

## Creating Synergy between Academia and Practice: The Arizona State University and Mayo Clinic Arizona Model

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### ABSTRACT

**Background:** The academic-practice partnership began in 2005 with a collaborative Pre-licensure Bachelor of Science in Nursing (BSN) program. Since that time the partnership has broadened to include faculty development, evidence-based practice, interprofessional education, and research initiatives.

**Purpose:** The purpose is to share the outcomes of this academic-practice partnership and to provide a model for other institutions.

**Methods:** This successful partnership is grounded in the American Association of Colleges of Nursing and the American Organization of Nurse Executives' eight guiding principles for academic-practice partnerships. The cornerstones to the partnership are communication, collaboration, and mutual respect.

**Results:** The initial outcomes of this collaboration increased enrollment, thereby increasing the number of BSN prepared registered nurses; created opportunities for clinical nurses to teach; increased the number of nursing faculty; and capitalized on the strengths of each partner.

**Conclusion:** The most exciting aspect of this partnership is the shared commitment to decrease the gap between nursing education and practice; thus, improving the quality of nursing education, advancing the practice of nursing and healthcare delivery, and enhancing the health of our community. Consistent with the AACN-AONE recommendations, this academic-practice partnership prepares nurses of the future to be evidence-based practitioners and creates opportunities for nurses to achieve educational and career advancements.

### Introduction

Current and future U.S. healthcare reform requires registered nurses to be agents of change as clinicians, educators, and researchers. The American Association of Colleges of Nursing (AACN) and American Organization of Nurse Executives (AONE) assert that academic-practice partnerships are essential to strengthen nursing practice and position nurses to lead change and advance healthcare in the United States (AACN, 2012). Collaboration between academic and clinical practice leaders across health professions is essential for sustained transformation of health care (AACN, 2016). Additionally, the 2010 Institute of Medicine (IOM) report, *The Future of Nursing: Leading Change, Advancing Health*, identified academic-practice partnerships as an innovative approach to increasing capacity in traditional nursing education programs.

The foundation for this comprehensive academic-practice partnership between a university college of nursing and an academic medical center began in 1998 by providing students in the undergraduate

nursing program opportunities to complete clinical experiences at the academic medical center. The partnership grew in 2005, when the organizations collaborated to provide a pre-licensure Bachelor of Science in Nursing (BSN) program. Since that time the partnership has broadened significantly to include faculty development, evidence-based practice (EBP), interprofessional education (IPE), and research initiatives.

The purpose of this paper is to provide a model for other academic institutions and healthcare organizations interested in creating an academic-practice partnership. We will describe the background, the model, the results, and the factors contributing to the success of this partnership.

### Background

#### Overview of Academic-Practice Partnerships

When this partnership began, there was limited literature available

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to guide the formation of academic-practice partnerships. However, since that time, numerous reports and guidelines have been published to guide this work, calling upon academic and practice organizations to form partnerships to address the challenges facing health care (AACN, 2012; AACN, 2016; IOM, 2010). To meet this goal, academic nursing must be transformed to demonstrate “the integration of practice, education, and research within baccalaureate and graduate nursing programs” (AACN, 2016, p. 5). As such, academic nursing faculty have an obligation to engage in research and scholarship that generates new knowledge for the discipline, connects practice with education, and ultimately leads to advancements that improve health and health care (AACN, 2016, p. 5).

Academic-practice partnerships are “strategic relationships between educational and clinical practice settings that are established to advance their mutual interests related to practice, education, and research” (Beal, 2012, Introduction section, para 2). Depending on the goals and structure of the organizations, academic-practice partnerships may include one or more academic organizations, and one or more practice organizations. This literature overview provides examples of select academic-practice partnerships and their outcomes, and factors that facilitate the success of academic-practice partnerships.

#### Select Academic-Practice Partnerships

Academic-practice partnerships may be classified as comprehensive or focused. Comprehensive partnerships are broad in scope and frequently aim to advance education, practice, EBP, and research. Focused partnerships are limited in scope and are usually formed to address a specific need.

The Department of Veterans Affairs (VA) has been instrumental in creating comprehensive academic-practice partnerships to transform the health care of veterans (Glynn, Wendt, McVey, & Vessey, 2018; Harper et al., 2016; Toderro, Long, & Hair, 2015). These partnerships expand educational, practice, and research opportunities for nursing students and faculty through the provision of educational programs where undergraduate nursing students complete the majority of their clinical rotations at the VA Medical Center; through the creation of veteran-centric curricula; by embedding school of nursing and VA faculty in the partner's governance structures; by providing faculty development opportunities for VA nurses; and by implementing quality improvement initiatives to enhance veterans care (Glynn et al., 2018; Harper et al., 2016; Toderro et al., 2015).

Focused academic-practice partnerships frequently aim to address educational or workforce issues, such as the supply of Doctor of Nursing Practice graduates (Howard & Williams, 2017), or the transition to practice for new graduates (Van et al., 2015), or the limited availability of clinical experiences for nursing students (McClure, Lutembacher, O'Kelley, & Dietrich, 2017). Academic-practice partnerships may begin as a focused partnership and expand to become a comprehensive partnership.

