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ORIGINAL ARTICLE

Interprofessional Education and Practice Guide No. 2: Developing and implementing a center for interprofessional education

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Abstract

The complexity of implementing interprofessional education and practice (IPEP) strategies that extend across the learning continuum requires that institutions create a structure to support effective and organized coordination among interested administrators, faculty and staff. The University of Virginia Center for Academic Strategic Partnerships for Interprofessional Research and Education (UVA Center for ASPIRE) was formally established in 2013 following five years of dramatic growth in interprofessional education at the School of Nursing, School of Medicine and the UVA Health System. This guide briefly describes the steps that led to the creation of the Center and the key lessons learned that can guide other institutions toward establishing their own IPE centers.

Keywords

Collaboration, education, faculty development, interprofessional collaboration, interprofessional evaluation, interprofessional research, partnership

History

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Introduction

Driven by the Institute for Healthcare Improvement (IHI) Triple Aim of providing a high-quality patient experience of care, improving the health of populations and reducing the per capita cost of healthcare (Institute of Medicine, 2012), U.S. healthcare systems are undergoing tremendous changes at a time when they are operating within increasing fiscal constraints. These changes are happening in parallel with a refocusing of health professions education, especially with respect to interprofessional education, teamwork and quality improvement (Cox & Naylor, 2013; Frenk et al., 2010; Interprofessional Education Collaborative Expert Panel, 2011; Josiah Macy Jr. Foundation, 2011; World Health Organization, 2010).

Aligning the efforts of care delivery systems with educational programs has the potential to increase the quality and efficiency of both (Cox & Naylor, 2013). Yet, health professions schools continue to confront numerous barriers to implementing comprehensive IPE curricula and new initiatives are frequently not sustained. Furthermore, despite direction from accrediting agencies that schools must document that graduates have obtained teamwork competencies (American Association of Colleges of Nursing, 2008; Liaison Committee on Medical Education, 2014), few institutions engage in objective competency assessment activities. Finally, hospitals, clinics and other care delivery organizations want graduates to start work *collaboration ready* (Cox & Naylor, 2013), yet there is often little coordination of IPE activities in academic settings with the priorities of healthcare delivery sites. The recently established University of Virginia Center for Academic Strategic Partnerships for Interprofessional Research and Education (UVA Center for ASPIRE) seeks to bridge the gap between medical and nursing education, and to prepare all students and clinicians to engage in teamwork that improves the effectiveness and safety of patient care. By reviewing and reflecting upon the steps that led to the creation of the Center for ASPIRE, this guide provides key lessons learned that can guide other institutions toward establishing their own IPE centers.

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Key lessons learned

Below we describe and discuss the key lessons learned regarding the creation of an IPE center – based on our experiences developing the UVA Center for ASPIRE.

Build upon past successes

An important factor in creating a center was the opportunity to build upon a historical foundation of informal interprofessional service learning opportunities. Innovative interprofessional projects, such as providing services to rural underserved populations both locally and abroad, can garner positive student evaluations and create a high level of appreciation for learning about, from and with each other (Larese, Goerman, Snyder, & Syverud, 2012). Descriptions of successful activities can be disseminated in media reports and local presentations. As more published reports indicate the need for more formal IPE, these positive outcomes can be highlighted and provide significant evidence that it is both possible and desirable to expand these kinds of activities into the formal curricula.

