

ADVANCING EVIDENCE-BASED PRACTICE IN NURSING AND HEALTHCARE

2nd
EDITION

Mary Jo **Vetter**
Kathleen Evanovich **Zavotsky**



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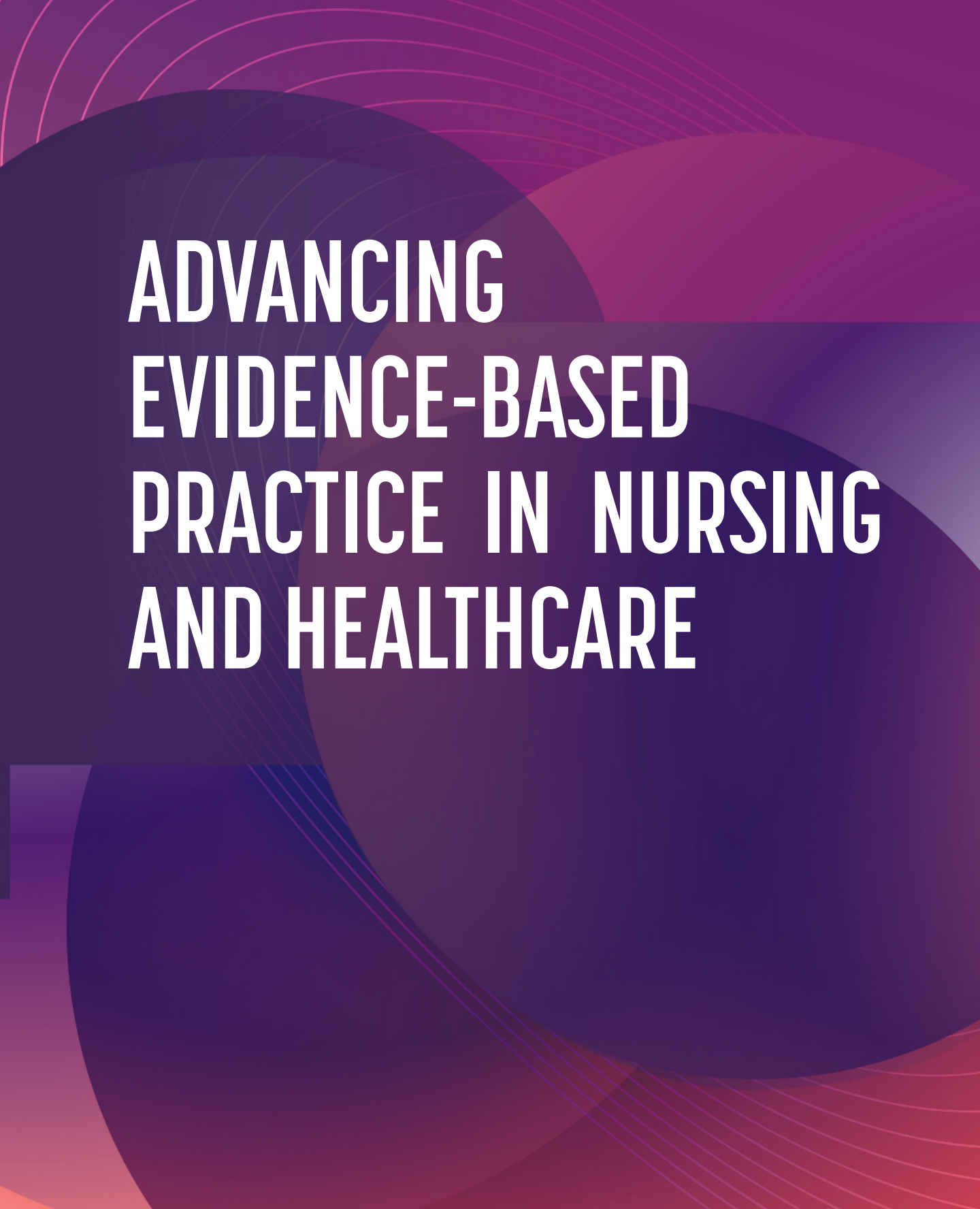
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ELSEVIER

Elsevier
3251 Riverport Lane
St. Louis, Missouri 63043

ADVANCING EVIDENCE-BASED PRACTICE IN NURSING AND
HEALTHCARE, SECOND EDITION

ISBN: 978-0-323-93621-7

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Executive Content Strategist: Lee Henderson
Senior Content Development Manager: Laura Schmidt
Senior Content Development Specialist: Kristen Helm
Publishing Services Manager: Deepthi Unni
Project Manager: Nayagi Anandan
Designer: Patrick Ferguson

Printed in India

Last digit is the print number: 9 8 7 6 5 4 3 2 1



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Mary Jo Vetter, DNP, RN, AGPCNP-BC, FAANP, is a nurse leader and clinician with over 45 years of experience in clinical and academic settings. She has maintained an active practice as a nurse and nurse practitioner with emphasis on care delivery in home and community-based settings. She has functioned in executive leadership roles in New Jersey and New York in health care organizations, providing ambulatory and primary care, certified home care, hospice, and long-term care with a primary focus on geriatric care innovation across the continuum of aging services. Mary Jo

is a graduate of New Jersey City University where she received the bachelor's degree in nursing and Rutgers, the State University of New Jersey, attaining both the master's and doctorate in nursing. She has been a long-time supporter of evidence-based practice in nursing, advocating for uptake of associated competencies in diverse practice settings. She has enjoyed a multitude of joint appointments operationalizing meaningful and productive academic–practice partnerships and has published and presented nationally and internationally on topics related to innovation in geriatric nursing care and service delivery, the integration of design thinking in academic curricula to foster nurse entrepreneurship and intrapreneurship, and nurse-managed primary care management. She was inducted as a fellow of the American Association of Nurse Practitioners and has been actively involved in multiple professional and academic organizations. After serving as a clinical associate professor and director of the Doctor of Nursing Practice Program at New York University, Rory Meyers College of Nursing for 8 years, she recently joined Parker Health Group, a noted aging services organization, as Chief Clinical Officer.



Kathleen Evanovich Zavotsky, PhD, RN, CCRN, CEN, ACNS-BC, FAEN, FCNS, is a nurse researcher/leader with more than 25 years of clinical, research, leadership, and education experience. She holds clinical certification as an emergency and critical care nurse, in which areas she has more than 40 years of clinical practice experience. She is a graduate of Rutgers, The State University of New Jersey for her bachelor's and master's degrees and a PhD in nursing from Seton Hall University. She is board-certified as an advanced practice nurse in adult gerontology and as a clinical nurse specialist since 1993. She is an award-recognized educator and

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INTRODUCTION

We would like to recognize the editors of the first edition, Dr. Geri LoBiondo-Wood, Dr. Judith Haber, and Dr. Marita Titler, for having the expertise and vision to create a textbook with such a strong foundation for evidence-based practice (EBP). The quality of the original version of the book has enabled practicing nurses and graduate students to have a greater understanding of the impact that EBP has on the quality of care overall. As healthcare continues to evolve, we have used the first edition to help us provide you with new and updated information for all nurses.

One of the changes on which we focused early on was highlighting the relationship, exchange of knowledge, and application of skills taught in the academic setting to impact outcomes in the practice setting. Through the process of academic–practice partnership (APP) we sought to broaden the utility of the textbook to meet the needs of both academia and practice by offering a pragmatic guide to EBP, quality improvement, and research that was relevant to nurses in graduate education and advanced clinical practice. This is especially important for organizations that are on the American Nurses Credentialing Center Magnet journey or those who have already received this designation. To meet established criteria, many have developed innovative programs such as residencies and fellowships that are dependent on EBP translation. Additionally, we were thoughtful to ensure that the second edition reflects recent guidance and aspirations set forth in the new American Association of the Colleges of Nursing (AACN) *Essentials of Professional Education*, the AACN *Advancing Healthcare Transformation: A New Era for Academic Nursing* (2016), the *Future of Nursing 2020–2030: Charting a Path to Achieve Health Equity* published by the National Academies of Sciences, Engineering, and Medicine, and multiple other regulatory and quality standards across multiple practice settings. Our goal in revising and adding chapters was to demonstrate alignment between education-based domains and competencies and practice expectations regardless of practice setting. We also hoped to portray through this contemporary approach that this edition of the textbook will help guide both

academic and practice organizations' programs as they continue to develop more sophisticated nursing science that keeps pace with and is relevant to the needs of health care organizations.

NYU Langone Health and Rory Meyers College of Nursing at New York University enjoyed a long, well-functioning relationship and history of collaboration in research and EBP, and that has led to an international reputation of nursing excellence. You will see elements of this partnership threaded throughout the chapters of the second edition. The textbook was a natural next step as we recognized the importance of synergy between what is taught in the classroom as it is translated to real-life, contemporary practice problems, such as nurse wellness, population health, and diversity, equity, inclusion, and belonging. Content was added to enhance the learning experience and guide scholarly work that reflects the current state of nursing science.

We welcomed the opportunity to serve as co-editors of the second edition as a way to memorialize the years of collaboration, recognizing that the next edition of the book will be different as healthcare, nursing practice, and academia evolve and mature to reflect current health care circumstances, and so we are already thinking updates for a third edition that will keep the textbook current and continue to meet the needs of nursing students and practicing clinicians.

Themes that guided contributors in revising existing chapters and writing new chapters were identified from both settings and shared, and teams of expert authors were purposefully partnered to complement and enhance each other's knowledge and experience.

Our vision was to directly apply concepts of EBP improvement to health care organizational priorities, strategies, and desired health system outcomes. Authors from both settings found the experience of collaboration extremely valuable and found that it enhanced their own practice and leadership. In response to a request for feedback from contributors about their thoughts regarding the importance of APP, we received several responses that are shared below:

“The current health care environment is particularly challenging for new graduate nurses transitioning to practice. Creating strong academic and practice partnerships is integral in preparing future nurses to be successful, applying knowledge acquired to the practice environment in all health care settings.”

Dr. Eileen Magri, NYU Langone Health

“Lita and I both feel that this experience was emblematic of the power of academic and practice partnerships; our work was stronger as a synthesis of our different perspectives than it would have been if we had been writing from our unique stances alone. Since we went into this collaboration with the explicit intention of building bridges between academic and practice applications and checking each other’s blind spots, we were really able to keep our focus on praxis, which provided a strong foundation from which to approach the chapter.”

Brynne Campbell Rice/Carlita Anglin, Medical Librarians, New York University/ NYU Langone Health

“The academic–practice partnership supports a continuum of learning for professional nursing by creating a culture where frontline nurses are bedside change agents who improve outcomes associated with evidence-based care in alignment with organizational strategic goals. The continuum of learning through the academic and practice partnership empowers nurses throughout their academic and professional development to identify and bring forth opportunities for improving patient outcomes and the professional practice environment. It facilitates the development of a culture of excellence for all levels of nurses to promote quality improvement and practice innovation. The academic–practice partnership supports a learning environment where everyone identifies and solves problems, enabling the organization to experiment and improve patient, nursing, and organizational outcomes.”

Dr. Patricia Maria Lavin, NYU Langone Health

“Thank you for your support on this massive undertaking. We both were willing to bring a new chapter, but not a new concept, to the book (i.e., population health). By taking an academic–practice partnership approach to this edition we, as coauthors of the

population health chapter, learned so much more about the work toward population health from the clinical side and the connections in concepts and language between the clinical and academic sides. A synchrony that we would never have appreciated if we were not brought together for this new chapter and edition.”

**Dr. Robin Klar, New York University
Rory Meyers College of Nursing**

“At the outset, our team of four had great synergy and comradery. Getting to have meaningful discussions about population health from both the academic and practice side of things really enabled us to craft our chapter in a way that was comprehensive and creative—the product was something that would have been much different without our team’s make-up and dedication to the topic. Because of our work together, I had many more offline conversations with our practice partners. This gave me the great fortune to engage our practice partners in my outpatient nursing elective. This in turn gave students a very real and rich exposure to a whole other side of nursing they were unfamiliar with previously!”