#### Academic-Practice Partnership Outcomes

Academic-practice partnerships benefit academic nursing, clinical practice, and the health and well-being of our communities and patients by:

- increasing nursing student enrollments (Glynn et al., 2018; Harper et al., 2016; Howard & Williams, 2017; Toderro et al., 2015);
- increasing nursing program graduates (Glynn et al., 2018; Harper et al., 2016; Howard & Williams, 2017; Toderro et al., 2015);
- increasing the availability of clinical experiences (Glynn et al., 2018; Harper et al., 2016; McClure et al., 2017; Toderro et al., 2015);
- increasing the availability of faculty (Glynn et al., 2018; Toderro et al., 2015);
- increasing IPE (Harper et al., 2016);

- advancing EBP and research (Glynn et al., 2018; Harper et al., 2016; Howard & Williams, 2017; Toderro et al., 2015);
- improving patient outcomes (Everett, 2016; Glynn et al., 2018; Harper et al., 2016; McClure et al., 2017; Toderro et al., 2015);
- improving nursing quality outcomes, such as decreased rates of infection, hospital acquired pressure ulcers, and falls (Everett, 2016);
- improving new graduate readiness for practice (Van et al., 2015);
- decreasing orientation costs, decreasing nurse turnover rates, and improving post-hire retention of nurses (Everett, 2016).

Additionally, the VA academic-practice partnerships have increased the awareness of the unique health needs of veterans by students, faculty and the community (Glynn et al., 2018; Harper et al., 2016; Toderro et al., 2015); as well as increasing clinical and nursing practice innovations that enhance the care of Veterans or result in cost efficiencies (Glynn et al., 2018; Harper et al., 2016; Toderro et al., 2015).

Academic-practice partnerships may also produce changes to the organizational cultures of the academic and practice partners. Everett (2016) describes how practice partner nurses, school of nursing faculty, and students “collaborate openly, honestly, and with purpose to enhance evidence based practice, improve patient care, and build meaningful, trust-based relationships that inspire ongoing innovation” (p. 171). These changes to the organizational cultures of the partners are critical in setting the stage for continued expansion and evolution of the academic-practice partnership.

In summary, some outcomes from academic-practice partnerships may primarily benefit one partner; however, most outcomes are mutually beneficial as they enhance the nursing profession or healthcare systems. Outcomes such as increased nursing student enrollments, increased nursing program graduates, and increased availability of real world clinical learning experiences primarily benefit the academic partner; however these outcomes also benefit the practice partner by providing an increased supply of practice-ready nurses. Additionally, expanding learning opportunities for students and faculty to participate in EBP and research at the practice site promotes the production of nurse graduates who are ready to engage in EBP and research upon graduation, as well as facilitates the development of innovations in nursing practice and healthcare.

#### Factors that Facilitate Success of Academic-Practice Partnerships

Beal (2012) describes the prerequisites for successful academic-practice partnerships as beginning with “self- and mutual assessments of strengths and opportunities” (Pre-requisites for Successful Partnerships section, para 1). Successful partnerships are built upon mutual trust, mutual respect; and shared vision (AACN, 2012; Howard & Williams, 2017; Van et al., 2015). Partners engage in consistent, frequent and open communication (AACN, 2012; Harper et al., 2016; Howard & Williams, 2017); have the support of organizational leadership at multiple levels (AACN, 2012; Breslin et al., 2011); establish written, formalized goals and evaluation plans (AACN, 2012; Harper et al., 2016; Howard & Williams, 2017); and celebrate and promote the visibility of partnership successes (Toderro et al., 2015). It is also important to provide dedicated time and resources to advance the partnership. Successful partnerships demonstrate “a united shared commitment to lifelong learning and to maximizing the potential of each nurse to reach the highest level within his or her individual scope of practice” (Beal et al., 2012, p. 329).

Toderro et al. (2015) recognize the significance of “building working relationships that acknowledge the different values and work cultures of the partners” (p. 50). If this work does not happen, the academic-practice partnership may experience conflicts that can potentially derail the partnership. It is also important to anticipate and proactively manage conflicts, and focus on the sustainability of the partnership from the beginning (Toderro et al., 2015).

Everett (2016) describes the “fluid interplay” between the roles of

the Chief Nursing Officer (CNO) and Academic Dean, where the CNO leads the partnership on issues related to practice and the Dean follows, and the Dean leads the partnership on issues related to academic nursing (p. 171). Each leader adjusts their role as leader or follower depending on the needs of the partnership exhibiting a “well-choreographed dance between leader and follower” (p. 171).

One persistent challenge faced by academic-practice partnerships as they evolve, is that “organizations, people, and systems change” (Breslin et al., 2011, Background section, para. 4). Five lessons learned from managing the evolution of an academic-practice partnership include (a) *change is inevitable*, (b) *leadership matters at all levels*, (c) *succession planning is vital* (d) *persistence toward established goals is necessary*, and (d) *relationships are the glue to creating the successful academic–practice partnerships* (Breslin et al., 2011, Lessons learned section, para. 1–5). These lessons learned provide valuable insights for other academic-practice partnerships to achieve sustainability during times of change.

Dobalian et al. (2014) examined the critical elements of academic-practice partnerships based upon the work of the U.S. Department of Veterans Affairs Nursing Academy program. Five key themes emerged from this work, including: “the criticality of inter-organizational collaboration; challenges arising from blending different cultures; challenges associated with recruiting nurses to take on faculty roles; the importance of structuring the partnership to promote evidence-based practice and simulation-based learning in the clinical setting; and recognizing that stable relationships must be based on long-term commitments rather than short-term changes in the demand for nursing care” (Dobalian et al., 2014, Results section, para. 1). Due to the differences in leadership, management, and organizational structures; different cultures and financial models, it is imperative that partner organizations learn to bridge their differences to facilitate the success of the partnership (Dobalian et al., 2014).

#### Overview of this Academic-Practice Partnership

The college of nursing has 1745 BSN students currently enrolled across two campus locations, including 780 pre-licensure students. There are 459 graduate students enrolled in four Master's degree programs, one Doctor of Nursing Practice program that has eight specialties and one Doctor of Philosophy in Nursing and Health Innovation program. The college is accredited by the Commission on Collegiate Nursing Education through 2023.

