texas Christian University, Fort Worth, TX  |
| 2014 | Nugent       | Comprehensive review of an accelerated nursing program: a quality improvement project                                    | Non CNL-related report/research       | Faculty                        | Curriculum development/testing | DS is an Assistant Professor of Nursing, Texas Christian University, Fort Worth, TX  |
| 2012 | O'Grady      | Bridging the gap in care for children through the clinical nurse leader  | CNL explanatory commentary in journal | Staff nurse                    | Expert commentary              | SSW Assistant Professor (location not stated)  |
| 2009 | Ott          | The clinical nurse leader: impact on practice outcomes in the veterans health administration                             | Report/research on CNL practice       | clinical executive             | CNL implementation             | LMM is an Associate Professor and Assistant Dean for Student Affairs (location not stated)   |
| 2013 | Perry        | The clinical nurse leader: improving outcomes and efficacy in the emergency department                                   | CNL explanatory commentary in journal | Staff nurse                    | Expert commentary              | SL is a professor and coordinator of the Baccalaureate program, Curry College, Milton, MA  |
| 2012 | Phillips     | Clinical nurse leader: emerging role to optimize unit level performance  | Report/research on CNL practice       | Faculty CNL program            | Expert commentary              | ELO is a Registered Nurse, University of Maryland, Baltimore School of Nursing, Baltimore, MD  |
| 2014 | Purbaugh     | Alarm fatigue: a roadmap for mitigating the cacophony of beeps   | Non CNL-related report/research       | Staff nurse                    | Literature review              | JLH is the Deputy Chief Nursing Officer at the Department of Veterans Affairs in Washington, DC  |
| 2014 | Rainier      | Reducing physical restraint use in alcohol withdrawal patients: a literature review                                      | Non CNL-related report/research       | Faculty CNL program            | Literature review              | AP is a Staff Nurse II, Sutter Roseville Medical Center, Roseville, CA   |
| 2015 | Rankin       | Professional issues. Clinical nurse leader: a role for the 21st century.   | Report/research on CNL practice       | clinical director              | CNL implementation             | PC is an Assistant Professor, Department of Health Restoration and Care Systems Management, School of Nursing University of Texas Health Science Center, San Antonio, TX that serves as a Deputy Chief Nurse in the US Air Force |
| 2011 | Reid         | The clinical nurse leader: point-of-care safety clinician.   | CNL explanatory commentary in journal | Faculty CNL program            | Expert commentary              | TP is a critical care staff nurse, Tacoma WA   |
|      |              |  |                                       | Specialty Clinical             | Expert commentary              | NCR is an adjunct faculty nursing instructor and critical care staff nurse, Tacoma WA  |
| 2013 | Rivet        | A closer look at hybrid nurses.  | Report/research on CNL practice       | clinical director unit manager | CNL implementation             | VR is the Clinical Nurse Leader Coordinator, Carolinas Medical Center, Charlotte, NC   |
| 2015 | Samuels      | Opportunities to improve pain management outcomes in total knee replacements: patient-centered care across the continuum | Non CNL-related report/research       | Faculty                        | Expert commentary              | KBR is an Assistant Professor and Director of Clinical Nurse Leader Program, University of Virginia School of Nursing, Charlottesville, VA   |
| 2015 | Savoy        | Depressive symptoms impact health-promoting lifestyle behaviors and quality of life in healthy women                     | Non CNL-related report/research       | Faculty CNL program            | Research                       | PD is a Clinical Nurse Specialist in Acute Cardiology, University of Virginia Medical Center and Clinician/Education, University of Virginia School of Nursing, Charlottesville, VA  |
| 2009 | Seed         | The clinical nurse leader: helping psychiatric mental health nurses transform their practice                             | CNL explanatory commentary in journal | Faculty CNL program            | Expert commentary              | Denise Brennan is the director of Emergency Services   |
| 2009 | Sherman      | The role of the clinical nurse leader in promoting a healthy work environment at the unit level.                         | Report/research on CNL practice       | Faculty CNL program            | CNL implementation             | Michele A. Creamer is a nurse manager in the Cardiac Catheterization Lab   |
|      |              |  |                                       |                                |                                | JGS is an Associate Professor, Department of Nursing, University of New Hampshire, Durham, NH  |
|      |              |  |                                       |                                |                                | SMS is an Associate Professor, Department of Nursing, College of Health and Human Services, Saginaw Valley State University, University Center, MI   |
|      |              |  |                                       |                                |                                | MSS is an Associate Professor, University of San Francisco, San Francisco, CA  |
|      |              |  |                                       |                                |                                | DJT is an Associate Professor, University of San Francisco, San Francisco, CA  |
|      |              |  |                                       |                                |                                | ROS is Director of Nursing Leadership Institute, Christine E. Lynn College of Nursing, Florida Atlanta University, Boca Raton, FL  |

