**ADVISORY REPORT** 







**Evidence-based Practice and U.S. Healthcare Outcomes: Findings from a National Survey with Nursing Professional Development Practitioners** 



# **EXECUTIVE SUMMARY**

The opportunity for nursing professional development practitioners to collectively and boldly advance evidence-based practice as standard for healthcare is before us. This advisory research-based report and its recommendations provide insights on making this a reality.

In association with:



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# **Overview**

This landmark national nursing professional development advisory report is the result of a

collaborative

supported by

agreement

Elsevier

# "Knowing is not enough; we must apply. Willing is not enough; we must do."

#### -GOETHE

Clinical Solutions in partnership with The Ohio State University College of Nursing and the Association for Nursing Professional Development (ANPD) to better understand the current perceptions and attributes of nursing professional development practitioners as they relate to evidence-based practice (EBP). This collaborative study contributes to the body of knowledge related to EBP to further our collective efforts to have evidence-based care be the standard for healthcare to improve healthcare quality and reduce costs. This national EBP study with nursing professional development (NPD) practitioners and advisory report follows a previous research study conducted in collaboration between Elsevier Clinical Solutions and The Ohio State University College of Nursing with chief nursing executives entitled, "Evidence-Based Practice and U.S. Healthcare Outcomes: Findings from a National Survey with Nurse Executives". That study

resulted in an Elsevier published advisory report, A National Survey & Forum for Nurse Executives: Leveraging Evidence-Based Practice to Enhance Healthcare Quality, Reliability, Patient Outcomes and Cost Containment (2014), as well as a peer-reviewed published manuscript in Worldviews on Evidence-Based Nursing titled, A Study of Chief Nurse Executives Indicates Low Prioritization of Evidence-Based Practice and Shortcomings in Hospital Performance Metrics Across the United States (Melnyk, Gallagher-Ford, Thomas, Troseth, Wyngarden & Szalacha, 2016). The national nurse executive study prompted leadership at ANPD to inquire about what findings could be discovered by a national survey of NPD practitioners on the perceptions of evidence-based practice in their healthcare organizations across the United States.

### Elsevier Clinical Solutions is

committed to delivering evidence-based content and solutions to advance the professional practice of the nurse and interprofessional team. The Elsevier Nursing Suite comprises three solutions: Clinical Skills, ClinicalKey® for Nursing, and Clinical eLearning all designed to provide evidence-based resources and educational content for advancing

professional development and delivering evidence-based care.

## The Elsevier Care Planning

solution has provided a strong foundation for evidence-based practice for healthcare organizations, leaders, and point of care providers for nearly three decades. Focused on sustainable culture and professional practice transformation, Elsevier Care Planning is intentionally designed to support the Elsevier Clinical Practice Model Framework<sup>TM</sup> and Models which are grounded in core beliefs, principles and theories, and provide guidance on the "how" to address the behaviors and tools to transform culture and practice in order to support the patient, family, community and caregiver. The six integrated models are:

- Health and Healing Care Model
- Applied Evidence-**Based Practice Model**
- Health Informatics Model
- Partnership Culture Model
- Interprofessional Integration Model
- International Consortium Model

Recognizing there is no one silver bullet to create and sustain strong evidence-based practice environments, the Elsevier Professional Practice Services interprofessional team partners with healthcare organizations to build internal capacity and





become high reliable healthcare.

# The Ohio State University College of Nursing (OSU CON)

is the world's preeminent college known for accomplishing what is considered impossible through its transformational leadership and innovation in nursing and health, evidence-based practice and unsurpassed wellness. OSU CON exists to revolutionize healthcare and promote the highest levels of wellness in diverse individuals and communities throughout the nation and globe through innovative and transformational education, research and evidence-based clinical practice.

The College of Nursing is home to several Centers of Excellence where innovative work is ongoing to explore and provide solutions to important healthcare challenges. One of those Centers is the Center for

# Transdisciplinary Evidencebased Practice (CTEP); an

innovative enterprise that fosters EBP for the purpose of improving health and healthcare. CTEP is a world renowned center that serves as a model and resource to all disciplines for implementing and sustaining a culture of best practice through transdisciplinary, innovative, evidence-based practices that impact care delivery across the healthcare spectrum.