The college employs 90 full-time faculty members, including 19 who teach in the pre-licensure program. All full-time faculty teaching in a nursing program are Registered Nurses who hold a master's or doctoral degree in Nursing or a related discipline. In fall 2017, the college employed 74 part-time faculty in the pre-licensure program, 14 of whom taught in the partnership. The college taught 192 sections of nursing courses in the pre-licensure program in Fall 2017, including 17 sections taught as part of the partnership program.

The academic medical center, located 25 miles from the college's main nursing campus, employs approximately 1700 registered nurses. Two hundred nurses are educators, clinical nurse/quality or informatics specialists, case managers, researchers, supervisors, managers or administrators. Seventy one percent (71%) of the academic medical center nurses are prepared at the Bachelor's, Master's, or Doctoral levels, thus providing a large pool of qualified applicants for appointment as college of nursing faculty.

The state board of nursing regulates the educational and experiential requirements for faculty teaching didactic and clinical courses. Nurses with at least two years of experience providing direct patient care as a Registered Nurse, and a graduate degree in nursing, or a graduate degree in another discipline and a baccalaureate degree in nursing may teach didactic courses (Arizona State Board of Nursing, 2017). Nurses with a baccalaureate degree in nursing and at least three years of experience as a registered nurse providing direct patient care

may teach clinical courses only.

The college collaborates with the academic medical center to offer the core nursing courses of the pre-licensure BSN program at the academic medical center's hospital located in the Southwestern U.S. This partnership has educated 9 cohorts of 20–32 students for a total of 191 graduates since the inception in 2005. The success of this academic-practice partnership is demonstrated by partnership graduates achieving an average 98% pass rate on the National Council Licensure Examination-Registered Nurse (NCLEX- RN); sustaining an average new graduate hire rate of 53% by the academic medical center; maintaining an average 1-year retention rate of 90% of new graduates hired at the academic medical center; and expanding the collaborations of faculty from both organizations in nursing education, practice, and research. The initial outcomes of this collaboration led to increased enrollment, provided excellent student learning experiences, created opportunities for clinical nurses to teach in an academic setting, increased the number of nursing faculty, and laid the foundation for maximizing the strengths of each partner.

#### Model

The college of nursing and academic medical center collaboration aligns with the eight guiding principles for academic-practice partnerships as defined by the AACN-AONE Task Force on Academic-Practice Partnerships (2012). See the Guiding Principles presented in Table 1.

#### Cultural Congruence of Organizations

The academic medical center and the university's college of nursing are culturally congruent organizations. The academic medical center aspires to be the premier academic medical center in the Southwestern U.S., and to fulfill the three shields of practice, education, and research (Mayo Foundation for Medical Education and Research, 2018). Investing in education is highly valued because it is one component of the academic medical center's mission. The academic medical center's Professional Nursing Practice Model, a relationship-based care model, is built upon four core values: EBP, nurse accountability, professional environment, and continuity of care (Mayo Foundation for Medical Education and Research, 2017). This partnership advances the academic medical center's mission related to nursing education, EBP, and research.

The college of nursing's vision is to be recognized as a model for excellence and inspiration in nursing and interprofessional practice, education, and research that advance knowledge, innovative practice models, and new solutions to optimize the health and well-being of diverse local, national and global communities (Arizona State University College of Nursing and Health Innovation, n.d.). This partnership also supports the college's goal to enhance local impact and social embeddedness by increasing collaborations between students, faculty, community members, and community leaders to design programs that improve health outcomes.

#### Administration and Resources

This collaborative endeavor is a comprehensive sharing of administrative oversight, teaching responsibilities, and resources. In addition to the affiliation agreement, a memorandum of understanding is drafted with each cohort of partnership students admitted to the program. Key stakeholders from both organizations attend biannual meetings to discuss the contractual details and financial projections for each cohort. Joint responsibilities include: selection, identification of responsibilities, and evaluation of the program manager; selection, retention, and evaluation of faculty; and funding of the program. The academic medical center's Program Manager and the college's Pre-licensure BSN Program Director forecast teaching needs for each cohort and determine which organization will be responsible for filling the teaching

