ASSOCIATION *of* SCHOOLS *and* COLLEGES *of* OPTOMETRY

IPECP Toolkit

A Guide to Effective Interprofessional Education and Collaborative Practice Experiences in Optometric Education

This IPECP toolkit for Optometric Education includes:

- A brief background of the importance of interprofessional education and collaborative practice, including the role of Doctors of Optometry in interdisciplinary care.
- Recommendations to prepare for interprofessional education and collaborative practice at your institution.
- Descriptions of exemplar projects in interprofessional education and collaborative practice at ASCO member institutions.
- Strategies for evaluating program initiatives and sustaining a culture of interprofessional education and collaborative practice at your institution.

The Association of Schools and Colleges of Optometry (ASCO) acknowledges that this IPECP Toolkit: A Guide to Effective Interprofessional Education and Collaborative Practice Experiences in Optometric Education is open access and that the intent of the publication is for users to adapt materials for application in a variety of academic and practice institutions. Users are asked to cite the source as follows:

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Interprofessional Professionalism Collaborative
http://www.interprofessionalprofessionalism.org/

The open access document, A Guide for Interprofessional Education and Practice in Nursing Education, published by the National League for Nursing (NLN), has been an invaluable resource in the development of this Toolkit. Thomas Jefferson University has extended its permission to include materials developed by its employees in the NLN document, and the University has indicated that the intent of the NLN document is for users to adapt materials for use in a variety of academic and practice environments. Sections 1 through 5 of this Toolkit have been adapted from the NLN document. http://www.nln.org/docs/default-source/default-document-library/ipe-toolkit-krk-012716.pdf?sfvrsn=6

The Health Professions Accreditors Collaborative and the National Center for Interprofessional Practice and Education have released Guidance on Developing Quality Interprofessional Education for the Health Professions. The Guidance was developed through a multi-year, multi-phase consensus process aimed at supporting the development and implementation of quality interprofessional education (IPE). The goals of the Guidance are to facilitate the preparation of health professional students for interprofessional collaborative practice through accreditor collaboration and to provide consensus guidance to enable institutions to develop, implement, and evaluate systematic IPE approaches and IPE plans. https://healthprofessionsaccreditors.org/ipe-guidance/

Introduction

The development of this Toolkit for Optometric Education has been an initiative of the ASCO Interprofessional Education and Collaborative Practice (IPECP) Committee. The charge to the 2017 – 2018 IPECP Committee from the ASCO President was as follows:

- Develop, share and/or recommend strategies for member institutions to incorporate interprofessional education into their curricula.
- Discuss the development of demonstration projects to raise awareness of optometry's role in collaborative patient care and to provide resources for ASCO member institutions to assist in curriculum development.
- Raise public and professional awareness of the role that optometry has in team-based collaborative patient-centered care.

The ASCO IPECP Toolkit was introduced at a Workshop conducted at the American Academy of Optometry 2018 Annual Meeting entitled "Toolkits and Resources for Interprofessional Education and Collaborative Practice Initiatives in Optometry." This Toolkit is intended to serve as a guide for building, implementing, and sustaining interprofessional education and collaborative practice initiatives at your institution.

The appointed members of the 2017 – 2018 IPECP Committee were as follows:
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What are Interprofessional Education and Collaborative Practice?

The Centre for the Advancement of Interprofessional Education (CAIPE) has put forth this definition: "Interprofessional education (IPE) occurs when two or more professions learn with, from, and about each other to improve collaboration and the quality of care."[1]

The essence of IPE is students of multiple healthcare profession programs learning together to improve the effectiveness of collaborative practice. Collaborative practice involves multiple disciplines working as a team along with the patient and the patient's support network to provide highly effective, patient-centered care. In its May 2011 report, an Expert Panel of the Interprofessional Education Collaborative (IPEC) identified four interprofessional competency domains, each containing a set of more specific competency statements:

- Values / Ethics for Interprofessional Practice (IPP)
- Roles and Responsibilities for Collaborative Practice
- Interprofessional Communication Practices, and
- Interprofessional Teamwork and Team-based Practice (Figure 1).[2]

IPE is an accreditation standard for multiple health professions including audiology, physician assistants, nursing, pharmacy, occupational therapy, and physical therapy. IPE is also cited in the World Health Organization's Framework for Action as a means to address the worldwide shortage of healthcare workers.[3]

Evolution of health professions education and the health care system

The 1910 Flexner Report and a subsequent publication 5 years later by William Henry Welch and Wickliffe Rose launched a transformation of post-secondary education for health professionals and public health to move provider education from a proprietary / apprentice model to an academically-based health professions educational system.[4,5] More recently, substantial efforts to transform not only health professional education but also the health care system have continued. These efforts in both important arenas are viewed by many to be best-placed when they are consistent with the Triple Aim put forth by the Institute for Healthcare Improvement as a framework approach to optimize the health care system by:

Figure 1

Consonant with these efforts and perspectives, IPE is becoming an increasingly ubiquitous, valued, and visible component of health professional / provider education and training in the United States. By building the foundation for team-based collaborative practice (CP), IPE is increasingly viewed as essential to improving patient / client outcomes, reducing medical errors, and improving the health care system,[7] consistent with the Triple Aim.

Why are Interprofessional Education and Collaborative Practice Important for Optometric Education and the Profession of Optometry?

Interdisciplinary team-based patient care

The current state of health care delivery is gaining widespread attention as new demands on health care have emerged. An aging population, longer life spans, and chronic health problems are changing priorities in health care practice and education.[8] In the evolving health care delivery environment, it is now important for providers to expand their scope of interdisciplinary team-based patient care, and it is vital for educational programs to identify the mechanisms that shape successful collaborative teamwork and effective communication.[9] Given their roles within the health care system and local communities, Doctors of Optometry are uniquely positioned to participate in collaborative practice (CP). The Schools and Colleges of Optometry are similarly uniquely positioned to establish the foundation for collaborative practice through effective interprofessional education (IPE) initiatives.

As part of these core discussions about IPE, CP, and team-based care, multiple key questions are being raised:

- Who are the members of health care teams?
- What are the attributes of effective teams and team-based care?
- How is the composition of the health care team affected by practice context and needs of the patient / client?
  - Is team-based care location-driven?
  - Are teams real or virtual?
  - Are teams hospital- or community-based?
  - What are the roles of patients and communities on health care teams?
  - How does IPE / CP measurably affect patient care outcomes?

As these questions suggest, effective IPE / CP is not a single identified model; rather, there are many potential approaches to IPE / CP that can contribute to positive patient outcomes.

Doctors of Optometry / ODs / Optometrists

Doctors of Optometry (ODs / Optometrists) are primary health care professionals. Eye and vision care serves as an important point of entry into the health care system, and Doctors of Optometry actively serve as members of the health care team.[10]

The Role of the Profession of Optometry in Interdisciplinary Health Care[11]

- As licensed, independent health care professionals, Doctors of Optometry play a primary and integral role in inter-disciplinary health care by examining, diagnosing, treating, and managing diseases, injuries, and disorders of the visual system, the eye, and associated structures.
- Doctors of Optometry are involved in the coordination of care of associated systemic diseases and zoonotic diseases, and serve a sentinel role in the identification of ocular side effects of systemic medications.
- Doctors of Optometry are an essential part of the national health care delivery system providing direct patient access to health care in nearly 6,500 communities across the country. In 3,500 of these communities, Doctors of Optometry are the only providers of vision and eye health care services.

Doctors of Optometry (ODs / Optometrists)[12]

- practice in many different healthcare settings that include private and group practice, hospital-based practice, Accountable Care Organizations, Federally Qualified Health Centers, School Based Health Centers, Rural Health Clinics, Certified Nursing Facilities, Rehabilitation Facilities, U.S. Armed Forces, Veterans Health Administration, Indian Health Service, Civil Service, and other settings.
- assist with improving overall population health and quality of life through prevention and early diagnosis of vision and eye health problems and prevention of chronic disease.
- detect systemic diseases through identification of associated eye findings during a comprehensive face-to-face eye examination. There are over 275 systemic conditions with potential ocular involvement.
- coordinate the vision, eye health, and wellness of their patients with optometric colleagues, ophthalmologists, primary care physicians, and other health care providers.
- offer services to assist individuals with functional vision problems, traumatic brain injury, visual impairment and blindness. Treatments may include vision therapy or tools to address functional vision problems or vision rehabilitation for those with vision impairment with the goal to optimize vision and maintain independence and quality of life.
- provide a continuum of patient-centered care for people of all ages focused on prevention, health maintenance, acute care, chronic care, habilitation, and/or rehabilitation, with special emphasis on minimizing life-long impacts and the burden of visual impairment on at-risk populations that include aging adults and the very old, as well as infants and children.

KEY POINTS: Interprofessional Education, Collaborative Practice, and the Profession of Optometry

- ✓ Interprofessional education prepares future practitioners to deliver patient-centered care as members of interprofessional teams.
- ✓ Interprofessional education and collaborative practice are increasingly linked to improved patient outcomes.
- ✓ Doctors of Optometry are uniquely positioned to participate in interdisciplinary collaborative practice.
- ✓ The Schools and Colleges of Optometry are similarly uniquely positioned to establish the foundation for collaborative practice through effective interprofessional education and collaborative practice initiatives.

ASCO's Commitment to Facilitating Interprofessional Education and Collaborative Practice

The Association of Schools and Colleges of Optometry (ASCO) advances optometric education and research to enhance the health and well-being of the public. ASCO accomplishes this mission through collaboration with educators, administrators, residents, students, industry, government, healthcare organizations, and other stakeholders through its education, research, advocacy, and development activities.

"Attributes of Students Graduating from Schools and Colleges of Optometry," initially published by ASCO in 2000 and updated in 2011, is comprised of competency statements that broadly define the attributes expected of graduates from each school or college of optometry.[13] Included in the expected attributes is interprofessional collaboration in the care of patients.

ASCO demonstrated its expanded and ongoing commitment to interprofessional education and collaborative practice under the leadership of the 2012 – 2014 ASCO President, Dr. Jennifer Coyle, whose presidential initiatives included establishing an ASCO Interprofessional Education and Collaborative Practice (IPECP) Task Force, which soon transitioned to an *ad hoc* committee. Projects spearheaded by the ASCO IPECP Task Force/Committee included:

- conducting a survey of the schools and colleges of optometry to collect data about existing interprofessional education (IPE) activity, as well as attitudes, challenges and future plans relating to IPE at each institution. The survey data were published in a poster presentation at American Optometric Association's Optometry's Meeting® in 2014.
- convening an Interprofessional Education and Collaborative Practice Summit in 2016. In addition to optometry representatives from all ASCO member institutions, Summit participants represented audiology, allopathic medicine, dentistry, health administration, nursing, osteopathic medicine, pharmacy, physician assistant studies, and social work. Following keynote addresses and interactive activities, Summit attendees participated in small group breakout sessions with subsequent large group presentations on the topics of best practices, assessment tools, and future trends for IPE and interprofessional practice (IPP). Participants met with individuals from their home institutions to discuss plans for the implementation of IPE and/or IPP initiatives.
- developing and disseminating a video in 2017 which presents interviews with a student and faculty members discussing the importance of learning with, about, and from students from other health professions, as well as the benefits to patients of collaborative care. https://www.youtube.com/watch?v=CuUfWGaLeWI

One of the five Key Strategic Objectives included in the 2018 – 2022 ASCO Strategic Plan is to develop and facilitate inter-institutional and interprofessional collaboration among ASCO member institutions as well as between ASCO and other organizations.[14]

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Interprofessional Education and Collaborative Practice (IPECP) Core Competencies for Optometric Education

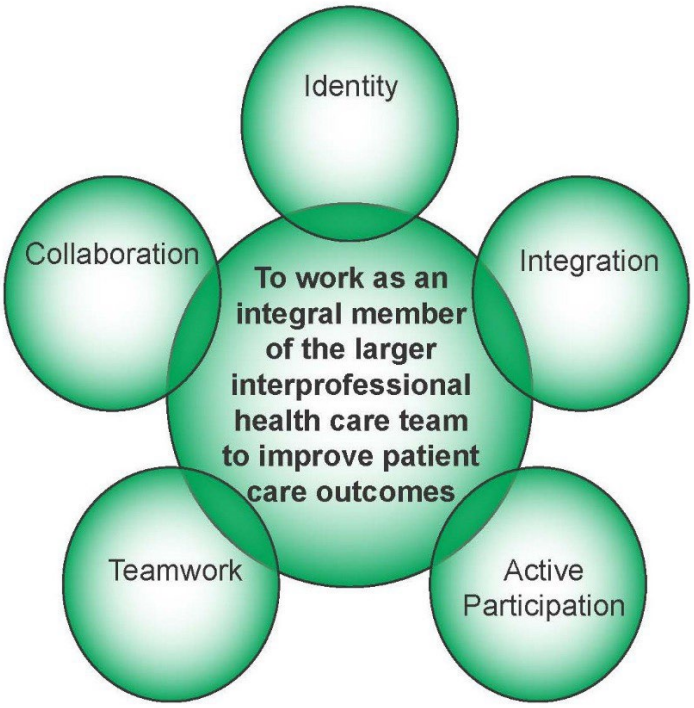
Approved by ASCO Board of Directors March 9, 2022

Overarching Goal

The school or college of optometry shall ensure that before graduation each student will have demonstrated critical professional and personal attributes, including professionalism, by demonstrating honesty and integrity in all interactions with patients and their families, colleagues, and […] a commitment to work as an integral member of the larger interprofessional health care team to improve patient care outcomes. (*2011 ASCO Attributes document*)

In order to achieve this Overarching Goal, the ASCO IPRF Committee has developed

5 Core IPECP Competencies for Optometric Education:



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1. **Identity**
   Understanding optometry's professional identity, as well as the identities of other professions
   - Champion the roles and responsibilities of the profession of optometry to the fullest scope of practice
   - Acknowledge the roles of other professions through review of patient health information and appropriate referral
   - Represent optometry as a part of the interprofessional team to advance public health

2. **Active Participation**
   Implementation of a sequential series of IPE learning activities
   - Engage in opportunities, didactic, clinical, curricular, and/or extracurricular, for IPE
   - Provide joint education with students from other professions in various classroom settings/institutions
   - Apply IPE knowledge, skills, attitudes, behaviors, and values into clinical training and practice

3. **Integration**
   Promotion and integration of optometry into patient-centered team-based care
   - Share knowledge, values, and respect with other professions to maximize expertise
   - Serve as members of interprofessional teams to address patient and population health care needs
   - Facilitate interactions with other health care professionals, patients, and their families

4. **Teamwork**
   Development and demonstration of effective interprofessional and patient-centered skills
   - Recognize the patient as a central part of the healthcare team
   - Communicate confidently with the healthcare team on assessment, management, and disease prevention
   - Acknowledge diversity in the backgrounds of the health care team members, while respecting the cultural beliefs of the patient
   - Practice terminology and presentation of materials easily accessed and understood by all members of the healthcare team

5. **Collaboration**
   Collaboration and coordination across academic institutions, professions, health systems and community partners
   - Deliver patient care that is accessible, safe, timely, efficient, effective, and equitable
   - Improve community care and patient advocacy by understanding social determinants of health that impact access to healthcare
   - Develop meaningful relationships between professions and with patients and their families, with attention to cultural humility
   - Encourage and provide feedback among stakeholders to enhance patient and population health care

This IPECP Toolkit for Optometric Education

Goal of this IPECP Toolkit

The goal of this Interprofessional Education and Collaborative Practice (IPECP) Toolkit is to provide a guide to the development and implementation of effective IPE and CP initiatives in optometric education. Since the strategies and resources available for implementing IPE and CP initiatives will differ based upon the local context and organization of a school, college, or university, this Toolkit is intended to serve as a resource for a variety of optometric educational settings.

Components of this IPECP Toolkit

Section 1: Preparing for Interprofessional Education and Collaborative Practice at Your Institution

Section 2: Supplement to the Steps to Interprofessional Education Readiness Checklist: How to Increase your Readiness

Section 3: IPE Exemplar Projects from ASCO Member Institutions

Section 4: IPE at Externship Sites

Section 5 : Evaluation and Change Management

Section 6: Sustaining a Culture of Interprofessional Education and Collaborative Practice at Your Institution

Section 7: Organizations Dedicated to Interprofessional Education and Collaborative Practice

Appendix 1: Process and Timeline to Reach Adoption of the ASCO IPE Toolkit

Appendix 2: University of Toronto Framework for IPE Competencies and Values

Appendix 3: Excerpts from the ASCO Graduate Attributes 2011 Document

Appendix 4: Excerpts from the IPEC Core Competencies 2023 Document

Portions of Sections 1 - 5 of this Toolkit have been adapted from A Guide for Interprofessional Education and Practice published by the National League for Nursing
http://www.nln.org/docs/default-source/default-document-library/ipe-toolkit-krk-012716.pdf?sfvrsn=6

Section 1: Preparing for Interprofessional Education and Collaborative Practice at Your Institution

The Agency for Healthcare Research and Quality (AHRQ) characterizes a climate conducive to change by the "leadership and key staff members who are committed to making a change and who are willing and able to dedicate the necessary time, resources, and personnel."[15] Despite the many benefits and endorsements of IPE and CP, many educational institutions and health care systems face numerous barriers to establishing IPE programming in a sustainable way. In the beginning, it may be more feasible to succeed with a singular activity in a specific department, rather than launching an organization-wide program. Regardless of the breadth of your program, Section 1 explains the key players and resources needed to make the IPE program successful.

Section 1.1 Building Your IPE Community: Enlist Support from Across Your Institution

Establishing an enthusiastic community with a shared IPE vision is essential to support program development and implementation. By formalizing commitment among the interested administrators, staff, faculty, and students, coordination is more effective and mechanisms for impacting organizational culture and curricular change are more easily leveraged. This section identifies individuals from whom you will want to seek support as you build an IPE presence at your institution.

Senior Leadership

Support from senior leadership is important from the beginning.[16] It is your institution's president/provost, deans/associate deans, directors, and program heads who have the power to support or squelch your efforts. Their approval will help to allocate resources and gain institutional recognition, and they may designate particular faculty members to support coordination of IPE initiatives.[17,18] The support of senior leadership is also symbolically significant, as it may positively influence buy-in from others.

Local Department Leaders

Faculty members from every profession that you want to include in IPE programming should be enlisted in your efforts. If your program is located at an institution that does not have other health-related degree programs, reach out to other non-health related academic departments if available. Today, it is rare to find a profession that doesn't require some teamwork coordination skills.[19] Work with faculty members from other departments, for instance environmental science, law, public policy, computer design, or the arts, to identify interests or areas of study where the two professions intersect, then coordinate an interprofessional activity around the topic. Alternatively, an affiliation agreement or memorandum of understanding can be executed with an extramural institution with one or more health-related programs that could be strong IPE collaborative partners.

The WHO report on establishing a framework for IPE and CP calls for health leaders to "champion the benefits of interprofessional collaboration with their…partners, educators, and health workers."[3] The term "champion" is commonly used to refer to faculty partners as they assume many responsibilities and promote IPE as vital learning within their local communities, often on a volunteer basis. Faculty members are needed to recruit students for programs, supervise and facilitate activities, and develop programming. A variety of perspectives should be included in planning committees, curricular workgroups, and evaluation efforts. An interprofessional faculty group also offers a wide professional community for you to call upon for funding, arenas in which to publish research, and other needs.

Scheduling is a widespread challenge for IPE programs as each health professional program has its own curricular requirements and varies in duration, student availability for in-person activities, and accreditation standards.[20] Your IPE champions who represent each profession have the information needed to determine the best schedule and learning objectives for all students. As was mentioned, champions are often secured, at least initially, on a volunteer basis as funding may be limited. If funding is available for the time and efforts champions devote, it can help with program sustainability and defer attrition for a period of time until individual faculty members retire or leave. By sustaining the work of IPE champions, funding or other incentives can have a positive impact on programming.

Pre-Existing Interprofessional Teams

Section 1.3 explains the importance of conducting an initial needs assessment of your institution's local environment to determine your institution's strengths and gaps in IPE competencies. If your program is closely linked with a clinical practice environment, the identification of pre-existing interprofessional health care teams where collaboration between professions is already established, is an institutional strength. Because students learn from what they experience, these teams can be engaged for clinical observation, leading simulations, and panel discussions about collaboration and teamwork in practice. If your institution is not directly affiliated with an interdisciplinary practice environment, reach out to the locations where students are completing clinical rotations to see if any interprofessional teams would be interested in hosting an activity for your students. Also, your local institution may have pre-existing teams that are not health care-related but could have equal educational value for students to gain insight about team functioning. Integrating community and patient partners into IPE and CP initiatives is also a very positive team approach.

