REIMAGINING INTERPROFESSIONAL EDUCATION & HEALTHCARE INNOVATION
In April 2016, Arizona State University (ASU) and SmithGroupJJR came together to lead a design workshop focused on developing environments that foster interprofessional education (IPE) and bridge the gap that currently exists between education and practice. The Design Forum was comprised of leaders from ASU’s College of Nursing and Health Innovation (CONHI), representatives from the National Center for Interprofessional Practice and Education, regional health system partners, ASU students, and SmithGroupJJR architects and planners. The event created a platform for attendees to discuss issues, challenges and opportunities affecting IPE and collaboratively envision the framework for a new Interprofessional Education and Collaborative Practice (IPECP) Center.

Design Forum Hosts

This workshop was sponsored by Arizona State University College of Nursing and Health Innovation; its’ Center for Advancing Interprofessional Practice, Education and Research; and SmithGroupJJR, an architecture, engineering and planning firm specializing in the design of health sciences and healthcare environments across the U.S. and internationally.

“Today, we have the opportunity to place our unique vision and imprint on the present and future of interprofessional practice, education, and research.”

- Gerri Lamb, Director of the Center for Advancing Interprofessional Practice, Education and Research, Arizona State University
Healthcare delivery systems and academic institutions that specialize in preparing healthcare professionals of the future have acknowledged that there is a gap between the methods and practices imparted to students in clinical training environments and those employed in real-world healthcare settings. Thought leaders from SmithGroupJJR and Arizona State University are deeply committed to advancing interprofessional healthcare practice, education and research. Inspired by these common goals, the two organizations came together and invited a diverse panel of industry and discipline leaders to help set a broad context for thinking about teamwork, collaboration, and the role they play in creating systems that encourage wellness, promote illness care, inspire innovation, and place a high value on all forms of caregiving. Here’s what attendee they had to say:

“I challenge us to stay within the spaces between our disciplines, because it might just be that area of intersection that we can provide the most innovation. I’m so excited to be a part of this wave of change that is going to not just impact the people of Arizona, but also those nationally.”

- Peggy Martin, University of Minnesota
...on interprofessionalism.

John Swagert, MD  
Chief Executive Officer, Mountain Park Health Center

We can't take care of patients without their trust. And, when we go into a community to build a clinic – we have to engage the community, build their trust and bring them in as a member of the team. The same is true when it comes to interprofessional practice - we definitely want to engage patients as a member of the team.

Teri Pipe, PhD, RN  
Dean, Chief Wellbeing Officer, Arizona State University

I think about the capacity of interprofessional education and research quite broadly – way beyond the health professions. We must do this to leverage change in healthcare. I’m inspired by the idea of the Quadruple Aim. That is, the Triple aim of cost, quality and patient experience magnified by a focus on the health workforce – and enabling practitioners to find joy in what they do and bring it to the patient experience.

Peggy Martin, PHD, OTR/L  
Program Director, Occupational Therapy, University of Minnesota

The patient experience is becoming the person experience. Healthcare is going to occur in every place where people live and play instead of just being in hospitals and clinics. There is a tsunami coming, and we really need to be prepared for it.

Heidi Fischer  
Assistant Director, The Biomimicry Center, Arizona State University

A 1990’s study by the Stanford business school aimed to evaluate which graduates were the most creative by means of who filed the most patents and started the most entrepreneurial businesses. They assessed the social networks of each graduate and discovered that the most “creative” people didn’t just have the largest social networks, but they had the networks with the most diversity of connections outside of their institution. I’m really interested in this concept of a mash up where we bring multiple disciplines together to innovate.

Chris Purdy, AIA, LEED AP  
Vice President, Higher Education Practice Leader, SmithGroupJJR

There is a whole new set of parameters that need to be prioritized in order for health education and practice settings to be positioned for the future. New parameters will lead to innovations, new interactions and engagements, of course new types of space to support them.
...On teamwork and collaboration.

Teamwork and collaboration play a very important role in healthcare, education and innovation. We all know that teamwork in healthcare is not new; what is new is the powerful infrastructure now being put into place to position teamwork and collaboration as central to healthcare transformation. And, almost every conceivable process being linked to national quality goals in the U.S., including comprehensive assessment, care coordination, and integrated primary and mental health care, relies on people working together effectively and efficiently. Panelists were asked to share a bit about how teamwork and collaboration impact their perspective:

**John Swagert, MD**  
Chief Executive Officer, Mountain Park Health Center

In primary care, much of our time is spent motivating patients to do what they don't want to do – shots, mammograms, etc. In our world if a patient has taken the steps to make an appointment and get into an exam room, we have to treat that as a very precious commodity and bring as much to that appointment as possible. This means that we have to work as a team in real time, get the right expertise and specialty care the patient, and deliver a consistent message.

