Interprofessional Education Between Dentistry and Nursing: The NYU Experience

Judith Haber, APRN, PhD; Andrew I. Spielman, DMD, MS, PhD; Mark Wolff, DDS, PhD; and Donna Shelley, MD, MPH

ABSTRACT In 2005, New York University Colleges of Dentistry and Nursing formed an organizational partnership to create a unique model of interprofessional education, research, service and practice. This paper describes the first eight years of experience, from the early reaction of the public to the partnership, to examples of success and past and current challenges.

AUTHORS

Judith Haber, APRN, PhD, is an associate dean for Graduate Programs and the Ursula Springer Leadership Professor in Nursing at the New York University College of Nursing. Conflict of Interest Disclosure: None reported.

Andrew I. Spielman, DMD, MS, PhD, is a professor of Basic Science and Craniofacial Biology and an associate dean for Academic Affairs at the New York University College of Dentistry. Conflict of Interest Disclosure: None reported.

Mark Wolff, DDS, PhD, is professor and chair of the Department of Cariology and Comprehensive Care and associate dean for Pre-doctoral Clinical Education at the New York University College of Dentistry. Conflict of Interest Disclosure: None reported.

Donna Shelley, MD, MPH, is an associate professor of Medicine and associate director of research for the Division of General Internal Medicine at the New York University School of Medicine. Conflict of Interest Disclosure: None reported.

Historically, health education in the United States has been delivered in well-established silos. The medical, dental and nursing professions, to name a few of the health professions, prepare students to practice in their own disciplines. Yet patients come with health problems that cross the boundaries of those disciplines and the specialized health care focus unique to each profession. Professional practice silos have been documented to have a negative impact on the quality and safety of patient care delivery. To address this glaring error in education and practice, the Institute of Medicine (IOM) commissioned a report in 2001. One of the key elements of the report, Crossing the Quality Chasm: A New Health System for the 21st Century, was fostering interdisciplinary team building.1 The IOM’s 2003 follow-up report, Health Professions Education: A Bridge to Quality, proposed that to improve patient outcomes through interprofessional (IP) practice, students in the health professions must be interprofessionally educated as “members of an interdisciplinary team.”2 At about the same time, the U.S. surgeon general issued the National Call to Action to Promote Oral Health to address the gap in meeting the oral health care needs of the American public and to consider the relationship of oral health to overall health from a population health focus.3 As a follow-up to the surgeon general’s report, the American Dental Education Association (ADEA) issued a report in 2003 in response to the crisis in oral health care needs of the American public and to consider the relationship of oral health to overall health from a population health focus.4 One of the recommendations of the ADEA report echoed that of the IOM report: “to develop and support new models of oral health care educational and delivery systems.”

The data provided by these seminal reports inspired a vision for Michael Alfano, DMD, and Terry Fulmer, PhD,
RN, FAAN, the leaders of the NYU College of Dentistry (NYUCD) and the then Division of Nursing, respectively, about the potential of two health professions, both committed to health promotion and primary care, to have a greater impact together on global health outcomes than either could individually. To actualize this vision, they proposed an organizational partnership, a school-within-a-school model, between the dental and nursing programs. The partnership provided an opportunity to develop novel IP education and practice models, as well as an IP research agenda that capitalized on the potential synergies of the research programs of each academic unit. In 2005, the NYU board of trustees approved the organizational relationship between the College of Dentistry and the now College of Nursing (NYUCN).

The initial reaction to this unusual alliance, primarily from some members of the larger dental community, dental alumni, faculty and students, was befuddlement and a question: Why? What did dentistry and nursing have in common? A study comparing the core competencies of dentistry, nursing and medicine demonstrated that there was more in common than one might assume. The findings revealed a surprisingly high, 38 percent, partial or total overlap between competencies for dentistry and nursing, and 25.4 percent overlap between competencies for dentistry and medicine. These data provided reinforcement for the wisdom of the dental-nursing venture. The leadership of both colleges immediately were engaged, given that they were both open-minded and curious about the potential “home runs” in education, practice and research that could be realized. The most obvious obstacle was the one-mile physical separation of the two colleges.