**Table 1**  
Summary of AACN and AONE Guiding Principles of Academic-Practice Partnerships.

<p><b>Collaborative relationships between academia and practice are established and sustained through</b></p> <p>Formal relationships established at the senior leadership level and practiced at multiple levels throughout the organization</p> <p>Shared vision and expectations that are clearly articulated</p> <p>Mutual goals with set evaluation periods</p> <p><b>Mutual respect and trust are the cornerstones of the practice/academia relationship and include</b></p> <p>Shared conflict engagement competencies</p> <p>Joint accountability and recognition for contributions</p> <p>Frequent and meaningful engagement</p> <p>Mutual investment and commitment</p> <p>Transparency</p> <p><b>Knowledge is shared amongst partners through mechanisms such as</b></p> <p>Commitment to lifelong learning</p> <p>Shared knowledge of current best practices</p> <p>Shared knowledge management systems</p> <p>Joint preparation for national certification, accreditation, and regulatory reviews</p> <p>Interprofessional education</p> <p>Joint research</p> <p>Joint committee appointments</p> <p>Joint development of competencies</p> <p><b>A commitment is shared by partners to maximize the potential of each registered nurse to reach the highest level within his/her individual scope of practice including:</b></p> <p>Culture of trust and respect</p> <p>Shared responsibility to prepare and enable nurses to lead change and advance health</p> <p>Shared governance that fosters innovation and advanced problem solving</p> <p>Shared decision making</p> <p>Consideration and evaluation of shared opportunities</p> <p>Participation on regional and national committees to develop policy and strategies for implementation</p> <p>Joint meetings between regional/national constituents of AONE and AACN</p> <p><b>A commitment is shared by partners to work together to determine an evidence based transition program for students and new graduates that is both sustainable and cost effective via</b></p> <p>Collaborative development, implementation, and evaluation of residency programs</p> <p>Leveraging competencies from practice to education and vice versa</p> <p>Mutual/shared commitment to lifelong learning for self and others</p> <p><b>A commitment is shared by partners to develop, implement, and evaluate organizational processes and structures that support and recognize academic or educational achievements</b></p> <p>Lifelong learning for all levels of nursing, certification, and continuing education</p> <p>Seamless academic progression</p> <p>Joint funding and in-kind resources for all nurses to achieve a higher level of learning</p> <p>Joint faculty appointments between academic and clinical institutions</p> <p>Support for increasing diversity in the workforce at the staff and faculty levels</p> <p>Support for achieving an 80% baccalaureate prepared registered nurse workforce and for doubling the number of nurses with doctoral degrees</p> <p><b>A commitment is shared by partners to support opportunities for nurses to lead and develop collaborative models that redesign practice environments to improve health outcomes, including</b></p> <p>Joint interprofessional leadership development programs</p> <p>Joint funding to design, implement, and sustain innovative patient-centered delivery systems</p> <p>Collaborative engagement to examine and mitigate non-value added practice complexity</p> <p>Seamless transition from the classroom to the bedside</p> <p>Joint mentoring programs/opportunities</p> <p><b>A commitment is shared by partners to establish infrastructures to collect and analyze data on the current and future needs of the registered nurse workforce via</b></p> <p>Identification of useful workforce data</p> <p>Joint collection and analysis of workforce and education data</p> <p>Joint business case development</p> <p>Assurance of transparency of data</p>
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Adapted from American Association of Colleges of Nursing. (2012). AACN-AONE task force on academic-practice partnership: Guiding principles. Retrieved from <http://www.aacn.nche.edu/leading-initiatives/academic-practice-partnerships/GuidingPrinciples.pdf>

assignment. The academic medical center pays 50% of the salaries for the nurses selected to teach in the program and the college pays the other 50%. The college also pays the salaries for the nurses hired by the college to teach specialty patient populations for which the academic medical center does not provide care, such as pediatric, obstetric and psychiatric/mental health.

Historically, the primary indicator of the academic medical center's return on investment has been the number of new graduates hired from each cohort. Other indicators include nurse retention, nurse job satisfaction, nurse engagement in life-long learning, and career development. Future work includes the identification of specific outcome measures to determine return on investment for the academic medical center.

Table 2 highlights the distribution of human resources and the physical resources are shown in Table 3. Tables 2 and 3 also illustrate both organizations' commitment to the AACN-AONE's guiding principles of academic-practice partnerships.

### Preparing Nurses of the Future

The collaborative BSN program prepares nurses of the future by promoting student interaction with a diverse interdisciplinary team of educators, clinicians, researchers, and leaders. The faculty staffing model and proximity of the academic program to the clinical practice site provide learning opportunities for partnership students which facilitate the seamless transition of knowledge from the traditional classroom setting to the bedside. The partnership students have access to clinical experts, IPE, mentors, shadow experiences, and an extern program. Additionally, partnership students are invited to participate in EBP and research projects at the clinical site.

### Collaborative Program Structure

Students complete their pre-nursing courses at the university or at a community college prior to advancing to the pre-licensure nursing program at one of college's campus locations. All students prioritize which campus location they prefer to attend to complete the nursing program. Student demand for the nursing program at the academic medical center campus exceeds the availability of space in the program.

Originally, the collaborative pre-licensure program admitted 20 students per cohort, delivered the academic program to one cohort at a time, and was operated on a 16-month, year-round schedule. The program was intentionally designed to deliver classes, lab/simulation, and clinical experiences during evening and weekend hours to ensure that existing resources (clinical placements, faculty, and use of psychomotor skills lab and simulation facilities) were effectively used across campuses. Utilizing a 16-month, year-round schedule was essential to distribute existing resources amongst the various campuses. When the partnership program began the academic medical center did not have lab/simulation facilities, necessitating the sharing of these resources with one of the other campuses. The academic medical center opened a benefactor funded clinical skills lab/simulation facility in 2009. However, the weekend-evening scheduling model was continued because it was efficient in using classroom, clinical, and faculty resources.

The partnership experimented with running two cohorts simultaneously in 2011. However, this approach taxed resources, including classroom space, lab/simulation facilities, and faculty. In 2012, the program moved from a 16-month, year-round schedule (Fig. 1) to a traditional academic year schedule. This change was made to coincide with the timing of the academic medical center's new graduate program, which is offered in July and February. The success of the program, and strong interest from students, has supported the expansion of the cohort size to 32 partnership students who are admitted every 24 months.

