

Certificate in Advanced Behavioral Interventions Among Multiple Populations: An Effective Model for Interprofessional Education

John Orwat
Michael P. Dentato
Katrina Herweh

Abstract: *This manuscript describes the curricular and instructional approaches utilized in the composition and delivery of the Certificate in Advanced Behavioral Interventions Among Multiple Populations (CABISAM) created by the School of Social Work at Loyola University Chicago. CABISAM is a social work led interprofessional education (IPE) model where students from social work, nursing, and medicine engage in didactic and experiential activities to advance clinical and leadership knowledge of interprofessional approaches to screening, brief intervention, and referral for treatment (SBIRT) with diverse populations. An interprofessional team of faculty from each discipline was involved throughout the development and planning process to consider accreditation, cultural, and logistical issues unique to each profession. CABISAM engages students in an evidenced-based interprofessional education (IPE) experience with exposure to cutting-edge topics relevant to health professionals: training in interprofessional practice, substance use in unique settings with diverse populations, and clinical implementation skills. This manuscript presents an adaptable and generalizable interprofessional education approach to other undergraduate and graduate programs across disciplines.*

Keywords: *Interprofessional education, interprofessional practice, student training, workforce preparedness*

Professional schools are incorporating interprofessional content and experiences into their curricula and field practicum to effectively prepare students for interprofessional health care practice. Interprofessional practice (IPP) improves the quintuple aims of health care that include improving population health, care experience, reducing health care costs, addressing healthcare professionals' burnout, and advancing health equity (Nundy et al., 2022). Accreditation standards across professions increasingly include interprofessional education (IPE) competencies tied to promoting the five aims of health care. Improving health care through the quintuple aims is important for all recipients of health care services including minority populations, as they are at an increased risk for being unnecessarily harmed in health care settings when compared to the general population (Chauhan, 2020). Such safe and affirming health care approaches are often provided through IPP.

This paper presents an exemplar for an IPP certificate and training program, referred to as CABISAM, based on the current research in conceptualizing IPE. In this paper, we review specific approaches to IPE and curriculum development, learning models, opportunities, and challenges. The IPE model examined in this manuscript has four key components including a training day, simulated patient practice experience, direct practice in community-based field work, and an interdisciplinary team poster presentation. Students

John Orwat, PhD, LCSW, Professor and Co-Director of Center for Field Innovation, Research, Strategy, and Training (CFIRST), Michael P. Dentato, PhD, Professor and Co-Director of CFIRST, and Katrina Herweh, MASW, LISW-S, Research Associate and Doctoral Student, School of Social Work, Loyola University Chicago, Chicago, IL.

Copyright © 2024 Authors, Vol. 24 No. 2 (Summer 2024), 455-471, DOI: 10.18060/27718



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

attending the program receive a certificate from the Institute for Transformative Interprofessional Education (ITIE) upon completing the IPE certificate program. This educational model has adaptability and generalizability to various interprofessional settings, topics, populations, and education formats.

Interprofessional Education and Practice

Interprofessional education is defined as “occasions two or more professions learn together with the object of cultivating collaborative practice” (Vanclay, 1997, p. 19). The CAIPE task force extended this definition by adding that interprofessional competence is attained through interprofessional learning grounded in evidence while respecting each profession’s perspectives and skills (Barr et al., 2017; Ford & Gray, 2021). Relatedly, the National Center for Interprofessional Practice and Education (NCIPE; 2023) notes:

We use the phrase "interprofessional practice and education" (IPE) as a way to create a shared space between interprofessional education, interprofessional practice and collaborative practice. The “new IPE” does not replace the principles related to these concepts - rather, it embraces them. (para. 2 & 3)

This focus is imperative for IPE as each healthcare profession has its unique educational accreditation processes that incorporates IPE requirements within their accreditation standards. Therefore, sustainable and impactful IPE programs require an implementation strategy that includes key stakeholders from each profession (Barr et al., 2017; World Health Organization [WHO], 2010).

IPE is important in both pre-licensure and post-licensure education because it teaches the student to successfully function in and enhance interprofessional teams as students and within their professional healthcare careers (Jones & Phillips, 2016). Furthermore, while engaging in IPE, educators draw attention to similarities across each respective professions’ knowledge, skills, and values (Jones & Phillips, 2016). IPE provides opportunities to maximize logistics across professional schools such as schedules and creative approaches to teaching and learning, such as the use of cutting-edge technology.

IPE & IPP Connections to Curriculum

The topic(s) chosen for an IPE experience should be relevant to the overall institutional strategy in a way that considers strategic goals and objectives as well as IPP competencies (Interprofessional Education Collaborative [IPEC], 2023). A topic for any IPE experience should include IPE competencies, such as those described by IPEC within the domain of interprofessional collaboration, including topics from the four competency areas: a. values and ethics, b. roles and responsibilities, c. interprofessional communication, and d. teams and teamwork (IPEC, 2023).

IPE curriculum should take a long view, be designed to accommodate the unique schedules and cadence of the professionals involved, measure outcomes, and plan subsequent training based on this evaluation (Khan et al., 2016). The success of IPE occurs when the education is planned, recognized, and accessible (Barr et al., 2005). Each

profession should view specific clinical issues from within their professional scope, ultimately coming together with a collective perspective on how to best move forward. IPE topics related to a specific clinical issue also provide opportunities for innovation and collaboration. Challenging clinical issues that do not have a universal or well-researched solution may provide an opportunity to utilize interprofessional competencies to teach students a method and process for addressing real-world issues that clinicians often face. This may result in an important opportunity where content delivery and IPE on a unique clinical topic and interprofessional practice skills can be universally explored.