The wisdom of the dental-nursing alliance was reinforced in 2011 when publication of two important IOM documents, Advancing Oral Health in America and Improving Access to Oral Health Care for Vulnerable and Underserved Populations, highlighted policy issues related to serious gaps in access to oral health services, the concomitant need to build oral health workforce capacity and the need to reduce oral health disparities. Almost simultaneously, another catalyst supporting our NYUCN/NYUCD interprofessional collaboration was publication of the Core Competencies for Interprofessional Collaborative Practice, the result of six professional organizations, including our dental and nursing education organizations, the ADEA and the American Association of Colleges of Nursing (AACN). The final national policy agenda to lend credibility to the importance of oral health as a leading health topic was the 2010 launch of Healthy People 2020, which identified oral health promotion as the eighth leading health topic.

The administration of the two colleges initiated several key steps and helped to facilitate the transition to an IP way of thinking. These included:

- The creation of a joint administrative leadership team, the Executive Management Council (EMC), a group that included the deans, associate deans, directors and key individuals from both colleges. The EMC meets monthly to discuss issues of concern and continues to forge a strategic and administrative alliance.
- The creation of a nursing faculty practice (NFP), a nurse practitioner (NP)-managed primary care practice located on the lobby level of the College of Dentistry, directly across from the dental admitting center. This strategic location was designed to operationalize the interprofessional vision of “one-stop oral-systemic health shopping” for dental patients and potential patients from the community. The NP-managed faculty practice turned out to be not only a key resource for curricular initiatives, but it became the cornerstone and the most obvious physical evidence of the dental-nursing partnership.
- The creation of an office of IP education with a new full-time faculty line for its director. The first director, a medical doctor with a master’s of public health, was appointed to lead development, implementation and evaluation of an IP agenda in education and practice, identify potential IP research synergies between the two schools and evaluate new practice models. Five years later, many of the initiatives have been integrated into the nursing and dental curricula as “best practices.” However, overall interprofessional organizational leadership from both colleges is essential to keep the “big opportunities” flowing in partnership with unit- or project-specific champions.
- The joint development of a strategic plan identifying two important strategic pillars — leveraging partnership among dentistry, nursing and dental hygiene and developing men and women of science — as top priorities. The strategic plan provided the catalyst for leveraging IP oral-systemic health.
initial initiatives. Over the last five years, the two colleges have fulfilled, and in some cases surpassed, the majority of the stated goals and outcomes of this strategic plan. A new strategic initiative is planned for the next five years.

- Provision of scholarship opportunities for organization leaders and faculty. Our dental-nursing partnership has provided a unique platform for the nursing faculty to play a national leadership role representing the nursing profession on the National Interprofessional Initiative on Oral Health (NIIOH), a national effort to increase oral health in primary care education and practice, jointly funded by DentaQuest, Washington Dental Service and Connecticut Health Foundations. The College of Nursing has been funded by NIIOH to lead a national nursing oral health agenda through the Oral Health Nursing Education and Practice (OHNEP) program featuring faculty development, curriculum integration and best clinical practices in oral-systemic health. OHNEP leaders are prominent nationally in nursing and interprofessional circles, addressing the opportunity for the nursing profession to be a “new partner in prevention.”

Innovative IP Oral-systemic Initiatives

The interprofessional educational programs that we developed at NYU were not meant to consist of the co-location of dental and nurse practitioner students in a large lecture hall in core courses such as pathophysiology or pharmacology. Such models exist currently in a handful of dental and medical schools and health centers across the country as part of basic science education. Such arrangements make good financial sense, but their IP educational value is questionable.

At NYU Colleges of Dentistry and Nursing, such interactions usually are not possible because of spatial and temporal constraints on student availability. Our unique focus was clinical education and practice experiences. A summary of interprofessional collaborative activities is shown in the TABLE and selected IP clinical education, faculty development and research exemplars are highlighted below.