Partnership students attend all classes on the academic medical

**Table 2**  
Distribution of Human Resources.

Responsibility	Academic Medical Center	College of Nursing
Strategic Oversight	Chief Nursing Officer Nursing Education Administrator Financial Officer	Dean Associate Dean Financial Officer
Operational Management Faculty:	Program Manager, Partnership Program Program Manager, Partnership Program	Program Director, Pre-licensure BSN Program Director, Pre-licensure BSN Faculty Teaching Support Coordinator, Scholarship of Teaching and Learning
<ul style="list-style-type: none"> <li>● Recruitment/onboarding</li> <li>● Orientation</li> <li>● Development</li> <li>● Mentoring</li> <li>● Teaching assignments</li> <li>● Evaluation</li> </ul>		
Program Support	Administrative Assistant	Administrative Assistant Coordinator, Clinical Placement Academic Advising and Enrollment
Lab and Simulation Support	Coordinator, Clinical Skills Lab/Simulation Nurse Specialist	Coordinator, Simulation and Learning Resource Center

**Table 3**  
Distribution of Physical Resources.

Responsibility	Academic Medical Center	College of Nursing
Space/Equipment	Workspace for faculty Classroom, conference, lab, and simulation space Psychomotor skill task trainers Disposable laboratory supplies Mannequins- low, medium and high fidelity Audio/visual simulation control system Mobile devices for video validation Laptop computers for computer based testing	Workspace for faculty Learning management system Registration and grade reporting system
Library	Physical and electronic access for partnership students and faculty to the academic medical center library services.	Physical and electronic access for partnership students and faculty to the university library services.

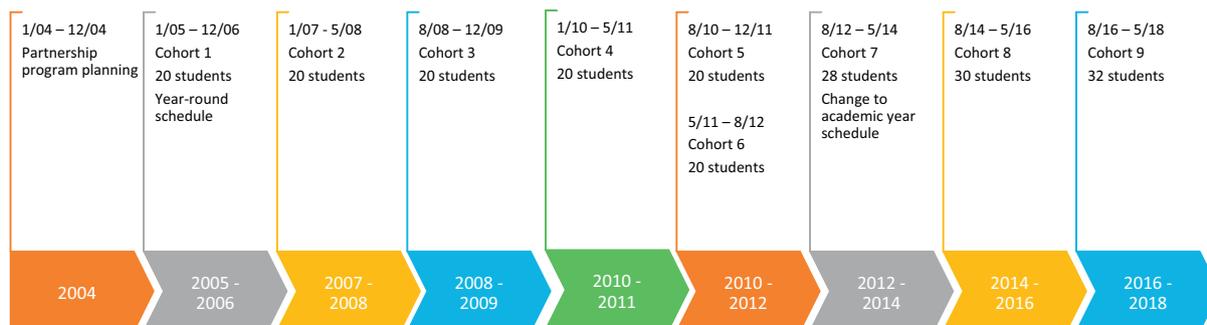
center campus, where they complete all clinical rotations, aside from specialty patient populations for which the academic medical center does not provide care, such as pediatric, obstetric and psychiatric/mental health. Partnership students receive priority placement for clinical experiences at academic medical center facilities. All didactic, laboratory, and clinical courses are taught by academic medical center nursing faculty, except for the pediatric, obstetric and psychiatric/mental health specialties which college of nursing faculty teaches. All academic medical center nursing faculty are practicing clinicians, clinical educators, or researchers at the academic medical center, an advantage that brings current clinical experience and content application into the classroom at all levels of curriculum. Mentorship, faculty development, and scholarship activities are provided to ensure academic medical center nurses are effective teachers. In Table 2, processes related to faculty onboarding, orientation, development, and mentoring are identified as shared responsibilities of the academic medical center and college of nursing.

To maintain curricular integrity across campuses, faculty routinely

collaborate to ensure that the program is consistently delivered. They accomplish this work by participating in regularly scheduled team meetings to ensure all faculty teaching in the course have voice and vote into the decisions that guide the curriculum. The pre-licensure BSN program has undergone two major revisions to the curriculum in the past decade. Nursing faculty from the academic medical center were integral to planning the revised curricula. Additionally, the college's full-time faculty serve as mentors for the academic medical center's part-time nursing faculty, which leads to increased collaboration amongst faculty, and congruence across campuses. These processes illustrate the partnership's commitment to joint accountability, frequent and meaningful engagement, mutual respect, trust and shared decision making which are key characteristics of successful academic-practice partnerships (AACN, 2012).

*Partnership Students*

The majority of the partnership students (88%) are traditional



**Fig. 1.** Partnership program timeline.

college age. Less than 1% are greater than 30 years of age, which is substantially less than the national average of over 12% (National League for Nursing [NLN], 2016). The partnership students are predominantly female. Males comprise only 11% of each cohort, which is slightly lower than the national average of 15% (NLN, 2016). The ethnic diversity of our program is reflective of the national average, where 28% of students in BSN programs across the U.S. are minorities (NLN, 2016). The ethnic population in our program is composed of 17% Hispanic/Latino, 8% Asian, and less than 1% black/African American, American Indian, native islander, or two or more races. Our location in the Southwestern U.S. may contribute to our Hispanic population being double the national average (NLN, 2016). Less than 1% of partnership students are veterans, and less than 1% are post-baccalaureate students.

#### *Unique Opportunities*

Program students across campus locations are eligible to participate in extra-curricular experiences on an elective and voluntary basis, while maintaining the same course learning outcomes and program completion outcomes across campuses for required academic experiences. The extra-curricular opportunities vary by campus depending upon course and event scheduling as well as student availability and interest. The following sections describe experiences available for partnership students.

#### *Access to clinical experts*

Partnership students learn in an interprofessional environment from a diverse team of clinical experts including nursing, medicine, physical therapy, respiratory therapy, social work, medical librarians, and dietitians. Clinical experts in advanced practice nursing, leadership, management, nursing research, and wound/ostomy care provide guest presentations in classroom and lab/simulation courses. This arrangement is mutually beneficial: clinical experts have an opportunity for professional growth as nurse educators, and students benefit from learning about the latest innovations in nursing and health care.