Engage support at the highest levels

Long-term success in creating an IPE center requires high-level administrative support and an investment of resources (Brazeau, 2013; Craddock, O'Halloran, McPherson, Hean, & Hammick, 2013). As is so often the case, UVA IPE activities were first implemented by individual faculty members who recognized the value of teamwork from their own practices, but did not have formal IPE training. In addition, there was a lack of coordination among activities making it impossible to provide a logical progression of objectives and competencies through the learning continuum. Finally, there was little administrative recognition of the value of interprofessional education, so that the majority of faculty champions found it impossible to sustain these labor-intensive activities in the context of meeting their other responsibilities. With sustained high-level support from deans and administrators, it was possible to create an initial structure for coordinating this work without developing a full center. The UVA Interprofessional Education Initiative (IPEI) was created by an IPE champion who had a faculty appointment in both the Schools of Medicine and Nursing. Volunteer administrators, faculty, staff and a nationally-regarded IPE expert were recruited to develop an initial vision and structure that would support organizing and enhancing IPE efforts. The recruitment of key administrators and senior faculty at this initial developmental stage was crucial. IPEI members were recruited based on their interest, their ability to commit time to the project and their strategic roles in influencing academic priorities and resources within the schools. They were then organized into subgroups focused on three primary areas: curriculum, institutional culture and funding resources (Brashers, Peterson, Tullmann, & Schmitt, 2012). By bringing together key stakeholders from diverse perspectives into a strategically designed structure that is supported by high-level administration, a shared mission was created toward which each member can identify his or her committed contribution. Establishing an initial structure and shared mission for coordinating and promoting IPE within an institution can be a powerful first step for bringing culture change to health profession schools and associated healthcare systems such that IPE can become increasingly understood and valued.

Apply for external grant funding

Garnering significant external funding can be a key step in increasing institutional visibility, promoting faculty scholarship, expanding programs and recruiting new IPE champions. For example, it was through the generous support of the Josiah Macy Jr. Foundation that UVA has become nationally recognized and IPE has emerged as one of the UVA's educational priorities. The UVA ''Macy Team'' consisted of four core faculty members and 14 co-investigators, and although data analysis is not yet complete, these investigators have already given over 20 scholarly presentations at national and international meetings and have multiple publications in highly regarded journals. This work is recognized by administration with regard to promotion and tenure, and has created many opportunities for new projects and grants. Public and private granting agencies now include interprofessional education, practice and/or research in the majority of their requests for applications, thus providing many opportunities to pursue this powerful mechanism for increasing faculty engagement and establishing institutional support for creating a center.

Integrate required IPE into the core curricula, provide evidence that it is effective, and create a curriculum framework for developing new IPE activities

Common criticisms of IPE are that it is not clinically relevant, is frequently conducted outside of the core learning of health professions education and does not yield tangible outcomes data to support the allocation of limited time and resources (Thistlethwaite, 2012). This suggests that in order for a new IPE center to be perceived as relevant to the work of its academic and clinical institutions, the IPE activities it supports must align with clinical priorities, be fully integrated into the core curricula and have measurable impacts on learner performance. The creation of clinically-relevant IPE activities and associated objective assessment tools is a challenging endeavor, and the National Center for Interprofessional Practice and Education (www.nexusipe.org) is working hard to create models that can be disseminated to multiple institutions. However, each institution is likely to have its own priorities and goals. UVA's original activities to develop new IPE projects predated the National Center, so initial Macy Foundation-funded work was focused on developing and implementing our own clinically-relevant IPE activities and objective observational assessment tools (Blackhall, Erickson, Brashers, & Owen, 2014; Brashers, Owen, Blackhall, Erickson, & Peterson, 2012; Owen, Brashers, Peterson, Blackhall, & Erickson, 2012). Four new IPE simulations that are required for all third-year medical and nursing students were developed and integrated into the clinical/clerkship year. These simulations addressed multiple different patient populations (adult, pediatric, geriatric, end of life), illnesses (sepsis, cancer, muscular dystrophy and Alzheimers disease), and care settings (acute inpatient, intensive care, clinic and home). Each student is also required to engage in two different Interprofessional Teamwork Objective Structured Clinical Examinations (ITOSCEs) before and after these four simulations. Pre and post ITOSCE data are now being analyzed, and preliminary results indicate that students achieve significant improvements in their teamwork competencies using this type of training. These measurable outcomes have gained the positive attention of the academic administrative leadership. The fact that these initiatives were created in the context of rigorous research and outcomes analysis provided the evidence to establish IPE as a serious component of the medical and nursing curricula. Building on the visibility of the Macy Team accomplishments, IPE curriculum ''threads'' were integrated into the nursing and medical programs of study, and IPE activities have been established across the learning continuum. By mapping current IPE activities into a curricular framework, links can be made to learning objectives and outcomes evaluations so that a logical progression in teamwork competencies can be achieved, gaps in learning can be identified, and new IPE activities can be appropriately designed and implemented at the right learning level. By sharing these kinds of successes with stakeholders from across the institution, garnering support for an IPE Center to coordinate and enhance additional activities at all learning levels can be made much easier.

