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UNIVERSITY OF SAN DIEGO
Hahn School of Nursing and Health Science

Developing A Clinical Nurse Leader Practice Model: An Interpretive Synthesis

By

Miriam Bender

A dissertation presented to the
FACULTY OF THE HAHN SCHOOL OF NURSING AND HEALTH SCIENCE
UNIVERSITY OF SAN DIEGO

In partial fulfillment of the requirements for the degree
DOCTOR OF PHILOSOPHY IN NURSING

February 21, 2013

Dissertation Committee

Cynthia D. Connelly, PhD, RN, FAAN: Chairperson

Ann M. Mayo, RN, DNSc, FAAN: Committee member

Linda Urden, DNSc, RN, CNS, NE-BC, FAAN: Committee Member

ABSTRACT

Objective: The Institute of Medicine's *Future of Nursing* report identifies the Clinical Nurse Leader (CNL) as an innovative and necessary new role for meeting higher healthcare quality standards. The American Association of Colleges of Nursing CNL White Paper defines core competencies necessary for practice. The literature documents preliminary evidence of improved outcomes associated with CNL integration into clinical microsystems. However, the CNL role is not yet clearly defined in terms of fundamental activities and responsibilities necessary to produce outcomes. Lack of practice clarity limits the ability to articulate, implement, and measure CNL-specific practice and outcomes. The purpose of this study was to clarify CNL practice components contributing to improved quality care standards.

Methods: An interpretive synthesis was conducted to integrate the extant CNL literature into a coherent understanding of CNL practice. A literature search was conducted in CINAHL, Pubmed, Dissertations and Theses, and Google. Results were reviewed and included if they described aspects of CNL practice *in action*. Thirty implementation reports, eight qualitative/mixed methods studies, three quantitative studies, and 254 conference abstracts were included. Grounded theory methodology was utilized to reanalyze primary CNL evidence and identify domains and components of CNL practice.

ABSTRACT CONTINUED

Results: CNL practice encompasses five domains: Preparation for CNL Practice; the Structure of CNL Practice; the Core Phenomenon of CNL Practice - Continuous Leadership at the Point-of-Practice; Outcomes of CNL Practice; and Acceptance. These domains interact to produce the structure, function, and outcomes of CNL practice. The core phenomenon of CNL practice involves developing relationships across professions to promote and manage information exchange, shared decision-making, and effective care processes. The model highlights the importance of a systematic approach to CNL development and implementation: the extent to which each domain is adequately addressed influences the degree of CNL success.

Conclusions: This study advances understanding of the CNL by synthesizing an empirically derived CNL Practice Model that clarifies practice components and differentiates them from existing nursing roles and practices. The model provides a guideline to organizations wanting to implement the CNL. It also provides a basis for future research identifying quantifiable measures of CNL practice and CNL-specific influence on outcomes.

DEDICATION

To Astrid Theo and Bruce

With Love

ACKNOWLEDGEMENTS

I would like to acknowledge first and foremost my family, for their active love and patience during this journey. I could not have done it without them.

I would like to acknowledge my chairperson, Dr. Cynthia D. Connelly, for her constant support and guidance throughout the years. She has kept my anxious tendencies under control through her calm leadership, and has masterfully kept me on track throughout all stages of this journey. I am grateful for all the meetings she carved out of her busy schedule to engage in scholarly discussion, necessary redirection, and kind assurances. I am also particularly grateful for her role in securing resources to conduct my doctoral research.

Dr. Ann M. Mayo, dissertation committee member, has been instrumental in the quality and thoroughness of the conceptualization and conduct of this doctoral research. She provided a continuous, non-judgmental sounding board throughout the process, which helped tremendously at times when progress looked uncertain. I am grateful for all her honest feedback over the years at all times of the day and night, and cannot imagine having completed this work without her.

Dr. Linda Urden has graciously taken time out of her busy schedule to be a part of my dissertation committee and provide feedback on the research as it

ACKNOWLEDGEMENTS CONTINUED

progressed.

Cathleen Mumper kindly and skillfully guided me over the years through the administrative processes of enrolling in doctoral classes and staying on top of loan documentation. Her expert and willing guidance in these matters ensured there was at least one wonderfully stress-free aspect to my PhD studies.

I would also like to acknowledge the Hahn School of Nursing and Health Science for its generosity in providing resources to conduct my doctoral research. I am incredibly grateful and honored to have been chosen as a Dean's Graduate Scholar for the duration of my PhD studentship, to receive the Irene Palmer Scholarship Award for the 2012-2013 academic year, and to have been awarded a Dean's Research Scholar Award in 2012.

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CHAPTER 1 : INTRODUCTION AND PROBLEM STATEMENT

Introduction

Current healthcare delivery is plagued by disciplinary 'silo' approaches to patient care, and has resulted in fragmented care delivery systems lacking formal interdisciplinary collaborative processes (Institute of Medicine [IOM], 2000). This fragmented approach to patient care is associated with preventable adverse patient outcomes, including increased mortality and morbidity, 30-day readmission rates, length of stay, and care costs (Fewster-Thuente & Velsor-Friedrich, 2008). In response to this evidence, the Institute of Medicine has identified creation of effective work teams as a priority for redesigning care delivery and improving healthcare (IOM, 2001). Teamwork and effective interdisciplinary collaboration have indeed been linked to improved quality of care and patient outcomes (Zwarenstein, Goldman, & Reeves, 2009). Unfortunately, there is still limited evidence describing effective structures and processes for creating and *sustaining* collaborative, interdisciplinary environments.

The clinical nurse leader (CNL) is specifically mentioned in the Institute of Medicine's "Future of Nursing" report as an innovative and necessary new nursing role for meeting the new higher standards for quality care (IOM, 2010, Ch 2 pg 72). The CNL is a masters-prepared RN educated to enhance the efficiency with which care is delivered and to coordinate care through collaboration at the microsystem level with the entire healthcare team (American Association of Colleges of Nursing [AACN], 2007). CNL core competencies include nursing leadership, clinical outcomes management, and care environment management. The goal of the CNL is to apply these advanced competencies to (a) lead and sustain a culture of interdisciplinary collaboration as a basis for delivery of safe, comprehensive care, (b) laterally integrate care services across disciplines and care settings efficiently and cost effectively, and (c) apply evidence-based criteria for measuring the quality of microsystem care delivery and lead quality improvement processes based on evidence.

Since its introduction in 2004, over 130 reports have been published describing CNL theory, conceptual framework, education, and implementation. The role has been implemented in many healthcare organizations, with numerous reports of enhanced collaborative practice and improved patient outcomes facilitated by integration of the CNL into various care delivery microsystems.

Problem Statement

In spite of this, there is still ambiguity about what the role looks like in practice, partly because the role is still so new, but also because of variation in CNL conceptualization and implementation across the literature. While the current CNL educational model clearly describes CNL core competencies considered necessary to achieve desired outcomes, the role in practice has not yet been explicitly defined in terms of essential responsibilities and activities (Fitzpatrick & Wallace, 2009). This lack of role clarity has continued to raise concerns regarding potential CNL versus clinical nurse specialist (CNS) practice overlap, as well as questions about how CNL competencies and practice differ from expected staff RN knowledge and practice (AHRQ, 2010; Gardenier, 2012; Goudreau, 2008; Nelson, 2010). These unanswered questions and concerns have created a barrier to wider implementation of the CNL role across the nation. Given the promise of the CNL, additional empirical evidence is needed to incentivize and promote wider CNL integration into care delivery microsystems across the healthcare spectrum, as recommended in the Future of Nursing report.

The current CNL evidence base encompasses a wealth of information with the potential to help clarify CNL role delineation. Unfortunately, utilizing the current evidence as a basis to compare and summarize existing findings across reports is methodologically difficult, as CNL investigators have pursued varied research questions in diverse contexts of practice. The reports present diverse methods of inquiry, including theoretical, qualitative, case study, descriptive, personal

narrative, and editorial approaches. The heterogeneous nature of the CNL evidence is ill suited to traditional methodologies for aggregate review and analysis of primary research.

Interpretive synthesis offers a unique approach towards the integration of primary evidence of a phenomenon of interest. It involves reinterpretation and reanalysis of text-based forms of evidence. As such, it can be conducted on various forms of primary evidence (Dixon-Woods et al., 2006; Pope, Mays, & Popay, 2007). The results of interpretive synthesis are new interpretations of a phenomenon of interest not found in any single research report, but derived from synthesizing all the reports as a whole (Thorne, Jensen, Kearney, Noblit, & Sandelowski, 2004). The end product should articulate a coherent, common understanding that facilitates further conceptual development of the phenomenon of interest, such as an evidence-based model (Estabrooks, Field, & Morse, 1994; Morse & Johnson, 1991; Pope et al). Interpretive synthesis cannot provide a conclusive “answer” to a problem or propose a general “truth” of a phenomenon, but it can generate knowledge that is capable of informing practice (Thorne et al).

Purpose and Aims

The purpose of this study is to increase understanding of the CNL role in practice as a basis for informing future education, practice and research. The specific aims of this study include:

1. Conduct an in depth exploration of CNL clinical practice within and across primary reports on the CNL role
2. Identify convergent concepts of CNL practice across the evidence base, including existing contexts of practice, foci of responsibilities and routine workflow processes
3. Synthesize concepts into a coherent understanding of the CNL role in practice that clarifies contexts necessary for influencing outcomes and establishes essential CNL processes.

Research questions include:

1. What are the major themes in existing reports of the CNL role in practice?
2. What points of thematic resonance exist across the evidence base, including practice contexts, foci of responsibilities and daily workflow processes?
3. What are essential practice contexts and workflow processes that enable CNLs to influence outcomes?

CHAPTER 2 : REVIEW OF THE LITERATURE

Overview

The clinical nurse leader (CNL) is a relatively new nursing role, introduced in 2003 through the American Association of Colleges of Nursing (AACN). A narrative review of the extant CNL literature was conducted with the aim of comprehensively summarizing the broad and methodologically diverse CNL evidence base. The review included 25 implementation reports, one CNL job analysis, seven qualitative and/or survey studies, and three quantitative studies.

The results of the literature review are presented in a manuscript that has been submitted and accepted for publication in the *Journal of Professional Nursing*. Please see Figure 2-1 to view the acceptance letter. The reference section has been incorporated into the bibliography.

Manuscript 1: The current evidence base for the Clinical Nurse Leader: A narrative review of the literature (Reference)

Bender M. (In press). The current evidence base for the Clinical Nurse Leader: A narrative review of the literature. *Journal of Professional Nursing*.

Figure 2-1. CNL Literature Review Acceptance Letter

From: ees.jpn.0.1e2c8d.470bf0db@eesmail.elsevier.com
[mailto:ees.jpn.0.1e2c8d.470bf0db@eesmail.elsevier.com] On Behalf Of Journal of Professional Nursing
Sent: Thursday, December 27, 2012 11:51 AM
To: Miriam Bender
Subject: Your Submission

Ms. Ref. No.: JPN-D-12-00120
Title: The Current Evidence Base for the Clinical Nurse Leader: A Narrative Review of the Literature Journal of Professional Nursing

Dear Ms. Bender,

Thank you for submitting your manuscript, "The Current Evidence Base for the Clinical Nurse Leader: A Narrative Review of the Literature," to the Journal of Professional Nursing. It is my pleasure to inform you that your manuscript has been accepted for publication. Your manuscript is tentatively scheduled to appear in the September-October 2013 issue.

Your next correspondence will come from the Production Office, however please contact Bill O'Connor, the Journal's managing editor, if you have any questions or comments in the interim period. We look forward to publishing your article.

Sincerely,

Ellen Olshansky, DNSc, RNC, FAAN
Editor
Journal of Professional Nursing

CHAPTER 3 : METHODS

Overview

The current CNL evidence base provides a resource to help clarify CNL practice. However, the heterogeneous nature of the evidence is ill suited to traditional methodologies for aggregate review and analysis of primary research. Interpretive synthesis offers a unique approach to the integration of primary evidence of a phenomenon of interest. It involves reinterpretation and reanalysis of text-based forms of evidence. Its strength is that it can be conducted on methodological disparate forms of primary evidence. The result of an interpretive synthesis is better understanding of a phenomenon of interest not found in any single research report, but derived from synthesizing all reports as a whole. For the purposes of this study, we conducted an interpretive synthesis of the CNL literature as described by Pope, Mays & Popay (2006).

A detailed description of study methods, including sampling, quality appraisal, data handling methods and analysis is presented below in a proposal submitted to the Robert Wood Johnson Foundation Future of Nursing: Campaign for

Action, and also in the manuscript “Developing a Clinical Nurse Leader Practice Model; An Interpretive Synthesis”, found in Chapter Four.

Manuscript 2: Future of Nursing: Campaign for Action proposal

IDENTIFYING INFORMATION:

Project Title: The Clinical Nurse Leader Contribution to Integrated Quality Care: A Systemic Review of the National Evidence

Proposal I.D.: 7673

Applicant Name: Miriam Bender MSN CNL

Legal Name of Applicant Organization: University of San Diego Hahn School of Nursing (USD)

RESEARCH QUESTIONS

Consistent with the “IOM Initiative on the Future of Nursing Strategic Plan” to capitalize on the contributions of nurses and the benefits of nurse led models of care throughout the healthcare system, this proposed study is designed to increase the understanding of Clinical Nurse Leader (CNL) theory, conceptualization, and implementation in practice with linkage to resulting patient care outcomes, by providing a rigorous systematic examination of the national evidence for CNL-mediated collaborative quality care improvements. The CNL is specifically mentioned in the Institute of Medicine’s “Future of Nursing” report as an innovative and necessary new nursing role, created to meet higher standards for quality care. CNL’s are educated to provide clinical leadership at the point-of-practice to maintain cross-disciplinary teamwork and collaborative processes that lead to integrated quality care (AACN, 2007).

Since its introduction over 130 articles have been published describing CNL theory, conceptual framework, education, and implementation. The role has been implemented in numerous healthcare organizations; with reports of collaborative practice improvements facilitated by integration of the CNL into care delivery microsystems (Bender, Connelly, Glaser & Brown, 2012; Bender, Connelly & Brown, 2013; Bender, Mann & Olson, 2011). In spite of this, there is still confusion regarding CNL versus clinical nurse specialist (CNS) practice overlap, questions about how CNL competencies and practice differ from expected staff RN knowledge and practice, and concern about the validity of the role as theorized because of variation in CNL conceptualization and evaluation methods across the literature.

These unanswered questions and concerns have created a barrier to wider implementation of the CNL role across the nation. Given the promise of the CNL, additional empirical evidence is needed to incentivize and promote wider CNL integration into care delivery microsystems across the healthcare spectrum, as recommended in the FON report. A rigorous, systematic examination of the cumulative body of CNL knowledge and current practice across systems will address this evidence gap and help fulfill IOM Recommendation 2: Expand opportunities for nurses to lead and diffuse collaborative improvement efforts. It will also address FON priority: Describe successful models of effective care teams, by providing an examination of the theoretical basis and national evidence for CNL-mediated collaborative quality care improvements.

The following specific aims reflect a balanced interest in empirically and clinically derived knowledge:

1. To compare, analyze, and synthesize primary reports on the CNL into an integrative, coherent, and usable scientific base to inform education, practice, policy, and research
2. To use the newly synthesized evidence as the basis for examining the conceptualization, implementation context, evaluation, and cost benefit outcomes of the CNL in a national sample of health care organizations.

The significance of the proposed research is that it will (1) refine the theoretical framework of the CNL role, (2) provide evidence of essential CNL processes and setting contexts necessary for influencing outcomes, (3) clarify how CNL theory, practice and outcomes are distinct from other nursing roles, and (3) provide the empirical basis for future work on a CNL 'toolkit' with evidence-based guidance for successful CNL implementation across the healthcare spectrum.

The study is proposed to take 24 months to complete: please see chart for details. The proposed budget is \$220,000-\$250,000.00 which includes: Meta-synthesis materials (retrieval & copying); computer and external hard drive; analysis software; scientific advisory group consultation fees; PI, co-PI and research assistant effort; database and statistical support; research dissemination (investigator travel, teleconferencing, participant stipends, and miscellaneous).

Study task	Timeline (by month)				
	1-3	4-9	10-13	14-19	20-24
Finalize materials, IRB, Project startup	X				
Meta-synthesis		X			
External audit of metasynthesis			X		
Scientific Advisory Board meeting			X		
Survey item extraction, development and pilot			X		
Survey administration, data collection				X	
Survey data analysis, report write-up, dissemination					X

PROPOSED METHODOLOGY

A descriptive non-experimental design using a mixed method approach will be conducted in three phases: (1) qualitative metasynthesis (QMS), (2) survey development based upon the metasynthesis, and (3) national survey of organizations utilizing CNLs.