Table 1 (continued)

| Year | First author                      | Article title   | Article category                      | NHA role category   | NHA CNL activities   | NHA CNL role description   |
|------|-----------------------------------|---|---------------------------------------|---|--|--|
| 2008 | Sherman                           | Developing the clinical nurse leader role in the twelve bed hospital model: an education/service partnership.   | Report/research on CNL practice       | Faculty CNL program   | CNL implementation   | ROS is Director of Nursing Leadership Institute, Christine E. Lynn College of Nursing, Florida Atlanta University, Boca Raton, FL  |
| 2010 | Sherman                           | Lessons in innovation: role transition experiences of clinical nurse leaders  | Report/research on CNL practice       | Faculty CNL program   | Research   | ROS is Director of Nursing Leadership Institute, Associate Professor, Christine E. Lynn College of Nursing, Florida Atlanta University, Boca Raton, FL   |
| 2013 | Shipman                           | Incorporation of the clinical nurse leader in public health practice.   | Report/research on CNL practice       | Faculty CNL program<br>Faculty CNL program                                  | CNL implementation<br>CNL implementation                         | SS is an instructor, Capstone College of Nursing of Alabama, Tuscaloosa, AL<br>MS is a Professor and Assistant Dean of the Graduate Program, Capstone college of Nursing, University of Alabama, Tuscaloosa, AL  |
| 2008 | Siegrist                          | Higher education: a perspective on leadership – the clinical nurse leader.  | CNL brief in newsletter               | Other NHA   | Expert commentary  | KS is a CNL project recruiter, Montana state university  |
| 2009 | Siegrist                          | Cnl improving outcomes.   | CNL brief in newsletter               | Other NHA   | Expert commentary  | KS is a CNL project recruiter, Montana state university  |
| 2009 | Siegrist                          | National perspective: clinical nurse leader (cnl) role leads to improved patient outcomes and nursing job satisfaction.   | CNL brief in newsletter               | Other NHA   | Expert commentary  | KS is a CNL project recruiter, Montana state university  |
| 2008 | Stanley                           | The clinical nurse leader: a catalyst for improving quality and patient safety.   | Report/research on CNL practice       | Specialty Clinical  | CNL implementation   | SH is the Coordinator of Nursing Research, Morton-Plant Mease, Clearwater, FL  |
| 2006 | Stanton                           | The health care quality challenge and the clinical nurse leader role (CNL)  | CNL explanatory commentary in journal | Other NHA   | Expert commentary  | MS is an editorial board member of a nursing journal   |
| 2011 | Stanton                           | The clinical nurse leader: a comparative study of the American association of colleges of nursing vision to role implementation   | CNL explanatory commentary in journal | Faculty CNL program<br>Faculty CNL program                                  | Expert commentary<br>Expert commentary                           | MS is a Professor and Assistant Dean of the Graduate Program, Capstone college of Nursing, University of Alabama, Tuscaloosa, AL<br>CL is an Associate Professor and CNL Curriculum Coordinator, Capstone College of Nursing, University of Alabama, Tuscaloosa, AL  |
| 2016 | Commission on Nurse Certification | Clinical nurse leader job analysis report   | Report/research on CNL practice       | Faculty Clinical director<br>Specialty clinical Unit manager<br>Staff nurse |  |  |
| 2016 | Toney                             | Chronic obstructive pulmonary disease and ventilator-associated pneumonia: an analysis and literature review into the intensive care unit exacerbation progression and acute pulmonary management | Non CNL-related report/research       | Faculty CNL program   | Literature review  | DLS is an Assistant Professor and adult-gerontology acute care nurse practitioner concentration coordinator, Department of Advanced Practice and Doctoral Studies, College of Nursing, The University of Tennessee health Science Center, Memphis, TN  |
| 2015 | Turner                            | Psychiatric case management in the emergency department   | Non CNL-related report/research       | Faculty CNL program   | Expert commentary  | MS is a Professor of Nursing, University of Alabama, Capstone College of Nursing, Tuscaloosa, AL   |
| 2014 | Webb                              | A model for preparing faculty to teach model c clinical nurse leader students   | Report/research on CNL education      | Faculty CNL program<br>Faculty CNL program                                  | Curriculum development/testing<br>Curriculum development/testing | SW is an Assistant Professor and CNL Option Coordinator, College of Nursing, The University of Tennessee Health Science Center that serve as co-investigator on this study<br>LM is Associate Professor and Associate Dean of Student Affairs, Loewenberg School of Nursing, University of Memphis, Memphis TN |
| 2008 | Weckman                           | The road back to sci: from informatics nurse to nurse manager via a clinical nurse leader residency.  | Report/research on CNL education      | Specialty clinical  | Curriculum development/testing                                   | HNW is a Nurse Manager, SCI, James A. Haley Veterans' Hospital, Tampa, FL  |
| 2014 | Wesolowski                        | The clinical nurse leader in the perioperative setting: a preceptor experience  | Report/research on CNL education      | Staff nurse<br>Faculty CNL program  | Curriculum development/testing<br>Curriculum development/testing | SJB is a surgical quality nurse, Malcolm Randall VA Medical Center, Gainesville, FL<br>JG is a Clinical Assistant Professor, University of Florida College of Nursing Gainesville, FL  |
| 2015 | Wienand                           | Implementing the clinical nurse leader role: a care model centered on innovation, efficiency, and excellence.   | Report/research on CNL practice       | Specialty clinical Unit manager   | CNL implementation<br>CNL implementation                         | DMW is a Clinical Nurse Leader Liaison, Rush Oak Park Hospital, Oak Park, IL<br>AMC is the Unit Director, Intensive Care Unit, Rush Oak Park Hospital, Oak Park IL   |