Engage in continuous innovation and grant writing

With the involvement of increasing numbers of students, faculty and clinicians in IPE efforts, new ideas for innovative programs and research studies can emerge. To obtain needed resources to support these new initiatives and expand the work of a center, grant proposal writing must become a core activity of the center leadership. At UVA, new intra- and extramural grants were obtained in support of a variety of needs including assessment tool refinements, website development, project administrative support, consultants, faculty development workshops and simulation expenses. Additional new grant proposals focused on graduate students, residents and clinicians working together in the Health System are in review. Perhaps most exciting has been the successful grant funding obtained by interprofessional groups of students interested in teamwork. Student-initiated and run

Table I. Center structure and staff responsibilities.

Co-Directors (0.125 position each for one SoM and one SoN faculty member)
1. Maintain a focus on center's mission and long-term goals
2. Coordinate educational and research projects to optimize efficiency and prevent redundancy
3. Engage in continuous grant development, evaluation and dissemination of findings
4. Identify additional fund-raising opportunities, e.g. gifts, scholarships, endowments
5. Ensure that adequate interprofessional faculty development is implemented
6. Identify IPE collaboration opportunities with internal and external teams
7. Serve on internal and external educational, research and clinical committees as appropriate
8. Act as the primary representative for IPE center to school, university, state, and national administrative/legislative bodies, organizations, and foundations
9. Consult on IPE to other academic, clinical, philanthropic and legislative organizations

Associate Director (0.50 faculty position)
1. Provide direct oversight of educational and research IPE projects to ensure quality
2. Support the implementation and evaluation of new interprofessional courses and experiences
3. Provide consultation to IPE project teams in the development of IPE grant proposals, research projects, and scholarly publications
4. Assist Co-Directors in grant development, implementation, evaluation and dissemination
5. Work with Co-Directors to provide and evaluate interprofessional faculty development
6. Ensure adequate technology infrastructure for interprofessional activities
7. Provide oversight, approval, and accurate management of all fiscal aspects

Projects Managers (0.50 staff position divided between Clinical and Administrative Roles)
1. Support activities of Co-Directors and Associate Director as needed
2. Schedule meetings with agenda and minutes
3. Schedule students from both Schools for IPE activities
4. Keep the IPE website updated
5. Facilitate the implementation of interprofessional courses and experiences
6. Provide support to project teams in the implementation of IPE grants
7. Facilitate communication between clinical healthcare teams and SON and SOM students
8. Manage budget and recordkeeping of all related IPE funding sources

IPE programs ensure that IPE activities are grounded in the interests and needs of the learners themselves and are of special interest to media resources. As successful funding announcements are posted online and disseminated at events, meetings and media outlets, local support for creating an IPE center can grow.

Create an IPE center that provides a working structure and secure adequate resources

Rapid expansion of IPE activities creates a need for a center with an administrative structure and resource base that allow for adequate mentorship, faculty development, coordination of activities to meet IPE competencies, and appropriate assessment of learner outcomes. Shared leadership and resource allocation by deans, health system administrators, and University-level leadership is crucial to creating a sustainable center structure and resource base. The UVA Center for ASPIRE was officially established in July 2013 and provides an example of a center structure and resource base that has been successful in one institution:

Overview: The Center works collaboratively with academic programs, research centers, faculty, students, residents and clinicians to develop, implement and evaluate interprofessional education in an integrated continuum across all learning levels. Embedded in this mission is a commitment to create clinically-relevant IPE activities whose goals and learning objectives are aligned with the priorities of care delivery in the UVA Health System in order to train learners to provide a high quality patient experience of care, improve the health of populations, and reduce the cost of healthcare. The Center is also committed to supporting cutting-edge IPE research including (but not limited to) new models for classroom, simulation and clinical settings; validated instruments for measuring student outcomes; and data that links IPE with sustained changes in practice and patient outcomes.