#### *IPE*

Periodically, partnership students are invited to participate in interprofessional simulation experiences with students from other healthcare disciplines and new academic medical center employees to meet the [Interprofessional Education Collaborative \(2016\)](#) core competencies. This simulation-based IPE provides opportunities to engage with students from other disciplines, such as advanced practice providers, medicine, nutrition, occupational therapy, pharmacy, physical therapy, respiratory, social work, and speech therapy. Research suggests that students who participate in IPE are better prepared to practice collaboratively (IOM, 2010), while faculty charged with developing, implementing and evaluating IPE are ultimately challenged to lead change and advance healthcare.

#### *Student nurse mentor program*

On average, 95% of partnership students participate in a formal mentor program, which pairs students with academic medical center nurses. The program provides both group and individual student-mentor opportunities for socialization into the profession of nursing and the culture of the academic medical center. Mentors are encouraged to innovatively develop activities to address individual mentee needs as students prepare for the transition into professional nursing practice. Training and opportunities to mentor the incoming workforce assist in maximizing the potential of each registered nurse to reach the highest level within their scope of practice.

#### *Nurse shadow program*

Partnership students are encouraged to participate in a nurse shadow program to broaden their knowledge of opportunities in specialty practices and diverse clinical settings. In addition to identifying specialty areas and patient populations of interest, students considering the pursuit of graduate and doctoral degrees state these experiences are valuable in learning about advanced practice nursing roles. This program provides yet another elective opportunity for partnership students to seek mentorship and for the academic medical center nurses to develop as mentors.

#### *Summer externship*

After successful completion of the junior year, all nursing students are eligible to apply for an unpaid 8 week summer externship at the academic medical center's hospital. The number and type of student externship opportunities vary annually, depending upon projected workforce needs. Approximately 35% of partnership students from each cohort are selected to participate in this program, which strengthens their cognitive and psychomotor skills in the clinical setting, increases visibility in the organization, enhances knowledge of the academic medical center culture, and increases the probability of being hired upon graduation. This externship also provides recruitment opportunities for future nurses.

#### *EBP and nursing research*

Partnership students may have opportunities to participate in extra-curricular activities such as EBP or quality improvement projects, and research activities because they are located on the academic medical center hospital campus. These types of collaborations benefit the organization by providing student resources to assist with project development and implementation, as well as providing students with exposure to real-world experiences in EBP and research. Nursing honors students from all campuses have access to resources at the academic medical center, including patients and staff, to aid in undergraduate theses work. Examples of recent projects in which students collaborated with the academic medical center staff include: students serving as mock surveyors to assist nurses preparing for their upcoming Magnet® accreditation site visit, and students working with staff on a quality improvement project to enhance patient screening in the outpatient dermatology practice.

#### *Advancing Nursing*

This academic practice partnership has provided opportunities for mentorship, faculty development, joint service, shared leadership and scholarship, which align with the guiding principles of successful academic-practice partnerships (AACN, 2012).

#### *Mentorship and Faculty Development*

This partnership has led to an increase in the number and the expertise levels of faculty through collaborative faculty development and one-on-one mentorship opportunities. Sixty (60) academic medical center nurses have been appointed as college of nursing faculty since 2005. Many academic medical center nursing faculty have taught more than once (62%), or have taught more than one cohort (45%). The majority of the 19 current academic medical center faculty hold a Master's degree (74%), whereas 16% of the faculty hold a Bachelor of Science in Nursing degree, and 10% of the faculty hold a Doctor of Nursing Practice degree. The faculty who hold a BSN as their highest degree teach only in the clinical setting.

Academic medical center nursing faculty may participate in all college faculty development opportunities, as well as workshops

designed by the college's academic innovation team to address unique learning needs. The college also provides membership in the National League for Nursing for all faculty. Academic medical center nursing faculty benefit from the mentorship of full-time college of nursing faculty, while full-time faculty, acting as mentors, benefit by meeting their service commitment to the college. In addition to in-kind resources, both organizations have a formal structure to support educational activities such as attainment of specialty certifications and special funding for presentation at conferences. Both organizations offer their benefits eligible employees opportunities to participate in tuition assistance programs.

#### Joint Service

Knowledge is also shared between the academic and clinical practice partners through joint committee appointments. The college's faculty are invited to serve on three academic medical center nursing subcommittees focusing on practice, education and research as well as the advisory board for the nurse residency program. Academic medical center nursing faculty attend the college's nursing undergraduate faculty forum, and participate in the development and revision of the BSN curriculum. Additionally, nursing leaders of the collaborative pre-licensure program are members of the academic medical center's education committee, which provides direction for educational programming and activities, including faculty development, and focuses attention on continuing high quality education programs (Mayo Clinic College of Medicine, 2015).

#### Shared Leadership

This program is one component of a larger university/academic medical center partnership. The high level of mutual respect, trust, and collegiality amongst the college and the academic medical center department of nursing have paved the way for deeper levels of connection. In May 2014, the Dean of the college and CNO of the academic medical center formed a collaborative workgroup with leaders and other key stakeholders from both organizations. This group meets bi-annually to brainstorm innovative approaches to expand and strengthen the partnership. The goal of this leadership workgroup is to increase the impact within the shared academic-healthcare communities to include educators, clinicians, researchers, students and patients/clients. In addition, the CNO and Dean meet every 4–6 weeks to update each other on relevant organizational priorities, evaluate progress to date, and identify areas of emerging strategic alignment.

#### Scholarship

Shared opportunities for EBP training and research initiatives have been developed and sustained. One example of this work is the development of a mentor workshop by the college of nursing, academic medical center and two other community partners to increase awareness of EBP in both the clinical and academic settings. As a result of this workshop, faculty are better prepared to mentor students in their EBP projects, and nurses are better equipped to lead EBP initiatives. Additionally, the EBP project, once viewed by students as only an academic exercise, is now “brought to life” as students are encouraged to engage in conversation with faculty, clinical preceptors, and nursing leadership to choose topics that align with organizational initiatives and have actual implementation potential.