Screening, Brief Intervention, and Referral to Treatment (SBIRT)

A topic of IPE that is relevant to healthcare professionals across the U.S. is alcohol and substance use. In 2021, 16.5% of people 12 years and older in the U.S. met the diagnostic criteria in the 5th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM V) for either a substance or alcohol use disorder (United States Department of Health and Human Services, 2023). The Screening, Brief Intervention, and Referral to Treatment (SBIRT) model is an approach used in screening for alcohol and substance use and identifying individuals at risk for developing a substance use disorder (Thoele et al., 2021). The approach is applicable in a variety of settings and with populations across the lifespan as universal screening for substance use followed by brief interventions can result in identifying important client goals, values, and increased readiness and/or motivation for change (Office of Addiction Services and Supports, n.d.). SBIRT is perceived and practiced by healthcare professions differently, therefore the approach is often enhanced by an interprofessional collaborative delivery approach that underscores each professions' strengths (Wamsley et al., 2018). However, the SBIRT model has been identified as an underutilized intervention in a number of practice and educational settings (Thoele et al., 2021). In fact, a systematic review found that only 29% of published studies on SBIRT were focused on training social work students (McAfee et al., 2022). Therefore, incorporating the SBIRT model in undergraduate and graduate social work education can better equip students for identifying and screening for risky substance use in interprofessional teams and clinical practice alike.

Advancements in Teaching and Learning

Common IPE experiences include simulated-based learning, games and role-play; exchange-based learning, case discussion; action-based learning, problem-based learning; practice-based learning; placements and work-based assignments; collaborative inquiry; observation-based learning, joint home visits; or received learning, lectures and other didactic teaching (West et al., 2016). Simulated learning experiences include case-based discussions, game simulations, scenario-based simulation, and standardized patients (Reeves & van Schaik, 2012). Additionally, in simulated-based learning students can participate as a member of their own profession, as a patient, patient's family member, or represent another profession (Barr et al., 2005). There is a vast array of simulated experiences that can provide students with practice skills and the opportunity to think about

collaboration, experience different roles and responsibilities, and experience some of the stressors associated with working in collaboration (Reeves & Van Schaik, 2012).

Feedback by peers, simulated patients, and professionals is a vital element to IPE. Interprofessional clinical supervision, as identified by Copenhagen and Crandell-Williams (2020), is a critical component of IPE regardless of the educational model employed. Supervision, in general, enhances clinical skills and autonomy while decreasing burnout rates (Knudsen et al., 2008). Key responsibilities of IPE supervisors and educators include promoting an affirming environment for students based on respect, using active listening skills, and valuing their unique personal and professional experiences (Barr et al., 2005). Special consideration must be given during supervision efforts that attend to the students' interprofessional education, interprofessional practice skills, and the learned intervention(s).

Communication Processes & Attitudes Toward Other Professions

IPE competencies among healthcare professions include improving patient health, advocacy, person-centered care, communication, teamwork, and ongoing learning (Kangasniemi et al., 2020). To achieve IPE competencies, students need opportunities to prepare, practice, and engage in clinical supervision and debriefing sessions. As indicated, teamwork and collaboration are vital to IPE and IPP experiences. Attitudes toward other professions in interprofessional experiences are essential to effective and impactful IPE. Starting IPE within academic settings results in students having positive attitudes toward IPE and increases the chances of students engaging in additional IPE opportunities (Ruebling et al., 2014). Students may realize they have misinformed notions, assumptions, or stereotypes of other professions' roles and responsibilities (Barr et al., 2005). Students engaged in IPE might also result in an overlap in professional roles and poorer understanding of one another's roles, such as prescribing authority with physicians, nurse practitioners, and physician assistants. Role misconception may be due, in part, to poor leadership failing to clarify roles and the importance of communication and collaboration, which is beneficial to discuss in IPE (Kangasniemi et al., 2020). Another significant communication challenge among professionals is using their own terminology, jargon, and knowledge base (Hansen et al., 2020; Ramgard et al., 2015). For example, all professions in IPE may not know or incorporate the other discipline's terminology(ies). In IPE experiences, students can practice the use of standard or familiar terminologies and new language to gain a clearer understanding of one other's responsibilities and unique perspectives.

Research findings suggest that students have a more positive attitude of their own profession and need for collaboration after completing an IPE session as they felt more confident through their work with real patients (Murphy & Nimmagadda, 2015; Swinnen et al., 2021). IPE has also been credited with increasing male students' feeling of competency of their own profession and value for other professions (Goelen et al., 2006). A unique element of IPE that enhances learning is the use of debriefing. Debriefing processes among team members provides students with an environment encouraging

constructive feedback, participation, and support from team members, simulated patients, and IPE trainers and supervisors.

