The Progress and Promise of Interprofessional Education in Athletic Training Programs

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Context: Interprofessional education (IPE), an emerging theme in health professional education programs, intends to prepare students for collaborative practice in order to improve patient outcomes. In 2012, the profession of athletic training strategically began to increase program participation in IPE.

Objective: This article compares 2 studies that examined the presence of IPE in athletic training.

Design: Cross-sectional design utilizing similar surveys regarding athletic training program participation in, and readiness for, IPE initiatives were administered via Qualtrics in 2012 and 2015.

Patients and Other Participants: Program directors of Commission on Accreditation of Athletic Training Education–accredited athletic training programs were surveyed in 2012 and 2015 using the “Interprofessional Education Assessment and Planning Instrument for Academic Institutions” in addition to program demographic information and IPE participation.

Data Collection and Analysis: The participants involved included 160 of 367 surveyed (43.6%) in 2012 and 162 of 380 surveyed (42.6%) in 2015.

Results: Data were analyzed, and χ² analysis revealed a significant relationship between level of accreditation and academic unit housing the program in both studies. Significant change was also shown in program participation in IPE from 2012 to 2015. However, institutional readiness and infrastructure for IPE was low in nearly all categories.

Conclusions: Interprofessional education has a greater presence in Commission on Accreditation of Athletic Training Education professional programs that reside in health science–related academic units and are accredited at the master’s level. However, less than 50% of the programs participate in IPE. There is also a need for greater institutional infrastructure and readiness for IPE.

Key Words: Collaboration, curriculum, survey research

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KEY POINTS

- Interprofessional education showed growth in athletic training programs between 2012 and 2015.
- Interprofessional education occurred more often in athletic training programs at institutions with a post-baccalaureate component.
- Interprofessional education occurred more often at institutions where the athletic training program is housed in health science related units.
- Administrative support and institutional commitment is recommended as key factors for further growth of interprofessional education in athletic training programs.

BACKGROUND

Current trends in health professional education focus on preparing graduates to provide interprofessional practice (IPP) in a team-based, collaborative care model incorporating IPE into curricula across these professions.9 Interprofessional education is defined by the World Health Organization as “when two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes.”16(p11)

The Interprofessional Education Collaborative (IPEC) has been instrumental in establishing a framework for IPE in the United States. The primary goal of IPEC is to prepare students and practitioners in all health professions to work in a collaborative practice model that is patient-centered, community-oriented and population-oriented, and interprofessional. The IPEC introduced core competencies for interprofessional collaborative practice in 2011 that included 4 domains: values and ethics, roles and responsibilities, interprofessional communication, and teams and teamwork.11 These standards were updated in 20169 to better emphasize the role of interprofessional collaboration in the “Triple Aim”: improving the experience of care, improving the health of populations, and reducing per capita costs of health care.12 These issues are also relevant to the athletic training profession. Perrin13 identified IPE as one of the key focus areas for the profession moving forward in a presentation and article in 2015 entitled “Seeking Greater Relevance for Athletic Training Education Within American Higher Education and the Health Care Professions.” The importance of the Triple Aim and IPE was also addressed by Merrick14 in 2017 in a presentation entitled “Shaping the Future of Athletic Training Education.”

Common accreditation standards for IPE are not universally available across professions. However, many peer professions have developed their own competencies to prepare collaboration-ready professionals. The American Association of Medical Colleges identified 4 IPE competencies in 2013 to be incorporated into medical education.15 Pharmacy and nursing were also early adopters, establishing their own IPE competencies.16,17 Health professions engage in IPE through membership in IPEC and the National Academies of Science and Medicine (formerly the Institutes of Medicine) Global Forum on Innovation in Health Professional Education.18 Although not currently a member of IPEC, the Athletic Training Strategic Alliance, representing the National Athletic Trainers’ Association (NATA), the CAATE, NATA Research & Education Foundation, and the Board of Certification, became a supporting member of the National Academies of Science and Medicine Global Forum in 2016.19

Overall, the athletic training profession has only recently set its sights fully on IPE and IPP. The NATA Executive Committee for Education (ECE) began a process in 2012 to
develop a Future Directions in Athletic Training Education document to inform the athletic training profession as it moves forward. Interprofessional education was included as "Recommendation #3": “Interprofessional education (IPE) should be a required component in professional and post-professional education programs in athletic training.”20(p5) However, at that time, anecdotal and early data showed that IPE had not yet been adopted widely in the athletic training profession.21,22 In response, the NATA ECE initiated a strategic process to engage a wide variety of athletic training educators and clinicians to inform the profession on IPE and IPP.23 In 2013, the ECE assembled a work group to write a white paper, Interprofessional Education and Practice in Athletic Training, which was published by the Athletic Training Education Journal in summer 2015.6

In 2014, the CAATE Standards for the Accreditation of Post-Professional Athletic Training Degree Programs were revised and included “Interprofessional Education and Collaborative Practice” as a core competency area.24 The CAATE Professional Program Standards are under revision, and proposed revisions feature IPE prominently.25 Published papers and presentations featuring IPE and IPP in athletic training are appearing more frequently in journals and at professional conferences.21,23,26,27 Further evidence of the growth of IPE in athletic training is shown through the “Vision Statement,” developed in 2015 by the NATA, which states: “Athletic trainers will be globally recognized as vital practitioners in the delivery and advancement of health care. Through passionate provision of unique services, athletic trainers will be an integral part of the inter-professional health care team.”28

As the emphasis on IPE and IPP within the athletic training profession has grown, it is important to assess whether this rising focus on IPE has been accompanied by an increase in athletic training program availability of/participation in IPE programs and initiatives as well as if this trend is consistent across different types of programs. Thus, our purpose is to compare availability, participation in, and readiness for IPE within athletic training programs at 2 different points in time (2012 and 2015), identifying key areas of progress as well as opportunities for further improvement.

METHODOLOGY

This article reports data from 2 descriptive, cross-sectional studies conducted at 2 different points in time—January through February 2012 and January through March 2015. Both studies received independent approval for the inclusion of human subjects from the sponsoring institutional review board.

Initial Study (2012)

The 2012 study was conducted in 2 phases: (1) survey usability phase and (2) survey administration phase. The initial phase of the study was to assess whether the Interprofessional Education Assessment and Planning Instrument (IPE-API) survey was a suitable instrument with which to assess IPE readiness within athletic training programs.

The IPE-API, which was developed in 2009 by the Association for Prevention Teaching and Research, sought to assess the readiness for IPE across a variety of academic units. It was designed with an emphasis on prevention and was intended to assist institutions in assessing their level of development of interprofessional education on their respective campuses.29 The IPE-API is structured around 5 domains: Educational Venues, Educational Evaluation, Programmatic Participation, Institutional Support, and Faculty Incentive. It is a 2-part instrument that measures IPE and prevention education. The IPE-API also provided a basic list of operational definitions to provide context and consistent terminology. The first part of the instrument, which focuses on IPE, was selected for this study (Table 1), and the second part of the instrument, which focuses on prevention education, was not included.29 This particular instrument was selected by study authors for 2 primary reasons. First, it had previously undergone pilot testing and expert review, as detailed by Greer and Clay,30 providing evidence for its suitability for use in this study. Additionally, study authors deemed that using a survey instrument was an efficient way to access the participants and that this particular survey instrument has not been used with athletic training programs specifically.

In addition to the questions from the IPE-API, other items were added to the survey to include general nonidentifying demographic information, such as degree level of program, Carnegie Classification, academic unit information, number of faculty, number of students, and nature of involvement in IPE. The initial draft of the survey went through a peer review process with a group of 10 subject matter experts, who were solicited based on their experience in both athletic training education and IPE. The participants received a recruitment letter outlining the purpose of the study and their role as in the study. The participants were notified in the recruitment letter that their feedback may be used verbatim in the final version of the instrument and that no identifiers would be used in the instrument, data analysis, conclusions, or publications. Participants’ responses did not place them at risk for disclosure.

The participants were asked to comment on the instrument to determine if the questions on the instrument were clearly worded, easy to interpret, and relevant to understanding the interprofessional content of their athletic training program and/or IPE in general. In order to facilitate the review process, the participants were provided an instruction sheet to detail their task in providing future users with a better instrument. Participants returned the instrument and their comments to the primary investigator. Participants were instructed that they had the option of nonparticipation by not returning the instrument or not commenting on a question. Once the participants submitted their responses, the investigators reviewed the comments and developed the final version of the instrument based on the participants’ comments.

During the second phase of the study, the final version of the instrument was then used for the survey administration phase of the study. The instrument was converted to an on-line survey using Qualtrics (www.qualtrics.com). The participants for this phase were recruited from a list of directors from accredited athletic training professional programs listed on the CAATE Web site (www.caate.net). Three hundred sixty-seven participants were contacted via an email containing instructions and a link to the instrument, with the recruitment letter as an attachment. One hundred sixty participants completed
the instrument in January and February of 2012, resulting in a response rate of 43.6%.

**Follow-Up Study (2015)**

The 2015 study was administered synchronously with a survey of program directors of nutrition and dietetics (ND) programs. The entire 2015 project, including both athletic training and ND data, was published in the *Journal of Allied Health* in early 2017.31

In addition to sampling ND program directors, the investigators also included program directors from CAATE-accredited postprofessional programs. There were also several changes made to the instrument in the area of program demographics. The IPE-API was not changed from the 2012 study. The changes were based on lessons learned from the previous study. The investigators determined that many of the participants who participated in the 2012 study were unsure of how to respond to the question “Does your institution have an Interprofessional Education (IPE) program/initiative?,” and of the 3 responses available (yes/no/not sure), many of them choose “not sure.” In the 2015 study there were only 2 choices available to that question (yes/no), and additional questions were added regarding athletic training program faculty and student participation in IPE.

The 2015 study sample consisted of 162 out of 380 possible athletic training program directors, resulting in a response rate of 42.6%. As such, the response rate for the 2015 study was comparable to that of the 2012 study.

**RESULTS**

Study data were analyzed using IBM SPSS version 20 (Armonk, NY).

**Program Characteristics**

The descriptive statistics for the athletic training programs included in this study are presented in Table 2. Within the 2012 study sample, most CAATE-accredited professional
Among the 2012 and 2015 study participants, most (78\%) of programs were at the bachelor’s level (89\%), with a small percentage of programs reporting master’s-only programs (8\%). Notably, only 3\% of programs reported having both bachelor’s-level and master’s-level athletic training programs. Postprofessional degree programs in athletic training were not included in the study sample.

As was the case in 2012, most (78\%) of the CAATE-accredited athletic training professional programs participating in the 2015 study were bachelor’s-level programs, 12\% were master’s-only programs, and 2\% had both bachelor’s-level and master’s-level programs. The remaining 8\% of programs reported having postprofessional athletic training programs, either in combination with a bachelor’s athletic training program or in the form of a master’s program by itself.

Programs from both 2012 and 2015 varied widely in terms of Carnegie Classification, and there were no significant differences between the 2 studies. In 2012, approximately 29\% of programs reported having doctoral-level classification (RU/VH, RU/H, DRU), compared with 36\% of programs in 2015 (Table 3). Approximately 41\% of 2012 participants reported having master’s-level Carnegie Classification, compared with 36\% of the 2015 participants. Lastly, 27\% of 2012 participants reported having baccalaureate-level classification, compared with 23\% in 2015.

In terms of academic unit type, the largest percentage of athletic training programs in 2012 and 2015 were housed within Health Professions/Health Sciences/Allied Health (40\% and 44\% for 2012 and 2015, respectively; Table 4). Approximately 22\% of 2012 respondents and 23\% of 2015 respondents were housed in Exercise Science/Physical Education/Kinesiology/Health and Recreation. The third most common academic unit was Education/Teacher Education (17.4\% in 2012 and 11.2\% in 2015). Less common academic unit types included Arts & Sciences, Liberal Arts, and Medicine.

### Interprofessional Education Availability

Table 5a shows the availability of IPE initiatives within athletic training programs in 2012 and 2015. As shown in Table 5, the availability of IPE programs within athletic training programs has grown from 23\% in 2012 to 37\% in 2015. A follow-up \( \chi^2 \) independence test \( (\chi^2[1] = 6.39; P < .05) \) demonstrated that this difference was statistically significant at the \( P < .05 \) level (Table 5b). Moreover, these findings indicated that programs surveyed in 2015 were nearly twice (1.94) as likely to have an IPE program as those surveyed in 2012. These findings are consistent with the growing emphasis on IPE and IPP within athletic training, as outlined in the NATA vision statement and the CAATE accreditation standards. Another explanation for these findings is the inclusion of postprofessional programs in the study sample. Nevertheless, despite this notable improvement in IPE availability from 2012 to 2015, it is important to note that the majority (63\%) of athletic training programs in the study sample still do not access IPE programs, initiatives, and/or opportunities.

Follow-up analyses indicated that IPE availability varied as a function of 2 key program characteristics—program type and academic unit type. As shown in Table 6a, fewer athletic training programs at the bachelor’s level had access to IPE, compared with athletic training programs with no bachelor’s component. In 2012, 46\% of master’s-only programs reported having access to IPE programs and initiatives, compared with 21\% to 25\% of programs with a bachelor’s component (bachelor’s only or bachelor’s + master’s). In 2015, only 33\% of bachelor’s-only program directors and 36\% of bachelor’s/master’s program directors reported having access to IPE programs and initiatives, while nearly two-thirds (63\%) of master’s-only athletic training programs reported having access to IPE.

### Table 2. Program Type

| Carnegie Classification | Survey Year, No. (%) |
|-------------------------|----------------------|
| 2012                    | 2015                 |
| PB only                 | 142 (89.0)           | 125 (77.6) |
| PM only                 | 13 (8.1)             | 19 (11.8)  |
| PB and PM               | 5 (3.1)              | 3 (1.9)    |
| PP only                 | 0 (0.0)              | 4 (2.5)    |
| PB and PP               | 0 (0.0)              | 9 (5.6)    |
| PM and PP               | 0 (0.0)              | 1 (0.6)    |
| Total                   | 160 (100.0)          | 161 (100.0) |

### Table 3. Carnegie Classification Type

| Carnegie Classification                  | Survey Year, No. (%) |
|-----------------------------------------|----------------------|
|                                         | 2012                 | 2015                 |
| RU/VH: Research university (very high research activity) | 17 (11.6)           | 19 (12.4)            |
| RU/H: Research university (high research activity)    | 9 (6.2)             | 20 (13.1)            |
| DRU: Doctoral/research university          | 16 (11.0)           | 16 (10.5)            |
| Master’s/L: Master’s college or university (larger programs) | 20 (13.7)           | 20 (13.1)            |
| Master’s/M: Master’s college or university (medium programs) | 21 (14.4)           | 23 (15.0)            |
| Master’s/S: Master’s college or university (smaller programs) | 19 (13.0)           | 12 (7.8)             |
| Bac/A&S: Baccalaureate arts and sciences   | 23 (15.8)           | 19 (12.4)            |
| Bac/Diverse: Baccalaureate diverse fields  | 13 (8.9)            | 15 (9.8)             |
| Bac/Assoc: Baccalaureate/associate’s college | 4 (2.7)            | 1 (0.7)              |
| Other/Uncertain of response              | 4 (2.7)             | 8 (5.2)              |
| Total                                   | 146 (100.0)         | 153 (100.0)          |
An analysis was conducted to determine whether athletic training programs with a bachelor’s component did, in fact, have less access to IPE initiatives than did those without a bachelor’s component (Table 6). The difference between programs with a bachelor’s component and those without one was not significant in 2012 ($\chi^2[1] = 3.26; P = .07$), but it was statistically significant in 2015 ($\chi^2[1] = 6.31; P = .01$).

Study findings indicated that IPE availability also varied as a function of academic unit type. Table 7a shows that the availability of IPE initiatives was highest among programs housed within Health Professions, Health Sciences, or Allied Health. In 2012, IPE availability for programs housed in Health Professions/Health Sciences/Allied Health was approximately 38%, compared with 17% or less for athletic training programs housed in other academic units. Similarly, in 2015, 53% of programs housed in Health Professions/Health Sciences/Allied Health reported having access to IPE programs, compared with 40% or less for programs housed in other academic units. A follow-up analysis indicated the presence of a statistically significant relationship between academic unit type (Health Professions/Health Sciences/Allied Health versus Other) and IPE availability in both 2012 and 2015 (Table 7b). In 2012, athletic training programs housed in Health Professions/Health Sciences/Allied Health were 4.4 times more likely to have access to IPE programs/initiatives than were those at the bachelor’s level only (Table 6b).

Next, we analyzed the effect of program type and the academic unit on overall readiness for IPE. As a result of sample size limitations, we compared IPE readiness between 2 different types of IPE outcomes (Table 9). In 2012, mean IPE readiness scores ranged from 0.75 for Personnel Support to 2.45 for Student Participation. In 2015, mean IPE readiness scores ranged from 0.57 for Personnel Support to 2.31 for Student Participation. Analysis of variance revealed no statistical differences in any of the IPE readiness outcomes from 2012 to 2015. Taken together, these findings indicate that while IPE availability within athletic training programs did increase from 2012 to 2015, IPE readiness within these programs did not. Additionally, while student participation in IPE programs/initiatives was high, there was still a general lack of resources dedicated to IPE, as indicated by low IPE readiness scores in Personnel Support. Lastly, mean scores for IPE Program Evaluation were among the lowest of all IPE readiness outcomes, both in 2012 and 2015. These results suggest that while more athletic training programs have access to IPE programs/initiatives, there are few systems and/or processes in place to evaluate the effectiveness of these programs and to identify opportunities for future improvement.

Table 4. Type of Academic Unit Housing Athletic Training Program

| Academic Unit                              | Survey Year, No. (%) |
|-------------------------------------------|----------------------|
| Arts and Sciences                         | 9 (6.2)              |
| Education/Teacher                         | 25 (17.4)            |
| Exercise Science/Physical Education/Kinesiology/Health & Recreation | 32 (22.2) |
| Health Professions/Health Sciences/Allied Health | 57 (39.6) |
| Liberal Arts                              | 5 (3.5)              |
| Medicine                                  | 1 (0.7)              |
| Other                                     | 15 (10.4)            |
| Total                                     | 144 (100.0)          |

Table 5a. Interprofessional Education (IPE) Availabilitya

| IPE Availability | Survey Year, No. (%) |
|------------------|----------------------|
| IPE              | 32 (23)              |
| No IPE           | 105 (77)             |
| Total            | 137 (100)            |

a The proportion of athletic training programs with access to IPE programs/initiatives has increased significantly ($P < .05$) from 23% in 2012 to 37% in 2015.

Interprofessional Education Participation

In addition to assessing IPE availability, this study sought to assess the extent to which athletic training faculty participated in IPE programs/initiatives, if they were available. As shown in Table 8, IPE participation ranged from 81% in 2012 to 67% in 2015. While these numbers may be indicative of a general downward trend in IPE participation, follow-up analyses revealed that these differences were not statistically significant ($\chi^2[1] = 2.09; P = .17$). Differences in faculty participation based on academic level and academic unit type were not assessed as a result of sample size limitations.

Interprofessional Education Readiness

Interprofessional education readiness, as measured with the IPE-API, was analyzed by examining mean scores along 9 different types of IPE outcomes (Table 9). In 2012, mean IPE readiness scores ranged from 0.75 for Personnel Support to 2.45 for Student Participation. In 2015, mean IPE readiness scores ranged from 0.57 for Personnel Support to 2.31 for Student Participation. Analysis of variance revealed no statistical differences in any of the IPE readiness outcomes from 2012 to 2015. Taken together, these findings indicate that while IPE availability within athletic training programs did increase from 2012 to 2015, IPE readiness within these programs did not. Additionally, while student participation in IPE programs/initiatives was high, there was still a general lack of resources dedicated to IPE, as indicated by low IPE readiness scores in Personnel Support. Lastly, mean scores for IPE Program Evaluation were among the lowest of all IPE readiness outcomes, both in 2012 and 2015. These results suggest that while more athletic training programs have access to IPE programs/initiatives, there are few systems and/or processes in place to evaluate the effectiveness of these programs and to identify opportunities for future improvement.
Table 6a. Interprofessional Education (IPE) Availability × Program Type

| Level of CAATE | 2012, No. (%) | 2015, No. (%) |
|---------------|---------------|---------------|
|               | IPE           | No IPE        | IPE            | No IPE         |
| PB only       | 26 (21)       | 96 (78)       | 39 (33)        | 79 (67)        |
| PM only       | 5 (46)        | 6 (55)        | 9 (64)         | 5 (36)         |
| PB and PM     | 1 (25)        | 3 (75)        | 1 (33)         | 2 (67)         |
| PP only       | —             | —             | 3 (75)         | 1 (25)         |
| PB and PP     | —             | —             | 3 (38)         | 5 (63)         |
| PM and PP     | —             | —             | 1 (100)        | 0 (0)          |
| Total         | 32 (23)       | 105 (77)      | 55 (37)        | 93 (63)        |

Abbreviations: CAATE, Commission on the Accreditation of Athletic Training Education; PB, professional bachelor’s; PM, professional master’s; PP, postprofessional (not surveyed in 2012 study).

Table 6b. Likelihood of Interprofessional Education Availability Among Athletic Training Programs Based on Program Type

|               | Value     | 95% CI    | df | $\chi^2$ | P Value |
|---------------|-----------|-----------|----|----------|---------|
| 2012 Odds ratio | 3.27      | 0.09, 1.16 | 1  | 3.26     | .13     |
| 2015 Odds ratio (PM + PP + (PM and PP)/PB only) | 3.43      | 1.26, 9.33 | 1  | 6.31     | .02     |
| Relative risk—PM + PP + (PM and PP) | 1.90      | 1.24, 2.89 |    |          |         |
| Relative risk—PB only | 0.55      | 0.30, 1.01 |    |          |         |

Abbreviation: CI, confidence interval; PB, professional bachelor’s; PM, professional master’s; PP, postprofessional.
These new learning experiences can be manifested in many different ways, depending on the contexts of the participating professional programs and the institutional culture. These can happen as intracurricular or extracurricular experiences, depending on institutional “best fit” and available resources. The white paper developed by the NATA ECE Interprofessional Work Group provides a useful summary of the types of available experiences.8

Clinical experiences are also important to help the IPE students realize how teamwork and collaboration affect the provision and eventual outcomes of health care.40,41 Coordinated assessment must always be included in these initiatives to (1) monitor program effectiveness; (2) provide a basis for program improvement; and (3) enable collaborative faculty scholarship. Embedding faculty scholarship into program- ming can be instrumental to creating a “value-added” incentive to faculty and programs being recruited to participate into IPE initiatives.35,39

LIMITATIONS

These studies had several limitations. Participants chose to participate in the surveys, and programs actively participating in IPE may have been more willing to participate in the study. Knowledge of the IPE and IPP terminology may be limited, so despite being provided key terminology, participants may not have answered the questions in the surveys consistently.

CONCLUSION

Teamwork and collaboration among health professionals are viewed as essential to the future of health care to improve communication, prevent medical errors, and improve patient/client outcomes. Academic institutions have responded by developing IPE, through which students learn together to build the attitudes and skills required for interprofessional practice. Professional organizations have followed suit by

Table 7a. Interprofessional Education Availability × Academic Unit Type

| Academic Unit                                      | Survey Year, No. (%) |
|---------------------------------------------------|----------------------|
|                                                   | 2012 | 2015 |
| Arts and Sciences                                 | 9 (6.2) | 16 (10.5) |
| Education/Teacher Education                       | 25 (17.4) | 17 (11.2) |
| Exercise Science/Physical Education/Kinesiology/Health & Recreation | 32 (22.2) | 35 (23.0) |
| Health Professions/Health Sciences/Allied Health  | 57 (39.6) | 67 (44.1) |
| Liberal arts                                      | 5 (3.5) | 0 (0.0) |
| Medicine                                          | 1 (0.7) | 0 (0.0) |
| Other                                             | 15 (10.4) | 17 (11.2) |
| Total                                             | 169 (100.0) | 152 (100.0) |

Table 7b. Likelihood of Interprofessional Education Availability Among Athletic Training Programs Based on Academic Unit Type

|                           | Value | 95% CI      | df | $\chi^2$ | P Value |
|---------------------------|-------|-------------|----|----------|---------|
| 2012                      |       |             |    |          |         |
| Odds ratio (Health Sciences/other) | 4.40  | 1.88, 10.30 | 1  | 12.66    | <.01    |
| Relative risk—Health Sciences | 2.13  | 1.25, 3.63  |    |          |         |
| Relative risk—other       | 0.49  | 0.34, 0.69  |    |          |         |
| 2015                      |       |             |    |          |         |
| Odds ratio (Health Sciences/other) | 3.50  | 1.74, 7.04  | 1  | 12.85    | <.01    |
| Relative risk—Health Sciences | 1.83  | 1.26, 2.68  |    |          |         |
| Relative risk—other       | 0.52  | 0.37, 0.74  |    |          |         |

Abbreviation: CI, confidence interval.

Learning experiences.38,39 These new learning experiences can be manifested in many different ways, depending on the contexts of the participating professional programs and the institutional culture. These can happen as intracurricular or extracurricular experiences, depending on institutional “best fit” and available resources. The white paper developed by the NATA ECE Interprofessional Work Group provides a useful summary of the types of available experiences.8

Table 8. Athletic Training Interprofessional Education (IPE) Faculty Participation

| IPE Faculty Participation | Survey Year, No. (%) |
|---------------------------|----------------------|
|                           | 2012 | 2015 |
| Participate               | 26 (81) | 34 (67) |
| Do not participate        | 6 (19) | 17 (33) |

Table 9. Readiness for Interprofessional Education (IPE) Δ

| IPE Readiness Domain          | 2012   | 2015   |
|------------------------------|--------|--------|
| IPE Courses                   | 2.15 ± 1.46 | 1.85 ± 1.37 |
| IPE Clinical                  | 1.35 ± 1.04 | 1.04 ± 1.03 |
| IPE Community                 | 1.50 ± 1.61 | 1.47 ± 1.47 |
| IPE Evaluation                | 0.95 ± 1.23 | 1.15 ± 1.38 |
| IPE Extracurricular           | 2.10 ± 1.37 | 1.57 ± 1.55 |
| IPE Student Participation     | 2.45 ± 1.47 | 2.31 ± 1.52 |
| IPE Personnel Support         | 0.75 ± 1.12 | 0.57 ± 1.09 |
| IPE Institutional Support     | 1.60 ± 1.39 | 1.91 ± 1.54 |
| IPE Faculty                   | 1.70 ± 0.66 | 1.36 ± 0.84 |
| IPE Incentives                | 1.80 ± 1.06 | 1.84 ± 0.86 |

Δ Scale detailed in Table 1 measures degree of readiness: 0 = lowest level to 4 = highest level.
incorporating IPE into their accreditation standards. Commission on Accreditation of Athletic Training Education–accredited athletic training programs have made progress since the Future Directions of Athletic Training Education document recommended IPE in 2012. However, as IPE is embedded into the new CAATE Standards for Accreditation of Professional Athletic Training Programs, much work remains to improve institutional readiness for IPE. It is critical moving forward that institutional readiness improves through increased investment and focus as more athletic training professional programs transition to the master’s level and connect with their peers in the health professions.

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Table 10. Interprofessional Education (IPE) Readiness by Academic Unit Typea

| Outcome | Health Professions | All Others |
|---------|--------------------|------------|
| Outcome | Mean ± SD          |            |
| IPE courses | 1.88 ± 1.31 | 1.81 ± 1.52 |
| IPE clinical rotationsb | 0.81 ± 0.87 | 1.53 ± 1.19 |
| IPE community projects/service learning | 1.50 ± 1.48 | 1.40 ± 1.50 |
| IPE standardized assessment/evaluation | 1.22 ± 1.39 | 1.00 ± 1.41 |
| IPE extracurricular activities | 1.81 ± 1.54 | 1.00 ± 1.47 |
| Health professional | 2.63 ± 1.31 | 1.54 ± 1.76 |
| IPE personnel support | 0.58 ± 1.06 | 0.54 ± 1.20 |
| IPE institutional support | 2.00 ± 1.51 | 1.69 ± 1.65 |
| IPE faculty | 1.35 ± 0.84 | 1.38 ± 0.87 |
| IPE faculty incentives | 1.94 ± 0.89 | 1.62 ± 0.77 |

a Scale detailed in Table 1 measures degree of readiness: 0 = lowest level to 4 = highest level.
b Differences are statistically significant at the P < .05 level.
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