Nursing Faculty Practice

The Nursing Faculty Practice (NFP) is an adult primary care practice staffed by nurse practitioners and located on site at the College of Dentistry. It operates as a New York State Article 28 diagnostic and treatment center and provides a full scope of primary care services addressing not only patient-centered, disease-based clinical management but also health promotion and disease prevention. The NYU College of Dentistry is one of the largest oral health care facilities in the U.S., with more than 500 dental chairs, nearly 30,000 new patients and 380,000 patient visits a year. Findings from a needs assessment indicated that approximately 24 percent of dental patients seeking oral health care at NYUCD did not have or did not access a usual source of primary care.

This gap in access to primary care positioned NYUCD and NYUCN to use the co-location of the NFP and the dental clinics as an innovative IP clinical learning environment. A reciprocal referral and consultation pattern between the NFP and faculty and students in the dental clinics reflects our aim of expanding the health care lens through which primary care providers, dentists and nurse practitioners view the delivery of effective health care across the life span. Seamless oral-systemic health care taking place under one roof should increase access, decrease barriers to comprehensive health care and improve clinical outcomes. Our aim was to break down the silos of our respective disciplines and prepare the next generation of nurse practitioners and dentists committed to addressing both the oral and systemic health needs of patients. We wanted to provide them with a series of IP clinical experiences so that when they graduated they would be “IP-practice ready” to operationalize a lifelong interprofessional practice paradigm. Electronic health record data collected by the NFP between 2008 and 2012 demonstrate that more than 500 primary care referrals that resulted in actual appointments/visits had been made on behalf of NFP primary care providers, dentists and nurse practitioners view the delivery of effective health care across the life span. Seamless oral-systemic health care taking place under one roof should increase access, decrease barriers to comprehensive health care and improve clinical outcomes. Our aim was to break down the silos of our respective disciplines and prepare the next generation of nurse practitioners and dentists committed to addressing both the oral and systemic health needs of patients. We wanted to provide them with a series of IP clinical experiences so that when they graduated they would be “IP-practice ready” to operationalize a lifelong interprofessional practice paradigm. Electronic health record data collected by the NFP between 2008 and 2012 demonstrate that more than 500 primary care referrals that resulted in actual appointments/visits had been made on behalf of NFP primary care patients to the NYUCD dental clinics.

Collaborative Nursing/Dental Clinical Experience

An interprofessional clinical experience in the dental admitting center was designed for nurse practitioner and dental students. Nurse practitioner students had their primary care clinical
experience at the NFP and dental students rotated through the adult dental admitting center. They were paired with a dental and nursing faculty member twice a week for a half day to promote increased clarity about the roles and responsibilities of each profession, interprofessional communication, team building and patient-centered care through collaboration on the assessment and treatment planning for a dental patient. The aim of the experience for dental students was to demonstrate a comprehensive approach to assessing patient general health needs, including the need for collaboration and referral (primary care, dietary counseling, social work, etc.). The aim for nurse practitioner students was to demonstrate competence in completing an oral health assessment and physical exam and, if need be, referral for dental care. Each student taught the other the relevant skills of his or her discipline. Together, with faculty guidance, they collaborated on developing an interprofessional treatment plan by establishing the oral and systemic association in the context of assessment, diagnosis and treatment planning to address the patient’s oral and overall health needs and appropriate triage.

This clinical model was initiated to broaden dental students’ knowledge about managing patients with complex medical problems, especially those who are co-morbid with their oral health problems so that they consider patient needs through a more holistic lens. At the same time, exposure of dental students to nurse practitioner faculty who worked at the NFP provided a reminder to refer patients to the NFP for primary care and consult with the nurse practitioners when questions or issues about the dental patient’s overall health arose and sometimes provided barriers to implementing dental care unless resolved. The physical presence of a primary care practice during dental clinical hours provided an opportunity to extend targeted education to dental students.