The CTEP team is comprised of experts in EBP from multiple disciplines, who facilitate the

organizations.

integration of evidence and best practices across settings to improve healthcare outcomes including the IHI Triple Aims of:

- Improving the patient • experience of care (including quality and satisfaction);
- Improving the health of • populations; and
- Reducing the per capita cost of health care.

The CTEP is completely dedicated to the promotion of EBP as the foundation of practice and decision making in healthcare. To that end, the CTEP provides leadership, education and consultation to academic and clinical enterprises across the US and the globe. The College of Nursing has recently been awarded a \$6.5 grant to create The Helene Fuld National Institute for Evidence-based Practice in Nursing and Healthcare that will accelerate and expand the groundbreaking EBP work already under way at the CTEP and provide robust support for additional programs and research initiatives to advance EBP.

# The Association for Nursing **Professional Development**

(ANPD) was founded in 1989 as the National Nursing Staff Development Organization (NNSDO). In 2012, the name was changed to ANPD to align with the Nursing Professional

Development: Scope and Standards of Practice. ANPD the specialty nursing organization for nursing professional development, a nursing specialty approved by the American Nurses Association (ANA). This specialty "facilitates the professional role development and growth of nurses and other healthcare personnel along the continuum from novice to expert" (Harper & Maloney, 2016).

The mission of ANPD is, "We inspire our members to excel by providing educational services, networking, advocacy, and research to support the unique needs of nursing professional development." The vision of ANPD is, "ANPD is the thought and practice leader for nursing professional development."

## ANPD consists of

approximately 4000 registered nurses who provide nursing professional development services in settings such as hospitals, outpatient clinics, long-term care facilities, home health, and universities. Members are from across the United States and abroad, including 12 countries: Australia, Bahamas, Bermuda, Canada, China, Lebanese Republic, Rwanda, Saudi Arabia, Singapore, South Korea, United Arab Emirates, and the United Kingdom.



# BACKGROUND

Evidence-based practice (EBP) is a problem-solving approach to clinical decision-making in healthcare that integrates the best evidence from welldesigned studies with a clinician's expertise, which includes internal evidence from patient assessments and practice data, and a patient's preferences and values (Sacket, Rosenberg, Gray, Haynes& Richardson, 1996; Melnyk & Fineout-Overholt, 2011). Findings from research support that the implementation of EBP leads to a higher quality of care, improved patient outcomes and decreased healthcare costs (McGinty & Anderson, 2008; Melnyk, 1994; Williams, 2004). Most importantly, EBP assists organizations in attaining high reliability (i.e. safety) (Melnyk, 2007).

In the landmark summit sponsored by the Institute of Medicine (IOM) on health professions education, it was recommended that all health professional educational programs should include five competencies: (a) providing patient centered care, (b)

applying quality improvement principles, (c) working in interprofessional teams, (d) using evidence-based practices, and (e) using health information technologies (Institute of Medicine, 2003). In addition, the IOM set the goal that 90% of healthcare decisions will be evidence-based by 2020. EBP also has become the driver of transformation for the six national priorities and goals developed by the National Priorities Partnership, a group of 48 organizations that play a key role in identifying strategies for achieving better care, affordable care, and healthy people and communities (National Priorities Partnership, 2008).

Historically, the major identified barriers to the implementation of EBP in healthcare institutions are: lack of EBP knowledge and skills, a perception that EBP is too time consuming, a belief that EBP is burdensome, and organizational cultures that do not support EBP (Majid et al, 2011, Melnyk et al., 2012; Melnyk et al, 2004; Solomons & Spross, 2011; Yoder et al, 2014). Conversely, key factors that facilitate the adoption of EBP include strong beliefs that

EBP improves patient care and outcomes; a solid foundation of knowledge and skills; access to EBP mentors; leaders who model EBP in their practices; and organizational cultures that support evidence-based care (Mylnyk & Fineout-Overholt, 2011; Cullen et al, 2011; Melnyk, Fineout-Overholt, Giggleman & Cruz, 2010). It is well established that EBP improves healthcare quality and patient outcomes as well as reduces morbidities, mortality, medical errors, costs and geographic variation of healthcare services (Melnyk & Fineout-Overholt, 2011; McGinity & Anderson, 2008; Williams, 2004).

