

Appendix: Summary of documents identified in the review

Citation	Purpose	Method/Design	Context/Sample	Key Findings	Gaps and Implications
Milner, Bradley, & Lampley (2018)	To describe faculty beliefs about teaching EBP; use of EBP for education; organizational cultural readiness for EBP and relationship of these variables	Quantitative; Electronic survey 3 instruments: developed by Fineout-Overholt & Melnyk, 2010)	Academic faculty: North-Eastern US College of Nursing and College of Health Professions 25% response rate; n=65	Adoption of EBP by faculty is foundational part of teaching Faculty Standards re EBP proficiency need to be set by organizations Programs preparing faculty for teaching nursing need to include EBP competencies	Lack of research exploring faculty adoption of EBP as essential to teaching. Therefore, there is a research gap relating to academic curricular models for EBP, Guideline implementation
Mthiyane, & Habedi (2018)	To determine nurse educators (faculty) experiences in implementing EBP in teaching and learning; and to describe its importance especially for nurse educators and students	Qualitative; Semi Structured Interviews with thematic analysis	12 nurse educators teaching in a 4-year undergraduate program under the KawaZulu Natal College of Nurses, in South Africa No clinical educators were included	Nurse educators should use EBP to provide a high-quality nursing education. Educator EBP knowledge and skill is questionable. Main themes were challenges with implementation of EBP teaching & learning and benefits of values of EBP in teaching and learning	Lack of research regarding curricular models for teaching EBP in academic context; need more inclusion of practice-based evidence of nurse educators in teaching and learning implementation
Burns, Noonan, Jenkins, & Bernardo (2017)	To describe how research findings informed an evidence-based practice curriculum	Quantitative-Survey using 4 instruments: EBP Beliefs Scale, EBP; Implementation Scale (Melnyk et al., 2008), Organizational Culture and Readiness for System Wide Integration of EBP Scale ([OCRSTEO], Fineout-Overholt & Melnyk, 2006) and a demographic profile	Community Hospital in context of shared governance	Curriculum development- based on findings from 4 instruments. Utilized several educational approaches- some online modules and some face-to-face presentations. Utilized nurse researcher consultant to support staff nurses Curricular guiding principles included shared governance, advocacy, professional development, EBP, fostering of a spirit of inquiry, and use of EBP findings in patient care	Similar model to Collaborative Curriculum Model for Implementing EBN (Jackson Health System, 2008) Research gap- not focused on undergraduate nursing curricula but some of the survey instruments may be helpful for use with students and faculty
Haggman, Mattila, & Melender (2017)	To review the literature related to outcomes of educational interventions for nurses about guideline implementation	Systematic Review (2008-2015) Included Cochrane, CINAHL, PubMed MEDLINE Data analyzed with qualitative content analysis	Unclear if search focused on both clinical and academic contexts	13 studies were quasi-experimental: 13 different educational interventions 7 interventions were supported by simultaneous strategies 12 studies reported statistically significant outcomes for interventions on at least	Research gap: there is a lack of strong evidence on teaching and learning strategies, educational interventions for guideline implementation

		and narrative synthesis		one measurement area 6 studies reported improvement to patient care Interventions that were multi-dimensional in content, teaching and learning methods produced several good outcomes Standardizing interventions will allow replication and comparisons Combinations of teaching & learning methods were useful and educational interventions should be supported with simultaneous strategies	
Hande, Williams, Robbins, Kennedy, & Christenbery (2016)	To describe strategies used for student EBP competencies in 3 nursing curricula levels- baccalaureate, masters and DNP	Descriptive report about how EBP competencies could be integrated in 3 levels of nursing of curricula-	US EBP competencies based on expected outcomes from The American Association of Colleges of Nursing for Baccalaureate, Masters and Doctoral Education for Advanced Nursing Practice (DNP)	Educators should examine curricula with a view for seamless transitioning of levelled EBP competencies over the 3 curricula.	Provides model for integration EBP related competencies into leveled curriculum However, limited application as cultural differences in US/Canada curriculum noted- some competencies identified as within US master's program, may already be taught within Canadian BScN programs; also differences between MSN, DNP /PhD as DNP does not exist in Canada Not clear in Canada how EBP competencies are taught in academic programs
Canada, A.N., (2016)	To discuss the relationship between Evidence-Based Practice Implementation Models and Critical Thinking in Applied Nursing Practice	Literature review	US article Probing the relationship between Evidence-Based Practice Implementation Models and Critical Thinking in Applied Nursing Practice for Continuing Education Credit.	Useful summary charts of 8 EBP implementation models - most models relate to implementation in a clinical context Iowa model, Stetler Model identified as relevant for nursing faculty	Critical thinking competencies are a necessity for EBP competencies – curriculum should foster a culture of inquiry, critical thinking as a key step in implementing EBP