Nursing/Dental Chairsid Consultation Project

The Chairside Consultation Project took place in one of the general dental clinics on a weekly basis. The nurse practitioner faculty member collaborated with the dental group practice director to identify student competency development in relation to integrating the overall health needs of dental patients with their extant oral health problem(s). The nurse practitioner faculty member conducted patient chart reviews with dental students prior to commencing the dental patient encounter. Ad hoc consulting opportunities for dental students were offered while they were providing dental care to their regular patients. The aim of the project was to teach dental students about the need for comprehensive patient assessment, collaboration and referrals for systemic health risk factors and existing problems. Commonly identified general health problems were elevated blood pressure, risk for diabetes, weight, smoking and no primary care provider. Such dental patients were potential referrals to the NFP and provided dental students with a holistic view of patient. This was a resource-intensive project that was not scalable across 14 group practice director groups with the nurse practitioner resources available, given the need to staff the NFP for delivery of primary care services.10

IP Integrated Basic Science-clinical Case Presentation Seminars

The aim of the IP integrated basic science-clinical case presentation seminars was to provide vertically integrated basic science and clinical education to students in all four years of the dental program and instill IP collaboration between dentistry, nursing and hygiene. The seminars were implemented incrementally. First, small groups of D4 and D3 students were asked to discuss clinical cases, with D4 students identifying the case and D3 students finding the best evidence in the literature by formulating a PICO question. In 2010, we added small groups of hygiene, D2 and D1 students and a basic science mentor to coordinate their contribution with a five-minute presentation (for each representative student) on a narrow aspect of the pathology or physiology, respectively, of the same patient. The result was a vertically integrated case presentation with all four years present (in small groups) and a representative of each year presenting his or her prepared contribution during a 50-minute well-polished, interprofessional presentation. In 2011, a nurse practitioner student and a dental hygiene student joined the dental team and collaborated on preparing the case presentation. Their role was to enhance the IP presentation and discussion of the oral health promotion (hygiene) and the general health (nurse practitioner) management of the patient.

How can all these students be in the same room at the same time? The seminars were held at 7:00 a.m. with frequent starts at 6:45 a.m. The outcome of these
encouraged them to stop. They were able to identify dental patients who smoked and ask, assess, advise, assist and arrange — to identify dental patients who smoked and encouraged them to stop.

Dental students used the five A’s — ask, assess, advise, assist and arrange — to identify dental patients who smoked and encouraged them to stop.

To offer up to six weeks of NRT and referred the patients to smoking cessation support services, including those provided at the NFP and through local online services. As a routine step, dental students accompanied these patients to the NFP to observe the follow-up care, including the prescribing of NRT and counseling sessions offered by the NFP faculty nurse practitioners and nurse practitioner students as a health promotion component of the NFP primary care services. The data reveal that from 2008 to 2011, 345 referrals were made for smoking cessation counseling and NRT, with the NFP faculty nurse practitioners and dental students to participant in community outreach at Head Start and other preschool programs.

The pediatric nurse practitioner students take a health promotion course, learn from the dental students and faculty about and demonstrate competence in the pediatric oral health assessment, exam and how to provide anticipatory guidance. The D3 dental students learn from the pediatric nurse practitioner students about behavioral management of children, child safety, oral trauma risk reduction and management of primary care health problems (e.g., asthma or Type I diabetes) and their impact on oral health.

When the pediatric nurse practitioner students take their diagnosis and management courses, they have a second pediatric dental rotation, time in the pediatric dental clinic with the pediatric dental residents. Guided by faculty from both programs, the pediatric nurse practitioner students and pediatric dental residents collaborate on assessing, diagnosing and developing a treatment plan for a complex pediatric patient with special needs (e.g., autism, seizure disorder, cerebral palsy, cancer, etc.). The pediatric nurse practitioner and pediatric dental resident team lead a collaborative case conference each semester to which faculty and students are invited. Since 2007, 115 pediatric nurse practitioners, 20 family nurse practitioners, 840 dental students and 120 pediatric dental residents have taken part in this IP pediatric oral health experience.

The Smoking Cessation Program

The Smoking Cessation Program was a systemwide initiative that addressed an IP population health issue that aligns with the Healthy People 2020 goals. Data revealed that approximately 25 percent of NYUCD dental patients smoked cigarettes, a smoking prevalence that is 67 percent higher than the general New York City population (15.8 percent) and 19 percent higher than the general U.S. population. The overall aim of the initiative was to inculcate a population-focused health care role for dental and nurse practitioner faculty and their students. A key component of the initiative was a study that implemented an intervention to improve the quality of tobacco use treatment in the 14 general dentistry clinics and evaluate provider adherence to tobacco use treatment guidelines. Faculty development and student training on smoking cessation and guideline adherence, chart prompts and free nicotine replacement therapy (NRT) were major features of the intervention.