**Dr. Stacen Keating, New York University
Rory Meyers College of Nursing**

Lastly, we must acknowledge every one of our contributors. Early in the process, each author shared our vision regarding the best way to meet the needs and address the complexities in healthcare by being inclusive of the various degree preparations present in both academia and practice. By doing this, we capitalized on each author’s unique contribution and expertise. It was through this synergy that is evident in each chapter that you will see the commitment to advancing the nursing profession through evidence-based, person-centered, high-quality care. We are so very grateful that each contributor aligned with our vision and helped make this book come to fruition.

Looking forward into the future as co-editors we welcome your feedback about the second edition and seek to continuously improve our ability to support evidence-based quality improvement and nursing science efforts across the continuum of care!

In gratitude and partnership,

**Mary Jo Vetter
Kathleen Evanovich Zavotsky**

ACKNOWLEDGMENTS

This textbook represents the cumulative knowledge and expertise of so many dedicated contributors as well as the numerous nursing leaders who have nurtured evidence-based practice (EBP) as a foundational skill in the profession. While there are too many to name individually, I would like to personally acknowledge academic leaders who have mentored me in my EBP journey: Dr. Rona F. Levin, Dr. Bernadette Melnyk, Dr. Ellen Fineout-Overholt, and Dr. Judith Haber. Years before EBP was an essential competency in nursing practice and well-integrated in nursing education curricula, EBP mentors were essential in bringing EBP skill sets to the practice setting. The reciprocal learning that took place between academic and practice partners was nothing short of inspirational. Fortunately, when I first met these inspirational leaders, I was in a practice environment led by a visionary nurse executive, Joan Marren, who paved the way for the Visiting Nurse Service of New York to engage in the co-creation of a framework that combined EBP and quality improvement that guided nurses to access research evidence to inform improvement in care quality and outcomes. As a result, I quickly became an enthusiastic supporter of academic–practice partnerships and have subsequently served in roles in both settings, continually looking for opportunities to collaborate.

Upon my arrival at the Rory Meyers College of Nursing at New York University, the commitment to partnership between service and academia was exemplified by the leadership of Dean Eileen Sullivan-Marx and NYU Langone Health's chief nursing officer at that time, Dr. Kimberly Glassman. In my role as director of the Doctor of Nursing Practice (DNP) Program, I benefitted from the established relationship of these leaders as we operationalized a highly effective approach to the DNP Project. Students were able to directly apply the rigorous skills learned in the classroom to address a real clinical problem that was also an organizational priority for the health system. Our collaboration deepened when I met Dr. Kathy Zavotsky, a kindred spirit, with equal passion for advancing nursing science. Together, we role-modeled and promoted meaningful PhD/DNP collaboration and designed new and

exciting ways to foster the partnership relationship. This book is one of the products of our work together.

At this time, I have returned to the practice setting as chief clinical officer of an aging services organization focused on meeting the current and future care needs of the geriatric population. My desire for academic practice partnership has endured because of the value such relationships offer in supporting clinical, quality, and person-centered outcomes.

I would like to thank all those who contributed to this textbook, the generations of nurse colleagues who have preceded me in their commitment to care excellence, and those who will continue to innovate care based on relevant evidence. We will continue to accelerate the integration and translation of research evidence in practice as the profession of nursing evolves to meet the needs of our collective, global society.

Finally, to my family and friends, I am eternally grateful for your sustained support and unconditional love. You energize me every day by demonstrating endless interest in my work and the people who weave the fabric of my professional life.

Mary Jo Vetter

First, I would like to thank the editors of the first edition, Dr. Geri LoBiondo-Wood, Dr. Judith Haber, and Dr. Marita Titler, for providing a foundation that was easy to build on. The thoughtfulness to the content has enabled us to add contemporary material that I believe will help enhance the benefits of this edition to the student, the practicing nurse, and beyond. It is an honor to continue the legacy that they have created.

Next, to my co-editor and friend Dr. Mary Jo Vetter. I knew from the moment that I met you and connected that we would continue to develop great nursing science for students and nurses at NYU Langone Health and beyond. I admire your commitment to the academic–practice partnership and the science of nursing, and I am so grateful to you for what you have taught me through this process and over the years. I am honored that you asked me to partner with you and so happy to call you a friend.

I am also forever grateful to Dr. Debra Albert, System Chief Nursing Officer at NYU Langone Health, who has provided me with an opportunity of a lifetime; thank you for creating an environment that values the science of nursing. To be given the opportunity to work with the amazing nurses at NYU Langone Health and the caliber of faculty at New York University's Rory Meyers College of Nursing every day is truly an honor.

When I first agreed to serve as an editor, I asked a mentor of mine how do I know that chapters that my colleagues write are appropriate for a textbook. She told me that when I read the chapter and if I come away with at least one new thing that I learned, it was good! I can remember the first chapter that I received and how I was so moved by the effort and content that it exceeded my expectations. As the months continued and I received

more and more chapters, it was like I was opening a present. The scholarly wisdom that each and every one of the contributors added to this book will undoubtedly influence practice and academia well into the future. A sincere thank you to each and every one of you.

Taking on a challenge like editing this second edition takes courage, and I was so glad that my parents instilled that in me early on and that my beautiful brothers and sisters taught me how to use it. A big thanks to my husband, Jeffry, who reminds me every day that life is so much better with a little bit of humor. Lastly to my beautiful, fearless, and funny daughter Mary Kate who reminds me every day how precious life is.

Kathleen Evanovich Zavotsky

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Leadership Implications for Evidence-Based Practice, Nursing Practice, and Healthcare

Debra Albert and Eileen Sullivan-Marx

LEARNING OUTCOMES

After reading this chapter, you should be able to do the following:

- Discuss the scope of leadership influence of evidence-based practice (EBP) implementation on nursing and healthcare.
 - Quality
 - Nurse wellness
 - American Nurses Credentialing Center (ANCC) Magnet
 - Education
- Review the leadership opportunities to sustain EBP in nursing practice and healthcare.
 - Advocate-EBP director
 - Quality-practice
 - Informatics/Quality and Safety Education for Nurses (QSEN)
- Discuss the opportunities for partnership between academia and practice in order to impact EBP, nursing, and healthcare.
 - Ensuring Doctor of Nursing Practice (DNP) project selection supports health care system needs/goals
 - Ambulatory care
 - Patient/family
 - Hospital at home
 - Education to reflect/mirror the practice
 - Specialty training
 - Sustainability
 - Benefits of partnership to both academia and service
- Review the call for action for DNP leaders to create the future for healthcare.

KEY TERMS

Academic–practice partnership
Evidence-based practice

Healthcare

Leadership

Overall, this chapter is geared toward equipping graduate-degree-prepared nurses and students (advanced practice nurses [APNs], clinical leaders) to serve as leaders in **healthcare** in various settings.

At the end of your graduate degree journey, you will be considered a leader in **evidence-based practice** (EBP). This is your opportunity to ensure that your education is filled with information you need to meet this challenge.

In addition to the didactic and clinical requirements necessary for the degree, you should take the time to develop and establish a mentor/mentee relationship with either one or more doctorally prepared nurses as well as other professional clinical leaders. As you begin to practice with your newly acquired credentials, you will soon find out that while the quality education you received is vitally important, the ability to execute in your practice is essential. Having a peer or nurse leader to guide and support you formally and informally should be part of your lifelong learning. Establishing and building mentor relationships is a process and a skill that can take time to develop. This process will certainly vary as you navigate roles in any health system, and as health policy, health care delivery, and professionals adapt, you will also need to adapt. Keeping in touch with faculty mentors and other professional advisors you have encountered in your graduate education is key to fostering solid mentorship and network support.

This chapter will help set the tone for you as a clinical leader through the valuable contribution from multidisciplinary leaders from both academia and clinical practice, writing together to present a partnership perspective on how practice, education, innovation, research, and leadership in nursing come together to drive EBP. The contributors in this textbook have very thoughtfully provided you with 28 chapters of contemporary, real-life information that is rooted in the latest art and science of nursing practice and will serve as a resource as you continue on your professional journey in our complex health care system.

SCOPE OF INFLUENCE

The scope of influence that you can have as a clinical leader is broad. As a nurse with an advanced degree, you will be called on to help ensure that nursing and healthcare provide value to our multiple constituencies and collaborators based on current evidence.

One of the most important things we can do as nurse leaders is ensure that our patients and staff are safe. As a nurse with an advanced degree, you will be called on to ensure that EBP is integrated in care delivery in all settings. While this seems like an easy, straightforward thing to do, there are often barriers to implementation in a complex system like healthcare. Utilizing a model/framework can help you ensure that EBP projects are executed successfully. EBP models can provide

structure, and ensure that appropriate multidisciplinary stakeholders are involved and the project is metric driven and sustainable (see [Chapters 4, 10, 12](#)). The utilization of a model may be a new skill for many of the team members, and you will be called on to help with education and ensure proper utilization.

Those organizations that are American Nurses Credentialing Center (ANCC) Magnet designated, or on an ANCC Pathway to Excellence journey, must demonstrate that a culture of scientific inquiry is infused and based on contemporary nursing research and the latest evidence. Nurses with advanced degrees and clinical leaders are responsible for creating an inclusive practice environment to ensure that the appropriate people and processes are in place to help prepare for and sustain this highly coveted accreditation status.

LEADERSHIP OPPORTUNITIES

The [leadership](#) opportunities for nurses to influence EBP and healthcare are endless. Some priority should be given to serving as a role model and advocating for rigor in scholarly work/projects in order to ensure that the position remains highly respected. With an expansion of Doctor of Nursing Practice (DNP) programs in the last 15 years, producing leaders and practitioners to serve in various roles can potentially lead to role confusion for yourself and others in healthcare. One strategy that can be used to help prevent this role confusion could be to ensure that your practice is goal driven and in alignment with a health care organization as well as with nursing professional policy and practice as established by accrediting bodies, nursing specialty organizations, and emerging nursing science (see [Chapters 6, 10, 25, 26](#)).

Leading or partaking in initiatives that are rooted in addressing quality of care is probably one of the best ways to ensure that your hard-earned education is of value to a health care organization. Embedded throughout this textbook are everyday examples that can be integrated into your practice. The ability for nurses at all levels to understand the benefits of metric-driven quality care should be modeled and led by nurses with advanced degrees. Integrating models similar to the Quality and Safety Education for Nurses (QSEN) is a perfect opportunity for you to provide a structure and process to ensure nurses have the knowledge and skills necessary to improve patient care and healthcare in all settings.

Most frontline nurses do not understand the scope of influence that EBP and translational science can have on their patient care. Thus, you will be in a position to guide the development, implementation, and evaluation process for your own practice and that of the health system (see [Chapters 22, 27](#)). In addition, your leadership in clinical advancement can inform policy that impacts care nationally and internationally (see [Chapters 25, 26](#)).

Another important consideration in developing the reach of EBP through clinical leaders is establishing partnerships between academia and service, or an **academic–practice partnership** (APP) (see [Chapter 2](#)). Much of this work is guided by guidelines set by the American Association of Colleges of Nursing (AACN) and is dependent on developing relationships through a joint vision and goals for both the academic and practice partner. In addition, your practice may be linked with students, which is often the beginning of a larger APP initiative as you highlight success and/or innovation in your sphere of influence.

This partnership, while keeping in mind that each entity has its own purpose and mission, clearly shares a goal that includes developing nurses who are prepared for what the future of healthcare holds for each level of entry into practice. Specifically related to the advanced degree preparation, there are many opportunities for academia and practice to come together for curriculum development, clinical placement, and other scholarly work.

The APP should ensure that prelicensure curriculum is contemporary and reflective of the current state of healthcare. There is much opportunity to ensure that education reflects and mirrors practice—for example, ensuring that the curriculum integrates various critical practice areas that are important to healthcare such as the ambulatory setting, care coordination, chronic disease management programs, and other specialty training/immersion programs, such as perioperative and emergency department nursing. Contemporary curriculums enable us to leverage early career practice interest and professional curiosity, which can be carried on throughout a nurse's professional career. This may be a challenge for both the academic and practice partners who are rooted in traditional approaches. However, if the needs of our patients and the health care system are prioritized, creating innovative programs benefits all. Innovative APP programs could help provide opportunities for clinical leaders to be active participants in

curriculum development, clinical placement, and program evaluation, leading to dissemination of the work to colleagues both internally and externally (see [Chapters 2, 6, 12, 21, 23](#)). Additionally, innovative APPs provide academic leaders the opportunity to influence the service practice environment and clinical care at the partner service organization. Moreover, successful and Magnet-certified APPs serve as standard bearers for smaller and emerging practices, particularly those that are community or long-term care based, to emulate them, particularly given the role that ANCC Magnet has in moving outcomes to excellence.