Few studies have been conducted to evaluate NPD practitioners' perceptions about and implementation of EBP. In 2005, Milner, Estabrooks, and Humprey explored research use among a sample of 82 "clinical educators" in Alberta, Canada. They found that clinical educators, defined as those who provided professional development education, reported higher research use than both managers and staff nurses. Recognizing the importance of

the role of the clinical educator in promoting translation of research into practice, the investigators called for additional research to identify the "knowledge, skills, and resources" (p. 911) needed for effective research use.

Pursuant to the Canadian study, Strickland and O'Leary-Kelly (2009) explored the perceptions of NPD practitioners toward research utilization. They administered the BARRIERS scale to a convenience sample of 122 NPD practitioners in California who identified organizational, adopter, communication, and innovation barriers and facilitators. The primary organizational barriers included lack or finances, lack of time, and lack of nurses' authority to implement change. Organizational facilitators included administrative and physician support, funding, and employing nurses with advanced degrees. The researchers concluded that the NPD practitioner, "as a vehicle of change, is paramount to the successful arrival at EBP" (p. 171).

Findings from research indicate that nurses and other healthcare providers are interested in gaining additional knowledge and skills related to EBP, including a recent study reflecting the current state of EBP where 74% of the U.S. nurses surveyed indicated the need for additional education in EBP (Melnyk, Fineout-Overholt, Gallagher-Ford & Kaplan, 2012). Studies over the past decades also revealed that when nurses have confidence in their EBP knowledge and skills, they implement EBP more. Further, when nurses' beliefs in the value and importance of EBP increase, implementation of EBP also increases (Melynk, Fineout-Overholt & Mays, 2008; Fineout-Overholt, Melnyk & Schultz, 2005).

In a recent descriptive survey by Melnyk and colleagues (2012) with a random sample of over 1000 nurses from across the United States (U.S.) who were members of the American Nurses Association (ANA), barriers to EBP were identified. Although several of the barriers named by the nurses were the same barriers that have been reported in previous decades,

some new developments were apparent. Two of the new EBP barriers that nurses reported were resistance from nurse managers and leaders; and traditional organizational cultures that often upheld the philosophy of "that is the way we do it here". Respondents to the survey expressed a need for support (as opposed to resistance) from their organizations, managers, and interdisciplinary colleagues in order to be able to implement EBP. This recent finding confirmed the idea previously discussed by Rycroft-Malone (2008) that leaders who support colleagues and create a vision for EBP in their organizations as well as influence policy to facilitate EBP and incorporate evidence into their own leadership practices have a key impact on EBP implementation.

Most recently, Melnyk and colleagues (Melnyk, Gallagher-Ford, Long, Fineout-Overholt, 2014) published Evidence-Based Practice Competencies for Practicing Registered Nurses and Advanced Practice Nurses. These competencies were developed through a two-round Delphi study and were



established to provide healthcare institutions with a set of scientifically derived, essential EBP competencies that could be easily integrated into organizations in their quest to achieve high performing systems that consistently implement and sustain evidencebased care. Organizations have viewed the advanced practice nurse competencies as applicable to not only to advanced practice clinicians (e.g., nurse practitioners, clinical nurse specialists), but to nurses in advanced leadership roles as well. The availability of these competencies has provided clear language and expectations related to EBP knowledge, skills, and attitude that can be implemented and measured for leaders.

In a time when the nation is calling for EBP as standard of healthcare, leaders must guide and support their organizations and clinicians through this challenge and opportunity. The basic definition of a leader is "one who guides or directs a group" (Dictionary.com 6/24). Evidence-based leaders are individuals who guide or direct a group through integration of the

EBP process as a foundational construct of their practice and leadership decision making. A recent study of NPD experts and stakeholders (Warren and Harper, 2016) on future requirements for the evolving roles of NPD practitioners, validated the roles of Leader and Champion of Scientific Inquiry to be essential.

Self-actualization and demonstration of EBP by leaders include embracing EBP in their own practice by attaining EBP knowledge/skills, developing a pro-EBP attitude, role modeling EBP by making evidence-based leadership decisions themselves, publicly navigating EBP barriers, and recognizing EBP achievements. Beyond leaders' individual responsibilities to embrace EBP, they are, by virtue of their position, power, and authority, accountable to facilitate the enculturation of EBP throughout their organizations. By embracing and role modeling EBP as well as creating a culture and environment that adopts, values, and implements EBP, evidence-based leaders build work environments and context

where EBP can not only arrive, but survive and thrive.