Dental students used the five A’s — ask, assess, advise, assist and arrange — to identify dental patients who smoked and encouraged them to stop. They were able to offer up to six weeks of NRT and referred the patients to smoking cessation support services, including those provided at the NFP and through local online services. As a routine step, dental students accompanied these patients to the NFP to observe the follow-up care, including the prescribing of NRT and counseling sessions offered by the NFP faculty nurse practitioners and nurse practitioner students as a health promotion component of the NFP primary care services. The data reveal that from 2008 to 2011, 345 referrals were made for smoking cessation counseling and NRT; 245 individuals received smoking cessation counseling and NRT prescriptions. Findings indicate that faculty and students demonstrated increased adoption and implementation of tobacco use treatment guidelines in a dental public health setting that treats the most vulnerable populations. Based on the study findings and previous research in dental settings, by providing brief advice and NRT, an estimated quit rate of 10-18 percent can be estimated. This is consistent with national data.

IP Pediatric Oral Health Initiatives

Collaboration between faculty and students in the NYUCN pediatric nurse practitioner program and the pediatric dental program, including dental students and pediatric dental residents, was designed to promote an interprofessional health promotion collaboration focused on the oral and overall health needs of children. These are effective clinical education experiences that promote clinical competency development, IP communication team building and values clarification about the importance of oral health promotion. Dental, dental hygiene and pediatric nurse practitioner faculty designed a four-week rotation for pediatric nurse practitioner and dental students to participate in community outreach at Head Start and other preschool programs. The pediatric nurse practitioner students take a health promotion course, learn from the dental students and faculty about and demonstrate competence in the pediatric oral health assessment, exam and how to provide anticipatory guidance.

When the pediatric nurse practitioner students take their diagnosis and management courses, they have a second pediatric dental rotation, time in the pediatric dental clinic with the pediatric dental residents. Guided by faculty from both programs, the pediatric nurse practitioner students and pediatric dental residents collaborate on assessing, diagnosing and developing a treatment plan for a complex pediatric patient with special needs (e.g., autism, seizure disorder, cerebral palsy, cancer, etc.). The pediatric nurse practitioner and pediatric dental resident team lead a collaborative case conference each semester to which faculty and students are invited. Since 2007, 115 pediatric nurse practitioners, 20 family nurse practitioners, 840 dental students and 120 pediatric dental residents have taken part in this IP pediatric oral health experience.
Service Learning Initiatives

As a “private university in the public service,” faculty and students at NYU place a high value on service learning. At NYUCN and NYUCD, service-learning activities have a significant interprofessional component where we capitalize on the unique partnership of the two colleges. Each college has its own mobile health van, which serves their respective constituencies. However, we commit to interprofessional opportunities where the vans visit the same elementary school to offer dental screenings to the kindergarten and first grade children while the nursing van conducts a teddy bear clinic, exposing other children at the school to the importance of having and visiting a primary care provider. The dental van and nursing van staff arrange twice-yearly visits to the international high schools that the nursing van serves as a primary care safety net. The adolescents attending these schools are in the U.S. for four years or less. Many of them have never had dental care. Because they are Medicaid eligible, they can be screened on the dental van and referred to the dental school for any treatment they may need. Health fairs provide another opportunity for interprofessional collaboration where oral health and primary care screenings and health literacy programs are offered.