Faculty can apply for intramural joint funding dedicated to support new collaborative research projects within the academic-practice partnership. Cancer prevention, cancer treatment, and health disparities are areas of collaborative research that have developed. These research collaborations have begun to reach beyond nursing and have become interprofessional in nature.

## Results

### Student Outcomes

The partnership has graduated nine cohorts (191 students) since 2005. The attrition rate is approximately 10%, with partnership students leaving the academic medical center campus due to unsuccessful academic progression or for personal or medical reasons. These students typically resume enrollment on the main nursing campus because courses on the academic medical center campus are only offered once every 2 years; whereas, courses are offered at the main nursing campus every semester affording students the opportunity for quicker degree completion. The average first-time NCLEX-RN pass rate for program graduates is 98%. Six out of nine cohorts achieved a first-time NCLEX-RN pass rate of 100%.

Partnership students benefit from the smaller cohort size, which allows for more individualized attention, the development of a learning community between the faculty and students, and the unique learning experiences provided by attending a program on a hospital campus. Partnership students demonstrate a high level of accountability to their faculty and peers, as evidenced by nearly 100% participation in class, laboratory, and clinical experiences. Common themes from a survey of 2014 program graduates included the following comments:

- Nursing instructors work at the academic medical center and are able to provide current clinical practice, policies, and information.
- I love that the academic medical center instructors are actual, practicing nurses. It makes it really nice to have that extra support when you're at clinical and you see a friendly face.
- Small class size means more individual attention and interactions between faculty and students, and there is an opportunity to support each other and become like family.
- We get to experience the most innovative types of care and how the staff at the academic medical center works as a team to put the patients first. I learn from my nursing preceptors and the doctors.
- The supplies we practice with in lab are the same as the ones used in clinical which is helpful.

Clinical nursing faculty are academic medical center employees; therefore, they are able to provide partnership students with unique clinical experiences that may not be offered by clinical faculty who are not employees of the health care organization. Additionally, the academic medical center nurses are dedicated to providing exceptional educational experiences, because they recognize the students' ultimate potential for employment as colleagues. Fifty three percent (53%) of program graduates are hired at the academic medical center. Individual cohort hiring rates are shown in Fig. 2.

### One-year Retention Rate for New Graduate Nurses

All new graduate nurses hired at the academic medical center participate in the nurse residency program. The average 1-year retention rate of 90% for new graduate nurses in the nurse residency program is higher than the 83% reported by a recent longitudinal study of data collected on newly licensed registered nurses by the National Council of State Board of Nursing (Blegen, Spector, Lynn, Barnsteiner, & Ulrich, 2017). The 1-year retention rate was 100% for program graduates hired in 2014 and 2016; for the 2014 graduates, the retention rate remained 100% through the first 23 months of employment. At the time of publication, the 2-year retention rate for May 2016 graduates is 100%. Nurse residents from the partnership report that the student nurse mentor program contributes to the new graduate nurse retention rate as the students already have an established support system in place upon accepting a position at the academic medical center.

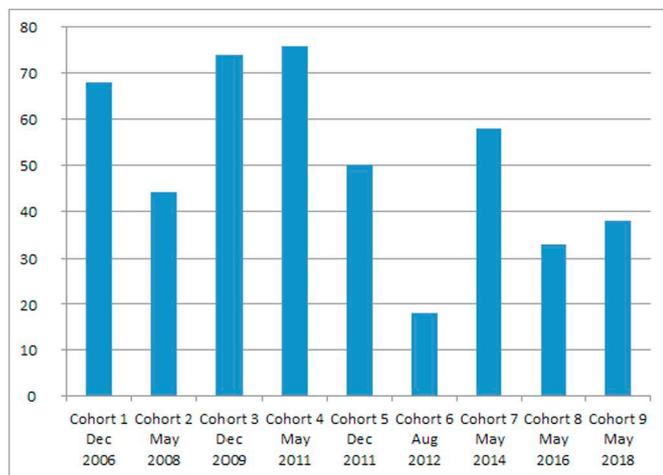


Fig. 2. Summary of hire rates at the academic medical center (expressed as percentage of cohort). A nurse residency program was not offered during the summer of 2012.

### Faculty Outcomes

All academic medical center nursing faculty hold academic appointments within the college of nursing and seven faculty hold academic rank in the academic medical center's college of medicine and science. In the past four years, academic medical center nursing faculty have published six articles in peer-reviewed journals and presented 25 podium or poster presentations at regional, national and international conferences. The organizations have also collaborated on one national webinar, two podium, and four posters presentations in the past three years.

Seven of the 19 academic medical center nursing faculty who taught in the ninth cohort engaged in honors enrichment contracts with partnership students, and four served as thesis directors or readers. Anecdotally, many academic medical center nursing faculty members have shared that teaching in the program has encouraged them to maintain employment and advance their formal education because of the support received in the role.

The academic medical center has retained approximately 70% of the nurses who have served as faculty in the program since 2005. Of the 40 academic medical center nursing faculty members retained to the organization, 48% continue to teach in the pre-licensure program. In the past three years, five academic medical center nursing faculty have received either a doctoral or master's degree, and two are currently pursuing higher-level degrees.

### Partnership Success

Several factors have influenced the success of this academic-practice partnership, including shared commitment to sustainability; effective communication; operational fluidity; mutual sharing of organizational strengths and expertise; and the ability to create synergy between the organizations to continue to expand the partnership.