Structure: The administrative structure of the Center for ASPIRE consists of two Co-Directors from the School of Nursing (SoN) and School of Medicine (SoM), an Associate Director, a clinical project manager, and an administrative project manager (Table I).

Steering Committee: A Center for ASPIRE Steering Committee was recruited for semiannual meetings to ensure that the Center's priorities and strategies remain consistent with both UVA academic and clinical missions. Membership in the Committee represents administrators, researchers, faculty, alumni, and students from the SoN and SoM; physicians, nurses, pharmacists and therapists from the UVA Health System; library, media, and development personnel; and Health System leaders such as the president of the clinical staff, the chief safety officer, the president of the professional nursing organization, and the director of clinical pharmacy services.

Resources: The Center for ASPIRE facilities consist of two faculty offices and two offices for administrative support personnel that are contiguous with a conference room located in the School of Nursing. The Center budget is funded by a fixed yearly contribution from the SOM, the SON, and the Health Sciences library as well as intramural and extramural grants. This funding supports the administrative structure and provides resources for initiating and sustaining IPE projects. Additional support such as statistical expertise and grant preparation is provided by the Center for Nursing Research, the Office of Medical Education Research, and the Health Sciences Library. Contributions from donors along with occasional support from the Deans' discretionary funds helps fill gaps and supports travel to national meetings. The SoN contributes time from its Communications Coordinator to facilitate media reporting on new IPE activities. Finally, the SoN IT team provides technical expertise in developing and maintaining the Center website (www.ipe.virginia.edu)

Make faculty development a high priority

Faculty development is an essential component of high-quality interprofessional education for students and clinicians and provides the foundation for establishing a respected IPE center.

In order to be effective, faculty development and continuing education programs must recognize the important differences between continuing interprofessional education as compared to traditional faculty/clinician continuing education programs (Owen & Schmitt, 2013). In addition, faculty development activities should be based on sound theoretical underpinnings that allow programs to adapt to the priorities and concerns of target learners (Owen et al., 2014). Faculty development for IPE can take many forms. At UVA, engaging faculty in the design of IPE activities increases their commitment to sustaining these programs, and serves as a powerful form of faculty development. A unique form of faculty development at UVA is the ''Jeffersonian Dinner'' in which small interprofessional groups of faculty engage in a facilitated discussion of their experiences with IPE and verbalize their commitment to changing their own teaching and practice behaviors. The UVA Center for Appreciative Practice[1] also provides interprofessional faculty development and conversation through leadership development seminars and programs such as Schwartz Center Rounds (Lown & Manning, 2010). Many faculty members have presented their work and learned from others at national meetings including the *Collaborating Across Borders III* and *IV* conferences. Finally, core IPE faculty members participated in the year-long Macy Faculty Development Program presented jointly by the University of Washington and the University of Missouri; these faculty members will provide leadership in developing UVA's new role as a regional center for IPE Faculty Development.

Align center goals with national and local health systems priorities and make a business case

Sustaining interest and support for a new center requires moving new IPE activities away from the classroom and simulation settings and refocusing on the healthcare delivery site to address the priorities of the health system. The transition of many institutions into Accountable Care Organizations[2] facilitates a focus on teamwork for quality and safety, as do governmental and philanthropic funding opportunities. The ASPIRE approach to teamwork for patient safety and quality improvement engages all unit stakeholders (administrators, clinicians, support staff, residents, and students) in identifying key areas for improvement, designing and implementing teamwork strategies for optimal patient care, and engaging in comprehensive data collection for learner, provider and patient outcomes. This ensures that a growing number of clinicians are working in teams, thus improving patient care while providing effective role-modeling for students. As a new IPE center works to establish its relevance to the care delivery system, rigorous outcomes research that documents the reduction in waste and the value added benefits of teamwork to patients and clinicians provides the business case for Center activities and is essential to ensure that IPE initiatives are sustained at the bedside.