**Teri Pipe, PhD, RN**  
Dean, Chief Wellbeing Officer, Arizona State University

ASU is a university that defines itself on who we include, not who we exclude. One of the big challenges is to be as inclusive as humanly possible without losing the “what” – the definitional place of what is moving forward. Team-ness is a competency that we need to teach, role model and continue to learn together.

**Peggy Martin, PHD, OTR/L**  
Program Director, Occupational Therapy, University of Minnesota

I’ve learned a few things from participating in a design process for a new IPE center at the University of Minnesota. Firstly, teams must acknowledge the barriers – and then set them aside. Secondly, in a process like this, culture shift will happen and you must be prepared for that. And, thirdly, rethinking things around a new model of interprofessional education and collaborative practice requires top-down vision and incentives as well support from the bottom-up. It’s a true team effort pushing from both sides.

**Heidi Fischer**  
Assistant Director, The Biomimicry Center, Arizona State University

Our program looks at improving daily life for people’s needs who were overlooked in the market place. In recent years we’ve been focused on disability projects and improving the well-being and quality of life for individuals in wheelchairs. Without a solid business case, all of the amazing ideas are nothing but a dream on the drawing board. It’s really important that we bring all of these disciplines together at the table to create viable solutions and to serve as checks and balances.

**Chris Purdy, AIA, LEED AP**  
Vice President, Higher Education Practice Leader, SmithGroupJJR

Innovative facility design is not always about the end product -- much of it is about process and pairing the design of space with the way people live and work. With this, SmithGroupJJR is consistently working to create opportunities where organizational design and space design happen in parallel. In doing this, it allows our design teams and client partners to collaboratively explore how processes and connections impact facility design.
“In this design charrette, you will collaborate with people who likely work outside your usual workspaces - to design your ideal clinic. Use teamwork and collaboration as a catalyst to drive innovation.”

- Gerri Lamb, Arizona State University

DESIGNING A NEW CLINIC MODEL

After the panel discussion, the room was transformed for “workshop mode” and interprofessional design teams were put to work designing a new interprofessional clinic. The groups were introduced to the project challenge at hand and encouraged to develop solutions that foster teamwork and collaboration and serve as a catalyst for improving health outcomes and inspiring innovation. Participants worked together to design an ideal clinic that embodies the principles of Michael Crow’s vision for the New American University – one that embraces diversity, collaboration and innovation.

Following is a summary of the challenge and assignment provided to the five charrette teams.
The Project Challenge

A local entrepreneur asks to meet with your team. She starts the conversation with: “I’ve been reading a lot about healthcare. I’ve been thinking about what happens when I bring my kids for their appointments. My mother has also had several health problems and I’ve been sitting in on visits with her specialists. I’d like you to design a new clinic for the community. I’m not sure what it would look like, but I have some ideas. I’ve researched your team. I see that you’re trying new things, and I like your passion.” Your team is free to shape the direction of the building’s design as you desire. However, the clinic must:

1. **Be part of the community.** Community members must be able to embrace the facility as their “community clinic.”

2. **Do more than treat illness or simply give a cursory nod to preventing illness.** Members of the community may be thinking, “Each day it seems that there’s a news report about the increasing number of people living with diabetes and other chronic illnesses.” I want the clinic to do something about this.

3. **Be a place where people can learn and try new things.** As a part of its mission, the clinic should develop programs that reach out to and involve students at all levels, from children at local elementary schools to university attendees.

4. **Excite you.** Use this as a chance to think about and do the things you haven’t had a chance to do.
The Design Charrette

Individuals were assigned to diverse groups of practitioners, educators and designers. And over a period of two hours, they were challenged to design the delivery care model, the facility and prioritize design considerations.

1 Design the care delivery model
   • What disciplines make up the facility?
   • What does the operational model for the building look like and how does that impact the patient experience?
   • How does that impact traditional care delivery?
   • How do students engage?
   • How is the clinic connected to the community?

2 Design the facility. Use the delivery care model framework identified to apply space design parameters to the new clinic.
   • What types of spaces will this facility have?
   • How much of each space type?
   • What are the adjacencies/relationships between the spaces?
   • What does the space feel like?