The organizations make collaborative decisions to address varying conditions within the academic and practice environments. Frequent, multimodal communication has been critical to the success. Leadership from both organizations meet a minimum of twice per year to revisit the program's shared vision, evaluate progress toward mutual goals, and share knowledge of current best practice, IPE initiatives, and joint research activities. Leaders responsible for operational management from both organizations meet monthly to review curricular programming, faculty staffing, and program expenses. In addition to regularly scheduled meetings, operational leaders meet as needed to address emergent faculty or students issues. Financial officers from each

organization advise on the financial status of the partnership, including projecting future program costs.

The partnership created the term “operational fluidity” to refer to how the program has adjusted over time to accommodate for changes in curricular plans of study, enrollment patterns, scheduling models, and faculty utilization. Two examples of operational fluidity include the addition of a second concurrent cohort and transitioning the program to a traditional academic year schedule to coincide with the academic medical center's new graduate program. While two concurrent cohorts increased enrollment capacity in the college, the model taxed human and physical resources for both partners, thus was deemed unsustainable beyond the pilot cohort. Additionally, financial constraints required the academic medical center to pilot an unpaid summer extern program as opposed to discontinuing the educational opportunity. The academic medical center found that the number of qualified applicants remained high, thus this model has been sustained. While this model may limit the summer externship applicants to those residing locally and those able to financially afford participation in an unpaid educational experience, this program continues to provide educational experiences for nursing students and serve as a recruitment tool for the academic medical center.

The strengths and expertise of both organizations are capitalized on to create a high level of synergy that benefits everyone involved. The academic medical center's strengths are clinical expertise, clinical research, and health innovation, whereas the college's strengths are academic programming, EBP, faculty development, health innovation, and research. Both organizations are committed to the sustainability, innovation and growth of this partnership.

### Recommendations

This academic-practice partnership faced many of the common barriers reflected in the literature, such as challenges with communication, limited finances, different organizational processes and systems that do not interface between the institutions, and constrained human and physical resources. The strategies used to overcome these barriers, outlined in our keys to partnership success, include: frequent, structured communication amongst all levels of the partnership from the chief executives to the faculty delivering the education; candid discussions about the financial implications of the partnership and strategizing cost-effective ways to sustain the partnership in challenging financial times; identification of methods to facilitate the interface between internal processes and systems of both organizations; and a shared commitment to working together to address human and physical resource constraints.

When considering initiating an academic-practice partnership such as this one, it is imperative to collaborate with organizations that share similar missions, visions, and goals. Success is dependent upon both partners being mutually invested and genuinely valuing the partnership. These types of partnerships usually arise from collegial working relationships between the organizations that have evolved over time.

Showcasing the potential value of an academic-practice partnership to reluctant organizations is imperative. For the practice partner, this value may be reflected in the ability to develop a pipeline of future nurses who are familiar with the organization. The practice partner may also benefit from the academic partner's expertise in education, evidence-based practice, and research, with the academic partner providing faculty and students to assist with these endeavors. This expertise is valuable for practice organizations striving to enhance efforts in evidence-based practice and research. For the academic partner, this value may be reflected in the ability to provide clinical learning experiences for their students; dedicated education units; mentors or preceptors to assist with teaching; and internship opportunities for their students.

Willingness to acknowledge when a partnership is not a good fit for one or both organizations is equally as important. Insufficient

leadership support and non-alignment of organizational mission, vision, goals and concurrent strategic initiatives between organizations makes sustaining an academic-practice partnership challenging. Ideally, this is identified during initial discussions between the organizations, but if at any time during the collaboration the value and investment in the partnership is not mutually shared, it is advisable to terminate the academic-practice partnership. It also important to consider the impact changes in leadership has on the sustainability of partnership.

Our model, in conjunction with the valuable AACN resources provides a framework for creating a sustainable academic-practice partnership. In 2016 the AACN released findings from a national study describing how to prepare academic nursing for long-term success and sustainability as partner in transforming healthcare. The report identifies six recommendations for building strong academic partnerships, which align with the eight AACN-AONE (2012) guiding principles, and include (a) embrace a new vision for academic nursing, (b) enhance the clinical practice of academic nursing, (c) partner in preparing the nurses of the future, (d) partner in the implementation of accountable care, (e) invest in nursing research programs and integrate research into clinical practice, and (f) implement an advocacy agenda to support a new era for academic nursing (AACN, 2016). Implementation strategies specific for each group of key stakeholders in academic-practice partnerships are also described in the final report (AACN, 2016). Additionally, the AACN (2018) has a designed a tool-kit to guide the development, foster the growth, and evaluate the success of academic-practice partnerships. Building the academic-practice partnership upon the AACN and AONE's (2012) guiding principles will promote the sustainability and expand the scope of the collaboration (Van et al., 2015).

## Conclusion

The academic-practice partnership that began with students from the college's undergraduate nursing program completing clinical experiences at the academic medical center has broadened substantially in scope and in depth. The collaboration now includes accomplishments in EBP, research, IPE, mentor/faculty development, and joint service. Our model has evolved over time. In 2005, when discussion about the collaboration began, there were no tools or models to guide the implementation of this partnership. Over the past 12 years, our model has met, and in some facets, exceeded the AACN (2016) and AACN-AONE (2012) recommendations for sustainable academic-practice partnerships.

Consistent with the AACN (2016) and AACN-AONE (2012) recommendations, this academic-practice partnership prepares nurses of the future to be evidence-based practitioners, and creates opportunities for nurses to achieve educational and career advancements. The most exciting aspect of the partnership is that our work is never complete. There are always new means of collaboration to decrease the gap between nursing education and practice, thus improving the quality of nursing education, advancing the practice of nursing and healthcare delivery, and enhancing the health of our community.

## Declaration of interest

No authors have any conflicts of interest regarding this manuscript, including relevant financial interests, activities, relationships, or affiliations.

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