The literature has clearly identified that nurse leaders must possess requisite knowledge, skills and attitudes about EBP in order to integrate and lead healthcare organizations successfully into the future. Although we know what nurse leaders need to do related to leading EBP, this body of evidence led to the identification of new gaps in knowledge to be addressed:,

- What is the current state of NPD practitioners' knowledge, beliefs and implementation of EBP in their own practices
- What are NPD practitioners' prioritization and advocacy for EBP in their organizations?
- What is NPD practitioners' understanding of EBP as an effective driver of quality healthcare outcomes?

These gaps in knowledge regarding the current state of EBP from NPDs' viewpoints



along with missing data regarding their role in EBP, advocacy for EBP and awareness of clinical outcomes impacted by EBP within their

# SURVEY METHODOLOGY

#### **Study Purpose**

The purposes of this descriptive correlational study were to:

- 1. Describe NPD practitioners' EBP beliefs. EBP implementation, and perceived organizational culture of EBP
- 2. Determine organizational infrastructures for EBP and NPD's engagement in and awareness of these infrastructures
- 3. Describe National Database of Nursing Quality Indicators (NDNQI), Core Measures and Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) outcomes in NPD organizations
- 4. Determine the relationships among study variables

## Method

ANPD provided an ANPD membership email list to OSU-CON after allowing members to own organizations is what led to this study. This study focused on determining EBP beliefs, EBP implementation frequency, and perceptions of

opt-out of receiving the research invitation. An email invitation to participate in the study was sent to 3687 members. The email provided a link to the survey so the responses could be anonymous.

#### **Research questions:**

- 1. What is the current state of NPD practitioners' EBP beliefs, EBP implementation, perceived organizational culture for EBP, and activities that support EBP?
- 2. What are the relationships among NPDs' EBPs beliefs, EBP implementation, perceived organizational culture for EBP, activities that support EBP and healthcare system outcomes that include NDNOI, HCAHPS, Core Measures, nurse vacancy rates, BSN rates, specialty certifications, and nursing satisfaction?

organizational culture and readiness for EBP as well as the relationship of these EBP attributes to critical healthcare outcomes.

*Methods:* This descriptive correlational study used an anonymous online survey of NPD practitioners. IRB review was obtained from the Ohio State University and the study was considered exempt. Participants were provided a cover letter with a description of the study and sent an email inviting them to participate in the online study.

# Sample size, data collection, and analysis

Procedures and sample size: The ANPD organization reached out to its members initially (before the survey) and informed them of the upcoming opportunity to participate in this research and gave members the opportunity to opt out of releasing their email address to OSU (the research organization). Subsequently, the survey was sent to the ANPD mailing list that consisted of 3687 emails. Eight percent of the original mailing list was



returned as undeliverable, rendering a viable list of 3397 emails. The survey was sent out in July 2015 and remained open for 4 weeks with weekly email reminders. An incentive was offered to participate in the research study; an opportunity to enter a drawing for one of two-\$100 gift cards. The gift card recipients were determined using a computer generated random number list. The recipients received their gift card after of the closing of the survey. The initial response rate was extremely low (only 65 completed surveys). When the team reviewed the responses at the close of the survey, 493 individuals had opened and initiated the survey but the majority did not complete it. Of those who did not complete the survey, almost all "left" the survey at the point where outcomes metrics (core measures, NDNQI and HCAHPS) were requested (and required to proceed). The research team regrouped and discussed this finding. The team decided to conduct a second round of the survey and offer respondents an "I don't know option" in the outcomes metrics section of the survey. Pursuant

to IRB approval of the change, Round 2 of the survey was launched in September 2015 and remained open for 4 weeks with weekly email reminders. An additional 188 surveys were completed in Round 2 with only 75 incomplete surveys. The combined total of completed surveys from both rounds was 253. Even with the incentive offered, plus two rounds of the survey, which afforded members eight weeks of opportunity to participate, and weekly email reminders; the response rate was only 7% of the viable email list of ANPD.