3 Prioritize design considerations. What are you not willing to sacrifice in your designs?
CHARRETTE RECOMENDATIONS

After two hours of interdisciplinary collaboration and design, charrette teams gathered together to share their ideas, inspiration and findings. Interestingly enough, as teams stood up to present one by one, it became very clear that many had similar ideas for the clinic design. The following concepts represent those design drivers that were consistent across multiple groups.

1 | Create a community destination.

The clinic isn’t just a clinic. It’s a community destination. One group shared, “The biggest concept is that we didn’t want it to be a health center in a traditional sense – you’re sick, you come in and get treated.” Another indicated, “Although we had many specialties that we developed and care providers and elements of care delivery, our focus was more on these peripheral things that would impact the community.” Suggestions of community meeting rooms, recreation centers, cultural centers and galleries were proposed as ways to engage the greater community beyond the clinic function.
2 | Evolve over time.

The clinic must evolve over time. In some instances, the groups said that they wouldn't sacrifice any design elements, and instead phase the clinic implementation over time, allowing for appropriate flexibility, scaling and funding. Another group indicated that they would keep architects on staff to redesign along the way.
3 | Recognize the power of the circle.

Each concept represented some sort of central core as a driving organizational element. This core was defined differently by each team, ranging from a central space with radiating paths to a hub. In some instances, teams identified a “navigator” or “concierge” position whose responsibility was to guide patients through their experience at the clinic and act as a member of the patient care team. The care team concierge was identified to address the fourth part of the Triple Aim – and looking at how that individual can help take care of the team to ultimately allow for better delivery outcomes.

4 | Consider multi-use space.

“This is like a little city,” one group member exclaimed. “There are kids playing. People gardening, playing, and napping.” The clinic literally became a multiuse building full of spaces for diverse groups including areas where people can relax, engage in recreation activities, learn and participate in the arts.
5 | Create a holistic view of wellness.

This clinic should take a holistic view on wellness and create spaces that respond to the needs of all of the stakeholders – patients, learners, the community, clinicians and staff. Looking at areas where people can relax and decompress like de-stress zones and healing gardens allows for a broader view of care. One group suggested that, instead of exam rooms, the facility has “wellness” and “we-ness” space. Sustainability should be incorporated throughout the facility as well, as we should have a commitment to care for our environment as well.

6 | Explore new collaborations.

Explore new concepts for collaboration between faculty and students both inside and outside of the clinic. Consider an interprofessional bullpen concept that creates a private learning and communication area for care teams, giving patients the best opportunity for coordinated care discussions in the exam room.
7 | Impact real-world innovation.

Space in the clinic should be open and encourage collaboration and innovation. Consider including labs, classrooms, maker space and simulation environments for use by interprofessional teams, students and even members of the community. When it comes to office space, look to limit the amount and make sure that it’s open and collaborative.

8 | Give back.

Set up the facility in the community with the goal of giving back. There are many different ways that can happen -- including school partnerships, daycare, early learning opportunities, training and job readiness. Unique program elements like teaching kitchens can offer opportunities to learn about self-managed care. An early learning center could enable staff to bring their children to work and also provide educational support for the community.
“It was impressive to see the level of teamwork and innovation that happened during this brief session, and encouraging to think of how much more can happen as we continue to tackle the future of interprofessional education and practice”

- Gerri Lamb, Arizona State University

SUMMARY

Over 50 individuals from diverse professions and work settings joined together for the half-day charrette aimed at reimagining a new center for interprofessional practice and education and designing a new interprofessional professional clinic. Each participant came with his or her own biases, preconceptions, ideas and opinions. Yet, after the charrette, the entire group left with a unified set of ideas to drive the future of interprofessional education and practice. It was impressive to see the level of teamwork and innovation that happened during this brief session, and encouraging to think of how much more can happen as we continue to tackle the future of interprofessionalism, at Arizona State University and nationally.

SPECIAL THANKS

We would like to extend our appreciation to the universities and healthcare institutions that joined us for this interprofessional design forum — Arizona State University, A.T. Still University, University of Arizona, Dignity Health, the Mayo Clinic, Mountain Park Health Center, and Wesley Community Center. In addition, we’d like to extend a special thank you to the program panelists and to the National Center for Interprofessional Practice and Education for taking the time to participate in the session. Your insights and participation were invaluable.