Students

It is crucial to include students in the IPE planning process. Students help shape programming by offering insight into their educational interests and needs. They also inspire their peers to buy in to the value of CP. Students also inherently bring an invaluable energy and enthusiasm to IPE initiatives.

Student interest will increase when there are meaningful ways to contribute, such as serving as a student adviser on a planning committee, assuming leadership roles in a student organization, participating in research opportunities, and otherwise closely engaging with their faculty and any practitioners involved in IPE programming.

Section 1.2 Supporting Your IPE Community

If resources are available and you seek to make IPE a regular aspect of educational programming, other supports will need to be in place for progress to occur. IPE initiatives can be challenging to sustain, so faculty members and facilitators will need support. The inherent enjoyment of IPE helps to sustain initiatives. Faculty scholarship / publication opportunities that result from IPE initiatives are also very valuable from multiple standpoints and contribute to the sustainability of IPE programming.

Develop an IPE Center if Feasible

Establishing an IPE Center with its own staff will centralize efforts and can move IPE from occasional, isolated programs to an established, regular fixture of the institution where IPE can thrive. IPE-specific staff would be one team solely dedicated to planning, organizing, and facilitating conversations involving the different professions. Roles at IPE Centers often include director, assistant director, education programs coordinator, and administrative assistant. Staff coordinate activity logistics, facilitate activities, lead evaluation, and serve as the workspace for new IPE programming to be developed.

Professional Development for Faculty

The development of faculty members involved in IPE is an important element. While it is important that faculty members and facilitators individually understand the positive effects of interprofessional collaborative skills, the value of more formalized IPE and CP training should not be understated. Training can be helpful for faculty members who are willing to facilitate IPE programming and can be used as a way to engage new faculty members and garner their support. Interprofessional programming was not a part of the schooling of many current faculty members. For this reason, recruiting faculty support may need to begin with introductory education so that faculty can make informed decisions around IPE.

Section 1.3 Conducting an Assessment to Determine Your Starting Point

Successful IPE and CP programming is not possible without the support of key individuals in your institution who can help you create an impactful and sustainable program. Assessing your institution's environment will inform the next steps you need to take. An institution is more likely to successfully implement an initiative when it has objective information about the crucial gaps that need to be filled. Be aware of particular initiatives or the special interests of senior leadership at your own institution.

The Checklist, "Steps to Interprofessional Education Readiness," will help you determine how ready your institution is to implement IPE. It is also important to note that the steps listed may not necessarily take place in the order in which they are listed. For instance, you may concurrently be meeting with senior leadership and recruiting interested faculty members as working partners. It is also important to emphasize that this Checklist can be useful whether you are trying to implement a single IPE activity or a comprehensive IPE program.

The Checklist is organized into five overarching stages of program development, with key prompting questions within each stage. Following the Checklist is a description of each of the five stages with advice to follow if you answered "No" to any of the questions. The Checklist, adapted from the AHRQ's "Organizational Readiness Assessment Checklist,"[21] thoroughly describes the institutional process for implementing the TeamSTEPPS® program, which is a teamwork system developed jointly by the Department of Defense (DoD) and the Agency for Healthcare Research and Quality (AHRQ) to improve institutional collaboration and communication relating to patient safety. The intention of this Checklist adaptation is to make the TeamSTEPPS readiness assessment tool relevant to all types of IPE programming.

Checklist: Steps to Interprofessional Education (IPE) Readiness

Adapted from AHRQ's Organizational Readiness Assessment Checklist[21]

	YES	NO
Establish the Need for IPE		
Have you identified IPE opportunities, strengths, and gaps in the current curricula and/or clinical environment?	☐	☐
Have you prepared a compelling case for IPE initiatives, taking into consideration institutional interests and best fit?	☐	☐
Support from Senior Leadership		
Have you gathered approval from senior leadership for offering interprofessional education and valuing a culture of teamwork across the institution?	☐	☐
Will your institution provide sufficient staff and resources to support program development and coordination?	☐	☐
Building Your IPE Team		
Have you assembled a working group of adequate size with faculty representation from all professions that you intend to include in programming?	☐	☐
Have you identified a sufficient number of faculty members who are adept in IPE competencies to serve as instructors for your activities?	☐	☐
Have you organized faculty development activities for interested leaders, faculty, and staff to increase their knowledge of IPE and engage in discussion of how to incorporate IPE into their teaching and practice?	☐	☐
IPE Program Development		
Have you reviewed all professions' academic calendars and curricula to determine the best positioning of IPE programs?	☐	☐
Have you developed interprofessional programming, such as classroom learning, clinical observation and practice, and/or simulation activities?	☐	☐
Sustaining Your IPE Program		
Will your institution revise curricula and dedicate time for learners to attend IPE trainings?	☐	☐
Have you developed an evaluation process for programming?	☐	☐
Have you developed the appropriate structure to revise and improve programming?	☐	☐
Will your institution recognize, reinforce and reward positive teamwork behaviors and improvements in process?	☐	☐

Section 2: Supplement to "Steps to Interprofessional Education Readiness" Checklist: How to Increase Your Readiness

If you answered "No" to any of the questions in the Checklist, Section 2 describes how to succeed in each step.

Establish the Need for IPE

Have you identified IPE opportunities, strengths, and gaps in the current curricula and/or clinical environment?
You may seek other assessment tools to clarify your organization's strengths and needs. Some other tools include examinations of institutional outcomes, and patient, staff, or student satisfaction surveys. These will help you describe the current environment and develop your case for IPE. It will also help you determine how large an undertaking is feasible at the current time, for example, a single IPE program or a comprehensive IPE curriculum.

Have you prepared a compelling case for IPE initiatives, taking into consideration institutional interests and best fit?
Devote time and energy to developing your case for IPE and preparing briefings. Carefully consider the purpose and goals of an IPE activity and/or program at your specific institution and why it is important. Prepare to be transparent about all that will be needed in order for IPE efforts to be a lasting success, including all potential barriers. Demonstrate that you have thoroughly considered these barriers and have plans for overcoming them. An organized and captivating presentation for key institutional players will increase your chances of success. As more reports about the effect of IPE on student behavior, team function, and, ultimately, patient outcomes are published, be sure to highlight these positive effects in presentations to illustrate IPE expansions that are desirable to the leadership in your institution.[16]

Support from Senior Leadership

Have you gathered approval from senior leadership for IPE core competencies and a culture of teamwork?
Conduct a briefing of senior leaders in which you justify IPE at your institution and illustrate the importance of implementation. Describe your purpose and goals so that they can make an informed decision. Be aware of your exact audience. Compile the specific information that will be most important to them and consider their special interests or priorities and how

they could benefit from IPE programming. Refer to current changes taking place at the institution (e.g., curriculum revisions, staffing changes) and who is affected. Describe how those changes affect the institution's capacity to implement IPE and suggest the ideal time for implementation. Point out that your program is a collaborative effort involving multiple, if not all, academic departments to emphasize that many students will benefit from the program. Describe how IPE programming will positively enhance the visibility and reputation of your institution, including to prospective students.

Gaining the approval of senior leaders will be integral to the success of your IPE program and enable it to be an established part of your institution. Once IPE programming is underway, schedule regular update briefings for senior leaders.

Will your institution provide sufficient resources to support IPE program development and coordination?
Whether you are trying to implement a single extracurricular event or a comprehensive curricular program, you will need resources, faculty support, and student time. For long-term success, it is important to assess the willingness of your institution to support culture change and the willingness of institution leaders to allocate resources to the initiative. Administrative recognition of the value of IPE is essential for sustainability because coordinating IPE programs can be labor-intensive for faculty champions who must also meet other responsibilities. Faculty efforts are needed in the preparatory work, activity facilitation, and grading or evaluation.

Senior leaders will need to understand the program requirements, such as facilitator training and regular meetings among the coordinators. If you are seeking assistance in recruiting personnel, be specific about what you are looking for. You can also seek external funding; however, this will most likely be more viable once the IPE program has begun and you can demonstrate its impact. There are public and private grant agencies that welcome applications for interprofessional education, practice, and research efforts.[16] More resources can increase faculty engagement and institutional support.

Building Your IPE Team

Have you assembled a working group of adequate size with faculty representation from all professions that you intend to include in programming?
Working groups should include faculty who have influence on their departments' curricula and student schedules in order to accommodate IPE activities. They will need to promote and champion IPE and CP in their own departments to enact larger culture and behavior changes. You can seek support from senior leaders in referring you to talented individuals who are advocates of teamwork and who have flexibility in their schedules. Leaders may be aware of programs or individuals at your institution with similar interests or who may already be implementing an interprofessional program with whom you could partner.

Have you identified a sufficient number of faculty and clinicians who are adept in IPE competencies to serve as instructors for your activities?
As for faculty facilitators, they will need to be familiar with IPE competencies (teamwork, values/ethics, roles/responsibilities, and communication), have respect for other professions,

and have presentational skills.[22] The facilitation group, similar to the working group, will need flexibility in scheduling and should be comprised of a variety of professions to provide profession-specific coaching to students during the activities. Facilitators should be willing to be trained in collaborative practice concepts and skills. For deeper engagement, they should be part of the development or customization of the IPE activity at your institution.

Have you organized faculty development activities for interested leaders, faculty, and staff to increase their knowledge of IPE and engage in discussion of how to incorporate IPE into their teaching and practice?

Students will follow their faculty's example. If your institutional leaders and calendars support it, interprofessional learning for faculty members is as valuable as activities for students. Faculty who are trained in teamwork and collaboration are able to integrate IPE into course-work and into practice.[22] No national standards or competencies exist at this time for faculty training purposes, yet there are supported resources available on the online resource exchange of the National Center for Interprofessional Practice and Education. If faculty learning is supported by institutional leaders, it may be easier to determine a convenient time for interprofessional faculty to meet.

Program Development

Have you reviewed all professions' academic calendars and curricula to determine the best positioning of IPE programs?

Identifying consistent scheduling availability among students of different professions can be one of the largest barriers to a successful IPE program. In the organizational matrix of higher education faculty, back-and-forth conversations among departments may be required to determine event dates; selecting one individual responsible for ensuring a date is reached may be helpful. There may be protected times or agreed-upon times when multiple degree programs do not schedule classes, enabling students to attend other activities. When there is support for IPE as curricular activity, it is essential to convene a working group or committee of faculty from each profession for coordination. Group members can speak to the IPE accreditation requirements of their specific degree programs to ensure that IPE activities benefit all.

Have you developed interprofessional curricula including classroom learning, clinical observation/practice, and/or simulation activities?

Institutions launching IPE for the first time should begin with one or two pilot programs that can be developed into a larger curriculum of IPE activities. Once your working groups and facilitators are selected, involve them in this program development. They can assist in iden-tifying existing courses where IPE can be incorporated. Section 3 of this Toolkit includes IPE Exemplar Project descriptions to assist in program development.

Sustaining Your Program

Will your institution dedicate time and revise curricula for learners to attend IPE trainings?

Your IPE initiative will likely start out as a single activity and then may progress into an array of activities as a part of core learning with a central staff and budget for IPE coordination. Progressing from isolated IPE activities to a standardized curriculum will involve faculty

members prioritizing IPE as a core aspect of education. To ensure IPE is seen as relevant to student learning, there should be a structure in place for periodic review of programming to ensure it is aligned with priorities and has a measurable impact on student learning and practice. Sharing the findings with curriculum committees to continually reinforce the importance of IPE is recommended.

Have you developed an evaluation process for IPE programming?
A structure for rigorous analysis should be created to maintain high quality programming and to gain positive attention from academic leaders. Develop a system to map IPE activities to competencies and learning objectives. The four core competency domains for interprofessional collaborative practice, values/ethics, roles /responsibilities, and teamwork and communication, can serve as a framework to formulate competencies for an IPE program. Formulated competencies should also be inclusive of the priorities of the local institution and curricular needs.

Have you developed the appropriate structure to revise and improve IPE programming?
Successful IPE programming and organizational culture changes require ongoing evidence-based intervention. Develop ways to measure the effectiveness of the program as well as a process for implementing changes and capitalizing on new opportunities.[15] Section 5 Evaluation and Change Management provides information about measurement tools.

Will your institution recognize, reinforce, and reward positive teamwork behaviors and improvements in process?
If evaluation associates your IPE program with a positive impact on individuals and the institution, the findings should be publicized to reinforce culture change, increase buy-in, and as an incentive for participating. To build upon that incentive, faculty could be rewarded during promotion processes, including support for increased release time.

Section 3: IPE Exemplar Projects from ASCO Member Institutions

Once you clearly identify your local needs and determine what resources can be directed toward IPE program development, establish program goals that describe the overall learning outcomes. IPE program objectives should be mapped to curricula, accreditation standards, and core competencies.

Develop IPE Program Type and Objectives

Section 3 includes descriptions of IPE programming, learning tools, and best practices that have worked successfully at ASCO member institutions. The IPE Exemplar Projects are diverse in their format and emphasis. The three IPE Exemplar Project types are: Didactic Education, Clinical Education, and Extracurricular / Orientation / Social Activities. Please feel free to use all or portions of the described Projects.

The IPE Exemplar Projects were submitted for this ASCO IPE Toolkit utilizing the Template shown on page 27. The following were used as resources to complete components of the Exemplar Project Template:

- Targeted Learning Level: University of Toronto Framework for IPE Competencies and Values (Appendix 2)
- Targeted ASCO Graduate Attributes: Excerpts from the ASCO Graduate Attributes 2011 Document (Appendix 3)
- Targeted IPEC Core Competencies: Excerpts from 2016 update

Didactic Education: IPE didactic activities involve an instructor educating participants in lecture or discussion form with the goal of introducing team-building skills and the rationales behind collaborative, team-based, patient-centered care. Students gain the essential foundational knowledge that they will rely on in simulation and practice scenarios. IPE didactic activities involve an interprofessional student audience that is engaged and interactive, which makes discussion richer and more diverse. IPE didactic activities may be mapped to curricula of the different professions, which could facilitate the involvement of multiple professions more easily. Because these tend to be introductory courses and possibly the first opportunity

for students to interact with students from other professions, this learning type benefits from initial ice-breaker activities, such as Extracurricular / Orientation / Social Activities, that help students develop rapport with one another and feel comfortable joining discussions.[20]

Didactic IPE activities may also include laboratory instruction and / or simulation. Simulation is an activity that involves the imitation of patient care and health care team interactions. It was originally developed in the aviation industry to ensure that all personnel were well acquainted with safety and emergency protocols.[23] Simulation involves the use of human participants, manikins, or virtual representation. Human participants may be standardized patients or trained actors who specialize in simulation work, faculty members, clinicians, or students. The use of high-fidelity simulators or manikins, if available, can be advantageous because it eliminates the need for volunteer time or paid time from human participants. Your selection of IPE simulation activities will likely depend on the resources available.

Clinical Education: IPE clinical experiences allow students to develop a more comprehensive understanding of the impact and management of chronic diseases and other patient conditions. George Thibault, past-president of the Macy Foundation, encourages IPE clinical experiences that are frequent, immersive, and community-based as those experiences lead to the students' ability to have meaningful experiences, develop relationships with practitioners and patients, and have greater impact on the environment.[24] IPE clinical education may include clinical observation in which students observe existing interprofessional team interactions in a clinical setting; interdisciplinary communication activities; team provider meetings (actual or simulated); and, case presentations, conferences, and Grand Rounds.

In IPE clinical practice, students actively participate in a team-based clinical practice activity that may occur in various settings. Interdisciplinary health screenings, student-run clinics, and mission trips provide excellent IPE / CP opportunities. The educational benefits of IPE clinical practice are similar to those of clinical observation in terms of the impact of exposure to teams in practice. In addition, IPE clinical practice allows students to experience relationship-building with patients and to implement learned IPE behaviors in actual practice. In a 2013 report, the Josiah Macy, Jr., Foundation recommends forming stronger IPE coalitions between education and clinical practice through new and creative solutions.[25]

Extracurricular / Orientation / Social Activities: While often more informal and less learning-centered, the implementation of IPE extracurricular, orientation, and / or social activities provides a valuable opportunity to develop mutual understanding, familiarization, and communication. IPE orientation activities can help to set the stage for subsequent IPE didactic and clinical education through mutual awareness of the scope of practice of each participating discipline and the development of student rapport.

IPE Project Title

Type of Project:
(Didactic Education, Clinical Education, or Extracurricular / Orientation / Social)

Description of the Project:

Why the Project was Selected:

Learning Objectives:

Targeted Participants:

Targeted Learning Level:
(please specify Exposure / Introduction, Immersion / Development, or Competence / Entry-to-Practice using the Framework from the University of Toronto)

Timeframe of the Project:
(duration, when offered; example: 3 months in duration during the Fall of the second year)

Preparation by Faculty:

Pre-Work for Students:

Targeted ASCO Graduate Attributes:
(please provide the relevant lettered / numbered Attributes from the provided excerpts from the 2011 ASCO document)

Targeted IPEC Core Competencies:
(please provide the relevant lettered / numbered Competencies from pages 11 - 14 of the 2016 IPEC Core Competencies document)

Lessons Learned in Planning and Implementing this Project:

Exemplar IPE Project Submitted by:
(name, institution, email address)

Section 3.1 IPE Exemplar Projects: Didactic Education

The following IPE Exemplar Didactic Education Projects were submitted by ASCO member institutions and are included in Section 3.1 (the Projects are listed in alphabetical order by institution):

Anchor #1: Introduction of Interprofessional Collaboration with an Interrupted Case, Indiana University

Type of Project: Didactic Education

Description of the Project: This is the first unit in a series of four events called Anchors. There are three components to this unit: uniprofessional preparation, the interprofessional (IPE) event, and a uniprofessional debriefing. At the interprofessional event, students work in groups of six and have an introductory section in which they participate in an icebreaker. Students then formulate elevator speeches about their professions plus another one about how they would interact with another profession that is present. They randomly select the other profession out of a stack of professions represented. The second part of the IPE event dives into a case regarding a man with diabetes who is admitted into the hospital after neglecting his health and then fast-forwarding to the discharge planning. The case is presented with two videos and related questions for the student groups to discuss after each segment is played. The small groups share their discussions with the larger group after a given time limit. There are cards for clarification and jargon at each table for participants to hold up if they need that type of help during the session. During the small group discussion, facilitators provide clarification and assist with challenges that the groups request help with, but the facilitators are not integrated into the small group discussions. The large group discussions are managed by the facilitators. At the close of the IPE event, there is a facilitator led wrap up with time allowed for feedback and evaluations. A debriefing discussion, including a one page reflection assignment, are part of the final uniprofessional wrap up.

Why the Project was Selected: It is a solidly structured IPE unit to introduce interprofessional collaboration in healthcare.

Learning Objectives:

1. Recognize the value of diversity and individual differences to improve outcomes relevant to prevention and healthcare.
2. Demonstrate respect for the unique cultures, values, roles/responsibilities, contributions, and expertise of professions.
3. Communicate one's professional roles, responsibilities, and contributions to others.
4. Recognize one's limitations in skills, knowledge, and abilities.
5. Listen actively to the ideas and opinions of others and encourage ideas and opinions of others.

Targeted Participants: Students from optometry, medicine, nursing, speech language pathology, audiology, athletic training, nutrition and dietetics, recreation therapy, psychology, and social work.

Targeted Learning Level: Exposure / Introduction

Timeframe of the Project: Offered over a three to four week timespan during the Fall Semester of the second year.

Preparation by Faculty: A Faculty Guide posted and completion of a workshop is also recommended but not required.

Pre-Work for Students: Reading from an article and a prepared guide which includes: a Community Context Sheet with community size and community resources available to patients. There is also uniprofessional preparation about diabetes and its effects on the ocular system.

Targeted ASCO Graduate Attributes: PE4, PE8, CC9, CC12

Targeted IPEC Core Competencies (2016 update): RR1, RR2, RR3, CC4, VE4

Lessons Learned in Planning and Implementing this Project:

- Student grouping affects the perception of relevance of the IPE activity by the optometry students. Optometry students needed better preparation to work with undergraduate students who were not as engaged in their profession. Optometry students felt more positively about the experience when paired with medical students or other health science students above the undergraduate level, and they needed reinforcement of teaming with various levels of learners.
- Scheduling an evening timeslot for this interprofessional event was challenging because of mealtime considerations and student readiness for participation at the end of a full day. In order to establish a daytime event, planning would be easier if completed 6-12 months in advance.

Exemplar IPE Project Submitted by:

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Exposure Level Learning Activity: Introducing IP Collaboration

Indiana University

Type of Project: (Didactic)

Description of the Project: First unit (in a series of three) that requires application of teamwork skills. Students work individually through an online activity that includes foundational material plus two different patient experiences and they complete reflections at multiple points throughout. After the individual work, students join their assigned live Zoom session with a group of eight learners from varied health care professions and a facilitator from one of the health professions. Health care students from over 10 campuses across the state of Indiana are included. After introductions and sharing on why interprofessional collaboration matters in their professions, students engage in a team huddle to answer key questions and complete tasks including:

1. Create a collective list of the key factors you believe led to such different outcomes for Carl and Joe.
2. If you were working in the same community to support health and wellness, what strategies might you use to develop collective competence across your professions?

Facilitators encourage participation from all team members and work to accomplish all learning objectives.

Why the Project was Selected: It highlights collaboration and coordination among multiple health care education programs at multiple campuses throughout Indiana. It is a solid introduction into interprofessional collaboration.

Learning Objectives:

- Describe the nature of interprofessional work and how it helps people and populations navigate the complex health, social, and public health system
- Recognize the value of interprofessional knowledge
- Reflect on the evidence and the impact of effective interprofessional work on people and populations
- Explain why collaborative practice matters to you
- Identify specific collaborative skills, tools, and methods to use within your workplace to enhance outcomes

Targeted Participants: Athletic Training, Dentistry, Medicine, Nursing, Advanced Practice Nursing, Occupational Therapy, Optometry, Pharmacy, Physical Therapy, Speech Language Pathology, Nutrition, Recreation Therapy, Social Work

Targeted Learning Level: Targeted Learning Level: (please specify Exposure / Introduction, Immersion / Development, or Competence / Entry-to-Practice using the Framework from the University of Toronto) Exposure / Introduction

Timeframe of the Project: (duration, when offered; example: 3 months in duration during the Fall of the second year)

Over 3 weeks (Meetings)

- Pre-activity Orientation by Center Director and optometry faculty member 50 min (uniprofessional)
- ~60 min hour online learning activity (completed individually)
- ~60 min hour Live Exposure session (interprofessional with facilitated small group discussion)

Fall of the second year in the Optometric Profession course

Preparation by Faculty: Faculty Prep Session (1 Hour during week prior)

Pre-Work for Students: Orientation from IU's Interprofessional Practice and Education Center

Targeted ASCO Graduate Attributes: (please provide the relevant lettered / numbered Attributes from the provided excerpts from the 2011 ASCO document)
PE4, PE6, PE8, CC9, CC10, CC13

Targeted IPEC Core Competencies (2016 update): (please provide the relevant lettered / numbered Competencies from pages 11 – 14 of the provided 2016 IPEC Core Competencies document) VE1, VE3, VE4, VE9, RR2, RR3, RR7, RR9, CC1, CC2, CC4, CC7, CC8, TT3, TT7, TT10

Lessons Learned in Planning and Implementing this Project:

- Facilitation is important for learners to feel comfortable and feel productive. Small groups without facilitation are less likely to engage at the same level.
- Greater emphasis on collective competence and collaboration than on complexities of the case helps students shift their thinking toward valuing their own contributions and those of other health care professions.

Exemplar IPE Project Submitted by: Elli Kollbaum, OD; Indiana University School of Optometry, ekollbau@indiana.edu

Cross Cultural Simulation
Massachusetts College of Pharmacy and Health Sciences (MCPHS)

Type of Project: Didactic Education

Description of the Project: Cross Cultural Simulation. Interdisciplinary groups of students from nine programs across the MCPHS University Worcester-Manchester campus are assigned to one of two fictional, contrasting cultures: "alpha" and "beta." Together, interprofessional student groups learn the customs and beliefs of their assigned fictitious cultures. As the simulation continues, small interprofessional student teams switch to the other fictitious culture to observe and engage. While students engage in the other culture, they are instructed to take notes of the contrasting culture and report back to their own initially assigned culture on what they observed. This happens multiple times. Finally, small groups are brought to the other fictitious culture and must try to assimilate into that culture.

The activity concludes with all students of both cultures participating in a large group discussion. Students are asked to reflect on how their own values and biases may affect their perception of other cultures and the impact this may have on interprofessional collaborative patient care. This activity promotes cultural sensitivity and self-awareness, skills that are critical to providing optimal patient-centered care.

Why the Project was Selected: Faculty at MCPHS University in Worcester, Massachusetts and Manchester, New Hampshire initiated an Interprofessional Education (IPE) Working Group in 2012 with the goal of developing a longitudinal IPE curriculum for students from multiple health programs. The IPE Working Group members represent all nine heath care programs housed between the two campuses: acupuncture, dental hygiene, diagnostic medical sonography, nursing, occupational therapy, optometry, pharmacy, physical therapy, and physician assistant studies. Initially, the Cross Cultural Simulation was an activity in which only the School of Pharmacy participated. As IPE was implemented into many of the MCPHS health professions core requirements, the Cross Cultural Simulation was a focused way to meet IPE and cultural competencies for all programs.

Learning Objectives: Students work in interprofessional groups to navigate new cultures and better understand cultural competency and communication across various cultural barriers. The Cross Cultural Simulation allows students to explore the feelings, anxieties, misperceptions, and counter-productive attitudes of people who, by choice or circumstance, are required to interact with another culture.

Targeted Participants: Students enrolled in Optometry, Physical Therapy, Occupational Therapy, Dental Hygiene, Pharmacy, Physician Assistant Studies, and Nursing.
A total of approximately 600 students participate, 64 from Optometry.

Targeted Learning Level: Exposure / Introduction

Timeframe of the Project: Spring semester of the 1st year. The Cross Cultural Simulation is a required component of the Optometric Theory and Methods II course.

Preparation by Faculty: A "pre-lab" is held before the Simulation for all facilitators, new or experienced. During the pre-lab, an overview of the Simulation is provided, and supplies for the assigned fictitious cultural group are distributed. An email is also sent a week prior to the Simulation for facilitators to familiarize themselves with their assigned fictitious culture.

Pre-Work for Students: None. Students are assigned to, and learn the characteristics of, two fictitious cultures, "alpha" and "beta," during the Cross Cultural Simulation.

Targeted ASCO Graduate Attributes: PE4, PE5, PE6, PE7, CC12

Targeted IPEC Core Competencies (2016 update): VE1, VE3, VE4, VE8

Lessons Learned in Planning and Implementing this Project: The Cross Cultural Simulation was added to the Optometry curriculum in 2014. Using feedback from the survey conducted at the end of the Simulation, the IPE Working Group is able to obtain insight, comments, and concerns from the student participants.

The survey results of the 2018 Cross Cultural Simulation revealed the following:

- 81.0% of students reported that the Simulation allowed them to experience what it might feel like trying to interact with another culture
- 84.0% of students reported that the Simulation allowed them to recognize potential cultural and individual differences that may characterize patients, populations, and the health care team
- 88.3% of students reported that the Simulation allowed them to recognize potential communication challenges they may face when interacting with culturally diverse patients, populations, or health care teams.

Student feedback also resulted in improvements to the Simulation activity. Survey comments from the Spring 2018 Simulation noted that the learning of the two fictitious cultures was confusing, and students were concerned with characteristics of the cultures, including gender identity and touching one another. The IPE Working Group was able to restructure and modify the directions of the Simulation for the Spring 2019 offering.

Exposing interprofessional groups of students to this Simulation gave them the opportunity to discuss the possible challenges in communication within a diverse healthcare population. The IPE Working Group will continue the Simulation in the spring of 2020, including reflecting on its importance to interprofessional education and collaborative learning.

Exemplar IPE Project Submitted by:

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Reference: Sullivan KM, Jehle G, Carace N, Abel C, Morrill A, and Dunican K. IPE Initiatives to enhance student preparation for introductory pharmacy practice experiences. American Association of Colleges of Pharmacy (2018, Winter), pp. 9-10.

Interprofessional Education Seminar
Midwestern University Chicago College of Optometry

Type of Project: Didactic Education

Description of the Project: Changes in our healthcare delivery system are creating a growing demand for health professionals who have skills in collaboration and teamwork. The Interprofessional Education I course describes the roles and responsibilities of the various healthcare disciplines and introduces the One Health concept. It also provides students from different health professions the opportunity to interact with one another and standardized patients. This collaboration promotes communication using a team-based approach to care for humans, animals, and the environment.

Why the Project was Selected: All students entering Midwestern University are required to take this course in the Fall quarter of the first year. The course is a hybrid of lectures and small group breakout sessions aimed at facilitating relationships and collaborations between students in each profession.

Students receive an introduction to interprofessional education and One Health, learn the roles and responsibilities of various healthcare professionals, discuss ethical issues, and work with standardized patients.

Learning Objectives:

1. Identify the roles and responsibilities of the various healthcare disciplines.
2. Demonstrate effective communication skills that support a team approach to healthcare.
3. Apply ethical principles to interprofessional team situations.
4. Apply interprofessional team-based concepts to interactions with standardized patients.
5. Apply One Health concepts to interprofessional team interactions.

Targeted Participants: Entering students in Optometry, Physical Therapy, Occupational Therapy, Physician Assistant Studies, Speech-Language Pathology, Pharmacy, Behavioral Medicine, Dental Medicine, and Osteopathic Medicine

Targeted Learning Level: Exposure / Introduction

Timeframe of the Project: 1 credit hour course in the Fall quarter of the first year titled Interprofessional Education I

Preparation by Faculty: Midwestern University has a staff member dedicated to this course who has training in interprofessional education. Various members of the other colleges assist in small group sessions and panels as needed.

Pre-Work for Students: Students are required to complete online modules in HIPAA, sexual misconduct and prevention of harassment and discrimination. Students must complete three group reflection activities and a simulated patient encounter assignment.

Targeted ASCO Graduate Attributes: PE1, PE2, PE3, PE4, PE5, PE8, KK9, CC7, CC10, CC12, CC13

Targeted IPEC Core Competencies (2016 update): VE1, VE2, VE4, VE5, VE6, VE7, VE8, RR1, RR4, RR7, RR9, RR10, CC3, CC4, TT3, TT4, TT6

Lessons Learned in Planning and Implementing this Project: The course was first implemented in the Fall quarter 2014. Based on feedback, updates beginning in 2017 were subsequently made as follows:

- Pre-course survey about roles/responsibilities was added to the healthcare professionals panel
- Standardized patient encounter scenarios were updated to improve applicability to all professions involved
- The One Health breakout session was revised to include facilitated discussion at the end of the class period

Lecturers for the One Health and Interprofessional Communication lectures within the course changed, and new facilitators for the breakout sessions were included this year.

Exemplar IPE Project Submitted by:

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Buck-IPE: Fundamentals of Teamwork and Interprofessional Communication
The Ohio State University

Type of Project: Didactic Education

Description of the Project: This longitudinal series is the first of the Buck-IPE curriculum and takes place over the course of the academic year during both autumn and spring semesters. This series focuses on providing foundational interprofessional education experiences to first-year professional students.

Fundamentals of Teamwork (module 1) exposes first-year students to evidence-based strategies for effective teamwork and collaboration. This two-hour module serves as the first introduction of students to their interprofessional longitudinal teams. In their teams, students complete a "breakout box" to apply their knowledge of effective teamwork and collaboration skills. The "breakout box" is designed around a mock family living in central Ohio, the "Gonzalez" family. Each breakout box task is focused on a different member of the Gonzalez family and how their social determinants of health shape their lives and health needs. After the breakout box is completed, student teams reflect and debrief on their teamwork skills during the session.

Interprofessional Communication (module 2) focuses on a single member of the Gonzalez family, "Ellie," and occurs in separate two-hour modules during the spring semester. Ellie is a teenage member of the Gonzalez family who sustains a head injury during an athletic activity and presents to the emergency department for care. It is revealed at her emergency visit that Ellie has several undiagnosed health problems, including an astrocytoma in the region of the fourth ventricle. In their same interprofessional longitudinal teams, students are asked to engage in an interprofessional case conference. Students prepare for the event by completing a profession-specific assignment, and then come together as an interprofessional team to develop a care plan for Ellie. Engaging in an interprofessional case conference allows students to learn about each other's roles and responsibilities while practicing effective communication skills. At the end of the series, student teams reflect and debrief on their teamwork skills during the module.

This series serves as a foundational experience for first-year students, and prepares students for immersion-level Buck-IPE experiences in their second and third years. These immersion-level experiences allow students to continue in their longitudinal teams to examine the interprofessional team's role in addressing health equity in their second-year. In their third-year, students collaborate interprofessionally to enhance critical conversation skills.

Why the Project was Selected: The Buck-IPE curriculum is designed to prepare students to excel as healthcare professionals who are able to collaborate with others in order to improve health outcomes in patient care. All optometry students are required to participate in the Buck-IPE curriculum during their first year in the Fundamentals of Teamwork and Interprofessional Communication modules. These foundational experiences allow students to better understand their roles and responsibilities on the healthcare team, consider social

determinants of health, as well as practice effective communication and collaboration using a team-based approach. Additionally, this series prepares students for their second-year Buck-IPE curriculum, which focuses on the interprofessional team's role in advancing health equity.

Learning Objectives:

- Introduce students to the significance of social determinants of health and their impact in patient care.
- Demonstrate effective team-based practices and collaborative decision-making using provided evidence.
- Listen actively and use respectful language when working in a team setting.
- Describe individual role in the interprofessional team while applying evidenced-based knowledge for clinical decision-making.
- Communicate information with interprofessional team members in an understandable manner, avoiding discipline-specific terminology.

Targeted Participants: First-year students in athletic training, dentistry, dental hygiene, genetic counseling, health information management systems, medical dietetics, medical lab sciences, medicine, nursing, occupational therapy, optometry, pharmacy, physical therapy, radiography, radiation therapy, respiratory therapy, sonography, and veterinary medicine.

Approximately 1,200 students from health and allied-health programs participate.

Targeted Learning Level: Exposure / Introduction

Timeframe of the Project: Fundamentals of Teamwork (module 1) offered during autumn semester of the first-year, one two-hour session.

Interprofessional Communication (module 2) offered during spring semester of the first-year, two two-hour sessions approximately one month apart.

Preparation by Faculty: Faculty facilitators are volunteers from all participating professional programs. The role of faculty facilitators is to engage students to learn more about interprofessional teamwork, ensure that teams are practicing effective teamwork, evaluate and assess students on interprofessional practices, and provide feedback. The Ohio State University Office of Interprofessional Education holds a one-hour live orientation/training for each module to review learning objectives and session mechanics. Facilitators are also provided with a comprehensive guide to effectively lead the in-person sessions.

Pre-Work for Students: For Fundamentals of Teamwork (module 1), students are required to watch several videos related to the importance of interprofessional education and evidence-based practices that promote team effectiveness.

For Interprofessional Communication (module 2), students are required to watch videos of patient "Ellie" that depict her initial injury and emergency department admission, as well

as review Ellie's electronic health record. Additionally, each participating program creates a "profession-specific assignment" which is designed to engage students in more fully understanding how their profession may contribute to the patient's case and allows students to participate meaningfully in an interprofessional case conference during the live session.

Targeted ASCO Graduate Attributes: PE3, PE4, PE6, PE7, PE8, KK1, KK5, KK8, CC1, CC3, CC7, CC9, CC10, CC11, CC12

Targeted IPEC Core Competencies (2016 update**):** VE3, VE4, VE10, RR1, RR2, RR3, RR8, RR9, CC1, CC2, CC4, CC6, TT1, TT2, TT8, TT10, TT11

Lessons Learned in Planning and Implementing this Project: This interprofessional education module was adapted from a program developed by The Ohio State University School of Health and Rehabilitation Sciences. An interprofessional faculty design team was created to modify the "breakout box" to allow students to learn about a community and social determinants of health. This design team also updated the patient case to be inclusive to all participating programs.

The content and logistics of the program is continuously improved by incorporating feedback from individuals involved (students and facilitators) as well data analysis of program efficacy in accomplishing targeted learning outcomes. Initial complications related to logistics were alleviated by the creation of several University-wide committees focused on making interprofessional education accessible for all programs who wish to participate.

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Interprofessional Evidence Based Practice Course
Salus University

Type of Project: Didactic Education

Description of the Project: In this evolving health care system, it is vital for health professions educational programs to identify the mechanisms that shape successful collaborative teamwork. The Evidence Based Practice (EBP) course at Salus University has evolved substantially since its launch in 2007 as part of the first semester core curriculum in optometry, audiology, and physician assistant studies. As Salus University continued to expand its program offerings, students in occupational therapy and speech-language pathology are now also enrolled in the EBP course. Beginning in Fall 2018, the course was retitled to the Interprofessional Evidence Based Practice (IPEBP) course.

Why the Project was Selected: The IPEBP course is a required curricular element for all students enrolled in the on-campus degree programs at Salus University: audiology, optometry, occupational therapy, physician assistant studies, and speech-language pathology. Beginning in 2007, an audiologist and an optometrist serve as co-course instructors. The instructors initially presented lectures in a traditional face-to-face format. There was a gradual shift to online lecture delivery mainly to accommodate logistical challenges such as scheduling, room availability and size. After gaining a deeper understanding of interprofessional education models, small group interactive activities were incorporated into the course in 2013, which consisted of interprofessional student teams applying evidence based practice concepts to clinical scenarios. After receiving positive student feedback on the small group activity and after researching other pedagogies, flipped classroom and Team-Based Learning principles were integrated into the course in 2014.

Beginning in Fall 2016, faculty members from each of the disciplines serve in the role of interdisciplinary student team faculty advisors. Following several course instructor and faculty advisor meetings, the course was purposefully revised beginning in Fall 2017 to include a team-based project that infuses interprofessional practice competencies into a written project and oral presentation involving a patient case scenario. The project includes aspects of care involving each of the University's disciplines. More specifically, interdisciplinary student teams are assigned a case scenario developed by the course faculty and are guided to formulate a clinical question. The student teams are then asked to critically appraise a research study that addresses their clinical question. The critical appraisal of the research and application of the results to the clinical scenario are then presented orally by all members of the team to student peers and faculty advisors.

Learning Objectives:
IPEBP Course Description: This course is taught in an interprofessional, team-based environment and utilizes a combination of in-person and online instruction. Students enrolled in this course will work through assignments culminating in an interprofessional team project and oral presentation. This course will facilitate understanding of how the available evidence based practice tools are applied in clinical training, clinical problem solving, and most importantly, clinical practice.

IPEBP Course Learning Objectives:

- Define evidence based practice
- Evaluate available evidence for accuracy and precision
- Apply evidence based principles in the context of clinical decision making
- Demonstrate team-based learning in an interprofessional environment
- Collaborate as a member of an interprofessional team on a group project

Targeted Participants:

- Students enrolled in audiology, optometry, physician assistant studies, and speech-language pathology: Fall Semester of the First year
- Students enrolled in occupational therapy: Fall Semester of the Second Year

Targeted Learning Level: Exposure / Introduction and Immersion / Development

Timeframe of the Project: 1 credit course, Fall semester

Preparation by Faculty: The course co-coordinators have attended workshops on how to teach EBP at Duke University (2011 and 2012) and McMaster University (2014 and 2018). The IPEBP course syllabus recently underwent program level as well as University level review and was approved by all relevant committees.

The IPEBP instructors and faculty advisors meet regularly during the course offering as well as quarterly throughout the year. The faculty advisors represent the professions of all the student cohorts enrolled in the course. All faculty advisors have administrative as well as faculty responsibilities; therefore, they are well-positioned to understand the accreditation requirements relative to EBP and IPE for their respective programs.

Pre-Work for Students: Individual and team readiness assurance testing (iRAT and tRAT; Michaelsen) is conducted in class. Students complete and submit the Modified Readiness for Interprofessional Learning Scale (RIPLS) Questionnaire as pre- and post-course work.

Targeted ASCO Graduate Attributes: PE2, PE3, PE8, CC7, CC10, CC13

Targeted IPEC Core Competencies (2016 update**):** VE5, VE7, VE9, RR4, RR5, RR6, RR9, RR10, CC3, CC4, TT1, TT4, TT6

Lessons Learned in Planning and Implementing this Project: Prior to recent offerings of the IPEBP course, students at Salus were limited in their exposure to the other on-campus professions and provided consistent feedback on course evaluations that the course was lacking in integrating the professions. Students and faculty have provided positive feedback on the highly structured team-based learning that has been integrated into the course through the small group interprofessional clinically-oriented projects. A positive trend has been noted in student learning outcomes as well as student perceptions of the interprofessional collaboration fostered by the course. The evidence based clinical project was

highlighted repeatedly and uniformly positively across the student cohorts in course evaluations. The flipped classroom concept has provided additional opportunities for students to learn "from and with each other."

The IPEBP course instructors and faculty advisors have continued the team-based clinical case project in the Fall 2018 offering of the course, including ongoing reflection of its application to interprofessional education and collaborative practice. The IPEBP course will continue to evolve based upon the results of qualitative and quantitative assessment tool outcomes; a positive trend has been identified regarding student learning as well as student perception of the interprofessional collaboration that this course provides to Salus University students early in their academic careers.

In Fall 2018, the Salus Office of the Registrar completed the preparations needed for the capacity to assign interprofessional education (IPE) didactic course designations. In January 2019, the Deans' Council adopted a Policy and Process document for Interprofessional Education Didactic Course Designations at Salus to delineate a purposeful approach that is consistent with the widely held understanding of interprofessional education. The inaugural didactic course at Salus to receive an IPE course designation is the Interprofessional Evidence Based Practice Course beginning in Fall 2019.

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References:

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Managing Eye Allergy with Topical Pharmaceuticals – A First Year Optometry and Pharmacy Student Workshop
University of Houston

Type of Project: Primarily Didactic Education with some components of Clinical Education and Extracurricular / Orientation / Social

Description of the Project: This workshop is intended to introduce the 1st year optometry and pharmacy classes, and facilitate cooperative education around a common clinical challenge – the use of over-the-counter (OTC) medications to manage ocular allergy. The three hour workshop includes an ice-breaker to allow the students to learn more about each other, their chosen profession, and the role of pharmacists and optometrists in managing ocular allergy. Neither 1st year pharmacy nor optometry students have received formal coursework on ocular allergy or anti-allergy ocular medications, so they come to the workshop on equal ground. Students are provided a case example of a patient presenting to a commercial pharmacy on a Saturday night asking about ways to alleviate their "itchy eyes." They are given information about the clinical signs and symptoms, and walked through a differential diagnosis of potential causes for red or irritated eyes. They work together to explore the options for OTC treatments. Sample OTC products are provided for students to understand product labelling. Faculty from pharmacy and optometry provide information on the mechanism of action, potential side effects, pregnancy and age considerations, indications and contraindications. They are also taught how to educate patients on the proper use of ocular medications and when it's appropriate to refer a patient (to an optometrist, allergist, etc.). A pre- and post-learning assessment is incorporated to evaluate knowledge gained during the workshop, and a survey is used to ascertain acceptance and suggestions for future workshops. Students also receive take home quick reference guides on some common OTC artificial tear and allergy medications.

Why the Project was Selected: Ocular allergy is a common clinical condition encountered by both optometrists and pharmacists. There are a growing number of OTC options to manage allergies - from bland artificial tears to vasoconstrictors, decongestants, generic, homeopathic, and previously prescription-only anti-histamine products. It is important for pharmacists and optometrists to understand the options available to patients, be able to make educated recommendations for OTC products, and understand when to refer or prescribe topical or oral medications.

Learning Objectives:
Students completing the workshop will learn:

- The roles of optometrists and pharmacists in managing ocular allergy
- The signs, symptoms and differential diagnoses for common "red eyes"
- The mechanism of action, side effects, indications, contraindications for common eye allergy medications
- How to counsel patients on the use of topical ocular medications
- How to make appropriate OTC recommendations for ocular allergy and when and to whom to refer

Targeted Participants: 1st year students enrolled in the College of Optometry and the College of Pharmacy (~240 total participants)

Targeted Learning Level: Exposure / Introduction and Immersion / Development

Timeframe of the Project: This is a 3 hour workshop conducted during the 2nd semester of the 1st year.

Preparation by Faculty: The workshop co-coordinators, Dr. Kathryn Richdale from Optometry and Dr. Catherine Hatfield from Pharmacy worked together for approximately 3 months to develop the workshop. Dr. Hatfield is the Director of Inter-Professional Education in the College of Pharmacy, and has over a decade of experience facilitating interprofessional education (IPE) initiatives. Dr. Richdale is new to IPE but has worked with Dr. Hatfield and the Texas IPE Consortium to undertake the TeamSTEPPS certification. The goal of TeamSTEPPS is to improve performance among teams of health care professionals.

Drs. Richdale and Hatfield, with assistance from other faculty from their respective colleges, developed the patient case example, ordered samples of OTC medications, made packets with copies of the drug labelling for students to review, created an icebreaker, developed pre- and post-test and satisfaction surveys, and coordinated the facilities and other doctors to help facilitate the workshop.

Pre-Work for Students: There is no pre-work required for students.

Targeted ASCO Graduate Attributes: PE4, PE8, KK6, CC4, CC10, CC13

Targeted IPEC Core Competencies (2016 update): VE5, RR2, RR3, RR4, CC2, CC4, TT3, TT8

Lessons Learned in Planning and Implementing this Project: This project is the College of Optometry's first joint interprofessional education program with the College of Pharmacy. Our goal this year was to introduce the classes with a topic that would be interesting and relevant to both groups. Our plans moving forward are to continue a workshop-style event each year, which builds upon the knowledge students gain in their respective curricula and supports understanding and appreciation of the knowledge and skills of each profession and how we can work together to improve patient care.

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Telehealth Simulation between Doctor of Optometry and Doctor of Nursing Practice Students, University of Missouri-St. Louis (UMSL)

Type of Project: Didactic Education

Description of the Project: This project is an online telehealth simulation in which students work together synchronously and remotely to complete a clinical case including diagnoses, assessments and plans. Students were assigned to small groups consisting of Doctor of Optometry and Doctor of Nursing Practice students. Within each group, students participated in an "Icebreaker" assignment and worked through a telehealth case simulation collaboratively via the eLearning software Easygenerator. The patient case scenario contained components reflective of both nursing and optometry expertise; the same case was used across all groups. The project was graded based on student participation, on a completion basis. Pre/post surveys were collected utlizing the Student Perceptions of Interprofessional Clinical Education-Revised (SPICE-R) validated tool. Additionally, each student completed a qualitative post-experience reflection.

Why the Project was Selected: Telehealth is already a significant method of modern healthcare delivery, and implementation continues to rise among physicians and subspecialists. Interprofessional clinical education and the use of simulation have become growing topics in healthcare education as a means to ultimately improve access to care and healthcare outcomes.

This project simulates a telehealth experience involving students from different disciplines to consult and provide expertise from their respective fields. The program evaluation will seek to answer the following questions: Is there a change in knowledge and attitude(s) regarding interprofessional teamwork and team-based practice, roles/responsibilities for collaborative practice, and patient outcomes from collaborative practice?

Learning Objectives:

- Recognize what is meant by "Interprofessional Education," and how it relates to optometric patient care
- Communicate the roles/responsibilities of your respective profession
- Recognize how the knowledgebase and scope of the fellow health professional student contributes to effective care of the patient
- Gain experience in interprofessional collaboration in the formulation of patient diagnoses and care plans

Targeted Participants: Doctor of Optometry (OD) students and Doctor of Nursing Practice (DNP) students; in Fall 2019, 48 Optometry students and 24 DNP students participated in total.

Targeted Learning Level: Immersion/Development

Timeframe of the Project: The five-module project spanned throughout the 2019 Fall semester. The project was a course requirement as part of Fall Third-Year Primary Care Clinic for the OD students, and a course requirement as part of the Adult Health I course within year 2 of 3 of the BSN to DNP program.

Preparation by Faculty: The project was developed in collaboration between one faculty member from the College of Optometry who serves as the College's IPE Coordinator, and one faculty member from the College of Nursing. The online module was developed with technology guidance from the university's Center for Teaching and Learning. Faculty preparation involved several collaborative planning and "working" meetings throughout the prior Spring and Summer semesters in order to execute the project for the Fall.

Pre-Work for Students: Students completed a "Pre-Assessment" diagnostic survey to assess self-reported knowledge and attitudes towards interprofessional teamwork and collaborative practice. The survey was then repeated after completion of the project to identify any change to self-reported knowledge/attitudes due to the project experience. Pre-work also included a brief group "Icebreaker" assignment.

Targeted ASCO Graduate Attributes: PE4, PE8, CC7, CC9, CC10, CC13

Targeted IPEC Core Competencies (2016 update): RR1, RR2, RR9, TT3, CC3, CC4

Lessons Learned in Planning and Implementing this Project: Fall 2019 was the first time implementing this project. Desired modifications for Fall 2020 are based upon faculty experience/reflection and student feedback, and include the following:

- It is important that the faculty involved in the project are also the instructors of the course(s) in which it is implemented. Otherwise, it is challenging to communicate clearly with the enrolled cohort of students, and for the purpose/requirements of the project to be appropriately conveyed.
- New IPE assignments must be fully integrated into a course with objectives/purpose clearly represented to minimize student perception of "busywork."
- Coordination of schedules can be very difficult for students, especially when some of the involved professional programs are largely online and students are also working full-time, as was the case for the DNP students. Designating dedicated class time to work on the project (either remotely or in person) could eliminate this difficulty.
- While a brief "Introduction to IPE" module was included in the online case, a more formal foundational background to IPE prior to this project would be beneficial for student buy-in and improved understanding. The goal is for this foundation to be implemented earlier in the optometric curriculum within other courses (e.g., Interpersonal Communications.)
- Future plans include inclusion of additional case modules to the project and consideration of an in-person component. Another important future addition is a post-project "wrap up" to discuss the experience and lessons learned.

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References:

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Third Year IPE Case Conferences
Western University of the Health Sciences

Type of Project: Didactic Education

Description of the Project: Case Conference

Why the Project was Selected:

- Grand rounds format offers real cases and scenarios
- Learning process through different points of view
- Clinical application in 3rd year offers high level of engagement and lends to more clinical application in a forum of different perspectives
- Less forced and more organic compared to standardized patient scenarios

Learning Objectives:

- Each group creates an evidence-based interprofessional care plan or discharge activity for the patient
- Active discussion in a noncompetitive environment is encouraged with a shared task

Targeted Participants: One student from each college is invited to join the Case Conference (DO, DPM, OD, DMD, RN/NP, PA, PharmD, PA, DPT, VMD)

Targeted Learning Level: Competence / Entry-to-Practice

Timeframe of the Project: Case Conference occurs the same day and week on a monthly basis for consistency. Scheduling information is issued for the entire academic year.

Preparation by Faculty: Facilitators stimulate group discussion to garner input from all the group members.

Pre-Work for Students:

- Each college selects a student to participate in Case Conference and to represent their profession.
- The responsibility for presenting the monthly Case rotates among the colleges, and the college-designated student participants facilitate the group discussions.

Targeted ASCO Graduate Attributes: PE1, PE2, PE3, PE4, PE5, PE8, KK8, KK9, KK10, CC7, CC9, CC10, CC11, CC12, CC13

Targeted IPEC Core Competencies (2016 update**):** VE5, VE10, RR1, RR2, RR3, RR5, RR6, CC1, CC2, CC3, CC4, CC7, TT3, TT4, TT5,TT6, TT8, TT11

Lessons Learned in Planning and Implementing this Project:

Scheduling

- Faculty
  - Implementation for all students requires more manpower
  - Faculty need to have time to participate
- Students
  - Limited scheduling opportunities because of busy student schedules
- Solution: Scheduling was determined at the onset, and all colleges had to clear their calendars to accommodate. Faculty time for this activity is included in faculty contracts.

Engagement

- Students want to put it into clinical practice
- Students need to be motivated (easy to get bogged down studying for a difficult test and lose the importance of IPE)
- Faculty members who are already stake holders in interprofessional care are best suited to serve as facilitators and provide student guidance
- Students are learning to practice in a way that is not typical in current health-care. There is inherent difficulty in implementing a true interprofessional practice on campus, and it is very difficult to ensure off campus clinics also practice interprofessionally.

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Section 3.2 IPE Exemplar Projects: Clinical Education

The following IPE Exemplar Clinical Education Projects were submitted by ASCO member institutions and are included in Section 3.2 (the Projects are listed in alphabetical order by institution):

Interprofessional Collaboration with Optometry and Sports Medicine
Nova Southeastern University

Type of Project: Clinical Education

Description of the Project: Nova Southeastern University has the advantage of having multiple disciplines represented at our institution. Collaboration with the optometric and sports medicine clinic allows students to get firsthand experience interacting with healthcare providers in multiple disciplines; including osteopathic physicians, physical therapists, psychologists, and more. Students participate in the sports vision seminar during the summer of their third years as an elective course. After completing the elective, students will participate in 3-4 clinic rotations at the sports medicine clinic located at NSU's main campus. We have established an exam lane at the sports medicine clinic. This gives the students firsthand experience interacting with the sports medicine team, which includes 3 sports medicine physicians, physical therapists, occupational therapists, athletic trainers, and neuro-psychologists, along with residents and fellows. We provide comprehensive eye exams and provide care to athletes referred by the interdisciplinary team.

Why the Project was Selected: This project highlights collaboration between multiple disciplines in a unique area of optometry.

Learning Objectives:

- Define role of optometrist in the interdisciplinary management of concussion
- Demonstrate effective communication skills that support a team approach to healthcare
- Recognize advanced level techniques available to optometrists to enhance vision to maximize performance in sports
- Utilizing optometric services to enhance sports performance for middle school, high school, collegiate, and professional athletes

Targeted Participants: 3rd year doctorate level students

Targeted Learning Level: Entry level

Timeframe of the Project: Year-Round

Pre-Work for the Students: Attended or completed Sports and Performance Vision elective course offered during summer semester (1 credit hour)

Targeted ASCO Graduate Attributes: (found in Appendix 3, page 112)

- Doctors of optometry as health care providers are expected to utilize all resources, including ancillary personnel, intra- and inter-professional collaboration, co-management and referral in securing the best possible care for their patients
- The new doctor of optometry must have the ability to work in cooperation with those who receive care, those who provide care, and others who contribute to or support the delivery of prevention and health services
- The new doctor of optometry should possess a commitment to work as an integral member of the larger inter-professional health care team to improve patient care outcomes

Targeted IPEC Core Competencies: (2016 update)

- VE5 Work in cooperation with those who receive care, those who provide care, and others who contribute to or support the delivery of prevention and health services and programs.
- VE10 Maintain competence in one's own profession appropriate to scope of practice.
- RR1 Communicate one's roles and responsibilities clearly to patients, families, community members, and other professionals.
- CC3 Express one's knowledge and opinions to team members involved in patient care and population health improvement with confidence, clarity, and respect, working to ensure common understanding of information, treatment, care decisions, and population health programs and policies.
- TT3 Engage health and other professionals in shared patient-centered and population-focused problem-solving

Lessons Learned in Planning and Implementing the Project: While completing annual vision screening with athletes, we were able to identify a large unmet need of vision care for our student athletes. Mutual respect and collaborative efforts of optometrists and sports medicine physicians has allowed us to embark on a mission to establish the sports vision and concussion clinic in the sports medicine clinic. Having an exam lane at the sports medicine clinic allows us to provide comprehensive eye exams and problem-focused exams for our student athletes. These student athletes are frequently with the athletic trainers adjacent to us. Sports medicine physicians, physical therapists, and occupational therapists are also located in the same facility. This convivence allows the student athletes to obtain vision care as succinctly as their training, medical, and academic needs. These specialties work in a true inter-disciplinary manner, allowing each professional to seamlessly communicate to best meet the patient's health care needs. Not only do we serve the NSU student athlete population, being located in the university center allows us to see NSU students who have been injured as well as our local Broward and Miami-Dade county population that suffered from visual sequalae due to concussion. With all of our mutual patients we are able to swiftly communicate with the referring providers so that we can meet patient needs when time is of the essence for their health, academic needs, and competition.

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Pacific University Interprofessional Diabetes Clinic

Type of Project: Clinical Education

Description of the Project: To address the needs of the growing population with diabetes and prepare students for future healthcare delivery, Pacific University's Colleges of Optometry and Health Professions have developed innovative opportunities for interprofessional education (IPE) and culturally sensitive collaborative practice.

Since June 2010, Pacific's Interprofessional Diabetes Clinic (IDC), has employed a new teaching and patient-centered service model, providing optometry, dental health, physical and occupational therapy, mental health, pharmacy, audiology, and physician assistant services to the underserved local population. Patients access the IDC through community health centers, outreach efforts, and other university-based clinics.

Patients are evaluated by student/faculty teams from up to three disciplines during an initial morning visit. They return on a subsequent morning for evaluation by the remaining disciplines. Each morning patient care session concludes with an afternoon case management conference for each patient, presented by student teams to all attending students and faculty providers, facilitated by an integrated electronic health record.

The bilingual/bicultural Patient Care Coordinator facilitates navigation of the predominantly Latino patients, coordinating follow-up care, comprehensive reports to the patients' PCPs, additional community services, and patient/family education in diabetes/chronic disease self-management (Stanford University Chronic Disease Self-Management Program,Tomando Control de su Salud, http://patienteducation.stanford.edu).

Why the Project was Selected: The urgent need for health care reform and dramatic increase in chronic disease calls for innovative and coordinated approaches to health care delivery that focus on prevention and wellness, effectively reach at risk, under-served populations, and that are responsive to community needs. This project employs a model of interprofessional care that, through collaboration by the Colleges of Optometry and Health Professions, addresses Pacific University's mission and commitment to being a "diverse and sustainable community dedicated to discovery and excellence in teaching, scholarship and practice," inspiring "students to think, create, care and pursue justice in our world," while preparing them for future healthcare delivery and serving the needs of a growing underserved population via improved access and coordination of quality services in a convenient, efficient, and culturally sensitive environment.

Learning Objectives: Learning objectives are centered on the IPEC core competencies: Roles and Responsibilities; Interprofessional Communication; Teamwork; and Mutual Respect and Shared Values. During the IPC orientation prior to patient care, from 8:00 am – 8:30 am, students and faculty introduce themselves and offer a meaningful experience or misconception about their profession or its scope to the entire group, as an introduction to their roles and responsibilities and as an "ice-breaker" for interprofessional communication.

During patient care, students accompany their patients whenever possible to the other professions' evaluations so they are directly learning "about, from and with each other," (WHO 2010), observing roles, responsibilities, and teamwork in action.

During the afternoon case conference presentations, students practice and engage in interprofessional communication. Respect for all patients and professions is modeled and promoted by faculty during the case discussions, with the aim that the students will realize not only the value of their individual contributions, but the enhanced value of the collective contributions of the interprofessional team to their patients' successful care management outcomes.

Targeted Participants: Professional students and faculty from all disciplines at Pacific University College of Optometry and College of Health Professions: Optometry, Dental Hygiene, Pharmacy, Occupational Therapy, Physical Therapy, Audiology, Psychology, Physician Assistant, Masters in Healthcare Administration

Targeted Learning Level: Immersion/Development

Timeframe of the Project: Throughout the year. The IDC meets the second Saturday of the month from 8:00 am – 3:00 pm. Patient evaluations are conducted from 8:30 am – 12:00 pm; case conference from 1:00 pm – 3:00 pm.

Preparation by Faculty: Interprofessional Diabetes Clinic Resource Center, accessible on Moodle, which is the current open-source Learning Management System (LMS), that provides faculty, staff, and students course web spaces, and other instructional tools.

Pre-Work for Students: Interprofessional Diabetes Clinic Resource Center, accessible on Moodle. The concept of interprofessional care is also introduced in several courses in the patient care curriculum. Students and faculty may also participate in various lunchtime Interprofessional Case Conference offerings prior to attending the IDC.

Excerpt from Moodle (hyperlinks are functional only internally):

Welcome to the Interprofessional Diabetes Clinic Resource Center.

This is your source of information about the IDC clinic. There are several important general, as well as profession-specific, informational documents you should view or download, under General Important Information, to learn more about what to expect from your clinic experience.

Thank you for your participation in this interprofessional experience!

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- Patient Presentation PPT Template File
- Patient Case Presentation Format File
- IDC Patient Service Card File
- Terminology: Common terms used by the professions in IDC File
- Dental Hygiene Protocols File
- Optometry Protocols File
- AOA Practice Guidelines for Patients with Diabetes File
- Using an Interpreter File
- Overview of Health Professions in the IDC File
- Compulink Training Module Link Folder
- Occupational Therapy Protocols, Forms & Information Folder
- Instructions for Downloading Citrix File
- Psychology Resources Folder
- Physician Assistant Resources Folder
- Eating Healthy on a Budget: Resource List File
- Support for the community Folder
- Patient Health Questionnaire (PHQ-9) File

Targeted ASCO Graduate Attributes: PE2; PE3; PE4; PE6; PE7; PE8, KK5; KK8; KK9, CC3; CC5; CC7; CC9; CC10; CC12; CC13

Targeted IPEC Core Competencies (2016 update**):** VE1; VE2; VE3; VE4;VE5; VE6; VE7; VE8; VE9; VE10, RR1; RR2; RR3; RR4; RR5; RR6; RR7; RR8; RR9; RR10, CC1; CC2; CC3; CC4; CC6; CC7; CC8, TT3; TT4; TT5; TT7; TT10

Lessons Learned in Planning and Implementing this Project:
The initial planning and the early implementation phase required frequent meetings over the first year. Faculty members first needed to understand and embrace the IP Core Competencies for themselves, establish consensus on protocols for care, referrals for advanced care, and principles of teamwork, and understand each other's roles, scopes of practice, and responsibilities. Faculty already passionate about interprofessional practice (IPP) remained the champions and inspiration for the project.

The unique advantages of the coordinated interprofessional team-based practice, recognized by the faculty early in the operation of the clinic, fully emerged during the afternoon patient case discussions:

- the opportunity for development of a more comprehensive patient history and life story when gathered within the different contexts of each profession, which aided in the development of a more comprehensive management plan;
- more opportunities for patients to express, and providers to identify, problems and key barriers to successful self-management;
- delivery of consistent, coordinated patient education; and,
- the sharing of information and multi-faceted perspectives on treatment that each profession would not have gathered, nor devised, independently.

These factors led to enhanced coordination, prioritization and modification of treatment plans as a team to optimize adherence, patient self-management, quality of care, and quality of life (Aamodt, et al., 2010). Students participating in the IDC reported that they benefited from interactions with other student professionals, gaining better knowledge of their roles. Our surveys showed the overall IDC experience increased student appreciation of the value of interprofessional patient care delivery. Students felt that the case conference was valuable—often the best part of the experience—and added to their understanding of the challenges of living with chronic disease and needs of patients with diabetes. However, there was room for improvement in the actual format and efficiency of the afternoon sessions. Modifications regarding the presentation style, including use of a presentation template available on the Moodle IDC Resource Center, and stricter time management for each case, have addressed these concerns.

The major challenges implementing the IDC include scheduling a time when already very busy professional students and faculty from the different programs, and the clinical facilities, are all available. Conducting clinic on Saturday, also convenient for the patient population, has largely alleviated the facilities availability problem. However, Saturday clinics are not, in general, popular with faculty. The most significant improvement has been the transition to providers who supervise students as part of their faculty contracts, but on a rotating basis. This consistency and built-in flexibility in staffing has helped foster continuity and consistency in process and procedures, use of the EHRs, and a renewed commitment to the ongoing success of the IDC.

Another challenge has been maintaining patient comfort with the increase in number of practitioners and students in the examination room during evaluations. Faculty and students are continually reminded to be mindful of patient comfort with multiple providers, including the interpreter, in the room at the same time. The bi-lingual, bi-cultural patient Care Coordinator is paramount to the success of the IDC given our patient population. Patient no-show rates have been low due to the outreach, rapport and trust she has developed within the community and with our patients. Lastly, due to the scheduling constraints, the IDC experience, a requirement for some programs, is not required for all the professional programs but offered on a volunteer basis to students.

Future plans include offering more frequent clinics as scheduling permits, including weekdays, to accommodate more patients, and eventually provide hands-on clinical opportunities in interprofessional practice for all of Pacific University's professional students.

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Firehouse Shelter Screening Clinic and Wellness Education
University of Alabama at Birmingham

Type of Project: Clinical Education

Description of the Project: "The mission of the Cooperative Downtown Ministries, Inc. is to provide to homeless men, ages 18 and older, in the Birmingham Area a nurturing and caring environment offering supportive services that break the cycle of homelessness and empower individuals to achieve their highest potential."

The Firehouse Shelter was founded in 1983 as an outreach program of The Cooperative Downtown Ministries. To help care for men at the Shelter, it is important to encourage that they take care of themselves, including their eye and vision care needs. Fourth year optometry interns perform advanced vision screenings for men at the Firehouse Shelter in an interdisciplinary setting. The optometry interns collaborate with students in the following University of Alabama at Birmingham healthcare programs: Physician Assistant, Occupational Therapy, Physical Therapy, Healthcare Management, and Clinical Laboratory Science.

Why the Project was Selected: The homeless population is more likely to die prematurely, have heart disease, and suffer a stroke or heart attack. Life on the streets is brutal with no stable shelter, no stable food, no stable food, and no stable healthcare. The Firehouse Shelter is a unique homeless shelter in that its mission is to help the chronically homeless. The Shelter serves the Birmingham area and six surrounding counties. The Firehouse Shelter clinic was created to help address the need for stable healthcare. Men at the Shelter are trying to get back on their feet and off the streets. In order to do so, they need good overall health including good ocular health and vision. It is also important for the students to learn how to properly educate patients. The "Wellness Wednesdays" initiative at the Firehouse Shelter helps to accomplish this. Students from optometry, occupational therapy, and nutrition educate the Shelter residents on important issues pertaining to men's health.

Learning Objectives:

- To deliver eye and vision care to guests of the Firehouse Shelter in an interdisciplinary setting.
- To learn how to collaborate with other health care professionals in the overall health of the patient.
- To participate in the education of the residents at the Firehouse Shelter on topics important to men's health.
- To learn compassion for your patients and the need to treat all people with respect and dignity.

Targeted Participants: Professional students and faculty from the University of Alabama at Birmingham in the following programs:

- Physician Assistant
- Clinical Laboratory Science
- Healthcare Management
- Optometry
- Nutrition
- Occupational Therapy
- Physical Therapy
- Public Health

Targeted Learning Level: Immersion / Development

Timeframe of the Project: Year round- 1st and 3rd Wednesday- Clinic; 2nd and 4th Wednesdays- wellness education

Pre-Work for Students: Prepare for the "Wellness Wednesday" presentations. Students choose the topic and lead the presentation and subsequent discussion.

Targeted ASCO Graduate Attributes: PE2; PE3; PE4; PE6; PE7; PE8, KK5; KK8; KK9 , CC1; CC2; CC3; CC5; CC7; CC9; CC10; CC12; CC13

Targeted IPEC Core Competencies (2016 update): VE1; VE2; VE3; VE4;VE5; VE6; VE7; VE9; VE10, RR1; RR2; RR3; RR4; RR5; RR6; RR7; RR9, CC2; CC3; CC4; CC5; CC7; CC8, TT3; TT4; TT5

Lessons Learned in Planning and Implementing this Project:
Communication is essential.

Exemplar IPE Project Submitted by:

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Section 3.3 IPE Exemplar Projects: Extracurricular / Orientation / Social Activities

The following IPE Exemplar Extracurricular / Orientation / Social Activities Projects were submitted by ASCO member institutions and are included in Section 3.3 (the Projects are listed in alphabetical order by institution):

Interprofessional Poverty Simulation
Ferris State University

Type of Project: Extracurricular / Orientation / Social

Description of the Project: A Poverty Simulation is a group-based experience designed by the Missouri Association for Community Action in which students are assigned a "family" role, such as a mother, father or child. Families are provided information as to their specific situation, including employment and income. Within the experience, there are multiple sessions. Each session simulates a day in the life of the family struggling to survive in poverty.

Around the room, tables are set up representing businesses, organizations and agencies. Using the provided family income, each family must fulfill the responsibilities of daily life by visiting the necessary tables around the room. Transportation requires a transportation pass. Daily needs such as employment, groceries, paying bills, school, daycare, healthcare, and more are available around the room. Throughout the experience, life detours may happen, needing a reassessment of priorities just like in the real world.

After the sessions, students gather in larger groups to discuss the experience, share their struggles and triumphs, and discuss how the experience may or may not have changed perceptions on life in poverty. The goal of the experience is to create awareness and empathy for those living in poverty as our future patients or clients in our chosen fields.

Why the Project was Selected: The Poverty Simulation was chosen because of the impact of this issue societally but also because of the importance of health professional students and providers being aware of, and sympathetic to, the issues surrounding poverty that their patients / clients face. The group-based design of the Simulation provides a natural opportunity for interprofessional education, with students from different programs comprising the simulated "families."

Learning Objectives: Student averages on the completed Poverty Simulation surveys should improve pre- to post-event in each of the following categories:

- I have an appreciation for the struggles associated with living in poverty.
- I have experience in using creativity and problem-solving skills together with other healthcare professionals.
- I have communicated with students in other health professions.
- I understand why healthcare is sometimes neglected in situations of poverty.
- I am comfortable with interprofessional simulation as a learning experience.
- I feel empathy for patients living in poverty and the working poor.
- I will be a better optometrist/pharmacist/nurse/social worker if I understand living in poverty.

Targeted Participants: First and third year students in optometry, second year pharmacy students, and nursing and social work students in various program years

Targeted Learning Level: In the area of Collaboration, this was a first Exposure experience as to how professions may best address issues of poverty.

In the area of Communication, this was an Exposure experience and Immersion activity in that it was both building knowledge in how professions may communicate with other professions but also with patients living in poverty. It also immersed students in a simulation of living through poverty.

In the area of Values and Ethics, the event was an Exposure experience to first introduce interprofessional students to a life of poverty; however, for many it was more of an Immersion activity since they noted they had personally experienced poverty.

Timeframe of the Project: The Poverty Simulation was an event conducted twice, once in the fall semester and once in the spring semester. First year optometry students participated in the fall event, and third year optometry students participated in the spring event.

Preparation by Faculty: The optometry event coordinator attended training prior to the Simulation, applied for an interprofessional grant to purchase the kits with colleagues from other programs, performed scheduling, introduced the Simulation to students, and provided them with pre-event information. The faculty coordinator of the course in which the Poverty Simulation occurred was also involved in pre-event instruction. Other faculty from the Michigan College of Optometry (MCO) at Ferris State University were invited to attend and volunteer at the event. Volunteers were provided with instructions by email prior to the Simulation and in-person on the day of the event.

Pre-Work for Students: None, however the pre-Simulation information provided to students follows this Exemplar.

Targeted ASCO Graduate Attributes: PE1, PE2, PE3, PE4, PE5, PE6, PE7, PE8; KK8, KK9; CC7, CC9, CC10, CC12, CC13

Targeted IPEC Core Competencies (2016 update**):** VE1, VE2, VE3, VE4, VE5, VE6, VE7, VE8, VE9; RR2, RR3, RR4, RR7, RR9, RR10., CC3, CC4, CC5, CC6, CC7, CC8; TT2, TT3, TT4, TT6, TT8, TT11.

Lessons Learned in Planning and Implementing this Project: Although there can be difficulty in planning and implementing IPE projects, it can be successfully accomplished with a dedicated team. The biggest barriers to implementation were funding needs, scheduling conflicts among programs and internally within colleges/programs, engaging students when they were taking some of their free time to participate, and navigating the sensitive topic of poverty. We had students who felt uncomfortable in the Simulation because they had lived or were living in poverty, so we approached this carefully and with an introduction prior to the event. Asking students to complete pre- and post-Simulation surveys was important to measure outcomes and make future improvements, but students did not enjoy this component of the event.

We also learned what works well and what does not work well for the Poverty Simulation. For instance, in future iterations we will have more volunteers working at certain stations that were most busy. We also learned that we must emphasize that this is a simulation and therefore not perfectly realistic.

Overall, the Poverty Simulation survey results speak to students enjoying and learning a great deal from the experience and feeling it should continue. Post-event survey comments from the students were fascinating.

Exemplar IPE Project Submitted by:

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Reference:
Poverty Simulation, the Missouri Association for Community Action
www.povertysimulation.org

FERRIS STATE UNIVERSITY
Michigan College of Optometry

Poverty Simulation Experience
Fall 2018

What: A poverty simulation is an interprofessional, group-based experience where students from different programs and backgrounds are assigned a "family" role, such as a mother, father or child. Families are provided information as to their specific situation, including employment and income. Within the experience, there are multiple sessions. Each session simulates a day in the life of the family struggling to survive in poverty.

Around the room, tables will be set up representing businesses, organizations and agencies. Using the provided family income, each family must fulfill the responsibilities of daily life by visiting the necessary tables around the room. Transportation requires a transportation pass. Daily needs such as employment, groceries, paying bills, school, daycare, healthcare and more are available around the room. Throughout the experience, life detours may happen, needing a reassessment of priorities just like in the real world.

After the sessions, students will gather in larger groups to discuss the experience, share their struggles and triumphs and discuss how the experience may or may not have changed perceptions on life in poverty. The goal of the experience is to create awareness and empathy for those living in poverty as our future patients or clients in our chosen fields.

A research study is being performed on the perceptions related to the event before and after it takes place. Your participation in this research is voluntary and no negative consequences will result if you choose not to participate. Your responses will be kept anonymous and will only be identified by college and in aggregate.

Ground Rules:

- Come to the experience open-minded and willing to engage.
- Follow the instructions provided and work as a team within your family.
- Be aware that the experience can be emotionally stimulating or draining for some students.
- If you have experienced or currently experience poverty, please be aware that this is not meant to be entirely realistic, only a way to simulate struggles within a short, given time-period.
- Remain open to sharing the experience with your group afterwards. The debrief period is one of the most valuable parts of the experience.
- Make note of how living in poverty leads to stress and how it may affect the way you are treated by others.

When/Where: Friday, October 26 at the Ferris State University Center in Ballrooms 202A/B. Check in at the table outside of the room when you arrive for your family assignment and pre-event survey.

How: Your schedules have been made to accommodate this event. You may walk over or, if driving is necessary, limited parking is available on campus in the University Center lot.

Why: By participating, you are preparing yourself for your future clinical experience in working with patients from different socioeconomic backgrounds. The experience helps to build empathy and serves to create awareness and compassion. It is also an interprofessional event. This means that you are working in groups with other students you do not know in order to engage with students from other programs, particularly those in health care. In the end, it is meant to support your personal and professional development as a healthcare provider.

IPE Social Activities
Marshall B. Ketchum University

Type of Project: Extracurricular / Orientation / Social

Description of the Project: The purpose of the IPE social activities at Marshall B. Ketchum University (MBKU) is to provide an opportunity for all students to interact in an informal setting. The intent is to reduce barriers for interactions.

Why the Project was Selected: During the planning phase of developing an Interprofessional Health Care University, a more relaxed and informal environment (social) component was developed as a supplement to the didactic and clinical activities.

Participating in on-campus social activities enables students to meet people who share common interests and individuals who can help them academically, or even professionally. Relationship-building is a good life skill for students to learn because of needed experiences such as negotiation, communication, and networking.

Learning Objectives:

1. To provide opportunities to meet and greet all MBKU students in a more relaxed and social environment
2. To provide a venue for students to "take a break" from the rigors of academic demands
3. To develop relationship-building skills
4. To develop students skills in emotional intelligence
5. To recognize, relate, and discuss various at-risk lifestyle situations

Activities:

1. Informal Events
    a. All-student BBQ
    b. All incoming students - bowling with their peer advisors
    c. Italian Ice event during the 1st year Professional Ethics class
    d. MBKU 5-year celebration
    e. Ice cream events during the year sponsored by the Office of Student Affairs
    f. Health information week – daily interprofessional activities
2. First Year Population Health Course (Students from Optometry, Pharmacy, Physician Assistant)
    a. Poverty simulation – students participate as a typical low income family and the situations that are encountered in daily life situations
    b. Disaster simulation – students participate in a simulated disaster situation

Targeted Participants: MBKU Students (Optometry, Pharmacy, Physician Assistant). Typically, first year students are the targeted participants, but for informal events all student cohorts invited.

Targeted Learning Level: Exposure / Introduction

Timeframe of the Project: Most of the IPE social activities are scheduled during the fall quarter before coursework intensifies. However, these activities are also scheduled throughout the year to continue the spirit of IPE.

Preparation by Faculty: The IPE social activities are coordinated by the Office of Student Affairs. The population health IPE activities are coordinated by the instructors of the first year Public Health / Population Health course.

Pre-Work for Students: There is no student pre-work for the informal events. There are reading assignments for the population health simulations.

Targeted ASCO Graduate Attributes:
PE4, PE8
KK8, KK9
CC10, CC12, CC13

Targeted IPEC Core Competencies (2016 update): VE6, RR7, CC4, TT3, TT11

Lessons Learned in Planning and Implementing this Project: There were initial barriers to cross-campus interaction because each program felt more comfortable to have their own event. With leadership support from MBKU Administration to create a culture of collaboration across health professions, the IPE social activities became easier to create.

The greatest logistical challenges were to coordinate schedules between programs.

Exemplar IPE Project Submitted by:

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University of Pikeville and Appalachian College of Pharmacy Interprofessional Workshop

Type of Project: Extracurricular / Orientation / Social

Description of the Project: For optimum patient care, it is essential for health care professionals to collaborate as a team. The University of Pikeville and the Appalachian College of Pharmacy have identified this essential need and have addressed this need by partnering in a multi-college interprofessional collaboration. Once a semester, students from the University of Pikeville's Kentucky College of Osteopathic Medicine, Kentucky College of Optometry, Elliott School of Nursing, College of Arts and Sciences Social Work program, and the Appalachian College of Pharmacy participate in an interprofessional workshop. In the past, the workshop has included clinical cases where the students must work together to help treat a patient and simulations with high-fidelity robotic simulators manufactured by Laerdal. This past semester, the workshop consisted of a mass casualty incident where students had to triage, transport, and treat individuals.

Why the Project was Selected: Since 2015, the University of Pikeville and the Appalachian College of Pharmacy have conducted a bi-yearly workshop to meet curricular requirements for some of the programs and to emphasize the importance of interprofessional collaboration between professions. Originally, osteopathic medicine, nursing, social work, and pharmacy students were involved in the workshop; optometry students were included in the fall of 2018. Students from each of the professions were placed into small groups. Each group was provided a patient case; portions of the case were presented into three parts. For each part, the students analyzed the data provided, ordered additional tests, and determined how to treat and manage the patient before the next portion of the case was revealed. Faculty members from each of the colleges served as facilitators for the groups. As the conference evolved and included feedback from students and faculty members, simulations were added to the workshop. Students worked as a group to care for their simulated patient.

In the Spring 2019 semester, with the desire to change the workshop structure and following recent tragic events, the workshop was adjusted to center around a simulated mass casualty incident: at the local area fair, a row of seats on the gondola ride fell off and landed on a nearby row of food vendors. Students were again divided into groups and rotated through four different stations.

Station 1 Triage: students determined how to triage care on-site of the incident.
Station 2 Treatment: students treated injured patients at the site of the incident.
Station 3 Transport: students assessed patients to determine which hospital services would best address their needs.
Station 4 Hospitalization: students developed treatment plans for the individuals who arrived at the hospital.

Learning Objectives:
The learning objectives for these workshops were:

- Discuss the educational and clinical backgrounds of various health care providers
- Demonstrate team-based learning in an interprofessional environment
- Demonstrate respect for other health care professions
- Demonstrate the confidence and ability to communicate effectively with other health care providers
- Apply evidence-based knowledge for clinical decision making
- Introduce students to the basic principles of Mass-Casualty Incident (MCI) management and patient care, including the Simple Triage and Rapid Transport (START) trauma triage system
- Familiarize students with the signs and symptoms of acute stress, the concept of Stress Inoculation, and basic stress management techniques including "circular" or "tactical" breathing

Targeted Participants: Students enrolled in the following programs: osteopathic medicine, optometry, nursing, social work, and pharmacy. Depending on the semester, students are enrolled in the first, second, or third year of their program.

Targeted Learning Level: Exposure / Introduction and Immersion / Development

Timeframe of the Project: The workshop occurs once per semester. Students participate in one of two half days each semester.

Preparation by Faculty: Each workshop is developed by an IPE Planning Committee which consists of faculty members from the University of Pikeville's Kentucky College of Osteopathic Medicine, Kentucky College of Optometry, Elliott School of Nursing, College of Arts and Sciences Social Work program, and the Appalachian College of Pharmacy. The committee meets throughout the year to plan each workshop. The University of Pikeville's statistician is also involved to provide data from the event. Faculty members from each institution are also involved with facilitating. Faculty members are provided a training guide and orientation prior to the workshop.

Pre-Work for Students: Students are given a pre- and post-survey assessing their skills and preparation for the workshop, as well as feedback on their experience with the workshop. More specifically, the surveys assess student academic ability, professional competency, interpersonal skills, leadership abilities, ability to work independently, ability to be a team player, ability to make decisions, practice skills, and confidence, as well as their perception of the other professionals for each of these categories. Students are also asked to indicate pertinent training they have received to prepare them for the workshop (i.e., BLS, EMT).

Targeted ASCO Graduate Attributes: PE2, PE3, PE4, PE5, PE6, PE7, PE8, CC2, CC3, CC7, CC8, CC9, CC10, CC11

Targeted IPEC Core Competencies (2016 update): VE4, VE5, VE6, VE7, RR1, RR2, RR3, RR4, RR5, RR7, RR8, RR9, CC2, CC3, CC4, TT3, TT5, TT8, TT11

Lessons Learned in Planning and Implementing this Project: Originally, the IPE workshop began as an accreditation requirement by some of the involved programs. However, following implementing the IPE workshop, the goals of the program have expanded in order to address the need for a more team-based health care approach to enhance patient care. The workshop has evolved from simple cases to added simulations to role playing in a mass casualty incident to encourage more communication between professions and to allow each program to utilize their strengths to help patients. The biggest struggle from the IPE Planning Committee is to create a patient case and workshop structure where patient care is not heavily reliant on one profession over another. The committee has utilized the survey results from students and faculty facilitators to work towards greater involvement from each student body for each workshop scenario. The committee will continue to utilize the surveys and create other activities to encourage improved interprofessional collaboration and to provide students with a variety of team-based learning opportunities.

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Workshop Website for students and facilitators:
https://sites.google.com/acp.edu/ipe2019

Interprofessional Education Day
University of Waterloo, School of Optometry and Vision Science

Type of Project: Extracurricular / Orientation / Social

Description of the Project: An annual Interprofessional Education Day, known as "IPE Day," has been established between the University of Waterloo and Western University of Ontario. IPE Day provides an opportunity for learners to work through interprofessional case examples and engage in different discussions with the focus on improving skills within the IPE core competencies. This is accomplished through three main activities:

1. A patient / care team panel
2. A stereotype activity where biases about professional groups are explored
3. A facilitated case discussion involving groups of students from different programs addressing the case through the lens of their profession.

Why the Project was Selected: This project was selected because it highlights the importance of introducing interprofessional collaboration in the first year of a health professional program. Over the past 15 years, Canadian healthcare services have been organizing clinical practices to function more harmoniously in interprofessional teams. Interprofessional teams are defined as groups of professionals that work collaboratively to enhance patient centered care. This team-based care is organized to better meet population needs and to provide improved service integration and co-ordination of different health professions. In order to effectively develop the skills necessary to collaborate outside of a specific profession's expertise, health professionals need to work outside the scope of their own professional identity and learn about the expertise and values of other health disciplines.

Interprofessional educational (IPE) programs have been established in health professional programs such as medicine, dentistry, pharmacy, optometry and social work. Ideally, IPE should be set within collaborative practice settings where learners can be exposed to practical educational experiences. It is thought that if learners are trained to be competent collaborative practitioners, more collaborative practice settings will be developed over time, which will ultimately enhance patient outcomes, improve system effectiveness and reduce healthcare costs. To facilitate the outcome of a collaborative practice, the implementation of true IPE activity should be introduced in the first year of a health professional program curriculum.

Learning Objectives: At the conclusion of IPE Day, first year health professional learners will be able to:

- Explain their role within a health care team
- Describe the role of other health professions within a health care team
- Discuss the importance of interprofessional collaboration within patient care

Targeted Participants: First year health professional learners from medicine, dentistry, pharmacy, optometry, nursing and social work. A total of approximately 500 students attend the event; 90 are first year optometry learners.

Targeted Learning Level: Exposure / Introduction, Immersion / Development

Timeframe of the Project: one day, winter term, first year

Preparation by Faculty: Approximately 5-8 faculty from each of the health professions facilitate IPE Day (40 total). Ahead of IPE Day, faculty are provided with a 2 hour in-person workshop reviewing the IPE core competencies, the objectives of IPE Day, and guidance on how to facilitate the case discussion.

Pre-Work for Students: There is no specific pre-work for the students. An IPE Day website (https://ipeday2018.weebly.com/) has been created to provide information to all first year health professional learners attending the event. The students are encouraged to review the website at least one week prior to attending IPE Day.

Targeted ASCO Graduate Attributes: PE4, PE5, PE6, PE8, PE9

Targeted IPEC Core Competencies (2016 update**):** VE1, VE2, VE3, VE4, VE5, VE7, VE8, VE9, VE10,RR2, RR3, RR4, RR5, RR6, RR7, RR9, RR10, CC3, CC4, TT3, TT6, TT7

Lessons Learned in Planning and Implementing this Project: Overall, IPE Day has received positive feedback from all attendees (learners and facilitators). To help evaluate the pre- and post-attitudes regarding interprofessional collaboration, all learners complete the Interprofessional Collaborative Competency Attainment Survey (ICCAS). Results from the Survey and qualitative feedback have resulted in helpful modifications to IPE Day to better meet the learning objectives. Future activities are also planned for years 2 – 4 to further facilitate the outcome of collaborative practice.

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References:

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Section 4: IPE at Externship Sites

The materials in this section were developed by members of ASCO's Externship Directors Special Interest Group for use at externship sites.

They include:

IPE Student Checklist
A checklist for students to use when assigned to a program that provides interprofessional collaborative practice opportunities.
Page 74 - 77

IPE Preceptor Checklist
A checklist for preceptors that lists IPE-related activities that help students develop their collaborative practice skills.
Page 78 - 80

IPE Case – Student Version
A case that incorporates interprofessional care. Students are to review and answer the questions in the case, which will assist in the continued development of students' collaborative practice skills.
Page 81 - 85

IPE Case – Preceptor Version
The same case presented so that preceptors can facilitate discussion. This includes the answers to the questions in the Student Version.
Page 86 - 95

Section 4.1 IPE Student Checklist

IPECP Student Checklist - Jaymeni Patel & Greta Gregg

1. Students may choose a case that they saw at the practice OR may have an IPE case provided to them by the school
    a. Case examined/observed by the student at an externship site.
        i. Complete the checklist.
        ii. Use the obtained case information to compile a case report discussing patient management by each profession. This may be completed as a:
            1. Written case report
            2. Grand Rounds style presentation
    b. Provided IPE case by school.
        i. Complete the checklist using the provided case.
            1. Observed by your preceptor when applicable
        ii. Use the obtained case information to compile a case report discussing patient management by each profession.

            This may be completed as a:
            1. Written case report
            2. Grand Rounds style presentation

IPE Communication Checklist

	YES	NO
Write a referral letter	☐	☐
Write a courtesy letter	☐	☐
Write an order for additional testing (i.e., bloodwork, imaging, etc.)	☐	☐
Phone call to a healthcare provider	☐	☐
Phone call to pharmacist	☐	☐
Observation of specialist (if applicable to practice)	☐	☐
Communication with company representatives (i.e., product, instrument, pharmaceutical)	☐	☐

Student checklist:

1. Case seen by the student.
    a. Observation of specialist if the site allows.
    b. List of recommended testing: bloodwork, imaging, etc.
    c. Letter to PCP/specialist.
    d. Mock call to PCP, specialist and/or pharmacist

2. IPE Case provided by the school.
    a. Review PAM case provided by the school and complete the exercise with the preceptor.

3. Adopt a patient.
    a. This could be achieved in a community health or hospital-based experience.
    b. The student would select a patient that they have seen in the clinic and then accompany that patient to visits with other health care providers or chart review if they are unable to accompany the patient.
    c. The student would then compile a report to discuss how the patient was cared for in each clinical setting either as a written case report or grand rounds style presentation.

4. Types of Communication (Examples):
    a. Referral Letter
        i. Give guidelines with appropriate, technical language and concise information for the person you are referring to.
    b. Courtesy Letter
        i. Keeping another provider informed regarding the referred patient regarding patient care provided, treatment, and management.
        ii. Thank you letter.

Student checklist, continued:

- **c.** Phone Call
  - i. Conduct a mock version of a phone call.
- **d.** Talking to Representatives
  - i. Communicating regarding the product (contact lens orders), instrument, or pharmaceutical representatives.
- **e.** Talking to Pharmacists
  - i. Communicating about medications a patient has been prescribed.
    - Side effects, generic, formularies, prior authorizations

5. Case Presentation

- **a.** Student completes a case presentation to preceptor, staff, and/or other students.

Review of Conditions

Diagnosis	
Co-Managing Doctors	
Epidemiology	
Pathophysiology	
Clinical Manifestations	
Treatment/ Management	

Section 4.2 IPE Preceptor Checklist

IPE Information for Preceptors

Background Information

IPE Team Member Skills to Exhibit:

- Initiating: Proposing tasks, goals, or action, defining group problems, suggesting a procedure.
- Seeking Information: Asking for opinions, facts, and feelings.
- Giving Information: Offering facts, giving an opinion or idea.
- Clarifying: Interpreting or elaborating on ideas; asking questions in an effort to understand or promote understanding.
- Summarizing: Pulling together related ideas; restating suggestions; offering a decision or conclusion for consideration.
- Consensus taking: Asking if a group is nearing a decision; restating suggestions; offering a decision or conclusion for consideration.
- Accountability: Taking responsibility for contributing and completing tasks.

IPE Preceptor Checklist

IPE Preceptor Checklist	Completed	Comments
Type of IPE	☐ Referral letter ☐ Courtesy letter ☐ Order testing ☐ Phone call to pharmacy ☐ Phone call to health care provider ☐ Observation of another discipline ☐ Communication with industry representative ☐ Case study	
Did the student...		
Accurately identify what health-care professionals should be involved in the patient's care?	☐ Yes ☐ No ☐ N/A	
Identify pertinent information about the patient to be communicated?	☐ Yes ☐ No ☐ N/A	
Provide appropriate information regarding their patient when communicating?	☐ Yes ☐ No ☐ N/A	
Use appropriate language?	☐ Yes ☐ No ☐ N/A	
Communicate professionally?	☐ Yes ☐ No ☐ N/A	
Respect the patient's HIPAA rights as indicated?	☐ Yes ☐ No ☐ N/A	
Ask appropriate/relevant questions?	☐ Yes ☐ No ☐ N/A	
Allow for open discussion?	☐ Yes ☐ No ☐ N/A	
Take responsibility for any tasks that need to be completed regarding patient's case?	☐ Yes ☐ No ☐ N/A	

Reflection Questions to Ask Student:

Pre/During encounter

1. What are the short-term and long-term goals for the patient?
2. What healthcare professionals should be involved in the plan of care?
3. What are the discipline-specific roles and responsibilities in the patient's care plan?
4. What is the best way to communicate with other healthcare professionals regarding this patient?

Post encounter

1. What teamwork and communication skills were used during this encounter?
2. Were there any areas of communication that could have been improved to ensure patient safety/prevent medical error?
3. How can members of the IPE team support each other in implementation of the patient's care plan?
4. How does the wellness of each team member play a role in the overall function of the team?

Section 4.3 IPE Case - Student Version

CASE 1: FEEL THE PRESSURE
by Jaymeni Patel, OD, FAAO

Demographics
29 year-old African American female
Chief complaint
Decreasing vision
History of present illness
Character/signs/symptoms: blurred vision
Location: OU, OS>OD
Severity: mild
Nature of onset: gradual
Duration: 3-4 months
Frequency: constant
Exacerbations/remissions: none
Relationship to activity or function: none
Accompanying signs/symptoms: none
Secondary complaints/symptoms
None
Patient ocular history
Unremarkable per patient
Family ocular history
Unremarkable per patient
Patient medical history
Unremarkable per patient
Medications taken by patient
None per patient
Patient allergy history
NKDA
Family medical history
Unremarkable per patient
Review of systems
Constitutional/general health: headaches
Ear/nose/throat: (+) tinnitus
Cardiovascular: denies
Pulmonary: denies
Dermatological: denies
Gastrointestinal: denies
Genitourinary: denies
Musculoskeletal: denies
Neuropsychiatric: denies
Endocrine: denies
Hematologic: denies
Immunologic: denies

Mental status

Orientation: oriented to time, place, and person
Mood: appropriate
Affect: appropriate

Clinical findings

VA Distance (sc)

OD: 20/20
OS: 20/30-; PHNI

Pupils: PERRL, negative RAPD
EOMs: full, no restrictions
Confrontation fields: full to finger counting OD, OS
Slit lamp:

lids/lashes/adnexa: 2+MGD OD, OS
conjunctiva: normal OD, OS
cornea: clear OD, OS
anterior chamber: deep and quiet OD, OS
iris: normal OD, OS
lens: clear OD, OS

IOPs: 14 mmHg OD, 14 mmHg OS @ 2:00 PM by GAT
Fundus:

See photos OD, OS

Blood pressure: 120/76 mmHg, right arm, sitting
Height: 5'2
Weight: 190 lbs.

Review of Conditions

Diagnosis	
Epidemiology	
Pathophysiology	
Clinical Manifestations	
Treatment/ Management	
Other Comments	

Reflection Questions to Ask:

1. What additional testing is indicated during today's exam?

2. What additional testisng would you like to refer the patient out for?

3. Please describe stages of papilledema?

4. Who do you believe should be included in this patient's care and why?

5. Please provide a script to the pharmacy.

6. Please write a letter to the primary care doctor regarding this case and additional testing you may require.

7. Please review the journal article provided for this case.

Section 4.4 IPE Case - Preceptor Version

Background about the patient

- Demographics: 29-year-old African American female
- CC: decreased vision OU at distance and near without correction on. Patient does not wear glasses and symptoms started 3-4 months ago
- MHx: unremarkable per patient
- OHx: unremarkable per patient
- Medications: No medications.
- Allergies: NKDA

Additional Information

- If the student has additional questions
  - *(+)HA, tinnitus*
  - *(-)TVO, diplopia, nausea*

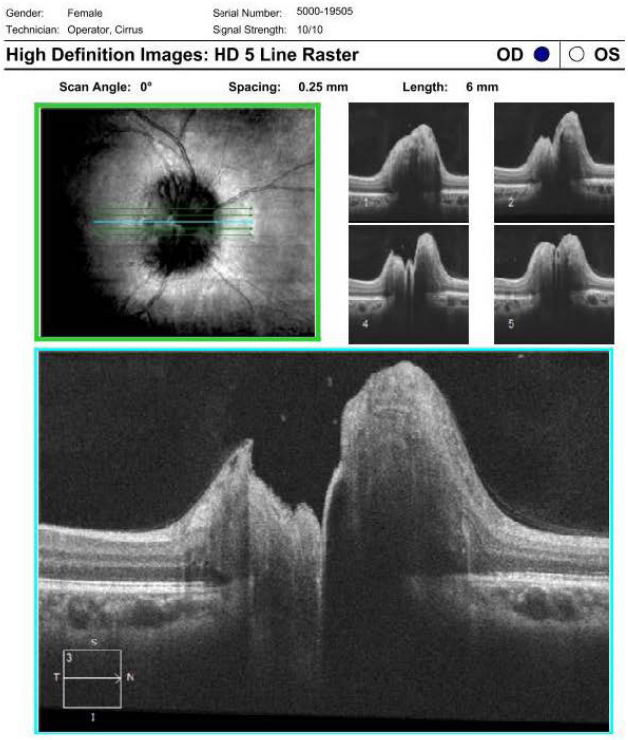
Work Up

OD	Test	OS
20/20	VA (sc)	20/30-; PHNI
pupils equal, round, reactive, no APD	Pupils	pupils equal, round, reactive, no APD
confrontation fields full to finger counting	Confrontation Visual Fields	confrontation fields full to finger counting
EOM is full	Extra Ocular Motility	EOM is full
2+MGD	Slit Lamp (pertinent findings)	2+MGD
14 mmHg	GAT IOPs @ 2 PM	14 mmHg
See photos	DFE (pertinent findings)	See photos
Blood Pressure: 120/76 mmHg RAS		
Height: 5'2		
Weight: 190 lbs.		

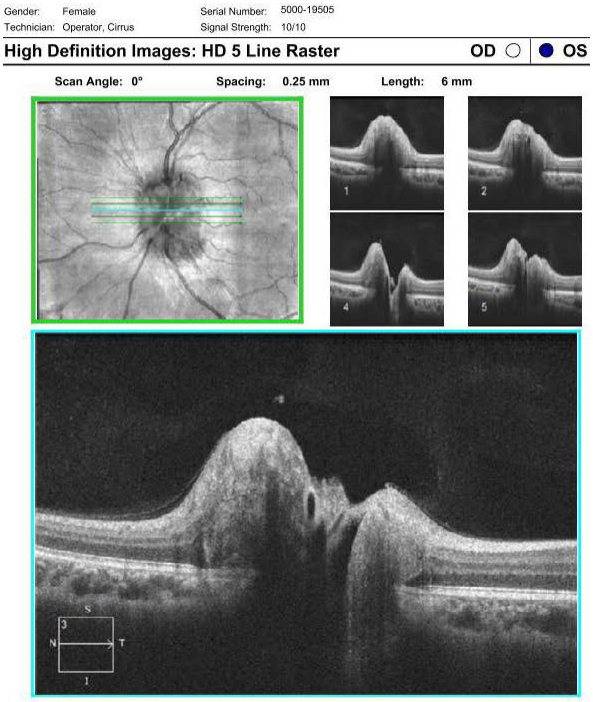
Ancillary Testing: Optos Photo OD

Ancillary Testing: Optos Photo OS

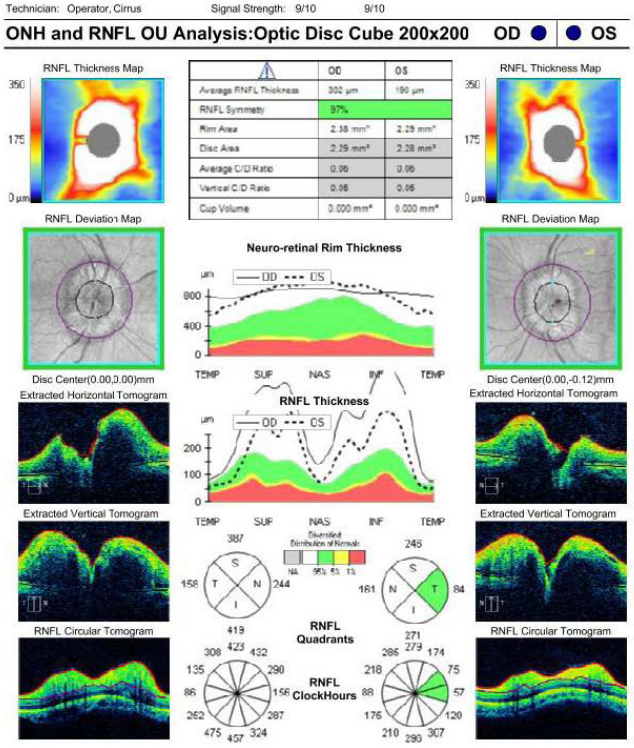
Ancillary Testing: OCT OD



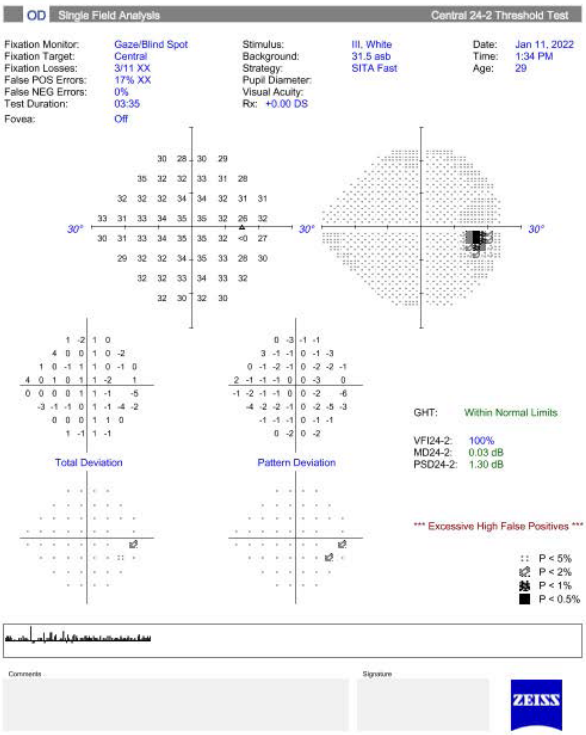
Ancillary Testing: OCT OS



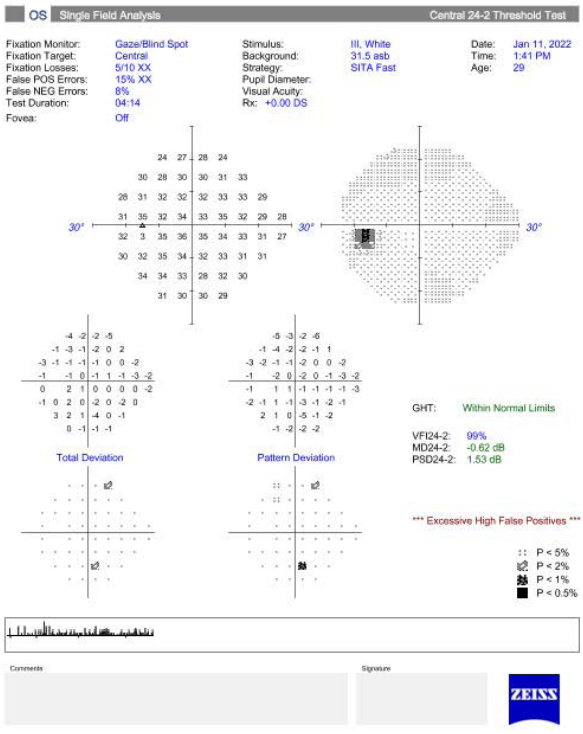
Ancillary Testing: OCT OU



Ancillary Testing: HVF OD



Ancillary Testing: HVF OS



Diagnosis/Management

- Increased Intracranial Hypertension OU
  - Confirm with imaging/LP
  - Comanage with PCP, neuro-ophth, neurology, nutrition specialist

Lab Orders (if applicable)

- LP
  - Diagnostic and therapeutic
- Bloodwork if deemed necessary

Image Orders (if applicable)

- MRI/MRV of Brain and Orbits with and without contrast

MRI Results

TECHNIQUE: Whole brain sagittal T1, axial ADC/DWI, T1, T2, FLAIR, GRE weighted images with postcontrast axial
T1 MTC and coronal T1 weighted images. Thin section axial T1, T2 FS, coronal T1, STIR weighted images through
the orbits with postcontrast axial and coronal T1 FS weighted images was performed. 20 cc of Dotarem were infused intravenously. There were no immediate complications.

FINDINGS:

MRI BRAIN: The ventricles and sulci are normal. There is no midline shift, mass effect, extra-axial fluid collection, acute intracranial hemorrhage, diffusion signal abnormality to suggest acute infarct, or abnormal brain parenchymal enhancement. A small developmental venous anomaly in the posterior paramedian left occipital lobe is noted. The craniocervical junction is intact. The pituitary gland is flattened along the floor of the sella. The remaining midline structures are unremarkable. The dominant intracranial flow voids are present. There is no T2 hypertense fluid level within the visualized paranasal sinuses or mastoid air cells.

MR orbits: The optic nerve sheath complexes are mildly tortuous and dilated. There is posterior scleral flattening. The optic chiasm is preserved. The extraocular muscles are symmetric and unremarkable in appearance. The lacrimal glands are symmetric and unremarkable in appearance. Bilateral superior ophthalmic veins are identified. The lamina papyracea are intact. The intraconal fat is maintained.

IMPRESSION: The constellation of findings of a partially empty sella, tortuous and dilated optic nerve sheath complexes and posterior scleral wall flattening can be seen with idiopathic intracranial hypertension in the appropriate clinical setting.

MRV Results

TECHNIQUE: Axial and coronal 2-D time-of-flight venographic imaging, axial T1 MP rage weighted images, pre and postcontrast was performed. MIP reformatted images were generated. 20 cc of Dotarem were infused intravenously. There were no immediate complications.

FINDINGS: The superior sagittal sinus, straight sinus, vein of Galen, and internal cerebral veins are patent. The distal internal jugular veins, transverse and sigmoid sinuses are patent, with mild right-sided dominance.

IMPRESSION: Negative MRV study, without evidence for dural venous sinus thrombosis or occlusion.

Communication: Phone Call

- Evaluate the student's communication call or do mock communication live.
  - *Primary Care Physician*
  - *Neurologist*
  - *Pharmacy if medication is called in*
  - *Nutrition Specialist/Weight Management Program*

Communication: Letter to Provider

Dear {Patient's Doctor},

We recently had the pleasure of seeing your patient, {Patient's Name} at the Illinois Eye Institute. She presented in our Urgent Care Clinic on {date).

She presented with complaints decreased vision OU at distance and near with no previous history of glasses.
Upon further question, she reports longstanding complaints of headaches greater on her left side temporally with (+) tinnitus. She takes over the counter medications for pain and has not been previously examined/treated for them. She denies transient vision obscurations, diplopia or nausea.

Examination revealed vision with correction was 20/20 in the right eye and 20/30- left eye. Pupils, confrontation visual field and motility were normal in both eyes.

Anterior segment slit lamp evaluation revealed blepharitis in both. Intraocular pressures were measured as 14 mmHg OD, OS via Goldmann applanation tonometry. Dilated fundus examination was remarkable for optic nerve head edema and elevation.

Humphrey Visual Field 24-2 was normal with no defects. Optical Coherence Tomography showed rim tissue thickness in both eyes.

She was educated on possible causes of optic nerve swelling and testing needed to rule out pathology. She was advised that an MRI/MRV is necessary to determine the underlying etiology, and we will require coordination of care with you. We are referring to your clinic to order an MRI/MRV of the brain and orbits with and without contrast (within her medical network) to determine the underlying etiology of optic nerve edema. Additional testing includes possible Lumbar Puncture pending MRI/MRV results. Please keep us updated on the results of her scans and further management/treatment.

{Patient} will be returning to the Illinois Eye Institute on {Date & Time} for follow up care. Thank you very much for allowing me to participate in the care of your patient.

Sincerely,
{Referring Doctor}

Other specialties involved in patient's care:

- OD/OMD specializing Neuro-ophthalmic Disorders
- Neurology
- PCP
- Nutrition Specialist

Final Outcome

- Patient treated with oral acetazolamide and enrolled in weight loss program.

Assignment

- See student case and assignment

Section 5: Evaluation and Change Management

To ensure that students gain the competencies needed to provide team-based patient-centered care and improve patient outcomes, institutions should regularly evaluate the effectiveness of their IPE programs.[28] While interprofessional education and learning is widely regarded as a valuable addition to health professions education, educators are challenged to provide reliable evidence to support its value.

In 2015, the then-Institute of Medicine and the National Center for Interprofessional Practice and Education both released reports responding to the lack of well-designed studies that chart the correlation between IPE interventions and improved patient and health system outcomes.[27, 28] While there are many evaluation tools in circulation, the wide variation in environments where IPE occurs complicates the formulation of broadly applicable ways to measure the effectiveness of IPE. Every setting has unique measurement needs, and, even within each setting, these needs may change at different times with different groups for different purposes.

When creating an evaluation tool, whether you customize an existing tool for your purposes or choose from an array of available options, consider these suggestions:

- Define the purpose of your evaluation and identify what indicators of success would look like. The tool should encapsulate all of the important questions and ideas at play.
- Assessments that only have outcomes related to attitudes, perceptions, beliefs, or feelings of students or the program participants are not informative about changes in behaviors, systems, or system outcomes. IPE's overall purpose is to improve team-based, patient-centered health care; always consider this when measuring impact.
- A study about an interprofessional activity can be compromised if the respondent group is not also interprofessional. Different professions can have vastly different experiences of the same activity. It is important to capture feedback from all represented professions.
- Multiple methods of evaluation are recommended to capture the complexities of an environment or an educational experience.[25, 26]

For IPECP evaluation, consider consulting evaluation professionals to determine best steps moving forward. One example of a resource is the Jefferson Teamwork Observation Guide (JTOG),[29] a validated tool mapped to IPE core competencies. The JTOG is designed to help learners observe and assess the behaviors of collaborative practice teams as well as understand team behavior. To access the JTOG and other evaluation tools, refer to the National Center for Interprofessional Practice and Education's online resource exchange, which includes a Measurement Needs collection representing popular submissions.[30]
The Interprofessional Professionalism Assessment (IPA) instrument developed by the Interprofessional Professionalism Collaborative evaluates the entry-level health professional's demonstration of professionalism when interacting with other members of the health care team.[31]

Section 6: Sustaining a Culture of Interprofessional Education and Collaborative Practice at Your Institution

The challenges of developing and sustaining IPE programs in higher education settings should not be underestimated. It can be hard to make progress within an institutional structure that has traditionally perpetuated discipline-specific structures and decision-making processes, and is historically slow or resistant to change.[32] It is not feasible to rely on a few individuals or department champions to sustain an entire IPE program. Continued support from the institution through the allocation of resources and participation from faculty, practitioners, administrators, and others is crucial to your success. Simply put, for IPE programming to be sustained, here are essential factors:

1. **IPE infrastructure** to continue engaging students. IPE competencies must be created that are customized for your local institutional needs and are aligned with current accreditation requirements in the participating professions. These competencies must then be incorporated into the curricula of all participating disciplines to ensure that IPE is prioritized in courses and activities for students.[2]
2. **Commitment of time and effort from individuals and entities across the learning spectrum**, senior leaders, faculty, staff, practitioners, and students. Leaders at all levels need to commit to championing interprofessional education in their local contexts.[3]
3. **Financial model and reliable funding sources to cover costs** associated with interprofessional education. The commitment of internal and external resources ensures that supplies for programming can be acquired, faculty development can be supported, and IPE personnel can be compensated for their involvement.[33]
4. **Program revision process with reliable evaluation tools** for measuring program effectiveness. Once the data are collected and analyzed, there should be a willingness and ability to implement changes.[28]

5. **Faculty development** so faculty can effectively design and deliver IPE programming. Faculty can then effectively coach students through collaborative team learning and practice utilizing standardized, high quality methods.[34]
6. **Centralized group for the coordination of IPE programming** to facilitate collaborative efforts involving separate professional departments. A staff dedicated to IPE can develop the program from one characterized by occasional isolated activities to an established, regulated curriculum.[16]
7. **Diverse array of authentic IPE programs that respond to local institutional needs** utilizing different learning formats, such as didactic, simulation, clinical observation, and clinical practice for different IPE proficiency levels.[35]
8. **Ongoing coaching for participants after training** when they initially enter or return to practice environments. Coaches model correct behavior, provide feedback, and champion patient-centered team-based care in their environment.[36]

KEY POINTS:
Preparing for and Sustaining a Culture of Interprofessional Education and Collaborative Practice

Build your IPE community

- ✓ Senior leadership
- ✓ Local department leaders
- ✓ Pre-existing interprofessional teams
- ✓ Students

Support your IPE community

- ✓ Develop an IPE Center if feasible
- ✓ Professional development for faculty

Conduct an assessment to determine your starting point

- ✓ Checklist: Steps to Interprofessional Readiness
- ✓ How to increase your readiness

Learn from IPE Exemplar Projects

- ✓ Didactic education
- ✓ Clinical education
- ✓ Orientation and social activities

Manage IPECP program evaluation and change

Section 7: Organizations Dedicated to Interprofessional Education and Collaborative Practice

Organizations Dedicated to Interprofessional Education and Collaborative Practice

Organization	Overview, Mission, or Purpose	Organizational Structure	Website	Getting Involved	Connection to other Organizations	Meeting/Summit	Miscellaneous/General Benefits/Leadership Opportunity
AIHC = American Interprofessional Health Collaborative	"As the professional community of the National Center for Interprofessional Practice and Education, AIHC contributes to better health and improved outcomes by redesigning how the health care workforce is prepared and how care is organized and delivered. AIHC members work locally, nationally and internationally to influence policy, develop and share best practices and resources, conduct research, mentor and support colleagues and remove barriers to effective action."	Board and committees. 4 primary committees: Membership, Communications, Scholarship, Program. Program committee is divided into 4 work groups: Student Engagement, Affiliate Conferences, Leadership, and Mentoring	https://aihc-us.org/	Annual membership $150 (professional)/$30 (student) running July 1 - June 30 annually; Institutional membership $600 covers 5 individuals. Can also join during registration for Nexus Summit. Once a member, volunteer for a committee. AIHC hosts periodic "All-Member Meetings" and "Social Hours" via zoom.	AIHC and the National Center for IPE share administrative support. The National Center is a repository of information related to IPE hosted by University of Minnesota; National Center produces the Nexus Summit. AIHC is the working groups, committees and networking body. AIHC serves as the regional member to Interprofessional.Global (IP.Global), host of the All Together Better Health international conference.	Nexus (in collaboration with the National Center), Collaboration Across Borders (CAB, in conjunction with CIHC)	**Weekly Email Newsletter:** AIHC Member Brief, Many provided resources (e.g., VodCasts, Nexus Resource Page) **The AIHC is in the process of changing its organizational structure.
APHA = American Public Health Association	"The American Public Health Association champions the health of all people and all communities... (Promoted) as the only organization that combines a 150-year perspective, a broad-based member community and the ability to influence policy to improve the public's health." **Mission**: To improve the health of the public and achieve equity in health status.	Executive board consists of 24 members: a Governing Council (President, President-elect, Treasurer, etc.) and 12 members known as Elective Members (consisting of voting and nonvoting members who represent different constituencies within APHA)	https://www.apha.org/	Regular membership $225, Discounted regular $110 (if gross salary <$45,000), Retired $100, Early Career Professional $135 (graduated in the past 24 months and transitioning to the workforce), and Student $85		APHA Annual Meeting and Expo (Oct/Nov each year)	**Publication:** *American Journal of Public Health* and *The Nation's Health* newspaper
IPC = Interprofessional Professionalism Collaborative	The purpose of the Interprofessional Professionalism Collaborative (IPC) is to develop a valid and reliable assessment instrument for interprofessional professionalism behaviors and related educational resources for use by educators across all health professions.	The IPC Committee was created in 2006 as instigated by the APTA. The IPA instrument was developed, including case scenario videos and toolkit, and released for public use in 2018.	http://www.interprofessionalprofessionalism.org/	ASCO is a member, No open membership; Can contact the IPC with feedback regarding the instrument/website, sending additional resources, and to share your experiences with the IPA (via contact form on website); contact Dr. John Nishimoto (jnishimoto@ketchum.edu) for more information			IPA TOOL KIT: http://www.interprofessionalprofessionalism.org/toolkit.html

Organizations Dedicated to Interprofessional Education and Collaborative Practice							
Organization	**Overview, Mission, or Purpose**	**Organizational Structure**	**Website**	**Getting Involved**	**Connection to other Organizations**	**Meeting/Summit**	**Miscellaneous/General Benefits/Leadership Opportunity**
IPEC = Interprofessional Education Collaborative	IPEC, working in collaboration with academic institutions, will promote, encourage, and support efforts to prepare future health professionals so that they enter the workforce ready for interprofessional collaborative practice that helps to ensure the health of individuals and populations. *Developed the widely-utilized IPEC Core Competencies	Leadership: Board of Directors; also has Committees and task forces	https://ipec.memberclicks.net/	Organizational membership: Annual membership application cycle opens in August to begin in January, dues of $5,000 with membership benefits including programming, communication, and partnerships	National Academies of Practice (NAP), Collaboration Across Borders (CAB), All Together Better Health Conference	Faculty Development Institutes held twice per year in May/Oct (open to IPEC member schools and non-members), webinars	Interprofessional Leadership Development Program (ILDP)
IHPE = Global Forum on Innovation in Health Professional Education	The Global Forum on Innovation in Health Professional Education (IHPE Forum) is an ongoing, activity of the National Academies of Sciences, Engineering, and Medicine that brings together diverse stakeholders to network, discuss and illuminate issues for the benefit and promotion of health professional education. In 2023, there were 37 academic experts and health professionals member-sponsors of the Forum, representing 17 different disciplines (including ASCO) from multiple developed and developing countries.	Governing Board of the National Research Council, whose members are drawn from the councils of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine. The members of the committee responsible for annual forums and generated report were chosen for their special competences and with regard for appropriate balance	https://www.nationalacademies.org/our-work/global-forum-on-innovation-in-health-professional-education	ASCO is a member. No open individual membership at this time.	Within the National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Global Health - Publications from the National Academies of Press Washington D.C.(also shortened to NAP)	The Forum will use two to three major workshops per year to inform its meetings, one to highlight issues, perspectives, or innovations relevant primarily to higher income countries, one to highlight subject matter more relevant to a lower income country, and, if resources allow, one to focus on global interdependency in education and workforce development.	Published Resources available for download at: https://www.nationalacademies.org/publications

Organizations Dedicated to Interprofessional Education and Collaborative Practice

Organization	Overview, Mission, or Purpose	Organizational Structure	Website	Getting Involved	Connection to other Organizations	Meeting/Summit	Miscellaneous/General Benefits/Leadership Opportunity
NAP = National Academies of Practice	**NAP's Vision:** National Academies of Practice is the alliance of professionals collaborating to transform health and well-being. **NAP's Mission:** Advancing Interprofessional Education, Scholarship, Research, Practice and Public Policy by educating and informing members and others, facilitating collaborative scholarship and research opportunities, recruiting, engaging, retaining and mentoring network members and advocating the value of interprofessional practice to improve healthcare and policy for all.	Comprised of a NAP Leadership Committee and 15 (as of 2023) Associated National Academies of Practice representing different contributors to Interprofessional Care. Included on the NAP Board are President, President-Elect, Treasurer, Immediate Past-President, VP of Partnerships & Networking, VP of Public Policy, VP of Professional Development, and VP of Scholarship/Co-Editor in Chief, Journal of Interprofessional Education & Practice. Within NAPO - Chair, Vice-Chair and Treasurer	https://www.napractice.org/	Nominated to become a member by a current member in your academy (e.g., optometry) or outside of your academy. Professional membership is eligible for those 5 years in practice and must apply, be accepted and pay dues, Distinguished Fellow status may be eligible after 10 years of practice and must apply/ meet requirements of rubric and pay dues.		NAP FORUM - generally in March of each year; alternates years in Washington DC with other years various locations	**Grant/SUPPORT for Travel** with IP poster at Annual FORUM meeting, **Publication**: Journal of Interprofessional Education & Practice (JIEP) and Bi-weekly online communication: *NAP Times*
CIHC = Canadian Interprofessional Health Collaborative	A volunteer-based organization, for the advancement of interprofessional knowledge, education, and practice. Connection: with members, regionally, nationally, and internationally	Board and committees. Board: 15 members representing various sub-groups of Interprofessional Collaboration. Commitees: Communications Accreditation CIHC/AIHC Liaison Budget & Finance Interprofessional.Global/InterprofessionalResearch.Global	https://www.cihc-cpis.com/	On-line application with Name and email - Student, "Regular" and Institutional Due options. Regular dues - $40/year, Student - $10/year, Institutional discount of 5 members (prices in Canadian dollars)	American Interprofessional Health Collaborative (AIHC)	Collaboration a la carte - Series, Collaboration Across Borders (CAB)	**Benefits include**: Speaker series Collaboration, Evolving communities of practice & discussion grps, link w/international orgs dedicated to IPEC, professional bodies, governments & regulators as well as access to Information. Access to resources on important IPE and practice activities, including the Canadian Competency Framework. Opportunities through participating in committees, working groups, discussions, & research to further IPE and practice in Canada & the world.

Created by ASCO Interprofessional Education and Collaborative Practice (IPRF) Committee -- In addition to these organizations be sure to become involved with the ASCO IPECP Special Interest Group (SIG): https://optometriceducation.org/for-faculty-administrators/committees-task-forces-sigs-groups/special-interest-groups-sigs/

For more information on these groups and to get connected with other ODs in these groups- please reach out to Joanne Zuckerman (jzuckerman@opted.org) or the Current/Recent ASCO IPECP Committee Members found through the ASCO Website at: www.optometriceducation.org

Below are additional organizations dedicated to IPECP. Please visit their websites for more information.

Association of Schools and Colleges of Optometry (ASCO), Rockville, Maryland
www.optometriceducation.org

Association of Schools and Colleges of Optometry (ASCO), Rockville, Maryland. ASCO Connect Interprofessional Education and Collaborative Practice Special Interest Group.
https://connect.opted.org/communities/community-home?CommunityKey=c3af9489-a039-453e-a381-1a52242a11b5

American Speech-Language-Hearing Association (ASHA)
Interprofessional Education / Interprofessional Practice (IPE / IPP)
https://www.asha.org/practice/interprofessional-education-practice/

Centre for Advancement of Interprofessional Education (CAIPE)
https://www.caipe.org/

Centre for Interprofessional Education, University of Toronto
https://ipe.utoronto.ca/

Collaborating Across Borders (CAB) Conference Series
https://aihc-us.org/collaborating-across-borders

Health Professions Accreditors Collaborative
https://healthprofessionsaccreditors.org/

Jefferson Center for Interprofessional Education (JCIPE)
https://www.jefferson.edu/university/interprofessional_education.html

The Josiah Macy, Jr., Foundation
http://www.macyfoundation.org/

MedEdPORTAL: The Journal of Teaching and Learning Resources
Association of American Medical Colleges (AAMC) Interprofessional Education
https://www.mededportal.org/collection/interprofessional-education/

National Academy of Practice in Optometry (NAPO)
https://napractice.org/About-NAP/Academies/Optometry

National Center for Interprofessional Education and Practice, University of Minnesota
https://nexusipe.org/

National Interprofessional Education Consortium (NIPEC)
American Council of Academic Physical Therapy (ACAPT)
https://www.acapt.org/about/our-leadership/consortium/national-interprofessional-education-consortium-(nipec)

Robert Wood Johnson Foundation
https://www.rwjf.org/

The Audiology Project (TAP)
https://www.theaudiologyproject.com/

World Health Organization: Transformative Education for Health Professionals
https://whoeducationguidelines.org/

Conclusion

This toolkit, **An IPECP Toolkit: A Guide to Effective Interprofessional Education and Collaborative Practice Experiences in Optometric Education**, was posted to the ASCO website in October 2019. The Toolkit is intended to be a "living" document and is updated on an as-needed basis. Feedback and suggestions for ways in which this Toolkit can be made more helpful are welcomed and can be forwarded to:

Joanne C. Zuckerman, MSEd
Manager, Data Services and Special Projects
Association of Schools and Colleges of Optometry
Email: jzuckerman@opted.org

The Association of Schools and Colleges of Optometry and its Interprofessional Education and Collaborative Practice Committee hope this Toolkit will serve as a valuable resource for individuals and institutions, wherever they may be in their interprofessional education (IPE) and collaborative practice (CP) endeavors. While any IPE / CP initiative has inherent challenges and potential obstacles, the resultant faculty – student energy, inclusiveness, mutual familiarization, and communication that accompany the process of IPE / CP program development and implementation are often as important as the projects themselves. As we work together to shape the future of optometric education and advance the delivery of health care, we wish you great success.

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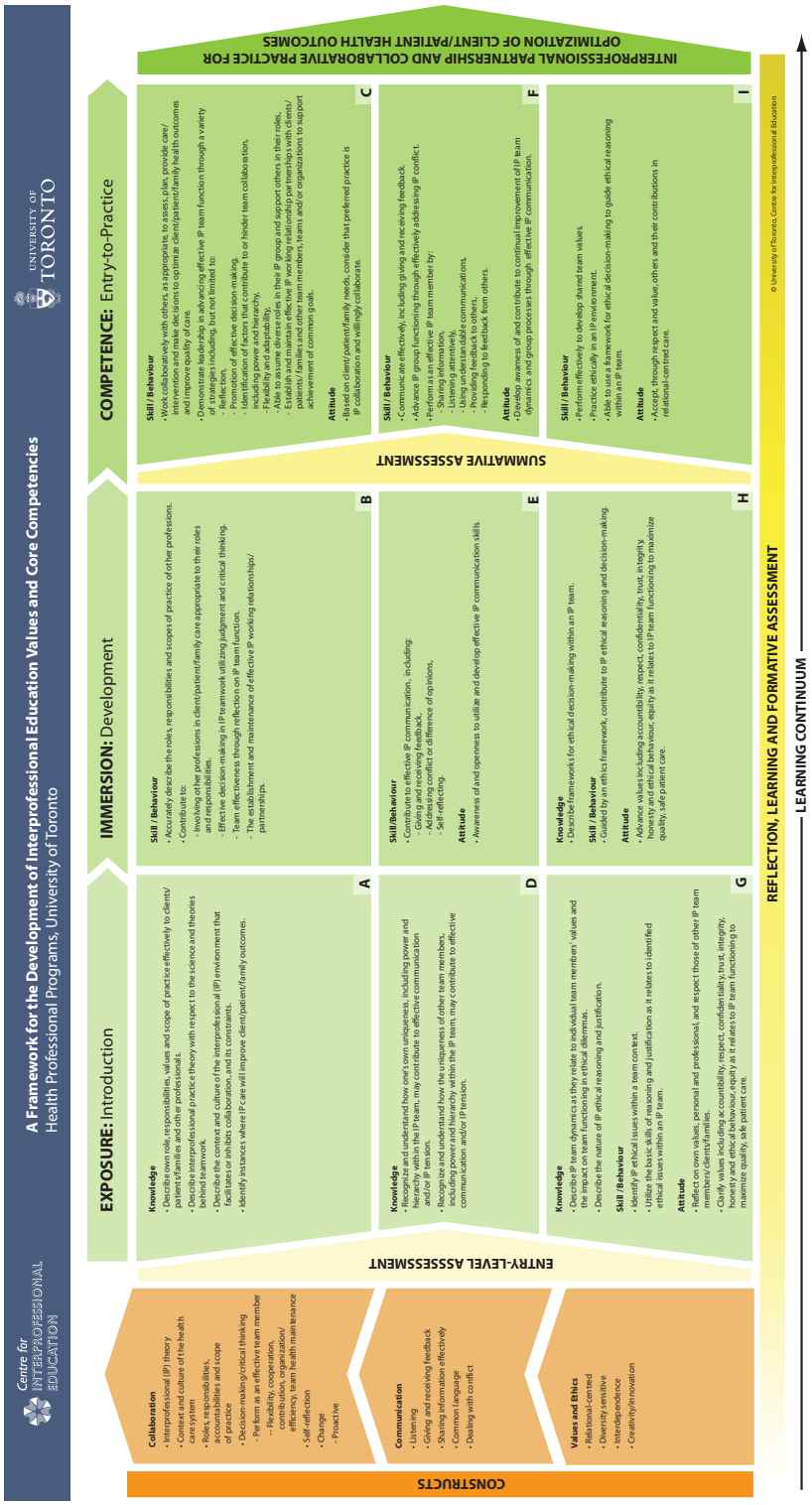
Appendix 1

Process to reach adoption of "*A Guide to Effective Interprofessional Education and Collaborative Practice Experiences in Optometric Education*" (the ASCO IPE Toolkit)

TIMEFRAME	ASCO IPECP COMMITTEE ACTIVITY
2017	Development / modification of the IPE Toolkit outline
September 2017	Conference Call of the IPECP Committee: consensus outcome was to proceed with developing a draft of the IPE Toolkit
May 2018	Conference Call of the IPECP Committee: reviewed and discussed the initial draft of the IPE Toolkit
June 2018	IPECP Committee Chair presented an early draft of the Toolkit to the ASCO Board of Directors and discussed IPE Exemplar submissions from ASCO member institutions In-person Meeting of the IPECP Committee: drafted the template for IPE Exemplar submissions by ASCO member institutions
July 2018	IPECP Committee finalized the template for IPE Exemplar submissions by ASCO member institutions
August 2018	Conference Call of the IPECP Committee: discussed the updated draft of the IPE Toolkit, including submissions of IPE Exemplar projects
September 2018-April 2019	Communication with all ASCO member institutions to submit IPE Exemplar projects for inclusion in the ASCO IPE Toolkit
October 2018	Conference Call of the IPECP Committee: discussed the updated draft of the IPE Toolkit, including its debut at the November 2018 Workshop
November 2018	The IPECP Committee conducted a Workshop entitled "Toolkits and Resources for Interprofessional Education and Collaborative Practice Initiatives in Optometry" at the November 2018 Annual Meeting of the American Academy of Optometry (AAO), San Antonio, Texas A draft of the IPE Toolkit was a component of the Consent Agenda for the ASCO Board of Directors Meeting
February 2019	Conference Call of the IPECP Committee: discussed the updated draft of the IPE Toolkit, including submissions of IPE Exemplar projects
March 2019	Submitted poster abstract to the Collaborating Across Borders (CAB) VII IPE conference: "An IPECP Toolkit: A Guide to Effective Interprofessional Education and Collaborative Practice Experiences in Optometric Education" An updated draft of the IPE Toolkit was a component of the Consent Agenda for the ASCO Board of Directors Meeting
May 2019	Conference Call of the IPECP Committee: the Committee adopts a motion to recommend to the ASCO board of directors that it "adopt the interprofessional education and collaborative practice toolkit for optometric education developed by the IPECP committee, *An IPECP Toolkit: A Guide to Effective Interprofessional Education and Collaborative Practice Experiences in Optometric Education.*"
June 2019	The poster abstract submitted to CAB VII is accepted for presentation in October 2019. The ASCO Board adopts the IPE Toolkit at its Annual Meeting in St. Louis

Appendix 2

A Framework for the Development of Interprofessional Education Values and Core Competencies
Health Professional Programs, University of Toronto



Appendix 3

ASSOCIATION *of* SCHOOLS *and* COLLEGES *of* OPTOMETRY

Excerpts from the Attributes of Students Graduating from Schools and Colleges of Optometry
A 2011 Report from the Association of Schools and Colleges of Optometry

The New Doctor of Optometry Must be Professional and Ethical

To serve the public and the profession well, new graduates must embrace and demonstrate the ethical and professional standards appropriate to being recognized as a health care provider. The new graduate must also recognize that the completion of the Doctor of Optometry degree program is only the first step in a life-long commitment to self-directed learning and continual professional improvement.

The school or college of optometry shall ensure that before graduation each student will have demonstrated critical professional and personal attributes, including the following.

Personal attributes:

PE1. a commitment to life-long learning and providing the highest standard of care

PE2. the ability to acquire, analyze and apply new information while making reasonable and informed decisions that are consistent with the interests and needs of the patient and broader community

PE3. problem-solving and critical-thinking skills that integrate current knowledge, scientific advances and the human/social dimensions of patient care to assure the highest quality of care for each patient

PE4. the ability to recognize personal limitations regarding optimal patient care and to work with the broader health care community in providing the best care possible.

Professional attributes:

PE5. an understanding of professional ethics and challenges to the optometric profession posed by conflicts of interest inherent in health care delivery, and the ability to incorporate those principles into decisions affecting patient care, always keeping the patient's welfare foremost

PE6. professionalism, by demonstrating honesty and integrity in all interactions with patients and their families, colleagues and others with whom the optometrist must engage in his/her professional life

PE7. a respect for the dignity of every patient and a commitment to empathetic and confidential care

PE8. a commitment to work as an integral member of the larger interprofessional health care team to improve patient care outcomes

PE9. a commitment to be actively involved in organized optometry and the community.

The New Doctor of Optometry Must be Knowledgeable

To provide quality eye and vision care to their patients, graduating Doctors of Optometry must have an established knowledge of the basic and clinical sciences. The foundation must be broad and include the biological, medical, vision and optical sciences, as well as a basic understanding of the health care delivery system. The Doctor of Optometry must recognize the dynamic nature of knowledge and possess the commitment and skills needed to responsibly assess and apply new information and treatment strategies throughout his/her career.

The school or college of optometry shall ensure that before graduation each student will have demonstrated knowledge of:

KK1. basic organ systems, with special emphasis on the ocular and visual system, and their inter-relationships to the body as a whole

KK2. the cellular, molecular and genetic basis of the development, physiology, pathology and treatment of eye disease

KK3. the structures and processes contributing to the development of refractive error and other optical and perceptual abnormalities of the visual system (This includes vision function with respect to deviation and enhancement such as, but not limited to, strabismus, amblyopia, oculomotor function, accommodation and visual perception.)

KK4. the optics of the eye and ophthalmic lens systems (including spectacles, contact lenses and low vision devices) used to correct refractive, oculomotor and other vision disorders

KK5. the various processes and causes that lead to dysfunction and disease, and the effect that these processes can have on the body and its major organ systems, with special emphasis on the ocular and visual systems

KK6. mechanisms of action of the various classes of pharmaceutical agents, their interactions and their safe and effective use for the treatment of diseases and conditions affecting the eye and visual system

KK7. vision therapy and other rehabilitative methods used for the management of common visual disorders

KK8. the psychosocial dynamics of the doctor/patient relationship and understanding of the social, psychological and economic forces affecting diverse patient populations

KK9. community health care resources and delivery systems to improve care

KK10. practice management structures and strategies as they pertain to the various practice settings.

The New Doctor of Optometry Must be Capable

To provide the highest quality of care to their patients, Doctors of Optometry must possess appropriate cognitive and motor skills needed to prevent, diagnose, treat and manage clinical conditions that are within the scope of their professional responsibilities. The school or college of optometry shall ensure that before graduation each student will have demonstrated:

CC1. all the skills required for the diagnosis, triage, management and/or treatment of common visual conditions, including or resulting from:

- refractive anomalies
- abnormalities of accommodation, monocular or binocular vision skills, oculomotor and sensory/perceptual dysfunctions
- ocular disease and trauma
- prior ocular surgery and/or laser intervention
- systemic disease
- environmental or occupational conditions

CC2. the ability to order and interpret frequently needed laboratory and diagnostic procedures

CC3. the critical-thinking skills needed to assess the patient's visual and physical status and to interpret and process the data to formulate and execute effective management plans

CC4. the ability to prescribe or use ophthalmic materials, contact lenses, vision therapy, low vision devices, pharmaceuticals and certain surgical procedures to treat and manage vision disorders and disease

CC5. an understanding of nutritional influences on ocular physiology and systemic health and disease

CC6. the ability to understand, evaluate and apply the use of contemporary imaging technologies in the provision of eye and vision care

CC7. the ability to recognize and initiate the coordination of patient care requiring advanced medical, systemic, inter-professional or specialty care

CC8. the ability to recognize life-threatening conditions and to initiate immediate intervention

CC9. effective communication skills, both oral and written, as appropriate for maximizing successful patient care outcomes

CC10. the ability to appropriately use all resources, including the use of ancillary personnel, intra- and inter-professional collaboration, co-management and referral, in ensuring the best quality patient care

CC11. the ability to access evidence-based knowledge (including through the use of information technology) and manage information, and to apply that information in making decisions about patient care and health care delivery

CC12. the ability to embrace the cultural diversity and individual differences that characterize patients, populations and the health care team

CC13. the ability to work in cooperation with those who receive care, those who provide care, and others who contribute to or support the delivery of prevention and health services.

Appendix 4

EXCERPTS FROM THE IPEC CORE COMPETENCIES FOR INTERPROFESSIONAL COLLABORATIVE PRACTICE

Overview

The IPEC Core Competencies for Interprofessional Collaborative Practice: Version 3 reflects the vision that interprofessional collaborative practice is key to safe, high-quality, accessible, equitable, person/client-centered care and enhanced population health outcomes desired by all. This competency set is aimed at preparing learners to engage in lifelong learning and collaboration to improve both person/client care and population health outcomes.

A total of 33 sub-competency statements are included in the 2023 version. The sub-competency statements are streamlined to broaden their applicability; in other words, they have been pared down to their essential elements. A glossary of terms is available in Appendix C for all terminology that appears in **bold** font within this section of the report and the accompanying 2016 to 2023 comparison guide in Appendix D.

As depicted in Figure 7, the 2023 IPEC competencies retain the overarching singular domain of "Interprofessional Collaboration" comprised of the following four competency areas:

FIGURE 7. IPEC CORE COMPETENCIES FOR INTERPROFESSIONAL COLLABORATIVE PRACTICE: VERSION 3 (2023)

- **Values and Ethics**

  Work with **team** members to maintain a climate of shared values, ethical conduct, and mutual respect.

- **Roles and Responsibilities**

  Use the knowledge of one's own role and **team** members' expertise to address individual and population **health outcomes**.

- **Communication**

  Communicate in a responsive, responsible, respectful, and compassionate manner with **team** members.

- **Teams and Teamwork**

  Apply values and principles of the science of teamwork to adapt one's own role in a variety of **team** settings.

Values and Ethics

Work with **team** members to maintain a climate of shared values, ethical conduct, and mutual respect.

VE1.	Promote the values and interests of **persons** and **populations** in health care delivery, **One Health**, and **population** health initiatives.
VE2.	Advocate for **social justice** and **health equity** of **persons** and **populations** across the life span.
VE3.	Uphold the dignity, privacy, identity, and autonomy of **persons** while maintaining confidentiality in the delivery of **team-based care**.
VE4.	Value **diversity**, identities, cultures, and differences.
VE5.	Value the expertise of **health professionals** and its impacts on **team** functions and **health outcomes**.
VE6.	Collaborate with honesty and integrity while striving for **health equity** and improvements in **health outcomes**.
VE7.	Practice trust, empathy, respect, and compassion with **persons**, **caregivers**, **health professionals**, and **populations**.
VE8.	Apply high standards of ethical conduct and quality in contributions to **team-based care**.
VE9.	Maintain competence in one's own profession in order to contribute to **interprofessional** care.
VE10.	Contribute to a **just culture** that fosters self-fulfillment, collegiality, and civility across the **team**.
VE11.	Support a **workplace** where differences are respected, career satisfaction is supported, and **well-being** is prioritized.

Roles and Responsibilities

Use the knowledge of one's own role and **team** members' expertise to address individual and population **health outcomes**.

RR1.	Include the full scope of knowledge, skills, and attitudes of **team** members to provide care that is **person-centered**, safe, cost-effective, timely, efficient, effective, and equitable.
RR2.	Collaborate with others within and outside of the health system to improve **health outcomes**.
RR3.	Incorporate complementary expertise to meet health needs including the **determinants of health**.
RR4.	Differentiate each **team** member's role, scope of practice, and responsibility in promoting **health outcomes**.
RR5.	Practice **cultural humility** in **interprofessional** teamwork.

Communication

Communicate in a responsive, responsible, respectful, and compassionate manner with **team** members.

C1. Communicate one's roles and responsibilities clearly.

C2. Use communication tools, techniques, and technologies to enhance **team** function, **well-being**, and **health outcomes**.

C3. Communicate clearly with authenticity and **cultural humility**, avoiding discipline-specific terminology.

C4. Promote common understanding of shared goals.

C5. Practice **active listening** that encourages ideas and opinions of other **team** members.

C6. Use constructive feedback to connect, align, and accomplish **team** goals.

C7. Examine one's position, power, role, unique experience, expertise, and culture towards improving communication and managing conflicts.

Teams and Teamwork

Apply values and principles of the science of teamwork to adapt one's own role in a variety of **team** settings.

TT1.	Describe evidence-informed processes of **team** development and **team** practices.
TT2.	Appreciate **team** members' diverse experiences, expertise, cultures, positions, power, and roles towards improving **team** function.
TT3.	Practice **team reasoning**, problem-solving, and decision-making.
TT4.	Use **shared leadership practices** to support **team** effectiveness.
TT5.	Apply **interprofessional conflict management** methods, including identifying conflict cause and addressing divergent perspectives.
TT6.	Reflect on self and **team** performance to inform and improve **team** effectiveness.
TT7.	Share **team accountability** for outcomes.
TT8.	Facilitate **team** coordination to achieve safe, effective care and **health outcomes**.
TT9.	Operate from a shared framework that supports **resiliency**, **well-being**, **safety**, and efficacy.
TT10.	Discuss organizational structures, policies, practices, resources, access to information, and timing issues that impact the effectiveness of the **team**.

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