Data Collection and Measures: The data collected included: (a) demographic information; (b) three valid and reliable instruments that tapped beliefs about EBP, EBP implementation frequencies, perceptions of organizational culture/readiness for EBP, (c). self-report of EBP competencies; (d) activities/structures that support EBP (e.g., shared governance councils, BSNs, certification rates, electronic medical records/clinical decision support); and (e) organizational outcomes metrics: (Core Measures, NDNQI, HCAHPS

scores). Three valid and reliable scales developed by Melnyk and Fineout-Overholt were used in the study (Melnyk et al., 2008).

#### The EBP Beliefs Scale

measures beliefs about the value of EBP and the ability to implement it (Melnyk et al, 2008). This instrument is a 16item Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items include: "I am clear about the steps of EBP," "I am sure that I can implement EBP" and "I am sure that evidence-based guidelines can improve care". The summed total EBP score with higher scores indicate stronger EBP beliefs. The scale has established face, content, and construct validity, with internal consistency reliabilities typically above 0.85. (Melnyk et al, 2008).

#### The EBP Implementation

(EBPI) Scale is an 18-item Likert-type scale that asks participants how often in the last 8 weeks they have performed certain EBP tasks, including: (a) generated a PICO question, (b) used evidence to change clinical practice, and (c) shared outcome data collected with colleagues.

Item scores are summed for a total score range of 0 to 72, with the higher scores indicating greater implementation of EBP. The EBPI has established face, content, and construct validity with internal consistency reliabilities reported at above 0.84 (Melnyk et al, 2008).

The Organizational Culture and Readiness for Systemwide Integration of Evidencebased Practice (OCRSIEP) scale was used to measure organizational culture and readiness for EBP. This instrument measures the extent to which cultural factors that influence system-wide implementation of EBP exist in the environment and the overall perceived readiness for integration of EBP and its comparison to 6 months ago. Respondents are asked to indicate their agreement each item on a 5-point Likert-type scale, with 1 meaning "none at all" and 5 meaning "very much". Examples of items on the 26-item scale include: (a) To what extent is EBP clearly described as central to the mission and philosophy of your institution? (b) To what extent do you believe that EBP is

practiced in your institution? Items are summed to create a total score, ranging from 25 to 125, with higher scores reflecting greater organizational readiness for and movement toward a culture of evidencebased practice. The scale has established face and content validity, with internal consistency reliabilities reported at above 0.85 (Melnyk, et al 2010).

# **KEY FINDINGS**

**Demographics** Of the 3397 eligible NPD practitioners, 253 returned completed surveys, resulting in a final response rate of 7%. The majority of the participants were:

- Caucasian (93%) •
- Female (95%)
- 53 years of age (SD=7.9)
- 28 years of experience as an RN (SD=9.4)
- 9.9 years as an NPD • Practitioner (SD=7.9)
- Master's or doctoral prepared in nursing (75%)

In addition, 20% were certified in NPD and 32% held certification in a specialty other than NPD.

## **Organizational Metrics**

Consistent with ANPD membership, 92% of respondents worked in a hospital. More than a third (36%) held the title of director or manager. Of those in nonsupervisory positions, 45% of the NPD practitioners were unit based and 20% worked in a centralized nursing education department. Most (53%) were employed at smaller community/regional hospitals with bed sizes ranging from 100-300 (34%) to 301-500 (23%). Almost a third (31%) were employed by Magnet designated organizations. The mean number of FTEs (actual) per organization was 1163(SD=1312) compared with 961 (SD=959) budgeted RN FTEs. About half, 54% (SD=22) of the employed nurses per organization were BSN prepared and 32% (SD=22) specialty certified. An average of 20% (SD = 28) of NPD practitioners were certified in NPD.



# **Summary of Findings**

- NPD practitioners have strong beliefs in EBP.
- Many NPD practitioners reported **not being competent** in several basic steps of the EBP process.
- No NPD practitioners reported being highly competent in any aspects of the evidence-based practice process.
- NPD practitioners reported being least competent in leading interdisciplinary EBP teams.
- Although many NPD practitioners reported not being competent in some very basic tenets of EBP, overall, they reported being clear about the steps of EBP, confident in their ability to implement EBP, and confident that the care they delivered was evidence-based.
- More highly educated NPD practitioners reported being more competent in EBP.
- NPD practitioners are not actively engaged in EBP.
- NPD practitioners perceive that their organizations do not have a culture that supports EBP and the organizations are not particularly ready for EBP.
- Several of the areas rated **lowest** were related to the nursing enterprise (EBP knowledge and skills, EBP mentors scientists, champions).
- NPD practitioners have a critical lack of knowledge about organizational metrics and benchmarks (HCAHPS, Core Measures).
- A majority of NPD practitioners believe that Clinical Decision Support (CDS) promotes EBP.
- Unit-based councils were more prevalent (86%) than research (61%) or EBP councils (48%). NPD practitioners were more likely to be on research and EBP councils and not on unit-based councils.
- Although Magnet organizations seemed to have more EBP resources, Magnet designation did not correlate with achieving organizational benchmarks in the outcomes measured.
- Less than 50% of NPD professionals consider EBP to be in their "top 20" priorities.