At a recent health fair for our NYUCN HRSA-funded elder care program, we had an event that included our adult-gerontology primary care nurse practitioner, dental hygiene and dental students and faculty. While the dental and dental hygiene students conducted the oral health screenings, the nurse practitioner students implemented the oral health literacy component by offering the health literacy equivalent of “speed dating.” Every six minutes the older adults moved to one of six tables where the students had a different oral health literacy topic loaded on their laptops that they shared with a group of four to eight attendees. Examples included diabetes and oral health, good dentures promote good nutrition and accessing affordable dental care. An annual ABC health screening, held at NYUCD since 2005, has become an interprofessional event with a wide array of oral health screenings offered, including blood pressure, diabetes and cholesterol screenings as well as BMI, weight and nutrition counseling. Nurse practitioner, nursing, hygiene and dental students, all of whom are supervised by the nurse practitioner faculty, often collaboratively implement these primary care services. In the past six years, we have collaboratively screened approximately 10,000 community members from the tristate area.

Summer Research Experience

The Summer Research Experience is a vibrant eight-week, full-time NYUCD program designed to introduce approximately 140 dental, dental hygiene and nurse practitioner students to research and inspire them to pursue research careers and/or value research as a component of their clinical or academic careers. Students attend IP research seminars presented by faculty research experts from both colleges. A faculty member whose research study and team the student joins for the eight weeks mentors each student. Some dental students have the option of designing their own yearlong research project. Sharing the same strategic priority to develop men and women of science, it seemed like a perfect plan for NYUCN to join the Summer Research Experience. It has been a very rewarding collaboration with students from each college having the opportunity to work with faculty from either college, most of whom are extramurally funded scientists, depending on the student research interest and faculty availability. The Summer Research Experience culminates with a professional poster show featuring 120 to 150 posters each year, presented by the IP collaborating research teams on studies ranging from bench science to translation science. Some students have continued to work with their faculty mentors as research assistants and for independent study. They have submitted abstracts for student poster conference presentations, won poster awards and have been co-authors on faculty publications. The Summer Research Experience provides tangible evidence of the effectiveness of the NYUCD/NYUCN partnership in developing men and women of science.

Faculty Development: The EBP Academy

Interprofessional faculty initiatives related to evidence-based practice (EBP) provided an opportunity to actualize our strategic priority — developing men and women of science. Developing faculty as sophisticated research consumers was the major aim of this initiative. It provided a foundation for development of clinical scholarship initiatives for faculty whose primary aim was education and practice. The aim of the EBP initiative was to develop a critical mass of faculty EBP experts who would become EBP curriculum champions.
The EBP Academy, funded by the NYUCD/NYUCN Office of Professional Development, sponsored semiannual faculty development workshops at the introductory, intermediate and advanced levels for 300 dental and 100 nursing faculty members over a three-year period. Faculty from McMaster University in Hamilton, Ontario, taught the workshops until a critical mass of faculty were developed to lead our own workshops. An EBP steering committee co-led by NYUCN and NYUCD faculty provided the leadership for developing, implementing and evaluating the offerings.

The steering committee also sponsored an evidence-based decision making club that met monthly to critically appraise research studies and guidelines of mutual interest related to the oral-systemic connection. Faculty experts also conducted local EBP development programs for faculty at both colleges and provided individual and group consultation to faculty about integration of EBP in the nursing and dental curricula. Today, EBP is a major curriculum thread at both NYUCD and NYUCN. NYUCN has research courses at the baccalaureate, master’s and clinical doctoral level that focus on developing increasingly sophisticated research consumers who lead evidence-based initiatives that result in systems-level change. NYUCD is now the North American Cochrane Center for Systematic Review Training in Oral Health and, currently, we have three IP systematic review teams from both colleges collaborating on preparing systematic reviews on Cochrane-approved oral health topics.

Discussion

The unique organizational partnership of the NYU Colleges of Dentistry and Nursing provided an opportunity for two health professions to capitalize on IP initiatives when the importance of this concept was just emerging. Many of the successful exemplars presented in this article represented innovations that were “low-hanging fruit.” Despite being successful, there were, and continue to be, challenges in maximizing our potential. We believe that these challenges, as well as the lessons learned, apply not only to NYU but also to other health science institutions who contemplate undertaking such IP health initiatives.