CALL TO ACTION

As a clinical leader you will be challenged to not only improve the health care system you serve but also act as a role model for nurses to build careers, strive for health equity, and promote nurse wellness, belonging, and joy (see [Chapters 27, 28](#)).

Walk the talk. Being able to take the time to reflect on your work is critical. Reflecting on the positive impact and perhaps missed opportunities will serve you well. Tapping into mentors' and colleagues' guidance and feedback is as valuable as receiving a formal evaluation from your direct leader. By taking the time to reflect on the work you have accomplished or set personal and professional goals, you can help ensure that you are staying true to the leadership role and your own personal values.

Lead with curiosity. The practice of nursing is infused with curiosity. Develop and sharpen the skill of a curious mind. Curiosity generally starts when you are a novice nurse, can be cultivated over time, and is vital to patient care. As a nurse in a leadership role, cultivating your own curiosity is as important as developing it in nurses and others in your sphere of influence. By developing this skill, you will be able to remain contemporary in your own practice and inspire others that you partner with to remain curious about the care delivered every day. Creating an environment of scientific and clinical curiosity is a key responsibility for any leader. In taking this work on, you empower nurses at all levels to have direct input into their practice and professional growth. Indeed, keeping professional curiosity as a core skill will ensure a career of constant growth (see [Chapters 5, 6, 10](#)).

Surround yourself with people who are smarter than you. Knowing your own strengths and weaknesses is

important to any leadership role. As a leader in nursing, you will be challenged to work with nurses and other health care providers with a variety of backgrounds, in different care settings that might include your own private practice that serves a diverse patient population (see [Chapters 25, 28](#)). Being confident in what you have been prepared to do through your education and your clinical experience is critical. You will be challenged to bring groups together, and an honest self-assessment to determine what skills are needed to make the project successful is essential. Identifying exactly what you can contribute to the project and then selecting team members who can make up for your weaknesses and complement your strengths will be the key to a successful intervention or change initiative. The more diverse the team, the better the outcome.

Know your audience. As a leader you may be the only nurse who is participating on the team and will serve as the voice for nurses. Consider all team members as your peers and be true to what you contribute and that which is within your scope of practice, which is as an expert in EBP. Doing this will enable you to cultivate the right resources and support the collaborations necessary to help make complex projects in healthcare successful. Bring in other nurses when you find that you are the only nurse, and realize that you are there for the voice of a nurse. Do not be intimidated to bring forth your nursing knowledge as a driver to get to a solution with the group.

Emphasize strengths. Nursing leaders are called to evaluate people and processes, which can be highly complex and challenging to say the least. We are the only health profession with specific education, skill development, and accountability for bringing a team together for the patient and their family. Regardless of the target audience it is often most effective to emphasize the strengths of individuals and processes rather than to focus on the weaknesses. Teams function more efficiently when they tap into and build on strengths. Utilizing a glass-half-full lens is one of the most effective ways to drive change, both with the individuals you interact with and members of your interdisciplinary teams (see [Chapter 22](#)).

When you win, everyone else wins. Serving as an advocate for your team may come easy to some professionals, but advocating for yourself may be a bit more of a challenge. Recognize that serving as a voice for nurses and patients is a major responsibility as well as a distinct

privilege. One of the most rewarding parts of your job will be to see nurses gain insight into their own practice and scope of influence on patient outcomes. It is important to let the full health professional team become aware of the unique contribution of nursing. As a clinical leader your most significant and lasting impact happens through others. We know that nurses are smart, passionate, and dedicated despite the challenges we face each and every day. Routinely we care for the marginalized and the most vulnerable people, and as a nurse leader taking the time to acknowledge those achievements is important. Remember to celebrate your and your team's accomplishments on a regular basis (see [Chapters 27, 28](#)).

CONCLUSION

You are going to be taking on a new, progressive role at a time in healthcare that has seen unprecedented changes. In the past 10 years we have experienced technological advances that impact patients and providers alike. We have endured a pandemic that pushed our nursing practice and the profession at large to new heights. We are experiencing the resulting challenges to our professional workforce and health care organizations. No doubt, the next 10 years will continue to bring on exciting challenges for leaders in both practice and academia. The only way for us to ensure that the nursing profession remains contemporary is to continue to develop the science through nursing research.

As a graduate-level-prepared clinical nursing leader, you are seen as an expert in translational science, which means you are dependent on rigorous and relevant research to be translated into practice. We do know that the number of nurses with a DNP degree compared to a PhD degree are outnumbered by approximately 2:1. The PhD role in nursing should be appreciated for what it was intended to do—developing new knowledge—which is complementary to the DNP role of applying that new knowledge to practice (see [Chapter 22](#)). Understanding and celebrating the synergistic relationship of these doctoral roles cannot be overemphasized. As nurses seek guidance on pursuing a terminal nursing degree, a clear understanding of each role and this interdependent, advantageous relationship is vital.

As a graduate-level-prepared clinical leader, you are in the position to make strong impressions and influence the choices that nurses make toward advancing their careers and formal education. As you serve as a

model and guide nurses on their journey, offering external expert resources will help inform the process, such as the AACN site, which has an abundance of resources for them to explore (<https://www.aacnnursing.org/students/nursing-education-pathways>). Accessing information that is presented in a factual manner is very important for the individual or mentee to consider when deciding to advance their formal education, because it will take a good deal of time, money, and resources. This guidance may help them avoid making a wrong professional life-changing decision, which can lead to role disillusionment and disappointment. Also stay informed of higher education resources, opportunities to seek doctoral education, and what various schools of nursing offer on their websites, in interactive webinars, and through maintaining your professional network.

Your call to action as a clinical leader with an advanced degree is to lead the future of healthcare and nursing in all settings where people live, work, play, learn, and worship. While this may seem daunting, the knowledge and skills presented through the content, concepts, and examples in this textbook will help ensure that you are prepared to be a highly effective, visionary leader who is well positioned to guide the future of healthcare and nursing.

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Academic–Practice Partnership for the Future of Nursing and Healthcare

Mary Jo Vetter and Kathleen Evanovich Zavotsky

LEARNING OUTCOMES

After reading this chapter, you should be able to do the following:

- Explore the historical and current status of academic–practice partnerships (APPs).
- Describe guiding principles of APPs.
- Explore ways that APPs are operationalized among academic and practice partners.
- Delineate the impact APPs have on evidence-based practice, healthcare quality, cost, and outcomes.
- Understand the potential impact APPs have on workforce development.
- Identify future implications in the evolution of APPs to impact transformational change in the nursing profession.

KEY TERMS

Academic–practice partnership
Clinical practice
Collaboration
Cost

Evidence-based practice
Education
Nursing workforce
Outcomes of care

Quality of care
Research

An **academic–practice partnership** (APP) is a **collaboration** between an academic institution and a healthcare organization. In nursing, an APP can empower innovative approaches in preparing the workforce of the future (Institute of Medicine [IOM], 2011; National Academies of Sciences, Engineering, and Medicine [NASEM], 2021). The goals of the partnership should be to enhance quality of healthcare delivery through the integration of **education**, **research**, and **clinical practice**. The academic institution provides opportunities for students and faculty to engage in learning experiences, while the healthcare organization benefits from access to the latest research, expertise, and educational programs that can positively impact the availability of a pipeline of highly

trained professionals for employment. With students, faculty, clinical leaders, and staff working together to advance nursing knowledge, there is opportunity to simultaneously provide high quality care and workforce development.

Partnerships can be structured, executed, and governed in a variety of ways to meet the needs of both parties. Some are highly explicit and based on formal contracts that describe strategic plans, have bylaws and financial arrangements, and are overseen by clearly designated management resources to achieve mutual objectives; others are developed in an ad hoc manner in response to a particular situational need (De Geest et al., 2013).

TIP

Regardless of the formality in arrangements, the academic and practice setting should have a shared vision that builds on strengths, demonstrates collaboration, and supports relational change for the sake of improvement.

MUTUAL BENEFITS OF ACADEMIC–PRACTICE PARTNERSHIPS

There are mutual benefits to engaging in an APP. [Sadeghnezhad and colleagues \(2018\)](#) conducted an integrative review of global literature and identified broad areas of shared impact. By creating synergy in training and empowerment of nurses in both settings, educational capacity can be enhanced through reciprocal sharing of expertise and tangible resources to improve student and staff performance. APPs have the potential to both improve student transition to practice and staff knowledge and skill development to provide safe, high-quality services. Access to a supportive practice-based learning environment enables students to achieve professional competence through interaction with expert staff, which in turn influences curricular innovation to keep pace with health setting needs rendering new graduates ready for employment. Access to shared human and financial resources promote the identification and resolution of pressing practice issues through joint research and [evidence-based practice](#) (EBP) improvements to bridge the gap between theory and application of new knowledge to impact outcomes.

Additional benefits of APPs may include:

1. Improved patient care due to opportunities for health care professionals to have additional training and apply the latest evidence in practice
2. Enhanced education as a result of hands-on learning experiences and exposure to real-world health care challenges
3. Increased access to cutting-edge technology and care delivery models
4. Increased research capacity as partners engage in mutually valuable studies of new interventions to overcome practice challenges
5. Improved workforce development to enhance practice readiness of new graduates and address nursing shortages

6. Financial benefits that accrue to both partners through grant funding and other sources of savings and revenue generation, and shared resources
 7. Strengthened community relationships to promote a collaborative and integrated health care system
- Challenges in establishing and maintaining an APP include:

1. Aligning goals and objectives of the partnership to ensure both institutions realize the value proposition
2. Integration of systems, processes, and deliverables, especially when the organizations have different cultures and ways of operating
3. Managing finances to determine the division of costs and allocation of resources
4. Maintaining quality and safety while balancing the goals of education and research with the delivery of high-quality care
5. Ensuring faculty and staff of both institutions have the necessary skills, knowledge, and attitudes to work effectively in the partnership
6. Measuring and quantifying the success of the partnership
7. Sustaining an effective partnership over time with the commitment to addressing challenges that arise

TIP

An APP should meet the needs of both partners with ample opportunities provided to communicate in a transparent, respectful manner.

HISTORY

As health care demands become increasingly complex and [nursing workforce](#) shortages persist over time, nursing education and the delivery system recognized the limitations to working as independent entities and began to invest in a joint effort to address long-term challenges faced by the profession. A strategic response requires both academia and practice partners to develop sensitivity and respect for each other's different demands and priorities in order to mount coordinated action. Historically, academic and clinical practice settings engaged in various degrees of partnership and collaboration in the preparation of the nursing workforce. The nature of these relationships continually evolved to meet the needs of each partner driven by the nature of influencing forces that are in play at different points

in time. Factors influencing the relationship include the current, prominent educational model, workforce demands, desired skills and characteristics of the nurse, and societal contributors influencing health care economics with increasing emphasis on **cost** and **quality of care** (Cronenwett, 2004). As evidence confirming the relationship between patient outcomes, staffing levels, educational preparation, and professional practice environments was confirmed through research studies, the need for meaningful collaboration between academia and practice became more urgent (Aiken et al., 2002; Aiken et al., 2003). Partnership was identified as a strategic response to enable and foster merging the collective intellectual capacity of both sectors to address issues such as nursing staff and faculty shortage, demanding workplace conditions, continual health care organization reprioritization, public recognition opportunities, and the need to improve health care delivery by integrating nursing research and EBPs in the workplace (American Nurses Credentialing Center, 2023; O'Neill & Kraul, 2004; Horns et al., 2007).

Over time, with perseverance and a commitment to innovation, academic and practice partners have continued to define the elements of an effective partnership. In 2012, the American Association of Colleges of Nursing (AACN) and the **American Organization of Nurse Leaders (AONL)** (2012) published guiding principles developed by a task force convened to address the recommendations of the *Future of Nursing: Leading Change, Advancing Health* report (IOM, 2011). The report charged the profession with creating systems for nurses to achieve educational and career advancement, preparing nurses of the future to practice and lead, and providing mechanisms for lifelong learning. The task force defined the APP as an intentional, formal relationship based on mutual goals, respect, and shared knowledge that can function to advance nursing practice to improve population health. The AACN/AONL APP Steering Committee developed a set of guiding principles, templates, and resources to support the growth of meaningful partnerships including a tool kit and outcome matrix (<https://www.aacnnursing.org/Academic-Practice-Partnerships/The-Guiding-Principles>). The guiding principles advocate for strong commitment and reciprocal support to achieve innovation in professional education and practice (Table 2.1).