Phase 1: CNL theory and practice have been reported using a variety of qualitative, quantitative, and narrative methods. QMS is a research method well suited to synthesize methodologically diverse reports into a usable, coherent whole that can inform future practice, policy, and research. QMS is well described in the literature and has been successfully adapted to inform a variety of healthcare phenomenon (Paterson, Thorne, Canam & Jillings, 2001; Mays, Pope & Popay, 2005; Dixon-Woods et al., 2006). The components of QMS include (a) data analysis of previously published report findings; this study will use the methods of Miles and Huberman (1994), (b) analysis of research methods, and (c) analysis of the theoretical frameworks used. The final synthesis will critically interpret the theory, methods, and findings of primary reports and their contribution to CNL knowledge;

refine CNL theory; and propose implications for further CNL research and practice. A preliminary literature search in CINHAL, Pubmed, AHRQ Innovations Exchange, and the AACN CNL website for the phrase “clinical nurse leader” produced 131 unique reports. Inclusion and exclusion criteria will be decided through assessment of content and utility of findings to inform the ultimate synthesis, rather than a formal process of identifying methodological rigor. It is expected that approximately 40-80% reports will be excluded, resulting in a final sample of 20-60 reports.

Phase 2: A survey will be developed to elicit data on context of implementation, evaluation, and cost benefit outcomes of the CNL among a national sample of health care organizations. Items will be based on QMS-identified categories and constructs related to CNL context of implementation, essential core competencies/components, and their proposed influence on outcomes. The survey will include rated-responses and open-ended questions. A scientific advisory group (SAG) of CNL scholars, healthcare service stakeholders and methodologists will be consulted to establish content validity. The survey will be pilot tested using a group of Chief Nursing Executives (CNE) with CNLs integrated into their organizations prior to administering to the national population.

Phase 3: Healthcare organizations that have implemented the CNL role will be identified through American Association of Colleges of Nursing (AACN) and Clinical Nurse Leader Association (CNLA) databases, literature review, and direct inquiry. CNEs of identified organizations will be recruited via an email invitation generated by a web survey. Web-based surveying was selected to enable the

researcher access to a large sample size without increasing expense, and for participant convenience including ability to respond at a convenient time.

Descriptive statistics will be conducted and examined throughout the study to ensure the quality of data and to guide appropriate statistical methods: i.e. the number of organizations eligible for participation, those who agreed to participate, characteristics of the organizations eligible to participate and did/did not agree to participate, and the results of the survey items.

TEAM

Miriam Bender (MSN, CNL) is the PI. She is an outcomes research specialist at Sharp Healthcare, a Malcolm Baldrige National Quality Award winning healthcare organization, and a nursing research PhD student at USD. Cynthia D. Connelly (PhD, FAAN) is the co-PI. She is an NIH-funded professor and director of research at USD. The scientific advisory group (SAG) includes: Ann M. Mayo (CNS, DNSc, FAAN), USD professor; Linda D. Urden (DNSc, FAAN), USD professor and director of the CNL program; Mary Stachowiak (MSN, CNL), founding president of the CNLA; Joan Stanley (PhD, CRNP, FAAN, FAANP), senior director of education policy at the AACN; Gregory Seymann (MD), associate clinical professor at University of California San Diego; Dale Glaser (PhD), adjunct professor of statistics at USD.

DISSEMINATION

Findings will be disseminated to policymakers at RWJF, AACN, CNLA, and to key stakeholders such as AHRQ (through Innovation Exchange), CNL educators, and

CNEs of healthcare organizations. Findings will also be disseminated through peer reviewed publications and presentations at professional meetings.

RISKS AND CHALLENGES

Human Subjects approval will be obtained from the USD IRB before proceeding with the proposed study, and is anticipated to take 2-3 months. For **Stage 1**: In any qualitative study, it is important to consider the credibility and reproducibility of the proposed synthesis. Methods used to ensure analytical credibility include: inputting direct information from original reports into an appraisal tool; keeping a detailed list of studies included/excluded with rationale; documenting retrieval processes so others can judge breadth of data retrieval; recording a detailed decision trail for all analyses and syntheses; utilizing external auditors to read and review selected articles, notes and summaries to ensure agreement on information recorded and summarized. Another limitation of the proposed metasynthesis is its reliance on the quality of the extant literature. This study will use a low quality threshold for inclusion, which is consistent with the literature describing metasynthesis (Barnett-Page & Thomas, 2009) because even 'weak' methodological papers have much to offer in terms of qualitative synthetic relevance. For **Stage 2-3**: SAG will judge the credibility of the completed metasynthesis using the strategies listed above before using the findings to develop survey items. Survey validity and reliability is critical for generating generalizable results. The research team has a history of success with survey research, and will

ensure the survey will be developed, administered, have adequate response rates, and be analyzed in accordance with rigorous scientific survey methodology.

CHAPTER 4 : RESULTS

Overview

This dissertation follows the format of Hahn School of Nursing and Health Science *Option 2: Manuscript Style Dissertation*, which specifies a minimum of three publishable manuscripts. The three publishable manuscripts include (1) a narrative literature review of the CNL evidence, (2) a proposal submitted to the Robert Wood Johnson Foundation *Future of Nursing: Campaign for Action*, and (3) a manuscript detailing the interpretive synthesis study background, methods, results and implications.

The first manuscript is a literature review entitled “The Current Evidence Base for the Clinical Nurse Leader: A Narrative Review of the Literature”. It was accepted for publication in the *Journal of Professional Nursing* on December 27, 2012 and is tentatively scheduled to appear in the September-October 2013 issue (see Figure 2-1).

The second manuscript is a grant submitted to the *Future of Nursing: Campaign for Action*, entitled “The Clinical Nurse Leader Contribution to Integrated

Quality Care: A Systemic Review of the National Evidence”, proposes the CNL interpretive synthesis, as well as further research involving preliminary validation of the interpretive synthesis results amongst practicing CNLs across the country and executive leaders involved in implementing the CNL within their organization. The submission deadline was January 3, 2012. The proposal was selected as a finalist on April 10, 2012 (see Figure 4-1) and was posted on the *Future of Nursing: Campaign for Action* Funder’s Community private website. The proposal remains on the Funder’s Community private website at this time: the interpretive synthesis was conducted without grant funding. The grant contents are presented in Chapter 3, from pages 9-15.

The third manuscript is entitled “Developing a Clinical Nurse Leader Practice Model: An Interpretive Synthesis”. The manuscript contents, including supporting tables and figures, are presented below, from pages 19-69.

Figure 4-1. Future of Nursing: Campaign for Action Finalist Notification

From: myrwjf@rwjf.org [mailto:myrwjf@rwjf.org]
Sent: Tuesday, April 10, 2012 9:32 AM
To: Miriam Bender
Cc: hkelley@nursing.upenn.edu; Alustiginqri@gmail.com
Subject: RWJF - The Future of Nursing: Campaign for Action Finalist Notification

We are pleased to inform you that your proposal The Clinical Nurse Leader Contribution to Integrated Quality Care: A Systemic Review of the National Evidence has been selected to move forward in the The Future of Nursing: Campaign for Action program and will be posted on the Funders' Community private site. Members of the Funders' Community will review all posted proposals and select those they may be interested in funding. If a funder selects your proposal, you will be contacted by that funder to submit additional information or a full proposal.

Many of the funders have decided to wait until all of the proposals have been posted on the board before making their selections. Since the solicitation closed on January 3, we are still in the process of receiving reviews and making decisions. We are also continuing to grow the Funders' Community and hope that funders will be in touch with applicants in the next couple of months.

If you have any questions, please contact me at
hkelley@nursing.upenn.edu<mailto:hkelley@nursing.upenn.edu> or call 215-573-2981.

Regards,
Heather Kelley-Thompson
hkelley@nursing.upenn.edu<mailto:hkelley@nursing.upenn.edu>
215-573-2981

Manuscript 3: Developing a Clinical Nurse Leader Practice Model: An Interpretive Synthesis

ABSTRACT

Aims: The purpose of this study was to clarify CNL practice components contributing to improved quality care standards.

Background: The Institute of Medicine's Future of Nursing report identifies the Clinical Nurse Leader (CNL) as an innovative and necessary new role for meeting higher healthcare quality standards. The CNL is not clearly defined in terms of fundamental activities necessary to produce outcomes. Lack of practice clarity limits the ability to articulate, implement, and measure CNL-specific practice and quality outcomes.

Methods: Interpretive synthesis design was used to integrate the CNL evidence base into a coherent understanding of CNL practice.

Results: Five domains were identified that interact to produce the structure, function, and outcomes of CNL practice. The core phenomenon of CNL practice involves developing relationships across professions to promote and manage clinical information exchange, shared decision-making, and effective care processes.

Conclusions: The empirically derived CNL Practice Model clarifies practice components, differentiates them from existing nursing roles/practices, and

proposes mechanisms by which a CNL-integrated care delivery model can improve healthcare quality.

Implications for Nursing Practice: The model can be helpful to organizations contemplating CNL implementation. It also provides a basis for future research identifying quantifiable measures of CNL practice and CNL-specific influence on outcomes.

BACKGROUND

The American health care system as currently structured, with its disciplinary 'silo' approaches to patient care, is characterized by fragmented care delivery systems lacking formal interdisciplinary collaborative processes (Baernholdt & Cottingham, 2011; Cebul, et al., 2008; Institute of Medicine [IOM], 2000; Nelson et al., 2008; Porter-O'grady et al., 2010). This lack of collaboration has resulted in hierarchical care patterns that prevent disciplines from fully translating their abilities, knowledge and motivation into optimal care performance (Bartels, 2005). Consequences include errors in clinical practice and preventable adverse patient outcomes such as increased mortality, morbidity, readmission rates, lengths of stay, and care costs (IOM 2001, Fewster-Thuente & Velsor-Friedrich 2008). Professional, policy and educational organizations have recognized the need to transform the healthcare workplace to better provide equitable, safe, patient centered, and team oriented care (American Association of Colleges of Nursing [AACN], 2002; Interprofessional Education Collaborative, 2011; IOM, 2001; IOM, 2003; Joint Commission, 2002; Joynt & Kimball, 2008).

In response to this mandate, the AACN spearheaded the development of the Clinical Nurse Leader (CNL), a masters-prepared RN educated to coordinate patient care through collaboration with the healthcare team at the microsystem level (AACN, 2007). Microsystems are small, organized patient care units with specific clinical purposes, such as cardiac care units in a hospital or a primary care physician office, and include the patients as well as the clinicians and staff responsible for patient care (Donaldson & Mohr, 2001). A collaborative task force comprised of practice and education leaders developed the curriculum framework and end-of-program competencies for CNL education (Bartels & Bednash, 2005; Harris et al., 2006). An implementation task force, funded in part by the Agency for Healthcare Quality and Research (AHRQ), was subsequently established in 2004 to oversee the evaluation of the first CNL education-to-practice partnerships (Stanley et al., 2007; Tornabeni & Miller, 2008).

A narrative literature review (Bender, in press) summarizes the results of these initial pilot implementations and other independent CNL trials and studies. Quality improvements facilitated by integration of the CNL into clinical microsystems include: Nursing time spent with the patient; staff, physician and patient satisfaction with care practices; efficiencies in patient care processes and lengths of stay; nursing quality indicators; staff RN certification rates; staff turnover; and interdisciplinary communication and collaboration. A consistent finding across reports was that the CNL is not yet clearly defined in terms of fundamental activities and responsibilities necessary to facilitate quality outcomes. Lack of practice clarity

limits the ability to articulate, implement, and measure CNL-specific practices and outcomes. This article describes a study conducted to clarify CNL practice components contributing to improved quality care standards and outcomes.

METHODS

Design

The current CNL evidence base does not explicitly define CNL practice, but does provide descriptions of organizational CNL implementations and detailed reports of CNL-led quality improvement projects. It also provides a number of qualitative studies that have explored the experience of CNLs as they transition into their newly created CNL roles. These primary accounts in the literature provide a resource to help clarify CNL practice. Interpretive synthesis offers a unique approach towards the integration of primary evidence of a phenomenon of interest. It involves reinterpretation and reanalysis of text-based forms of evidence. A strength of the design is that it can be conducted on various forms of primary evidence (Dixon-Woods et al., 2004; Mays et al., 2005; Pope et al.).

For the purposes of this study, an interpretive synthesis of the CNL literature was conducted, as described by Pope, Mays & Popay (2007). There are currently two main qualitative approaches to interpretive synthesis; comparative and translation based methodologies. Comparative approaches include grounded theory and comparative case study. Translational approaches include meta-ethnography

and critical interpretive synthesis. A comparative, grounded theory approach was used for this study rather than translational approach, as it was considered a better fit considering the methodologically diverse evidence base.

Sampling

Purposeful sampling of the literature was used to identify CNL practice evidence. A literature search was performed in CINAHL, Pubmed, and Dissertations & Theses, using the term “clinical nurse leader”. A grey search was also performed in Google, which identified the Virginia Henderson International Nursing Library, AHRQ Innovations Exchange, and AACN websites as additional sources for CNL reports. The searches were conducted in November 2011 with a follow-up in September 2012 to capture any newly published CNL reports (some articles have since moved from ‘online first’ publication to print publication; print citation is used in these cases, with DOI included in reference).

Quality Appraisal

With interpretive synthesis, there is a balance to be struck between high quality data and inclusiveness of potentially relevant data. This study did not exclude reports or abstracts on the grounds of ‘poor methodology’, which is consistent with previous interpretive synthesis studies (Dixon-Woods et al., 2006; Jensen & Allen, 1994; Sandelowski et al., 1997; Thorpe et al., 2009). The focus was on descriptions of CNL practices embedded within reports.

Data Handling Methods

Data handling and analysis was facilitated through use of Dedoose, a web-based qualitative and mixed methods analytical application package (dedoose.com). Report and abstract texts were uploaded to the password-protected Dedoose website, which recorded and organized subsequent coding and memoing. Dedoose-facilitated matrix displays were constructed to organize data. Matrices were exported into Microsoft Excel spreadsheets to facilitate qualitative and descriptive analysis of codes, domains and components.

Data Analysis

All primary texts were re-analyzed following Strauss and Corbin's grounded theory approach (Strauss & Corbin, 2007), using constant comparison of data to derive concepts as the building blocks of theory development. In this way concepts, components and domains were identified and verified through cross-data confirmation.

RESULTS

The search returned 138 unique authored reports and 254 abstracts. All search results were read and categorized to aid in decision for inclusion or not. Table 4-1 describes the investigator-developed categories for all reports and abstracts, which were used to determine inclusion or exclusion. All 254 abstracts were included in the synthesis. Thirty implementation/case study reports, eight qualitative or mixed methods studies, and three quantitative studies were included in the synthesis.

Report characteristics, including the stated aims, are detailed in Table 4-2. Abstract characteristics, including categories and stated aims, are detailed in Table 4-3. Line-by-line coding identified 1311 excerpts abstracted into 58 primary codes. As relationships became apparent, primary codes were integrated into groups representing various components of CNL practice. As patterns of connection emerged, groups of components were integrated into five major domains representing a model for CNL practice (see Figure 4-2).

Domains include: Preparation for CNL Practice; the Structure of CNL Practice; the Core Phenomenon of CNL Practice - Continuous Leadership at the Point-of-Practice; Outcomes of CNL Practice; and Acceptance. Table 4-4 through 4-8 detail the components of each domain and describe the influence of each component on CNL practice success. Table 4-9 details the percent of reports contributing to each domain and the contribution of each report to model domains.

DISCUSSION

Preparation for CNL Practice

Systematic preparation for CNL implementation is necessary for successful CNL practice. Essential components of preparation include: Clear understanding of current care delivery deficits; strong leadership support; and an effective change management strategy.

Knowledge of care deficits and an understanding of how they affect care across the healthcare spectrum is an important first step in deciding to transform

traditional care models. Organizations that successfully implemented the CNL described their understanding of the need for change:

The floors are so busy that it is sink or swim basically. Our ratios are good, but our patients are really sick. New staff get overwhelmed easily and feel very lost in the system (Sherman, 2010, p. 551).

The majority of staff nurses are just trying to make it through the day...I don't think they are asking themselves about what impact they can have on the patient for the next 12 hours (Sherman, 2008, p. 239).

Many CNLs struggling to succeed described scenarios where pockets of organizational leadership did not see the need for care delivery transformation and were thus resistant to the CNL:

The Chief Nursing Officer...believes the cost of the CNL is prohibitive and that bedside staff can do the work without the extra associated cost (Moore & Leahy 2012, p. 143).

There was reluctance to introduce another layer of nursing into our patient care mode (Tachibana & Nelson-Peterson, 2007, p. 478).

There was skepticism...regarding how it would be "helpful to have a nurse overseeing a group of patients. Why not decrease the number we have and give her some patients of her own?" (Hartranft et al., 2007, p. 262).

CNL practice success requires the support of organizational leaders with the power to drive change in the face of such resistance. Organizational leaders enthusiastic about the CNL described how they systematically developed CNL implementation strategies for optimal success:

Leaders engaged in an iterative process to create the business case for system-wide implementation predicated on the belief CNLs would become a cadre of change agents within each organization. The SVP [senior vice president] and CNO [chief nursing officer] established the implementation of the CNL role as a Blue Chip Board initiative (Thomas, 2012).

CNOs engaged in a strategic planning process that evaluated and prioritized key nursing and interdisciplinary strategies for the upcoming three years. Among the priorities identified was selecting and implementing a care model that acknowledges the changing climate within healthcare and addresses the future needs for care delivery in the hospitals (Harris & Roussel 2010, p. 266).

