Preparing the Athletic Trainer for Interprofessional Collaborative Practice: A Report From the Association for Athletic Training Education-Research Network

Sarah A. Manspeaker,1 Justin P. Young,2 Nicole A. Wilkins,3 Chad Clements,4 Dorice A. Hankemeier,5 Richelle M. Williams,6 Stacy E. Walker,6 and Lindsey E. Eberman2

1Duquesne University, Pittsburgh, PA, USA; 2Indiana State University, Terre Haute, IN, USA; 3University of Tulsa, Tulsa, OK, USA; 4Boston University, Boston, MA, USA; 5Ball State University, Muncie, IN, USA; 6Drake University, Des Moines, IA, USA

Contemporary health care emphasizes interprofessional collaborative practice (IPCP), described as when providers from two or more professions work together to achieve the highest-quality patient care. Historically, athletic trainers have naturally collaborated with physicians, in part due to our defined scope of practice, but more importantly as a benefit to achieving positive patient outcomes. Athletic trainers also collaborate with nurses, physical therapists, physician assistants, and other health care professionals when providing care to physically active patients and populations. Due to the oftentimes continuous contact with patients while engaging these other health care professionals, athletic trainers are well suited to expand their interprofessional collaborations to other disciplines and serve as key stakeholders in the IPCP team. To assist in this expansion of IPCP, there are several professional organizations and a substantial body of literature focusing on effective engagement in IPCP that can serve as resources for athletic training. This commentary will address the background of IPCP and the relevance of the athletic trainer within the interprofessional team, as well as identify resources for additional information.

Keywords: interprofessional team, collaborative practice, core competencies

IPCP Versus Interprofessional Education

To best prepare athletic trainers to engage in interprofessional collaborative practice (IPCP), a structured approach to interprofessional education (IPE) is necessary. IPE is the process by which learners in professional education programs learn with, from, and about learners from other disciplines.1,2 Thus, IPCP is the actual collaboration on patient care among professionals and IPE is the process of learning how to engage in IPCP. This commentary will focus specifically on IPCP.

Like other health care professions, it takes time, often years, to change clinician behavior. For example, evidence-based medicine was addressed in the athletic training literature nearly 20 years ago.3 Yet athletic trainers lacked the knowledge and self-efficacy to implement evidence and inform their clinical practice 10 years later.4 As with the challenge with evidence-based practices decades ago, the interprofessional emphasis in athletic training, which was initially supported by the National Athletic Trainers’ Association in 2012 as both an educational initiative and vital element of clinical practice,5 is encountering similar issues. In an effort to close this gap and enhance IPCP in practice, as part of their research agenda, collaborating members of the Association for Athletic Training Education-Research Network have been working to investigate IPCP in athletic training practice as well as identify how IPCP is being facilitated within educational programs (Table 1).

Characteristics and Behaviors of IPCP

In 2001, the National Academies of Medicine, formerly the Institute of Medicine, published a call for fundamental change to the health care system that outlined a series of overarching principles.6 These principles established a need for health care organizations and patients to collaborate to enhance patient outcomes and safety.6 Specific emphasis on areas such as continuous relationships, customization of care, patient ownership, shared knowledge, and evidence-based decision making established the core of these rules.6 Further discussions on transparency of information and cooperation for coordination of care are also provided within these guidelines.6

With the Institute of Medicine principles in mind, a recent literature search to describe the necessary behaviors and characteristics providers use to practice collaboratively was conducted.7 Search terms included “teams” or “providers,” “interprofessional,” and “behaviors” or “characteristics.” Five characteristics were identified: communication, cooperation and collaboration, roles and responsibilities, team dynamics, and patient-centeredness. These characteristics of IPCP align closely with the above National Academies of Medicine principles8 as well as the Interprofessional Education Collaborative core competencies, which have been well established in interprofessional literature.8

To successfully engage in IPCP, athletic trainers and all professionals need to be skilled in communication, cooperation, and collaboration. When applying these skills, professionals must also demonstrate specific behaviors such as an understanding of team dynamics, appreciation for their own roles and responsibilities, and those of other members of the IPCP team, all while maintaining a patient-centered focus.
Table 1  Interprofessional Education and Collaborative Practice Research Priority (From the Association for Athletic Training Education-Research Network)

<table>
<thead>
<tr>
<th>Global and specific aims</th>
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</thead>
<tbody>
<tr>
<td><strong>Global aim:</strong> To enhance interprofessional and collaborative practice in postcertification/licensure clinical practice through effective educational practices</td>
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<tr>
<td><strong>Specific Aim 1:</strong> To explore the impact of interprofessional education on collaboration among providers in postcertification/licensure clinical practice</td>
</tr>
<tr>
<td>1. What is the impact of clinical education setting on engagement in interprofessional and collaborative practice in postcertification/licensure clinical practice?</td>
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<td>2. What is the impact of type/mode of interprofessional education on engagement in interprofessional and collaborative practice in postcertification/licensure clinical practice?</td>
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<td><strong>Specific Aim 2:</strong> To explore the impact of interprofessional education on health care professionals’ knowledge of the roles and responsibilities of other health care professionals</td>
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<tr>
<td>1. What do other health care professionals know about the roles and responsibilities of athletic trainers?</td>
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<tr>
<td>2. What do athletic trainers know about the roles and responsibilities of other health care professionals?</td>
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<tr>
<td>3. Does interprofessional and collaborative practice in clinical education improve the knowledge of athletic trainers about the roles and responsibilities of other health care professionals?</td>
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<td>4. Are there differences in knowledge of roles and responsibilities of other providers during professional preparation and after credentialing?</td>
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<tr>
<td><strong>Specific Aim 3:</strong> To characterize interprofessional and collaborative practice in athletic training</td>
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<td>1. What are the ideal characteristics of interprofessional and collaborative practice in athletic health care?</td>
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<td><strong>Specific Aim 4:</strong> To understand measures of interprofessional and collaborative practice in athletic training education</td>
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<td>1. How are programs measuring and ensuring quality in interprofessional and collaborative practice in athletic training education?</td>
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<tr>
<td><strong>Specific Aim 5:</strong> To explore the intersections between diversity, equity, and inclusion (DEI) and IPCP accreditation standards in athletic training education</td>
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<tr>
<td>1. In what ways can athletic training educators curate interprofessional and collaborative practice experiences that enhance diversity, equity, and inclusion in clinical education?</td>
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<td><strong>Specific Aim 6:</strong> To explore the interprofessional and collaborative practice for the management of behavioral health conditions in collegiate athletics</td>
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<td>1. What are the characteristics and experiences of interprofessional teams that effectively recognize and manage routine and emergency behavioral health conditions?</td>
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<tr>
<td>2. Does a curated simulation experience enhance student confidence and competence in recognizing and managing routine and emergency behavioral health conditions?</td>
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*Note. IPCP = interprofessional collaborative practice.*

**Preparation for Engagement in IPCP**

Athletic training educators play a key role in fostering the behaviors necessary for successful IPCP. At the time of this publication, IPE and IPCP standards are found in over 25 accreditation governing documents, including athletic training. While the need for and importance of IPCP culture may be highlighted in the classroom, the research by the Association for Athletic Training Education-Research Network and others has found that this culture is not being emulated or fostered in clinical practice. We believe the important first steps to address the perceived lack of IPCP occurring in athletic training practice are to emphasize the key differences between IPE and IPCP, and to develop more formalized training in IPCP for educators and clinicians (Table 1).

One suggested strategy to address this knowledge gap could be to establish intentional student placement in IPCP-rich clinical education experiences in which providers from two or more professions engage in and discuss patient care and/or co-treat. To achieve this interprofessional emphases, inclusion of clinical sites that feature preceptors who model and facilitate collaborative practice behaviors with learners as well as the identification and utilization of preceptors specifically trained in IPCP to supervise students and reinforce IPCP culture in clinical practice could be considered. Lastly, fostering intentional collaborations between nearby and partner institutions featuring varied health care professionals could enhance opportunities for IPCP. These collaborations would enhance the sharing of resources (i.e., personnel, clinical sites, and technology such as shared medical records) while also providing a space to create, share, and model best clinical practices. To supplement these clinical opportunities, program faculty can incorporate IPCP simulations to provide increased exposure to best clinical practices for interprofessional collaboration that mimics real-life application. Educational administrators and program faculty can find additional information about these IPCP-rich experiences on the National Athletic Trainers’ Association and Association for Athletic Training Education Websites.

In conjunction with the development of IPCP clinical education experiences, program faculty should incorporate formal assessment measures to evaluate the effectiveness of and ensure that quality IPCP experiences are occurring. Tools such as TeamSTEPS and the Athletic Training Milestones can be helpful as programs implement formal assessment of IPCP experiences. These tools emphasize competency areas for learners in health care professions to develop their skills for the delivery of safe, efficient, equitable, and patient-centered care. While there are several competency areas within each tool, areas specific to interpersonal and interprofessional communication, professionalism, and responsiveness to the larger health care system to provide excellent patient care. More information about these tools, and other key resources, can be found in Table 2 of this manuscript.

**Athletic Trainers’ Role in Interprofessional Collaboration**

The Institute for Improvement has consistently focused on improving population health through emphasis on enhancing individualized patient care through the Triple, Quadruple, and now Quintuple Aims. The evolution from Triple Aim to Quintuple Aim established a purposeful approach to optimize health care system performance through patient experience and cost savings by adding workforce well-being, safety, and advancing health equity to the original pillars of the Triple Aim. The addition of advancing equity, although not new to the health care system, places greater emphasis on reducing disparities through options such as community-based care and cross-cultural education and practices.
treated patients, and improved communication among providers.22

with other health care providers, shared decision making when a
medical model often increases the opportunity for collaboration with a
physician rather than someone in the athletic department. This
reporting directly to a health care professional, most often a
athlete rather than someone in the athletic department.