(continued on next page)



Table 1 (continued)

| Year | First author | Article title   | Article category                      | NHA role category          | NHA CNL activities                      | NHA CNL role description   |
|------|--------------|---|---------------------------------------|----------------------------|---|--|
| 2015 | Williams     | Growing and sustaining the clinical nurse leader initiative.                  | CNL explanatory commentary in journal | Specialty clinical Faculty | CNL implementation<br>Expert commentary | PRS is a Performance Improvement Specialist, Rush Health, Chicago, IL<br>MB is an Assistant Professor, Program in Nursing Science, University of California, Irvine California |
| 2016 | Williams     | Promoting a strategic approach to clinical nurse leader practice integration. | Report/research on CNL practice       | Faculty CNL program        | CNL implementation                      | RSM is affiliated with the University of Alabama, Birmingham, AL   |

CNLs see themselves as enacting their educational competencies, many are doing so within traditional job titles such as unit managers, unit educators, and staff nurses. In the 2016 job analysis, the response rate was lower than the 2011 survey (6.6%) but still considered “acceptable” for an unsolicited survey (CNC, 2016). In the 2011 survey 53% responded that they were currently practicing in a CNL role, regardless of job title, yet only 34% chose the “CNL” job title. Once again, this discrepancy between CNLs identifying as being in a “CNL role,” while actually being hired into other job titles (staff nurse, unit coordinator) suggests that many certified CNLs are employed as NHA CNLs in their health organization, yet perceive themselves enacting CNL competencies within these more traditional roles.

Our results generally align with this interpretation of the CNC job analyses, in that we found certified CNLs functioning in traditional roles, but accomplishing more than what might be expected from those traditional roles. For example, CNLs in the literature review

were staff nurses (e.g. Perry, 2013; Purbaugh, 2014), unit directors/managers (e.g. Wienand, Shah, Hatcher, & Jordan, 2015; Weckman, 2008), and quality leaders (e.g. Bombard et al., 2010; Wesolowski, Casey, Berry, & Gannon, 2014). Their published scholarship however arguably goes well beyond these job titles; for example reviewing the literature on topics of interest and describing preceptor/residency program development and implementation. Unfortunately, data do not exist in either the job analyses or our literature review, based on the nature of each study design and data collected, to compare the types and levels of CNL competency enactment for each job title, so more research is warranted to better elucidate the specific competencies enacted by NHA CNL roles.

#### Comparing findings with the AACN White Paper

It is important to note that the majority of the job titles identified in our literature review function outside the microsystem level. According to the AACN 2007 White Paper, the CNL education and role were designed to function at the microsystem level and be accountable for a set of clinical outcomes for a specific patient population, and not function as administration or management. Another assumption was that the CNL focuses on clinical care quality, and therefore requires specific competencies in: evidence-based practice; clinical outcome improvement; interdisciplinary care; informatics; nursing assessment; fiscal stewardship; social justice; and communication technology (AACN, 2007, Assumptions 1–9). However, the majority of certified CNLs identified in our literature review were functioning at the organization level, in roles such as education faculty or as a clinical executive. This raises important questions. Does practicing outside the clinical microsystem preclude the use of CNL competencies? We would argue based on our review findings that NHA CNLs do in fact still utilize their competencies to ‘add value’ to traditional roles, both inside and outside the microsystem. Do certified CNLs functioning outside the microsystem level enact different CNL competencies than those functioning within the clinical microsystem level, or is it perhaps more a matter of degree and not kind? Our literature review, while raising these interesting questions, unfortunately does not provide the data needed to answer them. Prospective research is warranted to identify the ways in which CNL competencies are being enacted by certified CNLs in job titles other than formally designated CNL roles, and whether enactment differs based on role level within the health system.

