

Assessing Interprofessional Collaboration at Clinical Learning Sites: Methodology on Developing the IP-CLEAR Tool

Kimberly A. Sanders, Mary R. Lynn

Interprofessional education experiences are now an integral part of accreditation criteria for all health professional schools. While strong models exist for didactic interprofessional training, interprofessional practice opportunities are needed for students to apply the skills they learn in the classroom and simulation settings to real-world care environments [1-4]. According to the National Collaborative for Improving the Clinical Learning Environment (NCICLE), the ideal interprofessional clinical learning environment (CLE) is a "shared space between various professions collaborating with patients and caregivers, working together to provide the best care possible" and can occur in any area where professional students are trained [5]. Practice environments vary in the value placed on collaboration [6-9]. The presence of different health care professionals does not automatically make an environment collaborative; it must be an intentional foundation of practice in that environment. Yet, assessment of the readiness and development needs of these CLEs to provide optimum interprofessional experiences remains underdeveloped.

With these needs in mind, the Interprofessional Clinical Learning Environment Assessment and Reflection (IP-CLEAR) tool was developed by a team of faculty from the schools of nursing, pharmacy, and medicine at the University of North Carolina at Chapel Hill (UNC-CH), with the support of the North Carolina Area Health Education Centers (NC AHEC) and the UNC-CH Office of Interprofessional Education and Practice (IPEP). The IP-CLEAR tool is intended for use by clinical sites that have or want to have clinical learners engaged and integrated into an excellent interprofessional CLE. The development of the IP-CLEAR and projections for future work are described here.

IP-CLEAR Tool Development

There have been two phases of development of the IP-CLEAR so far: information gathering and piloting test-

ing. During phase one, a literature review determined the existing barriers to interprofessional collaboration in practice and methods used in assessing organizational readiness. The primary goals of IP-CLEAR were set as 1) categorizing the type of clinical site and infrastructure, 2) determining the existing degree of interprofessional collaboration, and 3) understanding the potential opportunities for interprofessional learners to engage. Two existing tools also served as foundational to initial tool development: the University of Minnesota's Interprofessional Education Site Readiness (InSITE) tool and the Assessment for Collaborative Environments (ACE-15) tool [9, 10]. It was determined that an integrated, updated version of the tools may best meet the goals outlined. Content validity testing was conducted through semi-structured interviews, and after qualitative analysis themes were summarized to create the IP-CLEAR tool for pilot testing using the Qualtrics platform (Qualtrics LLC).

The IP-CLEAR tool contains six sections of items addressing demographics, site infrastructure, preceptor qualities, learner experiences, site culture, and organizational culture, with the section titles other than demographics borrowed from the InSITE tool. The IP-CLEAR tool differs in significant ways from its predecessors. IP-CLEAR incorporates defining the organizational levels of areas where multiple health professionals currently interact (such as at the unit or service level versus the entire clinic or hospital), as well as in-depth questions about learner experience. It also captures any additional involvement in projects related to health and system-based outcomes, and the section on site culture was based on the ACE-15 statements but used a frequency scale rather than an agreement scale to capture "team-ness" beyond a single moment in time.

During the pilot period of April-July 2022, individuals from clinical sites were asked to either independently complete the IP-CLEAR or schedule a 30-minute meeting with a project team member to complete it. The two

types of administration processes were meant to assess the feasibility of IP-CLEAR completion. Sixty-four health professionals in North Carolina were contacted to complete the IP-CLEAR, 40 of whom started it and 23 of whom fully completed it. The clinical sites were from nine counties and from both inpatient and outpatient environments. Most respondents had mixed professional roles with administrative titles and backgrounds in either nursing, pharmacy, or medicine. Follow-up interviews were conducted to obtain feedback on the feasibility of administration of the IP-CLEAR. The feedback indicated that the IP-CLEAR is comprehensive and that, for feasibility, having a designated tool administrator was preferred to self-administration given the greater degree and depth of responses and their familiarity with interprofessional terminology to clarify any questions.

Next Steps

The overall goals for the development of the IP-CLEAR were met, and it will undergo further testing and refinement in future work to include demonstration of construct validity, assessment of inter-rater reliability among clinicians at one site and, ultimately, assessing the current structure of CLEs across more of North Carolina. A coaching model is being developed for clinical sites to address specific needs identified by the IP-CLEAR tool, with the goal of creating an action plan.

By improving clinical site evaluation through the development of a formative assessment tool, the hope is to provide information that can be used in assessing and improving the preparation of learners in collaborative practice. If you have a desire to be a part of this impactful work going forward, please consider contacting the UNC Office of Interprofessional Education and Practice at unc_ipe@unc.edu. NCMJ

Kimberly A. Sanders, PharmD, BCPS Assistant Professor, Eshelman School of Pharmacy, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.

Mary R. Lynn, PhD Professor, School of Nursing, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.

TABLE 1.
IP-CLEAR Sections and Content

Section	Question Description Summary	Number of Questions
Demographics	• Description of site setting and position; respondent represents where interaction with learners occurs the most	8
Infrastructure	• Descriptive components of clinical site • Current types of health professions and which identify as preceptors of learners • Micro, meso, and macro levels of interprofessional interactions • Interpersonal methods used in interactions • Frequency of interprofessional patient care activity • Source of input on clinical team member role definitions	6
Preceptor Qualities	• Description of role as a preceptor • How participant would rate preceptors at clinical site having the ideal qualities	3
Learner Experience	• Current types of health professions learners • Whether health professionals at site precept students from a different profession • Types of micro, meso, and macro levels of interprofessional interactions that include learners • Frequency of patient care activities including learners • Activities that learners participate in independently with learners from other disciplines • Degree of explicit expectations around learners engaging in interprofessional activities beyond what is expected of institution • Degree of learners' interprofessional involvement with health and/or system outcomes • Types of learner activities impacting patients or the organization (i.e., quality improvement) • Average duration of experience for learners engaging in health/system-based outcomes projects	11
Site Culture	• Incorporation of ACE-15 tool statements with a frequency scale	15
Organizational Culture	• Enabling and interfering aspects of the clinical site that impact collaboration • Ranking degree of enabling and interfering factors of collaboration • Readiness scale of whether workplace can sustain a program aimed to be involved in interprofessional collaboration	7

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Address correspondence to Kimberly A. Sanders, Campus Box 7574, 301 Pharmacy Ln, Chapel Hill, NC 27599 (kim.sanders@unc.edu).

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