Challenges and Opportunities to Consider With IPE

Despite significant research that demonstrates IPE's positive impact on IPP across various settings, universities struggle to implement IPE for various reasons (Khan et al., 2016; West et al., 2016). These challenges include uncertain decision-making around content, different academic calendars, logistics of professional school placements, and a focus on other investments (West et al., 2016). Khan et al. (2016) indicated limited access to facilities, training sites, and other healthcare professionals as unique challenges for IPE. Securing faculty or administrators as "champions" to lead and support IPE can also be difficult due to other workload demands and expectations for teaching, scholarship and research, promotion and tenure (etc.). Another challenge specific to IPE in training students prior to meeting program qualifications or licensure, is prioritizing content relevant to all professions involved and generalizable to different populations, care settings, and practice situations. It is also difficult in organizing and scheduling IPE because of different schools or universities coming together (either physically or remotely) to engage in the experience (Reeves & van Schaik, 2012). For example, the schools or universities might not be physically located within proximity to one another, which may be a barrier for in-person IPE experiences. The requirements for interprofessional experiences might also vary depending on the professional school's needs, background, or intentions. Lastly, IPE requires coherence and understanding between educators for which specific professions (e.g., social work, nursing, medicine) should be included and ensure equal commitment from students and professionals throughout the experience (Reeves & van Schaik, 2012). Unequal commitment from the students and professionals involved may lead to a disruption in effective and impactful IPE.

There are limitations specific to simulated learning experiences. A specific limitation to simulated learning is the difference between team composition and roles during IPE versus IPP (Reeves & van Schaik, 2012). Additionally, simulated IPE may not accurately reflect students' authentic responses due to performance-based anxiety and discomfort while being observed (Lee et al., 2018). For example, students may be concerned about their participation in the simulated experience related to academic feedback or peer interactions and may not display realistic responses. Recognizing challenges and predicting obstacles to IPE and simulated learning is important for professional schools when designing IPE curricula and simulations to ensure seamless IPE delivery.

A Case Example of IPE: CABISAM

The Certificate in Advanced Behavioral Interventions Among Marginalized populations (CABISAM) was developed by a team of interprofessional faculty members who collaborated at a large Midwestern university after being funded as part of a three-year SAMHSA grant (2017-2019) to infuse the Screening, Brief Intervention, and Referral to Treatment (SBIRT) model into the nursing, medical, and social work curricula. Current literature points to the need for more substance use addiction education and training in all

professional programs nationwide, with attention on use of alcohol, opioids, and other lesser-known substances (Muzyk et al., 2020). As the institution was already committed to providing SBIRT training for all students in several of its schools, there was strong faculty knowledge and commitment to teaching and using the SBIRT model, which positively assisted implementation efforts for this interprofessional program. The IPE curriculum was designed based on pedagogical best practices for teaching pre-licensure health professionals via an interprofessional practice model.

Therefore, this IPE model was developed based on existing literature and research, institutional priorities, funding, and best practices related to creating an SBIRT training program. Faculty leads from the three professional schools were first trained together in the SBIRT model as part of a national training program and then worked closely to develop CABISAM while fostering relationships with one another, sharing tasks, defining roles, responsibilities, and leading recruitment efforts within each respective school. Each student who completed the program received a certificate from the university's Institute for Transformative Interprofessional Education (ITIE). The value of the certificate for each student was more meaningful when issued by ITIE as opposed to solely being issued by one of the professional schools providing greater impact and visibility on their resumes rather than a simple annotation on their academic transcripts. Expansion beyond the university to a state-level and nationally recognized CABISAM certificate program remains a future goal.

The program initially ran over the course of three years including a semester-long course, with modifications based on a formal and informal evaluation process including faculty, simulated patients, and peer-based observation of students, in addition to a variety of formal and informal student feedback mechanisms, and an overall mixed-method program evaluation. As the three-year SAMHSA grant partially funded CABISAM, one aim was to incorporate rapid-cycle evaluation to modify future activities. Additional modifications of the model occurred during the second and third cohorts, when the CABISAM structure was amended to include direct observational feedback during simulation and in-person practice experiences by faculty members, simulated patients, and fellow students. The CABISAM educational model of delivery changed to an online format in March 2020 due to the COVID-19 global pandemic. Ongoing development of CABISAM and faculty involvement will be examined from an interdisciplinary perspective, with specific implications for clinical practice and implementation.

Key role of faculty. An interdisciplinary group of faculty members known as the Interdisciplinary Development Team (IDT) was led by social work, nursing, and medical faculty who served as their respective school's representative and champion to accommodate each school's logistical and curricular requirements and incorporate stakeholders from each profession, as indicated in the literature review. The IDT was essential to CABISAM's success as each faculty representative brought unique knowledge of their curriculum (e.g., content, gaps, accreditation requirements), logistics of their professional school (e.g., academic calendar, class schedule), while serving as a champion (e.g., for faculty within their school, to coordinate student recruitment), and to provide input from the perspective of their profession related to the development and infusion of the new interprofessional curriculum.