Challenges

Cultural dissonance. The degree to which there was cultural dissonance was significant. Faculty and students from both colleges had a dearth of knowledge about the education, scholarship and scope of practice of each other’s profession. Clarity about the roles and responsibilities of each profession was minimal and much of what was thought to be true was based on stereotypes rather than accurate data. For example, it remains an ongoing challenge to clarify the scope of practice of nurse practitioners to the dental community, especially new students who have not had any exposure to nurse practitioners. Similarly, it has been a challenge to educate nurse practitioner students about the health promotion role of the dental profession and the potential for collaboration with regard to the oral-systemic connection.

Faculty development. Creating venues for IP faculty development so that faculty from different disciplines have opportunities to communicate about their respective role and responsibilities that from a long-term perspective, ultimately increases respect and trust about each profession, greater commitment to team building and advances contributions to patient-centered care.

Reluctance from faculty to move out of their academic “comfort zone.” When faculty are faced with new projects that require them to commit to new and potentially disruptive, “uncomfortable” innovations, outside of their comfort zone, the first reaction may be “Why?” There has to be a very firm belief, commitment and messaging on the part of the organization’s leadership about the value of the IP initiatives. Faculty change-champions are often hard to identify, given current responsibilities or administrative duties. Curriculum integration that features oral-systemic health using an IP framework is an important factor in maintaining momentum and faculty have to have both the knowledge base and commitment to continue advancing the IP strategic agenda.

Sustainability. Financial sustainability must be considered and factored into a cost-benefit analysis across academic units. The potential for specific IP initiatives to be revenue generating is an advantage. Other initiatives must be supported and built into the budget. For example, the NFP is a revenue-generating primary care practice. However, its academic mission and clinical placement for nurse practitioner and dental students, as well as credentialing/reimbursement challenges as a nurse managed center, make institutional and grant support an ongoing need. Sustainability is also...
a function of the degree to which the IP initiatives become integrated in the curriculum and core competencies and become a set of IP best practices.

Evaluation. Evaluating the impact of the interprofessional innovation is a challenge. There is a dearth of valid and reliable IP measurement instruments. We have used a variety of evaluation strategies ranging from qualitative debriefing sessions, to tracking volume of participants, to pre and post testing of perceived IP change, to electronic health record clinical documentation of interprofessional oral-systemic health competencies and best practices. Establishing and evaluating interprofessional oral-systemic health community-based demonstration projects is recommended to test the clinical and cost-effectiveness of the model. A future challenge will be the evaluation of graduates to see if IP oral-systemic practice patterns continue to be evident in the professional practice environment.

Lessons Learned

Leadership support. It is imperative for there to be support from the deans, associate deans and assistant deans of the academic units involved in any IP collaboration. Embedding IP and oral-systemic health in our strategic plan was very important and created messaging about the value placed on the IP initiative as well as committed resources to support IP projects.

Identifying faculty champions. Engaging faculty champions who are formal or informal leaders is essential to supporting an IP culture change and promoting grassroots change.

Support interprofessional oral-systemic scholarship. Identify the low-hanging fruit that will create early “wins” that will provide positive reinforcement. Create opportunities for promoting research synergies and clinical scholarship including internal and external funding mechanisms for projects and studies. Support dissemination of findings in publications and presentations, and appointments to local, state and national committees. Recognize faculty IP innovations and outcomes with support for internal and external awards.

Sustainability over time. IP education must be more than the collaboration of two institutional leaders. It must survive the departure of either leader. At NYU such a leadership change was put to test when first Dr. Alfano was promoted and subsequently Dr. Fulmer left for another deanship. Luckily, the commitments on both sides existed to sustain the momentum. First, the interim deanships of Richard R. Vogel, DMD, and Judith Haber, APRN, PhD, and subsequent selection of Charles Bertolami, DDS, DMSc, and Eileen Sullivan-Marx, PhD, RN, FAAN, at the Colleges of Dentistry and Nursing, respectively, were firm believers in the strategic direction both colleges have forged together.

In conclusion, winning institutions should undertake IP education not because it is fashionable or it is imposed by an administration or an outside accrediting agency but because the faculty in these institutions truly feels that the outcome of such education will benefit the public and create more seamless and improved population health that improves access and decreases health disparities.

REFERENCES

THE CORRESPONDING AUTHOR, Judith Haber, APRN, PhD, can be reached at jh33@nyu.edu.