# **Comparisons to 2014 National Survey for Chief Nurse Executives (CNEs)**

- NPD practitioners identified lack of financial resources for EBP as a concern. This finding aligns with the CNE survey in which 74% of CNEs reported spending  $\leq 10\%$  of their budgets on EBP.
- NPD practitioners and CNEs reported that is important for them (individually) and their organizations to build and promote EBP.
- NPD practitioners and CNEs align very closely on EBP attributes of beliefs and perceptions of organizational readiness for EBP.
- NPD practitioners reported less frequency of implementing EBP in their own practice than CNEs.
- CNEs rated nurse managers as more supportive of nurses implementing EBP than NPD practitioners rated the nurse managers. .
- NPD professional and CNOs have **different priorities**: CNOs; quality and safety; NPDs; education and orientation. •
- Neither CNEs nor NPD practitioners identify EBP as a top priority.
- When asked where EBP falls on their list of priorities, only 44% of NPD practitioners said EBP was in their "top 20" priority list.
- CNEs listed EBP a lower priority than items such as staffing, recruitment/retention, and culture.
- NPD practitioners and CNEs are aligned and discordant about EBP is some very interesting ways:
  - They agree that **EBP** is very important. 0
  - They agree that EBP is **not supported financially** in their organizations. 0
  - They are aligned in their EBP beliefs (which are strong) and their perceptions of their organizational cultures and 0 readiness for EBP (moderate, at best).
  - They are discordant in **their own implementation of EBP** in practice. NPD practitioners reported lower frequency of implementing EBP in their practice than CNEs.
  - They are discordant in their perceptions of nurse managers' support for nurses implementing EBP. CNOs perceive the 0 nurse managers as far more supportive of EBP than NPD practitioners do.
- Most importantly, and quite unfortunately, they are aligned in their prioritization of EBP; neither CNEs nor NPD practitioners identify EBP as a top priority.



In a NPD role delineation study conducted by Warren and Harper (2016), a key role of NPD practitioners was identified as "champion of scientific inquiry." According to Nursing **Professional Development:** Scope and Standards of Practice (Harper & Maloney, 2016), in this role, "The NPD practitioner promotes the generation and dissemination of new knowledge and the use of evidence to advance NPD practice, guide clinical practice, and improve patient care" (p. 17). In addition, NPD practitioners are responsible for promoting, encouraging, facilitating, participating in, conducting, integrating, and disseminating research, EBP, and quality improvement. Fulfilling this role and its aligned responsibilities requires requisite competencies. Findings of this study suggest that NPD practitioners have opportunities to enhance their personal competence and promote organizational implementation of EBP. These opportunities include personal professional development in EBP including certification in NPD, use of available data, engagement in shared governance opportunities, and partnerships with nurse managers to promote EBP.

NPD practitioners who participated in this study selfidentified several areas of competence needing improvement as identified by items scoring less than 3.2 on the 5-point scale in the EBP

Competency Scale. These areas include leading interprofessional teams in application of EBP (2.92), generating external (2.99) and internal (3.04) evidence, measuring processes and outcomes of clinical decisions based on EBP (3.17), and developing a clinical question using the PICOT format. Furthermore, NPD practitioners scored about the same on the EBP competency scale as other groups of registered professional nurses. This finding may reflect a lack of specialty practice preparation. Many NPD practitioners are selected for their position because they are good bedside nurses. This type of selection assumes that good bedside nursing translates to good NPD practice and does not take into account the unique specialty roles and responsibilities. In addition, NPD practitioners in this study were an average age of 53 with over 28 years' experience in nursing. These nurses likely completed their nursing education prior to the inclusion of EBP in nursing curricula. These findings support the need for ongoing professional development of individual NPD practitioners. Support may be garnered through practice-academic partnerships in which academic faculty provide education and practice support for both staff and NPD practitioners (Highfield, Collier, Collins, and Crowley 2016). Furthermore, a formalized preparation process for the NPD specialty, including

graduate level education with a focus on service-based education as well as the academic nurse educator role, is needed.