The Structure of CNL Practice

CNL practice structure components include: Microsystem care delivery redesign; a competency-based CNL workflow; and accountability for a predetermined set of outcomes. The CNL should be integrated into a thoughtfully redesigned care model, not added onto an existing staffing model:

As functions change, so must the form or model for the delivery of care. Redesigning nursing care delivery is at the core of the CNL pilot

project: the context of how nurses practice has changed, and the work of nursing needs to be realigned to reflect this (Gabuat et al., 2008, p. 303).

When redesigning microsystems, all staff activities and workflow needs should be accounted for. The more people and disciplines involved in the redesign, the clearer the new workflow patterns become:

A design team of multidisciplinary staff worked for several weeks to identify the core care processes and care activities. The care team roles were all clarified, and distinct role sets were identified for each job (Drenkard, 2004, p. 90).

Staff were asked to provide input on the ideal staffing pattern for the unit, as well as to make recommendations on whether some of the support functions...should be recentralized, allowing nursing staff to concentrate on patient care duties. What surfaced in the discussion was the need for a consistent figure to act as a point person for staff, physicians, patients, and families (Sherman et al., 2008, p. 56).

The CNL role should be structured around CNL core competencies of leadership, care environment management and clinical outcomes management. This reduces role overlap, as competencies become the 'tasks' that encompass the CNL's job description. CNL practice is focused on microsystem care process development and improvement. The microsystem is where patients actually experience their care, and where multiple caregivers working in complex organizational

arrangements determine the quality of care. The CNL assesses the elements and working dynamics of multidisciplinary care processes to identify inconsistencies, gaps and/or variability as the basis for improvement. This focus on the general microsystem care environment differentiates the CNL from the clinical nurse specialist (CNS), whose practice is based on the direct care of specialty patient populations as well as on advanced clinical knowledge implemented across the macrosystem organizational level. The CNL workload does not include direct patient care assignments, which would overlap with staff nurse roles. It does not include administrative duties, which are the domain of the manager, or formal staff education, which is the focus of the nurse educator:

It was important to the staff that the leader not be responsible for management functions; rather, his or her primary purpose would be to act as a patient navigator and a central point for communication among other team members (Harris & Roussel, 2010, p. 260).

All nurses are expected to bring EBP to the bedside, however a CNL studies at the microsystem level (unit level) and can assess the patient population and synthesize processes, patterns, as well as the needs of professionals to deliver the resources and care for the patient (AHRQ Innovations Exchange, 2010, p. 14).

Lack of understanding of CNL competencies and how they are enacted to produce CNL workflow was the most common reason cited by CNLs struggling to thrive in their role:

Fifty-two percent of participants believed that the biggest challenge to the CNL role implementation was a lack of role clarity. This finding is of concern especially when coupled with the finding that 39% of participants believed that the success of the role hinges upon a more structured description and understanding of the role (Moore & Leahy, 2012, p. 143).

The manager viewed me as her 'assistant charge nurse' and attempted to delegate a lot of her managerial duties to me. She also had expectations that I 'be available' to take patients in a '911 situation.' Unfortunately, these '911 situations' happened far too regularly (Moore & Leahy 2012, p. 142).

Another distinction between the CNL and other nursing roles is accountability for a predetermined set of outcomes. This was the case for every single CNL role described in the literature. Comparing outcomes before and after CNL implementation reinforces the business case for the CNL and provides leaders with real-time data on the effectiveness of the CNL in facilitating improved microsystem quality:

An interprofessional team was convened to collaborate on the selection of measures from literature and from clinical experience among the members from pharmacy, patient education, social work, community health liaison nursing, quality management, nutrition, nursing, RN- patient care facilitators (discharge planners), and utilization review (Zarella & O'Neal, 2011, p. 19).

They [CNLs] are held accountable for outcome measures at the microsystem level. Such measures include falls, pressure ulcer rates, patient satisfaction scores, Joint Commission on Accreditation of Healthcare Organizations core indicators, and certain financial targets (Smith & Dabbs 2007, p. 159).

Core Phenomenon of CNL Practice: Continuous Leadership at The Point-Of-Practice

The heart of CNL practice involves developing relationships within and across professions to promote and manage information exchange, shared decision-making, and effective care processes at the point-of-practice. Components of continuous leadership include: strengthening inter-professional relationships; being a source of constant communication/information; team creation; supporting staff engagement; and shifting focus from person to process. Communication is key to all components. CNLs start the communication process by embedding themselves within their microsystem to learn and understand practice dynamics:

It is necessary for the unit based and/or setting based CNL to become absorbed in the unit/setting culture and provide leadership working side by side with staff, to improve care (Swan, 2011, p. 28).

I worked within the practice environment and studied how problems were being solved daily and how the flow through the GI lab was affected by other variables within the unit itself. I evaluated how happy staff were with the way problems were being addressed by

management and how their work performance was affected by their overall satisfaction with their work environment (Miller, 2008, p. 4).

A significant portion of CNL workflow is time spent engaging all members of the healthcare team. Building relationships is time consuming and can be difficult at first, but is necessary to improve microsystem structures and processes that will lead to improved quality. While clinicians might recognize the need to reach out to all members of the care team, the structures of their own practice many times make that impossible on a regular basis. The CNL corrects that structural flaw.

Within just a few years, the CNLs have established a network of partners who once may have acted in isolation. They have increased collaboration among disciplines in both clinical and non-clinical settings (Wilson et al., 2013, p. 177).

The CNLs saw themselves as being the connectors with health care providers from different departments, and that serving in this role was integral to the safety of their patients...Jennifer viewed garnering and sharing knowledge with other health care providers to keep patients safe an example of the CNL being a "connector", describing herself as being a "knowledge broker." Angela described working with other disciplines to pull together all the pertinent information as "connecting the dots" (Sorbello, 2010, p. 103).

As relationships are built and sustained, teams can be formed to effectively drive meaningful quality improvement. Teamwork was identified more than any

other single component of CNL practice during analysis, with more than 101 excerpts linked across all reports. A striking finding was the sheer variety of team participants, consisting of members from the entire organizational spectrum. The CNL, with a focus on root causes of microsystem dysfunction, is able to recognize the need for representatives from multiple disciplines to enact and sustain meaningful change across the entire care process:

The CNLs brought together an interdisciplinary team that included a wound nurse, respiratory therapist, pulmonologist, primary care physician, surgeon, OR staff and anesthesiologist (Wilson et al., 2013, p. 180).

Positive outcomes aren't achieved by individuals but by a cooperative, cohesive work environment. The CNLs worked in collaboration with the entire healthcare team to achieve these results (Sheets et al., 2012, p. 58).

By building relationships, communicating information through teamwork, and harnessing frontline staff knowledge of care deficits and their ideas for improvement, CNLs put the pieces in place to change the microsystem focus from individual tasks towards a broader understanding of how everyone plays a part in complex care processes to provide quality patient care:

Eventually a focus emerged on teaching/mentoring for clinical thinking skills and showing those on the unit the relationship between safety behaviors and documentation to engage everyone in a culture of safety (Rusch & Bakewell-Sachs, 2007, p. 36).

The team established itself by formulating a global aim statement, which described the intent and expectations for the group...Communication with all staff members of the microsystem was solicited through unit postings and communications, as input from all was valuable to the group. These postings simultaneously supported the transparency of the groups' work and the mission of patient safety rather than a culture of blame (Gerard & O'Neil Meyers, 2011, p. 41).

The CNL facilitates this renewed focus on processes by supporting staff to practice to their full level. The CNL does not oversee or manage the staff nurse, but provides daily support for them to lead their own practice:

Because the bedside nurses have the CNLs as a resource, they have begun to view their practices differently and challenge the status quo. While continuing to provide direct patient care, these nurses now have an exciting opportunity to drive positive changes in our healthcare system (Wilson et al., 2013, p. 180).

Staff performance also improved as staff began to work on professional goals, such as working on research, which led to article publication in professional nursing journals and magazines. They also worked with the CNL to update existing policies that affected the endoscopy lab that were no longer meeting patient care needs. Nursing staff also became the model for the facility for implementing new processes such as the Time-Out process, creating a Time-Out educational CD, along with a computer charting form that is currently

being planned for hospital-wide use (Fitzpatrick & Wallace, 2008, p. 182).

Outcomes of CNL Practice

While most reports describe specific outcomes of CNL implementation (for details see Bender, in press), analysis identified three general consequences of CNL practice: Improved microsystem care environment; improved care quality; and nursing brought to the forefront of healthcare delivery. Standardized healthcare quality metrics, such as nursing quality indicators, were chosen and reported as CNL evaluation measures across reports, aligning with the initial focus of the role to improve care quality (as described above).

The improved care environment was reflected through numerous reports of enhanced microsystem teamwork, communication, workflow and satisfaction:

A significant change in unit culture has been noted as members of the interdisciplinary team are able to verbalize the measures, rationales and take accountability for their part in its success (Jones, 2011, p. 33).

The RN turnover rate was 40% before the CNL introduction and now the rate is 3.1% on our unit. This unit had the reputation as the worst unit in the hospital, now there is a waiting list of nursing trying to get on our unit (Arsenault et al., 2011, p. 15).

Physicians have expressed their support and satisfaction about the role to nursing administration, describing the CNL as their “go to

person". On one of the CNL units, nurses had expressed to the nurse manager their intention to leave. All have stayed and said that it was directly linked to the implementation of the CNL role. In another instance, a nurse said, "The CNL makes me want to be a better nurse" (Hartranft et al., 2007, p. 263).

The CNLs provided nursing staff with a survey that indicated that the CNL role positively impacted the bedside nurses' ability to contact physicians and stay informed of the plan of care (Lolacono et al., 2011, p. 41).

Staff pride and ownership of quality care is increasing and surgeon concerns regarding care have dramatically diminished (Adkins, 2012, p. 12).

Nursing staff express that the [CNL-led] huddles have created a sense of "community" and that they have increased the morale on the nursing unit (Caiazzo, 2012, p. 16).

Part of this increased sense of satisfaction is CNL commitment to make visible and accountable all the work nurses do to care for patients on a daily basis to the broader healthcare community:

The concept of the clinical microsystem is now a part of the vernacular describing assumptions for empowering today's nurses to improve healthcare (Gerard & O'Neil Meyers, 2011, p. 41).

It [the CNL] will also increase nursing's influence and value to impact the quality and safety of patient care, assure more evidence-based practice in patient care delivery, and assure an increased focus on nursing to lead the entire healthcare team in a patient-focused rather than discipline-focused manner. (Smith & Dabbs, 2007, p. 160).

The CNL role provided the critical link for translating and modifying nursing initiative, knowledge and process into a simple tool that significantly reduced the duration of catheterization (Foster et al., 2010, p. 30).

Acceptance

CNL development and integration into care delivery models requires significant change to the way healthcare practices are currently enacted. Change is difficult, even when it is for the better. The reports in this synthesis describe many bumpy paths from CNL development to true acceptance by macro and microsystem leaders and the overall healthcare team. The components of acceptance include: Initial buy-in; exposure; and understanding. While initial buy-in was secured by key organizational leaders and microsystem managers to implement the CNL, most microsystem practitioners were very skeptical of the role at first. For example, CNLs were many times seen as a hindrance to practice rather than a benefit when first implemented in various microsystems:

Initially, staff members voiced skepticism about possible intrusiveness of the teamwork approach (Bender et al., 2011, p. 297).

One CNL remembers being confronted by staff with the question “what are you doing here? You don’t have a patient assignment: are you the chart police?” (Sherman, 2010, p. 551).

Shaun described the conflict he was experiencing, “I feel like I am getting a lot of roadblocks. The nurse manager said to me, you know you are competition now...The staff thought that I was put there as a spy (chuckles), sent by the Director to make them work harder and to see how come things were so bad on the floor” (Sorbello, 2010, p. 116).

Exposure to the role over time helped overcome initial confusion about what exactly the CNLs ‘were doing’. As communication flourished and teamwork became more common, staff and physicians gradually understood the CNLs to be an asset to the care team:

Interestingly, once the CNLs secured the trust and respect of the administrative, nursing, ancillary and medical staff, there was a synergistic effect in terms of new staff entering the unit: they seemed to take other's trust and respect as a cue to feel secure enough to collaborate and communicate with the CNLs and other team members without reservation. Group cohesion was created, with a sense of interdisciplinary competence in each other, which new employees

could immediately become a part of, and take part in, by the end of the yearlong study (Bender et al., 2013, p. 172).

The CNLs reported that after an initial period of adjustment usually lasting about 6 months, unit staff began to see the value in the role. One CNL described her transition experience, “at first there was a lot of resistance. I just pushed through it and remained confident about my abilities; eventually the staff came to realize what a benefit I was and now don’t want me to take a vacation.” (Sherman, 2010, p. 551).

The skeptics were quickly won over, some within 3 hours of role implementation. The CNLs now routinely hear comments such as, “I feel safer knowing you are here; it is great to be able to bounce ideas off you” and “you really do know what is happening with the patient.” (Hartranft et al., 2007, p. 262).

CONCLUSIONS

The Institute of Medicine’s Future of Nursing report (IOM, 2010) identifies the CNL as an innovative and necessary new role for meeting higher healthcare quality standards. This research advances understanding of CNL practice by synthesizing an empirically derived CNL practice model that clarifies practice components and differentiates them from existing nursing roles and practices. It proposes mechanisms by which a CNL-integrated care delivery model can influence care quality.

The model suggests the need for a systematic approach to CNL implementation, including a well thought out strategy for care delivery redesign that integrates the CNL. The model describes a process unfolding over time, and highlights possible struggles throughout the journey, such as overcoming resistance to necessary care delivery redesign and the need for a period of exposure to the CNL before clinicians overcome their skepticism and see firsthand the benefits of the role.

LIMITATIONS

This study examined CNL practice in the context in which it currently exists and has been described in the literature. It thus provides a preliminary model defining CNL practice. More research is warranted to confirm and/or expand domains and components of CNL practice across a more comprehensive sample of clinical microsystems.

One CNL practice domain worth exploring in more detail is 'acceptance'. The model highlights the need for continuous exposure to the CNL before the healthcare team (a) understood CNL workflow, b) saw the relationship between CNL workflow and benefits for their own practice, and (c) accepted the CNL as a meaningful contribution to improving microsystem care delivery. A better understanding of how this conceptual change takes place can advance CNL practice as well as help better understand the mechanisms by which multidisciplinary teams (with multiple perspectives) relate to and adopt new care processes in general.

It is also necessary to examine the convergence of CNL continuous leadership practice components with the current literature on clinical leadership, including what it consists of and how it is enacted.

IMPLICATIONS FOR NURSING PRACTICE

The CNL practice model can be helpful to organizations and managers contemplating CNL implementation, helping to frame an implementation strategy that addresses all five domains of CNL practice, and contributing a preliminary roadmap of necessary steps and milestones for CNL practice success. The CNL practice model also provides a framework for generating evidence of how the CNL can specifically influence patient care quality and outcomes. For example, the model can provide a basis for identifying and/or developing measures of: adherence to systematic CNL implementation processes; basic CNL workflow requirements; CNL leadership in action; and CNL-specific influence on care quality such as interdisciplinary collaboration, teamwork, and communication. We also hope the model can facilitate CNL practice success by providing a structure for current and future CNLs to better articulate their practice to their microsystem team, managers, executive leaders, and the broader healthcare community at large.