With shifting health system priorities and movement toward value-based reimbursement strategies that

include assumption of responsibility for health outcomes at the population level, ensuring safe transitions of care across the health care continuum while simultaneously ensuring a high level of efficiency and effectiveness, further alignment of APP priorities was needed. The *Advancing Healthcare Transformation: A New Era for Academic Nursing* report (AACN & Manatt Health, 2016) outlined opportunities for academic nursing to enhance partnership with academic health centers (AHCs) to advance care in integrated health systems, further improve health outcomes, and foster new models for care innovation. Findings from interviews and surveys of academic and health system executive leaders from around the United States captured perspectives of a diverse set of individuals and yielded key recommendations to achieve deeper understanding and commitment to work collaboratively to achieve health care transformation. Major conclusions were that academic nursing was not well positioned as a partner in healthcare transformation. Often, there is minimal faculty participation in health system governance, marginal participation of faculty in clinical practice, and siloed nursing research initiatives that are not mutually beneficial to care delivery. Institutional leaders recognized the missed opportunity for alignment of efforts and endorsed the need to redefine relationships and set a dynamic vision for academic nursing in health care settings despite the challenge of having insufficient financial resources to facilitate success. A summary of the six action-oriented recommendations made in the report are found in Table 2.2 (Fig. 2.1).

ACADEMIC–PRACTICE PARTNERSHIP CHARACTERISTICS

When APPs have intentionally planned, clear objectives and a structured framework for developing and implementing partnership endeavors, evaluation of the effectiveness of the relationship is possible. Clearly defined goals and implementation activities enable identification of specific, measurable outcomes, time frame for achievement, opportunities to modify partnership strategies, and regular follow-up to evaluate the success of the partnership. Utilizing a standard method of quantifying outcomes of the partnership enhances the ability to communicate the impact of the collaboration. It is important to keep key stakeholders abreast of partnership outcomes as they have the power to sustain and evolve the relationship informed by lessons learned.

TABLE 2.1 AACN/AONL Guiding Principles for Academic–Practice Partnerships (2012)

Guiding Principle	Strategies
Collaborative relationships are established and maintained	• Formal relationships established at the senior leadership level and practiced throughout the organization • Shared vision and expectations are clearly articulated • Mutual goals are set and evaluated at set points in time
Mutual respect and trust are cornerstones of the relationship	• Shared conflict engagement competencies • Joint accountability and recognition for contributions • Frequent and meaningful engagement • Mutual investment and commitment • Transparency
Knowledge is shared among partners through a variety of mechanisms	• Commitment to lifelong learning • Shared knowledge of current best practices • Shared knowledge management systems • Joint preparation for national certification, accreditation, and regulatory reviews • Interprofessional education • Joint research • Joint committee appointments • Joint development of competencies
Shared commitment to maximize the potential of each nurse to reach the highest level within their scope of practice	• Culture of trust and respect • Shared responsibility to prepare and enable nurses to lead change and advance health • Shared governance that fosters innovation and advanced problem solving • Shared decision making • Consideration and evaluation of shared opportunities • Participation on regional and national committees to develop policy and strategies for implementation • Joint meetings between regional/national constituents of AONL and AACN
Commitment is shared by partners to work together to determine an evidence-based transition program for students and new graduates that is sustainable and cost effective	• Collaborative development, implementation, and evaluation of residency programs • Leveraging competencies from practice to education and vice versa • Mutual/shared commitment to lifelong learning for self and others
Commitment is shared by partners to develop, implement, and evaluate organizational processes and structures that support and recognize educational achievements	• Lifelong learning for all levels of nursing, certification, and continuing education • Seamless academic progression • Joint funding and in-kind resources for all nurses to achieve a higher level of nursing • Joint faculty appointments between academic and clinical institutions • Support for increasing diversity in the workforce at the staff and faculty levels • Support for achieving an 80% baccalaureate prepared RN workforce and doubling the number of nurses with doctoral degrees
Commitment is shared by partners to support opportunities for nurses to lead and develop collaborative models that redesign practice environments to improve health outcomes	• Joint interprofessional leadership programs • Joint funding to design, implement, and sustain innovative patient-centered delivery systems • Collaborative engagement to examine and mitigate non-value-added practice complexity • Seamless transition from the classroom to bedside • Joint mentoring programs/opportunities

TABLE 2.1 AACN/AONL Guiding Principles for Academic–Practice Partnerships (2012)—cont’d

Guiding Principle	Strategies
Commitment is shared by partners to establish infrastructures to collect and analyze data on the current and future needs of the RN workforce	• Identification of useful workforce data • Joint collection and analysis of workforce and education data • Joint business case development • Assurance of transparency of data

AACN, American Association of Colleges of Nursing; AONL, American Organization of Nurse Leaders; RN, registered nurse. From AACN/AONL, 2012.

TABLE 2.2 AACN Manatt Report (2016)

Recommendations	Strategies
Embrace a new vision for academic nursing	Be a full partner in health care delivery, education, and research that is integrated and funded across all professions and missions in the academic health system • Participate in health system governance • Expand academic nursing leadership in clinical practice and care delivery • Grow and evolve academic nursing research in partnership with the medical school, health system, and other professional schools • Collaborate on workforce plans and training program in partnership with the health system • Integrate academic nursing into population health initiatives • System-wide commitment to leadership development to prepare and support future nursing leaders
Enhance the clinical practice of academic nursing	• Implement initiatives that more fully bring nursing faculty into the clinical practice of the health system • Connect clinical service more closely to the academic mission of the school
Partner in preparing the nurses of the future	• Build a pipeline of nurses (BSN, MSN, DNP, PhD) to meet the clinical requirements of the academic health system • Create leadership development programs for faculty and practicing nurses that are jointly managed
Partner in the implementation of accountable care	• Engage in joint clinical planning to develop linkages between acute and postacute care services • Expand nurse-led community programs led by faculty and in partnership with health system leaders and clinicians
Invest in nursing research programs and better integrate research into clinical practice	• Create mechanisms to coordinate research projects and activities across academic nursing and AHCs • Develop joint research programs • Integrate nurse researchers into developing informatics programs • Strengthen training programs for nurse clinical trial coordinators and clinical research nurses • Provide leadership in establishing links to other professional schools • Expand faculty development to include PhD investigators across multiple disciplines in targeted research areas
Implement an advocacy agenda in support of a new era for academic nursing	• Seek growth in funding for the training of nurse scientists • Advocate for scope of practice changes to have all nurses perform at the full potential of their license

AACN, American Association of Colleges of Nursing; AHC, academic health center; BSN, bachelor of nursing science; DNP, doctorate of nursing practice; MSN, master’s of nursing science; PhD, doctorate of philosophy. From AACN & Manatt Health, 2016.

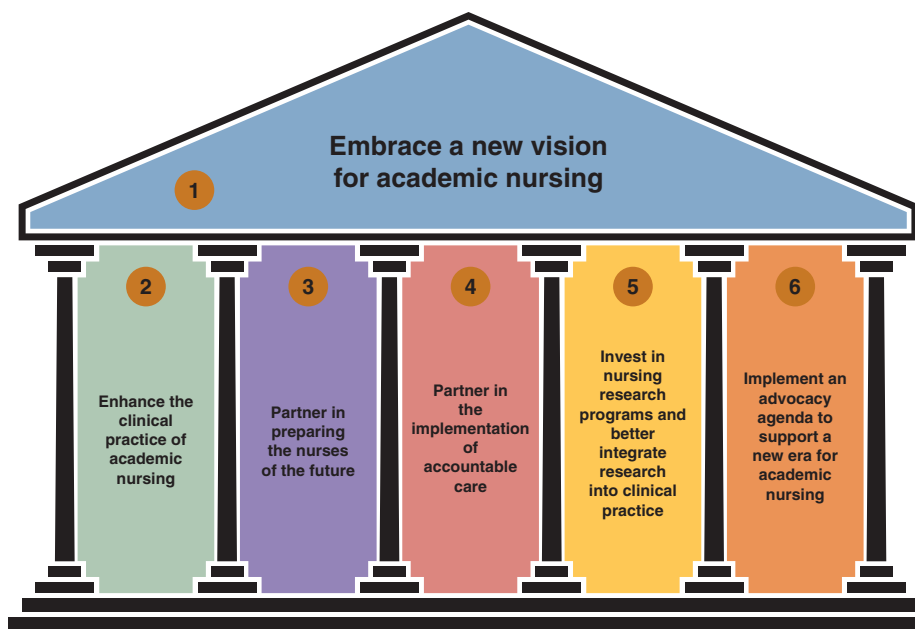


Fig. 2.1 Six Action-Oriented Recommendations for Academic Nursing. (From AACN & Manatt Health, 2016.)

Outcome data enable the ability to make necessary adjustments in academic and care delivery processes to demonstrate the progress and highlight the value of the APP (Polancich et al., 2021; Beal et al., 2012).

Several outcomes associated with APPs may make engaging in these relationships more attractive and worth the investment of time and effort. Academic program redesign is more effective when partners create innovation education models to advance the profession. APP programs have reported increased recruitment of students, faculty, and staff nurses as well as improved retention. Students relate increased readiness for practice and more high-quality clinical experiences for both students and preceptors. Partnerships have promoted cultural shifts by increasing percentage of bachelor of nursing science-prepared nurses and adoption of EBP and research that lead to improved patient outcomes while decreasing costs associated with onboarding newly licensed registered nurses (RNs) (Robertson et al., 2021).

OPERATIONALIZING ACADEMIC–PRACTICE PARTNERSHIPS

Practice settings operationalize APPs in various ways with targeted goals that include growth in professional

practice and improved quality of care and patient outcomes. Common activities focus on joint support of EBP, nursing research, dissemination, clinical redesign, innovative clinical experiences, and strategies to recruit and retain nurses (Dols et al., 2019). APPs should support evidence-based transition to practice programs, lifelong learning, and nursing leadership development (Beal et al., 2012). Typically, students and faculty representing all levels of academic education work with clinical leaders and interprofessional staff across an organization on initiatives that are strategic priorities for both partners.

A common method utilized to achieve the shared objectives in an APP is a joint appointment where an academic nurse educator or practice leader has a role with responsibilities in both settings. Salary expenses for an individual may or may not be shared by the partners, but goals for the role should be mutually beneficial. The person provides consultation and collaborates closely with key individuals or departments on agreed-upon focus areas that may support attainment or recertification of American Nurses Credentialing Center (ANCC) Magnet designation, meet organizational quality improvement or accreditation goals, promote academic curriculum development or revision, and support scholarship among partners (Hinich et al., 2017).

Academicians in a practice setting may:

1. Support research by partnering to offer clinical or methodological expertise in the formulation of research questions, planning research study design and data analyses, and guiding Institutional Review Board application submission
2. Support EBP and quality improvement efforts by supporting literature review and synthesis, designing practice change approaches, and defining outcomes, measures, targets, and goals reflective of strategic priorities of the organization
3. Explore avenues and support efforts geared toward funding of practice-based initiatives
4. Assist in dissemination of organizational work through publication, presentation, and social media outlets
5. Support staff education directly or indirectly by targeted accessing of academic resources
6. Participate in shared governance committees, task forces, and other scholarly efforts
7. Foster attainment of current clinical knowledge and advanced educational degrees among nursing staff and administration

Practice leaders in an academic setting may:

1. Function as adjunct faculty to support academic education at all levels in courses, simulation centers, and academic advising
2. Support curriculum revision to align with the realities of the current practice
3. Contribute to curriculum revision to meet goals in the practice setting
4. Identify opportunities for collaboration with practice partners to enhance nursing science
5. Function as a role model, liaison, and coach for new graduates and graduate students

TIP

Take the time to understand the nature of an APP that already exists or try to work with partners to establish a new relationship based on available guiding principles. Impact of the APP may be observed immediately or take longer to develop the shared value proposition.