Each member of the IDT was charged with developing some aspect of the curriculum based on their unique scholarly and research interests, teaching background, and knowledge base. Challenges included developing a program for each profession that fit the unique academic calendar of each professional school, delivering content that was current, relevant, and engaged students, ultimately resulting in a greater understanding of each profession's roles. The IDT also spent time inventorying the existing substance use curriculum (if any) within each school, and identified students in each program (e.g., medicine, social work, and nursing) that would receive education on the basics of SBIRT as a part of each program curriculum, realizing that some students may have additional and advanced exposure resulting from attending CABISAM, or practicum experiences, and/or elective coursework focused on substance use and addiction. Members of the IDT modified elements of the curriculum and simulated practice experiences based on student responses to CABISAM course evaluations, feedback obtained from the optional focus groups, and pre- and post-test results utilizing the revised Interprofessional Collaborative Competency Attainment Scale.

A total of thirty students (ten from each profession per cohort) were recruited by the IDT faculty champion at each school and had to submit applications for the certificate program. Members of the IDT were key to student recruitment as well as the "word of mouth" promotion about CABISAM. The purpose of the application was to assess the student's level of interest in learning the SBIRT model and brief interventions related to substance use, and their appreciation and understanding of the importance of interprofessional practice. Initially, CABISAM was only open to graduate students (MSW and graduate-level nursing and medical students) while some exceptions were granted to safeguard equal representation from each school. It was important to focus on graduate students since they are more likely practicing independently post-graduation and the nature of the program required a higher level of individual and group level skills and learning. Preference was given to students with supervised clinical experience in coursework and practicum. Additional attention was given to the specific program concentrations, especially those from nursing and social work who were already at the point of specialization (e.g., health, mental health, schools, addictions, etc.). Interprofessional teams of three were created that ideally included one medical, nursing, and social work student.

Members of the IDT had integral roles during the CABISAM one-day training by modeling IPP skills and interactions. For example, each faculty member represented their profession in ad hoc discussions (e.g., answering questions, small group work) and demonstrated interprofessional skills during role-plays, which were an important part of student learning. Didactic learning via role-plays modeled by faculty allowed students to test and expand their skills during live simulated patient practice experiences. The IDT also engaged in a lively discussion during a panel presentation on IPP in which anecdotal stories, successes, and challenges from the field were shared, followed by a question-and-answer session.

The IPE Model: CABISAM

CABISAM is a semester-long program with four key requirements (see Table 1): a. an initial one-day training including pre-work (e.g., readings, videos, online simulation practice), b. interprofessional practice experiences (e.g., at a social service organization), c. creation of an implementation poster by the interprofessional team of students, and d. attendance, participation, and poster presentation at the university/community-based conference. Key requirements for CABISAM were designed in response to the literature underscoring significant limitations in classroom-only based learning activities and the benefit of engaging students in “real world” practice activities (WHO, 2010). In this case, “real world” activities included an Interdisciplinary Student Team (IST) consisting of one student from each profession engaging in practicing the SBIRT model in a practice setting and working together to develop a poster about SBIRT implementation opportunities and challenges. The IST provided a unique way for pre-licensure students to work collaboratively together and learn about each discipline’s perspectives pertaining to practice in the field of substance use and addiction. So, the overall sequence of events for students was to first learn the model, then practice the model, and finally to teach the model.

Table 1. *Timeline of CABISAM Certificate Program*

<i>Month</i>	<i>December</i>	<i>January</i>	<i>February</i>	<i>March</i>	<i>April</i>
Activity	Prework	Training Day	Practice Experience	Group Poster Collaboration	University Conference
Time	<i>3.5 hours</i>	<i>5 hours</i>	<i>3 hours</i>	<i>2 hours</i>	<i>3 hours</i>

Initial one-day training. The initial one-day training included IST introductions via an icebreaker, didactic instruction via lectures, small and large group discussions, and practice with simulated patients (see Table 2). Prior to attending the full-day training, students completed prework activities, including readings, videos, and stimulated practice experience (via the KOGNITO simulated platform). These educational activities covered each aspect of the SBIRT model of screening, brief intervention, and referral to treatment with a focus on motivational interviewing, the basics of substance use, and materials about interprofessional practice. Didactic presentations were delivered in the training by each faculty member on advanced SBIRT topics such as the stages of change model, screening and assessment, the brief negotiated interview, motivational interviewing, an overview of alcohol and drugs (specific emphasis on alcohol and other drug effects on the body), DSM criteria for diagnosis, navigating resources for referrals to treatment and care, and impactful engagement skills via role plays by faculty. In the observation of role plays by faculty, students completed SBIRT observation forms (see Appendix: Brief Intervention Observation Sheet) that guided their observation of the role-plays and feedback. The BIOS forms were used throughout CABISAM to guide student assessment and feedback of themselves and their peers.

IST members worked collectively, and efforts were made during didactic components to engage in small group activities, so teams had the opportunity to practice content and learn from one another. A panel of interprofessional faculty with practice and academic experience capitalized on previous student knowledge about IPP (e.g., collaboration,

communication) and provided deepened context related to their professional experiences while underscoring the value of IPP. The panel also provided students with an opportunity to directly observe faculty discuss issues concerning effective utilization of the SBIRT model, and practice with medically underserved communities and marginalized populations, among other relevant topics. IST members were given time to formally educate one another about their unique profession and informally promote bonding and relationship building.