#### Implications for nursing education

Our literature review found that the majority of CNLs in the literature were functioning as academic faculty. In light of these findings, it is interesting to note that the 10th assumption articulated in the AACN White Paper is that “the CNL must assume guardianship for the nursing profession ... The CNL, with additional education, will be expected to assume positions in professional, policy, and regulatory organizations/agencies, leadership positions in health care facilities, practice plans, and as faculty in institutions of higher education” (AACN, 2007, p. 9–10). Our findings show that certified CNLs are assuming

Table 2  
NHA CNL activity by role type

| NHA CNL activities by role     | NHA CNL activities count | NHA CNL activities (% of total) |
|--------------------------------|--------------------------|---------------------------------|
| Clinical director              | 5                        | 5.62%                           |
| CNL implementation             | 3                        |                                 |
| Expert commentary              | 1                        |                                 |
| Research                       | 1                        |                                 |
| Clinical executive             | 2                        | 2.25%                           |
| CNL implementation             | 2                        |                                 |
| Faculty                        | 5                        | 5.62%                           |
| Curriculum development/testing | 1                        |                                 |
| Expert commentary              | 2                        |                                 |
| Literature review              | 1                        |                                 |
| Research                       | 1                        |                                 |
| Faculty CNL program            | 53                       | 59.55%                          |
| CNL implementation             | 5                        |                                 |
| Curriculum development/testing | 17                       |                                 |
| EBP project                    | 2                        |                                 |
| Expert commentary              | 18                       |                                 |
| Literature review              | 6                        |                                 |
| Research                       | 4                        |                                 |
| Research on CNL                | 1                        |                                 |
| Specialty clinical             | 9                        | 10.11%                          |
| CNL implementation             | 4                        |                                 |
| Curriculum development/testing | 1                        |                                 |
| Expert commentary              | 1                        |                                 |
| Research                       | 3                        |                                 |
| Staff nurse                    | 7                        | 7.87%                           |
| Curriculum development/testing | 1                        |                                 |
| Expert commentary              | 3                        |                                 |
| Literature review              | 2                        |                                 |
| Research                       | 1                        |                                 |
| Unit manager                   | 3                        | 3.37%                           |
| CNL implementation             | 2                        |                                 |
| Expert commentary              | 1                        |                                 |
| (Blank)                        |                          |                                 |

just such positions, and suggests that certified CNLs that are not in formally designated CNL roles are nevertheless fulfilling the assumptions laid out in the CNL White Paper. It is significant that faculty have determined the need for CNL certification as part of their faculty role. Faculty in a CNL program were also the biggest contributors to identified NHA CNL activities (60%). This suggests that faculty in CNL programs are highly productive in advancing the CNL initiative's knowledge and education base. These efforts have not perhaps been as recognized as they could be, in terms of the work NHA CNL faculty are doing to educate the next generation of CNLs using innovative curriculum, and publishing expert commentaries in peer-reviewed journals exploring the potential of the formal CNL role in areas such as the emergency department, ambulatory care, and breast cancer care. There is a need for more scholarship on how NHA CNL faculty are advancing the CNL initiative. A better understanding of this emerging aspect of the CNL initiative will inform CNL education as well as expand understanding of CNL practice. Our findings suggest more research on CNL education may be warranted as well. One potential direction for inquiry is whether the dimensionality of current CNL competencies can or should be expanded based on new knowledge about NHA CNL roles and activities, and if so, how they should be taught in CNL programs.

## Limitations

The lack of consistent terminology for certified Clinical Nurse Leader who are not practicing under a CNL job title led to challenges in discovering which articles to include in this study. It was necessary for researchers to pull all CNL related articles and delve deeper into selected articles to actually discover where NHA CNLs were involved in an article and what title or role they fulfilled. This review only included articles that were published at the time of the literature search. It is possible that articles that were in review or yet to be published were not included in this report. Also, there may be certified CNLs publishing work without using their CNL credential, which would have precluded inclusion in this study. The conclusions reached in this review are limited by the scarcity of articles that directly address NHA CNLs. The reviewers made several iterative decisions that potentially introduced selection bias into the review. However, a systematic approach was used to document all iterative decisions during the data collection process in an effort to minimize any selection bias.

## Conclusion

The certified Clinical Nurse Leader has been in existence for a decade now. The data indicates that CNLs are maturing and transitioning from being considered an innovative new role to one that is prepared to fulfill a strategic position in the healthcare teams both within and beyond the microsystem. This literature review is the first to review this topic systematically, and we hope it spurs more dialogue and research. Although findings from this study were insufficient to provide a comprehensive typology of the NHA CNL, the information obtained about the diverse job titles and roles offers a solid beginning for understanding the professional journey of these nurses and how they may be using the CNL competencies along the way.