Disseminate findings widely at scholarly meetings, consultations, media and website

Gaining national recognition for the work of a center can do much to garner support from administrators, faculty and students. The Center for ASPIRE takes an inclusive approach to scholarly work and welcomes the participation of all relevant contributors in presentations and publications. By emphasizing scholarship as a key component of a center's work and by providing support for travel to national meetings, faculty and students are incentivized to participate in evidence-based research-focused IPE work that maintains a high level of quality and attention to measurable outcomes. In addition, dissemination of research findings can lead to opportunities to work with other nationally-recognized programs and gain invaluable new perspectives, skills and connections.

Discussion

The key lessons described in this article summarize an enormous amount of experiences, reflections and revisions that we have made during the last five years as IPE developed at UVA culminating in the formation of the Center for ASPIRE. By engaging colleagues in innovative educational programs and high-quality grant funded outcomes research, it is possible to grow a cadre of faculty, administrator, clinician and student IPE champions in both academic and care delivery institutions. Through the development of a curricular framework for IPE activities that progressively builds knowledge, skills and attitudes across learning levels, an ongoing logical basis for identifying gaps and building on strengths as new programs are proposed can be created. Objective documentation of learner competencies engenders credibility and builds support among those who are responsible for curriculum accreditation and who are integral to continued resource allocation to the center. Aligning educational and care delivery goals ensures that IPE remains relevant and that learners will be supported in applying their skills in the clinical setting. Keeping an ongoing local, regional and national dialogue with colleagues through dissemination of research findings provides tangible rewards for faculty efforts and opens many new connections and opportunities for future innovation. By creating a working structure within an IPE center, administrative processes can be defined and improved, resource utilization can be optimized, faculty can be trained, and it becomes possible to take the long view toward sustainable changes in culture, education and practice. A successful IPE center is one that is committed to pursuing a mission to improve the quality of patient care and to aligning educational and clinical goals such that learners at all levels can more effectively engage in team-based patient-centered care delivery.

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Declaration of interest

The authors report no conflicts of interest. The authors were responsible for the writing and content of this paper.

Key resources

While there are many examples of successful Centers for IPE nationally, the following Centers were selected because their websites provide comprehensive information about their activities:

Local Centers

Medical University of South Carolina Office of Interprofessional Initiatives

Website: http://academicdepartments.musc.edu/esl/ip_initiatives/

MGH Institute of Health Professions Center for Interprofessional Studies and Innovation

Website: http://www.mghihp.edu/academics/center-for-interprofessional-studies-and-innovation/default.aspx

[1]For more information, see: http://www.medicine.virginia.edu/community-service/more/appreciative-practice/appreciative-practice

[2]An organization characterized by a payment and care delivery model that seeks to link provider reimbursements with quality metrics and reductions in the cost of patient care.

Saint Louis University Center for Interprofessional Education and Research
Website: http://ipe.slu.edu/
Thomas Jefferson University Jefferson Center for InterProfessional Education Website:
Website: http://www.jefferson.edu/interprofessional_education.html
University of New England Center for Excellence in Interprofessional Education Website:
Website: http://www.une.edu/ceipe/
University of Toronto Centre for Interprofessional Education
Website: http://www.ipe.utoronto.ca/
University of Washington Center for Health Science Interprofessional Education, Research, and Practice
Website: http://collaborate.uw.edu/
National Centers
National Center for Interprofessional Practice and Education
Website: http://nexusipe.org/
Centre for the Advancement of Interprofessional Education
Website: http://caipe.org.uk

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