Table 2. *CABISAM Certificate Program Training Day Schedule*

Topic(s)	Description
Welcome	Introduction of CABISAM faculty IDT & review of agenda
Review of CABISAM Requirements	
Introductions & Ice Breaker	
SBIRT Educational Presentations	Introduction to the SBIRT model Overview of alcohol & drugs Overview of the stages of change model Screening & screening tools (e.g., AUDIT, DAST) Brief intervention & motivational interviewing Referral to treatment Questions & answers
Faculty Role Play Examples	Students observe faculty role plays of interprofessional practice & utilization of the SBIRT model
Practice with Standardized Patients	Opportunity for students to practice with members of their interprofessional student team. Other teams watch & provide feedback. This is the first time the IST worked together with time to process strengths & weaknesses of interactions & the model of delivery
Panel on interprofessional practice	Interprofessional faculty panel from various schools discuss interprofessional education, practice experiences, barriers, & opportunities
Conclusion	Review next steps & closing remarks

Students engaged in simulated practice opportunities via alcohol and substance use scenarios with standardized patients, developed by the IDT and based on contemporary issues in the field. Each IST would engage in a simulated patient experience while fellow students and faculty members observed using the BIOS form to guide them. This was a crucial component of CABISAM as it provided the IST a chance to work together as a team before the actual field experience and other activities throughout the semester. It also provided an opportunity for students to ask questions and receive direct feedback from faculty, students, and the standardized patients themselves (both in character and out of character). For example, students were often fascinated about the utility and usefulness of SBIRT as an appropriate intervention when substance use has not yet reached a diagnostic threshold and the impact of using motivational interviewing skills.

As an example of interprofessional learning, social work faculty and students found significant value in the use of standardized patients, a strategy which has not been widely used in social work education because educational methods tend to focus on classroom-

based role-plays and field-based practice experiences (Neuderth et al., 2019). On the other hand, there is a long history of using standardized patients in nursing and medical clinical education and training (Neuderth et al., 2019; Talwalkar et al., 2020). Ultimately, all professions found new opportunities related to training and learning via standardized patients, the SBIRT model, motivational interviewing, substance use, and behavioral health topics.

Interprofessional field practice experience. Interprofessional student teams (IST) engaged in three to four-hour field practice experiences, supervised SBIRT screenings and brief interventions at a community-based primary care clinic or social service organization. This practice experience required all members of the IST to put into action stages of the SBIRT model and motivational interviewing skills that were initially practiced at the training day with an actual client. We found that providing such experiences in non-medical settings (e.g., community-based health clinic and an evening meal program for unstably housed clients) provided more direct practice opportunities, had fewer barriers in terms of scheduling, and allowed students to be on the front line of working with diverse and marginalized individuals in underserved areas.

Implementation poster. Each IST was required to develop and present a poster at the annual university SBIRT conference. The poster's content was to outline implementation opportunities and challenges of using the SBIRT model during the interprofessional field experience. The goal was for students to engage with one another in an interprofessional activity by first developing an implementation-related question, interviewing a stakeholder about challenges and opportunities with utilizing SBIRT in a unique practice setting, and collaborating on designing a poster reviewed by faculty members of the IDT. Students subsequently presented the poster at the annual conference in front of peers, faculty, and community members (e.g., alumni, social service staff members). Students reported that the poster presentation and conference component of CABISAM was helpful for strengthening their knowledge and presentation skills with a faculty-reviewed presentation at a university conference attended by faculty and community-based clinicians while providing a valuable way to understand the barriers and challenges of implementing cutting edge clinical interventions as they embark upon their post-graduate careers. Further, students were encouraged to submit abstracts of their presentations to local, regional, and national professional conferences. This resulted in a number of students being accepted at conferences including the annual program meeting of the Council on Social Work Education and the International Association of Social Work with Groups conference.

Annual conference. Finally, students presented their posters at an annual CEU bearing university conference attended by clinicians, faculty, alumni, and staff from local community-based organizations. The conference agenda included viewing the student poster presentations, processing the experience of community clinicians working with patients, and advanced mentorship training by nationally renowned leaders in the field of SBIRT and substance use. The program also incorporated a plenary lecture as well as small breakout groups. The conference was modeled closely after the one-day training. However, students engaged in a leadership role in creating the overall conference theme, presentations, and providing feedback to attendees after they engaged in simulated patient practice experiences. The conference's theme ranged from SBIRT implementation

challenges; to SBIRT and the opioid crisis; to SBIRT opportunities with interprofessional teams. One of the conferences created a unique venue for learning more about the opioid crisis in the region and underscored how clinicians approach large-scale problems without evidence-based tools. This topic directly addressed the lack of strong evidence of SBIRT utility with patients diagnosed with opioid use disorders (Kaczorowski et al., 2020). Relatedly, a notable SBIRT training in a bachelor's level nursing program found a decrease in students' stigma after completing SBIRT training and education on patients with opioid or alcohol use disorders (Mahmoud et al., 2019).

Pivot to Online Delivery

In March 2020, the U.S. experienced its first wave of the COVID-19 pandemic which has undoubtedly influenced IPP in healthcare settings, including role changes and recognition of all healthcare workers as vital team members (Goldman & Xyrichis, 2020). Additional challenges due to the pandemic included moving select health services to an online delivery model and determining which IPP was essential for in-person care (Goldman & Xyrichis, 2020). Although there was online IPE occurring prior to the pandemic, a large majority of schools, universities, and healthcare settings across the country moved to a completely online format. Students enrolled in online IPE reported that online delivery was comparable to in-person IPE related to content, course involvement, and individual learning (Jones et al., 2020). Additionally, the convenience and flexibility, no additional travel required, interpersonal connections, open learning format, engagement, and reflection were all reported strengths of online IPE delivery. On the other hand, limited face-to-face interactions and interpersonal connections, busy work, inconclusive directions, delayed feedback, and technology issues were indicated as barriers to online IPE (Jones et al., 2020).