APPs have been effective in meeting the need for innovative clinical placement models that allow students to develop knowledge, skills, and attitudes to manage patient care safely and effectively. The Dedicated

Education Unit (DEU) is a health care unit where education, in addition to patient care, is a primary function. Students are responsible for their learning and peer teaching. RNs are responsible for overall patient care and mentoring students and faculty ensure that students have relevant learning opportunities and evaluate student progress. An effective APP is a key ingredient for a successful DEU where relationships are based on formal agreements founded on a united commitment to enhance both student learning and quality clinical outcomes. The APP relationship in the DEU is built on mutual respect, trust, and goodwill, and equal voice in building optimal practice environments where students, faculty, and nurses are valued partners who contribute to both education and practice processes and outcomes. The presence of a formal shared or professional governance structure and mutual vision for the partnership promotes a culture of learning that is sustained by strong structural foundations, ongoing dialogue, and continuous evaluation to produce practice-ready graduates. An effective DEU possesses a culture of educational excellence and is supported by responsive leadership where there is clarity of roles and responsibilities that builds capacity for both nursing staff and faculty to ensure high-quality outcomes (Marcellus et al., 2021). Compared to traditional models of education, the DEU enhances clinical learning and allows educational and service institutions to integrate needed resources to create an environment capable of achieving the best quality patient care while sustaining nurses' professional growth and promoting a positive experience for students (Pedregosa et al., 2021). The financial impact of a DEU has been analyzed from the perspective of both partners and found to offer advantages to participating health care institutions and schools of nursing (Greene & Turner, 2014). Calculating the return on investment on a DEU, which is often preferred by students, can positively impact the perception of value for both partners.

APPs foster high-quality doctoral education programs in nursing and are vital to positioning nurses to lead innovation in healthcare. Both research and practice doctoral education students benefit from immersion in a practice setting to generate new knowledge or apply existing evidence to inform best practice. Students' dissertation or doctorate of nursing practice project work can be customized to meet the needs of a health care organization while ensuring development of essential competencies related to research, critical appraisal, and

translation of evidence to create sustainable, data-driven practice change (Prado-Inzerillo et al., 2023). Graduates of doctoral programs have the potential to infuse the practice setting with learned skills and systems-level competencies that enable flexible system responses to address both anticipated and unanticipated demands. Health systems benefit from jointly created innovative, evidence-based models of care that have the ability to increase access, improve outcomes, and decrease cost. Nurses collaborating to design innovations are at the forefront of patient care and are well positioned to address new and emerging trends in order to affect positive change despite barriers and challenges (Howard et al., 2021).

APPs may focus exclusively on developing research and EBP capacity (Horns et al., 2007; Davis et al., 2019). These partnerships set goals to support generation of new knowledge that is specific to the needs of the practice settings to improve patient and health system outcomes. Collaboration and mentoring activities effectively engage faculty and staff nurses in identifying strategic priorities for research studies to directly inform changes in practice standards. Nursing science fellowships involving a structured didactic curriculum, ongoing mentorship, and ad hoc consulting are an effective way to ensure completion of the full cycle of knowledge generation, translation, and sustainability of practice improvements. Partners should jointly design and implement initiatives, measure outcomes, analyze generated data, and disseminate findings internally and externally (Phillips et al., 2019).

APPs can focus on addressing shortages of nurses and advanced practice staff when educators are also in short supply. Academic programs can be code-signed and delivered to meet the workforce needs of the practice partner for RNs serving a specific specialized population, advanced practice nurses where critical shortages of providers exist, and nursing educators when enrollment targets in the academic setting is limited by faculty shortages. Varying arrangements for tuition remission, dual funding of compensation packages, workload expectations, and hiring, recruitment, and retention strategies can be funded by the partners or governmental grants (Horns et al., 2007; Paton et al., 2022; Rowen et al., 2023). In circumstances where academic educator shortages exist, APPs can be mutually beneficial when academic time, which is typically devoted to teaching, curriculum development,

and other faculty role obligations, is dedicated to practice setting priorities. Clinician–educator roles allow for current bedside practice to be brought to the educational setting, reducing the theory–practice gap, enhancing academic credibility, and integrating best evidence in clinical practice. Reciprocal value accrues to the practice partner when role transition for novice clinicians is facilitated, greater inquiry into practice issues occur promoting integration of research evidence in practice, and partners jointly advocate for the future of nursing (Pfister et al., 2021).

Partners have also collaborated to expand the role of nurses throughout the continuum of healthcare to improve the nations' health while decreasing costs. In a rapidly changing health care environment, nursing education and practice reforms are necessary to meet current and future population health demands (NASEM, 2021). An exemplar APP is working together to scale up nursing competency in care coordination and patient-centered care in both students and practicing nurses by providing educational content, supporting quality and performance improvement projects, and assessing impact of the collaboration on patient, education, and practice outcomes (Nahm et al., 2022). Care coordination across the lifespan is an essential competency that further expands the role of nurses in providing effective, efficient, equitable, accessible care using collaborative practice models (AACN, 2021).

As care delivery moves increasingly toward the outpatient settings in response to shifts in evolving care delivery models designed to meet patient needs while reducing costs, enhancing the patient experience, and promoting population health, the American Academy of Ambulatory Care Nursing recognized the opportunity to define best practices to facilitate successful APPs outside of the acute care setting. With an increased need for competent ambulatory care nurses, evidence-based guidelines were created and published to promote setting-specific pre- and postlicensure clinical experiences that support independent and collaborative practice in health promotion, chronic illness management, and transitional care. Ongoing professional development of faculty and preceptors to support an ambulatory care nursing workforce was identified as a key factor for long-term success of the APP (DeBiase et al., 2022; Witter et al., 2022; DiGiuli, et al., 2022).

The COVID-19 pandemic forced nursing programs, health care systems, and community-based

organizations to quickly adapt to meet the needs of students, patients, populations, and communities while addressing safety concerns and preserving limited health care resources. The resulting amplification of the value and need for APPs served to increase awareness and support for these relationships in a rapidly evolving, sometimes uncertain environment. The pandemic impacted APPs by decreasing or temporarily suspending student placements, shifting clinical experiences to virtual care delivery modes, increasing collaboration with new, nontraditional partners, and highlighting the need to be prepared for additional public health crises. APPs were leveraged by new and existing partners to mobilize collaborative efforts to meet predominant health care needs such as staffing mass vaccination clinics, contributing to community coalition efforts, and engaging in virtual public health education and outreach efforts to support social connection and resource navigation. The diversification of APPs to practice areas previously not considered refocused academic and practice partners and emphasized the need to align academic educational content with service delivery needs in order to contribute meaningfully in the development of the workforce (Bejster et al., 2022). Nurses were rapidly responding to demands to care for patients and families without sufficient evidence to guide best practice, which led to the rapid deployment of research initiatives to inform evidence-based care. In response to the impact of the pandemic on nursing education and practice, the National Council of State Boards of Nursing (NCSBN) convened nurses from around the country to explore the multitude of issues identified and develop possible solutions. A national model of APP was recommended with the goal of creating clinical education opportunities to support care delivery during a crisis. Building on the guiding principles set forth by AACN and AONL in 2012, the committee recommended the APP as the appropriate mechanism

to define roles and responsibilities of health care organizations and schools of nursing. The APP provides a solid foundation for a bidirectional relationship where communication is vital in achieving clarity about issues such as who provides personal protective equipment and whether compensation is offered for engaging in certain clinical activities such as screening, outreach, vaccination, and public health education activities. The NCSBN endorsed the creation of APPs outside of large academic medical centers in community-based settings as long as faculty are well prepared in codesigning valuable experiences that are in compliance with scope of practice parameters and both partners understand and are involved in establishing the APP agreement. The important role of state boards of nursing in defining APPs in the future was emphasized to ensure state regulatory compliance with appropriate educational oversight (Spector et al., 2021).

TIP

An APP should change to address the evolving demands of the academic and practice partner. Goals of the relationship and desired outcomes should be evaluated and revised periodically.

SYNTHESIS

APPs have evolved along with the profession of nursing. As healthcare becomes more complex with increased emphasis on quality, cost, and the health and well-being of patients and providers, it is essential that APPs remain dynamic and responsive to the unique requirements of participating partners. Expert guidance and tools are available to establish and maintain a productive APP. Clinical leaders should be transparent in expressing the desired characteristics, available resources, goals, and outcomes that benefit both partners.

KEY POINTS

- An APP can be structured in a variety of ways with common goals that build on strengths, demonstrate collaboration, and support relational change for the sake of improvement in the quality of health care delivery through the integration of education, research, and clinical practice.
- Mutual benefits are derived from APPs by creating value through synergy between partners in both settings who engage in reciprocal sharing of expertise and tangible resources to improve student and staff performance.

- Challenges to effective APPs must be proactively addressed through open, transparent communication, shared decision making, and goal setting.
- APPs foster innovation in care delivery, education, and leadership, positioning the nursing profession for the future of healthcare.

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Overview of Evidence-Based Practice

Kathleen Evanovich Zavotsky and Mary Jo Vetter

LEARNING OUTCOMES

After reading this chapter, you should be able to do the following:

- Describe the historical perspective of evidence-based practice (EBP).
- Compare and contrast the benefits of research, EBP, translation/implementation science, and quality improvement in healthcare.
- Describe Donabedian's Framework for Quality Improvement.
- Describe the strategies and work of public and private agencies that guide the national agenda for EBP in healthcare.
- Describe the steps of EBP.
- Discuss benefits of including consumers on EBP teams.
- Describe actions that can be used to promote EBPs in healthcare.

KEY TERMS

Care bundles

Conduct of research

Evidence-based practice

Implementation science

Outcomes

Processes of care

Quality improvement

Translation science

Since the early 2000s, the advancement of knowledge about effective interventions to achieve improved outcomes has exploded. As nurses and nursing leaders you will assume responsibility for ensuring that evidence from nursing science and the science of other disciplines is used in practice. Whether as faculty, clinical nurses, or nurse leaders in health care organizations, you will be preparing the nursing workforce to be members of interprofessional and intra-professional health care teams that use the best available evidence to achieve optimal patient outcomes across various settings. Among the greatest challenges you will face as nurses and nursing leaders is engaging your colleagues in committing to using an evidence-based approach to guide practice. In your role, you will lead or be interprofessional and intraprofessional team members, asking relevant clinical questions, accessing and assessing the best information, implementing evidence-based practice (EBP), and

evaluating the effect on expected outcomes. Meeting this challenge is integral to improving healthcare, which is guided by the Institute for Healthcare Improvement's (IHI's) Quadruple Aim framework that seeks to optimize health system performance by simultaneously focusing on improving the patient care experience, improving the experiences of those in the workforce who provide healthcare, enhancing population health, and reducing health care cost (Nundy et al., 2022). The four elements of the Quadruple Aim of Healthcare include addressing social determinants of health (SDOH). SDOH is defined as conditions in the environments where people are born, live, learn, work, play, and age that affect a wide range of health, functioning, and quality of life outcomes and risks. According to Healthy People 2030 (U.S. Department of Health and Human Services, & Office of Disease Prevention and Health Promotion, n.d.), SDOH can be grouped into five

domains: economic stability, education access and quality, health care access and quality, neighborhood and built environment, and social and community context (IHI, 2023).

The application of evidence to improve quality of care and patient outcomes is essential to health care improvement. The United States faces the threat of explosive growth in chronic illness incidence, an aging population, persistent challenges to improve and address SDOH and patient safety, and rising health care expenditures that are projected to reach 5.8% by 2024 (Keehan et al., 2015; World Health Organization [WHO], 2022). Although U.S. spending in health exceeds that of all other developed nations, key measures of health lag behind, particularly for preventable chronic conditions and associated functional decline (Squires & Anderson, 2015). Several reports of the National Academy of Medicine describe multiple opportunities for implementation of evidence in healthcare to improve population health and health care delivery (Institute of Medicine [IOM], 2009, 2011, 2012a, 2012b, 2013, 2015, 2021). Despite the availability of evidence-based recommendations for practice, challenges continue in integrating this approach to care delivered across the lifespan (Agency for Healthcare Research and Quality [AHRQ], 2022). There is a need to continue to develop EBP recommendations and applications to improve patient care and address population health issues. This EBP gap is linked to poor health outcomes such as obesity, food insecurities, substance abuse, health care-acquired infections, falls with injury, and pressure injuries (Brownson et al., 2017; Centers for Disease Control and Prevention [CDC], 2024). This chapter provides an overview of EBP in order to lay the groundwork for you to participate in EBP promotion in healthcare.