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Figure 4-2. CNL Practice Model

Table 4-1. Report and Abstract Category Descriptions used to Determine Inclusion Into Synthesis

Report Category	Description of Category	Count	Included?
Implementation report	Documents describing some aspect of CNL implementation and practice	30	Yes
Qualitative/mixed methods study	Studies using qualitative methods, including investigator-designed survey data used for descriptive and qualitative analysis	8	Yes
Quantitative study	Descriptive. survey or quasi-experimental studies using statistical analysis to quantify results	3	Yes
Explanatory/editorial	Documents describing the vision, history, rationale, educational competency development, and/or editorial commentary about the CNL, but do not provide information on the role in action	38	No
Journalism	Short, informative briefs introducing or commenting on the role in general	43	No
Not about CNL role	Reports that were not actually about the CNL	16	No
Total		138	41
Abstract Category			
QI (quality improvement)	CNL-initiated QI project	122	Yes
Implementation/outcomes	Describes the need for and implementation of CNL(s), sometimes with outcomes	54	Yes
Educational methods	Describes methods to educate/train CNLs, including developing partnerships with clinical organizations and placing CNLs into practice	39	Yes
Immersion methods	Describes clinical immersion experience of CNL students, including how they were operationalized	20	Yes
How CNL can be utilized	Describes how and why CNL can be utilized	9	Yes
CNL experience	Description/analysis of CNL personal experience	7	Yes
Quantitative/survey study	Cross-sectional survey method investigating some aspect of CNL	3	Yes
Total		254	254

Table 4-2. Title, Category, Source and Stated Aims of Reports Included in the Synthesis

Author(s)	Title	Report Category	Stated Aims of Report
Drenkard 2004	The Clinical Nurse Leader: A Response From Practice	Implementation/ Case study report	"This article will present information about the role of team coordinator, similar to that of CNL, that has been implemented at an integrated non-profit health care system in 5 hospitals. Although the roles were not similar, the driving forces for change were similar"
Bowcutt et al. 2006	The Clinical Nurse Leader: Promoting Patient-Centered Outcomes	Implementation/ Case study report	"The objectives for the new role included (a) to promote and role model expert clinical data collection, analysis and decision making, and (b) to enhance the individual and aggregate outcomes of the nursing unit"
Smith et al. 2006b	Application Of The Clinical Nurse Leader Role In An Acute Care Delivery Model	Implementation/ Case study report	"Describe a 6-month pilot project incorporating a modified version of the AACN CNL role as a prelude to implementation of the AACN-defined CNL role"
Smith et al. 2006a	Hospital Use Of A Modified Clinical Nurse Leader	Implementation/ Case study report	Describe how "Flager hospital implemented and piloted a modified version of the CNL role in May 2004"
Wiggins 2006	The Partnership Care Delivery Model	Implementation/ Case study report	"The author presents a summary of system drivers that are mandating the need for change and an overview of the partnership care delivery model...to provide the necessary support and practice environment for the CNL to function as envisioned by the AACN and its practice partners"
Hartranft et al. 2007	Realizing The Anticipated Effects Of The Clinical Nurse Leader	Implementation/ Case study report	"Explore the actual implementation of the CNL role within the microsystem of the hospital unit and discuss a typical day in the life of a CNL, how the role achieves lateral integration, and the impact the role has had on quality outcomes and satisfaction for the patient and nurse"
Rusch & Bakewell-Sachs 2007	The CNL: A Gateway To Better Care?	Implementation/ Case study report	Describes "joining the CNL pilot" and "education-practice partnership model"

Author(s)	Title	Report Category	Stated Aims of Report
Smith & Dabbs 2007	Clinical Nurse Leader: Evolution Of A Revolution: Transforming The Care Delivery Model In Preparation For The Clinical Nurse Leader	Implementation/ Case study report	"This article focuses on one organization's efforts to redesign the patient care delivery model in preparation of the CNL"
Tachibana & Nelson-Peterson 2007	Clinical Nurse Leader: Evolution Of A Revolution: Implementing The Clinical Nurse Leader Role Using The Virginia Mason Production System	Implementation/ Case study report	"In this article the authors discuss the needs for changes in the nursing care delivery=very model, the implementation of the role and early outcomes and future opportunities for expansion of the CNL role"
Gabuat et al. 2008	Implementing The clinical Nurse Leader Role In A For-Profit Environment	Implementation/ Case study report	"Provide a case study of those challenges and the process used by on medical center to create a sense of urgency for change, build a business case, and redesign professional nursing practice"
Harris et al. 2006	The Clinical Nurse Leader Role: A Pilot Evaluation By An Early Adopter	Implementation/ Case study report	"VA TVHS partnered with the AACN to develop an evaluation tool aimed at capturing clinical outcomes pre and post assignment of unit-based CNLs"
Miller 2008	Clinical Nurse Leader -- A New Nursing Role	Implementation/ Case study report	"I was asked to work in this pilot program and implement the CNL role" (continues with author-narrated journey as CNL)
Poulin-Tabor et al. 2008	Pioneering A New Role: The Beginning, Current Practice And Future Of The Clinical Nurse Leader	Implementation/ Case study report	"To discuss the development of a new nursing roe in response to the health care crisis in the united states"
Sherman et al. 2008	Developing The Clinical Nurse Leader Role In The Twelve Bed Hospital Model: An Education/Service Partnership	Implementation/ Case study report	"In this article we provide an overview of the CNL project. We examine why one practice partner with a well-developed nursing role similar to the CNL role in an innovative model of patient care delivery, the 12-bed hospital model, chose to become involved in the project. We also discuss how the model is providing guidance for other partners as a best practice for nursing care delivery redesign to incorporate the CNL role"

Author(s)	Title	Report Category	Stated Aims of Report
Sherman 2008	Factors Influencing Organizational Participation In The Clinical Nurse Leader Project	Qualitative/ Mixed methods study	"The purpose of this article is to present the findings of a qualitative research study conducted during 2005-6, exploring the driving factors that influenced decisions of CNOs to promote the involvement of their organizations in the CNL project"
Stanley et al. 2008	The Clinical Nurse Leader: A Catalyst For Improving Quality And Patient Safety	Implementation/ Case study report	"This paper describes evaluation efforts to date in three different practice sites", "naturalistic approach is a description of what exists, how people feel, perceptions and understandings. The case study is the most appropriate form for reporting the results of a naturalistic, summative evaluation such as this"
Stanton 2008	CNL Practice Across Diverse Care Settings	Implementation/ Case study report	Describes "setting the stage for innovative partnerships" and preliminary outcomes of CNL pilots across inpatient and outpatient settings"
Wiggins 2008	The Partnership Care Delivery Model: An Examination Of The Core Concept And The Need For A New Model Of Care	Implementation/ Case study report	"This article describes the foundation of an emerging care delivery model based on partnership"
Fitzpatrick & Kazer 2008	The Doctor Of Nursing Practice And Clinical Nurse Leader (Chapter 12, Voices From The Field: Clinical Nurse Leaders Speak)	Implementation/ Case study report	"The following excerpts detail the experiences of these new graduates, illustrating the CNL possibilities for promoting outcomes for the nursing profession and health care system, as well as positive outcomes for patients"
Hix et al. 2009	Clinical Nurse Leader Impact On Clinical Microsystems Outcomes	Implementation/ Case study report	"To examine the impact of CNLs at the Department of veterans affairs Tennessee valley healthcare system (TVHS), 5 diverse microsystems were evaluated before and after CNL implementation using electronic scheduling system reports, patient medical records, and QI reports"
Ott et al. 2009	The Clinical Nurse Leader (SM): Impact On Practice Outcomes In The Veterans Health Administration	Implementation/ Case study report	"In this article, the introduction of the CNL role in multi-site health care system, development of CNL evaluation process, and analysis of impact data are described"

Author(s)	Title	Report Category	Stated Aims of Report
Sherman et al. 2009	The Role Of The Clinical Nurse Leader In Promoting A Healthy Work Environment At The Unit Level	Implementation/ Case study report	"Overview of the CNL role and case study illustrating how 1 medical center is utilizing the CNL role to promote a healthy work environment at the unit level"
AHRQ Innovation Exchange 2010	Clinical Nurse Leader As Quality Champion: A Dialogue About An Effective Nursing Innovation	Implementation/ Case study report	"Clinical nurse leader as quality champion: A dialogue about an effective nursing innovation"
Bombard et al. 2010	Answering The Question, "What Is A Clinical Nurse Leader?: Transition Experience Of Four Direct-Entry Master's Students	Qualitative/ Mixed methods study	"This article describes an action research project analyzing the transition of direct-entry master's students to the role of CNL."
Harris & Roussel 2010	Initiating And Sustaining The Clinical Nurse Leader Role	Implementation/ Case study report	"In this chapter, a nurse executive chronicles an experience with implementing new care delivery models focused around the concept of the CNL"
Hilton 2010	Implementing Clinical Nurse Leader Role Improves Core Measure Performance, Patient And Physician Satisfaction And Reduces Nurse Turnover	Implementation/ Case study report	Service delivery innovation profile explaining what they did, did it work, how they did it, and adoption considerations
Klich-Heartt 2012	Entry-Level Clinical Nurse Leader: Evaluation Of Practice	Quantitative study	"Evaluate entry-level master's CNL graduates with the CNL end-of-program competencies to determine whether these graduates are able to have positive effects on patient, systems and leadership outcomes in clinical settings"

Author(s)	Title	Report Category	Stated Aims of Report
Kohler 2011	Exploring The Relationships Among Work-Related Stress, Quality Of Life, Job Satisfaction, And Anticipated Turnover On Musing Units With Clinical Nurse Leaders	Qualitative/mixed methods study	"The purpose of this study was to explore the relationship of the Clinical Nurse Leader (CNL) (AACN) role with the variables of work related stress, quality of life, job satisfaction and anticipated turnover of acute care nurses. In addition, this research examined the interrelationships among work-related stress, quality of life, job satisfaction, and anticipated turnover"
Lammon et al. 2010	Innovative Partnerships: The Clinical Nurse Leader Role In Diverse Clinical Settings	Implementation/ Case study report	"This article reports the strategies used and the process made at CCN in the development of innovative partnerships and the successful integration of the CNL role across diverse clinical settings"
Sherman 2010	Lessons In Innovation: Role Transition Experiences Of Clinical Nurse Leaders	Qualitative/ Mixed methods study	"The purpose of this study was to describe the role transition experiences of 71 CNLs as they pioneered the role in practice settings"
Sorbello 2010	Clinical Nurse Leader Stories: A Phenomenological Study About The Meaning Of Leadership At The Bedside	Qualitative/ Mixed methods study	"A phenomenological investigation examined the lived experiences of 10 CNLs to gain understanding about the meaning of leadership at the point of care and to discover the unique expressions of living caring the CNLs experience as they embark upon this new role in the acute care hospital setting"
Thomas & Landstrom 2010	Creating Shared Meaning Through Partnerships: Intersecting CNL Curriculum With Operational Needs	Implementation/ Case study report	"Examine how the framework for practice-education partnerships supports shared learning, explore how organizational needs can be addressed through CNL course work and assignments, specify how their CNL role supports organizational change and results in quantifiable outcomes"
Bender et al. 2011	Clinical Nurse Leader: Leading Transformation: Implementing The Clinical Nurse Leader Role	Implementation/ Case study report	"This article describes how a PCU redesigned its care delivery system to implement the CNL role, using Kotter's 8 change phases model as a guide"

Author(s)	Title	Report Category	Stated Aims of Report
CNC 2011	Clinical Nurse Leader Job Analysis Report	Qualitative/ Mixed methods study	"A full scale job analysis was conducted to support the relevance validity and legal defensibility of the CNL examination by establishing a link between CNL competencies and examination content"
Guillary 2012	A Study To Examine The Relationships Between The Leadership Style Of Nurse Managers (Nms) And The Leadership Style Of Clinical Nurse Leaders (Cnls) And The Leadership Behaviors Of Their Staff Nurses (Sns)	Quantitative study	"This study examined the relationships between leadership styles of nurse managers and the leadership style and/or behaviors adopted by CNLs and their staff nurses"
Stanton et al. 2011	The Clinical Nurse Leader: A Comparative Study Of The American Association Of Colleges Of Nursing Vision To Role Implementation	Qualitative/ Mixed methods study	"The purposes of this exploratory study were to examine the CNL role as it is presently implemented and to explore whether the educational preparation of the CNL complements the implementation of the CNL role in the hospital, home health, and public health arenas"
Bender et al. 2013	Interdisciplinary Collaboration: The Role Of The Clinical Nurse Leader	Implementation/ Case study report	"To explore the feasibility and acceptability of a clinical nurse leader (CNL) role to improve interdisciplinary collaboration (IC) within a fragmented acute-care microsystem"
Bender et al. 2012	Clinical Nurse Leader Impact On Microsystem Care Quality	Quantitative study	"Assess the impact of CNL integration into an acute care microsystem on care quality as measured by patient satisfaction with care"
Moore & Leahy 2012	Implementing The New Clinical Nurse Leader Role While Gleaning Insights From The Past	Qualitative/ Mixed methods study	"Explore the experiences of CNLs as they launched the CNL role in the practice setting"

Author(s)	Title	Report Category	Stated Aims of Report
Sheets et al. 2012	CNLs Make A Difference	Implementation/ Case study report	"This article describes the role of CNLs in one facility and the positive results they've achieved. Start by looking at their history at Hunterdon Medical Center (HMC) in Flemington, N.J., a 178-bed community hospital"
Wilson et al. 2012	Evolution Of An Innovative Role: The Clinical Nurse Leader	Implementation/ Case study report	"This study describes the evolution of the CNL role and its utility in a tertiary care and community hospital"

Table 4-3. Title, Category and Source of Abstracts Included in the Literature

Abstract Title	Abstract Category	Year	Abstract Source
A Model for Leadership Development: Master of Science in Advanced Care Management & Leadership at Kennesaw State University	Educational methods	2005	STTI Biennial Convention
Complexity in Nursing Education: A Model Curriculum	Educational methods	2005	STTI Biennial Convention
Teaching Clinical Nurse Leader (CNL) Students about Evidence-Based Practice Using Adult Learning Principles	Educational methods	2007	STTI biennial convention
Leadership Innovations in Practice: Implementing the Clinical Nurse Leader (CNL) Role	Implementation/ outcomes	2007	STTI Biennial Convention
Quality-Based Strategic Planning in a New Master's Entry Clinical Nurse Leader Program	Educational methods	2007	STTI Biennial Convention
Leveraging a VA Partnership to Craft a Clinical Nurse Leader (CNL) Program	Implementation/ outcomes	2007	STTI Biennial Convention
Micro-system Analysis: A Blueprint for Transdisciplinary Clinical Leadership	Implementation/ outcomes	2007	STTI International Nursing Research Congress
Clinical Nurse Leader: Innovation in Nursing Education and Practice	immersion methods	2008	ANCC - Magnet Conference
Lessons Learned in Innovation: Role Transition Experiences of Clinical Nurse Leaders SM	analysis of CNL experience	2009	USF - Annual Florida Magnet Nursing Research Conference
The Clinical Nurse Leader as a Community and Healthcare Advocate for Our Aging Population	QI	2009	ANCC -Magnet Conference
Small Focus Gets Big Results	Implementation/ outcomes	2009	ANCC - Magnet Conference
Facilitating Innovative Nursing Practices,	Implementation/	2009	ANCC -Magnet

Abstract Title	Abstract Category	Year	Abstract Source
Improved Outcomes, and Cost Savings with Clinical Nurse Leaders	outcomes		Conference
Transforming Care at the Bedside through Transformational Leadership	Implementation/ outcomes	2009	ANCC – Magnet Conference
Evaluation of a New Pre-CNL Role in a Tertiary Medical Center	Implementation/ outcomes	2009	USF - Annual Florida Magnet Nursing Research Conference
A Case Study/Discussion Methodology Orientation Program Successfully Launches New nurses into professional practice	QI	2010	AACN CNL summit
A CNL Designed Tool to Help Reduce the Duration of Indwelling Urinary Catheterization Being There	QI	2010	AACN CNL summit
Clinical Nurse Leader Traineeship Successes and Lessons Learned	analysis of CNL experience	2010	AACN CNL summit
CNL: Role in Acute Psychiatric Transformation to Recovery Focus	Implementation/ outcomes	2010	AACN CNL summit
CNLs Perceptions About the Role and Implications for Sustainability	QI	2010	AACN CNL summit
Collaborating With an External Partner to Launch an Online CNL MSN Program	analysis of CNL experience	2010	AACN CNL summit
Creating the CNL Preceptor Role	Educational methods	2010	AACN CNL summit
Emotional Comfort: Patient Healing is Both Physical and Emotional	Immersion methods	2010	AACN CNL summit
How Do My Genes Look? CNL Students Practice Patient-Centered Genetics Care	QI	2010	AACN CNL summit
Incorporating the Microsystem Assessment into a Model C CNL Program	Educational methods	2010	AACN CNL summit
Incorporation of the Clinical Nurse Leader in Public Health Practice	Educational methods	2010	AACN CNL summit
Innovative Solutions to Assist Patients with Success Outside of the Hospital	QI	2010	AACN CNL summit
Interventions for the Prevention of Central Venous Catheter Infections in a Surgical Intensive Care Unit	QI	2010	AACN CNL summit
Making the Case for Evaluation of CNL Practice	QI	2010	AACN CNL summit
Microsystem Outcomes of a Dedicated Education Unit for CNLS	analysis of CNL experience	2010	AACN CNL summit
Outcomes Focused Residency Experience: A Case Study	Immersion methods	2010	AACN CNL summit
Positive Outcomes Since Implementing the CNL Role at Thornton IMU	Immersion methods	2010	AACN CNL summit
Quantifiable Outcomes of the CNL	Implementation/ outcomes	2010	AACN CNL summit
Selected CNL Student Immersion Projects	Implementation/ outcomes	2010	AACN CNL summit
	Immersion	2010	AACN CNL summit