Similar to other IPE courses during the pandemic, CABISAM pivoted to an online delivery format. All training components, including the one-day training, simulated patient experiences, field practice experience, poster presentations and conference, were held synchronously online via Zoom. The faculty leads continued to monitor the online delivery and topics to ensure that the professional scope was appropriately addressed and implemented. Each training component experienced a slight adjustment due to the online delivery. The initial one-day training included online breakout rooms to enhance bonding within the IST. A specific change to the field practice experience was made for IST members to utilize interprofessional skills through three-hour online experiences with simulated patients (SPs). The SPs were provided with character descriptions and scenarios to professionally and impactfully facilitate the online practice experience. Another change to CABISAM was the online conference, which changed to a capstone practice seminar. This revised format allowed students to hear from a trans person in recovery, reflect upon their CABISAM experience, and learning related to IPP skills. The capstone seminar also focused on the influence of the COVID-19 pandemic and work-related stress and burnout in healthcare settings. Despite the obstacles of transitioning to online delivery, the new capstone seminar format expanded CABISAM's student base nationwide, which enhanced the IPE experience with diverse students (e.g., age, gender, racial/ethnic, LGBTQ+) from urban and rural backgrounds.

Sustainability Challenges

Barriers to the establishment and ongoing success of CABISAM were environmental and curricular in nature. The three schools from the university that led the program are separated by geographically distanced campuses, each about 10 miles apart with limited access via public transportation at the health sciences campus. While technology aided in bridging this distance, faculty interactions on the IDT and student interactions on the IST (especially concerning poster development) may have been better served in person, which would have allowed for the development of more interpersonal cohesion and connections. Curricular challenges were related to the various academic schedules of each school and differing levels of academic requirements for each discipline.

Notably, initial grant funding provided the opportunity to develop, evaluate, and refine CABISAM, which included logistical needs working with community-based agencies to expand practice opportunities for students. However, sustainability has proved challenging, as sustaining the program post funding necessitated institutional “buy-in” from the deans of each school, and the academic provost. Thankfully, tuition revenue generated by the CABISAM credit-bearing course helped fund the program over the past few years. However, it is unknown if this course will be offered in the future, possibly limiting funding-generated opportunities for CABISAM’s continuation. In years past, continuing education credits (CEUs) were offered free of charge to practitioners attending the annual conference, while in forthcoming years, we will need to charge for CEUs, which may limit participation.

Discussion

Faculty from each school who acted as champions were present from conception to development and implementation stages, and all equally engaged in leadership roles best representing their professional expertise. Recently, and most notably, faculty created a credit-bearing CABISAM course, offering students an enhanced semester-long version delving more deeply into the clinical components of using the SBIRT model, motivational interviewing, and brief negotiated interview. The offering of this class also allowed for hiring an adjunct using tuition dollars from the cohort of CABISAM students who completed the course. An adjunct instructor was selected because of their professional expertise in the field concurrent to teaching. Nursing faculty members have recently been working with social work faculty to utilize the CABISAM model within new Health Resources and Services Administration (HRSA) interprofessional grant applications such as one recently funded to train students on interprofessional practice with Indigenous and rural populations via telehealth.

CABISAM can serve as a model of IPE for other schools of social work to lead IPE initiatives within their universities. Incorporating IPE has many opportunities and barriers as outlined in this manuscript along with the model’s own limitations, but healthcare delivery within the U.S. is beginning to utilize collective approaches for health care, including IPP. Social work students, among all other health care students, must be prepared for real-world IPP skills and relationships to better serve patients and enhance healthcare

outcomes. Additional research on the impact of graduate level social work IPE is needed to better inform IPE curriculum and activities.

The successful use of interprofessional practice is vital for patient engagement and satisfaction in health care, follow through with treatment recommendations, and ease in the continuity of care across practice settings and patient populations (WHO, 2010). Using an IPE model focusing on marginalized populations is significantly crucial in enhancing the health and wellbeing of such underserved communities. Incorporating IPE across undergraduate and graduate curricula is vital to effectively prepare students across professions for impactful IPP in their post-graduate careers. Without successful IPE, healthcare teams will continue to struggle to maximize collaboration, leading to failure in attaining the five aims of health care.

Conclusion

This CAMISAM training model presented in this manuscript focused on using the SBIRT model in an interprofessional team of social work, nursing, and medical students, while providing a certificate and course structure that may be adapted for other schools and professions. While CABISAM was found to be effective and impactful based on student course evaluations, focus group feedback, and pre- and post-test results utilizing the Interprofessional Collaborative Competency Attainment Scale, this manuscript solely outlines the model and not an evaluation of the program. Regardless, we believe that CABISAM is thorough and replicable as it encapsulates didactic learning, observation of role-play, simulated practice and education, and participation in a university conference. Although the CABISAM model was created for use with pre-licensed or pre-certified students focused on substance use interventions and one key model, the model and structure can certainly be modified among post-licensure community-based professionals for continuing education purposes.