TIP

Evidence-based practice is a team activity! The Interprofessional Education Collaborative (IPEC) Competencies (<https://www.ipcollaborative.org/ipccore-competencies>) can provide a framework for you to use when thinking about how successful EBP teams operate. The IPEC Competencies provide an understanding of the roles and responsibilities of intra- and interdepartmental team members, valuing, and respecting what each team member has to offer, and communicating effectively in order to build highly functioning teams.

HISTORICAL OVERVIEW

Nursing has a rich history of using research in practice, pioneered by Florence Nightingale, who used data to change practices that helped reduce mortality rates in hospitals and communities (Nightingale, 1858, 1859, 1863a, 1863b). Beginning in the 1970s, nursing science has grown, and findings have become available to guide practice. EBP (called *research utilization*) was advanced by demonstration projects and programs such as the following:

- Conduct and Utilization of Research in Nursing project (Horsley, 1983)
- Western Interstate Commission for Higher Education in Nursing regional program on nursing research development (Krueger, 1978; Krueger et al., 1978; Lindeman & Krueger, 1977)
- Nursing Child Assessment Satellite Training project (King et al., 1981)
- Moving New Knowledge into Practice project (Cronenwett, 1995; Funk et al., 1989)
- Orange County Research Utilization in Nursing project (Rutledge & Donaldson, 1995)

These seminal projects laid the groundwork for application of research findings in practice to improve patient care, known today as *evidence-based practice*. The nursing profession has made great strides in ensuring that EBP is integrated into undergraduate curriculums (Abu-Baker et al., 2021) as well as graduate programs including serving as a foundation for meeting the requirement for a doctorate in nursing practice (DNP) (Moore et al., 2019). The introduction of EBP principles through formal education has allowed us to serve as leaders in the field of translational science (Kalhor et al., 2017; Bianchi et al., 2018; Alqahtani et al., 2022). As a result of the work conducted by Titler (2010) and more recently Melnyk and colleagues (2017), the scientific body of knowledge translation and the application of evidence in nursing and healthcare are continuing to grow. Advancements in implementation science can expedite and sustain the successful integration of evidence in practice to improve care delivery, provide a framework for addressing SDOH, and improve patient outcomes (Tucker, 2021).

TIP

The new knowledge created from nursing research will help address health care challenges in practice, promote policy development, and advance health equity into the future (National Institute of Nursing Research [NINR], 2022).

DEFINITION OF TERMS

Various terms are used in the field of EBP (Table 3.1). It is essential that you start or advance your involvement in EBP by improving your understanding of the differences between the conduct of research and EBP. As detailed in Table 3.2, you will note that EBP and the conduct of research have distinct purposes, questions, approaches, and evaluation methods. **Conduct of research** is the systematic investigation of a phenomenon to answer research questions or hypotheses that generate new knowledge and advance the state of the science. For example, as an investigator, you may be testing the impact that a stress reduction program has on patients following an acute stroke. Patients' length of stay poststroke has been reduced dramatically thereby impacting their transition to home. This change has led to many unanswered questions about how we can better address this high-risk patient population's needs. Researching the effects that a stress-reducing program has on them may indeed help address their critical needs that include medication compliance and overall self-care management. Because the state of the science is questionable, this topic may benefit from a randomized control trial. As a randomized control trial, your study aims to advance science by using a more rigorous design in which participants in your study will meet specific inclusion criteria, and be randomized to the experimental or comparison arm (see Chapter 8). Measures of health literacy, self-care management and perhaps medication compliance using reliable and valid tools at baseline, after the completion of the intervention, and at specified follow-up time points will demonstrate the effect of the intervention. Upon study completion, you will disseminate your findings internally and externally at scholarly conferences and in peer-reviewed publications (see Chapter 21).

Evidence-based practice is the conscientious and judicious use of current best evidence in conjunction with clinical expertise, patient values, and circumstances to guide health care decisions (Straus et al., 2011; Titler, 2014). Best evidence, as guided by the EBP hierarchy, includes findings from randomized control trials, evidence from other scientific designs such as descriptive and qualitative research, and information from case reports and scientific principles (Chapter 4, Figure 4.1) When enough reliable research evidence is available, practice should be guided by research findings in

conjunction with clinical expertise and patient values. In some cases, however, a sufficient research base may not be available, and health care decision making is derived principally from other evidence sources such as scientific principles, case reports, expert opinions, and outcomes of quality improvement (QI) projects. For example, there is a strong evidence base for nurses to perform a structured handoff. The results of structured handoffs during changes of shift and changes in condition or location have proven to positively impact patient outcomes, including the overall patient experience (Kim et al., 2020; Rhudy et al., 2022) When thinking about use of this intervention in your practice, you will need to consider the following:

- The components of the intervention
- Whether you or other staff have the expertise to deliver this intervention
- The perceptions of the populations of patients you care for
- In what circumstances you will offer this intervention (e.g., change of shift, transfer from another unit/facility)
- The specific workflow of the unit or department you are offering this intervention to

In making these decisions, you will need to carefully weigh the research regarding the following:

- Multiple elements required in a structured handoff
- Unit, setting, and format in which it has been utilized (medical surgical, emergency department, intensive care unit)
- Specialized training required for the intervention
- Inclusion and exclusion criteria of the caregivers included in previous studies

TIP

When planning for implementation of EBPs, remember that it is not just the importance or value of the EBP topic as perceived by users and stakeholders (e.g., ease of use, valued part of practice) that will influence their adoption. It is the interaction among the importance of the EBP topic, the intended users' perception, and how it impacts their practice and workflow that determines the rate and extent of adoption.

Quality improvement (QI) is both a philosophy of organizational functioning and a set of analysis tools and change techniques to reduce variations in the quality

TABLE 3.1 Terms Used in EBP and Implementation Science

Term	Description
Translational research	A dynamic continuum from basic research through application of research findings in practice, communities, and public health settings to improve health and health outcomes; progresses across five phases: preclinical and animal studies (T0/basic science research); proof of concept/Phase 1 clinical trials (T1/testing efficacy and safety with small group of humans); Phase 2 and Phase 3 clinical trials (T2/testing the efficacy and safety with larger group of humans; compare to common treatments); Phase 4 clinical trials and clinical outcomes research (T4/translation to practice); Phase 5 population-level outcomes research (T5/translation to community) The translational phases along this continuum are sometimes referred to as “bench-to-bedside” and “bedside-to-community” (IOM, 2013)
Conduct of research	Systematic investigation of a phenomenon to answer research questions or hypotheses that advances the state of the science
Implementation science (also called translation science)	Field of science that focuses on testing implementation interventions to improve uptake and use of evidence to improve patient outcomes and population health, and explicate what implementation strategies work for whom, in what settings, and why (Eccles & Mittman, 2006; Titler, 2010, 2014)
Dissemination research	Targeted distribution of information and intervention materials to a specific public health or clinical practice audience with the intent to spread, scale up, and sustain knowledge use and evidence-based interventions (National Institutes of Health, 2013)
Comparative effectiveness research	Generation and synthesis of evidence that compares benefits and harms of alternative methods to prevent, diagnose, treat, and monitor a clinical condition, or to improve the delivery of care Purpose: to assist consumers, clinicians, purchasers, and policy makers to make informed decisions that will improve healthcare at both the individual and population levels This definition implies the direct comparison of two or more effective interventions in patients who are typical of day-to-day clinical care (IOM, 2009)
Knowledge translation	A term primarily used in Canadian implementation research and defined by the Canadian Institute for Health Research (www.cihr-irsc.ca/e/) as “a dynamic and iterative process that includes synthesis, dissemination, exchange, and ethically sound application of knowledge to improve the health of Canadians, provide more effective health services and products, and strengthen the health care system”
Knowledge transfer	“The process of getting knowledge from producers to potential users” (Graham et al., 2006) Knowledge transfer has been criticized for its “unidirectional notion and its lack of concern with the implementation of transferred knowledge” (Graham et al., 2006)
Evidence-based practice	Conscientious and judicious use of current best evidence in conjunction with clinical expertise and patient values to guide health care decisions (Straus et al., 2011; Titler, 2014)
Quality improvement	A set of statistical analysis tools and change techniques used to reduce variations in the quality of care provided by health care organizations (Nelson et al., 2007)
Evidence-based policy	Policy developed through a continuous process that uses the best available quantitative and qualitative evidence to improve public health outcomes (Brownson et al., 2009)
Evidence-informed decision making	Process of combining a range of sources of evidence to inform a decision In practice, this occurs within a political context that requires consideration of a range of other factors including research evidence, community views, budget constraints, and expert opinion (Armstrong et al., 2013)
Policy dissemination and implementation research	Research focused on generating knowledge to effectively spread research evidence among policy makers and integrate evidence-based interventions into policy designs (Purtle et al., 2016)

TABLE 3.2 Comparison of EBP and Conduct of Research

Components	Conduct of Research	EBP ^a
Purpose	Knowledge/science generation Example: Test an intervention to improve cognitive performance of older adults with HF.	Application of research findings and/or other evidence in local practice and/or communities Example: Implement evidence-based fall prevention bundles of care targeted to patient-specific fall risk factors for hospitalized older adults.
Synthesis of the science/knowledge	Identify gaps in the science Example: Despite high prevalence and severe consequences of memory loss in HF, there are no research-based therapies to improve memory in HF patients. Few studies have tested interventions to improve cognition in HF. Prior studies have been small sample sizes and lacked control groups.	Synthesize the evidence and set forth EBP recommendations Example: Because falls are complex and risks for falls are multifactorial, beneficial effects of fall reduction interventions increase when interventions target patient-specific fall risk factors. Fall prevention interventions should be customized to the individual's identified fall risk factors. Example: For those with mobility risk factors (e.g., gait instability, lower limb weakness, required assistance getting out of bed), the following EBPs are recommended: • Ambulate 3–4 times per day with assistance as needed unless contraindicated. • Refer to physical therapy for assessment and gait and strength training. • Minimize use of immobilizing equipment (e.g., indwelling urinary catheters, restraints). • Ensure proper assist equipment (e.g., walker, cane) is readily available and in proper working condition. • Utilize a standardized mobility assessment tool.
Question	Research questions or hypotheses that advance the state of the science Example: Compared with active control and usual-care control groups, do HF patients who receive BrainHQ have greater improvement in delayed recall memory, instrumental activities of daily living, and health-related quality of life?	Clinical question or purpose of the EBP project derived from the PICOT Example: Does implementing EB fall prevention interventions that target patient-specific risk factors decrease falls and fall injuries of hospitalized older adults? The purpose of this EBP project is to implement EB fall prevention interventions targeted to hospitalized older adults' fall-specific risk factors for those cared for in noncritical care settings to decrease falls and fall injuries.
Approach	Research design that is aligned with the research questions/hypotheses (e.g., observational; RCT; step-wedge design) Example: A three-arm RCT comparing BrainHQ with computerized general cognitive stimulation with crossword puzzles (active control) and usual care with no computerized cognitive stimulation (usual care).	Nonresearch design: Track measures (see Evaluation in this table) for a specified period of time preimplementation, during implementation, and postimplementation. Example: Falls and types of fall injuries for 6 months before implementation, midway through implementation (3 months), and after implementation (6 months).

Continued

TABLE 3.2 Comparison of EBP and Conduct of Research—cont’d

Components	Conduct of Research	EBP ^a
Evaluation	Standardized dependent measures with known reliability and validity Example: Hopkins Verbal Learning Test—Revised delayed recall measure; instrumental activities of daily living; Everyday Problems Test; Minnesota Living with Heart Failure Questionnaire.	QI metrics that address both processes of care and patient outcomes. Use standardized QI measures when available Example: <i>Outcome indicator</i> —fall rates defined as an unplanned descent to the floor, calculated, at the unit level, by the number of inpatient falls multiplied by 1,000 and divided by the total number of inpatient days <i>Process indicator</i> —If a specific fall risk factor was present, was the EB fall prevention bundle of care implemented that targeted the patient-specific fall risk factor? Number of patient days a specific risk factor is present, such as gait instability (1,285 patient days); number of times an EB fall prevention care bundle was implemented that targeted the patient-specific fall risk factor per 100 patient days; rates of correct intervention per 100 patient days (e.g., 31/100 patient days; 88/100 patient days).