Abstract Title	Abstract Category	Year	Abstract Source
	methods		
The Clinical Nurse Leader Approaching Illness Prevention by Reaching into the Community	QI	2010	AACN CNL summit
The Clinical Nurse Leader as Preceptor: Academic-Clinical-Community Partnerships in Sustaining Quality Immersion Experiences	Immersion methods	2010	AACN CNL summit
The CNL Role Impacting the Geriatric Evaluation and Management Clinic	QI	2010	AACN CNL summit
The Role of the Clinical Nurse Leader in the Identification and Root Cause Analysis of Medication Errors: Multiple Methods, Similar Goals	Educational methods	2010	AACN CNL summit
Top Ten Reasons to Take Your CNL Program Online	Educational methods	2010	AACN CNL summit
Transformational Leadership at the Microsystem Level	Immersion methods	2010	AACN CNL summit
Using a Team Approach and Innovative Methods to Develop a New CNL Program With multiple partners	Educational methods	2010	AACN CNL summit
The Journey of a CNL Educator: First Year Experience	Educational methods	2010	AACN CNL summit
One Minute Messaging: The CNL Elevator Speech	Educational methods	2010	AACN CNL summit
Alternative Strategies to Support the CNL Student Role in a Noneducation-Practice Partnership Model	Immersion methods	2010	AACN CNL summit
Evaluating PDA Use among Staff Nurses on a Dedicated Education Unit for CNL Education and Practice	QI	2010	AACN CNL summit
Prevention of Post-OP Pneumonia Utilizing Pre-Operative Oral Care	QI	2010	AACN CNL summit
CNL Impact on Patients at Risk for Falls	QI	2010	AACN CNL summit
Nosocomial Ventriculitis: Utilizing the Eight P'S for Prevention	QI	2010	AACN CNL summit
Take the Pressure off Pressure Ulcers	QI	2010	AACN CNL summit
Application of the CNL Role in the Outpatient Clinical Setting	How CNL can be utilized	2010	AACN CNL summit
NICU Nursing Research Journal Club: Bringing the Evidence to bedside practice	QI	2010	AACN CNL summit
An Exploratory Study of Emotional Intelligence and Clinical Nurses	quantitative/survey study	2010	AACN CNL summit
Nurse Rounding in an Emergency Department Observation Unit: Implementing an Evidence-Based Inpatient Practice into an Outpatient Service	QI	2010	AACN CNL summit
Project Assert: A Model for Professional Collaboration	How CNL can be utilized	2010	AACN CNL summit
From Start to Finish: The CNL Job Description Roundtable	How CNL can be utilized	2010	AACN CNL summit

Abstract Title	Abstract Category	Year	Abstract Source
Model C Graduates: Clinical Expert- NO, Clinical Nurse Leader- YES!	analysis of CNL experience	2010	AACN CNL summit
Electronic Documents the Smartworks Way	How CNL can be utilized	2010	AACN CNL summit
CNL Stewardship of Environment with Proper Disposal of Pharmaceuticals	QI	2010	AACN CNL summit
Implementation of a New Nursing Role	Implementation/ outcomes	2010	AACN CNL summit
Using a Scoring System to Activate Urgent Response System	QI	2010	AACN CNL summit
Therapeutic Group Proposal: A CNL Practice Innovation	Educational methods	2010	AACN CNL summit
Aquapheresis Therapy in an Outpatient Setting: A Case Study	QI	2010	AACN CNL summit
The CNL'S Role in Empowering Staff to Improve Outcomes	QI	2010	AACN CNL summit
Clostridium Difficile: A CNLs Initiative to Improve Flow, Patient Outcomes, and the Environment for the Patient Being Ruled Out for Clostridium Difficile	QI	2010	AACN CNL summit
Implementation of Bedside Hand-Off in a Labor & Delivery Unit Utilizing a Standardized tool	QI	2010	AACN CNL summit
Developing a Neutropenia Protocol	QI	2010	AACN CNL summit
Enhancing Heart Failure Core Measure Performance through Concurrent Review	QI	2010	AACN CNL summit
Collaboration: Implementation of the CNL Role across a Hospital System	Implementation/ outcomes	2010	AACN CNL summit
Improving Patient-Centered Communication between Nursing Staff and Care Partners at Change of Shift	QI	2010	AACN CNL summit
How a CNL Empowers Staff RNS to Control Catheter Associated Urinary Tract Infection Rates via Improvements in Clinical Monitors and Nursing Documentation	QI	2010	AACN CNL summit
A CNL Initiative: A Mentoring Strategy Using a Care Group Approach J	QI	2010	AACN CNL summit
Clinical Nurse Leaders: Qualitative Outcomes and Innovations	Implementation/ outcomes	2010	ANCC – Magnet Conference
“Riding Out the Storm”: The Clinical Nurse Leader’s Impact on Medication Reconciliation	QI	2011	AACN CNL summit
A CNL Effort to Decrease Hyperglycemic Episodes on an Acute Inpatient Medicine Unit	QI	2011	AACN CNL summit
A Microsystems Improvement Collaborative: Action Learning for Academics and Clinical partners	Educational methods	2011	AACN CNL summit
An Electronic Portfolio: Tracking CNL End of Program Competencies	Educational methods	2011	AACN CNL summit
An Evidence-based Approach to Weight Control for Latino Women with Type 2 Diabetes	QI	2011	AACN CNL summit

Abstract Title	Abstract Category	Year	Abstract Source
Assessing Interest in an Online CNL Education Program Using a Marketing Survey Strategy	Educational methods	2011	AACN CNL summit
Building, Implementing & Sustaining an Onsite CNL Education Program	Educational methods	2011	AACN CNL summit
Centralized Program Oversight as Strategy for Initial Implementation of the Clinical Nurse Leader Role in an Integrated Health Care System	Implementation/ outcomes	2011	AACN CNL summit
Changing Unit Culture through CNL Leadership	Implementation/ outcomes	2011	AACN CNL summit
Clinical Nurse Leader Role in Development and Implementation of Rapid Response Teams	QI	2011	AACN CNL summit
Clinical Nurse Leader SM Stories: A Phenomenological Study About the Meaning of Leadership at the Bedside	Analysis of CNL experience	2011	AACN CNL summit
CNL Created New Model of Care Produced \$500,000 Revenue in Three Months and Increased Staff Satisfaction and Retention	QI	2011	AACN CNL summit
Comfort Care Protocol	QI	2011	AACN CNL summit
Giving Back: The Full Circle of the CNL	Implementation/ outcomes	2011	AACN CNL summit
I Am a CNL: Now What?	Implementation/ outcomes	2011	AACN CNL summit
Implementation of Patient Centered Care Teams: Creating a System of Excellence	QI	2011	AACN CNL summit
Improving Fall Outcomes: A CNL'S Patient Safety Collaborative Initiative	QI	2011	AACN CNL summit
Improving Patient Satisfaction in the Emergency Department with an Innovative Hourly Rounds Model and Technology Utilization	QI	2011	AACN CNL summit
LIGHTS! CAMERA! ACTION! Putting Nursing Theory into Practice	Educational methods	2011	AACN CNL summit
Onboarding CNLs Organization Preparation for CNL Role Enactment	Immersion methods	2011	AACN CNL summit
Partnerships in Leading Change: The CNL Cohort Experience	Educational methods	2011	AACN CNL summit
Preventing Maternal Death	QI	2011	AACN CNL summit
Promotion Of The CNL Skill Set In The Current Health Care Environment	How CNL can be utilized	2011	AACN CNL summit
Quality Improvement As A Way Of Life: How System Level Support Of Cnls Brings Organizational Learning And Sustained Practice Change	Immersion methods	2011	AACN CNL summit
Rn Attending	Implementation/ outcomes	2011	AACN CNL summit
Scholarly Writing In The CNL Curriculum: Meeting The Communication Competency	Educational methods	2011	AACN CNL summit
Somewhere Over The Rainbow – Integrating Novice Nurses Into The CNL Role	Implementation/ outcomes	2011	AACN CNL summit
Teach 3 Model: A Cnl Design	QI	2011	AACN CNL summit

Abstract Title	Abstract Category	Year	Abstract Source
Team Building To Grow Your Own CNL Faculty: Pitfalls And Wins On The Frontlines	Implementation/ outcomes	2011	AACN CNL summit
The Mother/Baby Reunion Project	QI	2011	AACN CNL summit
The Nurse Manager And The Clinical Nurse Leader: A Partnership In Progress	Implementation/ outcomes	2011	AACN CNL summit
The PANDA Project: Improving The Pediatric Venipuncture Experience	QI	2011	AACN CNL summit
The Process To Achieve Interprofessional Collaboration: An Essential Component Of A Funded Performance Improvement Project	QI	2011	AACN CNL summit
The Southern Arizona VA Health Care System Vision For Excellence: The Clinical Nurse Leader Journey	Implementation/ outcomes	2011	AACN CNL summit
To Tele Or Not To Tele	QI	2011	AACN CNL summit
Tying The CNL Role To Strategic Board Initiatives: Transforming Nurse Practice At A System Level	Implementation/ outcomes	2011	AACN CNL summit
The Clinical Leadership Program: Supporting Cnl Career Transitions At The James J. Peters Va Medical Center	Implementation/ outcomes	2011	AACN CNL summit
Implementation Of Bedside Shift Report: A Patient Safety Initiative	QI	2011	AACN CNL summit
The Cnl Difference: A Collaborative Effort To Improve Patient Satisfaction	Implementation/ outcomes	2011	AACN CNL summit
Cnls Leverage Resources: A Community Collaborative For Quality Outcomes	Implementation/ outcomes	2011	AACN CNL summit
Improving Care Delivery Through Effective Implementation & Evaluation Of The Clinical Nurse Leader Role	Implementation/ outcomes	2011	AACN CNL summit
End-Of-Program Competencies And Clinical Experiences For The Cnl At Jesse Brown Va Medical Center	Educational methods	2011	AACN CNL summit
An Innovative Strategy In Pursuit Of The Clinical Nurse Leader Role	Implementation/ outcomes	2011	AACN CNL summit
The Bedside Pediatric Early Warning System: A Clinical Nurse Leader's Journey To Best Practice For Evaluating Patient Acuity	QI	2011	AACN CNL summit
Integrating Interprofessional Experiences Into A CNL Curriculum	Educational methods	2011	AACN CNL summit
Continuous Renal Replacement Therapy For Acute Renal Failure In The Critically Ill	QI	2011	AACN CNL summit
The Minneapolis Cnl Experience	Implementation/ outcomes	2011	AACN CNL summit
Decreasing Nausea In Bariatric Post-Surgical Patients: A Clinical Nurse Leader And Community Hospital Interdisciplinary Team	QI	2011	AACN CNL summit
Dedicated Education Unit Patient Outcomes And Experiences	Immersion methods	2011	AACN CNL summit
Clinical Nurse Leader As Coordinator Of Multidisciplinary Rounds	Implementation/ outcomes	2011	AACN CNL summit

Abstract Title	Abstract Category	Year	Abstract Source
Prevention Of Catheter Associated Urinary Tract Infections	QI	2011	AACN CNL summit
A Day In The Life Of A Cnl-Patient Care Integrator	Implementation/ outcomes	2011	AACN CNL summit
Quality Pain Management	QI	2011	AACN CNL summit
The Role Of The Clinical Nurse Leader In The Reduction Of Nosocomial Infections	QI	2011	AACN CNL summit
Teaching Interdisciplinary Team Skills To Cnl Students Using An Interactive Symposium	Educational methods	2011	AACN CNL summit
Collegial Collaboration To Enhance The Impact Of The Clinical Nurse Leader	Educational methods	2011	AACN CNL summit
Implementing The Cnl Role In Diverse Clinical Settings	Immersion methods	2011	AACN CNL summit
Clinical Nurse Leader Impact On Documentation Of Prn Pain Medication Effectiveness	QI	2011	AACN CNL summit
A Cnl Initiative: Improving Stroke Care Using An Interdisciplinary Model Of Care Delivery	QI	2011	AACN CNL summit
Clinical Nurse Leader And Infection Prevention Collaboration Leading To Decreased Hospital Acquired Vancomycin Resistant Enterococcus (HA VRE) On A Medical-Specialty Unit	QI	2011	AACN CNL summit
Evaluation The Entry Level Cnl In Practice	Quantitative/sur vey study	2011	AACN CNL summit
Pateint Education To Prevent Falls In A Progressive Cardiology Unit	QI	2011	AACN CNL summit
Improving Urinary Catheter Discharge Education	QI	2011	AACN CNL summit
INCREASING NURSE CONFIDENCE THROUGH NEROLOGIC ASSESSMENT Education	QI	2011	AACN CNL summit
Evidence-Based Nurse Group Shift Report	QI	2011	AACN CNL summit
Evidence Based Practice Change To Decrease Surgical Site Infection	QI	2011	AACN CNL summit
CHALLENGES OF IMPLEMENTING THE CNL ROLE IN AN ACADEMIC MEDICAL Center	Implementation/ outcomes	2011	AACN CNL summit
Implementation Of The Clinical Nurse Leader Role Combined With Clinical Nurse Specialist Collaboration: An Innovation Designed To Facilitate Nursing Practice And Heighten Patient Care	Implementation/ outcomes	2011	AACN CNL summit
The Power Of Precepting And The Magic Of Mentoring: The Secret Roots Of Precepting And Mentoring	Educational methods	2011	AACN CNL summit
DEVELOPMENT OF THE CNL: TRANSITION OF MODEL C TO PROFESSIONAL Practice	Implementation/ outcomes	2011	AACN CNL summit
Implementing Skin Care Rounds In Critical Care	QI	2011	AACN CNL summit
Steps To Developing A Work Site Cnl Program	Educational methods	2011	AACN CNL summit
CNL-Led Collaboration And Innovation	Implementation/ outcomes	2011	AACN CNL summit

Abstract Title	Abstract Category	Year	Abstract Source
Implementing Standardized Nursing Education And Documentation For Patient Swallow Screens	QI	2011	AACN CNL summit
A Multidimensional Approach To Curricular Mapping: Clinical Nurse Leader Education Model C Program	Educational methods	2011	AACN CNL summit
One Role, Many Expectations: Successful CNL Student Experiences In Diverse Settings	Immersion methods	2011	AACN CNL summit
Validation Of Role Utility For The New Cnl Model	Implementation/ outcomes	2011	AACN CNL summit
Evidence Practice Change Project: Utilizing Volunteers In A Clinical Microsystem	QI	2011	AACN CNL summit
Connecting The Dots- Care Coordination Of The Mental Health Patient With A Community Partner	QI	2011	AACN CNL summit
On Boarding The Clinical Nurse Leader	Implementation/ outcomes	2011	AACN CNL summit
Videoconferencing Academic Cnl Program And Solutions For Marketing	Educational methods	2011	AACN CNL summit
Double Check: Medication Safety In The Pediatric Intensive Care Unit	QI	2011	AACN CNL summit
Implementation Of A Fast Track Bowel Program And The Impact On Length Of Stay	QI	2011	AACN CNL summit
Monitored Hourly Rounding	QI	2011	AACN CNL summit
Implementing Evidence Based Practice: Using A Falls Typology To Prescribe Nursing Interventions That Prevent Falls	QI	2011	AACN CNL summit
Improving Prn Effectiveness Documentation	QI	2011	AACN CNL summit
Evaluation Of The Use Of Health 2.0 Tools: Implications For Cnl Role Development	How CNL can be utilized	2011	AACN CNL summit
Reducing The Percentage Of Heart Failure Patients Readmitted To The Hospital Within 30 Days Of Discharge: A System Redesign Project	QI	2011	AACN CNL summit
Clinical Nurse Leader Student Projects: Step-By-Step Success	Immersion methods	2011	AACN CNL summit
Bridging the Gap	Implementation/ outcomes	2011	STTI biennial convention
Partnering for Success: Clinical Nurse Leaders Initiate and Sustain Unit Level Practice Changes in Quality and Safety	Immersion methods	2011	STTI Biennial Convention
Transforming Nursing Practice at a System Level: Making the Business Case through Collaboration and Key Messages for Implementation of the Clinical Nurse Leader Role in 6 Michigan Hospitals	Implementation/ outcomes	2011	STTI Biennial Convention
Adaptation of Marks-Maran and Rose's reflective cycle in CNL student	Educational methods	2012	AACN CNL summit
Journaling to demonstrate achievement of CNL core competencies			
A Coronary Artery Bypass Grafting (CABG) and/or Valve Surgery Interdisciplinary Clinical Pathway; Achieving Improved Patient Outcomes through a	QI	2012	AACN CNL summit

Abstract Title	Abstract Category	Year	Abstract Source
Highly Functional Team			
A New Approach to the Prevention of Central Line Associated Bloodstream Infections in Pediatric Intensive Care Unit	QI	2012	AACN CNL summit
Bringing Evidence-Based Practice on Delirium to a CLC unit	QI	2012	AACN CNL summit
C-RISE: An Evidence Based Approach to Diabetes Compliance in Adolescence	QI	2012	AACN CNL summit
Changing Practice of Medication Documentation: A CNL approach to motivating accountability	QI	2012	AACN CNL summit
Clinical Nurse Leader (CNL) and a multi-pronged approach to improving care for the high risk, low volume patient	QI	2012	AACN CNL summit
Clinical Nurse Leader Impact On Methicillin-Resistant Staphylococcus Aureus Infection rates	QI	2012	AACN CNL summit
Clinical Nurse Leader: Implementation of the role and the impact on nursing sensitive outcomes	Implementation/ outcomes	2012	AACN CNL summit
Clinical Nurse Leader: Implements "The Daily Plan" at VA Connecticut to Improve Veteran Safety and Team Communication	QI	2012	AACN CNL summit
Clinical Nurse Leader: Role development, Implementation and Expansion	Implementation/ outcomes	2012	AACN CNL summit
Clinical Nurse Leader: The Strategic Advantage in Transforming Nursing Practice	Implementation/ outcomes	2012	AACN CNL summit
CNL Outcomes in the Pediatric Inpatient Unit	Implementation/ outcomes	2012	AACN CNL summit
CNL Partnership for Improvement: Rapid Recovery Ambulation Program	QI	2012	AACN CNL summit
CNL Student Projects: From Assessment Through Dissemination	Immersion methods	2012	AACN CNL summit
Defining the CNL Role in the Emergency Department: The Nurse Manager and CNL Dyad	Implementation/ outcomes	2012	AACN CNL summit
Enhancing Prelicensure CNL Problem Solving Skills: Use of the Fishbone Analysis	Educational methods	2012	AACN CNL summit
Evolution into Practice: A CNL Residency Program	Immersion methods	2012	AACN CNL summit
Evolution of the Clinical Nurse Leader: Inauguration to Influence	Implementation/ outcomes	2012	AACN CNL summit
Facilitating Model C CNL Students Transition to Practice through a Better Understanding of the CNL Role	Educational methods	2012	AACN CNL summit
How Does an Organization Sustain the CNL Role? ... Sustain the CNL	analysis of CNL experience	2012	AACN CNL summit
Implementation of the CNL Role: An Innovative Approach	Implementation/ outcomes	2012	AACN CNL summit
Improving Incentive Spirometry Performance among Children with Sickle Cell Disease in a Pediatric In-Patient Setting	QI	2012	AACN CNL summit
Improving MRSA Nasal Screens	QI	2012	AACN CNL summit

Abstract Title	Abstract Category	Year	Abstract Source
Improving Outcomes through Discharge Phone Calls	QI	2012	AACN CNL summit
Interdisciplinary Collaboration: the Role of the CNL	Implementation/ outcomes	2012	AACN CNL summit
Leveraging Technology: Development and application of electronic tools to efficaciously manage care and decrease fragmentation	QI	2012	AACN CNL summit
Maximizing the Clinical Immersion Experience and Project Development: Student, Preceptor, and Faculty Collaboration	Immersion methods	2012	AACN CNL summit
Navigating the Model C Curriculum: Innovative Strategies for Individuals from Disadvantaged Backgrounds	Educational methods	2012	AACN CNL summit
Partnering: Ensuring a successful academic partnership	Educational methods	2012	AACN CNL summit
Standing Up the VA Clinical Nurse Leader Implementation & Evaluation Service	How CNL can be utilized	2012	AACN CNL summit
Starting a Model C Program: Lessons Learned	Educational methods	2012	AACN CNL summit
The Diabetic Post Hospital Telephonic Health Follow-up Pilot Study	QI	2012	AACN CNL summit
The Impact of the Clinical Nurse Leader Role in Improving the Number Deaths Reported to the Facility's Organ and Tissue Procurement Agency	QI	2012	AACN CNL summit
The Impact of the Clinical Nurse Leader role on Quality Outcomes	Implementation/ outcomes	2012	AACN CNL summit
Transforming Care of the Patient by Caring for Our Own: A CNL Educational Initiative for Reducing Stress in New Perioperative Nurses	QI	2012	AACN CNL summit
Under Pressure: Decreasing Device-Related Pressure Ulcers in the ICU	QI	2012	AACN CNL summit
Using Data to Determine Patient Rounding Strategies: A Unique Fall Prevention Program	QI	2012	AACN CNL summit
Using Environmental Scanning as a Strategic Approach to Improve Outcomes in Complex Health Care Systems	How CNL can be utilized	2012	AACN CNL summit
Using Narratives to Illustrate Philosophy of Nursing Practice	Educational methods	2012	AACN CNL summit
Using WIKIS to facilitate group work on unfolding case studies for CNL students in an Accelerated Masters CNL program.	Educational methods	2012	AACN CNL summit
Innovation: Clinical Nurse Leader facilitates clinical implementation of the NICHE Program (Nurses Improving Care for Healthsystem Elders)	QI	2012	AACN CNL summit
CNL Partnership for Improvement: Educational Poster Template	QI	2012	AACN CNL summit
The Clinical Nurse Leader: Shaping the New Health Care Environment	How CNL can be utilized	2012	AACN CNL summit
CNL's Practice: Begins with a story of the Clinical	QI	2012	AACN CNL summit

Abstract Title	Abstract Category	Year	Abstract Source
Microsystem			
Improving Fall Outcomes: A CNL's Collaborative Safety Initiative for In-Patient geriatrics	QI	2012	AACN CNL summit
The CNL Pain Plan Initiative: Developing an Educational Plan for Identifying and Managing Pain on a NICHE Senior Adult Medical and Intermediate Acute Care Unit	QI	2012	AACN CNL summit
Preventing Hospital Acquired Pressure Ulcers in Hemodialysis Patients: A Nurse-led Quality Improvement Project	QI	2012	AACN CNL summit
The Evolution of a Nurse-Driven Mobility Initiative on a Certified Stroke Unit: Pioneering the CNL Role in a Magnet Recognized Medical Center	QI	2012	AACN CNL summit
Prevention of Readmission within 30 Days among the Chronic Heart Failure Population:	QI	2012	AACN CNL summit
Implementation of the Clinical Nurse Leader Role Unit-Based Falls Team Fosters Awareness and Prevention of Inpatient Falls	QI	2012	AACN CNL summit
Hospital to Home: Patient as Partner in Delivering High Quality Transitional Care for Older Adults	QI	2012	AACN CNL summit
A New Practice Guideline Regarding Mobility of Patients with Left Atrial Catheters (LAC)	QI	2012	AACN CNL summit
CNL Impact on Intermediate Training for the Bedside Nurse	QI	2012	AACN CNL summit
The Structured CNL Practicum	Immersion methods	2012	AACN CNL summit
Joint Ventures for Patients and the Healthcare Team	QI	2012	AACN CNL summit
Clinical Nurse Leader: Implements "Quiet Hour" to reduce unit noise and improve patient satisfaction	QI	2012	AACN CNL summit
The CNL's Role in Initiating the Remote Medical Telemetry.	QI	2012	AACN CNL summit
Teaching Nurses An Effective Transition to Palliative and Hospice Care in an Inpatient Hospital Setting	QI	2012	AACN CNL summit
CNL Preceptor Teams	Immersion methods	2012	AACN CNL summit
Patient and Family Nurse-Physician Rounding to Improve Communication: Effects on Length of Stay and Patient Satisfaction	QI	2012	AACN CNL summit
Abstract title: Using Medication Cards to Improve Patient Satisfaction	QI	2012	AACN CNL summit
From "OW!" to "WOW!!": Improving CNL Certification Exam Pass Rates	Educational methods	2012	AACN CNL summit
Breathing Life into Dyspnea Relief: Educating Oncology Nurses about Alleviating Dyspnea During the End-of-Life	QI	2012	AACN CNL summit
The Scavenger Hunt; A Method for Enhancing	Educational	2012	AACN CNL summit

Abstract Title	Abstract Category	Year	Abstract Source
Advanced Health Assessment Skills	methods		
Hospital to Home Care Coordination	QI	2012	AACN CNL summit
Decreasing the 24 – Hour Urine Turnaround Time for Obstetric Patients	QI	2012	AACN CNL summit
The CNL Impact on Quality Care: A Decrease in CLABSI	QI	2012	AACN CNL summit
Home Safety: Fixing Fractures Before They Fall	QI	2012	AACN CNL summit
Community Based Participatory Research: An Intervention Model for Homeless Women with Children Navigating the Health Care System	QI	2012	AACN CNL summit
The Influence of Patient Care Integrator's on the Reduction of Never Events: Hospital Acquired Pressure Ulcers (HAPU)	QI	2012	AACN CNL summit
Examining Rural Point of Care Nurse Leadership	quantitative/survey study	2012	AACN CNL summit
An Innovative CNL Endeavor: Promoting Evidenced-Based Practice Through Nursing Grand Rounds	QI	2012	AACN CNL summit
Improving Oncology Patient Outcomes through Expansion of the CNL Role	Implementation/outcomes	2012	AACN CNL summit
Initiation and Development of a Fall Prevention Pilot Program: A Collaborative Effort	QI	2012	AACN CNL summit
A Clinical Nurse Leader's Effort to Improve the Perception of Patient Privacy on an Acute Inpatient Medical-Surgical Unit.	QI	2012	AACN CNL summit
Improving Outcomes Through Staff Development	Implementation/outcomes	2012	AACN CNL summit
A CNL in a non-CNL Role: Implementing a Palliative Care Bundle in an ICU to Reduce Moral Distress	QI	2012	AACN CNL summit
CNL Lead Interdisciplinary Pharmacy rounds at an acute care hospital enhance HCAHPS scores for the domains pain management and communication about medication.	QI	2012	AACN CNL summit
Restraint Free: A Quality Improvement Project	QI	2012	AACN CNL summit
Refining the Restraint Process in the PICU through Implementation of CNL Led Restraint rounds	QI	2012	AACN CNL summit
Increasing Access to Medical Care through Case Assessment and Continuity	QI	2012	AACN CNL summit
Setting the Course: Intentionalizing a Clinical Nurse Leader Hiring and Retention Strategy that impacts Quality Outcomes	Implementation/outcomes	2012	AACN CNL summit
Somewhere Over the Rainbow – Integrating Novice Nurses into the CNL Role	Implementation/outcomes	2012	AACN CNL summit
Controlling Condom Catheter-Associated Infections (CCAI) while preventing indwelling urinary Catheter Associated Urinary Tract Infections (CAUTIs)	QI	2012	AACN CNL summit

Abstract Title	Abstract Category	Year	Abstract Source
Reaching Critical Mass: CNLs transforming Health Care in a Georgia Healthcare System	Educational methods	2012	AACN CNL summit
A Voice with Courage is Measurable	QI	2012	AACN CNL summit
Using Evidence Based Practice at the Bedside to Improve Pain Management for Veterans with Cancer	QI	2012	AACN CNL summit
Formalizing the Role of the Clinical Nurse Leader in a Progressive Care Unit	Implementation/ outcomes	2012	STTI International Nursing Research Congress

Table 4-4. 'Preparation for CNL Practice' Components

Component	What it means	What it looks like	Influence on CNL Practice
Clearly understand current care delivery deficits	Suboptimal care related to dysfunctional practice patterns	Care variation, workarounds, low documentation adherence, adverse events Reactive, task based care	CNL role can be viewed as 'redundant' with continued belief in traditional models
	Discipline-centered 'silo' approach to patient care Lack of tools and support to work safely	Limited understanding of care complexity and consequences of activities across care spectrum Staff shortages, part time staff	CNL goal of care integration across disciplines can be viewed as threatening, overwhelming, too challenging
	Hierarchical leadership patterns	Culture of blame Power imbalances Professional 'jealousy'	Continued distrust of CNL practice with continued misunderstanding of collaborative leadership process and goals
Strong leadership support	Macrosystem and microsystem leadership accountability for CNL practice success Iterative process of support (Not one-off)	Set CNL priorities and objectives important to organization and microsystem Commitment to maintaining clarity and integrity of role	CNL credibility facilitated/hindered by level of macro-micro agreement of goals Ongoing support help remove barriers to CNL practice as they arise
Effective change management strategy	Multiple stakeholder involvement	Staff and departmental involvement in CNL role development	Trust in role related to level of involvement with development

Component	What it means	What it looks like	Influence on CNL Practice
		Awareness across organization of CNL	Authority to reach out across disciplines/departments influenced by organizational awareness of CNL
	Clear job description	Role clarity and distinctness from other care roles CNL consistency across microsystems	Variation creates ambiguity about CNL-specific productivity and outcomes Mixing roles (such as patient assignments, charge RN duties) limits role productivity
	Appropriate and adequate resources allocated for CNL	FTEs allotted/re-conceptualized for CNL Partnership with academia for CNL continued education and support Staff career paths includes CNL role	Financial commitment signal of support and credibility CNL mentorship reduces perceived isolation as role first introduced CNL seen as professional advancement opportunity

Table 4-5. 'Structure of CNL Practice' Components

Component	What it means	What it looks like	Influence on CNL Practice
Microsystem care delivery redesign	Evidence of current care pattern deficits drives redesign	CNL integrated into redesigned care model, NOT added on to current staffing model	Lack of care delivery redesign reinforces 'workaround' mentality
	Account for all staff activities and workflow needs	Clarity of tasks, activities and functions for all microsystem staff	Lack of clarity impedes effective care delivery: nursing, CNL, support staff etc.
	No administrative duties	Minimal time away from the patient-healthcare interface	Time away from clinical setting reduces productively
	Daily consistent microsystem presence	Daily presence allows for immersion into work patterns across disciplines and departments	Dependable presence and consistency of role builds trust and legitimacy
	No direct patient-care assignments	Easily accessible for immediate care/microsystem needs	There to provide follow-through

Component	What it means	What it looks like	Influence on CNL Practice
	Responsible for care coordination of appropriate patient load	Available for complex coordination activities Microsystems are scaled accordingly (for example: 12-bed system)	Patient load balance is critical for ability to perform adequately Can only know so many patient 'stories' at once
Competency-based CNL workflow	CNL White Paper delineated competencies	Written into job description as 'tasks' of practice	Focus on CNL competencies reduces opportunity for role overlap or confusion
	1. Care environment management: Microsystem is the unit of assessment 2. Leadership: Find and reduce practice variation	Root problems impacting patient care are identified across disciplines and departments Lead the development of guidelines, clinical checklists, information sheets, databases, clinical pathways, etc.	Facilitates meaningful changes in processes that impact care quality Facilitates culture of performance
	3. Clinical outcomes management: Data used as basis for EBP and QI implementation and maintenance	Microsystem processes based on evidence, not cultural norms	Evidence based standards reduce risk of adverse events Pathways tailored to each microsystem for optimal fit and effectiveness
Accountable for a defined set of outcomes	All CNL activities measured	Measures created based on microsystem assessment and improvement needs Track data and compliance to processes in real-time Interpret data meaningfully to show relationship between practice and results	Objective benchmark for success Tracking and disseminating outcomes provides basis to show CNL ROI Provides positive feedback for multidisciplinary staff on goal attainment
	Clinical accountability creates CNL authority for action	Don't accept status quo	Provides authority and momentum for leading change

Table 4-1. 'Core Phenomenon of CNL Practice: Continuous Leadership' Components

Component	What it means	What it looks like	Influence on Microsystem
Support staff engagement	Facilitate development of staff leadership skills	Daily mentor/role model for those not comfortable or familiar with leadership processes	Build environment where staff KNOW they have support to act
	CNL is de-facto early adopter	Facilitate action when staff recognize problem	Frontline ideas transformed into sustainable quality processes
		Real-time feedback	Support builds confidence
	Facilitate continuous, hands-on educational environment	Continuous, non-threatening clinical process monitoring Continuous reinforcement of education provided by CNS/educators	Help staff avoid getting lost in the system and feeling overwhelmed Focus on staff's dynamic practice knowledge creates a continuous empowerment feedback cycle at the bedside
Source of continuous communication and information	Use multiple domains of communication: written, spoken, nonverbal	Synthesize various pieces of information into coherent story	Communication is advocacy: for patient, for staff, for better care processes
		Cross disciplinary databases, care plans, electronic health records Formal rounding, informal huddles, interdepartmental rounds, interdisciplinary rounds	Bridges staff and interdisciplinary team's knowledge gaps By showing value of different perspectives, communication promotes involvement
	Knowledge broker	Build a resource and knowledge 'bank' through constant informal communication with everyone who touches the patient Crossing disciplines to get necessary information	Ensures all voices are heard during decision-making process
Strengthen interdisciplinary relationships	Establish a network of partners whom previously worked	Seek out the right people and say "I need you"	Creates a sense of "we're in it together" Share strengths from all areas

Component	What it means	What it looks like	Influence on Microsystem
	in isolation Relationship broker	Daily presence facilitates effective utilization of previously untapped human resources Connect people that otherwise would not have time to seek each other out	Collaboration is integral to patient safety Creates insight into how other disciplines do their work Builds confidence in other disciplines Relationships create voluntary commitment for action
Team creation	Bring people together with a common goal	CNL microsystem perspective helps identify disciplines/ departments needed on team	Teamwork emphasizes the importance and interdependency of all members
	Empower groups instead of individuals	Problems usually cross boundaries and disciplines	Creating a shared vision for change Network facilitates and sustain innovation
	Put focus on patient-centered care, (away from discipline-centered care practices)	Transparency of goals and methods to reach them Engage all disciplines to bring resources to the table	Shared vision helps reduce resistance to change
Shift focus from person to process	Re-conceptualizing care practice as structure/process /outcome rather than situation/task/result	Make visible current care patterns, which typically are shown vary significantly	Variability of care patterns adds to risk of adverse events
		CNL microsystem perspective finds the structure gaps leading to process failures Downplay task efficiency, promote projects that change care patterns	Promotes evidence based practice Good processes make 'doing the right thing' easier
		Move away from short-term fixes to finding real solutions for entrenched problems	Helps eliminate 'blame mentality' Process development can address complex care needs across system/discipline