## References

- Ailey, S., Lamb, K., Friese, T., & Christopher, B. (2015). Educating nursing students in clinical leadership. *Nursing Management*, 21(9), 23–28.
- American Association of Colleges of Nursing (2004). *Working statement comparing the clinical nurse leader and clinical nurse specialist roles: Similarities, differences and complementarities*. American Association of Colleges of Nursing.
- American Association of Colleges of Nursing (2007). White paper on the education and role of the clinical nurse leader. Retrieved from <http://www.aacn.nche.edu/publications/white-papers/ClinicalNurseLeader.pdf>.
- American Association of Colleges of Nursing (2013). *Competencies and curricular expectations for clinical nurse leader education and practice*. American Association of Colleges of Nursing.
- American Association of Colleges of Nursing (2015). Essentials series. Retrieved 2015, from American Association of Colleges of Nursing [www.aacn.nche.edu/education-resources/essential-series](http://www.aacn.nche.edu/education-resources/essential-series).
- Baernholdt, M., & Cottingham, S. (2011). The clinical nurse leader - new nursing role with global implications. *International Nursing Review*, 58(1), 74–78 <https://doi.org/10.1111/j.1466-7657.2010.00835.x>.
- Baker, K. A., Rushing, J., True, B., & Rodriguez, L. (2015). A collaborative model for the CNL and CNS. *Nursing Management*, 46(7), 11–14 <https://doi.org/10.1097/01.NUMA.0000466494.38698.13>.
- Beasley, A., Stanton, M., & Aldridge, J. (2015). Dyspnea management of hospice patients. *Home Healthcare Now*, 33(7), 380–384.
- Beauvais, A., & Frost, L. (2014b). Saving our backs: Safe patient handling and mobility for home care. *Home Healthcare Nurse*, 32(7), 430–434 quiz 435–6 <https://doi.org/10.1097/NHH.0000000000000110>.
- Beauvais, A., & Frost, L. (2014a). Saving our backs: Safe patient handling and mobility for home care. *Home Healthcare Nurse*, 32(7) July/August.
- Bender, M. (2014). The current evidence base for the clinical nurse leader: A narrative review of the literature. *Journal of Professional Nursing*, 30(2), 110–123.
- Bender, M., Connelly, C. D., & Brown, C. (2013). Interdisciplinary collaboration: the role of the clinical nurse leader. *Journal of Nursing Management*, 21(1), 165–174 <https://doi.org/10.1111/j.1365-2834.2012.01385.x>.
- Bender, M., Connelly, C. D., Glaser, D., & Brown, C. (2012). Clinical nurse leader impact on microsystem care quality. *Nursing Research*, 61(5), 326–332 <https://doi.org/10.1097/NNR.0b013e318265a5b6>.
- Bender, M., Williams, M., & Su, W. (2016). Diffusion of a nurse-led healthcare innovation: describing certified clinical nurse leader integration into care delivery. *Journal of Nursing Administration*, 46(7/8), 400–407 July/August <https://doi.org/10.1097/NNA.0000000000000365>.
- Bender, M., Williams, M., Su, W., & Hites, L. (2016). Clinical nurse leader integrated care delivery to improve care quality: factors influencing perceived success. *Journal of Nursing Scholarship*, 48(4), 414–422 <https://doi.org/10.1111/jnu.12217>.
- Bombard, E., Chapman, K., Doyle, M., Wright, D. K., Shippee-Rice, R. V., & Kasik, D. R. (2010). Answering the question, "what is a clinical nurse leader?": Transition experience of four direct-entry master's students. *Journal of Professional Nursing*, 26(6), 332–340 <https://doi.org/10.1016/j.profnurs.2010.04.001>.
- Burtson, P., & Vento, L. (2015). Author's response regarding "Sitter Reduction Through Mobile Video Monitoring" July/Aug 2015; 45 (7/8). *JONA: the Journal of Nursing Administration*, 45(12), E2–E3 <https://doi.org/10.1097/NNA.0000000000000281>.
- Centrella-Nigro, A. M., Faber, K., Wiklinski, B., Bognar, L., Flynn, D. L., & LaForgia, M. (2015). Effective collaboration among magnet hospitals: A win-win for nurses and institutions. *The American Journal of Nursing*, 115(7), 50–54 <https://doi.org/10.1097/01.NAJ.0000467279.13447.ea>.
- Coleman, C. (2013). Integrating quality and breast cancer care: role of the clinical nurse leader. *Oncology Nursing Forum*, 40(4), 311–314 <https://doi.org/10.1188/13.ONF.311-314>.
- Commission on Nurse Certification (2011). Clinical nurse leader job analysis report. (Retrieved February 27th, 2012 from) <http://www.aacn.nche.edu/cnl/Job-Analysis-Report.pdf>.
- Commission on Nurse Certification (2016). *Clinical Nurse Leader CNL 2016 Job Analysis*.
- Edouard-Trevathan, E. (2010). The clinical nurse leader: a catalyst in community healthcare transformation. *Nurse Leader*, 8(2), 25–28 <https://doi.org/10.1016/j.mnl.2010.01.005>.
- Eggenberger, T., Garrison, H., Hilton, N., & Giovengo, K. (2013). Discharge phone calls: using person-centered communication to improve outcomes. *Journal of Nursing Management*, 21(5), 733–739 <https://doi.org/10.1111/jonm.12100>.
- Elo, S., & Kyngas, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107–115 <https://doi.org/10.1111/j.1365-2648.2007.04569.x>.
- Forman, J., & Damschroder, L. (2008). Qualitative content analysis. *For bioethics: A primer Oxford* [https://doi.org/10.1016/S1479-3709\(07\)11003-7.3d](https://doi.org/10.1016/S1479-3709(07)11003-7.3d).
- Frank, J. S., Vance, D. E., Jukkala, A., & Meneses, K. M. (2014). Attention and memory deficits in breast cancer survivors: implications for nursing practice and research. *Journal of Neuroscience Nursing*, 46(5), 274–284.
- Gabuat, J., Hilton, N., Kinnard, L. S., & Sherman, R. O. (2008). Implementing the clinical nurse leader role in a for-profit environment. *Journal of Nursing Administration*, 38(6), 302–307.
- Gerard, S., Grossman, S., & Godfrey, M. (2012). Course strategies for clinical nurse leader development. *Journal of Professional Nursing: Official Journal of the American Association of Colleges of Nursing*, 28(3), 147–155 <https://doi.org/10.1016/j.profnurs.2011.11.012>.
- Gilmartin, M. J., & Nokes, K. (2015). A self-efficacy scale for clinical nurse leaders: Results of a pilot study. *Nursing Economics*, 33(3), 133–143.
- Harris, J. L., & Ott, K. (2008). Building the business case for the clinical nurse leader role. *Nurse Leader*, 6(4), 25–28 Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=c8h&AN=2010001936&site=ehost-live>.
- Harris, J., Rousell, L., & Thomas, P. (2018). *Initiating and sustaining clinical nurse leader role - A practical guide*. Jones & Bartlett Learning: Burlington, MA.
- Harris, J. L., Stanley, J., & Rosseter, R. (2011). The clinical nurse leader: Addressing healthcare challenges through partnerships and innovation. *Journal of Nursing Regulation*, 2(2), 40–46.
- Hix, C., McKeon, L., & Walters, S. (2009). Clinical nurse leader impact on clinical microsystems outcomes. *JONA: the Journal of Nursing Administration*, 39(2), 71–76 <https://doi.org/10.1097/NNA.0b013e318195a612>.
- Hynds, R. L., Hatch, J. L., & Samuels, J. G. (2014). The Affordable Care Act 2010: Educational needs of bedside nurses. *Journal for Nurses in Professional Development*, 30(6), 281–286.
- Jeffers, R. B., & Astroth, K. S. (2013). The clinical nurse leader: Prepared for an era of healthcare reform. *Nursing Forum*, 48(3), 223–229.

- Jordan, K., & Aureli, S. (2013). The clinical nurse leader: An innovative role. *ASBN Update*, 17(2), 16.
- Jukkala, A., Greenwood, R., Motes, T., & Block, V. (2013). Creating innovative clinical nurse leader practicum experiences through academic and practice partnerships. *Nursing Education Perspectives*, 34(3), 186–191.
- Karas-Irwin, B. S., & Hoffmann, R. L. (2014 Nov). Facing the facts: in-person peer review. *Nursing Management*, 45(11), 14–17. <https://doi.org/10.1097/01.NUMA.0000455736.01991.b2>.
- King, M. O., & Harland, B. (2013). Holistic clinical nurse leader. *Beginnings*, 33(1), 18–21.
- Lammon, C. A., Stanton, M. P., & Blakney, J. L. (2010). Innovative partnerships: The clinical nurse leader role in diverse clinical settings. *Journal of Professional Nursing*, 26, 258–263.
- Lampe, J., Penoyer, D. A., Hadesty, S., Bean, A., & Chamberlain, L. (2014). Timing Is Everything. *Clinical Nurse Specialist*, 28(3), 161–167 <https://doi.org/10.1097/NUR.000000000000045>.
- L'Ecuyer, K., & Meyer, G. (2011). Educating students for a new nursing role: the clinical nurse leader. *Missouri State Board Of Nursing Newsletter*, 13(3), 3.
- Maresca, R., Eggenberger, T., Moffa, C., & Newman, D. (2015). Lessons learned: Accessing the voice of nurses to improve a novice nurse program. *Journal for Nurses in Professional Development*, 31(4), 218–224.
- McGowan, K. (2016). Physical exercise and cancer-related fatigue in hospitalized patients: Role of the clinical nurse leader in implementation of interventions. *Clinical Journal of Oncology Nursing*, 20(1).
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009 Oct). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Journal of Clinical Epidemiology*, 62(10), 1006–1012. <https://doi.org/10.1016/j.jclinepi.2009.06.005>.
- Moore, P. (2013). The academic story: introducing the clinical nurse leader role in a multifacility health care system. *Journal of Professional Nursing*, 29(5), 264–269 <https://doi.org/10.1016/j.profnurs.2012.10.007>.
- Moore, P., & Cagle, C. (2012). The lived experience of new nurses: Importance of the clinical preceptor. *The Journal of Continuing Education in Nursing*, 43(12), 555–565.
- Moore, L. W., Kelly, C. W., Schmidt, S., Miller, M., & Reynolds, M. (2011). Second degree prelicensure master's graduates: what attracts them to nursing, their views on the profession, and their contributions. *Journal of Professional Nursing*, 27(1), 19–27 <https://doi.org/10.1016/j.profnurs.2010.03.002>.
- Moore, L. W., & Leahy, C. (2012). Implementing the new clinical nurse leader role while glean insights from the past. *Journal of Professional*, 28(3), 139–146 <https://doi.org/10.1016/j.profnurs.2011.11.010>.
- Moore, P., Schmidt, D., & Howington, L. (2014). Interdisciplinary preceptor teams to improve the clinical nurse leader student experience. *Journal of Professional Nursing*, 30(3), 190–195 <https://doi.org/10.1016/j.profnurs.2013.09.013>.
- Moore, P., & Spence Cagle, C. (2012). The lived experience of new nurses: Importance of the clinical preceptor. *The Journal of Continuing Education in Nursing*, 43(12).
- Norris, T. L., Webb, S. S., McKeon, L. M., Jacob, S. R., & Herrin-Griffith, D. (2012). Using portfolios to introduce the clinical nurse leader to the job market. *JONA: the Journal of Nursing Administration*, 42(1), 47–51 <https://doi.org/10.1097/NNA.0b013e31823c18e3>.
- Nugent, E., & LaRocco, S. (2014). Comprehensive review of an accelerated nursing program: A quality improvement project. *Dimensions of Critical Care Nursing*, 33(4), 226–233.
- O'Grady, E. L., & VanGraafeiland, B. (2012 May-Jun). Bridging the gap in care for children through the clinical nurse leader. *Pediatric Nursing*, 38(3), 155–158.
- Ott, K. M., Haddock, K. S., Fox, S. E., Shinn, J. K., Walters, S. E., Hardin, J. W., et al. (2009). The clinical nurse leader (SM): Impact on practice outcomes in the veterans health administration. *Nursing Economic*, 27(6), 363.
- Perry, A. (2013). The clinical nurse leader: Improving outcomes and efficacy in the emergency department. *Journal of Emergency Nursing*, 39(4), 334–339 <https://doi.org/10.1016/j.jen.2011.10.001>.
- Phillips, S., Swiger, P. A., Flores, R., Clutter, P., & Reineck, C. (2012). Clinical nurse leader: Emerging role to optimize unit level performance. *U.S. Army Medical Department Journal*, 77–83.
- Purbaugh, T. (2014). Alarm fatigue: a roadmap for mitigating the cacophony of beeps. *Dimensions of Critical Care Nursing*, 33(1), 4–7.
- Rainier, N. C. (2014). Reducing physical restraint use in alcohol withdrawal patients: A literature review. *Dimensions of Critical Care Nursing*, 33(4), 201–206.
- Rankin, V. (2015). Clinical nurse leader: A role for the 21st century. *MEDSURG Nursing*, 1–5.