One potential challenge may be that some athletic training practice
to which athletic trainers are actively engaging in IPCP is unclear.

Aim.4,18,19 Examples of elements of athletic training practice that align
engaging in IPCP athletic trainers can contribute to the goals of the
 Ips

In comparison, a medical model features athletic trainers
in IPCP with. Historically, athletic trainers have not been housed
in typical health care system.21 Varying models of administrative
settings (e.g., secondary schools and college/university settings) are
owing collaborative practice, athletic trainers

Institute for Improvement and the Quintuple Aim now also charge
health care providers with addressing the social determinants of health
and potential inequities in care to advance their mission of improved
health and health care worldwide.17 IPCP, which focuses on achieving
the highest quality patient care through collaboration among provid-
ers, aligns with the goals of the Quintuple Aim. Accordingly, by
engaging in IPCP athletic trainers can contribute to the goals of the
Aim.4,18,19 Examples of elements of athletic training practice that align
with the Quintuple Aim are provided in Table 3.

In settings where athletic trainers practice, we are often the first
health care provider that individuals seek out for assessment of their
health conditions. Consequently, athletic trainers are often the entry
point to the system for those individuals and serve as both a primary
provider and a primary point of coordination for teams—uniquely
positioning athletic trainers to lead in IPCP.20 However, the degree
to which athletic trainers are actively engaging in IPCP is unclear.

One potential challenge may be that some athletic training practice
settings (e.g., secondary schools and college/university settings) are
relatively isolated and therefore function differently than that of a
typical health care system.21 Varying models of administrative
structure (e.g., athletic, medical, or academic model) can provide
challenges to fostering IPCP. For example, in an athletic model,
athletic trainers typically report to an athletic director or coach and
often lack other health care providers in the same location to engage
in IPCP with. Historically, athletic trainers have not been housed
administratively with the other providers in secondary school
settings (e.g., school nurses, counselors, and speech-language
specialists) or college/university settings (e.g., student health centers),
preventing such collaboration.

In a collaborative model, such as the medical model, athletic
trainers should be ready to advocate for the need for a more
collaborative model, such as the medical model, in order to enhance
opportunities for IPCP. Future research in IPCP could include more
in-depth inquiry as to how athletic trainers engage in IPCP and with
which health care professions. Additional assessment of patient
outcomes related to IPCP could be addressed through future
research.

Conclusions

IPCP is a key component of contemporary practice and requires
skilled engagement by multiple professionals. As IPCP evolves
within athletic training, both clinicians and educators will play a
key role in creating a strong IPCP culture that fosters communica-
tion, collaboration, patient-centeredness, and appreciation for all
members of the team. Understanding and modeling the key char-
acteristics and behaviors of IPCP should result in improved team
performance and patient outcomes for our active populations. Such
outcomes may be measured through the list of suggested readings
and resources in the area of IPCP provided in Table 2 of this
commentary.

Table 2 Suggested Readings and Resources

<table>
<thead>
<tr>
<th>Resource</th>
<th>Suggested readings and resources</th>
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<tbody>
<tr>
<td>Crossing the Quality Chasm: A New Health System for the 21st Century6</td>
<td>This article from the Institute of Medicine provides insight into the current gap in quality while</td>
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<tr>
<td>2016 Interprofessional Education Collaborative Core Competencies8</td>
<td>providing strategies for clinicians to address the gap and other challenges that impede collaborative</td>
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<tr>
<td>TeamSTEPPS12</td>
<td>practice.</td>
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<tr>
<td>AT Milestones13</td>
<td>This project provides a framework for assessing the knowledge, skills, attitudes, and behaviors</td>
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<tr>
<td>National Academies of Practice Position Paper: Interprofessional Collab</td>
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Note. AT = Athletic Training; IPE = interprofessional education; IPCP = interprofessional and collaborative practice; TeamSTEPPS = Strategies and Tools to Enhance Performance and Patient Safety; NAP = National Academies of Practice.

Table 3 Elements to Enhance Athletic Training Interprofessional Collaborative Practice6,18,19

<table>
<thead>
<tr>
<th>Athletic Training Checklist for Interprofessional Collaborative Practice</th>
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<tbody>
<tr>
<td>Encourage participation from persons and community members that can impact</td>
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<tr>
<td>planning and delivery of care</td>
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<td>Provide patient-centered care that is respectful and inclusive of the</td>
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<tr>
<td>patient’s needs and values</td>
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<td>Deliver care that is inclusive and culturally sensitive</td>
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<td>Implement evidence-based interventions that can reduce health disparities</td>
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(Ahead of Print)
References