Table 4-7. 'Outcomes of CNL practice' Components

Components	What this means	What it looks like	Influence on Practice
Improved care environment	Shared sense of power/responsibility	Staff start challenging status quo, empowered to look for ways to improve (themselves, the unit, patient care)	Collaboratively developed changes are meaningful to all Improves daily workflow Provides motivation to sustain change
	Staff perceive ownership of environment	Expectation for collaboration and teamwork becomes the standard	Greater points of contact and relationships makes change possible
	Shared sense of values	Goal of practice becomes patient care, not discipline-centered care	Shared decision making provides a richer understanding of the problem and how to fix it
	Increased sense of community, group cohesion	Positive, ongoing peer feedback	Focus becomes what is best for patient, rather than how to get tasks done quicker
	Improved staff satisfaction	Engaged staff who like being on the unit Physicians who want patients to be on CNL units	Removes the isolation that exists in current care practices
Improved patient outcomes	Improvement in patient quality indicators (falls, pressure ulcers, infections, adverse events, etc.)	Less variation in collaboratively developed care processes	Data of positive gains provides evidence of improvement that staff can see and feel motivated by
	Improved patient satisfaction with their care	Patients engaged with their care team	Bringing practice up to national mandated quality standards
Nursing brought to the forefront of healthcare delivery	Make visible the work nurses do	Data showing impact of nursing practice (CNL and staff)	Reduce chances that staff get 'lost in the system'
	Increase nursing professionalism	Increased engagement in clinical and quality projects	Staff are provided meaningful support (continuous, peer-provided) to grow as professionals
		Increased certification rates Daily presence of masters-prepared nurse at the bedside	Represents nursing excellence to multidisciplinary team

Components	What this means	What it looks like	Influence on Practice
	Nurses full partners with other disciplines	CNL creates partnership pathways staff can utilize with ease (instead of having to create individually)	Increases influence nurses have to change healthcare delivery in a way that is meaningful to them
	Nursing process basis for healthcare delivery change		Clinical perspective brought to administrative and non-nursing leadership in a way that shows strength and validity of bedside nursing practice

Table 4-8. 'Acceptance' Components

Components	What this means	What it looks like	Influence on CNL Success
Initial buy-in	A few executive/microsystem 'early adopters'	A microsystem stakeholder willing to pilot role Tacit support from executive leadership to commit some resources Single microsystem that is ready for change CNLs willing and able to pioneer new healthcare role	Starting small with committed implementation team creates short term win that establishes feasibility and outcomes possible to wider organization Strength of CNL influences speed and level of environment and practice improvements
Exposure	Constant CNL microsystem visibility	Steady relationship building with continued daily presence	Familiarity leads to trust
	Cumulative evidence of improvements	Objective outcomes that can be disseminated Subjective stories of CNL assistance and support	Provides validation Increases credibility

Components	What this means	What it looks like	Influence on CNL Success
Understanding	Tangible and intangible CNL-facilitated outcomes felt across disciplines and departments	'Tipping point' where people can't imaging microsystem without CNL	Level of CNL integration influenced by level of role understanding across disciplines and organizational hierarchy
	People 'change their mind' about CNL role	Realization that CNL is a supportive role, not hierarchical Group cohesion with CNL integration	Microsystem culture change felt, if not articulated

Table 4-9. Contribution of Abstracts and Reports to Model Domains

Author	Year	Title	Preparation for CNL Practice	Structure of CNL Practice	Continuous Leadership	Outcomes of CNL practice	Acceptance
Percent (%) of reports domain codes found in			79	79	93	86	62
Multiple	Various	Combined Abstracts (n=254)	X	X	X	X	X
Drenkard	2004	The clinical nurse leader: a response from practice	X	X	X	X	X
Bowcutt	2006	The clinical nurse leader: promoting patient-centered outcomes	X	X	X		X
Harris	2006	The clinical nurse leader role: a pilot evaluation by an early adopter					
Rusch	2006	The CNL: a gateway to better care?	X	X	X	X	X
Smith	2006	Application of the clinical nurse leader role in an acute care delivery model	X	X	X	X	X
Smith	2006	Hospital use of a modified clinical nurse leader		X	X	X	
Wiggins	2006	The partnership care delivery model	X		X	X	X
Hartranft	2007	Realizing the anticipated effects of the clinical nurse leader	X	X	X	X	X
Smith	2007	Clinical nurse leader: evolution of a revolution: Transforming the care delivery model in preparation for the clinical nurse leader	X	X	X	X	
Tachibana	2007	Clinical nurse leader: evolution of a revolution: Implementing the clinical nurse	X		X		X

Author	Year	Title	Preparation for CNL Practice	Structure of CNL Practice	Continuous Leadership	Outcomes of CNL practice	Acceptance
		leader role using the Virginia Mason Production System					
Gabuat	2008	Implementing the Clinical Nurse Leader role in a for-profit environment	X	X	X	X	X
Miller	2008	Clinical nurse leader -- a new nursing role	X	X	X	X	
Poulin- Tabor	2008	Pioneering a new role: the beginning, current practice and future of the Clinical Nurse Leader	X	X	X	X	X
Sherman	2008	Factors influencing organizational participation in the Clinical Nurse Leader project	X	X	X		X
Sherman	2008	Developing the clinical nurse leader role in the twelve bed hospital model: an education/service partnership	X	X	X	X	
Stanley	2008	The clinical nurse leader: a catalyst for improving quality and patient safety	X	X	X	X	X
Stanton	2008	CNL practice across diverse care settings	X	X	X	X	X
Wiggins	2008	The partnership care delivery model: an examination of the core concept and the need for a new model of care			X	X	
Fitzpatrick	2009	The Doctor of Nursing Practice and Clinical Nurse Leader (Chapter 12, Voices from the field: clinical nurse leaders speak)	X	X	X	X	X
Hix	2009	Clinical nurse leader impact on clinical microsystems outcomes		X	X	X	
Ott	2009	The Clinical Nurse Leader (SM): impact on practice outcomes in the Veterans Health Administration	X	X	X	X	
Sherman	2009	The role of the clinical nurse leader in promoting a healthy work environment at the unit level	X	X	X	X	X
AHRQ Innovation s	2010	Clinical Nurse Leader as Quality Champion: A Dialogue About an Effective Nursing Innovation	X	X	X	X	X
Bombard	2010	Answering the question, "what is a clinical nurse leader? transition experience of four direct-entry master's students	X			X	X
Harris	2010	Initiating and sustaining the clinical nurse leader role	X	X	X	X	
Hilton	2010	Implementing clinical nurse leader role improves core measure performance, patient and physician satisfaction and reduces nurse turnover	X		X		X

Author	Year	Title	Preparation for CNL Practice	Structure of CNL Practice	Continuous Leadership	Outcomes of CNL practice	Acceptance
Klich-Heartt	2010	Entry-level Clinical Nurse Leader: Evaluation of Practice	X	X	X	X	X
Kohler	2010	Exploring the relationships among work-related stress, quality of life, job satisfaction, and anticipated turnover on musing units with clinical nurse leaders				X	
Lammon	2010	Innovative partnerships: the clinical nurse leader role in diverse clinical settings	X	X	X	X	
Sherman	2010	Lessons in Innovation: Role Transition Experiences of Clinical Nurse Leaders	X	X	X	X	X
Sorbello	2010	Clinical Nurse Leader stories: A phenomenological study about the meaning of leadership at the bedside	X	X	X	X	X
Thomas	2010	Creating shared meaning through partnerships: intersecting CNL curriculum with operational needs	X	X	X	X	
Bender	2011	Clinical Nurse Leader: Leading Transformation: Implementing the Clinical Nurse Leader Role	X	X	X	X	X
CNC	2011	Clinical nurse leader job analysis report		X	X	X	X
Stanton	2011	The clinical nurse leader: a comparative study of the American association of colleges of nursing vision to role implementation	X	X	X		
Bender	2012	Interdisciplinary collaboration: the role of the clinical nurse leader	X	X	X	X	X
Bender	2012	Clinical nurse leader impact on Microsystem care quality		X	X	X	
Guillary	2012	A study to examine the relationships between the leadership style of nurse managers (NMs) and the Leadership style of clinical nurse leaders (CNLs) and the leadership behaviors of their staff nurses (SNs)			X	X	
Moore	2012	Implementing the new clinical nurse leader role while gleaning insights from the past	X	X	X	X	X
Sheets	2012	CNLs make a difference			X	X	
Wilson	2012	Evolution of an innovative role: the clinical nurse leader	X	X	X	X	X

CHAPTER 5 : CONCLUSIONS

The Institute of Medicine's *Future of Nursing* report (IOM, 2010) identifies the Clinical Nurse Leader (CNL) as an innovative and necessary new role for meeting higher healthcare quality standards. Since its introduction into practice in 2004, there have been numerous reports of improved outcomes associated with CNL integration into clinical microsystems. However, the CNL was ambiguously defined in terms of fundamental activities and responsibilities necessary to produce outcomes. Because of this, CNLs were struggling to define the role to themselves and to the healthcare spectrum at large.

This study advances understanding of CNL practice by synthesizing an empirically derived CNL practice model that clarifies practice components and differentiates them from existing nursing roles and practices. The model highlights the need for a systematic approach to CNL implementation, and describes how the process unfolds over time. It also describes the struggles organizations may encounter throughout the implementation journey, such as overcoming resistance to necessary care delivery redesign and the need for a period of exposure to the CNL

role for clinicians to overcome their skepticism and see firsthand the benefits of the role.

The synthesis examined CNL practice in the context in which it currently exists and has been described in the literature. It thus provides a preliminary model defining CNL practice. While the general fit and inclusiveness of the CNL practice model was confirmed by two CNL experts involved in the CNL initiative since its inception, more research is necessary to confirm and/or expand domains and components of CNL practice across a more comprehensive sample of clinical microsystems, practicing CNLs and executive leaders implementing the CNL in their organizations.

Despite these limitations, the CNL practice model can still be useful as a general guide to organizations wanting to implement the CNL, providing a roadmap of necessary steps and milestones for CNL practice success. The model also provides an evidence base for future research expanding CNL knowledge, such as identifying quantifiable measures of CNL practice and CNL-specific influence on outcomes

BIBLIOGRAPHY

Adkins, L. (2012). CNL Partnership for Improvement: Educational Poster Template.

In *AACN 2012 CNL Summit*. Retrieved from

<http://www.aacn.nche.edu/cnl/12Poster-Session.pdf>

AHRQ Innovations Exchange. (2010). *Clinical Nurse Leader as Quality Champion: A*

Dialogue About an Effective Nursing Innovation. Retrieved from

<http://innovations.ahrq.gov/webevents/index.aspx?id=1>

American Association of Colleges of Nursing. (2007). *AACN white paper on the*

education and role of the clinical nurse leader. Retrieved from

<http://aacn.nche.edu/publications/whitepapers/clinicalnurseleader07.pdf>

American Hospital Association Commission on Workforce for Hospitals and Health

Systems. (2002). *In our hands, How hospital leaders can build a thriving*

workforce. Chicago, IL: American Hospital Association.

Arsenault, J. G., Gorero, J., Hampel, J., & Peixoto, A. (2011). RN Attending. In *AACN*

2011 CNL Summit. Retrieved from <http://www.aacn.nche.edu/cnl/11Podium->

[Abstract.pdf](http://www.aacn.nche.edu/cnl/11Podium-Abstract.pdf)

- Baernholdt, M., & Cottingham, S. (2011). The Clinical Nurse Leader - new nursing role with global implications. *International Nursing Review*, 58(1), 74-78.
doi:10.1111/j.1466 7657.2010.00835.x
- Bartels, J. (2005). Educating nurses for the 21st century. *Nursing and Health Sciences*, 7(4), 221-225.
- Bartels, J. & Bednash, G. (2005). Answering the call for quality nursing care and patient safety: A new model for nursing education. *Nursing Administration Quarterly*, 29(1), 5-13.
- Begun, J., Tornabeni, J., & White, K. (2006). Opportunities for improving patient care through lateral integration: the clinical nurse leader. *Journal Of Healthcare Management*, 51(1), 19-25.
- Bender, M. (In Press). The current evidence base for the clinical nurse leader: A narrative review of the literature. *Journal of Professional Nursing*.
- 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.
doi: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.
doi:10.1097/NNR.0b013e318265a5b6
- Bender, M., Mann, L., & Olsen, J. (2011). Leading Transformation. *JONA: the Journal of Nursing Administration*, 41(7/8), 296-298.
doi:10.1097/NNA.0b013e3182250905

- Bombard, E., Chapman, K., Doyle, M., Wright, D. K., Shippee-Rice, R. V., & Kasik, D. (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. doi:10.1016/j.profnurs.2010.04.001
- Bowcutt, M., Wall, J., & Goolsby, M. (2006). The clinical nurse leader: promoting patient-centered outcomes. *Nursing Administration Quarterly*, 30(2), 156-161.
- Caiazzo, K. (2012). CNL Outcomes in the Pediatric Inpatient Unit. *AACN CNL Summit*. Retrieved from <http://www.aacn.nche.edu/cnl/12Podium-Abstract.pdf>
- Cebul, R., Rebitzer, J., & Taylor, L. (2008). *Organizational Fragmentation and Care Quality in the US Health Care System*. No. w14212. National Bureau of Economic Research.
- Charmaz, K. (2006). *Constructing grounded theory*. Thousand Oaks: Sage publications.
- Clarke, A., E. (2005). *Situational analysis*. Thousand Oaks: Sage publications
- Commission on Nurse Certification. (2011). *Clinical Nurse Leader Job Analysis Report*. Retrieved from <http://www.aacn.nche.edu/cnl/Job-Analysis-Report.pdf>
- Corbin, J., Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Los Angeles, CA: Sage publications.
- Deerhake, A. (2010). Nosocomial Ventriculitis: Utilizing The Eight P's For Prevention. *AACN CNL Summit*. Retrieved from

<http://www.aacn.nche.edu/cnl/10Poster-Session.pdf>

- Dixon-Woods, M., Cavers, D., Agarwal, S., Annandale, E., Arthur, A., Harvey, J., Hsu, R., Katbamna, S., Olsen, R., Smith, L., Riley, R., Sutton, A. J. (2006). Conducting a critical interpretive synthesis of the literature on access to healthcare by vulnerable groups. *BMC Medical Research Methodology* 6:35.
- Dixon-Woods, M., Agarwal, S., Jones, D., Young, B., & Sutton, A. (2005). Synthesising qualitative and quantitative evidence: a review of possible methods. *Journal of Health Services Research & Policy*, 10(1), 45–53B.
- Dixon-Woods, M., Agarwal, S., Young, B., Jones, D., & Sutton, A. (2004). Integrative approaches to qualitative and quantitative evidence. *London: Health Development Agency*, 181.
- Donaldson, M. S., & Mohr, J. J. (2001). *Exploring Innovation And Quality Improvement In Health Care Micro-Systems: A Cross-Case Analysis*. Retrieved from <http://www.nap.edu/catalog/10096.html>.
- Drenkard, K. (2004). The clinical nurse leader: a response from practice. *Journal Of Professional Nursing*, 20(2), 89-96.
- Drenkard, K., & Cohen, E. (2004). Professional issues. Clinical nurse leader: moving toward the future. *Journal Of Nursing Administration*, 34(6), 257-260.
- Edouard-Trevathan, E. (2010). The clinical nurse leader: a catalyst in community healthcare transformation. *Nurse Leader*, 8(2), 25-28.
doi:10.1016/j.mnl/2010.01.005
- Estabrooks, C. A., Field, P. A., & Morse, J. M. (1994). Aggregating qualitative findings:

- an approach to theory development. *Qualitative Health Research*, 4(4), 503–511.
- Fewster-Thuente, L., & Velsor-Friedrich, B. (2008). Interdisciplinary collaboration for healthcare professionals. *Nursing Administration Quarterly*, 32, 40-48.
- Fitzpatrick, J. J., Wallace, M. (2009). *The Doctor of Nursing Practice and Clinical Nurse Leader*. NY, NY: Springer Publishing Company LLC.
- Foster J, Clark AP, Heye ML, Rosenow DJ, Baldwin K, Villagomez ET, Wilkinson S, Gilliland I, Ward S. (2011). Differentiating the CNS and CNL roles. *Nursing Management*, 42(1):51-4.
- Foster, D. A., Rawls, M. C. (2010). A CNL designed tool to help reduce the duration of indwelling urinary catheterization. In *AACN 2010 CNL Summit*. Retrieved from <http://www.aacn.nche.edu/cnl/10Podium-Abstract.pdf>.
- Gabuat, J., Hilton, N., Kinnaird, L., & Sherman, R. (2008). Implementing the clinical nurse leader role in a for-profit environment: a case study. *Journal Of Nursing Administration*, 38(6), 302-307.
- Gardenier, D. (2012). Does Nursing Need the Clinical Nurse Leader? *Journal For Nurse Practitioners*, 8(1), 30-31.
- Gerard, S. O., & O'Neil Meyers, K. (2011). A Microsystems Improvement Collaborative: Action Learning for Academics and Clinical Partners. In *AACN 2011 CNL Summit*. Retrieved from <http://www.aacn.nche.edu/cnl/11Podium-Abstract.pdf>.
- Glaser, B., Strauss, A. (1967). *The discovery of grounded theory*. Chicago, IL: Aldine Press.

- Goudreau, K. (2008). Confusion, concern, or complimentary function: the overlapping roles of the clinical nurse specialist and the clinical nurse leader. *Nursing Administration Quarterly*, 32(4), 301-307.
- Guillory, S. (2011). *A study to examine the relationships between the leadership style of nurse managers (NMs) and the leadership style of clinical nurse leaders (CNLs) and the leadership behaviors of their staff nurses (SNs)*. Doctoral dissertation. Retrieved from Dissertations & Theses: Full Text. (Publication No. AAT 3480277).
- Haase-Herrick, K.S. & Herrin, D.M. (2007). The American Organization of Nurse Executives' Guiding Principles and American Association of Colleges of Nursing's Clinical Nurse Leader: a lesson in synergy. *Journal of Nursing Administration*, 37(2), 55-60.
- Harris J.L., Walters S.E., Quinn C., Stanley J. & McGuinn K. (2006). The clinical nurse leader role: a pilot evaluation by an early adopter. Retrieved from <http://apps.aacn.nche.edu/CNL/pdf/tk/VAEvalSynopsis.pdf>
- Harris, J.L. & Roussel, L. (2010). *Initiating and sustaining the clinical nurse leader role*. Sudbury, MA: Jones and Bartlett.
- Harris, J.L., Stanley, J., & Rosseter, R. (2011). The Clinical Nurse Leader: Addressing Health Care Challenges Through Partnerships and Innovation. *Journal of Nursing Regulation*, 2(2), 1-7.

- Harris, J.L., Tornabeni, J. & Walters, S.E. (2006). The clinical nurse leader: a valued member of the healthcare team. *Journal of Nursing Administration*, 36(10), 446-449.
- Hartranft, S., Garcia, T., & Adams, N. (2007). Clinical nurse leader: evolution of a revolution. Realizing the anticipated effects of the clinical nurse leader. *Journal Of Nursing Administration*, 37(6), 261-263.
- Hilton, N. (2010). Implementing clinical nurse leader role improves core measures performance, patient and physician satisfaction and reduces nurse turnover. In *AHRQ Innovations exchange*. Retrieved from <http://www.innovations.ahrq.gov/content.aspx?id=2566>
- Hinebaugh, A., & Calamaro, C. (2011). The Clinical Nurse Leader: Playing an Integral Role in the Prevention and Treatment of Pediatric Overweight and Obesity. *Bariatric Nursing & Surgical Patient Care*, 6(3), 145-150.
doi:10.1089/bar.2011.9950
- Hix, C., McKeon, L., & Walters, S. (2009). Clinical nurse leader impact on clinical microsystems outcomes. *Journal Of Nursing Administration*, 39(2), 71-76.
doi:10.1097/NNA.0b013e318195a612.
- Institute of Medicine. (2000). *To err is human: Building a safer health system*. Washington, DC: National Academies Press.
- Institute of Medicine. (2001). *Crossing the quality chasm: A new health system for the 21st century*. Washington DC: National Academies Press.

Institute of Medicine. (2003). *Health professions education: A bridge to quality*.

Washington, DC: The National Academies Press.

Institute of Medicine. (2010). *The Future of Nursing: Leading Change, Advancing*

Health. Washington D.C.: National Academies Press.

Interprofessional Education Collaborative. (2011). *Team-based competencies:*

Building a shared foundation for education and clinical practice. Washington, DC:

Interprofessional Education Collaborative.

James, W. (1996). *Pragmatism and the meaning of truth*. Cambridge, MA: Harvard

University Press.

Jensen, L. A., & Allen, M. N. (1994). A synthesis of qualitative research on wellness-

illness. *Qualitative Health Research*, 4(4), 349–369.

Joint Commission on Accreditation of Healthcare Organizations. (2002). *Health care*

at the crossroads, Strategies for addressing the evolving nursing crisis. Chicago:

Author.

Jones, C. (2011). A CNL Initiative: Improving Stroke Care Using An Interdisciplinary

Model Of Care Delivery. In *AACN 2011 CNL Summit*. Retrieved from

<http://www.aacn.nche.edu/cnl/11Poster-Session.pdf>

Joynt, J., & Kimball, B. (2008). Innovative care delivery models: identifying new

models that effectively leverage nurses. *Health Workforce Solutions*. Retrieved

from [http://www.innovativecaremodels.com/docs/HWS-RWJF-CDM-White-](http://www.innovativecaremodels.com/docs/HWS-RWJF-CDM-White-Paper.pdf)

[Paper.pdf](http://www.innovativecaremodels.com/docs/HWS-RWJF-CDM-White-Paper.pdf).

- Jukkala, A., Greenwood, R., Ladner, K., & Hopkins, L. (2010). The clinical nurse leader and rural hospital safety and quality. *Online Journal Of Rural Nursing & Health Care*, 10(2), 38-44.
- Keiswetter, S., & Brotemarkle, B. (2010). Culturally competent care for HIV-infected transgender persons in the inpatient hospital setting: the role of the clinical nurse leader. *Journal Of The Association Of Nurses In AIDS Care*, 21(3), 272-277. doi:10.1016/j.jana.2010.02.003
- Klich-Heartt, E. (2010). *Entry-level Clinical Nurse Leader: Evaluation of Practice*. DNP thesis. Retrieved from <http://repository.usfca.edu/dnp/5>.
- Kohler, M. (2010). *Exploring the relationships among work-related stress, quality of life, job satisfaction, and anticipated turnover on musing units with clinical nurse leaders*. Doctoral dissertation. Retrieved from Dissertations & Theses. Full text (publication no. AAT3432569).
- 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(5), 258-263. doi:10.1016/j.profnurs.2010.06.004
- LoIacono, C., Hardy, S., & Block, V. (2011). Challenges Of Implementing The CNL Role In An Academic Medical Center. In *AACN CNL 2011 Summit*. Retrieved from <http://www.aacn.nche.edu/cnl/11Poster-Session.pdf>.
- Long, K. A. (2004). Preparing nurses for the 21st century: Re-envisioning nursing education and practice. *Journal of Professional Nursing*, 20(2), 82-88.

- Maag, M.M., Buccheri, R., Capella, E. & Jennings, D.L. (2006). A conceptual framework for a clinical nurse leader program. *Journal of Professional Nursing*, 22(6), 367-372.
- Mays, N., Pope, C., & Popay, J. (2005). Systematically reviewing qualitative and quantitative evidence to inform management and policy-making in the health field. *Journal of Health Services Research & Policy*, 10(suppl 1), 6–20.
- McCormick, J., Rodney, P., Varcoe, C. (2003). Reinterpretation across studies: An approach to meta-analysis. *Qualitative Health Research*, 13(7), 933-944.
- McKeon, L.M., Norris, T.L., Webb, S., Hix, C. Ramsey, G., & Jacob, S.R. (2009). Teaching Clinical Nurse Leaders how to diagnose clinical microsystems. *Journal of professional nursing*, 25(6), 373-378.
- Miles, M. B., Huberman, M. A. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage publications.
- Miller, P. (2008). Clinical nurse leader--a new nursing role. *Tennessee Nurse / Tennessee Nurses Association*, 71(2), 4.
- Moore, L. W., & Leahy, C. (2012). Implementing the new clinical nurse leader role while gleanig insights from the past. *Journal of Professional*, 28(3), 139–146.
doi:10.1016/j.profnurs.2011.11.010
- Morse, J. M., & Johnson, J. L. (1991). *The illness experience: Dimensions of suffering*. Sage Publications Newbury Park, CA.
- Nelson, E., Godfrey, M., Batalden, P., Berry, S., Bothe, A., McKinley, K., et al. (2008). Clinical microsystems, part 1. The building blocks of health systems. *Joint*

- Commission Journal on Quality and Patient Safety*, 34(7), 367–378.
- Nelson, R. (2010). The clinical nurse leader: an update on the controversial nursing role. *American Journal Of Nursing*, 110(1), 22-23.
- Noblit, G., Hare, R. (1988). *Meta-ethnography: synthesizing qualitative studies*. Newbury Park, CA: Sage publications.
- Ott, K., Haddock, K., Fox, S., Shinn, J., Walters, S., Hardin, J., & Harris, J. (2009). The Clinical Nurse Leader (SM): impact on practice outcomes in the Veterans Health Administration. *Nursing Economic\$*, 27(6), 363-383.
- Paterson, B., L., Thorne, S., Canam, C., Jillings, C. (2001). *Meta-study of qualitative health research: a practical guide to meta-analysis and meta-synthesis*. Thousand Oaks, CA: Sage publications.
- Perry A. (2011). The Clinical Nurse Leader: Improving Outcomes and Efficacy in the Emergency Department. *J Emerg Nurs*. 2011 Nov 30. [Epub ahead of print]
- Pope, C., Mays, N., Popay, J. (2007). *Synthesizing qualitative and quantitative health evidence: a guide to methods*. Berkshire, England: Open University Press.
- Porter-O'grady, T., Clark, J. S., & Wiggins, M. S. (2010). The Case for Clinical Nurse Leaders: Guiding Nursing Practice into the 21st Century. *Nurse Leader*, 8(1), 37–41. doi:10.1016/j.mnl.2009.11.002
- Poulin-Tabor, D., Quirk, R., Wilson, L., Orff, S., Gallant, P., Swan, N., & Manchester, N. (2008). Pioneering a new role: the beginning, current practice and future of the Clinical Nurse Leader. *Journal Of Nursing Management*, 16(5), 623-628. doi:10.1111/j.1365-2834.2008.00905.x

- Radzynski, S. (2005). Advances in graduate nursing education: beyond the advanced practice nurse. *Journal Of Professional Nursing*, 21(2), 119-125.
- Reid KB, Dennison P. (2011). The Clinical Nurse Leader (CNL)(R): point-of-care safety clinician. *Online Journal of Issues in Nursing*, 16(3):4. doi: 10.3912/OJIN.Vol16No03Man04.
- Rusch, L., & Bakewell-Sachs, S. (2007). The CNL: a gateway to better care? *Nursing Management*, 38(4), 32-40.
- Sandelowski, M., Docherty, S., & Emden, C. (1997). Focus on qualitative methods qualitative metasynthesis: Issues and techniques. *Research in Nursing & Health*, 20, 365-372.
- Seed, M.S., Torkelson, D.J. & Karshmer, J.F. (2009, May). The Clinical Nurse Leader: Helping psychiatric mental health nurses transform their practice. *Journal of the American Psychiatric Nurses Association*, 15(2), 120-125.
- Sheets, M., Bonnah, B., Kareivis, J., Abraham, P., Sweeney, M., & Strauss, J. (2012). CNLs make a difference! *Nursing*, 42(8), 54-58.
doi:10.1097/01.NURSE.0000415837.20995.e2
- Sherman, R. (2008). Factors influencing organizational participation in the Clinical Nurse Leader project. *Nursing Economic*, 26(4), 236-241.
- Sherman, R. O. (2010). Lessons in Innovation: role transition experiences of clinical nurse leaders. *Journal of Nursing Administration*, 40(12), 547-554.
doi:10.1097/NNA.0b013e3181fc6ea7

- 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(3), 54-58.
- Sherman, R., 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.
- Smith, D., & Dabbs, M. (2007). Clinical nurse leader: evolution of a revolution. Transforming the care delivery model in preparation for the clinical nurse leader. *Journal Of Nursing Administration*, 37(4), 157-160.
- Smith, S., Hagos, O., Harriss, J., Claus, K., Thompson, D., & Young, J. (2006a). Hospital use of a modified clinical nurse leader. *Med-Surg Matters*, 15(3), 11-14.
- Smith, S., Manfredi, T., Hagos, O., Drummond-Huth, B., & Moore, P. (2006b). Application of the clinical nurse leader role in an acute care delivery model. *Journal of Nursing Administration*, 36(1), 29-33.
- Sorbello, B. (2010). *Clinical Nurse Leader stories: A phenomenological study about the meaning of leadership at the bedside*. Doctoral dissertation. Retrieved from Dissertations & Theses: FullText. (Publication No. AAT 3407171).
- Stanhope, M., & Turner, L. (2006). Clinical nurse leader: evolution of a revolution. Diffusion of the clinical nurse leader innovation. *Journal Of Nursing Administration*, 36(9), 385-389.
- Stanley, J. M., Hoiting, T., Burton, D., Harris, J., & Norman, L. (2007). Implementing innovation through education-practice partnerships. *Nursing Outlook*, 55(2), 67-

73. doi:10.1016/j.outlook.2007.01.009

Stanley, J., Gannon, J., Gabuat, J., Hartranft, S., Adams, N., Mayes, C., Burch, D. (2008).

The clinical nurse leader: a catalyst for improving quality and patient safety.

Journal Of Nursing Management, 16(5), 614-622. doi:10.1111/j.1365-

2834.2008.00899.x

Stanley, J., Hoiting, T., Burton, D., Harris, J., & Norman, L. (2007). Implementing

innovation through education-practice partnerships. *Nursing Outlook*, 55(2),

67-73.

Stanton, M. P., Barnett, & 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*, 27(2), 78-83.

doi:10.1016/j.profnurs.2010.09.014

Stanton, M., Lammon, C., Tolbert, S., Beasley, J., McCullough, P., Cash, S., et al. (2008).

CNL practice across diverse care settings. Retrieved from

<http://apps.aacn.nche.edu/CNL/presentations/Stanton08.pdf>

Strauss, A., Corbin, J. (2007). *Basics of qualitative research: Techniques and*

procedures for developing grounded theory. Los Angeles, CA: Sage

publications.

Summers, B. L., Adornetto-Garcia, D., Nelson, B., Bowman, G., & Cline, D. (2012).

Clinical Nurse Leader: The Strategic Advantage in Transforming Nursing

Practice. AACN CNL Summit. Retrieved from

<https://www.aacn.nche.edu/cnl/12Podium-Abstract.pdf>

- Swan, N. (2011). Changing Unit Culture Through CNL Leadership. In *AACN 2011 CNL Summit*. Retrieved from <https://www.aacn.nche.edu/cnl/11Podium-Abstract.pdf>.
- Tachibana, C., & Nelson-Peterson, D. (2007). Clinical nurse leader: evolution of a revolution. Implementing the clinical nurse leader role using the Virginia Mason Production System. *Journal Of Nursing Administration*, 37(11), 477-479.
- Thomas, P. (2012). Partnering for Success: Clinical Nurse Leaders Initiate and Sustain Unit Level Practice Changes in Quality and Safety. In *41st Annual Biennial Sigma Theta Tau Convention*. Retrieved from <http://hdl.handle.net/10755/202206>.
- Thomas, T., & Landstrom, G. (2010). *Creating Shared Meaning through Partnerships: Intersecting CNL Curriculum with Operational Needs*. Retrieved from <http://www.cnlassociation.org/webinar-archives>.
- Thompson, P. & Lulham, K. (2007, October). Clinical nurse leader and clinical nurse specialist role delineation in the acute care setting. *Journal of Nursing Administration*, 37(10), pp. 429-31.
- Thorne, S. (2004). Qualitative Metasynthesis: Reflections on Methodological Orientation and Ideological Agenda. *Qualitative Health Research*, 14(10), 1342-1365. doi:10.1177/1049732304269888

- Thorpe, G., McArthur, M. and Richardson, B. (2009), Bodily change following faecal stoma formation: qualitative interpretive synthesis. *Journal of Advanced Nursing*, 65: 1778–1789. doi: 10.1111/j.1365-2648.2009.05059.x
- Tilden, V. (2011). The tides of change: Are we ready for interprofessional collaboration? *Nursing Outlook*, 59(3), 107-108.
- Tornabeni, J. (2006). Clinical nurse leader: evolution of a revolution. The evolution of a revolution in nursing. *Journal Of Nursing Administration*, 36(1), 3-6.
- Tornabeni, J., & Miller, J. F. (2008). The power of partnership to shape the future of nursing: the evolution of the clinical nurse leader. *Journal of Nursing Management*, 16(5), 608–613.
- Tornabeni, J., Stanhope, M., & Wiggins, M. (2006). Clinical nurse leader evolution of a revolution. The CNL vision. *Journal Of Nursing Administration*, 36(3), 103-108.
- Tucker, A. L. (2009). *Workarounds and resiliency on the front lines of health care*. Retrieved from <http://webmm.ahrq.gov/perspective.aspx?perspectiveID=78>
- Wiggins, M. (2006). Clinical nurse leader: evolution of a revolution. The partnership care delivery model. *Journal Of Nursing Administration*, 36(7/8), 341-345.
- Wiggins, M. (2008). The partnership care delivery model: an examination of the core concept and the need for a new model of care. *Journal of Nursing Management*, 16(5), 629–638. doi:10.1111/j.1365-2834.2008.00900.x
- Wilson, L., Orff, S., Gerry, T., Shirley, B. R., Tabor, D., Caiazzo, K., & Rouleau, D. (2013). Evolution of an innovative role: the clinical nurse leader. *Journal of Nursing*

Management, 21(1), 175-181. doi:10.1111/j.1365-2834.2012.01454.x

Woodring, B.C. (2004). Clinical nurse leaders: New roles, new responsibilities, new preparation. *Journal for Specialists in Pediatric Nursing*, 9(4), 129-133.

Zarella, F., & O'Neal, D. I. (2011). The Process to Achieve Interprofessional Collaboration: An Essential Component of a Funded Performance Improvement Project. In *AACN 2011 CNL Summit*. Retrieved from <https://www.aacn.nche.edu/cnl/11Podium-Abstract.pdf>.

Zwarenstein, M., Goldman, J., & Reeves, S. (2009, July 8). *Interprofessional collaboration: Effects of practice-based interventions on professional practice and healthcare outcomes*. Cochrane Database System Reviews, 3:CD00007