- Reid, K. B., & Dennison, P. (2011). The clinical nurse leader (CNL)(R): Point-of-care safety clinician. *Online Journal of Issues in Nursing*, 16(3), 4.
- Rivet, C., Rivet, C., Steeves, S., Steeves, S., Brennan, D., Brennan, D., et al. (2013). A closer look at hybrid nurses. *Nursing Management*, 44(2), 38–42 <https://doi.org/10.1097/01.NUMA.0000424017.37551.af>.
- Samuels, J. G., & Woodward, R. S. (2015). Opportunities to improve pain management outcomes in total knee replacements: Patient-centered care across the continuum. *Orthopaedic Nursing*, 34(1), 4–9.
- Savoy, S. M., & Penckofer, S. (2015). Depressive symptoms impact health-promoting lifestyle behaviors and quality of life in healthy women. *Journal of Cardiovascular Nursing*, 30(4), 360–372.
- Seed, M. S., Torkelson, D. J., & Karshmer, J. F. (2009). The clinical nurse leader: Helping psychiatric mental health nurses transform their practice. *Journal of the American Psychiatric Nurses Association*, 15(2), 120–125 <https://doi.org/10.1177/1078390309333063>.
- Sherman, R. O. (2008). Factors Influencing Organizational Participation in the Clinical Nurse Leader "SM" Project. *Nursing Economics*, 26(4), 236–249.
- Sherman, R. (2010). Lessons in innovation: Role transition experiences of clinical nurse leaders. *Journal of Nursing Administration*, 40, 547–554.
- Sherman, R., Clark, J., & Maloney, J. (2008). Developing the clinical nurse leader role in the twelve bed hospital model: An education/service partnership. *Nurse Leader*, 6, 54–58.
- Sherman, R. O., Edwards, B., Giovengo, K., & Hilton, N. (2009). The role of the clinical nurse leader in promoting a healthy work environment at the unit level. *Critical Care Nursing Quarterly*, 32(4), 264–271.
- Shipman, S., Stanton, M., & Hankins, J. (2013). Incorporation of the clinical nurse leader in public health practice. *Journal of Professional Nursing*, 29(1), 4–10 <https://doi.org/10.1016/j.profnurs.2012.04.004>.
- Siegrist, K. (2008). Higher education: A perspective on leadership – The clinical nurse leader. *Pulse* (00334189), 45(2), 5.
- Siegrist, K. (2009a). CNL improving outcomes. *Pulse* (00334189), 46(3) 13.
- Siegrist, K. (2009b). National perspective: Clinical nurse leader (CNL) role leads to improved patient outcomes and nursing job satisfaction. *Pulse* (00334189), 46(1), 9.
- Stanley, J. M., Gannon, J., Gabuat, J., Hartranft, S., Adams, N., Mayes, C., et al. (2008). The clinical nurse leader: A catalyst for improving quality and patient safety. *Journal of Nursing Management*, 16(5), 614–622 <https://doi.org/10.1111/j.1365-2834.2008.00899.x>.
- Stanton, M. (2006). The health care quality challenge and the Clinical Nurse Leader role (CNL). *Online Journal of Rural Nursing and Health Care*, 6(1) (4p).
- Stanton, M. P., Barnett Lammon, C. A., & Williams, E. S. (2011). The clinical nurse leader: A comparative study of the American Association of Colleges of Nursing vision to role implementation. *Journal of Professional Nursing: Official Journal of the American Association of Colleges of Nursing*, 27(2), 78–83 <https://doi.org/10.1016/j.profnurs.2010.09.014>.
- Toney, B. S., & Lynch-Smith, D. (2016). Chronic obstructive pulmonary disease and ventilator-associated pneumonia: An analysis and literature review into the intensive care unit exacerbation progression and acute pulmonary management. *Dimensions of Critical Care Nursing*, 35(1), 16–22.
- Turner, S. B., & Stanton, M. P. (2015). Psychiatric case management in the emergency department. *Professional Case Management*, 20(5), 217–227.
- Webb, S., & McKeon, L. (2014). A model for preparing faculty to teach model C clinical nurse leader students. *Journal of Nursing Education*, 53(7), 421–425 <https://doi.org/10.3928/01484834-20140617-05>.
- Weckman, H. N. (2008). The road back to SCI: From informatics nurse to nurse manager via a clinical nurse leader residency. *SCI Nursing*, 25(2), 24–25.
- Wesolowski, M. S., Casey, G. L., Berry, S. J., & Gannon, J. (2014). The clinical nurse leader in the perioperative setting: A preceptor experience. *AORN Journal*, 100(1), 30–41 <https://doi.org/10.1016/j.aorn.2013.11.021>.
- Wienand, D. M., Shah, P. R., Hatcher, B., & Jordan, A. (2015). Implementing the clinical nurse leader role: A care model centered on innovation, efficiency, and excellence. *Nurse Leader*, 13(4), 78–85 <https://doi.org/10.1016/j.mnl.2014.11.011>.
- Williams, M., Avolio, A. E., Ott, K. M., & Miltner, R. S. (2016). Promoting a strategic approach to clinical nurse leader practice integration. *Nursing Administration Quarterly*, 40(1), 24–32 <https://doi.org/10.1097/NAQ.0000000000000143>.
- Williams, M., & Bender, M. (2015). Growing and sustaining the clinical nurse leader initiative. *JONA: the Journal of Nursing Administration*, 45(11), 540–543 <https://doi.org/10.1097/NNA.0000000000000260>.