In addition to self-identified areas low EBP competence, only 20% of participants in this study were certified in NPD. This is consistent with the findings of Harper, Aucoin, and Warren (2016) who found that only 16% of NPD practitioners were certified in NPD while 50% were certified in a clinical specialty. NPD certification, which is available through the American Nurses Credentialing Center (ANCC), validates competence in a specific specialty based on experience, education, professional development activities, and an exam. Approximately 10% of the certification exam questions relate to EBP, research and quality improvement. Low levels of certification among NPD practitioners may reflect a lack of knowledge about the specialty and/or a higher value for patient-care practice certification. Through preparation for NPD certification, NPD practitioners have an opportunity to enhance their knowledge of their role as a champion of scientific inquiry and their competencies related to EBP.

Findings from this study suggest an opportunity to enhance knowledge and use of organizational metrics by NPD practitioners. Despite the mandatory reporting of

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HCAHPS and core measures data, only 26% of participants reported that their organization uses HCAHPS and only 11.5% reported that their organizations use core measure data. This professional practice gap is extremely concerning at a time when NPD departments are particularly vulnerable to reductions in workforce due to the myriad governmental influences that reduce organizational reimbursement when quality outcomes are not met. To remain viable, NPD departments must align themselves with organizational initiatives to improve patient outcomes. The good news is that the data are already collected. NPD practitioners must avail themselves of these data and measure the impact of their departmental activities on them. Activities that promote integration of EBP are the key to improving quality of care.

NPD practitioners also have an opportunity to enhance their impact on quality of care by increased involvement in shared governance. Only 52% of participants indicated that their organization has an EBP council. Of those, 91% had an NPD department representative. An opportunity exists to increase the number of organizations with EBP councils to 100% as well as NPD representation to 100%. Whitmer, Auer, Beerman, and Weishaupt (2011) described how NPD practitioners were instrumental in developing a council for implementation of

EBP and quality improvement. They partnered with their academic partner to provide faculty support for the EBP process. Such partnerships have been successful in many organizations (Highfield, Collier, Collins, and Crowley 2016; Jeffers, Robinson, Luxner, & Redding, 2008; Wittman-Price, R. Celia, L., & Dunn, R. 2103).

Involvement in shared governance may also be increased on unit councils. While unit-based councils were reported by 83% of participants, only 53% had NPD department representation. These findings suggest that NPD practitioners are missing a vital opportunity to connect with direct-care nurses and identify professional practice gaps that are amenable to educational interventions. Engagement at the unit level is imperative, even for centralized NPD departments, in order to prepare staff to ensure optimal patient outcomes.

Finally, an opportunity exists for NPD practitioners to partner with unit nurse managers to propel EBP in the patient care setting. On a scale of 0 (not at all) to 4 (a great deal), NPD practitioners scored nurse managers an average of 2.5 on supporting staff nurse EBP activities and 2.2 for implementation in their own practice. This is in contrast to the survey of chief nursing executives as summarized above (Melnyk, Gallagher-Ford, Thomas, Troseth, Wyngarden &

Szalacha, 2016). NPD practitioners, who are responsible for professional role development of staff (Harper & Maloney, 2016), must assess the knowledge, skills, and practice of nurse managers related to EBP to determine if educational interventions are warranted or if other barriers to implementation of EBP must be addressed.

In the current complex healthcare environment, NPD practitioners must demonstrate their value through their impact on organizational outcomes (Harper, Aucoin, & Warren, 2016). EBP is the key to quality outcomes. As champions of scientific inquiry, NPD practitioners can promote optimal patient care through facilitation of the implementation of EBP.

The opportunity for NPD Practitioners to collectively and boldly advance EBP as standard for healthcare is before us. This advisory research-based report and its recommendations provide insights on making this a reality.

"Whatever you can do, Or dream you can, BEGIN IT! Boldness has genius, power, and magic in it."

-GOETHE



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