^aExamples from [Titler et al., 2016](#).
BrainHQ, A computerized cognitive training program; *EB*, evidence-based; *EBP*, evidence-based practice; *HF*, heart failure; *PICOT*, problem/patients/populations, intervention, comparison, outcome, time; *QI*, quality improvement; *RCT*, randomized control trial.

of care provided by health care organizations ([Nelson et al., 2007](#)). QI emphasizes the continuous improvement of workflow that can involve the patient experience, teamwork, and the organization’s safety initiatives. Other defining features include setting organizational or departmental performance goals and expectations that can be guided by outside organizations’ standards that help qualify for public recognition such as *U.S. News and World Reports*, American Nurses Credentialing Center (ANCC) Magnet Designation, and the Joint Commission. The appropriate use of data is critical in order to help make evidenced-based decisions, and to assist in standardization of care and work processes that help in the reduction of variations in care (see [Chapter 13](#)). For example, members of your health care organization’s QI council are concerned about an increase in fall rates over the past six months that are higher than those of peer organizations in National Database of Nursing Quality Indicators (NDNQI) reports. You are charged with addressing this concern. You will use principles of QI and organizational quality data in conjunction with the latest evidence to guide your approach.

W. Edwards Deming is the father of modern QI, which started in the 1940s. Deming’s QI approach is

centered on process management ([Best & Neuhauser, 2005](#)). The principles for QI set forth by Deming include the following: (1) QI must be data driven; (2) improving the **process of care** is necessary to improve **outcomes**; (3) about 20% of the health care processes account for nearly 80% of the inefficiencies and wide variations in process of care (Pareto principle); and (4) managing processes of care means engaging clinicians who understand the care delivery process and are equipped to figure out improving processes of care over time ([Haughom, 2016](#)). A common QI framework used with EBP is *Structure-Process-Outcome* ([Donabedian, 1966](#)). *Structure* includes the physical and organizational components of care delivery such as facilities, equipment, and staffing. *Process* of care is the services and treatments patients receive (e.g., early removal of Foley catheters). *Outcomes* are the effect that the processes of care have on patients and populations, such as catheter-associated urinary tract infection (CAUTI) rates. This framework will be helpful as you plan EBP initiatives (see [Chapter 5](#)), implementation strategies (see [Chapter 17](#)), and evaluation (see [Chapter 19](#)).

QI and EBP have similarities and differences. As depicted in [Fig. 3.1](#), EBP is a type of QI that focuses



Fig. 3.1 Relationship Between EBP and Quality Improvement.

on implementing evidence-based processes of care to improve patient outcomes and population health. Not all QI, however, is based on scientific findings; it may use organization-specific data to guide actions for improving care processes. For example, if QI data in your organization show a wide variation in outpatient clinic wait times, organizational QI data about care processes (e.g., number of scheduled patients in specific time blocks) may be used to determine actions to decrease variation across clinics and shorten clinic wait times. This is a QI project, but not an EBP project. Both are important for quality of care. In comparison, your QI data may reveal high rates of CAUTI. Review of the evidence reveals a set of EBP recommendations or bundles of care that can be implemented to lower CAUTI rates in the identified patient population. Bundles of care or care bundles are a set of three to five evidence-based interventions that, when used together, can consistently help improve quality of care (Lavallée et al., 2017). The bundles of care in this example are guided by the most current evidence from research and other evidence sources (e.g., limit bladder catheter insertion, catheter care, early removal of bladder catheters) to decrease CAUTI. QI data (e.g., CAUTI rates) are tracked over time with expectations that your rates will decline if the bundles of care are followed. The Donabedian framework of QI is useful in considering the types of metrics to use in evaluating the impact of EBPs (Donabedian, 1966).

Translation science, also more recently known as **implementation science**, is a type of research science that focuses on testing implementation of interventions to improve uptake and use of evidence to improve patient outcomes and population health, as well as to clarify what implementation strategies work for whom, in what settings, and why (National Institutes of Health [NIH], 2017; Tucker, 2021). An emerging body of knowledge in translation science provides a scientific base for guiding the selection of implementation strategies to promote adoption of EBPs in real-world settings (Dobbins et al., 2009; Titler, 2010; Titler et al., 2016). Thus, EBP and translation science, although related, are not interchangeable terms. EBP is the actual application of evidence in practice (the “doing of” EBP), whereas translation science is the study of implementation interventions, factors, and contextual variables that affect knowledge uptake and use in practices and communities. Translation science is research; various research designs and methods are used to address research hypotheses. Having knowledge of translational science can help clinicians better adopt evidence-based care. This can also help guide nurses through the EBP process and reduce the knowledge-to-action gaps (Tucker, 2021).

TIP

EBP is the actual application of evidence in practice (the “doing of” EBP), whereas translation science is the study of implementation interventions, factors, and contextual variables that affect knowledge uptake and use in practices and communities.

THE NATIONAL AGENDA FOR EVIDENCE-BASED PRACTICE

As current and future leaders, it is important for you to recognize that the national agenda for EBP is clearly in the forefront of healthcare. Multiple federal and national agencies are dedicated to promoting quality, safety, and population health through the application of evidence. EBP is now a national standard, as demonstrated by the agendas of several agencies including the following:

- Agency for Healthcare Quality and Research (AHRQ)
- American Nurses Credentialing Center (ANCC) Magnet Recognition Program
- Centers for Medicare and Medicaid Services (CMS)

- Home Health Care Consumer Assessment of Health-care Providers and Systems (HHCAHPS)
 - Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)
 - Joint Commission for Accreditation of Healthcare Organizations
 - Centers for Disease Control and Prevention (CDC)
 - U.S. Preventive Services Task Force
 - National Database of Nursing Quality Indicators (NDNQI)
 - National Quality Forum (NQF)
 - Institute for Healthcare Improvement (IHI)
- Table 3.3** provides a general description of each agency's evidence-based initiatives and examples of evidence-based standards, recommendations, or programs. Private and public agency websites noted in **Table 3.3** are rich resources for locating evidence-based information on a variety of health care topics.
- As systems-level change agents, you will need to be knowledgeable about the CMS's value-based programs

TABLE 3.3 National Agency EBP Initiatives

Agency	General Description: Evidence-Based Initiatives
Centers for Medicare and Medicaid Services (http://www.CMS.gov)	Value-based programs: incentive payments for the quality of care provided to people with Medicare coverage • Hospital Value-Based Purchasing • Hospital Readmission Reduction • Value Modifier (Physician Value-Based Modifier) • Hospital-Acquired Conditions
Joint Commission for Accreditation of Healthcare Organizations (https://www.jointcommission.org)	Sets standards of care for accreditation of health care organizations. Standards informed by scientific literature and expert consensus and reviewed by the Board of Commissioners.
Centers for Disease Control and Prevention (CDC) (https://www.cdc.gov)	Works to protect the United States from health, safety, and security threats, both foreign and in the United States. Fights disease and supports communities and citizens in doing the same. As the nation's health protection agency, the CDC saves lives and protects people from health threats. To accomplish the mission, the CDC conducts critical science and provides health information that protects our nation against expensive and dangerous health threats, and responds when these arise.
Agency for Healthcare Quality and Research (https://www.AHRQ.gov)	Lead federal agency charged with improving the safety and quality of America's health care system. Ensures that the evidence is understood and used in an effort to achieve the goals of better care, smarter spending of health care dollars, and healthier people. Funds health services research
U.S. Preventive Services Task Force (https://www.uspreventiveservicestaskforce.org)	Independent, volunteer panel of national experts in prevention and evidence-based healthcare. The Task Force works to improve the health of all Americans by making evidence-based recommendations about clinical preventive services such as screenings, counseling services, and preventive medications. Task Force members come from the fields of preventive medicine and primary care, including internal medicine, family medicine, pediatrics, behavioral health, obstetrics and gynecology, and nursing. Their recommendations are based on a rigorous review of existing peer-reviewed evidence and are intended to help clinicians and patients decide together whether a preventive service is right for a patient's needs.

TABLE 3.3 National Agency EBP Initiatives—cont'd

Agency	General Description: Evidence-Based Initiatives
National Quality Forum (NQF) (http://www.qualityforum.org)	The NQF is a not-for-profit, nonpartisan, membership-based organization that works to catalyze health care improvements. NQF measures and standards serve as a critically important foundation for initiatives to enhance health care value, make patient care safer, and achieve better outcomes. NQF-defined measures or health care practices are evidence-based approaches to improving care. The federal government, states, and private-sector organizations use NQF's endorsed measures, which must meet rigorous criteria, to evaluate performance and share information with patients and families.
National Database of Nursing Quality Indicators (https://www.pressganey.com/platform/ndnqi/)	Used by leaders and nurses on the front lines of care, across ambulatory and inpatient care settings, to assist with measures of nursing quality within health care organizations to help improve patient outcomes.
Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) (https://www.hcahpsonline.org/)	The intent of the HCAHPS initiative is to provide a standardized survey instrument and data collection methodology for measuring patients' perspectives on hospital care.
Institute for Healthcare Improvement (IHI) (http://www.IHI.org)	The IHI takes a unique approach to working with health systems, countries, and organizations on improving quality, safety, and value in healthcare. IHI focuses on the science of improvement, an applied science that emphasizes innovation, rapid-cycle testing in the field, and spread to generate learning about what changes, in which contexts, produce improvements. It is characterized by the combination of expert subject knowledge with improvement methods and tools. It is multidisciplinary—drawing on clinical science, systems theory, psychology, statistics, and other fields. Quadruple Aim of Healthcare
Home Health Care Consumer Assessment of Healthcare Providers and Systems (HHCAHPS) (https://homehealthcahps.org)	The intent of the HHCAHPS initiative is to provide a standardized survey instrument and data collection methodology for measuring patients' perspectives on hospital care.
American Nurses Credentialing Center (ANCC) Magnet Recognition Program (https://www.nursingworld.org)	The Magnet Recognition Program designates organizations worldwide where nursing leaders successfully align their nursing strategic goals to improve the organization's patient outcomes. The Magnet Recognition Program provides a roadmap to nursing excellence, which benefits the whole of an organization. To nurses, Magnet Recognition means education and development through every career stage, which leads to greater autonomy at the bedside. To patients, it means the very best care, delivered by nurses who are supported to be the very best that they can be.

(VBPs), which illustrate the national importance of evidence-based healthcare. These VBPs reward health care systems with incentive payments for the quality of care provided to people with Medicare coverage and support the four-part aim of better care for individuals, better health for populations and providers, and lower

cost. The VBPs include items such as (1) using incentives to improve care, (2) tying payment to value through new payment models, (3) changing how care is delivered through better coordination across health care settings, and (4) more attention to population health (CMS, 2021).

The seven current VBPs are the following:

1. Hospital Value-Based Purchasing Program
2. Hospital Readmission Reduction Program
3. Value Modifier Program (also called the Physician Value-Based Modifier)
4. Hospital Acquired Conditions Program
5. End Stage Renal Disease
6. Skilled Nursing Facility VBP
7. Home Health VBP

Driven by the CMS's VBPs, hospitals are paid for acute care services based on the quality of care rather than quantity of the services provided. *Quality measures are based on evidence.* For example, the inpatient quality measures for those with heart failure (HF) include discharge instructions to include weight monitoring, activity, diet, provider follow-up, and monitoring and addressing signs and symptoms for worsening HF. These are important evidence-based components for self-care management of HF after hospital discharge. A second example, CAUTI, is a quality measure because research demonstrates that following the care bundle that includes proper insertion and early removal of urinary catheters can reduce CAUTIs. Similarly, unplanned hospital readmission for those with HF is based on research demonstrating that effective coordination of care can lower the risk of readmission for patients with HF. Care coordination, home-based interventions, remote monitoring devices, and exercise-based rehabilitation therapy among patients with HF all contribute to reducing the risk of hospitalization (CMS, 2021; see Chapter 25).