				Identified characteristics of critical thinkers Concluded critical thinking is a contributing factor to successful implementation of EBP	
Hägman-Laitila, Mattila, & Melender, (2016)	To synthesize evidence of educational interventions on EBN	Systematic review completed by Finnish researchers (2008-2015)	Eight studies were selected from Cochrane, CINAHL, PubMed, MEDLINE Focus mainly on Clinical practice but some included students Only one RTC included in review; studies were of modest evidence with several research challenges; comparison of results difficult	Most common teaching/learning methods are lecture and group work. Educational Interventions should address all components EBP with a focus on implementation in patient care. “Curricula need to include learning goals on attitudes, knowledge, skills and practice with special focus on implementation of evidence in patient care” Similar findings for health professionals	Research gap: how teaching and learning methods influence learning contexts needs further investigation Important Implications for revising research courses, electives course, elective or graduate studies especially re implementation focus
Leung, Trevena, & Waters, (2016)	To develop a competency framework that measures EBP knowledge & skills in nursing and to identify the views of health educators/researchers care about the framework	Descriptive Survey Design and questionnaire	42 (63% response rate) health academics/educators, clinicians, researchers from medical and nursing schools at University of Sydney & Nurse Teacher’s Society, in Australia	-substantial agreement on structure & relevance of framework -3 common themes re framework: a useful framework; varying expectations of EBP competence; challenges to EBP -	Research gap: framework does not identify /define effective educational strategies Curriculum: Understanding how our curriculum addresses components of an EBP implementation model such as the Ask, Acquire, Appraise, Apply. Assess model (Straus et al., 2011) could help shape a curricular model – e.g. In the Straus model the Acquire phase is particularly relevant to academic context provide a framework for facilitate. Using a particular EBP implementation model could

					provide a valuable lens for curriculum development models, especially in BPSO context
Registered Nurses Association of Ontario (2016)	To provide evidence-based recommendations that promote and sustain the undergraduate nursing student's application of knowledge to practice in a variety of clinical learning environments	Systematic Review -Best Practice Guideline: Practice-Based Education Detailed search strategies, including web sites, data bases, hand searches. Full report available from RNAO web site	Undergraduate nursing students, clinical instructors, preceptors, faculty, academic and community health agencies	Curricular recommendations: RE -incorporating simulation in curriculum Integrating innovative strategies into curriculum that promote critical thinking, including class discussions of key clinical issues or case studies, reflective writing and use of virtual health care settings Recommendations for faculty, students, preceptors, agencies	Excluded from recommendations are classroom theory Recommendations will be useful for development of EBP model re clinical component.
Zeleníková, Beach, Ren, Wolff, & Sherwood (2014)	To determine how nursing faculty from top 50 US schools of nursing perceived the effectiveness of EBP courses for graduate nurses	Cross sectional web-based survey	45 participants completed the Perception of EBP Courses Scale (Good Cronbach's alpha of .84)	-first study in US to evaluate US nursing faculty perceptions of effectiveness of graduate EBP courses - more opportunities to implement EBP knowledge should be part of curriculum -objective measures of faculty EBP competence should be developed	Research gap- no Canadian studies about faculty perceptions of effectiveness of EBP courses in nursing curriculum Important to include more experiential application of EBP knowledge in our curriculum
Reicherter, Gordes, Glickman, & Hakim, (2013)	To describe a health professional education programs successful endeavor or to educate and create evidence-based champions	Case report with survey	University of Maryland 3-year curriculum model, 3 phase Some case reports presented at research day; all were presented in clinical	-Students agreed case reports facilitated EBP use while in clinical internship and clinical decision making with their clinical instructors -Higher student interest in research day -Requests from additional clinical sites to develop case report process -Kept faculty engaged in clinical	Helpful model for teaching EBP skills in academic context Rubric for case report may be helpful for term assignments Case reports Research Day similar to our Undergraduate Research Conference Clinical instructors need to have knowledge of EBP skills for this model Student case reports need to have ethics

					approval
Kastner, Estey, & Bhattacharyya (2011)	To describe how Graham et al.'s Knowledge to Action Framework can be applied to research initiatives such as guideline implementation	Realist Review Asks what works for whom and in what circumstances?	Keenan Research Centre, Shing Knowledge Institute of St. Michael's Hospital, University of Toronto Targets Guideline developers	KTA Framework may be helpful to structuring a program of research and implementation that supports sustained practice changes	KTA Framework should be discussed as part of our research classes Research 1 and 2
Longo, F & Lindsay, G. (2011)	To develop a curriculum that addresses "what comprises nursing knowledge? What is the process of inquiry (coming to know)? How do teachers facilitate students' practice-based inquiry as knowledge creators?"	Innovation report on revision of required Nursing Knowledge Course using a narrative pedagogy Students used a meta-analysis of their journals (Program improvement initiative)	2 nd year students in 4-year collaborative baccalaureate nursing program in Ontario Canada.	Weekly in class journaling to reflect on their evolving knowledge. Guided professor led discussions were used to encourage exploration of how nursing knowledge is applicable to their practice	Promotes a holistic approach to nursing knowledge idea that nursing knowledge is not just what can be measured- EBP but there are other ways of knowing. This is an important point to keep in mind as we revise courses and the curriculum at large.
Ritchie, Evans, & Matthews, (2010)	To explore nursing students' and clinical instructors' perceptions regarding implementation of BPGs into their practice	Qualitative Semi structured Interviews	Canadian study, Brock University. Sample: 4 student nurses and 2 clinical instructors Focused on Smoking Cessation BPG	4 themes: Personal & professional self; health "preaching"; developmental perspective; & environmental constraints Health promotion viewed as important concept for implementation of this guideline	Making sure our curriculum addresses skills needed for health promotion as this is a frequent intervention for BPGs is an important consideration for a curricular model that supports BPG implementation