References

- Barr, H., Ford, J. Gray, R., Helme, M., Hutchings, M., Low, H., Machin, A., & Reeves, S. (2017). [Interprofessional education guidelines 2017](#). Centre for the Advancement of Interprofessional Education [CAIPE].
- Barr, H., Koppel, I., Reeves, S., Hammick, M., & Freeth, D. (2005). [Effective Interprofessional Education: Argument, Assumption and Evidence](#). Blackwell & CAIPE.
- Chauhan, A., Walton, M., Manias, E., Walpole, R. L., Seale, H., Latanik, M., Leone, D., Mears, S., & Harrison, R. (2020). [The safety of health care for ethnic minority patients: A systematic review](#). *International Journal for Equity in Health*, 19(1), 118-125.
- Copenhaver, M., & Crandell-Williams, A. (2020). [A safe place: Using clinical supervision groups to build interprofessional collaborative practice skills](#). *Advances in Social Work*, 20(2), 320-337.
- Ford, J., & Gray, R. (2021). [Interprofessional education handbook: For educators and practitioners incorporating integrated care and values-based practice](#). CAIPE.

- Goelen, G., De Clercq, G., Huyghens, L., & Kerckhofs, E. (2006). [Measuring the effect of interprofessional problem-based learning on the attitudes of undergraduate health care students](#). *Medical Education*, 40(6), 555-561.
- Goldman, J., & Xyrichis, A. (2020). [Interprofessional working during the COVID-19 pandemic: Sociological insights](#). *Journal of Interprofessional Care*, 34(5), 580-582.
- Hansen, M. D., Holland, M. M., & Munn, J. (2020). [Teaching note- A call for social work education: Moving toward a model of interprofessional education](#). *Journal of Social Work Education*, 56(3), 595-601.
- Interprofessional Education Collaborative [IPEC]. (2023). [IPEC core competencies for interprofessional collaborative practice: Version 3](#). Author.
- Jones, B., & Phillips, F. (2016). [Social work and interprofessional education in health care: A call for continued leadership](#). *Journal of Social Work Education*, 52(1), 18-29.
- Jones, T. A., Vidal, G., & Taylor, C. (2020). [Interprofessional education during the COVID-19 pandemic: Finding the good in a bad situation](#). *Journal of Interprofessional Care*, 34(5), 633-646.
- Kaczorowski, J., Bilodeau, J., Orkin, A., Dong, K., Daoust, R., Kestler, A., & Heard, K. J. (2020). [Emergency department-initiated interventions for patients with opioid use disorder: A systematic review](#). *Academic Emergency Medicine*, 27(11), 1173-1182.
- Kangasniemi, M., Karki, S., Voutilainen, A., Saarnio, R., Viinamäki, L., & Häggman-Laitila, A. (2020). [The value that social workers' competencies add to health care: An integrative review](#). *Health and Social Care in the Community*, 30(2), 403-414. <https://doi.org/10.1111/hsc.13266>
- Khan, N. S., Shanhnaz, S. I., & Kadayam, G. G. (2016). [Currently available tools and teaching strategies for the interprofessional education of student health professions: Literature review](#). *Sultan Qaboos University Medical Journal*, 16(3), e277-e285.
- Knudsen, H. K., Ducharme, L. J., & Roman, P. M. (2008). [Clinical supervision, emotional exhaustion, and turnover intention: A study of substance abuse treatment counselors in the Clinical Trials Network of the National Institute on Drug Abuse](#). *Journal of Substance Abuse Treatment*, 35(4), 387-395.
- Lee, C. A., Pais, K., Kelling, S., & Anderson, O. S. (2018). [A scoping review to understand simulation used in interprofessional education](#). *Journal of Interprofessional Education & Practice*, 13, 15-18.
- Mahmoud, K. F., Finnell, D., Lindsay, D., MacFarland, C., Marze, H. D., Scolieri, B. B., & Mitchell, A. M. (2019). [Can screening, brief intervention, and referral to treatment education and clinical exposure affect nursing students' stigma perception toward alcohol and opioid use?](#) *Journal of the American Psychiatric Nurses Association*, 25(6), 467-475.
- McAfee, N. W., Schumacher, J. A., Madson, M. B., Villarosa-Hurlocker, M. C., & Williams, D. C. (2022). [The status of SBIRT training in health professions education:](#)