There are many funding opportunities that are offered by both government and private organizations that support translational and implementation science programs and projects. This is done to ensure that the best evidence interventions are explored and integrated into practice. The National Institutes of Health (NIH) is one example of an organization that provides funds for research in translation and implementation science. While applying for a federal grant can seem daunting, it is an opportunity for the academic and practice partners to come together to pursue a common interest (Brown, 2021). For example, hospital-at-home programs that are utilizing a nurse-driven model that is dependent on technology would benefit from academic and practice partners' collaboration. Both the academic and the practice partner would have something to contribute while at the same time benefit from developing a grant proposal to help guide this innovative practice model.

The benefits for practice would include improved patient care, scholarly recognition, and the opportunity to work with experienced funded, faculty. The academic partner would gain access to a study population to pursue their research interests while at the same time advancing the body of knowledge available to inform continued evolution of the evidence-based model of care.

STEPS OF EVIDENCE-BASED PRACTICE

Multiple models of EBP, QI, and translation/implementation science are available for you to use as an organizing framework for your agency's EBP initiatives (see Chapter 4). Choosing a model is critical as it helps ensure that practitioners are guided through a structured process and can help make the project useful to practice. For the process or the model to be meaningful it should take into consideration clinical expertise/experience of team members, available research evidence, and value to patients. Choosing an EBP model should be driven by the organization, design of the project, the knowledge of the team members, as well as a professional preference or previous experience. The steps of EBP are overviewed in Table 3.4 with linkages to other chapters that provide detailed information about completing each step.

TIP

Adoption of EBPs is influenced by the nature of the topic (e.g., the type and strength of evidence, complexity) and the manner in which it is communicated to members (nurses) of a social system (organization, setting).

THE EVIDENCE-BASED PRACTICE TEAM

The composition of your EBP team, also referred to as stakeholders, will vary depending on the question being asked, the patient population, and the anticipated resources needed. You want to think about potential EBP teams as interprofessional, comprising a broad array of appropriate health professionals in order to help you with the planning and implementation of the project. The stakeholders can include, but are not limited to, clinical nurses, nurse practitioners, clinical nurse specialists and midwives, physicians, physician assistants,

TABLE 3.4 Overview of EBP Steps and Chapter Linkages

EBP Step	Description	Factors to Consider	Book Chapter(s)
Select an EBP Topic			
Topic selection is often driven by problem- and/or knowledge-focused triggers. Example: increasing early mobility in the critical care unit	Problem-focused: QI and risk surveillance data, financial data, recurrent clinical problems. Knowledge-focused: research publications, scientific papers at research conferences, EBP guidelines	Be sure to include clinicians who will implement the potential practice changes in selecting the topic. Do clinicians view the topic as contributing significantly to the quality of care? Consider QI data in topic selection.	Chapter 5 : Developing Compelling Clinical Questions Chapter 14 : Evidence-Based Approaches for Improving Healthcare Quality Chapter 15 : Planning for Success
Form a Team			
Example: physical therapists, clinical nurses, advanced practice nurses, physicians	The composition of the team is directed by the topic selected and should include those in the delivery of the EBPs. Consider other key stakeholders who may not be team members but can facilitate the work of the team (Box 3.1).	An important early task for the team is to use PICOT in formulation of the clinical question. This helps set boundaries for the project and assists in evidence retrieval.	Chapter 5 : Developing Compelling Clinical Questions Chapter 15 : Planning for Success
Evidence Retrieval			
Search for evidence sources on your topic	Use search engines. Retrieve relevant research and related literature, including clinical studies, meta-analyses, systematic reviews, and EBP guidelines.	Keep track of your search strategies. Include websites such as AHRQ, CDC, etc.	Chapter 6 : Searching the Literature for Evidence
Critical Appraisal of the Evidence			
Requires critique of all types of evidence (e.g., research, systematic reviews, EBP guidelines)	Should be a shared responsibility with one individual providing the leadership (e.g., advance practice nurse). A group approach distributes the workload, helps those responsible for implementing the EBPs to understand the scientific base, arms nurses with citations and research-based language to use in advocating for practice changes with and across disciplines, and provides novices an environment to learn, critique, and application of research findings.	Critical appraisal tools are available for specific research designs, EBP guidelines, systematic reviews, etc. Understanding statistical methods is important to determining whether study findings are congruent with research design and study aims.	Chapter 4 : Models and Evidence-Based Practice Chapter 6 : Searching the Literature for Evidence Chapter 7 : Principles of Assessing Research Quality Chapter 8 : Intervention Studies Chapter 9 : Observational Studies Chapter 10 : Systematic Reviews and Clinical Practice Guidelines Chapter 11 : Qualitative Studies Chapter 13 : Understanding Statistics for Evidence-Based Practice

Continued

TABLE 3.4 Overview of EBP Steps and Chapter Linkages—cont'd

EBP Step	Description	Factors to Consider	Book Chapter(s)
Evidence Synthesis			
Synthesis is integrating and linking different types and sources of evidence into a comprehensive whole, thereby providing a foundation for making EBP recommendations	Evidence synthesis uses tools and techniques to combine multiple sources of evidence. In general, there are two types of synthesis: narrative synthesis (e.g., systematic reviews) and quantitative synthesis (e.g., meta-analysis).	Various tools and strategies are helpful in synthesizing the evidence. Considerations for inclusion of evidence in a synthesis are overall scientific merit, similarity of subjects to patient populations, and relevance to the clinical question/topic.	Chapter 6 : Searching the Literature for Evidence Chapter 10 : Systematic Reviews and Clinical Practice Guidelines
Set Forth Evidence-Based Practice Recommendations			
Summarize recommendations about assessments, actions, interventions/treatments derived from the evidence synthesis with an evidence grade assigned to each	Recommendations for practice are set forth based on the synthesis of the evidence. The strength of evidence for each practice recommendation needs to be clearly documented.	Use a standard grading schema.	Chapter 4 : Models and Evidence-Based Practice Chapter 6 : Searching the Literature for Evidence Chapter 15 : Planning for Success
Decision to Change Practice			
Based on critical appraisal and synthesis of evidence, decisions are made about practice changes	Critical appraisal and synthesis may result in validating that current practices are aligned with the evidence or result in minor or major practice changes.	Consider the following: • Consistent results from several well-designed studies • Findings are consistent across systematic reviews, EBP guidelines, and critiqued research • Benefits of applying the EBPs outweigh potential risks	Chapter 15 : Planning for Success
Convert EBP Recommendations into Local Standards, Policies, or Procedures			
	A written EBP standard (e.g., policy, procedure, guideline) for the organization or setting is necessary so that individuals in the setting know (1) that the practices are based on evidence and (2) the type of evidence (e.g., RCT, expert opinion) used in development of the practice.	Have EBP standard reviewed by key stakeholders for feedback. Focus groups are a useful way to provide discussion about the EBP and to identify key areas that may be potentially troublesome during the implementation phase.	Chapter 4 : Models and Evidence-Based Practice Chapter 15 : Planning for Success

TABLE 3.4 Overview of EBP Steps and Chapter Linkages—cont'd

EBP Step	Description	Factors to Consider	Book Chapter(s)
Implement the Practice Change			
Multiple implementation strategies are needed	Use the Translating Research into Practice model to guide selection of implementation strategies. Trying the EBPs on a small scale first is recommended to determine whether process and outcome improvements occur as expected (Piloting).	Select implementation strategies that address each of the following areas: • Nature of the EBP topic (e.g., complexity) • Methods for communicating the EBPs • Users of the EBPs social context/setting for implementation	Chapter 15: Planning for Success Chapter 16: Launching Implementation Chapter 17: Implementation Strategies for Stakeholders Chapter 18: Patient-Centered Evidence-Based Practices
Evaluation			
Collection and analysis of data aligned with use of new EBPs; used to determine the overall impact and sustainability of the EBPs	Evaluation criteria are derived from the evidence sources and should include process and outcome indicators.	Use QI data when available. Focus on collecting essential data. Evaluation includes planned feedback to staff making the practice change.	Chapter 12 Sources of Data to Drive Evidence-Based Practice and Quality Improvement Chapter 13: Understanding Statistics for Evidence-Based Practice Chapter 14: Evidence-Based Approaches for Improving Healthcare Quality Chapter 19: Evaluation of Evidence Based-Practice
Dissemination			
Plan for ways to share the results of the EBP implementation with internal and external audiences.	Make presentations to key stakeholder groups. Write executive summaries. Give presentations at regional and national conferences.	Consider use of active dissemination strategies. Know your dissemination options. Use social media and blogs.	Chapter 21 : Dissemination

EBP, evidence-based practice; PICOT, problem/patients/populations, intervention, comparison, outcome, time; QI, quality improvement; RCT, randomized control trial.

social workers, pharmacists, academic partners, occupational and physical therapists, and administrative staff. You might broaden your thinking about other potential members as your project continues to evolve to include those who have important contributions to make, such as QI specialists, infection prevention staff, finance personnel, health science librarians, or IT support staff. Depending on your patient population and practice setting, point-of-care providers such as care coordinators,

patient navigators, chaplains, medical assistants, and community health workers may also offer important contributions to your EBP team.

ENGAGING CONSUMERS IN EVIDENCE-BASED PRACTICE

Although not traditionally included as part of the EBP team, engaging patients, family members, and consumers

BOX 3.1 Questions to Consider in Identification of Key Stakeholders

- How are decisions made in the practice areas where the evidence-based practice (EBP) will be implemented?
- Is there an opportunity and benefit to engage and create an academic–practice partner in the project?
- What types of system changes will be needed?
- Who is involved in decision making?
- Who is likely to lead and champion implementation of the EBP?
- Who can influence the decision to proceed with implementation?
- What type of cooperation is needed from the stakeholders for the project to be successful?
- What other stakeholders are needed to ensure the project is sustainable over time?

as team members is receiving more attention in the form of patient family advisory councils (PFACs). According to the American Hospital Association (AHA, 2022), PFACs are an excellent way to help health care institutions and providers better understand the perspective of patients and families. They can also help caregivers better identify the needs of their patient population and bring patients' and clinicians' views closer together. PFACs can help organizations implement best practices by bringing an approach from a completely different perspective while at the same time providing a forum for patients and families to engage with leaders to share their very valuable insights to our EBP projects.

When considering either a layperson or a member of a PFAC to serve on your EBP team, it is best to see if there is interest, previous experience, and a willingness to participate. For example, a team that is focusing on improving pediatric outpatient central line education may want to see if any member of the PFAC has had previous experience with this procedure or has been recently discharged from the hospital and is willing to participate. Having a layperson participate may help reduce the amount of community acquired central line acquired blood stream infections.

There are several rationales for including consumers in EBP teams. First, they can lend their expertise as consumers of healthcare and provide input on practices important to them. Second, involving consumers may increase their understanding of why certain EBPs are used in specific circumstances and why they are important. Third, consumers

may be helpful in championing the use of EBPs. Fourth, consumers may provide insights into evaluation components of EBPs such as specific health outcomes and the overall patient experience (see Chapter 18).

CALL TO ACTION

Application of evidence in practice is now a national health care agenda. Each of us are called to act within our practice organizations to lead EBP improvements, to participate in organizational initiatives to improve care through implementation of the latest evidence, and to critically question current practices with an eye toward improving care through evidence application.

The new *Essentials: Core Competencies for Professional Nursing Education* (AACN, 2021) are a product of collaboration between education and practice representatives that serve as a foundation for continued discussion of both entry-to-practice and advanced-level competencies required in rapidly changing health care environments. EBP is identified as one of several concepts of importance that serve as a core component of knowledge and skills needed across multiple situations and contexts within nursing practice. As the next generation of nursing leaders, you must acquire the essential competencies to carry out the work of EBP. Advanced practice nurses are expected to do the following:

- Select an EBP model to help guide the project
- Lead interprofessional EBP teams
- Critically appraise and synthesize the evidence for use in practice
- Articulate to a variety of audiences the evidence base for practice decisions, including the credibility of sources of information and the relevance to the practice problem confronted
- Set forth EBPs for the local setting, based on evidence synthesis
- Use effective implementation strategies, such as care bundles
- Apply the principles and tools of QI
- Direct EBP evaluation
- Disseminate the impact of EBPs to internal and external audiences
- Identify key stakeholders, including both practice and academic partners

All advanced-level nurses prepared at the master's or doctoral level are expected to be experts in EBP and must be able to do the following: