

Promoting Interprofessional Communication through Situation, Background, Assessment, and Recommendation (SBAR): An Educational Technique

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Context: The Board of Certification Standards of Professional Practice and the 2020 Curricular Content Standards indicate athletic trainers should establish working relationships with collaborating medical professionals and be able to communicate effectively. In addition, increased emphasis on interprofessional collaboration (IPC) in practice is apparent throughout health care professions and their educational programs. However, integrating both interprofessional communication and IPC within 1 learning opportunity can be difficult.

Objective: To share an educational approach aimed to enhance athletic training students' abilities and confidence in delivering patient information to physician assistant students via the situation, background, assessment, and recommendation (SBAR) technique.

Background: As part of the health care team, athletic trainers need to communicate with various providers while making clinically based decisions. Anecdotally, learners in their final year of health care education are not confident in their ability to make recommendations to other health care professionals. The SBAR communication strategy from the evidence-based framework TeamSTEPPS has become widely adopted in health care disciplines and may help to enhance confidence in communication.

Description: This learning activity enables athletic training students to use a patient case scenario to develop an SBAR for delivery via phone to a physician assistant studies student. This article describes the content, delivery methods, outcomes to date, and connection to the 2020 Curricular Content Standards.

Clinical Advantage(s): This clinically relevant activity provides a low-stakes, real-life opportunity for students to practice communication skills, including the following: condensing the evaluation process, clinical decision-making skills, and the ability to make recommendations for a plan of care. Active participation in the communication process enhances reasoning skills needed for collaborative clinical decision making and the transfer of care, when applicable.

Conclusion(s): Developing and implementing an interprofessional SBAR communication experience with 2 health care disciplines is an innovative strategy that bridges the gap between clinical education and actual patient care experiences while addressing curricular content needs.

Key Words: Clinical decision making, collaboration, communication, TeamSTEPPS

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KEY POINTS

- The situation, background, assessment, and recommendation (SBAR) tool is a brief and effective communication strategy to enhance delivery of patient information among members of the sports medicine team.
- Incorporation of a low-stakes SBAR teaching technique allows for real-life replication of clinical decision making and interprofessional communication among members of the sports medicine team.
- Interprofessional communication and collaboration among members of the sports medicine team are vital to continuity of care, prevention of medical errors, and potential improved patient outcomes.

INTRODUCTION

Interprofessional education and interprofessional collaboration (IPC) have become focal points of education in health care disciplines.^{1–3} As part of the vision for the Institute of Medicine,² Core Competencies that include working in interdisciplinary teams have become key factors in preparing future practitioners. Working within an interdisciplinary team requires health care providers to be ready for collaboration,³ with athletic trainers often serving as the key communication liaison role within the sports medicine team for such collaboration.^{4–7} In turn, effective strategies for communication are needed to ensure athletic trainers are ready to assume an active role on collaborative teams. The educational technique presented in this article focuses on enhancing communication among athletic trainers (ATs) and physician assistant (PA) students for interprofessional collaborative patient care.

Effective communication strategies have been introduced through the evidence-based framework, TeamSTEPPS.^{8–10} This framework aims to optimize team performance across the health care delivery system through instruction in team leadership that includes, although is not limited to, mutual trust and closed loop communication toward the provision of safe and effective patient care.¹⁰ One specific communication

strategy that is highlighted in the TeamSTEPPS model is the situation, background, assessment, recommendation (SBAR), as outlined in Table 1.⁸ This brief communication strategy helps members of an interprofessional care team clearly define components of a patient's presenting condition, pertinent history, professional conclusion, and ultimately provide a recommendation for the patient's care.⁸

ATs work directly under the supervision or standing orders of a physician.¹¹ Given that a significant number of physicians work directly with PAs in their practice, it is very common for ATs and PAs to communicate aspects of patient care in the health care setting.⁴ According to the American Academy of Physician Assistants,¹² PAs are committed to collaborative team practice with physicians and other health care providers. In 2017, Optimal Team Practice¹² was developed to ensure that PAs, physicians, and other health care professionals, such as ATs, can work together to provide quality care. This recommendation established the foundation for practitioners to practice without legal requirements, such as formalized practice agreements or contracts, governing the relationship among a PA, physicians, and other health care providers,¹² thus solidifying the ability for ATs and PAs to work collaboratively. In educational settings, both AT and PA students are required to receive education in IPC and communication.^{13,14} The learning activity outlined in this article helps to meet the required curricular content standards for both disciplines, as outlined in Table 2. Although anecdotal evidence suggests that many students in these programs are receiving instruction in the SBAR tool, there is limited evidence documenting collaboration between the AT and PA programs to enhance communication for these disciplines. The delivery of patient information via SBAR has significant real-world application, as these disciplines collaborate to provide patient care.

TECHNIQUE DESCRIPTION

This learning activity titled, “Communicating with a Physician Assistant via SBAR: You make the Call” is designed to be completed within a 1-hour time frame. The purpose of this

Table 1. Situation, Background, Assessment, Recommendation (SBAR) Description

Portion of SBAR	Description of Included Information
(S) Situation	Describes the specific details relevant to the patient (eg, name, location, relevant signs/symptoms, status, vital signs as appropriate)
(B) Background	Outline pertinent medical history, prior issues, medications, allergies, relevant laboratory/diagnostic results
(A) Assessment	Provide the clinical impression and/or concerns, overview of your findings; this section does not always need to be a diagnosis, although it needs to make an initial assessment and determine how to proceed further
(R) Recommendation	State your recommendation, be clear in making suggestions, explaining what is needed, and identifying what you like to see happen; What should be the next step in the plan of care?

NOTE: Content adapted from TeamSTEPPS training materials, which are free to the public (<https://www.ahrq.gov/teamsteps/index.html>).

Table 2. Educational Content and Standards Covered as Part of This Activity

Standard Number	Summary of Standard/Content Area of Emphasis	Student Actions Relevant to Standards Content
AT 71 PA B1.05 PA B2.07	Development of problem-solving and medical decision-making skills; perform examination; formulate plan of care; referral to appropriate provider when indicated	Examine case details, consider options for differential diagnosis; establish a plan of care; consider information being relayed during the SBAR phone call
AT 59 PA B2.04	Communicate effectively and appropriately with other health care professionals	Conduct (AT student) or receive (PA student) a phone call to deliver the appropriate patient details; engage in discussion as appropriate to the plan of care and inquiry from the collaborating health care student
AT 61 PA B1.10	Practice in collaboration with other health care professionals	Confirm the plan of care or adjust as agreed on in collaboration with the collaborating health care student; potential referral of patient as necessary
AT 90 PA B1.10	Establish a working relationship with a collaborating physician (substitute PA); also links to Board of Certification Standards of Professional Practice	Communicate effectively via delivery or receipt of the SBAR; ensure open communication between health care providers

Abbreviations: AT, athletic trainer; PA, physician assistant; SBAR, Situation, Background, Assessment, Recommendation.

NOTE: Content from CAATE 2020 Curricular Content Standards¹³ and ARC- PA Standards 4th Edition.¹⁴

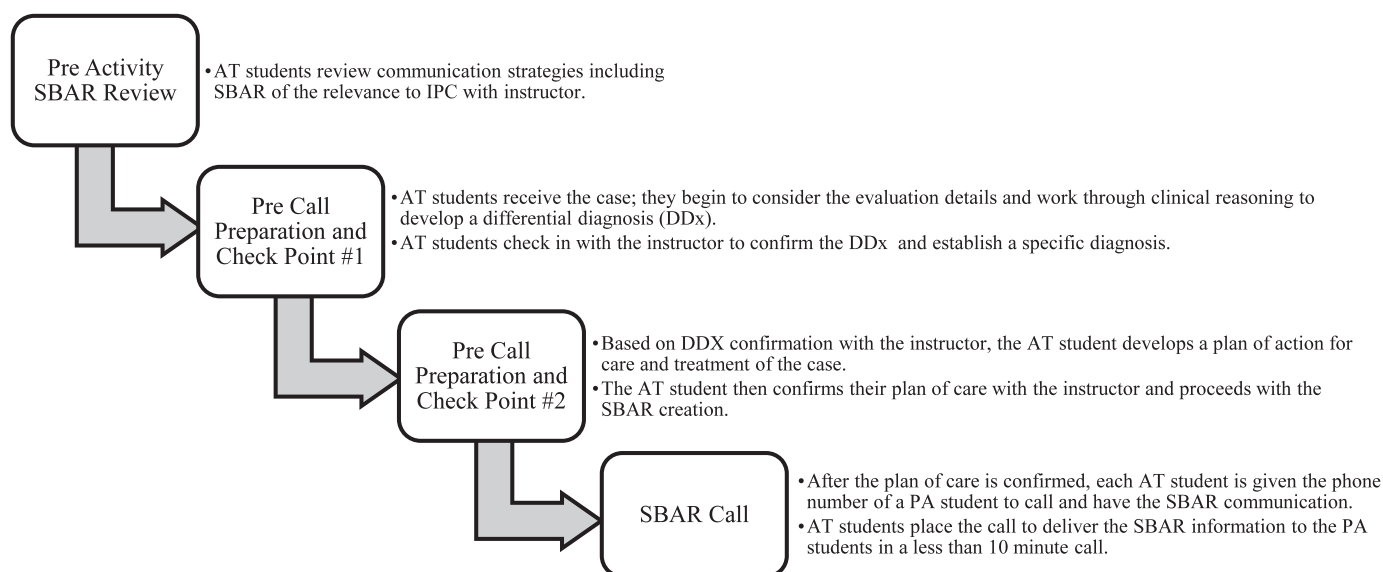
activity is to allow AT and PA students to enhance their communication skills through use of SBAR. The activity itself is distributed into 3 phases: (1) review of SBAR, (2) case scenario resolution, and (3) interprofessional phone call (Figure 1). Using case information provided by the instructor, AT students determine a differential diagnosis, identify which condition and appropriate action are suitable for the plan of care, construct the SBAR for the situation, and ultimately call a PA with an update.

Curricular Content Standards

This SBAR learning activity aligns with several Commission on Accreditation of Athletic Training Education (CAATE) Curricular Content Standards, Board of Certification Stan-

dards of Professional Practice, as well as Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) Standards (Table 2).^{13–15} Students engaging in this learning activity are required to demonstrate problem-solving and medical decision-making skills in the recognition of a case condition in order to formulate a plan of care with the potential for referral to another health care professional (CAATE Standard 71).¹³ In addition, the student must effectively communicate and practice in collaboration with another health care professional as delineated in CAATE Standards 59 and 61, respectively.¹³ Through collaborative practice and communication, the student will establish a working relationship with a collaborating PA (an extrapolation from CAATE Standard 90).¹³

Figure 1. SBAR: You Make the Call teaching technique. SBAR indicates situation, background, assessment, recommendation.



Review of SBAR Content

The first portion of the learning activity requires the instructor of both the AT and PA courses to review components of an SBAR and its relevance to IPC. This review is conducted as an active in-class discussion session and outlines the components of an SBAR, as described in Table 1. As the topics of SBAR and IPC were covered in previous classes, this activity provides a good opportunity to revisit this content and apply it in a new, clinically meaningful way.

Case Scenario Resolution

Depending on class size, 3 or 4 case scenarios are provided for students to independently work through. Case scenarios may include nonorthopaedic conditions, acute orthopaedic injuries, or chronic/preexisting conditions, either orthopaedic or otherwise. Students are instructed to work through the brief case scenario and check in with the instructor at 2 time points to ensure accurate progress toward case resolution. After working through the case scenario, students present to the instructor their differential diagnosis and give their rationale for their selections. This is the first checkpoint from the instructor. Once the first checkpoint has been completed, students then develop a plan of action for how to complete their SBAR call that includes care plan options and potential treatments for the case. Students then present their plan of care to the instructor as the second checkpoint before being allowed to make their actual SBAR call. Clinical decision-making skills are reinforced by having the student confirm with the instructor at the points of diagnosis and plan of care before the SBAR call. The SBAR call technique with each step to be completed by the students is outlined in Figure 1.

Interprofessional Phone Call

Once AT students have finalized the intended plan for the patient, they are instructed to develop a rough outline of their SBAR. The guiding goal is to provide the PA with clear, concise information lasting less than 3 minutes. Students are instructed to only provide information that is truly necessary to convey the patient information (eg, patient, name, age, nature of the condition/injury, current activity level status, current conditions affecting return to play/activity), allowing for the PA student to make informed decisions. Appropriate prioritization of information is emphasized for the SBAR content, as is clarity. It is also noted that students should not read the SBAR outline to the PA verbatim, but rather should demonstrate understanding of the case through a natural, conversational tone.

Students are then provided the phone number and name of the collaborating PA student. They then conduct the call, provide the SBAR, answer any questions that arise in relation to the SBAR, confirm the plan moving forward, and provide closure to the call in a professional manner. On average, these phone calls lasted less than 7 minutes.

OUTCOMES

Following institutional review board approval from the 2 institutions involved in this educational technique, 9 AT students (4 from Institution X and 5 from Institution Y) and 11 PA students (all from Institution X) (100% participation

rate) were surveyed to gain insight as to the performance of the other professional during the respective phone calls. Using the Creighton Competency Evaluation Instrument (C-CEI)¹⁶ as a starting point, 2 separate survey instruments were created to assess student perceptions of communication and critical thinking during an SBAR interaction. Although the C-CEI is a free, valid, and reliable survey instrument, it was primarily designed to evaluate effectiveness of clinical learning in simulation environments and did not fully meet the assessment intent of this learning activity.¹⁶ For example, the 4-section C-CEI survey captures elements of assessment, communication, clinical judgment, and patient safety as related to patient simulation participation.¹⁶ As the SBAR educational technique implemented dealt with a paper-based case scenario with no direct simulation, the assessment and patient safety aspects of the C-CEI did not apply, and thus were removed. In addition, there were aspects of communication and clinical decision making that were specific to the SBAR focus of the implemented learning activity that were not addressed on the C-CEI, therefore adaptations in the form of both additions and deletions of content from the C-CEI instrument were warranted. The final versions (1 for AT students and 1 for PA students) included emphasis on the areas of overall feedback, critical thinking, and communication; both feedback instruments are presented in Figures 2 and 3, respectively.

Response options on the adapted survey were established to determine how well items were addressed during the phone call communication. Specific options ranged from a 5: addressed in detail matching that of a professional, 4: addressed in moderate detail appropriate to a student, down to 1: would have been appropriate to the SBAR communication but was omitted. An option of 0 was also available to indicate that an item was not applicable to the specific case details or communication experienced. Scores on the instrument were overwhelmingly in the category of 5 (more than 75% of survey items had a mean of 5), indicating a professional level of critical thinking and communication perceived by both the PA and AT students.

Overall, both AT and PA students had positive perceptions of the SBAR learning activity. Both student groups indicated that the other group performed well during the phone call communication, including accurate delivery/receipt of all SBAR content. Athletic training students remarked that they appreciated having the opportunity to present their findings to the PAs, as they did not typically have this chance during clinical education. An AT student commented on the particular value of the IPC experienced during her call: "She [the PA student] asked a lot of great follow-up questions, and she was really invested in giving the best possible recommendation for the patient. I also like that she included me in decision making when it came to the [plan for the] patient's athletic participation." Another piece of feedback provided by an athletic training student included emphasis on the clarity of the communication while providing insight for consideration of future communication with a PA: "I thought the call went very well. Communication was clear, concise, and patient focused. [The] only thing looking back now could have potentially been some feedback [from the PA student] about the ibuprofen dosing for the athlete." The PA students indicated that the athletic training students accurately determined the diagnosis, provided appropriate patient

Figure 2. Situation, background, assessment, recommendation (SBAR) communication: athletic training student feedback to physician assistant student. AT indicates athletic trainer; HIPAA, Health Insurance Portability and Accountability Act; PA, physician assistant.

Physician Assistant Completing this form (Initials):	
Athletic Training Student Name:	
Please provide feedback to the Athletic Trainer based on the following scale: 5 – This item was addressed in detail matching that of professional level 4 – This item was addressed in moderate detail appropriate to a student 3 – This item was addressed but could have been presented more thoroughly 2 – This item was addressed but needed significant prompting 1 – This item would have been appropriate to the SBAR communication but was omitted 0 – This item was not applicable/appropriate to the SBAR communication I participated in	
Measurable Objectives "The Athletic Trainer...."	Response
Overall Feedback on Assessment Related Content	
Shared pertinent subjective data	
Shared pertinent objective data	
Shared pertinent patient details relevant to the SBAR (details were sufficient to gain all needed information related to the patient)	
Received patient information from the PA using HIPAA regulations throughout SBAR	
Critical Thinking	
Reported pertinent vital signs as appropriate (may prompt AT to provide this information if applicable)	
Reported/interpreted lab results as appropriate (may prompt AT to provide this information if applicable)	
Provided rational for assessment portion of SBAR	
Provided rational recommendation portion of SBAR	
Received safe and accurate medical care from the PA	
Understands the following from the PA: the PA expressed an understanding of his/her limitations and will seek advice from attending physician as needed	
Communication	
Communicated effectively in the SBAR format	
Received professional and effective communication from the PA	
Communicated focused information that was relevant to the case (no extraneous or unrelated information was provided)	
Accurately responded and answered questions appropriately	
Received appropriate follow up questions from the PA	
Promoted and maintained professionalism during the call	
Communicated in an efficient manner (not too much time)	

background details, and delivered an appropriate plan of care. In addition, PA students expressed perceived value of the opportunity to receive case summaries from athletic training students, as they were mostly unaware that this was a potential area of communication for their future clinical practice. One PA student commented, "I think this was a good [IPC] exercise...It was simple to complete but still very clinically applicable."

Instructor Preparation and Collaboration

To successfully complete this activity, collaboration among faculty in the AT and PA programs is necessary. Early establishment of learning objectives, course availability, student expectations, and scheduling logistics must be considered. Ensuring that the case meets appropriate aspects of practice for both disciplines is paramount. When consid-

ering the context of the case, establishing which level of students to include (early in program enrollment or closer to graduation) will need to be discussed. Prerequisite knowledge for successful participation, such as anatomy, basic injury mechanisms, or nonorthopaedic conditions, signs and symptoms, and clinically relevant soft tissue testing, and diagnostic procedures should be agreed on by involved faculty. If the case has a more general medical or illness aspect, then relevant signs and symptoms of disease/illness will be needed for the students to both provide and interpret the contents of the SBAR. In doing so, ensuring students have the best chance to succeed in this low-stakes activity should be achieved.

Although each of the aforementioned items are important to consider and establish for the activity, the time for collaboration does not need to be extensive. The 3 instructors for this described SBAR activity collaborated for less than 3 hours

Figure 3. Situation, background, assessment, recommendation (SBAR) communication: physician assistant student feedback to athletic training student. AT indicates athletic trainer; HIPAA, Health Insurance Portability and Accountability Act; PA, physician assistant.

Physician Assistant Completing this form (Initials):	
Athletic Training Student Name:	
Please provide feedback to the Athletic Trainer based on the following scale: 5 – This item was addressed in detail matching that of professional level 4 – This item was addressed in moderate detail appropriate to a student 3 – This item was addressed but could have been presented more thoroughly 2 – This item was addressed but needed significant prompting 1 – This item would have been appropriate to the SBAR communication but was omitted 0 – This item was not applicable/appropriate to the SBAR communication I participated in	
Measurable Objectives "The Athletic Trainer...."	Response
Overall Feedback on Assessment Related Content	
Shared pertinent subjective data	
Shared pertinent objective data	
Shared pertinent patient details relevant to the SBAR (details were sufficient to gain all needed information related to the patient)	
Received patient information from the PA using HIPAA regulations throughout SBAR	
Critical Thinking	
Reported pertinent vital signs as appropriate (may prompt AT to provide this information if applicable)	
Reported/interpreted lab results as appropriate (may prompt AT to provide this information if applicable)	
Provided rational for assessment portion of SBAR	
Provided rational recommendation portion of SBAR	
Received safe and accurate medical care from the PA	
Understands the following from the PA: the PA expressed an understanding of his/her limitations and will seek advice from attending physician as needed	
Communication	
Communicated effectively in the SBAR format	
Received professional and effective communication from the PA	
Communicated focused information that was relevant to the case (no extraneous or unrelated information was provided)	
Accurately responded and answered questions appropriately	
Received appropriate follow up questions from the PA	
Promoted and maintained professionalism during the call	
Communicated in an efficient manner (not too much time)	

over the course of 2 months to outline the necessary details for implementation, with 1 additional hour from 1 faculty member to construct the case scenarios. When considering opportunities for disciplines to collaborate with, the home institution would be an easy first stop if appropriate programs are offered, or other external entities locally or nationally could be considered if there is a lack of opportunity directly on campus. Last, it is important to note that the faculty collaboration needed for the activity serves as a built-in model for students to see IPC among the faculty involved.

FUTURE DIRECTIONS

In consideration of future incorporation of this SBAR activity, there is potential for many areas of expansion, such as inclusion of other health care disciplines, increasing the amount of student collaboration and communication, incor-

porating telemedicine, and enhancing case pattern recognition. This activity could be used among other health care students, including, although not limited to, nursing, certified registered nurse practitioner, pharmacy, occupational therapy, physical therapy students, speech-language pathology, and medical students. Engaging more health-related disciplines in this type of activity should help students gain confidence in collaboration and communication skills while potentially fostering teamwork. Furthermore, in consideration of the moving trends of medicine, the SBAR activity could be implemented via telemedicine while having the provider examine the patient over video with collaboration of the appropriate health care professionals. Last, with continued practice, students may develop advanced clinical reasoning, which can help build case pattern recognition as they learn to identify a specific condition from key signs and symptoms and

relay that information to other appropriate health care providers.

CLINICAL ADVANTAGES

This SBAR learning activity provides a real-life opportunity for AT and PA students to practice deductive reasoning, clinical decision making, patient management, and plan of care directives while directly participating in interprofessional communication. Student confidence is enhanced, as the SBAR allows them to organize pertinent medical information that needs to be shared with the corresponding health care provider, thus contributing to their skills in interprofessional communication. Successful completion of the activity allows students to reinforce their abilities to convey and process pertinent patient information while providing clear and concise communication to another health care professional. From a clinical application standpoint, interprofessional communication is vital to maintaining the continuity of patient care, thus avoiding potential medical errors and improving patient outcomes. Another advantage of this teaching technique is the short period of time needed for delivery of an SBAR. Oftentimes, patient information is transferred quickly and concisely, thus providing students an opportunity quite like real-life clinical practice.

CONCLUSIONS

Among members of the sports medicine team, ATs are well poised to serve as the central communicator for patient care. Providing students with opportunities to actively engage professionally with other disciplines during their educational experiences allows for development of confidence in communication, a vital interpersonal and interprofessional skill. Incorporation of the SBAR communication strategy is one way to equip students with skills in IPC, communication, and clinical decision making.

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