- [A cross-discipline review and evaluation of SBIRT curricula and educational research](#). *Academic Medicine*, 97(8), 1236-1246.
- Murphy, J. I., & Nimmagadda, J. (2015). [Partnering to provide simulated learning to address interprofessional education collaborative core competencies](#). *Journal of Interprofessional Care*, 29(3), 258-259.
- Muzyk, A., Smothers, Z. P. W., Andolsek, K. M., Bradner, M., Bratberg, J. P., Clark, S. A., Collins, K., Greskovic, G. A., Gruppen, L., MacEachern, M., Ramsey, S. E., Ruiz Veve, J., & Tetrault, J. M. (2020). [Interprofessional substance use disorder education in health professions education programs: A scoping review](#). *Academic Medicine*, 95(3), 470-480.
- National Center for Interprofessional Practice and Education. (2023). [About IPE](#). Author.
- Neuderth, S., Lukaszczik, M., Thierolf, A., Wolf, H.-D., van Oorschot, B., König, S., Unz, D., & Henking, T. (2019). [Use of standardized client simulations in an interprofessional teaching concept for social work and medical students: First results of a pilot study](#). *Social Work Education*, 38(1), 75-88.
- Nundy, S., Cooper, L. A., & Mate, K. S. (2022). [The quintuple aim for health care improvement: A new imperative to advance health equity](#). *JAMA*, 327(6), 521-522.
- Office of Addiction Services and Supports. (n.d.). [SBIRT: Screening, brief intervention, and referral to treatment A tool for identifying risky substance use behaviors and providing appropriate intervention](#). New York State.
- Ramgard, M., Blomqvist, K., & Petersson, P. (2015). [Developing health and social care planning in collaboration](#). *Journal of Interprofessional Care*, 29(4), 354-358.
- Reeves, S., & van Schaik, S. (2012). [Simulation: A panacea for interprofessional learning?](#) *Journal of Interprofessional Care*, 26(3), 167-169.
- Ruebling, I., Pole, D., Breitbach, A. P., Frager, A., Kettenbach, G., Westhus, N., Kienstra, K., & Carlson, J. (2014). [A comparison of student attitudes and perceptions before and after an introductory interprofessional education experience](#). *Journal of Interprofessional Care*, 28(1), 23-27.
- Swinnen, E., Fobelets, M., Adriaenssens, N., Vandyck, E., Goelen, G., Moortgat, E., Laforge, D., & Peersman, W. (2021). [Effectiveness of an interprofessional education model to influence students' perceptions on interdisciplinary work](#). *The Journal of Nursing Education*, 60(9), 494-499.
- Thoele, K., Moffat, L., Konicek, S., Lam-Chi, M., Newkirk, E., Fulton, J., & Newhouse, R. (2021). [Strategies to promote the implementation of Screening, Brief Intervention, and Referral to Treatment \(SBIRT\) in healthcare settings: A scoping review](#). *Substance Abuse Treatment, Prevention, and Policy*, 16(42), 1-20.
- Talwalkar, J. S., Cyrus, K. D., & Fortin, A. H. (2020). [Twelve tips for running an effective session with standardized patients](#). *Medical Teacher*, 42(6), 622-627.

- United States Department of Health and Human Services. (2023, January 4). [*SAMHSA announces National Survey on Drug Use And Health \(NSDUH\) results detailing mental illness and substance use levels in 2021*](#). Author.
- Vanclay, L. (Ed.). (1997). [*Interprofessional education: What, how & when*](#). *CAIPE Bulletin*.
- Wamsley, M., Satterfield, J. M., Curtis, A., Lundgren, L., & Satre, D. D. (2018). [*Alcohol and drug Screening, Brief Intervention, and Referral to Treatment \(SBIRT\) training and implementation: Perspectives from 4 health professions*](#). *Journal of Addiction Medicine*, 12(4), 262-272.
- West, C., Graham, L., Palmer, R. T., Miller, M. F., Thayer, E. K., Stuber, M. L., Awdishu, L., Umoren, R., Wamsley, M. A., Nelson, E. A., Joo, P. A., Tysinger, J. W., George, P., & Carney, P. A. (2016). [*Implementation of interprofessional education \(IPE\) in 16 U.S. medical schools: Common practices, barriers and facilitators*](#). *Journal of Interprofessional Education & Practice*, 4, 41-49.
- World Health Organization. (2010). [*Framework for action on interprofessional education & collaborative practice*](#). Author.

Author note: Address correspondence to Katrina Herweh, School of Social Work, Loyola University Chicago, Chicago, IL 60611. Email: kherweh@luc.edu

Appendix. *Brief Intervention Observation Sheet*

Provider #:
Rater:
Date:

<i>Did the Provider ...</i>	Yes/No	Comments
(1): Raise the subject	1) Explain role and respectfully ask permission to have a discussion about alcohol/drug use	Yes/No
	2) Review patient's alcohol/drug use patterns	Yes/No
	3) Share the patient's AUDIT/DAST scores and zones	Yes/No
(2): Provide feedback	4) Review low-risk guidelines relevant to his/her sex and age group	Yes/No
	5) Explore possible connection to health, social, work issues and express concern(s) (if relevant)	Yes/No
(3): Enhance motivation	6) Ask patient to select a number on the "Readiness Ruler" 6a) What was the number?	Yes/No
	7) Ask patient: <i>why didn't you pick a lower number?</i> OR Ask patient: <i>how would your drinking (drug use) have to impact your life in order for you to start thinking about cutting back?</i> OR Discuss patient's pros and cons of use	Yes/No
	8) Provide a summary of readiness (You said ...)	Yes/No
(4): Negotiate a plan	9) Negotiate a goal with the patient based on his/her response to: <i>What steps would you be willing to take?</i>	Yes/No
	10) Offer a menu of choices for change, provide recommendation, secure agreement	Yes/No
Motivation	11) To what degree did the provider use a motivational style (open-ended questions, reflective listening, not confrontational)?	
	<i>Not At All</i> 1 2 3 4 5 6 7 <i>Very Effectively</i>	

Adapted from the BI Adherence/Competence Scale, and Oregon Brief Observation Sheet.

12. Additional comments about provider performance: