UNDERSTANDING THE PERCEPTIONS OF PROFESSIONALISM IN ATHLETIC TRAINING WITH THE USE OF A PROFESSIONALISM QUESTIONNAIRE

A thesis submitted to the Kent State University College of Education, Health, and Human Services in partial fulfillment of the requirements for the degree of Master of Arts

By
Nathan C. Blue
August 2012
Thesis written by
M.A., Nathan C. Blue, 2012
B.A., Ohio University, 2010

Approved by

_________________________, Director, Thesis Committee
Kimberly S. Peer

_________________________, Member, Thesis Committee
Jacob E. Barkely

_________________________, Member, Thesis Committee
Ashley Reed

Accepted by

_________________________, Director, School of Health Sciences
Lynne Rowan

_________________________, Dean, College of Education, Health and Human Services
Daniel F. Mahony
Professionalism is the combination of clinical competence, legal/ethical understanding, knowledge and humanistic qualities. Previous literature from varying disciplines indicates a decline in the perception of professionalism of healthcare providers. Medicine has a long standing contract with patients and to society as whole. Professionalism is the binding concept in this contract. Athletic Trainers are allied healthcare providers that interact and collaborate with a large and varied population of athletes, patients and clients.

The purpose of this research was several-fold. First, this research aims to enhance, promote and further the discussion of professionalism in athletic training. This research aims to examine the overall perception of professionalism in athletic training and whether athletic training student’s perceptions differ from certified athletic trainers.

Permission was granted to adopt and modify The Penn State College of Medicine Professionalism Questionnaire (PSCOM-PQ) for studying professionalism perceptions in athletic training. Participants were recruited through distribution emails to program directors (PD) in 12 Mid-American Conference ATEPS. The sample population included students (pre professional and professional phase) as well as certified athletic trainers (graduate students and faculty/staff).
A 4x6 way Analysis of Variance (ANOVA) with repeated measures on the ABIMs six *a priori* elements of professionalism was performed for aggregate rating and rank ordering scores. *Post Hoc* testing was accomplished with independent samples T-Tests by group (pre-professional phase, professional phase, graduate and faculty/staff).

Pre-professional students had the greatest significant between groups differences; when compared to professional phase students pre-professional students significantly differed in 4 of 6 *a priori* elements of professionalism. They included accountability ($t=1.8$, $p=.03$), altruism ($t= 1.4$, $p=.04$), excellence ($t= 1.53$, $p=.011$) and respect ($t= 1.04$, $P=.04$). Pre-professional students to graduate students significantly differed in the *a priori* element excellence ($t=1.72$, $p=.04$). There were no significant differences between any of the remaining groups. Pre-professional phase students significantly differed in honor/integrity ($t=1.56$, $p=.03$) compared to graduate students in the rank ordering analysis.

Data from this study did not support the original hypothesis that athletic training students would differ in their perceptions of professionalism compared to certified athletic trainers.
ACKNOWLEDGMENTS

“No man ever reached to excellence in any one art or profession without having passed through the slow and painful process of study and preparation” – Horace

This paper is dedicated to the countless number of people who have supported, inspired and encouraged me— not only in this undertaking but more so in life - I cannot thank you enough.

I would like to start off first by saying thank you to George F. Blackall, PsyD, and his colleagues at the Penn State College of Medicine, for the gracious use of their PSCOM-Professionalism Questionnaire. I would also like to thank Ms. Patti Peters of the Research and Evaluation Bureau at Kent State University for her many dedicated hours in preparing and publishing the questionnaire. To my mentors, Bentley A. Krause, Ph.D, AT, LAT – Ohio University and Mr. Robert Bitzer, MS, AT, LAT – Orange High School. I would not be the certified athletic trainer I am today if not for their mentorship, continued demonstration of what it truly means to be a professional and more importantly their friendship and belief in me.

I sincerely thank my thesis committee for their dedication and patience through the entirety of this process. Ms. Ashley Reed, MS, AT, for her feedback and assistance in participant recruitment. Jacob E. Barkley, Ph.D, for his assistance and guidance with the statistical analysis associated with this research. Finally, my advisor and thesis committee chair Dr. Kim Peer, Ed.D, ATC, FNATA for her continued support, feedback and dedication to the profession of athletic training.
To my parents Bill & Karen Blue, words cannot describe the appreciation and sincere gratitude for instilling their beliefs, dedication and work ethic, whom without; I would not be where I am today. Dad, it was you who pushed me to strive for excellence and taught me to think outside the box. Mom, all I can say is thank you for being you – Your compassion and caring is unmatched and I truly believe I learned those values from you. I know that I am the person I am today because of it. To the rest of my family – Chris, Terra & Elliott, Mike, Alissa, Anonabelle & Truman and Jordan I cannot thank you enough for all your love, support and friendship. I cannot imagine a greater family and I am truly grateful for every one of you.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>ACKNOWLEDGMENTS</th>
<th>iii</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF FIGURES</td>
<td>vii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>viii</td>
</tr>
</tbody>
</table>

## CHAPTER

### I. INTRODUCTION/PURPOSE

| Introduction                                                                 | 1   |
| Statement of Problem                                                        | 3   |
| Purpose                                                                      | 4   |
| Research Questions                                                          | 5   |
| Assumptions                                                                 | 5   |
| Delimitations                                                               | 7   |
| Operation Terms/Definitions                                                 | 8   |
| Summary                                                                     | 11  |

### II. REVIEW OF LITERATURE

| Introduction                                                                 | 13  |
| Professional Development                                                    | 15  |
| Professionalism                                                             | 18  |
| Teaching Professionalism                                                    | 25  |
| Assessing Professionalism                                                   | 28  |
| Introduction into Allied Health                                             | 33  |
| Professionalism in Allied Health                                           | 35  |
| Teaching Professionalism in Allied Health                                   | 38  |
| Assessing Professionalism in Allied Health                                  | 40  |
| Introduction into the Athletic Training Profession                          | 42  |
| Teaching in Athletic Training                                               | 45  |
| Assessment in Athletic Training                                             | 48  |
| Professional Development, Socialization and Professionalism in Athletic Training | 52  |
| Conclusion                                                                  | 56  |

### III. METHODOLOGY

| Introduction                                                                 | 59  |
| Population                                                                  | 59  |
| Instrument                                                                  | 61  |
Data Analysis .................................................................63
Results .............................................................................63

IV. DISCUSSION ..................................................................67
Introduction ....................................................................67
A Model of Professionalism in Athletic Training ..........67
Perceptions of Professionalism .......................................69
Professional Socialization ..............................................72
Group Differences in the Perceptions of Professionalism ......73
  Pre-Professional to Professional Phase Students ...........73
  Pre-Professional Phase to Graduate Students .................74
  Pre-Professional to Faculty/Staff .....................................74
  Remaining Groups ........................................................75
Professionalism Assessment Questionnaire ..................77

V. RECOMMENDATIONS, LIMITATIONS AND CONCLUSION ..79
Recommendations ...........................................................79
Limitations .......................................................................81
Conclusions ....................................................................82

APPENDICIES ..................................................................85

APPENDIX A. NATA CODE OF ETHICS .................................86
APPENDIX B. CODE OF ETHICS FOR THE PHYSICAL THERAPIST .90
APPENDIX C. CODE OF ETHICS FOR NURSES, AMERICAN NURSING ASSOCIATION .................................................97
APPENDIX D. BOC STANDARDS OF PROFESSIONAL PRACTICE 116
APPENDIX E. RECRUITMENT LETTER ................................123
APPENDIX F. QUESTIONNAIRE ........................................126

REFERENCES ..................................................................137
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Definition of Professionalism according to Stern (2006).</td>
<td>22</td>
</tr>
<tr>
<td>2.</td>
<td>Multi-Source Feedback Assessment from Berk, 2009</td>
<td>31</td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>1</td>
<td>Mean + Standard Deviation of Age, Gender, and Membership Status by Group</td>
<td>61</td>
</tr>
<tr>
<td>2</td>
<td>ANOVA with Repeated Measures. Main Effect of Aggregate Rate Score and Interaction of Rate Score by Group</td>
<td>64</td>
</tr>
<tr>
<td>3</td>
<td>Mean and Standard Deviation of A Priori Elements by Group. Similar letters (a,b,c,d) indicate a significant difference (p &lt; 0.05) between pre-professional phase students and professional phase students, while (e) indicates the difference (p &lt; 0.05) between pre-professional students and graduate students</td>
<td>65</td>
</tr>
<tr>
<td>4</td>
<td>ANOVA with Repeated Measures. Main Effect of Aggregate Rank Score and Aggregate Rank Score Interaction by Group</td>
<td>65</td>
</tr>
<tr>
<td>5</td>
<td>Mean and Standard Deviation of A Priori Elements by Group. Means with matching letter (a) indicates significant difference (α &lt; .05)</td>
<td>65</td>
</tr>
<tr>
<td>6</td>
<td>Rate and Rank Order Each Group: Pre-Professional Phase, Professional Phase, Graduate Students and Faculty/Staff</td>
<td>66</td>
</tr>
</tbody>
</table>
CHAPTER I
INTRODUCTION/PURPOSE

Introduction

As recently reflected in modern media and contemporary research, the perception of professionalism in healthcare is lacking (van Mook et al., 2008). As healthcare providers, athletic trainers are not immune from this dilemma nor should they be so naïve to think that the lack of professionalism among other health professionals will not or has not transcended into athletic training. A multitude of factors contribute to this issue including a perceived lack of professionalism in medicine by society, lack of operational knowledge/definition of professionalism and changing healthcare/educational systems (Swick, 2000). The perception of decreasing professionalism within medicine is cause for concern and served as a catalyst for the professionalism movement in medicine. Abundant literature on professionalism in medicine has been published, especially in the last decade (van Mook et al., 2008).

Healthcare providers have obligations to patients, and themselves but, most importantly, to society as a whole. Inherent to medicine and allied health (AH) is a contract with society; and at the center of that contract is the concept of professionalism (Kirk, 2007). Physicians, AH care providers and athletic trainers are committed to this societal contract through their daily interaction with patients, athletes and other professional

Various studies in medicine and other AH disciplines have documented the need to develop, foster and formally instruct/assess professionalism (Koenig, Johnson, Mora
Ducette, 2003). Professionalism remains one of the more highly debated yet least
understood competencies in the health professions education (van Mook et al., 2008). As
a relatively new profession, athletic training is continuously evolving and is currently
struggling with issues such as third-party reimbursement, equal access to patients, an
improved professional identity and state licensure (Hannam, 2000). Other AH disciplines
have completed a transition to doctorate level to practice, thus providing them with a
higher level of professionalism or perceived professionalism that does not exist in athletic
training (Donini-Lenhoff, 2008). If athletic training is to continue to develop as a
profession, further improvement on and fostering of professionalism is crucial. By
improving the professional identity and demonstrating congruent level of professionalism
with other health care providers, athletic training can have an improved status and
presence in today’s health care arena.

Athletic training education has endured drastic changes and reform in recent
years. Historically, an internship-based route to certification existed, whereas today,
successful completion from an accredited athletic training program is the sole path to
certification. Athletic training education incorporates various instructional methods
including formal didactic instruction and clinical, situational-based experiences

Formal and explicit education, demonstration/assessment of professionalism and
professional behaviors are warranted in medical education (Cruess & Cruess, 2006).
Research has also demonstrated that the much of the information and knowledge
conveyed to athletic training students is done via the “hidden curriculum”. This informal
instruction remains an integral component of medical and athletic training education (Mackenzie, 2007; Seegmiller, 2004). Athletic training students learn different depending on the situation, clinical experiences and clinical instructors. Therefore it seems logical that knowledge retention, skill acquisition and perceptions of professional roles/responsibilities would differ among students.

Contemporary thought regarding the concept of professionalism reflects that students adopt the attitudes, attributes and values demonstrated and instructed to them. Athletic training educational programming reflects this concept by delineating seven Foundational Behaviors of Professional Practice that must be taught and assessed throughout athletic training education. Professionalism is included among primacy of the patient, teamed approach, legal/ethical practice, knowledge advancement, cultural competence, legal and ethical practice as a foundational behaviors. Furthermore, professional development and responsibility remains an area of competency assessment by athletic training education programs.

**Statement of Problem**

The professional socialization process is a model of transitioning students into professionals by preparing them for the roles and responsibilities of a profession through development and promotion of core values, professional behaviors/attitudes and clinical competence (Klosner, 2008). Athletic trainers are socialized throughout their academic career and even into their professional practice (Klosner, 2007). While it is documented that athletic training students are versed in professionalism and professional development, little is known about what attitudes/behavior/values students actually
perceive as “professionalism.” Furthermore, literature suggests that differences between what is being taught (classroom) and what is being demonstrated (clinical setting) is different, even reflecting significant conflict with what is taught in the formal instructional components of the curriculum (Steinert, Cruess, Cruess & Snell, 2005). Without understanding what Athletic Training Students (ATS) and Certified Athletic Trainers (ATCs) perceive as core components in professionalism, little can be done as far as fostering, assessing or evaluating professionalism.

**Purpose**

As athletic training continues to move toward obtaining goals of professional credibility, professional identity, autonomy and equal access to third party reimbursement, the concept of professionalism will continue to evolve. The purpose of this study is to further understand the concepts, themes and perceptions of professionalism in athletic training and to determine if differences in professionalism among athletic training students and certified athletic trainers exist. This research will promote discussions within athletic training on professionalism, specifically with regards to a consistent definition of professionalism in the athletic training profession. Moreover, this study will make recommendations on a valid and reliable professionalism assessment tool for athletic training education program (ATEP) educators and clinical staff to utilize when assessing professionalism in athletic training students.

Additionally, the purpose of this study is to provide a foundation for further research. The scope of this research is limited to ATEPs in the Mid-American Athletic Conference (MAC) and further studies should seek to examine differences in
professionalism among students and professionals across National Athletic Trainers’ Association (NATA) districts and worldwide as the profession expands globally. Future research may also include the comparison of athletic training students to other AH students and certified athletic trainers to other AH professionals.

**Research Questions**

Several research questions will be examined for this research.

1. What is the general perception of professionalism in athletic training?

2. Are perceptions, attitudes, and beliefs of professionalism among athletic training students different than those of certified athletic trainers?

3. Are perceptions, attitudes, and beliefs of professionalism among graduate students different that those of clinical/academic faculty?

4. Do pre-professional phase and professional phase students differ in their perceptions of professionalism?

5. Do variables such as years of certification, route to certification, job setting, and membership in national or state organizations, age or gender effect the perceptions of professionalism among certified athletic trainers?

**Assumptions**

An adapted version of The Penn State College of Medicine College (PSCOM) Professionalism Questionnaire was used, with permission, as the basis for this research.

This particular instrument was the first valid and reliable professionalism assessment tool for medical students, medical educators and faculty/staff. The authors utilized seven previously identified a priori characteristics of professionalism including:
accountability, altruism, duty, enrichment, equity, honor/integrity, and respect (ABIM, 2004). Since athletic training education has roots similar to that of medicine and is endorsed by the American Medical Association (AMA), this instrument was selected. Among other commonalities, both professions include traditional classroom instruction and clinical-based experience. This particular instrument was not designed for the use in the field of athletic training; therefore the researchers assume validity and reliability will carryover from one healthcare discipline (medicine) to another (athletic training).

The researcher assumes responsibility for distributing, collecting and analyzing data in the form of an electronically mailed survey. The respondents accept the assumption of risk associated with this particular research study. Personal demographic information such as age, gender, route to certification, years as certified athletic trainer, years in current setting and educational accomplishments will be asked by researchers to ascertain any relevant correlations. All demographic information and survey responses answers will be kept anonymous and confidential.

While it is understood those responses are solely the opinion of participants and completely subjective – the researchers must assume that participants will answer truthfully, honestly and provide valid answers to questions on the survey. The researcher will respect the notion that some respondents will misinterpret and/or misread questions or simply provide answers to please the researcher. All of these assumptions are inherent in survey research and will be considered in this study.
Delimitations

The primary construct of this research is to further understand the underlying themes, attitudes and perceptions of professionalism in athletic training. Additionally, this study seeks to determine if differences in the perceptions of professionalism among athletic training students and certified athletic trainers exist. The instrument used to measure the perceptions and attitudes of professionalism throughout this study is an electronically mailed professionalism questionnaire.

The population of this research is focused on athletic training students and certified athletic trainers associated with Mid-American Conference interscholastic athletics and athletic training education programs. The only inclusion criterion for students was enrollment in either the pre-professional or professional phase of a Commission on Accreditation of Athletic Training Education (CAATE) accredited athletic training education program within in the MAC. Inclusion criteria for certified athletic trainers are slightly more comprehensive. Participants must maintain BOC certification and state licensure (if applicable) to be able to practice athletic training in that state.

The MAC conference was chosen for several reasons. With the exception of one, all MAC schools have a CAATE-accredited athletic training education programs and secondly, the Mid-American Conference was selected as a population of convenience. It was thought that improved response rates and participants would be achieved from this particular population. Additionally, four of the six states that constitute NATA District 4 are represented by an institution within the MAC.
Operational Terms/Definitions

Accreditation Council for Graduate Medical Education (ACGME). The Accreditation Council for Graduate Medical Education (ACGME) is a separately incorporated non-governmental organization responsible for the accreditation of Graduate Medical Education (GME) programs within the United States. The ACGME has 28 review committees and oversees approximately 8500 programs in over 130 specialties and subspecialties.

Training Education Program (ATEP). CAATE accredited educational programs that instruct, educate and assess athletic training students on the competencies and proficiencies of athletic training education. Entry-level athletic training education uses a competency-based approach in both the classroom and clinical settings. Using a medical-based education model, athletic training students are educated to serve in the role of physician extenders, with an emphasis on clinical reasoning skills. Educational content is based on cognitive (knowledge), psychomotor (skill), affective competencies (professional behaviors) and clinical proficiencies (professional, practice-oriented outcomes). (National Athletic Trainers’ Association, 2011)

Allied Health. Health care professionals involved with the delivery of health or related services pertaining to the identification, evaluation and prevention of diseases and disorders; dietary and nutrition services; rehabilitation and health systems management, among others. (Association of Schools of Allied Health Professions, 2011)
Altruism. Primary regard for or a devotion to the interest of patients/clients, this assuming the fiduciary responsibility of placing the needs of the patient/client ahead of the healthcare provider’s self-interest (Bezner, 2004).

Board of Certification (BOC). The Board of Certification, Inc. (BOC) was incorporated in 1989 to provide certification program for entry-level Athletic Trainers (ATs). The BOC establishes and regularly reviews both the standards for the practice of athletic training and the continuing education requirements for BOC Certified ATs. The BOC has the only accredited certification program for ATs in the US. (Board of Certification, 2011)

Certified Athletic Trainer. Athletic trainers’ are allied health care providers recognized by the American Medical Association. Athletic trainers are health care professionals who collaborate with physicians to optimize patient and client activity and participation in athletics, work and life. The practice of athletic training encompasses the prevention, examination and diagnosis, treatment, and rehabilitation of emergent, acute, subacute, and chronic neuromusculoskeletal conditions and certain medical conditions in order to minimize subsequent impairments, functional limitations, disability, and societal limitations. (National Athletic Trainers’ Association, 2011)

Commission on Accreditation of Athletic Training Education (CAATE). CAATE is the agency responsible for the accreditation of 350+ professional (entry-level) athletic training educational programs. CAATE and other professional organizations collaborate to develop the Standards for Entry-Level Athletic Training Educational Programs. The mission of the CAATE is to provide comprehensive accreditation services to institutions
that offer athletic training degree programs and verify that all CAATE-accredited programs meet the acceptable educational standards for professional (entry-level) athletic training education. (CAATE, 2011)

_Fiduciary obligation._ Person bound to act for another's benefit, as a trustee in relation to his beneficiary. (Webster Dictionary, 3rd Edition, 1995)

_National Athletic Trainers’ Association (NATA)._ The National Athletic Trainers’ Association is the professional membership association for certified athletic trainers and others who support the athletic training profession. Founded in 1950, the NATA has grown to more than 30,000 members worldwide today. The mission of the National Athletic Trainers’ Association is to enhance the quality of health care provided by certified athletic trainers and to advance the athletic training profession. (National Athletic Trainers’ Association, 2011)

_Professionalism._ Professionalism entails positive, identifiable, quantifiable qualities, behaviors attitudes and values that professionals should strive for. Qualities such as altruism, compassion/caring, honesty/integrity and excellence help to define professionalism. Behaviors include adherence to ethical and moral standards, accountability and maintaining professional relationships with colleagues and other health care professionals. Attitudes include respect, self-regulation and continued commitment to learning. (van Mook et al., 2009)

_Socialization._ Process by which individuals learn the knowledge, skills, values, roles, and attitudes associated with their professional responsibilities. (Pitney et al., 2002)
Summary

Recently perceived declining professionalism within the medical community has prompted an extensive review and reflection of the concept of professionalism (van Mook et al., 2008). No clear consensus on the definition of professionalism is universally agreed upon. *Project Professionalism* (2001) defined professionalism as intrinsic qualities of healthcare providers such as altruism, compassion/caring, honesty/integrity, respect and commitments to practicing medicine at the highest levels of excellence and ethical judgment. Professionalism is a crucial component of the overall professional development of healthcare providers. Medicine (and health care providers) seeks to maintain a fiduciary responsibility and serve the contractual obligation to society is dutifully noted in literature (Swick, 2000; Macpherson & Kenny, 2008).

The Council on Accreditation for Graduate Medical Education has adopted ‘professionalism’ as a competency for residents and medical students. Professionalism education has shifted from student’s informally learning professionalism to formal and explicit professionalism and humanism education. A broad array of professionalism assessment techniques and methods has been documented in literature.

While the amount of professionalism and literature in medicine is abundant, less has been published on professionalism in athletic training. Athletic trainers are recognized by the AMA, as allied healthcare providers who work collaboratively with other health care providers to provide patients with the best care possible in the areas of injury and illness treatment, prevention, rehabilitation, and intervention. Although the profession of athletic training has evolved substantially from its creation in the 1950’s, as
a whole it is still facing several critical issues. Among the more critical issues are third-party reimbursement, equal access to Medicare services, professional identity and state licensure (Hannam, 2000).

The Penn State College of Medicine Professionalism Questionnaire was adopted and modified with permission. Participants in this study consisted of undergraduate athletic training students, graduate assistants, academic faculty and clinical staff from 12 Mid-American Conference Athletic Training programs. Assessing the perceptions, attitudes, and definition of professionalism among athletic training students and certified athletic trainers is the focus this research. This research was performed to enhance discussion on the definition of professionalism specific to athletic training, provide data on perceptions and attitudes of athletic training students and professionals (certified athletic trainers), and finally to make recommendations on a valid and reliable professionalism assessment tool for use in the athletic training profession.
CHAPTER II
REVIEW OF LITERATURE

Introduction

The purpose of this literature review is to present the constructs, themes and perceptions of professionalism in medicine and various AH professions. The first part of this review is a brief introduction into professional development and professional socialization and how each concept correlates to professionalism. The remainder of the review is dedicated to the teaching, assessment/evaluation and implementation of professionalism within medicine and AH.

The ideology of professional development is supported by professionalism and socialization constructs. Socialization is a model of professional development that socializes students for the roles and responsibilities of a given profession through formal, informal and situational learning (Klosner, 2007). Professionalism can be defined as a set of attributes and values that health care providers rely on to uphold the unwritten contract with society (Swick, 2000). Defining professionalism has proven difficult in recent years, largely due to the multitude of concepts and values more commonly associated with professionalism, such as professional/clinical competence (Epstein & Hundert, 2002), ethical/moral judgment (Mackenzie, 2007), service/advocacy, and virtue characteristics (Physician Charter, 2004).

Traditionally medical education predominantly focused on mastery of skill and knowledge retention. In the informal or hidden curriculum, instruction anchored on students passively learning professional behaviors, attitudes and values from appropriate
role models (Steinert et al., 2005). The teaching of medical ethics and professionalism was not highlighted as a central constituent of medical education until the 1970’s (Kirk, 2007). Since that time, education in medicine has changed drastically with regards to professionalism and teaching humanistic qualities. Additionally, elements such inter-professional professionalism (IPE), intrapersonal professionalism, interpersonal professionalism, and public professionalism are emerging as crucial components of professionalism education (van de Camp, Vernooij-Dassen, Grol & Bottema, 2004; McNair, 2005; Reeves, 2009).

AH has evolved through a long and arduous process to become a driving force in today’s health care arena (Donini-Lenhoff, 2008). There is ample information pertaining to professionalism within medicine and the medical community (Arnold 2002; Cruess & Cruess, 2006; Steinert et al., 2005; Stern, 2006; van Mook et al., 2008). However, literature in AH fields as nursing (Castell, 2008; Creasia & Friberg, 2011; Wynd, 2003), physical and occupational therapy (Foord-May & May, 2004; Koenig, 2003; Swisher, Beckstead & Bebeau, 2004) or athletic training (Caswell & Gould, 2008; Craig, 2007; Delforge & Behnke, 1999) is lacking.

Athletic training, the third focus of this review, is an AH profession recognized by the American Medical Association. The profession of athletic training has evolved substantially since the creation of the National Athletic Trainers Association (NATA) in the early 1950’s (Delforge, 1999; Perrin, 2007). Additionally, athletic training education has gone through substantial reform as well. One of the most profound changes within the profession of athletic training came with the transition from internship-base route to
certification to exclusively accredited curriculum instruction. This transition to accreditation as the sole route to national certification helped to unify and strengthen the education and profession of athletic training as well as improve professional credibility.

Athletic training students are educated and assessed on a set of competencies set by the National Athletic Trainers Associations’ Professional Educational Council in conjunction with accreditation standards set by CAATE and Standards of Professional Practice published by the BOC. Professional development is not only considered a foundational behavior for the practice of athletic training but also an educational competency for athletic training.

**Professional Development**

Professional development (PD) is a broad and comprehensive concept describing the development, continued progress, change and growth of an individual over the course of a career (Elman, Illfelder-Kaye & Robiner, 2005). Elman et al., (2005) notes that PD is more than merely acquiring knowledge, skills and competency, but rather a commitment and theory of continued improvement. Professional development can be further defined as:

…the developmental process of acquiring, expanding, refining, and sustaining knowledge, proficiency, skill, and qualifications for competent professional functioning that result in professionalism. It comprises both (a) the internal tasks of clarifying professional objectives, crystallizing professional identity, increasing self-awareness and confidence, and sharpening reasoning, thinking, reflecting, and judgment and (b) the social/contextual dimension of enhancing interpersonal
aspects of professional functioning and broadening professional autonomy.

(Elman et al., p.368)

According to the above definition of professional development elements such as thinking, reflecting and reasoning are contributors to PD. PD is, in essence, how a student transitions into a competent, ethical and knowledgeable professional. Through the PD process, an individual continually re-formulates and refines both their personal and professional identity. The purpose of PD enhances the commitment to life-long learning that medicine and healthcare professionals are obligated to engage in.

Increased PD awareness in the medical community has led to considerable amounts of literature (Stephenson, Higgs & Sugarman, 2001; Gordon 2003; Howe, 2002; Roth & Zlatic, 2009; Wear, 1998). However, the bulk of PD literature remains in educational literature and does not include AH care professionals (Dall’Alba & Sandberg, 2006; Kennedy, 2005; Knight, 2002; Pill, 2005). According to PD literature, numerous PD models exist and are utilized. Such models include award-bearing, standards-based (Ingvarson, 1998), coaching/mentoring (Cruess & Cruess, 2005), transformative (Prochaska & Di Clemente, 1982) and, novice to expert (Neibert, 2009).

Several models of PD have a greater applicability to medicine and AH than others. For example, a “novice-to-expert” PD model is cited in athletic training literature (Neibert, 2009) as well as in medicine (Gordon, 2003). This model incorporates segmental stages of development beginning with the “novice” and transitioning to an “expert” as the individual acquires knowledge and skills necessary to master each stage (Dall’Alba & Sandberg, 2006). The coaching/mentoring PD model has been greatly
researched in medicine as the effectiveness of role modeling has come into question (Cruess et al., 2008; Gofton & Regehr, 2006). A final PD model commonly associated with medicine and AH collectively is the standards-based model. In every aspect of healthcare education, whether it is medicine or AH; from undergraduate, graduate, or residency training, various educational standards/requirements ([ACGME, 2001; NATA 5th Educational Competencies, 2011) codes of ethics (American Medical Association [AMA], 2001; [NATA], 2005 (Appendix A); American Physical Therapy Association [APTA], 2009 (Appendix B), American Nurses Association [ANA], 2001)(Appendix C) and societal expectations are in place (Arnold, 2002; Physician Charter, 2004; Swick, 2000). These documents containing policy, law, and other various principles serve as the foundation for PD in this model and can be found in the appendices at the end of this paper.

Professional socialization has been documented as a critical component of professional development in medicine and allied healthcare education (Clark, 1997; Cruess, 2006; Klosner, 2007; Pitney, 2002). Clark (1997) defined professional socialization as the “process by which individuals learn the knowledge, skills, values, roles, and attitudes associated with their professional responsibilities (p.442). Typically, values and behaviors such as professional conduct, humanism and professionalism conveyed to students through the professional socialization process are done informally and via the hidden curriculum (Pitney 2002, Pitney, Ilsley & Rintala, 2002).
Professionalism

Although professional development and professionalism are similar in context and theory, they are in fact different in concept. While PD remains an ideology, professionalism describes a set of attributes, attitudes and values to be demonstrated by a professional (Howe, 2002). Professionalism remains an objective of PD (Elman et al., 2005).

Physicians and other health care providers are expected to meet and maintain the highest standards of practice as set by society (Danielson, 2007). Medicine has a long-standing contract with society. It is through this contract that medicine has enjoyed benefits such as autonomous practice, self-regulation and professional status. To continue to enjoy the privileges bestowed to medicine by society, physicians must uphold the trust of society and are obligated to remain the fiduciary party for patients (van Mook et al., 2008). Distrust between society and medicine among other factors prompted a perceived decline in professionalism (Cruess, 2006; Shrank, Virginia, Reed & Jernstedt, 2004). Such distrust stems from society’s feelings that healthcare providers are less altruistic than beforehand and often demonstrate a self-preserving, less conscientious attitude towards practicing medicine. Medicine is desperately trying to rebuild the contract with society by moving past the conflict between changing societal needs and medical practice (van Mook et al., 2008). Professionalism is the component crucial to rebuilding the societal contract and central to the survival of the medical profession (Beauchamp, 2004; Kirk, 2007).
Within the last several decades, a substantial amount of literature and research has been published on professional development and professionalism in healthcare (Accreditation Council on Graduate Medical Education [ACGME], 1999; American Board of Internal Medicine [ABIM], 1995; Cruess & Cruess, 2006; van de Camp et al., 2004; Swick, 2000). Despite this breadth of information, Van Mook et al., (2008) noted the concept of professionalism is still a seemingly theoretical construct; something to be pursued yet never achieved. Further complicating the matter is the fact that a myriad of behaviors, attitudes, competencies and skills are typically included when defining professionalism (Gillespie et al., 2009; Wagner et al., 2007). Dozens of articles published in the last decade reiterate the difficulty and ambiguity surrounding a consensus on the definition of professionalism (van de Camp et al., 2004; Cornwall, 2008; Swick, 2000).

One of the first widely accepted definitions of professionalism was described by The American Board of Internal Medicine (ABIM) through ‘Project Professionalism.’ The goal of Project Professionalism was to enhance professional competence in medical education. Subsequently, a change in education, specifically non-cognitive domains (professionalism, humanism and medical ethics) emerged (Kirk, 2007). Objectives of ‘Project Professionalism’ included establishing a working definition of professionalism and raising awareness of professionalism among professionals. Additionally, the project was charged with making recommendations for the implementation of professionalism guidelines into educational programs and developing assessment tools/strategies to be used by educational/training programs. The ABIM produced a broad yet effective
working definition of professionalism inclusive of three commitments and six elements thought to accurately reflect the concept of professionalism in medicine. Commitments comprise the following: practicing medicine at the highest standards of excellence, sustaining the interest and welfare of patients and being responsive to the needs of society. The project also proposed six characteristics of professionalism that included altruism, accountability, excellence, duty, honor & integrity and respect for others (Project Professionalism, 2001).

For nearly a decade Project Professionalism served as a foundational guideline for professionalism within the medical community. However, medicine is now faced with new challenges such as improved technology, changing health care systems and increased responsibilities for health care providers which lead to the efficacy of Project Professionalism being brought into question. To satisfy growing concerns over declining professionalism and a changing health care system; a new set of guidelines on professionalism was published. The Physician Charter was a collaborative publication effort by the American Board of Internal Medicine, American College of Physicians and the European Federation of Internal Medicine designed to outline fundamental professionalism principles and responsibilities of physicians. The principles proposed included: primacy of patient welfare, patient autonomy and social justice. Additionally, the Charter outlines a set of 10 professional responsibilities to be exhibited by physicians that included: commitments to honesty with patient, professional competence, patient confidentially, maintenance of appropriate relations with patients, improving quality of care, improving access to care, distributing finite resources, evolving scientific
knowledge, managing conflicts of interests and professional responsibilities (*Physician Charter*, 2004).

As previously mentioned, the *Physician Charter* and *Project Professionalism* sought to define professionalism with sets of principles and commitments. Although, those principles and commitments help to conceptually define professionalism, they lack practical applicability of professionalism in everyday practice. Current literature on professionalism is primarily focused on concepts such as clinical competence (Epstein & Hundert, 2002), inter-professional collaboration (Reeves, 2009; McNair, 2005; van de Camp et al., 2004), professional roles/behaviors/attitudes (Cruess, 2006; Duffy & Roberts, 2006; Jha, Bekker, Swick, 2000) service (Kirk, 2007; Mackenzie, 2007) and virtue characteristics (Wagner, Hendrich, Moseley & Hudson, 2007; Sethuraman, 2006).

One key facet of professionalism is clinical competence. Health care providers are charged with the role and responsibilities of performing clinical skills to facilitate healing and improve patient health. Clinical competence requires the acquisition, retention and application of a specific body of knowledge (Kirk 2007). Epstein and Hundert (2002) reported that competence is the “habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served.”(p.226). Stern (2006) provided a visual representation of professionalism with clinical competence as the foundation. The next foundational level in Sterns’ (2006) representation is communication skills.
Health care providers must interact and communicate with patients and other health care providers therefore effective communication is a crucial component of professionalism. Inter-profession professionalism is the concept of effective collaboration and communication by various healthcare professionals to provide the highest care possible (McNair, 2005). Effective communication includes being a good listener as well (Kirk, 2007). Irvine (1996) reported that communication between healthcare provider and patient is essential for medical practice. The final component entails legal and ethical understanding of professionalism.

**Figure 1.** Definition of Professionalism according to Stern (2006).
Being a competent health care professional, however, requires more than clinical competency, communication skills and legal/ethical understanding. Professionalism entails virtue characteristics that are inherent and innate characteristics of health care providers. These often include characteristics such as altruism, compassion, accountability, excellence and honesty/respect.

Again using the representation by Stern (2006) four “pillars” of professionalism include: excellence, humanism, altruism and accountability. Excellence is the idea of “exceeding ordinary expectations” (Mackenzie, 2007). Commitment to healthcare excellence (practicing medicine at the highest standards) is a fundamental principle seen in both Project Professionalism & Physician Charter documents. Excellence necessitates lifelong learning and adherence to a code of ethics for healthcare providers. Maintaining and practicing healthcare at the highest standards of excellence facilitates clinical competence (Wagner et al., 2007). As reported by van de Camp (2004) altruism, or the notion to put others (patients) needs ahead of oneself, has been the most frequently described virtue characteristic in medical literature.

Respecting the rights and the choices made by either society or a patient is critical in understanding humanism. Humanism can be described as the culmination of several other virtues including respect, compassion and empathy (MacKenzie, 2007). Patients and society have certain undeniable rights. Mackenzie (2007) described compassion, another virtue as “being focused on the welfare of others with expression of sympathy” (p.223). Compassion and empathy transmit the emotions and concerns of healthcare providers demonstrating a certain level of humanism. However, compassion requires the
healthcare provider to remain emotionally detached from the situation in order to make
decisions in the patient’s best interest (Mackenzie, 2007). Accountability is the notion of
taking responsibility for one’s actions, or lack of action (Mackenzie, 2007). Societal
expectations of healthcare systems and providers continue to change necessitating a
greater awareness and understanding of what accountability truly means. The
characteristic accountability is an underlying theme to the concept of “public
professionalism” (van de Camp et al., 2004).

Today, the perception that professionalism is lacking among health care
professionals is prevalent. Factors such as changing healthcare systems
(commercialism), increasing costs, and breakdown in the societal contract further
perpetuate the decline in professionalism. Professionalism is a concept that incorporates
the combination of fundamental concepts such as clinical competence, communication
and legal/ethical understanding with professionalism “pillars” including excellence,
altruism, accountability and humanism. While there has been some concern over the lack
of professionalism and trust in the medical community in recent years, as a whole
medicine, is making the appropriate changes in part by raising awareness of the issue
through publications such as Project Professionalism and the Physician Charter. Formal
and explicit instruction of professionalism serves as starting point for the continued effort
to increase awareness and perception of the issue, which will ultimately increase overall
professionalism in not just medicine but all health care disciplines.
Teaching Professionalism

Previously, medical education was primarily focused on the acquisition and mastery of skills, knowledge, techniques and abilities related to clinical competency (van Mook et al., 2008; Shrank et al., 2004; Stern & Papadakis, 2006). It wasn’t until after the 1970’s those ‘non-cognitive’ areas such as humanism, medical ethics/morality and professionalism within medical education began to gain recognition as important components of medical education (Kirk, 2007; Stern, 2006). These elements served as an impetus for developing educational programs that were more inclusive of all aspects of professionalism.

The ACGME is an independently incorporated organization that serves as the accreditation agency for all graduate medical education (GME). In 1999, the ACGME adopted six competencies for evaluating the competency of physicians in the domains of patient care, medical knowledge, practice-based learning/improvement, interpersonal/communication skills, professionalism and systems-based practice (ACGME, 1999). As of July 2002, mastery of the six competencies became a requirement for medical residency programs in the United States of America (Shrank et al., 2004). These competencies mirrored the guiding principles of Project Professionalism established previously and were the first formally established educational requirements on professionalism.

As mentioned before, the concept of professionalism is difficult to define (van de Camp et al., 2004; Gillespie et al., 2009; Swick, 2000). As such, no consensus on the definition of professionalism exists; therefore different professions, programs and fields
of study have slightly different perceptions, teaching/assessment methods and expectations of professionalism (McNair, 2005). One common theme surrounding professionalism is that it must be taught (van Mook et al., 2008; Cruess, 2006), however, how it is taught remains a point of contention. Evidence in medical and AH literature now illustrates the need to incorporate a more formal, structured didactic teaching of professionalism to students ([ABIM] Project Professionalism, 2001; Borrero, McGinnis, McNeil et al., 2008; Cruess & Cruess, 2006; Davis, 2009; Swick, 2006;).

Institutions and educators have recognized the need to formally and implicitly instruct students on the non-cognitive areas of medical education (Cruess, 2006; van Mook et al., 2008; Swick, 2005). However, the informal or hidden curriculum largely remains the most convenient and widely utilized method for transmitting knowledge, skills, behaviors and attitudes to students (Cruess, Cruess & Steinert, 2008; Gofton & Regehr, 2006). Yet – evidence suggests that informal instruction alone is insufficient in developing and conveying professionalism to students (Cruess et al., 2005; Cruess & Cruess, 2006). The concern with the hidden curriculum is that negative role modeling or unprofessional behaviors can run counter to ideals, values and goals of the formal curriculum causing dissonance between what the students are actually learning and what they were being taught (Cruess et al., 2006; van Mook et al., 2008; Stern & Papidakis, 2006). These behaviors can positively or negatively influence a student’s behaviors, attitudes, and perceptions of professionalism (Cruess et al., 2006). Several factors should be considered when discussing formal professionalism education including: the cognitive base, faculty development/role modeling and professionalism evaluation.
A critical component of educating students on professionalism is the concept of the cognitive base. Cruess (2006) describes this as the theoretical and educational components fundamental to understanding professionalism. The cognitive base provides a framework on the history of professionalism, what actually constitutes professionalism, and how professionalism is viewed/evaluated by both the medical community and society. The cognitive base of professionalism is also crucial in demonstrating the importance of professionalism on the societal contract that medicine upholds to society. Understanding the significance and foundation of professionalism is crucial to sustaining professionalism (Cruess, 2006, Cruess & Cruess, 2006).

The traditional method of transmitting or ‘teaching’ professionalism and other humanism qualities (professional behaviors/attitudes and values) was done largely via role modeling within the ‘hidden curriculum’ from trusted, moral/ethical and professional mentors (Cruess & Cruess, 2006). Despite the fact that role modeling, as the sole method of educating students on professionalism is no longer adequate does not take away from the importance of developing and maintaining appropriate faculty/staff as role models – especially with regards to professionalism. Role modeling remains an effective method of conveying humanism and other non-cognitive qualities (Gofton & Regehr, 2006; Steinert et al., 2008). This is imperative when fostering professionalism in students. Not only do faculty and staff serve the role of educators in the formal curriculum; but equally important, as role models in the hidden curriculum (Cruess et al., 2008). Role modeling serves as link in the translation of professionalism and humanism qualities to students (Setherman, 2006). A critical component of role modeling centers
on the professional attitude and behavior of the role model themselves. Therefore it is crucial for those serving as role models to demonstrate and abide by professional behaviors/attitudes otherwise, a failure to learn professionalism can occur (Shrank et al., 2004).

**Assessing Professionalism**

Assessing professionalism is a critical component of professionalism education (Cruess & Cruess, 2006; Stern, 2006). Assessing professionalism has been especially difficult for many professions, including medicine (Davis, 2009; Jha et al., 2007). Not surprisingly with the explosion of professionalism research in the past decade, the concept of assessing professionalism has gained an enormous amount of popularity. Assessing professionalism in individual students is immensely beneficial for several reasons. As students may not be aware of shortcomings or lack of professionalism, assessment and feedback provide an opportunity to recognize and correct any insufficiencies. Assessments have also been shown to motivate student learning and improve knowledge in content area (Schuck, Gordon & Buchanan, 2008). Further, assessments also provide summative and formative information to educators and instructors regarding a student’s knowledge retention – or in the case of professionalism and other non-cognitive domains of education; a student’s perception or attitude in the area being assessed (van Mook et al., 2008). Furthermore, a lack of formal assessments may send conflicting messages to students regarding performance (Cruess, 2006; van Mook et al., 2008). Finally, most authors and educators agree that professionalism can
and should be assessed; yet there still remains some concerns surrounding the best methodology and instrument for the assessment of professionalism (Arnold, 2002).

A major area of concern related to professionalism assessment is focused specifically on which methods should be utilized. An assortment of techniques are implemented to assess professionalism such as self-assessment, peer-assessment, faculty/staff assessments (Shrank et al., 2004), OSCE (objective structured clinical exam) (Arnold, 2002), 360-degree multisource assessment (Berk, 2009) and standardized patients. Using multiple assessment techniques is a process known as triangulation. It is evident from literature that relying on a single form of assessment is neither reliable nor beneficial for providing accurate results (van Mook et al., 2008; Stern, 2006). Triangulation allows a broader depth and breadth of assessment(s) made. Utilizing multiple assessors, over a longitudinal time period and in a realistic context may increase the validity and reliability of the assessment.

This area of concern - whether professionalism should be assessed comprehensively or each individual supporting element/theme of professionalism be evaluated individually – remains inconsistent in the literature. While some authors suggest that professionalism is a combination of numerous characteristics it should therefore be assessed comprehensively, (Arnold, 2002; Shrank et al., 2004) other authors suggest that measuring individual elements of professionalism provides a more accurate results – especially with regards to humanism, altruism and empathy (Gillespie et al., 2009; Stern, 2006). Professionalism assessment should be aimed at performance (or values) rather than competence to accurately reflect the shift in medical education from
the competence to value/performance-based model (Kirk, 2007). To clarify the
difference; assessing performance is a reflection of the everyday practice; while
competence is assessing measures under test conditions (van Mook et al., 2008)

Another concern of professionalism assessments involves which individuals can
and should be assessing a student’s professionalism. The use of faculty and staff
observations as well as peer and self-assessments have all been validated in literature
(Arnold, 2002; Shrank et al., 2004; Stern, 2006 van Mook et al., 2008). Each specific
method of assessment carries with it certain advantages and disadvantages. Faculty and
staff observations are one of the most widely utilized assessment methods for several
reasons. First, as faculty and staff, individuals presumably have been educated on and
understand the implications of professionalism, or lack thereof (Stern, 2006).
Furthermore, faculty and staff are seen as experts and therefore have the knowledge,
skills and experience to make objective, formative assessments (Arnold, 2002). A
disadvantage associated with faculty/staff observations is limited interaction between
student and assessor which may not accurately reflect a student’s true belief or attitude
towards professionalism (van Mook et al., 2008).

Peer observations offer several advantages as well. Stern (2006) defines a peer as
“individuals who have attained the same level of training or expertise, exercise no formal
authority over each other, and share the same hierarchical status in an institution” (p.
175). Although peer assessments can sometimes include technical or psychomotor skills,
the focus is increasingly geared toward non-cognitive aspects of health care such as
professionalism, integrity, responsibility compassion and empathy (Stern, 2006). This
occurs for several reasons. First, when students assess other students they tend to do so with a more formative purpose (van Mook et al., 2008) thereby decreasing the chance of personal or professionally affecting a colleague.

The 360-degree multisource feedback (MSF) method has also been described as a valid assessment tool. Initially developed for managerial evaluations in manufacturing and industry, (Berk, 2009) the MSF can and has been adopted for use in assessing professionalism across medical disciplines as well as for the assessment of medical students and residents (Berk, 2009; van Mook et al., 2008). A graphic representation of a 360 MSF assessment is analogous to a wheel. The center or “hub” of the wheel is representative of the person being assessed (student, professor or clinician) with the “spokes” of the wheel illustrating the various individuals/groups serving as assessors.

![Diagram of a 360 MSF assessment](image)

*Figure 2. Multi-Source Feedback Assessment from Berk, 2009.*
MSF assessments have been utilized to assess individuals programs or even institutions (law, medicine, psychology and business). The majority of assessment techniques and methods are formative in nature meaning they reflect and promote learning in students. Conversely summative assessments are utilized to measure outcomes and typically provide external accountability. Formative assessment couples appropriate/timely feedback with an action plan to improve performance (in the case of this paper – professionalism).

Another widely utilized research method on professionalism includes the use of inventories, surveys or questionnaires. The gold standard for many decades was Halls Professionalism Inventory (Makeda, 2010; Wynd, 2003). Hall’s inventory utilized what was termed “attitudinal attributes” that included: use of professional organization, belief in public service, belief in self-regulation, sense of calling, and perceived autonomy in work to characterize professionalism. Assessing professionalism and other non-cognitive qualities of healthcare providers is extremely important in developing and fostering professionalism.

Assessing professionalism and other non-cognitive domains of medical education has, however, proven difficult. Assessments should aim at assessing performance and values over competence. A multitude of assessment techniques and methods have been adopted to assess professionalism. Triangulation, or utilizing a combination of assessment methods, may provide a more accurate and reflective measure of professionalism in students. The benefits of assessing students on professionalism include raising awareness of deficient abilities/values/skills, promoting reflection and
behavior modification. Hall’s (1968) prominent work culminated in a Professionalism Inventory that is still in use today by health care providers. Assessing professionalism has proven a key component of professionalism education. Assessing professionalism, although carried out in a number of methods and techniques ultimately conveys one goal, to improve the professionalism of the individual being assessed.

**Introduction into Allied Health**

Beginning in 1930s through present day, the AMA’s Council on Medical Education has played an integral part of the regulation and accreditation of AH education. Allied health is the term designated to healthcare professionals that have “formal education” and clinical training who are credentialed through certification, registration and/or licensure – who are not physicians” (Donini-Lenhoff, 2008). According to the AMAs Allied Health Directory, AH encompasses 71 professions excluding the professions of medicine, osteopathic medicine, dentistry, veterinary medicine, optometry, podiatry & pharmacy (MODVOPP) professions. Estimates in the United States suggest that 60% or nearly 6 million healthcare providers fall under the umbrella term AH term (Donini-Lenhoff, 2008). More common disciplines include occupational therapy, radiology/imaging technicians, respiratory therapy, nursing, physical therapy and athletic training (Donini-Lenhoff, 2008). Many of these disciplines’ educational standards are maintained and enforced via accreditation. Accreditation, whether in medicine or AH, is the process of safeguarding the protection of society and individual patients by requiring healthcare providers to meet set educational standards and requirements to practice
(Batalden, Leach, Swing Dreyfus & Dreyfus, 2002). Specific accreditation agencies exist for various healthcare disciplines and fields of study.

The Commission on Accreditation of Allied Health Education Programs (CAAHEP) oversees the accreditation of approximately 20 AH education programs. Joint review committees assist in the regulation and accreditation of many AH disciplines. Several joint review committees such as those of physical therapy, athletic training and physician assistant have withdrawn from the CAAHEP to develop and initiate profession specific accreditation standards and guidelines (Donini-Lenhoff, 2008). These independent accrediting bodies sought to further promote autonomy and exhibit greater control over each specific discipline. The Commission on Accreditation in Physical Therapy Education (CAPTE) and Commission on Accreditation of Athletic Training Education (CAATE) serve as the accrediting agencies for physical therapy and athletic training, respectfully. Not only do these agencies work in conjunction with each profession’s governing body and other discipline specific regulatory bodies but are responsible for educational standards, assessment guidelines and the fostering of professionalism within each discipline.

As previously noted professionalism has been a major concern within medicine (Arnold, 2002; Kirk, 2007; Stern, 2006). Recently the concern over professionalism has transcended from medicine into other healthcare professionals (Freeman & Rogers, 2010; Foord-May & May, 2004) and has become a major initiative in allied health ([APTA], 2011; Creasia & Friberg, 2011) and athletic training ([NATA] 5th Educational Competencies).
Professionalism in Allied Health

Professionalism in AH is equally important as it is in medicine. Numerous professional associations and AH governing bodies have demonstrated the importance of developing professional behaviors and educating students on professionalism (Freeman & Rogers, 2010). A common theme among AH professions is the dual education of students (i.e. academic setting and clinical setting). Publications such as codes of ethics/conduct, vision and position statements attempt to define and describe professionalism within a specific discipline. Often students and clinical supervisors differ in perceptions of professional behaviors (Freeman & Rogers, 2010). It is this difference in perception that leads to differing expectations, outcomes and measures of professionalism among students, professionals and across disciplines (Freeman & Rogers, 2010).

The American Physical Therapy Association (APTA) is the professional governing body for the profession of physical therapy. Several documents including the APTA’s Code of Ethics, the APTA’s Education Strategic Plan and the APTA’s Professionalism in Physical Therapy: Core Values collectively define professionalism for physical therapy. The core values serve as a guide and reference point for professional practice and are similar in nature to those characteristics described previously by the Physician Charter and Project Professionalism. The APTA’s core competencies include the following: accountability, altruism, compassion/caring, integrity, professional duty and social responsibility ([APTA], 2012).
May (2007) developed a model of implementing professionalism in physical therapy known as the facilitation process. This process is modeled after concept of the professional socialization. Several theories, including that of adult learning (Bandura, 1991) and the trans-theoretical model for change (Prochaska & DiClemente, 1982) are utilized in conjunction to support the facilitation process. The authors concluded that inclusion of a behavioral assessment prior to or during final stage clinical education is an important component to identify and if necessary, intervene, to improve the likelihood of student success in AH professions (May & May, 2007).

Nursing education standards are maintained through accreditation by the National League for Nursing Accrediting Commission, Inc. (NLNAC). The American Nursing Association (ANA) serves as the governing body for the profession of nursing. The nursing code of ethics is similar to that of medicine, physical therapy and other AH professions in that it serves a guide for professional practice. Within the code of ethics are nine provisions that outline the professions duties and responsibilities and behaviors of practicing nurses. Items such as respect, patient primacy, accountability, ethical judgment, professional/personal and patient advocacy and collaboration with other health care providers are the backbone of the nursing code of ethics ([ANA], 2011).

Miller (1984) created a professionalism wheel to visualize the professionalism of nursing. Supported by the ANA Code of Ethics, Miller’s wheel demonstrates key behaviors “essential to achieve, maintain and expand professionalism in individual nurses” (Creasia & Friberg, 2011). At the center of the wheel is education supported by a scientific background. The “spokes” extending from the center hub are the behaviors that
provide support for professionalism. Traits such as adhering to a code of ethics, community service, theory development/evaluation, continuing education, research development, self-regulation, professional organization participation and publication/communication.

Figure 3. Professionalism Nursing Wheel from Creasia and Friberg 5th edition, 2011.
Freeman & Rogers (2010) showed that slight differences of professional attributes exist between clinical supervisors and AH students. The authors concluded that students underestimate individual professionalism in the clinical setting compared to academic setting. Furthermore, professionalism self-assessments should be administered to students to demonstrate differences between the student’s perceptions of professionalism and what is being displayed clinically.

AH is a driving force in today’s health care arena consisting of over 70 disciplines. Accreditation combined with implementation of various codes of ethics or standards of practice promote patient safety through sound legal and ethical practice. AH care students are educated in professional development and professionalism although some disparity occurs between the teaching/demonstrating and actual learning of professional behaviors.

**Teaching Professionalism in Allied Health**

The demands placed on the healthcare system have steadily increased. Such increases require a more collaborative, team-oriented effort among health care providers to provide the highest quality healthcare to patients and society (McNair, 2006). An increased awareness of the concept of inter-profession professionalism is crucial for healthcare providers. This is especially true for AH care disciplines that collaborate with a variety of other healthcare providers, colleagues, and patients.

Studies in AH disciplines have demonstrated that students and educators differ on the themes and perceptions of professionalism (Caswell, 2006; Davis, 2009). Davis (2009) demonstrated the perceptions of professionalism and professional attributes
among educators sampled differed from the concepts and core competencies adopted by the APTA on professionalism (APTA, 2011). Of the APTA’s seven core values, only four (integrity, professional duty, accountability and compassion/caring) were identified by educators as one of the top seven professional attributes. Davis (2009) also demonstrated that oral communication skills were ranked in as one of the top seven skills of practicing physical therapist 70% of the time. Communication is an important component of professionalism. AH care providers must communicate with a multitude of people including patients, third party payers, colleagues and other health care professionals.

The concept of inter-professional education refers to when “two or more professions learn with, from and about one another to facilitate collaboration in practice.” McNair (2005) demonstrated that students of medicine, social work and AH are ill-prepared with regards to IPE and the “inevitability of teamwork once the transition from student to professional is made.” Barriers to IPE often include competition for limited consumer dollars, diverging and overlapping scopes of practice (thus creating ‘territory’ disputes), distinct codes of conduct/ethics and a general lack of understanding of other disciplines. Overcoming those barriers will further facilitate inter-profession professionalism and facilitate teamwork and excellence in healthcare. McNair (2005) suggest that AH educational programs should include a multidisciplinary outcomes driven curriculum. The curriculum would include discipline specific content as well as a shared inter-professional professional component. A study by Brehm et al., (2006) required AH students to complete guided rotations with various other health care
disciplines and specialties. The authors proposed this as a meaningful and productive way of not only introducing a student to different members of the (future) health care team but as a means to improve inter-profession professionalism among team members as well. Conclusions of that study indicated health professions education programs should incorporate multidisciplinary collaborative learning for students as this can serve to enhance inter-profession professionalism among members of the health care team (Brehm, 2006).

AH care providers collaborate and work together on a daily basis. Several authors suggest ways to overcome the barriers and a seemingly poor perception of the inter-profession professionalism of allied students by incorporating a multidisciplinary, outcomes-driven approach into the educational process. Further research into a new multidisciplinary approach begins with IPE may assist in the overall professionalism of AH care providers as they work together in as a healthcare team.

**Assessing Professionalism in Allied Health**

AH education is largely dependent on the collaboration of both an academic and clinical setting. Students in AH were traditionally assessed on the psychomotor skills and content knowledge specific to their discipline. Academic/clinical faculty, approved clinical instructors, graduate students and upper classman all serve as role models in AH education (Arnold et al., 2005; Gillespie et al., 2009, Gardner & Mensch, 2004). Medical literature suggests that role modeling is still a highly effective method of conveying skills, knowledge and values – especially with regards to non-cognitive domains of
education such as humanism and professionalism (Cruess & Cruess, 2008; Steinert et al., 2005; McKenzie, 2007). The move to instruct and evaluate non-cognitive areas such as professionalism in AH has become increasingly prominent and while it is important to impart these values and beliefs in AH students it is sometimes difficult to assess the various components that constitute professionalism.

One such area of professionalism assessment focuses on how professionals perceive not only their role within their profession but also what constitutes professionalism. Swisher et al., (2004) adopted the Professional Role Orientation Inventory for use in physical therapy to measure individual differences among practicing physical therapists. The study concluded that perception of a clinician’s role/orientation in the profession can affect their perception of professionalism. Further research is needed to fully understand the underlying theoretical and psychosocial constructs in physical therapy; however, this study provided valuable information regarding professionalism. Although assessing behaviors such as critical thinking, role orientation and competency is crucial to professionalism assessment, studying what students perceive as professional and unprofessional behavior is essential as well. Wynd (2003) used Hall’s (1968) Professionalism Scale to determine the perception of professionalism among RNs (registered nurses) and concluded that years of experience, membership and service in a professional organization and higher education/specialty training significantly improved professionalism scores.

As previously stated, clinical reasoning and critical thinking are key concepts when discussing professionalism and professionalism in AH students. Koenig et al.,
(2003) assessed the validity of a professional behavior assessment tool in AH. As predicted, upperclassman (3rd-4th year of professional education) scored higher than first or second year students in professional behavior and clinical reasoning. Educators and institutions may have a greater opportunity to remedy unprofessional behaviors or trends in students if such a professional behavior assessment tool is implemented. This study supports the use of valid and reliable professional behavior assessment tools in AH education.

Studies in AH demonstrate that when clinicians understand and positively perceive their professional role, are active members in national organizations, commit to higher education and have a clear understanding of what constitutes professionalism they reflect a greater amount of professionalism. AH students are assessed on cognitive and non-cognitive skills in multiple settings. As students’ progress through a professional educational program, perceptions of professional behavior, critical thinking and professionalism are comparable to practicing clinicians (Koenig, 2003). However, these results have not been replicated in the field of athletic training.

**Introduction into the Athletic Training Profession**

Historically athletic training (AT) has roots in physical education (Perrin, 2007). Since its inception as a profession in the middle of the century, AT has advanced into a specialized AH provider that today, is recognized by the American Medical Association (AMA) (Delwiche, 2007).

Athletic trainers are credentialed professionals who are educated in a specific content area and scope of practice including evidence-based practice, prevention & health
promotion, clinical examination & diagnosis, therapeutic interventions, psychosocial strategies & referral, health care administration and finally professional development & responsibility. Educational standards are regulated and overseen by CAATE and function as a set minimum educational requirements.

The Board of Certification (BOC) is the credentialing agency for individuals seeking athletic training entry level certification. The BOC must maintain accreditation from the National Commission for Certifying Agencies (NCCA) to continue to provide the ATC credential. Prior to 1989, the BOC was a division within the National Athletic Trainers Association; however since then the BOC is an independently incorporated non-profit organization. The BOC established and maintains the Standards of Professional Practice for AT. The Standards of Professional Practice are intended to provide expectations to athletic trainers regarding issues such as patient care, professional duties/obligations and clarify athletic training expectations; they are not intended to ensure specific outcomes. The practice section consists of seven standards that mirror the scope of practice for athletic training and include direction, prevention, immediate care, clinical evaluation & diagnosis, treatment/rehabilitation & reconditioning, program discontinuation and organization/administration. The second distinct section of the Standards is Code of Professional Responsibility consisting of the following six codes: patient responsibility, competency, professional responsibility, research, social responsibility and business practices. The complete Standards of Professional Practice can be found in Appendix D.
The National Athletic Trainers’ Association (NATA) is the professional membership association for the athletic trainers. The National Athletic Trainers Association publishes the Code of Ethics for the practice of athletic training intended to establish and maintain high standards of excellence and professionalism ([NATA, 2005]).

Four principles comprise the Code of Ethics. Principle one relates to how members respect the welfare and rights of patients by providing competent care, not discriminate protected classes and maintain patient confidentiality and other protected information. Principle two states that members will comply with state, local, federal, association or institutional laws and regulations with regards to the practice of AT. Also, members shall report illegal or unethical practices. Principle three relates to high standards of practice. Members shall only provide services, make referrals and seek reimbursement to which they are qualified and legally permitted. Additionally, members shall maintain high ethical standards. The final principle correlates to professional image. Members will not compromise professional responsibilities or the image of the profession through activities such as conflict of interest, personal or professional misconduct or financial gain.

The NATA’s Professional Educational Council was charged with the task of authoring the 5th Edition of the Athletic Training Educational Competencies. Coupled with the CAATE standards the educational competencies outline the educational requirements and expectations for athletic training students to master prior to eligibility for certification. Along with content areas, the competencies delineate foundational behaviors of professional practice such as patient primacy, team approach to practice, legal/ethical practice, knowledge advancement, cultural competence and professionalism.
Professionalism is the culmination of attributes, attitudes and behaviors and is designated as a foundational behavior for athletic training practice. The four main components of professionalism include: professional advocacy, honesty/integrity, exuding compassion/empathy and demonstration of interpersonal communication. These behaviors, values and attitudes have been proposed and implemented by other healthcare professions such as medicine (Gordon, 2003; van de Camp et al., 2004; Stern, 2006) and AH (Creasia & Friberg, 2001; Davis, 2009; Freeman & Rogers, 2010).

These three agencies formalized their interdependence on athletic training as a profession in a landmark agreement of collaboration in 2011. Collectively the three entities (BOC, CAATE & NATA) guide and regulate the education, assessment and practice of athletic training and athletic training education. The concept of professionalism is important as the profession of athletic training continues its political and professional endeavors to gain credibility, a professional identity and equal access to consumer dollars. Continued adherence to the standards of professional practice, codes of ethics and educational competencies will remain essential in the next chapter of reform.

**Teaching in Athletic Training**

Education in athletic training has transformed dramatically since the inception of the profession nearly 60 years ago. Athletic training education has roots in medical as well as physical education (Perrin, 2007). After the creation of the national certification for athletic training, several methods to credentialing existed. The first was via an internship-based program. This method to certification was largely dependent on
amassed hours and learning the profession through clinical experience. Students were largely left unsupervised and required to learn the profession on their own. Obvious legal, moral and ethical complications are associated with this type of instruction. The curriculum-based model to certification was proposed in the latter half of the 1980’s. The creation of accredited programs aided the profession of athletic training greatly. Not only did accreditation provide a means to unify and standardize the educational requirements of athletic training but also began to build professional credibility and revamp the AH community.

Today athletic training education is multifaceted, more diverse and exponentially more comprehensive than previously. Teaching is done formally, informally, in classrooms & clinical settings and by varying personnel including faculty/staff, ACI/CI’s and peers. Students are afforded the opportunity to learn material in a formal classroom setting as well as apply knowledge and skills in clinical experiences. AH disciplines such as physical therapy, nursing and pharmacology have similar models of learning. One key difference in athletic training education to that of physical therapy, medicine and nursing is the attitude of teaching students rather than preparing proficient practitioners. It is important for educators to understand how and why athletic training students learn the way they do. Otherwise, appropriate learning may not take place. Regardless of whether instruction is being done in a classroom or clinically such as in an athletic training room or field/court athletic training education is governed by the standards previously mentioned.
Athletic training students are now instructed in courses core athletic training content matter such as evaluation, emergency care, rehabilitation/conditioning as well as perquisite courses such human anatomy & physiology, nutrition, kinesiology/biomechanics and human psychology (Perrin, 2007). The purpose of didactic instruction is to provide theoretical and requisite information for appropriate clinical practice of athletic training. As athletic training students’ progress through an ATEP changes in learning styles, required supervision levels and instruction techniques vary. Researchers have demonstrated that differences in clinical and classroom learning styles exist. Additionally, students utilize different learning techniques depending on content or subject area being taught (Coker, 2000; Caswell, 2006)

As noted previously, the hidden and informal curriculum is largely responsible for the professional development, socialization and clinical skill mastery of athletic training students (Laurent & Weidner, 2001). Literature on the development of ACI evaluation and selection criterion has been proposed for athletic training education by Weidner & Henning (2004). The area of selection and training approved clinical instructors (ACI) in athletic training education is immensely critical as ACIs ultimately have the greatest influence on the professional development and socialization of athletic training students (Weidner & Henning, 2005). The seven standards of approved clinical instructors include legal/ethical behavior, communication skills, interpersonal relationships, instructional skills, supervisory/administrative skills, evaluation of performance and clinical knowledge/skills (Weidner & Henning, 2005). The concept of professionalism is clearly evident and reflective in Stern’s (2006) definition which is “clinical competence,
communication skills, and ethical and legal understanding upon which is built the aspiration to and wise application of the principles of professionalism: excellence, humanism, accountability and altruism” (p. 19). Clearly, the connection between ACI selection/evaluation and professionalism can be seen. The connection between student and ACI perceptions of professionalism is less clear.

Athletic training education has transformed drastically since the profession began in the 1950’s. Athletic training students are held to rigorous educational, ethical and professional standards. Formal instruction through a CAATE accredited program is the sole means to certification for athletic trainers’ today. Although, a portion of education is done in a classroom setting, a large portion of a student’s professional socialization is done informally, in clinical experience via the hidden curriculum. Athletic training students are educated on a broad range of topics. Clinical education is the practical application of theoretical knowledge from didactic settings. Approved clinical instructors play a vital role in the socialization and clinical education of athletic training students. Professionalism is demonstrated through the seven criteria used to select and evaluate ACIs. The distinction between classroom and clinical experience in athletic training education add a layer of difficulty to the assessment of athletic training education.

Assessment in Athletic Training

Research in athletic training education demonstrates that athletic training students utilize different learning and testing strategies depending on subject matter, learning environment and perhaps even between instructors (Coker, 2000; Caswell, 2006). Assessment methods in athletic training education should center on effective student-
centered techniques and be modified depending on the setting (classroom vs. clinical) and coincide appropriately with those previously mentioned factors. Medical students are assessed on a wide range of competencies in both the cognitive (skill and knowledge mastery) and non-cognitive content areas of education such as professionalism, ethics and humanism. Similarly, athletic training students are required to master cognitive and non-cognitive areas of athletic training.

Within an athletic training education program a multitude of assessment/student evaluation methods of have been adopted and utilized. Medicine and other AH professions education programs have proposed and validated assessment tools in literature. It is not unreasonable to expect that themes and concepts of those assessment tools/methods will carry over to athletic training education. However, this point has yet to be validated by current literature. In athletic training the use of peer-assisted learning and assessments, practical simulations or OSCEs and formal academic assessments have all been validated as reliable tools.

Topping (1998) defined peer assessment as “an agreement in which individuals consider the amount, level, value, worth, quality or success of the products or outcomes of learning of peers of similar status” (p. 250). Peer assessments serve as a formative means of objectifying cognitive, motivation and attitudinal goals of athletic training students. Several considerations must be made when utilizing peer-assessments. For example, matching of peers with similar abilities and skills is essential otherwise learning and peer-assessment maybe skewed. Furthermore, appropriate contact and frequency the assessment of must be considered. Peers required to make assessments on one-another
should have regular contact to allow feedback and accurate assessments. One other area of consideration is content and material. Athletic training students may be more confident in evaluating peers in certain areas and not others. Student assessments are utilizing peer assisted learning (PAL) within the clinical education component of athletic training education. Further research need to validate reliability of assessments of PAL within athletic training education both clinical and classroom oriented. Overall peer assessments provide positive feedback for both parties involved, and can be easily implement into ATEP and clinical education (Henning et al, 2006).

Literature has confirmed that (PAL) occurs in athletic training education. Henning et al., (2006) defines PAL in AT as “the act or process of gaining knowledge, understanding, or skill in athletic training–related tasks among students who are at either different or equivalent academic or experiential levels through instruction or experience” (p. 30). Various other healthcare disciplines such as medicine, nursing and physical therapy have demonstrated the benefits associated with peer-assisted learning and assessment. Benefits of peer assisted learning and assessment often include decreased anxiety, increased performance of clinical skills and confidence in decision making and critical thinking (Henning et al, 2006; Topping, 1998).

Another method of assessment that has been document as a reliable tool in medicine and AH is the use of the objective structured clinical exam (OSCE) (Heinrichs, 2002; van Mook et al., 2008). OSCEs comprise everything from psychomotor skills, communication skills and clinical decision making and are easily adaptable depending on situation or content material to be assessed. In athletic training or medicine the OSCE
evaluates five areas of clinical competence including history, physical examination, appropriate tests and measures, working diagnosis, and management. Typically, a checklist or rating scale is used within to assess each area of competence. Athletic training education programs have begun to utilize the OSCE and other problem based learning techniques to assess the clinical competence and decision making skills of athletic training students.

Inventories have been validated as reliable assessments in medicine and AH fields such as physical therapy and nursing. The use of survey research or questionnaires in athletic training is becoming more prominent (Turocy, 2002). Surveys provide researchers or educators a glimpse into a given situation by measuring the respondent’s self-reported attitudes, behaviors or perceptions. Using questionnaires or inventories has perceived advantages such as (1) often less time constraining (2) un-biased, standardized question (3) anonymous responses allow participants to provide honest answers. One major disadvantage to using survey research includes the self-reporting answering of participants that may lead to misinterpretation/misunderstanding of questions. In the educational setting, the use of self-assessment surveys can promote reflection and change in athletic training students. Furthermore, instructor and institution/program performance can be evaluated with the use of anonymous questionnaires to gain insight into how well a program is performing or educating students.

Assessment tools such as the OSCE and questionnaires are being increasingly utilized to assess the cognitive and non-cognitive domains of athletic training. Peer
assisted learning and peer assessments are valid assessment techniques that are also increasing in popularity. Questionnaires provide anonymous responses and can be used to assess individuals, programs or courses. The distinction between clinical experience and academic coursework adds to the complexity of assessing professionalism and other non-cognitive domains of athletic training practice.

**Professional Development, Socialization and Professionalism in Athletic Training**

The professional development of athletic trainers is largely centered on the mastery of cognitive skills required to be competent, knowledgeable and proficient clinicians. This is accomplished through rigorous coursework, specialty training programs and meaningful/authentic learning experiences. The mastery of humanistic and/or non-cognitive skills such as ethical decision making, professional behavior and qualities such as altruism, compassion and integrity is yet another aspect of professional development. One final component of professional development focuses on advocacy; both professional and patient/society. Healthcare providers maintain a fiduciary responsibility to patients and society alike. Patient advocacy coupled with altruism reflects the healthcare provider placing the patients/societies needs above others including personal needs (Swick, 2000). Healthcare providers should advocate the profession, its core values and beliefs. Professionalism however is more than a set of competencies or values –it is the practical application of those values and behaviors.

The professional socialization process is a crucial progression in the professional development and professionalism of athletic training students. Professional socialization as noted by Klossner (2007) is the process by which students learn roles, responsibilities
and values associated with the profession as they transition into competent, ethical/moral and knowledgeable professionals. The professional socialization process is typically divided into three phases; recruitment, professional preparation and organizational socialization. In athletic training research/education the primary focus has been on the second phase – professional preparation (Pitney, 2002). During this phase the individual assumes the roles and responsibilities of the field as another qualified professional within the field would (Pitney, 2002; Klosner, 2007). Limited literature in athletic training exists on the first and third phases, recruitment and organizational socialization respectively.

Several factors have been documented to enhance the legitimation of the professional socialization process in athletic training students during the second phase of the socialization process. Legitimation is a crucial component to the professional socialization process that aids in professional identity formation, meaningful learning and role orientation while in the professional preparation phase (Klosner, 2007). A set of rewards and punishments have been documented to motivate and aid the legitimation of athletic training students. Finally, coaches, peers, athletes and/or patients, clinical instructors or other mentors can be seen as socializing agents that contribute to legitimation process. Legitimation is essential for socializing athletic training students into AH professionals (Klossner, 2007).

Another inherent component of the professional development of an athletic training student is mentorship. Mentors or role models serve as socializing agents providing legitimation to athletic training students throughout socialization process
(Pitney, 2002; Klossner, 2007). Mentors are able to convey three components of professional development – mastery of skill, advocacy and socialization. Mentors not only provide insight into future roles, responsibilities and expectations of athletic trainers; but also refine clinical skills. Athletic trainers tend to rely on previous mentors when facing uncertain situations or responsibilities. Athletic training literature suggests mentorship-mentee relationships are founded when students assimilate similar values, attitudes and beliefs with potential mentors (Pitney, 2002). This is an important element especially with regards to the ‘non-cognitive’ qualities developed during professional development. Finally, mentors are attuned to the importance of patient and professional advocacy in athletic training. Mentors are largely responsible for the informal and hidden knowledge, behaviors and attitudes conveyed to athletic training students during their educational career.

The PD of athletic trainers occurs over the course of a career. The socialization process is largely responsible athletic training students’ learning the roles and responsibilities of the athletic training profession. Socializing agents such as coaches, peers, athletes and mentors can have profound effects and have been demonstrated to legitimize the socialization process. Mentor-mentee relationships are formed when students and mentors have similar values and beliefs. Non-cognitive domains of practice such as professionalism and legal/ethical practice are critically fostered and developed with the aid of a mentor.

Literature on professionalism in medicine and other health care professions is abundant, however, literature on the perceptions of professionalism in athletic training is
lacking. Professionalism is a concept that is so intimate to the profession of athletic training that without it the profession would cease to exist. Hannam (2000) suggested that professionalism in athletic training is “the most necessary yet least focused upon skills that can be learned as one develops first as a student, then through entry level in the profession, and finally into mature, contributing professional” (p. 7). Few resources discuss the importance of athletic training and the societal contract. Professionalism as previously noted, is the concept that inherently binds healthcare providers to patients and society through the social contract (Arnold, 2002; Mackenzie, 2007; Swick, 2000). The majority of professionalism literature in athletic training is related to issues of appearance or professional image/attire (Dodge, 2004; Mensch, 2005), appropriate relationships (Scifers, 2005), professional development (Pitney et al., 2006; Turocy, 2002), and professional socialization (Pitney et al, 2002; Klosner, 2007). While these issues are important component of professionalism they represent a small portion literature on the professionalism spectrum.

Professional image relates to both personal appearance and the image of entire profession of athletic training. As the profession of athletic training continues to seek a professional identity and credibility within the healthcare arena, professional image is of the utmost importance. Athletic trainers should represent themselves, the profession and institutions or organizations with professional dress, behavior and professionalism when communicating with patients, athletes, coaches and other healthcare professionals.

Athletic trainers develop and maintain relationships with an extraordinary array of people including athletes, coaches, parents, administrators, physicians and many other
healthcare professionals. Maintaining these relationships in a professional manner is crucial for athletic trainers.

**Conclusion**

Professional development is a broad and inclusive term describing the continued development of professional attributes, values, knowledge and competency in professionals. Professional socialization is a component under the umbrella term ‘professional development.’ Professional socialization is the process by which students are socialized into a particular profession. As students transition from students to professionals, they learn the roles, responsibilities and values of the profession. Professionalism is one of many foundational concepts contributing to the socialization process of students.

The concept of professionalism has changed in recent decades. A perceived decline in professionalism and breach of medical-societal contract prompted an extensive review and evaluation of medical professionalism. Several publications such as the *Physician Charter* and *Project Professionalism* provided a foundation for professionalism guidelines and standards. Despite an increased awareness on professionalism, a cohesive definition of professionalism does not exist. Qualities such as altruism, compassion, moral/ethical judgment, excellence and patient respect, have been utilized to define professionalism. Furthermore, professional behaviors/attributes such as communication skills, advocacy and competency are included in many professionalism definitions.
As the concept of medical professionalism has evolved, so too has the concept of medical education, standards and professionalism instruction/evaluation techniques. Various methods of instructing and assessing professionalism have been proposed throughout research. Literature now supports the notion that teaching professionalism must be explicitly done in both the formal and informal settings of medical and AH education. No one method seems to be the preferred method, but rather an array and combination of assessment tools, techniques and methods has been shown to provide the most accurate reflection of professionalism and an individual’s professional development.

Health care providers maintain an unwritten contract with society to provide healthcare at the highest standards of quality, excellence and ethical practice. Athletic training as an AH profession is obligated to honor the societal contract and provide the best care possible to patients, athletes and society as a whole. Developing and maintaining professionalism is a crucial aspect for providing the highest quality healthcare. The concept of professionalism is challenged in athletic training on a daily basis. Athletic trainers face a variety of personal, professional and societal conflicts.

The professional socialization process is the process by which athletic training students are transitioned into certified professional health care providers. Through the transition students master the skills, knowledge and responsibilities to be a competent member of the athletic training profession. Professional development is an educational competency for the profession of athletic training. However, a more thorough understanding of professionalism within athletic training is warranted to fully understand the implications on the professional socialization of athletic training students with regards
to professionalism. The purpose of this research is to therefore enhance discussions on the attitudes, beliefs and perceptions of professionalism in athletic training.
CHAPTER III

METHODOLOGY

Introduction

An institutional review board (IRB) application to collect data on human subjects was submitted to the IRB at Kent State University. The IRB at Kent State University approved this study as a level 1 exempt research project – not requiring full IRB review. Data collection was done using a validated, adapted with permission, electronically distributed professionalism questionnaire. Participants included a convenience sample of athletic training students and certified athletic trainers from 12 Mid-American Conference athletic training programs.

Population

Potential respondents from 12 member Mid-American Conference (MAC) athletic training education programs (ATEP) were selected to participate in this research. Several letters were drafted and e-mailed to athletic training education program directors within the MAC. The first e-mail briefly described the purpose and rationale behind the study as well as informally invited the program director and associated athletic training education program to participate in the study.

Additionally, the letter asked for the program directors assistance distributing and forwarding a link to access the survey. A second letter sent to program directors again asking for their assistance in distributing the questionnaire to athletic training students, graduate assistants and faculty/staff associated with the ATEP. This e-mail described the purpose of the study, time commitments and all necessary informed consent information.
Prior to the start of the questionnaire, respondents were instructed to read a further detailed description of the study and if they agreed to participate and give consent by clicking “I agree” within the page. Contact information for the primary author of this study and the Kent State Institutional Review Board was given should potential respondents have questions or concerns. Several reminder e-mails were distributed to urge potential respondents to complete the questionnaire if they had not previously done so. Questionnaire data was collected through an electronic survey collection website (SurveyMonkey; Palo Alto California, 2012).

A total of seventy-four (n=74) usable, individual questionnaires were electronically submitted. The sample population for this study was divided into two categories, athletic training students and certified athletic trainers. Pre-professional phase students (n=19) were students enrolled in pre-major (athletic training) programs. Professional phase students (n=18) were students ranging in academic standing from sophomore to senior, enrolled in the athletic training major at the institution and were not currently Board of Certification (BOC) certified athletic trainers. The graduate student group (n=18) was comprised of graduate/teaching assistant certified athletic trainers enrolled in graduate coursework through their institution. BOC eligible candidates were excluded from data collection. Finally, participants were required to be BOC certified and employed by their institution to serve as an academic faculty member, clinical staff or both to be included in the faculty/staff group. Certified athletic training groups included graduate students (n=18) and academic faculty/staff (n=19). Table 1 below illustrates the mean and standard deviation of age, as well as participant membership
status in both the National Athletic Trainers’ Association and state athletic training organizations. Additionally, gender breakdowns and percentages by group is illustrated in Table 1.

Table 1. Mean ± Standard Deviation of Age, Gender, and Membership Status by Group

<table>
<thead>
<tr>
<th>Group</th>
<th>Age (Mean ± SD)</th>
<th>Gender</th>
<th>NATA Membership</th>
<th>State Membership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-professional</td>
<td>19.53 ± 1.55</td>
<td>M= 6, F= 13</td>
<td>2 (11%)</td>
<td>1 (5%)</td>
</tr>
<tr>
<td>Professional</td>
<td>21.00 ± 1.36</td>
<td>M= 2, F=16</td>
<td>16 (88%)</td>
<td>16 (88%)</td>
</tr>
<tr>
<td>Graduate</td>
<td>23.41 ± 1.37</td>
<td>M= 4, F=1</td>
<td>18 (100%)</td>
<td>14 (77%)</td>
</tr>
<tr>
<td>Faculty/Staff</td>
<td>25.06 ± 10.86</td>
<td>M= , F=1</td>
<td>17 (89%)</td>
<td>18 (95%)</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>M= 17, F=57</td>
<td>53 (72%)</td>
<td>49 (66%)</td>
</tr>
</tbody>
</table>

**Instrument**

To the knowledge of the author of this study, no previous inventories, questionnaires or surveys have been utilized in the profession of athletic training to assess professionalism. Therefore, a previously validated questionnaire was sought for use in this study. The Penn State College of Medicine Professionalism Questionnaire (PSCOM-PQ) was adopted as the primary instrument for this study. Permission to adopt and modify the PSCOM-PQ for the purpose of this research was granted by the primary author of the instrument (Blackall, 2011).

The PSCOM questionnaire was designed and implemented for medical students, residents, faculty and staff and was described as one of the first valid and reliable
measures of professionalism in medical literature (Blackall, 2007). The demographic section of the PSCOM-PQ was modified to include questions specific to athletic training such as years certified, route to certification, educational accomplishments & years in current job setting. The questionnaire comprises 36 items (six groups of six statements) with groups representing the American Board of Internal Medicines (ABIM) a priori elements of professionalism: accountability, altruism, duty, excellence, honesty & integrity and respect. Each group consists of six statements; one statement representing each element. Each a priori element of professionalism was represented with six statements. Respondents were asked to read each statement and determine/compare how important each statement is to their personal definition of professionalism. Each statement within the group was assessed on 5 point Likert Scale (never, some, little, much, great deal) and rank ordered (1-6) with each number being used only once. Aggregate scores were calculated by summing each of the six statements representing each element. The highest score possible was 30 with higher rate aggregate scores indicating that the participants rated that a priori element more closely to their personal definition of professionalism. The rank ordering scores were calculated in the same fashion, however, the highest score possible increased from 30 to 36; with lower scores indicating the participant ranked the a priori element more closely to their personal definition of professionalism. The rank ordering section was intended to illustrate a finer distinction between statements that may have been assessed similarly with the Likert Scale (Blackall, 2007).
Data Analysis

The rating and ranking scores of the questionnaire were assessed using parametric tests. Each group of scores (rate and rank) were analyzed with 4 group (pre-professional phase student, professional phase student, graduate student & faculty/staff) by 6 a priori element (accountability, altruism, duty, respect, honor/integrity, excellence) Analysis of Variance (ANOVA) with repeated measures on the ABIMs six a priori elements of professionalism were performed. Post hoc testing was accomplished with independent samples T-Tests by group (pre-professional phase, professional phase, graduate and faculty/staff). Post hoc testing was performed when a significance of (P>.05) was demonstrated by the ANOVA for between group comparisons.

Results

The ANOVA demonstrated significant interaction (F=13.44, P=.038) as well as a main effects of aggregate score (F=13.44, P<.01). Pre-professional students had the greatest significant between groups differences in average aggregate a priori element score; when compared to professional phase students pre-professional students significantly differed in 4 of 6 a priori elements of professionalism. Pre-professional students (23.84 ± 3.09) had significantly greater scores (t=1.80, p =.03) than professional phase students (20.61 ± 7.13) for accountability. Pre-professional phase students (24.79 ± 3.10) reported significantly higher altruism scores (t =1.41, p =.04) compared to professional phase students (22.17 ±7.46). Professional phase students (23.17 ± 7.55) reported significantly lower excellence scores (t =1.53, p =.011) compared to pre-professional phase students (26.00 ± 2.70). Pre-professional phase students (24.84 ±
3.38) reported significantly higher scores (t =1.72, p =.04) than professional phase students (21.72 ± 7.11) regarding respect. Pre-professional students (26.00 ± 2.70) reported significantly (t= 1.04, p =.04) greater scores for the a priori element excellence than graduate students (24.82 ± 6.64). There were no differences in pre-professional students to faculty/staff. Furthermore, there were no significant differences between any of the remaining groups: professional phase to graduate students and faculty/staff or graduate students to faculty/staff.

Additionally the rank order ANOVA demonstrated a significant main effect of group (F= 6.01, P<.01). Pre-professional students significantly differed (t=1.52 , p= .03) in mean rank order a priori honor/integrity scores (20.37 ± 4.52) compared to professional phase students (18.22 ± 7.98) (Tables 2-6).

Table 2. ANOVA with Repeated Measures. Main Effect of Aggregate Rate Score and Interaction of Rate Score by Group.

<table>
<thead>
<tr>
<th></th>
<th>F Statistic</th>
<th>Significance Level (P)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank Score</td>
<td>13.44</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Rank Score X Group</td>
<td>1.79</td>
<td>.038</td>
</tr>
</tbody>
</table>
Table 3. Mean & Standard Deviation of A Priori elements by Group. Similar letters (a,b,c,d) indicate a significant difference (p < 0.05) between pre-professional phase students and professional phase students, while (e) indicates the difference (p < 0.05) between pre-professional students and graduate students.

<table>
<thead>
<tr>
<th>ELEMENTS</th>
<th>Pre-Prof.</th>
<th>Professional</th>
<th>Graduate</th>
<th>Faculty/ Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account</td>
<td>23.84 ± 3.09a</td>
<td>20.61 ± 7.13a</td>
<td>21.89 ± 5.91</td>
<td>22.68 ± 5.33</td>
</tr>
<tr>
<td>Altruism</td>
<td>24.79 ± 3.10b</td>
<td>22.17 ± 7.46b</td>
<td>22.50 ± 6.07</td>
<td>24.74 ± 5.74</td>
</tr>
<tr>
<td>Duty</td>
<td>25.05 ± 3.58</td>
<td>21.50 ± 6.93</td>
<td>22.50 ± 6.33</td>
<td>23.53 ± 5.70</td>
</tr>
<tr>
<td>Excellence</td>
<td>26.00 ± 2.70c-e</td>
<td>23.17 ± 7.55c</td>
<td>24.82 ± 6.64e</td>
<td>24.58 ± 5.52</td>
</tr>
<tr>
<td>Hon/Integ.</td>
<td>25.42 ± 3.32</td>
<td>21.61 ± 6.86</td>
<td>23.22 ± 5.97</td>
<td>23.05 ± 4.96</td>
</tr>
<tr>
<td>Respect</td>
<td>24.84 ± 3.38d</td>
<td>21.72 ± 7.11d</td>
<td>24.83 ± 6.29</td>
<td>23.47 ± 6.15</td>
</tr>
</tbody>
</table>

Table 4. ANOVA with Repeated Measures. Main Effect of Aggregate Rank Score and Aggregate Rank Score Interaction by Group.

<table>
<thead>
<tr>
<th>F Statistic</th>
<th>Significance Level (P)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank Score</td>
<td>6.41</td>
</tr>
<tr>
<td>Rank Score X Group</td>
<td>1.58</td>
</tr>
</tbody>
</table>

Table 5. Mean & Standard Deviation of A Priori Elements by Group. Means with matching letter (a) indicates significant difference (α < .05).

<table>
<thead>
<tr>
<th>ELEMENTS</th>
<th>Pre-Prof.</th>
<th>Professional</th>
<th>Graduate</th>
<th>Faculty/ Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account</td>
<td>21.74 ± 5.05</td>
<td>17.61 ± 6.68</td>
<td>20.44 ± 7.35</td>
<td>20.58 ± 6.23</td>
</tr>
<tr>
<td>Altruism</td>
<td>20.53 ± 5.15</td>
<td>16.78 ± 5.49</td>
<td>19.11 ± 5.69†</td>
<td>16.47 ± 4.12†</td>
</tr>
<tr>
<td>Duty</td>
<td>19.47 ± 4.56‡</td>
<td>19.22 ± 7.13‡</td>
<td>21.06 ± 5.61</td>
<td>20.00 ± 5.50</td>
</tr>
<tr>
<td>Excellence</td>
<td>18.21 ± 5.21</td>
<td>16.00 ± 5.63</td>
<td>16.61 ± 5.55</td>
<td>19.05 ± 4.66</td>
</tr>
<tr>
<td>Hon/Integ.</td>
<td>20.37 ± 4.52a</td>
<td>18.22 ± 7.98a</td>
<td>20.56 ± 6.09</td>
<td>22.26 ± 6.59</td>
</tr>
<tr>
<td>Respect</td>
<td>21.42 ± 5.04</td>
<td>18.56 ± 7.36</td>
<td>18.83 ± 5.09</td>
<td>19.98 ± 5.52</td>
</tr>
</tbody>
</table>
Table 6. Rate and Rank Order Each Group: Pre-Professional Phase, Professional Phase, Graduate Students and Faculty/Staff

<table>
<thead>
<tr>
<th>Professional Students</th>
<th>Pre-Professional Students</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rate</strong></td>
<td><strong>Rate</strong></td>
</tr>
<tr>
<td>Excellence</td>
<td>Excellence</td>
</tr>
<tr>
<td>Altruism</td>
<td>Altruism</td>
</tr>
<tr>
<td>Respect</td>
<td>Accountability</td>
</tr>
<tr>
<td>H/I</td>
<td>H/I</td>
</tr>
<tr>
<td>Duty</td>
<td>Respect</td>
</tr>
<tr>
<td>Accountability</td>
<td>Duty</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Faculty/Staff</th>
<th>Graduate Students</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rate</strong></td>
<td><strong>Rate</strong></td>
</tr>
<tr>
<td>Altruism</td>
<td>Altruism</td>
</tr>
<tr>
<td>Excellence</td>
<td>Excellence</td>
</tr>
<tr>
<td>Duty</td>
<td>Respect</td>
</tr>
<tr>
<td>Respect</td>
<td>Duty</td>
</tr>
<tr>
<td>H/I</td>
<td>Accountability</td>
</tr>
<tr>
<td>Accountability</td>
<td>H/I</td>
</tr>
</tbody>
</table>

Accountability | Accountability | Duty |

Altruism      | Respect       | H/I  |

Respect       | Duty          | H/I  |

Duty          | H/I           |       |

H/I           | Accountability| Duty  |
CHAPTER IV

DISCUSSION

Introduction

Data from this research is encouraging and has implications to several areas of athletic training and athletic training education. Areas previously discussed include a model of professionalism in athletic training, perceptions of professionalism in AT, continuing and/or enhancing professionalism discussions, developing and maintaining professionalism, socialization and professionalism education/assessment in athletic training.

A Model of Professionalism in Athletic Training

The Pillars Model (Stern, 2006) was previously discussed in this research. This model has important implications in athletic training and could be readily integrated into ATE as well as can be compared and contrasted to the foundational behaviors of professional practice in athletic training which serve as a guide for professional practice.

The concept of professionalism in athletic training, as in medicine and medical education, requires a strong foundational base beginning with clinical competence. The foundational base of the model was comprised of characteristics such as clinical competency, effective communication and legal/ethical understanding. The peak and ultimate goal of the model is professionalism (Stern, 2006). In contrast, in athletic training practice and education, professionalism is a foundational behavior for professional practice ([NATA] Athletic Training Competencies 5th Ed, 2011) and seen a stepping stone compared the outcome.
As previously discussed the other foundational behaviors of professional practice include patient primacy, teamed-approach to practice, legal and ethical understanding, cultural competency, advancing knowledge and professionalism. Students transition first from cognitive areas of knowledge and skill mastery to non-cognitive areas such as humanism, ethics and professionalism. However, athletic training students are increasingly instructed on such non-cognitive domains earlier in the ATEP curriculum. A cognitive base in the scope of athletic training practice is critical to further develop the other aspects of professionalism.

Another aspect of the professionalism foundation described by Stern (2006) was effective communication skills. Athletic training and the foundational behaviors reflect the importance of effective communication skills as well. For example, the foundational behavior of a teamed approach to healthcare often includes communication with patients and other health care providers. It is critical to develop a foundation of effective communication skills, so that later values and themes of professionalism can be articulated by the individual.

The final component of the professionalism foundation is legal/ethical understanding of practice. It is important for an individual to master these behaviors not only to protect themselves from legal action but more importantly to protect patient and society alike. As noted by Peer & Schlabach (2007) implementation of ethics education to athletic training students is likely to have a positive effect on the profession of athletic training, as individual’s transition from students to professionals. The foundational
behaviors of professional practice echo the notion that an understanding of the legal/ethical implications is critical to the practice of athletic training.

On top of the foundational base are “pillars” or values supporting professionalism. According to Stern (2006) the pillars of professionalism include: excellence, humanism, accountability and altruism. Excellence relates to the commitment to achieving and maintaining standards of education and care. The foundational behavior in athletic training of advancing knowledge relates to the excellence pillar. Athletic trainers are lifelong learners who are continually striving for excellence. Humanism is defined as a thought or action in which human interests, values and dignity are preserved (Webster Dictionary, 2002).

In the foundational behaviors of patient primacy, cultural competency and legal/ethical practice are reflective of the humanistic qualities of the profession of athletic training. As healthcare providers, athletic trainers strive to maintain patient confidentiality, as well as demonstrate respect for others (including patients, other health care providers and colleagues) in a moral manner.

The pillar of accountability describes the upholding of an unwritten contract with society. By virtue of its position and standing medicine is more acutely focused on this contract with society. Despite the fact that the foundations of professional practice in athletic training do not describe accountability as medicine does; athletic training does demonstrate accountability through behaviors of a commitment to patient primacy and maintaining a level of professionalism.
Finally, altruism is the concept of putting others needs ahead oneself. As with accountability, altruism is not directly described in the foundations of professional practice for athletic trainers. Yet athletic trainers exhibit all of the “pillars” of professionalism including altruism and accountability on a daily basis. Behaviors often include striving for excellence in the field and scope of practice, accountability to patients and society, humanistic and altruistic characteristics of caring, compassion and empathy to patients.

**Perceptions of Professionalism**

As previously discussed professionalism literature in medicine is abundant, while professionalism literature in athletic training remains limited. Promoting professionalism through research, education and professional organizations is critical for athletic training. A critical piece of enhancing professionalism discussions is to have a consensus on the definition of professionalism. It is essential for various disciplines, a governing body or professional organization to operationally define professionalism. For example, the NATAs Code of Ethics for Athletic Trainers (2005) Preamble states…

The National Athletic Trainers’ Association Code of Ethics states the principles of ethical behavior that should be followed in the practice of athletic training. It is intended to establish and maintain high standards and professionalism for the athletic training profession.

Despite including professionalism in the preamble, the code of ethics does not clearly define professionalism. Craig (2006) in the *Athletic Training Education Journal* defined professionalism as “the conduct or qualities that characterize a professional
person or a profession.” This definition is broad and generalized and is not consistent with other AH care professions. This definition, the only definition published specific to athletic training, is not operational. The athletic training profession must develop and implement a definition of professionalism that is specific to the education, scope of practice, professional relationships and legal/ethical understanding of athletic trainers. The results of this study can clearly impact the definition of professionalism that would be more specific and practical for the athletic training.

Another aspect of the continued discussed on professionalism is developing and maintaining said professionalism. This is accomplished not only through professionalism activities but also through athletic training education programs and the professional development/socialization process. For example, Wynd (2003) cites active membership and participation in professional organizations and associations as a way of developing and fostering professionalism in healthcare nurses. Furthermore, Gardiner & Mensch (2004) suggest utilizing concepts such as a journal club or athletic training student organizations as means to promote professionalism in athletic training students. Data from this research indicated that 72% & 66% of respondents were members in the NATA and state organizations, respectively. This demonstrates that most athletic trainers and athletic training students value the importance of maintaining a membership within a professional organization. However, the correlation to the entire athletic training profession cannot be assumed based on this research.

In a recent study by Seyler et al., (2012) the perceived importance of professional behaviors in AT education and practice was examined. Two surveys were developed for
use in the study including the Importance of Professional Behaviors in Athletic Training Survey (IPBATS) and Frequency of Professional Behaviors in Athletic Training Survey (FPBATS). Behaviors included within the instruments were taken the NATA Athletic Training Education Competencies 5th Edition and the BOC’s Standards of Professional Practice. Included in the Competencies, are the Foundations of Professional that include: primacy of the patient, team approach to practice, legal practice, ethical practice, advancement of knowledge, cultural competence, and professionalism. Although the authors found differences in the importance of professional behaviors and the frequency that they are practiced in athletic training there were no statistically significant differences with regards to professionalism. The data from our study supports this as we did not find any significant differences between groups, except between pre-professional students.

Overall practice of professional behaviors is high meaning that certified athletic trainers and athletic training students are practicing them. Seyler et al., (2012) noted that it was necessary to continue to assessing professionalism in ATE and cited the use and implementation of a professionalism assessment tool for AT to monitor professional behaviors and to maintain professionalism.

**Professional Socialization**

Socialization, as defined previously, is the process by which students learn the various roles, responsibilities and attitudes of a profession (Klosner, 2007; Pitney et al., 2002). Socialization research is prominent in AH literature as well as athletic training (Creasia & Friberg, 2011; Klosner, 2007; Pitney, 2002). Of the three distinct phases of
the professional socialization process (recruitment, professional preparation and
organizational socialization) the vast majority of literature focuses on the latter two
(Klosner, 2007).

Literature in medicine has supported the notion of using certain criterion when
selecting medical students to ensure individuals meet standards and have a greater chance
of success in the profession (Stern, 2006). This study sought to examine the perceptions
and attitudes of those individuals characterized as “pre-professional” athletic training
education students. This can be likened to the recruitment phase of the professional
socialization process as individuals may be exposed to the profession but are not formally
admitted to an ATEP (Pitney et al., 2002).

**Group Differences in the Perceptions of Professionalism**

The questions for this research study sought to examine the differences in the
perceptions of professionalism among several groups of participants ranging from
pre-athletic training students to AT faculty/staff. Data from our study demonstrated that
pre-professional students differed in perceptions and attitudes of professionalism
compared to professional phase students, graduate students and faculty/staff in several of
the *a priori* professionalism elements. Variables such as age, gender, route to
certification, years as ATC and current job setting/position did not seem to have a
significant impact on the perceptions of professionalism among the certified athletic
trainer group (graduate assistants and faculty/staff).
Pre-Professional to Professional Phase Students

The largest number of discrepancies reported existed between pre-professional students and professional phase students including rating four *a priori* elements and ranking one element differently. The number of discrepancies between pre-professional phase and professional phase students was thought to stem from several factors. First, pre-professional phase students are not afforded the clinical experience, academic background and socialization that professional phase students are. Furthermore, pre-professional students may lack the knowledge and appropriate use of legal and ethical understanding for practicing athletic training. According to Stern (2006) pre-professional students do not have the foundational values yet in place to articulate professionalism.

Pre-Professional Phase to Graduate Students

Pre-professional students demonstrated one significant difference between graduate students in the *a priori* element of excellence. This difference partial supported our hypothesis stating that there were differences in the perceptions of professionalism; however, with only one *a priori* element difference between the groups our hypothesis was rejected. A possible explanation for this could be that pre-professional phase students, despite limited exposure and experience, the actual time observing the profession is spent with graduate assistants (GA). Therefore, their perception is shaped by the GA or clinical supervisor in which they spent the most time.

Pre-Professional to Faculty/Staff

There were no significant differences in either rate aggregate or rank order scores when comparing pre-professional phase students to faculty/staff. Interestingly, no
differences were detected between pre-professional phase students and faculty/staff. This may be attributed to the limited exposure of pre-professional phase students to the profession of athletic training. These findings were substantiated by previous literature from Freeman & Rogers (2010) who noted that AH students did not significantly differ when asked to rank “professional attributes” such as responsibly, professionalism, communication skills, commitment to learning compared to their clinical supervisors. While this survey did not state athletic training students or certified athletic trainers participated in this study; the inference that athletic training students and certified athletic trainers do not rank professionalism \textit{a priori} elements of professionalism differently was substantiated with this questionnaire. Again, this could possibly be a result of limited exposure to the profession and influences from the instructor of the pre-major ATEP classes.

**Remaining Groups**

The second phase of the professional socialization process is professional preparation. During this phase athletic training students are exposed the vast array of knowledge, skills and responsibilities to be mastered. There were no significant differences between professional phase students, graduate students or faculty/staff. This was also interesting in that it was hypothesized that professional phase students and faculty staff would have different perceptions of professionalism. This does however; demonstrate that athletic training students are adequately socialized into the profession of athletic training regarding perceptions of professionalism. The third and final socialization phase, organizational socialization, would be more relevant to the graduate
student group of this research. Data revealed almost no differences between graduate
students and faculty/staff emphasizing that graduate students maybe properly socializing
into their job setting, roles and responsibilities within their respective positions.

The data reported in our study was supported in previous literature. Peer &
Schlabach (2011) studied the professional values of head athletic trainers (HAT), ATEP
program directors (PDs) and program directors/head athletic trainers (PD/HATS)
regarding the impact of the hidden curriculum. Through a pilot study and expert sources
the authors identified a list of professional athletic training values to be included. The
values cited by Peer & Schlabach (2011) are nearly identical to the ABIMs Project
Professionalism and used in both the PSCOM-PQ (Blackall et al., 2007) and this research
study. Common values included: accountability, altruism, integrity, respect and
excellence. Additionally, Peer & Schlabach used social responsibility where this
research used the term duty, both values reflecting an obligation to patients and society.
It is important to note, also that in our research the values honesty/integrity were
combined whereas in Peer & Schlabach (2011) the values of truth and honesty were
mutual.

Three groups (PDs, HATs, & PDs/HATs) were asked to choose five important
values. The most frequently selected value across the three groups was that of
truth/honesty. PDs selected integrity, respect, accountability and excellence as the values
rounding out the five. HATs were similar to PDs in frequency of every value with the
exception of the fifth (PDs= excellence, HAT= caring). Finally, PD/HATs rated
truth/honesty and respect with the same frequency for the number one value, caring and
integrity similarly as the second value and accountability as the fifth. In our study, the faculty/staff group rated altruism, excellence, duty, respect and honor/integrity and accountability as the order of elements that most accurately matched their personal definition of professionalism.

The final aspect of the study required participants to rank order their top three values. Contrary to the study by Peer & Schlabach (2011), data from our study indicated that faculty/staff (presumably including PDs & HATs) ranked altruism as the number one element of professionalism; followed by excellence, respect, duty, accountability and honor/integrity opposed to truth/honesty as the number one value. The PDs group ranked integrity identically as truth/honesty for the first value, followed by respect and accountability; while HATs ranked integrity and accountability as their second and third values, respectively. In our study excellence was ranked as the second element of professionalism. The PDs/HATs group ranked respect as the second value and excellence as the third whereas in our study, respect was third. Interestingly, the faculty/staff group in our research ranked honor/integrity as the sixth value.

**Professionalism Assessment Questionnaire**

This research paper has a number of implications in the teaching and assessing of professionalism to athletic training students. The inclusion of professionalism as a foundational behavior in the NATA’s 5th Educational Competencies demonstrates the national organizations commitment and understanding to the importance that professionalism plays within athletic training. Athletic training students are now
formally instructed and required to be competent in areas including professional
development and professionalism.

Administering a professionalism or humanism questionnaire to students prior to
admittance into the athletic training program is a possible way to screen students and
select only those prospective students meeting certain criteria. It is apparent from the
study that pre-professional students have the greatest variability regarding
professionalism themes and constructs.

Questionnaires are used frequently in athletic training education, however, the
number, type of frequencies of questionnaires designed to assess professionalism or
humanism qualities is not readily known. The longitudinal use of a professionalism
questionnaire has been validated as a reliable measure to monitor the students’ through
their educational process. This can provide educators and clinical instructors valuable
insight into the student’s current attitudes and though processes. Furthermore,
interventions or remedies in deficient areas can be more readily applied, thereby assisting
the student in a greater capacity than other infrequent assessments.
CHAPTER V

RECOMMENDATIONS, LIMITATIONS AND CONCLUSION

Recommendations

Several recommendations can be made based on this study and previous literature. Further research is needed to examine topics such as professionalism and socialization in athletic training to a greater extent. As previously discussed enhancing professionalism literature in athletic training is immensely important for improving the credibility and professional identity. Additionally, a more unified and discipline specific definition of professionalism should be adopted for the profession of athletic training. This would not only serve as a starting point for continuing and enhancing professionalism discussions in the profession but would also provide an integrated and cohesive explanation that is accepted by all athletic trainers regardless of educational background or current job setting.

As previous research indicates, AH students are emerging from educational programs not adequately socialized or educated in “team-based care” which may impact patient care in a progressively changing health care market. Another recommendation regarding further research may focus on incorporating a multi-disciplinary approach to professionalism education.

To a certain extent this is currently done within athletic training educational programs, however; more formalized and structured multi-disciplinary observations may prove beneficial to the inter-professional professionalism of AH care providers required in the team-based care approach utilized by healthcare today. Furthermore, future
research studies may seek to survey other AH care students and clinicians and compare/contrast the differences between those in athletic training (certified athletic trainers and athletic training students). Again, this may demonstrate the credibility and professionalism of athletic training to other AH care providers, third-party insurers and society as a whole.

Athletic training education programs should continue to monitor and assess professionalism of athletic training students. Factors such as assessment frequency, the use of multiple assessors and assessment methods and realistic learning experiences have all been shown to increase the reliability of assessments in healthcare education programs such as medicine, physical therapy, nursing and athletic training.

ATEPs should incorporate a professionalism questionnaire or other valid method of professionalism assessment as a part of the recruitment or pre-professional student phase prior to the individual entering the professional phase of athletic training education. This not only serves as a “baseline” score to compare subsequent scores to in order to monitor a student’s professionalism progression or socialization, but can also be utilized as a selection criterion prior to entry into the ATEP.

Finally, further research is needed to validate the findings of this study. Primary limitations such as a small and relatively homogenous population sample may have skewed results. One hypothesis of this research was that athletic training students would have significantly different perceptions of professionalism compared to certified athletic trainers (graduate students and faculty/staff). Although this hypothesis was not supported by data from this study, further research studies should aim to validate or refute these
results. Furthermore, studies may seek to examine differences among the various phases of athletic training students. The data collection of this study did not examine individual class differences, merely the difference between pre-professional students and professional phase students (sophomore-senior).

**Limitations**

As in any study there are limitations that need to be addressed. One possible limitation relates primarily to the participant sample population. As previously mentioned a total of 74 usable questionnaires were submitted producing a relatively small sample size. An additional limitation of this study was that participants were recruited solely from athletic training programs within the NCAAs Mid-American Conference (MAC).

Although potential respondents were recruited equally via emails to all MAC schools with athletic training education programs, another limitation of this study was that the demographic section did not ask which MAC ATEP program the participants were associated. The researchers were therefore unable to establish the percentage and representation of each school within the MAC. This information would have been useful to send programs with limited responses emails encouraging participation in this study.

A previously validated professionalism questionnaire was sought for utilization in this study largely because no studies, inventories or questionnaires within the profession of athletic training could be found. The Penn State College of Medicine Professional Questionnaire (PSCOM-PQ) was adopted with permission of the authors however; several limitations regarding the PSCOM-PQ were present. This particular questionnaire
was designed to assess the professionalism of medical students, residents, clinical and basic science faculty/staff therefore; the assumption that the PSCOM-PQ will reliably measure the professionalism of athletic training students (pre and professional phase), graduate students and faculty/staff was recognized as a possible limitation by the authors of this study prior to data collection.

**Conclusion**

A recent decline in the perceived professionalism across healthcare systems and providers prompted an extensive review into the themes and constructs of professionalism. Professionalism is often described as the keystone characteristic within medicine to upholding the societal contract. Distrust by society and lack of professionalism in healthcare transcends all healthcare providers from physicians to allied healthcare workers. Professionalism literature is readily available for the medical profession however; literature pertaining to professionalism in athletic training is lacking.

Athletic training students are guided in their athletic training education through a set of educational competencies. In these competencies, professionalism is set as a foundational behavior for practice. Socialization is the process by which students learn the various roles and responsibilities of a profession or discipline. The hidden curriculum is a key component in socializing athletic training students.

A 4x6 way analysis of variance (ANOVA) (4 groups X 6 *a priori* elements) was one of the statistical analysis performed on the data for this study. The ANOVA demonstrated a significant interaction between groups and groups by professionalism elements. Further post hoc testing revealed significant differences in mean Likert scale
aggregate scores between several groups. The most significant differences were found to be between pre-professional phase students and professional phase students. This supported one of the research hypotheses that pre-professional phase students would significantly differ in perceptions of professionalism. However, several other research hypotheses were not supported such as professional phase athletic training students would significantly differ in their perceptions of professionalism when compared to certified athletic trainers (graduate students and faculty/staff) was not supported by the data from this research study. Further research is needed to validate these findings. Additionally, future studies seek to reach a consensus on an athletic training specific definition of professionalism should include larger population samples and consider including other AH professionals and students such as those in nursing, physical therapy or exercise physiology.

Despite the fact that several research hypotheses were not accepted does not refute the fact that there are several important implications of this research. For example, this study further substantiates the literature in backing the professional socialization process for athletic training students. Individuals come into an athletic training program unaware and uneducated on the profession and are largely leaving with the same knowledge, skills and attitudes of certified athletic trainers working and teaching within the profession.

Professionalism questionnaires have been shown to be valuable and reliable in measuring professionalism longitudinally. Furthermore, certain professions such as medicine use professionalism/ethics questionnaires as part of the selection and entry
criteria in to medical schools or specialties. Athletic training education programs should adopt the use of professionalism questionnaires not only as possible program entry criteria, but more importantly, as a longitudinal measure to monitor a student’s professionalism attitudes and beliefs. Another recommendation for athletic training education is to incorporate a more structured multidisciplinary, “team-based” approach to health care.

As a relatively new AH profession, athletic training continues to struggle with issues such as professional identity/credibility, third-party reimbursement, licensure and various other laws or regulations limiting the scope of practicing of athletic training. Professionalism has emerged as a critical element of the societal contract healthcare providers between medicine and society. Thus, professionalism education for healthcare workers has emerged similarly. Athletic trainers have and must continue to embrace professionalism in order to make appropriate changes in practice and education to improve professional credibility, scope of practice and rights to patients/ reimbursements and other issues so vital to the survival and evolution of the profession.
APPENDICES
APPENDIX A

NATA CODE OF ETHICS
Appendix A

NATA Code Of Ethics

PREAMBLE

The National Athletic Trainers’ Association Code of Ethics states the principles of ethical behavior that should be followed in the practice of athletic training. It is intended to establish and maintain high standards and professionalism for the athletic training profession.

The principles do not cover every situation encountered by the practicing athletic trainer, but are representative of the spirit with which athletic trainers should make decisions. The principles are written generally; the circumstances of a situation will determine the interpretation and application of a given principle and of the Code as a whole. When a conflict exists between the Code and the law, the law prevails.

PRINCIPLE 1:

Members shall respect the rights, welfare and dignity of all.

1.1 Members shall not discriminate against any legally protected class.

1.2 Members shall be committed to providing competent care.

1.3 Members shall preserve the confidentiality of privileged information and shall not release such information to a third party not involved in the patient’s care without a release unless required by law.

PRINCIPLE 2:

Members shall comply with the laws and regulations governing the practice of athletic training.

2.1 Members shall comply with applicable local, state, and federal laws and institutional guidelines.

2.2 Members shall be familiar with and abide by all National Athletic Trainers’ Association standards, rules and regulations.

2.3 Members shall report illegal or unethical practices related to athletic training to the appropriate person or authority.
2.4 Members shall avoid substance abuse and, when necessary, seek rehabilitation for chemical dependency.

**PRINCIPLE 3:**

Members shall maintain and promote high standards in their provision of services.

3.1 Members shall not misrepresent, either directly or indirectly, their skills, training, professional credentials, identity or services.

3.2 Members shall provide only those services for which they are qualified through education or experience and which are allowed by their practice acts and other pertinent regulation.

3.3 Members shall provide services, make referrals, and seek compensation only for those services that are necessary.

3.4 Members shall recognize the need for continuing education and participate in educational activities that enhance their skills and knowledge.

3.5 Members shall educate those whom they supervise in the practice of athletic training about the Code of Ethics and stress the importance of adherence.

3.6 Members who are researchers or educators should maintain and promote ethical conduct in research and educational activities.

**PRINCIPLE 4:**

Members shall not engage in conduct that could be construed as a conflict of interest or that reflects negatively on the profession.

4.1 Members should conduct themselves personally and professionally in a manner that does not compromise their professional responsibilities or the practice of athletic training.

4.2 National Athletic Trainers’ Association current or past volunteer leaders shall not use the NATA logo in the endorsement of products or services or exploit their affiliation with the NATA in a manner that reflects badly upon the profession.

4.3 Members shall not place financial gain above the patient’s welfare and shall not participate in any arrangement that exploits the patient.

4.4 Members shall not, through direct or indirect means, use information obtained in
the course of the practice of athletic training to try to influence the score or outcome of an athletic event, or attempt to induce financial gain through gambling.
APPENDIX B

CODE OF ETHICS FOR THE PHYSICAL THERAPIST
Appendix B

Code of Ethics for the Physical Therapist

HOD S06-09-07-12 [Amended HOD S06-00-12-23; HOD 06-91-05-05; HOD 06-87-11-17; HOD 06-81-06-18; HOD 06-78-06-08; HOD 06-78-06-07; HOD 06-77-18-30; HOD 06-77-17-27; Initial HOD 06-73-13-24] [Standard]

Preamble

The Code of Ethics for the Physical Therapist (Code of Ethics) delineates the ethical obligations of all physical therapists as determined by the House of Delegates of the American Physical Therapy Association (APTA). The purposes of this Code of Ethics are to:

1. Define the ethical principles that form the foundation of physical therapist practice in patient/client management, consultation, education, research, and administration.

2. Provide standards of behavior and performance that form the basis of professional accountability to the public.

3. Provide guidance for physical therapists facing ethical challenges, regardless of their professional roles and responsibilities.

4. Educate physical therapists, students, other health care professionals, regulators, and the public regarding the core values, ethical principles, and standards that guide the professional conduct of the physical therapist.

5. Establish the standards by which the American Physical Therapy Association can determine if a physical therapist has engaged in unethical conduct. No code of ethics is exhaustive nor can it address every situation. Physical therapists are encouraged to seek additional advice or consultation in instances where the guidance of the Code of Ethics may not be definitive. This Code of Ethics is built upon the five roles of the physical therapist (management of patients/clients, consultation, education, research, and administration), the core values of the profession, and the multiple realms of ethical action (individual, organizational, and societal). Physical therapist practice is guided by a set of seven core values: accountability, altruism, compassion/caring, excellence, integrity, professional duty, and social responsibility. Throughout the document the primary core values that support specific principles are indicated in parentheses. Unless a specific role is indicated in the principle, the duties and obligations being delineated pertain to the five roles of the physical therapist. Fundamental to the Code of Ethics is the
special obligation of physical therapists to empower, educate, and enable those with impairments, activity limitations, participation restrictions, and disabilities to facilitate greater independence, health, wellness, and enhanced quality of life.

Principles

Principle #1:

Physical therapists shall respect the inherent dignity and rights of all individuals. 
(Core Values: Compassion, Integrity)

1A. Physical therapists shall act in a respectful manner toward each person regardless of age, gender, race, nationality, religion, ethnicity, social or economic status, sexual orientation, health condition, or disability.

1B. Physical therapists shall recognize their personal biases and shall not discriminate against others in physical therapist practice, consultation, education, research, and administration.

Principle #2:

Physical therapists shall be trustworthy and compassionate in addressing the rights and needs of patients/clients. 
(Core Values: Altruism, Compassion, Professional Duty)

2A. Physical therapists shall adhere to the core values of the profession and shall act in the best interests of patients/clients over the interests of the physical therapist.

2B. Physical therapists shall provide physical therapy services with compassionate and caring behaviors that incorporate the individual and cultural differences of patients/clients.

2C. Physical therapists shall provide the information necessary to allow patients or their surrogates to make informed decisions about physical therapy care or participation in clinical research.

2D. Physical therapists shall collaborate with patients/clients to empower them in decisions about their health care.

2E. Physical therapists shall protect confidential patient/client information and may disclose confidential information to appropriate authorities only when allowed or as required by law.
**Principle #3:**

Physical therapists shall be accountable for making sound professional judgments.
*(Core Values: Excellence, Integrity)*

3A. Physical therapists shall demonstrate independent and objective professional judgment in the patient’s/client’s best interest in all practice settings.

3B. Physical therapists shall demonstrate professional judgment informed by professional standards, evidence (including current literature and established best practice), practitioner experience, and patient/client values.

3C. Physical therapists shall make judgments within their scope of practice and level of expertise and shall communicate with, collaborate with, or refer to peers or other health care professionals when necessary.

3D. Physical therapists shall not engage in conflicts of interest that interfere with professional judgment.

3E. Physical therapists shall provide appropriate direction of and communication with physical therapist assistants and support personnel.

**Principle #4:**

Physical therapists shall demonstrate integrity in their relationships with patients/clients, families, colleagues, students, research participants, other health care providers, employers, payers, and the public.
*(Core Value: Integrity)*

4A. Physical therapists shall provide truthful, accurate, and relevant information and shall not make misleading representations.

4B. Physical therapists shall not exploit persons over whom they have supervisory, evaluative or other authority (eg, patients/clients, students, supervisees, research participants, or employees).

4C. Physical therapists shall discourage misconduct by health care professionals and report illegal or unethical acts to the relevant authority, when appropriate.

4D. Physical therapists shall report suspected cases of abuse involving children or vulnerable adults to the appropriate authority, subject to law.
Physical therapists shall not engage in any sexual relationship with any of their patients/clients, supervisees, or students.

Physical therapists shall not harass anyone verbally, physically, emotionally, or sexually.

**Principle #5:**

Physical therapists shall fulfill their legal and professional obligations.

*(Core Values: Professional Duty, Accountability)*

5A. Physical therapists shall comply with applicable local, state, and federal laws and regulations.

5B. Physical therapists shall have primary responsibility for supervision of physical therapist assistants and support personnel.

5C. Physical therapists involved in research shall abide by accepted standards governing protection of research participants.

5D. Physical therapists shall encourage colleagues with physical, psychological, or substance-related impairments that may adversely impact their professional responsibilities to seek assistance or counsel.

5E. Physical therapists who have knowledge that a colleague is unable to perform their professional responsibilities with reasonable skill and safety shall report this information to the appropriate authority.

5F. Physical therapists shall provide notice and information about alternatives for obtaining care in the event the physical therapist terminates the provider relationship while the patient/client continues to need physical therapy services.

**Principle #6:**

Physical therapists shall enhance their expertise through the lifelong acquisition and refinement of knowledge, skills, abilities, and professional behaviors.

*(Core Value: Excellence)*

6A. Physical therapists shall achieve and maintain professional competence.
6B. Physical therapists shall take responsibility for their professional development based on critical self-assessment and reflection on changes in physical therapist practice, education, health care delivery, and technology.

6C. Physical therapists shall evaluate the strength of evidence and applicability of content presented during professional development activities before integrating the content or techniques into practice.

6D. Physical therapists shall cultivate practice environments that support professional development, lifelong learning, and excellence.

**Principle #7:**

Physical therapists shall promote organizational behaviors and business practices that benefit patients/clients and society.

*(Core Values: Integrity, Accountability)*

7A. Physical therapists shall promote practice environments that support autonomous and accountable professional judgments.

7B. Physical therapists shall seek remuneration as is deserved and reasonable for physical therapist services.

7C. Physical therapists shall not accept gifts or other considerations that influence or give an appearance of influencing their professional judgment.

7D. Physical therapists shall fully disclose any financial interest they have in products or services that they recommend to patients/clients.

7E. Physical therapists shall be aware of charges and shall ensure that documentation and coding for physical therapy services accurately reflect the nature and extent of the services provided.

7F. Physical therapists shall refrain from employment arrangements, or other arrangements, that prevent physical therapists from fulfilling professional obligations to patients/clients.

**Principle #8:**

Physical therapists shall participate in efforts to meet the health needs of people locally, nationally, or globally.

*(Core Value: Social Responsibility)*
8A. Physical therapists shall provide pro bono physical therapy services or support organizations that meet the health needs of people who are economically disadvantaged, uninsured, and underinsured.

8B. Physical therapists shall advocate to reduce health disparities and health care inequities, improve access to health care services, and address the health, wellness, and preventive health care needs of people.

8C. Physical therapists shall be responsible stewards of health care resources and shall avoid overutilization or underutilization of physical therapy services.

8D. Physical therapists shall educate members of the public about the benefits of physical therapy and the unique role of the physical therapist.
APPENDIX C

CODE OF ETHICS FOR NURSES,
AMERICAN NURSES ASSOCIATION
Appendix C

Code of Ethics for Nurses,
American Nurses Association

Preface

Ethics is an integral part of the foundation of nursing. Nursing has a distinguished history of concern for the welfare of the sick, injured, and vulnerable and for social justice. This concern is embodied in the provision of nursing care to individuals and the community. Nursing encompasses the prevention of illness, the alleviation of suffering, and the protection, promotion, and restoration of health in the care of individuals, families, groups and communities. Nurses act to change those aspects of social structures that detract from health and well-being. Individuals who become nurses are expected not only to adhere to the ideals and moral norms of the profession but also to embrace them as a part of what it means to be a nurse. The ethical tradition of nursing is self-reflective, enduring, and distinctive. A code of ethics makes explicit the primary goals, values, and obligations of the profession.

The Code of Ethics for Nurses serves the following purposes:
It is a succinct statement of the ethical obligations and duties of every individual who enters the nursing profession

- It is the professions nonnegotiable ethical standard
- It is an expression of nursing’s own understanding of its commitment to society

There are numerous approaches for addressing ethics; these include adopting or subscribing to ethical theories, including humanist, feminist and social ethics, adhering to ethical principles, and cultivating virtues. The Code of Ethics for Nurses reflects all of these approaches. The words “ethical” and “moral” are used throughout the Code of Ethics. “Ethical” is used to refer to reasons for decision about how one ought to act, using the above mentioned approaches. In general, the word “moral” overlaps with “ethical” but is more aligned with personal belief and cultural values. Statements that describe activities and attributes of nurses in this Code of Ethics are to be understood as normative or prescriptive statements expressing expectations of ethical behavior.

The Code of Ethics for Nurses uses the term patient to refer to recipients of nursing care. The derivation of this word refers to “one who suffers,” reflecting a universal aspect of human existence. Nonetheless, it is recognized that nurses also provide services to those seeking health as well as those responding to illness, to students and to staff, in health care facilities as well as in communities.
Similarly, the term *practice* refers to the actions of the nurse in whatever role the nurse fulfills, including direct patient care provider, educator, administrator, researcher, policy developer, or other. Thus, the values and obligations expressed in this Code of Ethics apply to nurses in all roles and settings.

The Code of Ethics for Nurses is a dynamic document. As nursing and its social context change, changes to the Code of Ethics are also necessary. The Code of Ethics consists of two components: the provisions and the accompanying interpretive statements. There are nine provisions. The first three describe the most fundamental values and commitments of the nurse; the next three address boundaries of duty and loyalty, and the last three address aspects of duties beyond individual patient encounters. For each provision, there are interpretive statements that provide greater specificity for practice and are responsive to the contemporary context of nursing. Consequently, the interpretive statements are subject to more frequent revision than are the provisions. Additional ethical guidance and detail can be found in ANA or constituent member association position statements that address clinical, research, administrative, educational, or public policy issues.

*The Code of Ethics for Nurses with Interpretive Statements* provides a framework for nurses to use in ethical analysis and decision-making. The Code of Ethics establishes the ethical standards for the profession. It is not negotiable in any setting nor is it subject to revision or amendment except by formal process of the House of Delegates of the ANA. The Code of Ethics for Nurses is a reflection of the proud ethical heritage of nursing, a guide for nurses now and in the future.

**Provision 1.**

The nurse, in all professional relationships, practices with compassion and respect for the inherent dignity, worth and uniqueness of every individual, unrestricted by considerations of social or economic status personal attributes, or the nature of health problems.

1.1 **Respect for human dignity** – A fundamental principle that underlies all nursing practices is respect for the inherent worth, dignity and human rights of every individual. Nurses take into account the needs and values of all persons in all professional relationships.

1.2 **Relationships to patients** – the need for health care is universal, transcending all individual differences. The nurse establishes relationships and delivers nursing services with respect for human needs and values, and without prejudice. An individual’s lifestyle, value system and religious beliefs should be considered in planning health care with and for each patient. Such consideration does not suggest that the nurse necessarily agrees with or condones certain individual choices, but that the nurse respects the patient as a person.
1.3 **The nature of the health problems** – The nurse respects the worth, dignity and rights of all human beings irrespective of the nature of the health problem. The worth of the person is not affected by disease, disability, functional status, or proximity of death. This respect extends to all who require the services of the nurse for the promotion of health, the prevention of illness, the restoration of health, the alleviation of suffering, and the provision of supportive care to those who are dying.

The measures nurses take to care for the patient enable the patient to live with as much physical, emotional, social, and spiritual well-being as possible. Nursing care aims to maximize the values that the patient has treasured in life and extends supportive care to the family and significant others. Nursing care is directed toward meeting the comprehensive needs of patients and their families across the continuum of care. This is particularly vital in the care of patients and their families at the end of life to prevent and relieve the cascade of symptoms and suffering that are commonly associated with dying.

Nurses are leaders and vigilant advocates for the delivery of dignified and humane care. Nurses actively participate in assessing and assuring the responsible use of interventions in order to minimize unwarranted or unwanted treatment and patient suffering. The acceptability and importance of carefully considered decisions regarding resuscitation status, withholding and withdrawing life-sustaining therapies, forgoing medically provided nutrition and hydration, aggressive pain and symptom management and advance directives are increasingly evident. The nurse should provide interventions to relieve pain and other symptoms in the dying patient even when those interventions entail risks of hastening death. However, nurses may not act with the sole intent of ending a patient’s lives even though such action may be motivated by compassion, respect for patient autonomy and quality of life considerations. Nurses have invaluable experience, knowledge, and insight into care at the end of life and should be actively involved in related research, education, practice, and policy development.

1.4 **The right to self-determination** – Respect for human dignity requires the recognition of specific patient rights, particularly, the right of self-determination. Self-determination, also known as autonomy, is the philosophical basis for informed consent in health care. Patients have the moral and legal right to determine what will be done with their own person; to be given accurate, complete, and understandable information in a manner that facilitates an informed judgment; to be assisted with weighing the benefits, burdens, and available options in their treatment, including the choice of no treatment; to accept, refuse, or terminate treatment without deceit, undue influence, duress, coercion, or penalty; and to be given necessary support throughout the decision-making and treatment process. Such support would include the opportunity to make decisions and other health professionals. Patients should be involved in planning their own health care to the extent they are able and choose to participate.
Each nurse has an obligation to be knowledgeable about tomorrow and legal rights of all patients to self-determination. The nurse preserves, protects, and supports those interests by assessing the patient’s comprehension of both the information presented in the implications of decisions. In situations in which the patient lacks the capacity to make a decision, a designated surrogate decision-maker should be consulted. The role of the surrogate is to make decisions as the patient would, based upon the patients previously expressed wishes and known values. In the absence of the designated surrogate decision-maker, decisions it should be made in the best interest of the patient, considering the patient's personal values to the extent that they're known. The nurse supports patient self-determination by participating in discussions with surrogates, providing guidance and referral to other resources as necessary, and identifying and addressing problems in the decision-making process. Supports of autonomy in the broadest sense also includes recognition that people of some cultures place less weight on individualism and choose to defer to family or community values in decision-making. Respect not just for the specific decision but also for the patient's method of decision-making is consistent with the principle of autonomy.

Individuals are interdependent members of the community. The nurse recognizes that there are situations in which the right to individual self-determination maybe outweighed or limited by the rights, health and welfare of others, particularly in relation to public health considerations. Nonetheless, limitation of individual rights must always be considered a serious deviation from the standard of care, justified only when there are no less restrictive means available to preserve the rights of others and the demands of justice.

1.5 Relationships with colleagues and others – The principle of respect for persons extends to all individuals from whom the nurse interacts. The nurse maintains compassionate and caring relationships with colleagues and others with a commitment to the fair treatment of individuals, to integrity preserving compromise, and to resolving conflict. Nurses function in many roles, including direct care provider, administrator, educator, researcher, and consult. In each of these roles, the nurse treats colleagues, employees, assistants, and students with respect and compassion. The standard of conduct precludes any and all prejudicial actions, any form of harassment or threatening behavior, or disregard for the affect ones actions on others. The nurse values the distinctive contribution of individuals or groups, and collaborates to meet the shared goal of providing quality health services.

Provision 2. The nurse's primary commitment is to the patient, whether an individual, family, group, or community.

2.1 Primacy of the patient's interest – The nurse's primary commitment is to the recipient of nursing and healthcare services - the patient - whether the recipient is an individual, a family, a group, or community. Nursing holds a fundamental commitment to
the uniqueness of the individual patient; therefore any plan of care must reflect that uniqueness. The nurse strives to provide patients with opportunities to participate in planning care, assures the patients find the plans acceptable and supports the implementation of the plan. Addressing patient interest requires recognition of the patient's place in the family or other networks of relationship. When the patient's wishes are in conflict with others, the nurse seeks to help resolve the conflict. Where conflict persists, the nurse's commitment remains to the identified patient.

2.2 conflict of interest for nurses – Nurses are frequently put in situations of conflict arising from competing loyalties in the workplace, including situations of conflicting expectations from patients, families, physicians, colleagues, in many cases healthcare organizations and health plans. Nurses must examine the conflicts arising between their own personal and professional values, the values and interests of others who are also responsible for patient care and health care decisions, as well as those of patients. Nurses strive to resolve such conflicts in ways that ensure patient safety, Guard the patient's best interest and preserve the professional integrity of the nurse.

Situations created by changes in healthcare financing and delivery systems, such as incentive systems to decrease spending those new possibilities of conflict between economic self-interest and professional integrity. The use of bonuses, sanctions, and incentives tied to financial targets are as examples of features of healthcare systems that may present such conflict. Conflict of interest may arise in any domain of nursing activity including clinical practice, administration, education, or research. Advanced practice nurses who bill directly for services and nursing executives with budgetary responsibilities must be especially cognizant of the potential for conflicts of interest. Nurses should disclosed to all relevant parties (e.g., patients employer, and colleagues) any perceived or actual conflict of interest and in some situations should withdraw from further participation. Nurses in all rolls must seek to ensure that employment arrangements are just and fair and do not create an unreasonable conflict between patient care and direct personal gain.

2.3 Collaboration – Collaboration it is not just cooperation but it is the concerted effort of individuals and groups to retain a shared goal. In health care, that goal is to address the health needs of the patient and the public. The complexity of healthcare delivery systems requires a multidisciplinary approach to the delivery of services that has the strong support and active registration of all the health professions. Within this context, nursing's unique contribution, scope of practice, and relationship with other health professions needs to be clearly articulated, represented and preserved. By its very nature, collaboration requires mutual trust, recognition, and respect among the healthcare team, shared-decision-making about patient care, and open dialogue among all parties we have an interest in and a concern for health outcomes. Nurses should work to assure that the relevant parties are involved and have a voice in decision-making about patient care issues. Nurses should see that the questions that need to be addressed are asked and that
the information needed for informed decision-making is available and provided. Nurses should actively promote the collaborative multidisciplinary planning required to ensure the availability and accessibility of quality health services to all persons who have needs for health care.

Intra-professional collaboration within nursing is fundamental to effectively addressing the health needs of patients and the public. Nurses engaged in non-clinical roles, such as administration or research, while not providing direct care, nonetheless are collaborating in the provision of care through their influence and direction of those who do. Effective nursing cares is accomplished through the interdependence of nurses in differing roles – those who teach the needed skills, set standards, manage the environment of care, or expand the boundaries of knowledge used by the profession. In this sense, nurses in all roles share a responsibility for the outcomes of nursing care.

2.4 Professional boundaries – When acting within one’s role as a professional, the nurse recognizes and maintains boundaries that establish appropriate limits to relationships. While the nature of nursing work has an inherently personal component, nurse-patient relationships and nurse-colleague relationships have, as their foundation, the purpose of preventing illness, alleviating suffering, and protecting, promoting, and restoring the health of patients. In this way, nurse-patient and nurse-colleague relationships differ from those that are purely personal and unstructured, such as friendship. The intimate nature of nursing care, the involvement of nurses is important and sometimes highly stressful life events, and the mutual dependence of colleagues working in close concert all present the potential for blurring of limits to professional relationships. Maintaining authenticity and expressing oneself as an individual, while remaining within the bounds established by the purpose of the relationship can be especially difficult in prolonged or long-term relationships. In all encounters, nurses are responsible for retaining their professional boundaries. When those professional boundaries are jeopardized, the nurse should seek assistance from peers or supervisors or take appropriate steps to remove her/himself from the situation.

Provision 3. The nurse promotes, advocates for, and strives to protect the health, safety, and rights of the patient.

3.1 Privacy – The nurse safeguards the patient’s right to privacy. The need for health care does not justify unwanted intrusion into the patient’s life. The nurse advocates for an environment that provides for sufficient physical privacy, including auditory privacy for discussions of a personal nature and policies and practices that protect the confidentiality of information.

3.2 Confidentiality – Associated with the right to privacy, the nurse has a duty to maintain confidentially of all patient information. The patient’s well-being could be jeopardized and the fundamental trust between patient and nurse destroyed by
unnecessary access to data or by the inappropriate disclosure of identifiable patient information. The rights, well-being, and safety of the individual patient should be the primary factors in arriving at any professional judgment concerning the disposition of confidential information received from or about the patient, whether oral, written or electronic. The standard of nursing practice and the nurse’s reasonability to provide quality care require that relevant data be shared with those members of the health care team who have a need to know. Only information pertinent to a patient’s treatment and welfare is disclosed, and only to those directly involved with patient’s care. Duties of confidentiality, however, are not absolute and may need to be modified in order to protect the patient, other innocent parties and in circumstances of mandatory disclosure for public health reasons.

Information used for purposes of peer review, third-party payments, and other quality improvement or risk management mechanisms may be disclosed only under defined policies, mandates, protocols. These written guidelines must assure that the rights, well-being, and safety of the patient are protected. In general, only that information directly relevant to task or specific responsibility should be disclosed. When using electronic communications, special effort should be made to maintain data security.

3.3 Protection of participants in research – Stemming from the right to self-determination, each individual has the right to choose whether or not to participate in research. It is imperative that the patient or legally authorized surrogate receive sufficient information that is material to an informed decision, to comprehend that information, and to know how to discontinue participation in research without penalty. Necessary information to achieve an adequately informed consent includes the nature of participation, potential harms and benefits, and available alternatives to taking part in the research. Additionally, the patient should be informed of how the data will be protected. The patient has a right to refuse to participate in research or withdraw at any time without fear of adverse consequences or reprisal. Research should be conducted and directed only by qualified persons. Prior to implementation, all research should be approved by a qualified review board to ensure patient protection and the ethical integrity of the research. Nurses should be cognizant of the special concerns raised by research involving vulnerable groups, including children, prisoners, students, the elderly, and the poor. The nurse who participates in research in any capacity should be fully informed about both the subject’s and nurse’s rights and obligations in the particular research study and in research in general. Nurses have the duty to question and, if necessary, to report and to refuse to participate in research they deem morally objectionable.

3.4 Standards and review mechanisms – nursing is responsible and accountable for assuring that only those individuals who have demonstrated the knowledge, skill, practices experiences, commitment, and integrity essential to professional practice are allowed to enter into and continue to practice with the profession. Nurse educators have a responsibility to ensure that basic competencies are achieved and to promote a
commitment to professional practice prior to entry of an individual into practice. Nurse administrators are responsible for assuring that the knowledge and skills of each nurse in the workplace are assessed prior to the assignment of responsibilities requiring preparation beyond basic academic programs.

The nurse has a responsibility to implement and maintain standards of professional nursing practice. The nurse should participate in planning, establishing, implementing, and evaluating review mechanisms designed to safeguard patients and nurses, such as peer review processes or committees, credentialing processes, quality improvement initiatives, and ethical committees. Nurse administrators must ensure that nurses have access to and inclusion on institutional ethics committees. Nurses must bring forward difficult issues related to patient care and/or institutional constraints upon ethical practices for discussion and review. The nurse acts to promote inclusion of appropriate others in all deliberations related to patient care.

Nurses should also be active participants in the development of policies and review mechanisms designed to promote patient safety, reduce the likelihood of errors, and address both environmental system factors and human factors that present increased risk to patients. In addition, when errors do occur, nurses are expected to follow institutional guidelines in reporting errors committed or observed to the appropriate supervisory personnel and for assuring responsible disclosure of errors to patients. Under no circumstances should the nurse participate in, or condone through silence, either an attempt to hide and error or a punitive response that serves only to fix blame rather than correct the conditions that led to the error.

3.5 Acting on questionable practice – The nurse’s primary commitment is to the health, well-being, and safety of the patient across the life span and in all settings in which health care needs are addressed. As an advocate for the patient, the nurse must be alert to and take appropriate action regarding any instances of incompetent, unethical, illegal, or impaired practices by any member of the health care team or the health care system or any action on the part of others that places the rights or best interests of the patient in jeopardy. To function effectively in this role, nurses must be knowledgeable about the Code of Ethics, standards of practice of the profession, relevant federal, state and local laws and regulations, and the employing organizations policies and procedures.

When the nurse is aware of inappropriate or questionable practice in the provision or denial of health care, concern should be expressed to the person carrying out the questionable practice. Attention should be called to the possible detrimental affect upon the patient’s well-being or best interests as well as the integrity of nursing practice. When factors in the health care delivery system or health care organization threaten the welfare of the patient, similar action should be directed to the responsible administrator. If indicated, the problem should be reported to an appropriate higher authority within the institution or agency, or to an appropriate external authority.
There should be established processes for reporting and handling incompetent, unethical, illegal, or impaired practice within the employment setting so that such reporting can go through official channels, thereby reducing the risk of reprisal against the reporting nurse. All nurses have a responsibility to assist those who identify potentially questionable practice. State nurses associations should be prepared to provide assistance and support in the development and evaluation of such processes and reporting procedures. When incompetent, unethical, illegal, or impaired practice is not concerned within the employment setting and continues to jeopardize patient well-being and safety, the problem should be reported to other appropriate authorities such as practice committees of the pertinent professional organizations, the legally constituted bodies concerned with licensing of specific categories of health workers and professional practitioners, or the regulatory agencies concerned with evaluating standards or practice. Some situations may warrant the concern and involvement of all such groups. Accurate reporting and factual documentation, and not merely opinion, undergird all such responsible actions. When a nurse chooses to engage in the act of responsible reporting about situations that are perceived as unethical, incompetent, illegal, or impaired, the professional organization has a responsibility to provide the nurse with the support and assistance and to protect the practice of those nurses who choose to voice their concerns. Reporting unethical, illegal, incompetent, or impaired practices, even when done appropriately, may present substantial risk to the nurse; nevertheless, such risks do not eliminate the obligation to address serious threats to patient safety.

3.6 Addressing impaired practice – Nurses must be vigilant to protect the patient, the public and the profession from potential harm when a colleague’s practice, in any setting, appears to be impaired. The nurse extends compassion and caring to colleagues who are in recovery from illness or when illness interferes with job performance. In a situation where a nurse suspects another’s practice may be impaired, the nurse’s duty is to take action designed both to protect patients and to assure that the impaired individual receives assistance in regaining optimal function. Such action should usually begin with consulting supervisory personnel and may also include confronting the individual in a supportive manner and with the assistance of others or helping the individual to access appropriate resources. Nurses are encouraged to follow guidelines outlined by the profession and policies of the employing organization to assist colleagues whose job performance may be adversely affected by mental or physical illness or by personal circumstances. Nurses in all roles should advocate for colleagues whose job performance may be impaired to ensure that they receive appropriate assistance, treatment and access to fair institutional and legal processes. This includes supporting the return to practice of the individual who has sought assistance and is ready to resume professional duties.

If impaired practices poses a threat or danger to self or others, regardless of whether the individual has sought help, the nurse must take action to report the individual to persons authorized to address the problem. Nurses who advocate for others whose job
performance creates a risk for harm should be protected from negative consequences. Advocacy may be a difficult process and the nurse is advised to follow workplace policies. If workplace policies do not exist or are inappropriate – that is, they deny the nurse in question access to due legal process or demand resignation – the reporting nurse may obtain guidance from the professional association, state peer assistance programs, employee assistance program or similar resource.

Provision 4. The nurse is responsible and accountable for individual nursing practice and determines the appropriate delegation of tasks consistent with the nurse’s obligation to provide optimum patient care.

4.1 Acceptance of accountability and responsibility – Individual registered nurses bear primary responsibility for the nursing care that their patients receive and are individually accountable for their own practice. Nursing practice includes direct care activities, acts of delegation, and other responsibilities such as teaching, research, and administration. In each instance, the nurse retains accountability and responsibility for the quality of practice and for conformity with standards of care.

Nurses are faced with decisions in the context of the increased complexity and changing patterns in the delivery of health care. As the scope of nursing practice changes, the nurse must exercise judgment in accepting responsibilities, seeking consultation, and assessing activities to others who carry out nursing care. For example, some advanced practice nurses have the authority to issues prescription and treatment orders to be carried out by other nurses. These acts are not acts of delegation. Both the advanced practice nurse issuing the order and the nurse accepting the order are responsible for the judgments made and accountable for the actions take.

4.2 Accountability for nursing judgment and action – accountability means to be answerable to oneself and others for one’s own actions. In order to be accountable, nurses act under a code of ethical conduct that is grounded in the moral principles of fidelity and respect for the dignity, worth, and self-determination of patients. Nurses are accountable for judgments made and actions taken in course of nursing practice, irrespective of health care organizations’ policies or providers’ directives.

4.3 Responsibility for nursing judgment and action – Responsibility refers to the specific accountability or liability associated with the performance of duties of a particular role. Nurses accept or reject specific role demands based upon their education, knowledge, competence, and extent of experience. Nurses in administration, education, and research also have obligations to the recipients of nursing care. Although nurses in administration, education, and research have relationships with patients that are less direct, in assuming the responsibilities of a particular role, they share responsibility for the care provided by those whom they supervise and instruct. The nurse must not engage
in practices prohibited by law or delegate activities to others that are prohibited by the practice acts of other health care providers.

Individual nurses are responsible for assess their own competence. When the needs of the patient are beyond the qualifications and competence of the nurse, consultation and collaboration must be sought from qualified nurses, other health professionals, or other appropriate sources. Educational resources should by sought by nurses and provided by institutions to maintain and advance the competence of nurses. Nurse educators act in collaboration with their students to assess the learning needs of the student, the effectiveness of the teaching program, the identification and utilization of appropriate resources, and the support needed for the learning process.

4.4 Delegation of nursing activities – Since the nurse is accountable for the quality of nursing care given to patients, nurses are accountable for their assignment of nursing responsibilities to other nurses and the delegation of nursing care activities to other health care workers. While delegation and assignment are used here in a generic moral sense, it is understood that individual states may have a particular legal definition of those terms.

The nurse must make reasonable efforts to assess individual competence when assigning selected components of nursing care to other health care workers. This assessment involves evaluating the knowledge, skills, and experience of the individual to whom the care is assigned, the complexity of the assigned tasks, and the health status of the patient. The nurse is also responsible for monitoring the activities of these individuals and evaluating the quality of the care provided. Nurses may not delegate responsibilities such as assessment and evaluation; they may delegate tasks. The nurse must not knowingly assign or delegate to any member of the nursing team a task for which that person is not prepared or qualified. Employer policies or directives do not relieve the nurse of responsibility for making judgments about the delegation of nursing responsibilities, activities, or task.

Nurses functioning in educator or preceptor roles may have less direct relationships with patients. However, through assignment of nursing care activities to learners they share responsibility and accountability for the care provided. It is imperative that the knowledge and skills of the learner be sufficient to provide the assigned nursing care and that appropriate supervision be provided to protect both the patient and the learner.

Provision 5. The nurse owes the same duties to self as to others, including the responsibility to preserve integrity and safety, to maintain competence, and to continue personal and professional growth.

5.1 Moral self-respect – Moral respect accords moral worth and dignity to all human beings irrespective of their personal attributes or life situation. Such respect extends to oneself as well; the same duties that we owe to others we owe to ourselves.
Self-regarding duties refer to a realm of duties that primarily concern oneself and include professional growth and maintenance of competence, preservation of wholeness of character, and personal integrity.

5.2 Professional growth and maintenance of competence – Though it has consequences for others, maintenance of competence and ongoing professional growth involves the control of one’s own conduct in a way that is primarily self-regarding. Competence affects one’s self-respect, self-esteem, professional status, and the meaningfulness of work. In all nursing roles, evaluation of one’s own performance, coupled with peer review, is a means by which nursing practices can be held to the highest standards. Each nurse is responsible for participating in the development of criteria for evaluation of practice and using those criteria in peer and self-assessment.

Continual professional growth, particularly in knowledge and skill, requires a commitment to lifelong learning. Such learning includes, but is not limited to, continuing education, networking with professional colleagues, self-study, professional reading, certification, and seeking advanced degrees. Nurses are required to have knowledge relevant to the current scope and standards of nursing practices, changing issues, concerns, controversies, and ethics. Where the care required is outside the competencies of the individual nurse, consultation should be sought or the patient should be referred to others for appropriate care.

5.3 Wholeness of character – nurses have both personal and professional identities that are neither entirely separate, nor entirely merged, but are integrated. In the process of becoming a professional, the nurse embraces the values of the profession, integrating them with personal values. Duties to self involve an authentic expression of one’s own moral point of view in practice. Sound ethical decision-making requires the respectful and open exchange of views between and among all individuals with relevant interests. In a community of moral disclosure, no one person’s view should automatically take precedence over that of another. Thus the nurse has a responsibility to express moral perspectives, even when they differ from those of others, and even when they might not prevail.

The wholeness of character encompasses relationships with patients. In situations where the patient requests a personal opinion from the nurse, the nurse is generally free to express an informed personal opinion as long as this preserves the voluntariness of the patient and maintains appropriate professional and moral boundaries. It is essential to be aware of the potential for undue influence attached to the nurse’s professional role. Assisting patients to clarify their own values in reaching informed decisions may be helpful in avoiding unintended persuasion. In situations where nurses’ responsibilities include care for those whose personal attributes, condition, lifestyle or situation is stigmatized by the community and are personally unacceptable, the nurse still renders respectful and skilled care.
5.4 preservation of integrity – Integrity is an aspect of wholeness of character and is primary a self-concern of the individual nurse. An economically constrained health care environment presents the nurse with particularly troubling threats to integrity. Threats to integrity may include a request to deceive a patient, to withhold information, or to falsify records, as well as verbal abuse from patients or coworkers. Threats to integrity also may include an expectation that the nurse will act in a way that is inconsistent with the values or ethics of the profession, or more specifically a request that is in direct violation of the Code of Ethics. Nurses have a duty to remain consistent with both their personal and professional values and to accept compromise only to the degree that it remains an integrity-preserving compromise. An integrity-preserving compromise does not jeopardize the dignity or well-being of the nurse or others. Integrity-preserving compromise can be difficult to achieve, but is more likely to be accomplished in situations where there is an open forum for moral discourse and an atmosphere of mutual respect and regard.

Where nurses are placed in situations of compromise that exceed acceptable moral limits or involve violations of the moral standards of the profession, whether in direct patient care or in any other forms of nursing practice, they may express their conscientious objection to participation. Where a particular treatment, intervention, activity, or practice is morally objectionable to the nurse, whether intrinsically so or because it is inappropriate for the specific patient, or where it may jeopardize both patients and nursing practice, the nurse is justified in refusing to participate on moral grounds. Such grounds exclude personal preference, prejudice, convenience, or arbitrariness. Conscientious objection may not insulate the nurse against formal or informal penalty. The nurse who decides not to take part on the grounds of conscientious objection must communicate this decision in appropriate ways. Whenever possible, such a refusal should be made known in advance and in time for alternate arrangements to be made for patient care. The nurse is obliged to provide for the patient’s safety, to avoid patient abandonment, and to withdraw only when assured that alternative sources of nursing care are available to the patient.

Where patterns of institutional behavior or professional practice compromise the integrity of all its nurses, nurses should express their concern or conscientious objection collectively to the appropriate body or committee. In addition, they should express their concern, resist, and seek to bring about a change in those persistent activities or expectations in the practice setting that are normally objectionable to nurses and jeopardize either patient or nurse well-being.

Provision 6. The nurse participates in establishing, maintaining, and improving health care environments and conditions of employment conducive to the provision of quality health care and consistent with the values of the profession through individual and collective action.
6.1 **influence of the environment on moral virtues and values** – virtues are habits of character that predispose persons to meet their moral obligations; that is, to do what is right. Excellences are habits of character that predispose a person to do a particular job or task well. Virtues such as wisdom, honesty, and courage are habits or attributes of the morally good person. Excellences such as compassion, patience, and skill are habits of character of the morally good nurse. For the nurse, virtues and excellences are those habits that affirm and promote the values of human dignity, well-being, respect, health, independence, and other values central to nursing. Both virtues and excellences, as aspects of moral character, can be either nurtured by the environment in which the nurse practices or they can be diminished or thwarted. All nurses have a responsibility to create, maintain, and contribute to environments that support the growth of virtues and excellences and enable nurses to fulfill their ethical obligations.

6.2 **influence of the environment on ethical obligations** – all nurses, regardless of role, have a responsibility to create, maintain, and contribute to environments of practice that support nurses in fulfill their ethical obligations. Environments of practice include observable features, such as working conditions, and written policies and procedures setting out expectations for nurses, as well as less tangible characteristics such as informal peer norms. Organizational structures, role descriptions, health and safety initiatives, grievance mechanisms, ethics committees, compensation systems and disciplinary procedures all contribute to environments that can either present barriers or foster ethical practice and professional fulfillment. Environments in which employees are provided fair hearing of grievances, are supported in practicing according to standards of care, and are justly treated allow for the realization of values of the profession and are consistent with sound nursing practice.

6.3 **Responsibility for health care environment** – The nurse is responsible for contributing to a moral environment that encourages respectful interactions with colleagues, support of peers, and identification of issues that need to be addressed. Nurse administrators have a particular responsibility to assure that employees are treated fairly and that nurses are involved in decisions related to their practice and working conditions. Acquiescing and accepting unsafe or inappropriate practices, even if the individual does not participate in the specific practice, is equivalent to condoning unsafe practice. Nurses should not remain employed in facilities that routinely violate patient rights or require nurses to severely and repeatedly compromise standards of practice or personal morality.

As with concerns about patient care, nurses should address concerns about the health care environment through appropriate channels. Organizational changes are difficult to accomplish and may require persistent efforts over time. Toward this end, nurses may participate in a collective action such as collective bargaining or workplace advocacy, preferably through a professional association such as the state nurses association, in order to address the terms and conditions of employment. Agreements reached through such action must be consistent with the profession’s standards of practice, the state law
regulating practice and the Code of Ethics for Nursing. Conditions of employment must contribute to the moral environment, the provision of quality patient care and professional satisfaction for nurses.

The professional association also serves as an advocate for the nurse by seeking to secure just compensation and humane working conditions for nurses. To accomplish this, the professional association may engage in collective bargaining on behalf of nurses. While seeking to assure just economic and general welfare for nurses, collective bargaining, nonetheless, seeks to keep the interest of both nurses and patients in balance.

Provision 7. The nurse participates in the advancement of the profession through contributions to practice, education, administration and knowledge development.

7.1 Advancing the profession through active involvement in nursing and health care policy – Nurses should advance their profession in contributing in some way to leadership, activities, and the viability of their professional organizations. Nurses can also advance the profession by serving in leadership or mentorship roles or on committees within their places of employment. Nurses who are self-employed can advance the profession by serving as role models for professional integrity. Nurses can also advance the profession through participation in civic activities related to health care or through local, state, national or international initiatives. Nurse educators have a specific responsibility to enhance students’ commitment to professional and civic values. Nurse administrators have a responsibility to foster an employment environment that facilitates nurses’ ethical integrity and professionalism, and nurse researchers are responsible for active contribution to the body of knowledge supporting and advancing nursing practice.

7.2 Advancing the profession by developing, maintaining, and implementing professional standards in clinical, administrative, and educational practices.

Standards and guidelines reflect the practice of nursing grounded in ethical commitments and a body of knowledge. Professional standards and guidelines for nurses must be developed by nurses and reflect nursing’s responsibility to society. It is the responsibility of nurses to identify their own scope of practice as permitted by professional practice standards and guidelines, by state and federal laws, by relevant societal values, and by the Code of Ethics.

The nurse as administrator or manager must establish, maintain, and promote conditions of employment that enable nurses within that organization or community setting to practice in accord with accepted standards of nursing practice and provide a nursing and health care work environment that meets the standards and guidelines of nursing practice. Professional autonomy and self regulation in the control of conditions of practice are necessary for implement nursing standards and guidelines and assuring quality care for those whom nursing serves.
The nurse educator is responsible for promoting and maintaining optimum standards of both nursing education and nursing practice in any settings where planned learning activities occur. Nurse educators must also ensure that only those students who possess the knowledge, skills, and competencies that are essential to nursing graduate from their nursing program.

7.3 Advancing the profession through knowledge development, dissemination, and application to practice – The nursing profession should engage in scholarly inquiry to identify, evaluate, refine, and expand the body of knowledge that forms the foundation of its discipline and practice. In addition, nursing knowledge is derived from the sciences and from the humanities. Ongoing scholarly activities are essential to fulfilling a profession’s obligations to society. All nurses working alone or in collaboration with others can participate in the advancement of the profession through the development, evaluation, dissemination, and application of knowledge in practice. However, an organizational climate and infrastructure conducive to scholarly inquiry must be valued and implemented for this to occur.

Provision 8. The nurse collaborates with other health professionals and the public in promoting community, national, and international efforts to meet health needs.

8.1 Health needs and concerns – The nursing profession is committed by promoting the health, welfare and safety of all people. The nurse has a responsibility to be aware not only to specific health needs of individual patients but also of broader health concerns such as world hunger, environmental pollution, lack of access to health care, violation of human rights, and inequitable distribution of nursing and health care resources. The availability and accessibility of high quality health services to all people require both interdisciplinary planning and collaborative partnerships among health professionals and others at the community, national, and international levels.

8.2 Responsibilities to the public – Nurses, individually and collectively, have a responsibility to be knowledgeable about the health status of the community and existing threats to health and safety. Through support of and participation in community organizations and groups, the nurse assists in efforts to educate the public, facilitates informed choice, identifies conditions and circumstances that contribute to illness, injury and disease, fosters healthy life styles, and participates in institutional and legislative efforts to promote health and meet national health objectives. In addition, the nurse supports initiatives to address barriers to health, such as poverty, homelessness, unsafe living conditions, abuse and violence, and lack of access to health services.

The nurse also recognizes that health care is provided to culturally diverse populations in this country and in all parts of the world. In providing care, the nurse should avoid imposition of the nurse’s own cultural values upon others. The nurse should affirm
human dignity and show respect for the values and practices associated with different cultures and use approaches to care that reflect awareness and sensitivity.

Provision 9. The profession of nursing, as represented by associations and their members, is responsible for articulating nursing values, for maintaining the integrity of the profession and its practices, and for shaping social policy.

9.1 Assertion of values – it is the responsibility of a professional association to communicate and affirm the values of the profession to its members. It is essential that the professional organization encourages discourse that supports critical self-reflection and evaluation within the profession. The organization also communicates to the public the values that nursing considers central to social change that will enhance health.

9.2 The profession carries out its collective responsibility through professional associations – The nursing profession continues to develop ways to clarify nursing’s accountability to society. The contract between the profession and society is made explicit through such mechanisms as

(a) The Code of Ethics for Nursing
(b) the standards of nursing practice
(c) the ongoing development of nursing knowledge derived from nursing theory, scholarship, and research in order to guide nursing actions
(d) educational requirements for practice
(e) certification, and
(f) mechanisms for evaluating the effectiveness of professional nursing actions

9.3 Intraprofessional Integrity – A professional association is responsible for expressing the values and ethics of the profession and also for encouraging the professional organization and its members to function in accord with those values and ethics. Thus, one of its fundamental responsibilities is to promote awareness of an adherence to the Code of Ethics and to critique the activities and ends of the professional association itself. Values and ethics influence the power structures of the association in guiding, correcting, and directing its activities. Legitimate concerns for the self-interest of the association and the profession are balanced by a commitment to the social goods that are sought. Through critical self-reflection and self-evaluation, associations must foster change within themselves, seeking to move the professional community towards its stated ideals.

9.4 Social reform – Nurses can work individually as citizens or collectively through political action to bring about social change. It is the responsibility of a professional nursing association to speak for nurses collectively in shaping and reshaping health care within our nation, specifically in areas of health care policy and legislation that affect accessibility, quality, and the cost of health care. Here, the professional association maintains vigilance and takes action to influence legislators, reimbursement agencies, nursing organizations, and other health professions. In these activities, health is
understood as being broader than delivery and reimbursement systems, but extending to health-related sociocultural issues such as violation of human rights, homelessness, hunger, violence, and the stigma of illness.
APPENDIX D

BOC STANDARDS OF PROFESSIONAL PRACTICE
Appendix D

BOC Standards of Professional Practice

Implemented January 1, 2006

Introduction

The mission of the Board of Certification Inc. (BOC) is to provide exceptional credentialing programs for healthcare professionals. The BOC has been responsible for the certification of Athletic Trainers since 1969. Upon its inception, the BOC was a division of the professional membership organization the National Athletic Trainers' Association. However, in 1989, the BOC became an independent non-profit corporation. Accordingly, the BOC provides a certification program for the entry-level Athletic Trainer that confers the ATC® credential and establishes requirements for maintaining status as a Certified Athletic Trainer (to be referred to as “Athletic Trainer” from this point forward). A nine member Board of Directors governs the BOC. There are six Athletic Trainer Directors, one Physician Director, one Public Director and one Corporate/Educational Director. The BOC is the only accredited certification program for Athletic Trainers in the United States. Every five years, the BOC must undergo review and re-accreditation by the National Commission for Certifying Agencies (NCCA). The NCCA is the accreditation body of the National Organization for Competency Assurance.

The BOC Standards of Professional Practice consists of two sections:
I. Practice Standards
II. Code of Professional Responsibility

I. Practice Standards

Preamble
The Practice Standards (Standards) establish essential practice expectations for all Athletic Trainers. Compliance with the Standards is mandatory.

The Standards are intended to:
- assist the public in understanding what to expect from an Athletic Trainer
- assist the Athletic Trainer in evaluating the quality of patient care
- assist the Athletic Trainer in understanding the duties and obligations imposed by virtue of holding the ATC® credential
The Standards are NOT intended to:

- prescribe services
- provide step-by-step procedures
- ensure specific patient outcomes

©Board of Certification, Inc. Page 2 of 4

The BOC does not express an opinion on the competence or warrant job performance of credential holders; however, every Athletic Trainer and applicant must agree to comply with the Standards at all times.

**Standard 1: Direction**
The Athletic Trainer renders service or treatment under the direction of a physician.

**Standard 2: Prevention**
The Athletic Trainer understands and uses preventive measures to ensure the highest quality of care for every patient.

**Standard 3: Immediate Care**
The Athletic Trainer provides standard immediate care procedures used in emergency situations, independent of setting.

**Standard 4: Clinical Evaluation and Diagnosis**
Prior to treatment, the Athletic Trainer assesses the patient’s level of function. The patient’s input is considered an integral part of the initial assessment. The Athletic Trainer follows standardized clinical practice in the area of diagnostic reasoning and medical decision making.

**Standard 5: Treatment, Rehabilitation and Reconditioning**
In development of a treatment program, the Athletic Trainer determines appropriate treatment, rehabilitation and/or reconditioning strategies. Treatment program objectives include long and short-term goals and an appraisal of those which the patient can realistically be expected to achieve from the program. Assessment measures to determine effectiveness of the program are incorporated into the program.

**Standard 6: Program Discontinuation**
The Athletic Trainer, with collaboration of the physician, recommends discontinuation of the athletic training service when the patient has received optimal benefit of the program. The Athletic Trainer, at the time of discontinuation, notes the final assessment of the patient’s status.
Standard 7: Organization and Administration
All services are documented in writing by the Athletic Trainer and are part of the patient’s permanent records. The Athletic Trainer accepts responsibility for recording details of the patient’s health status.

II. Code of Professional Responsibility
Preamble
The Code of Professional Responsibility (Code) mandates that BOC credential holders and applicants act in a professionally responsible manner in all athletic training services and activities. The BOC requires all Athletic Trainers and applicants to comply with the Code. The BOC may discipline, revoke or take other action with regard to the application or certification of an individual that does not adhere to the Code.

The *Professional Practice and Discipline Guidelines and Procedures* may be accessed via the BOC website, www.bocatc.org.

Code 1: Patient Responsibility

The Athletic Trainer or applicant:

1.1 Renders quality patient care regardless of the patient’s race, religion, age, sex, nationality, disability, social/economic status or any other characteristic protected by law

1.2 Protects the patient from harm, acts always in the patient’s best interests and is an advocate for the patient’s welfare

1.3 Takes appropriate action to protect patients from Athletic Trainers, other healthcare providers or athletic training students who are incompetent, impaired or engaged in illegal or unethical practice

1.4 Maintains the confidentiality of patient information in accordance with applicable law

1.5 Communicates clearly and truthfully with patients and other persons involved in the patient’s program, including, but not limited to, appropriate discussion of assessment results, program plans and progress

1.6 Respects and safeguards his or her relationship of trust and confidence with the patient

and does not exploit his or her relationship with the patient for personal or financial gain

1.7 Exercises reasonable care, skill and judgment in all professional work
Code 2: Competency

The Athletic Trainer or applicant:

2.1 Engages in lifelong, professional and continuing educational activities

2.2 Participates in continuous quality improvement activities

2.3 Complies with the most current BOC recertification policies and requirements

Code 3: Professional Responsibility

The Athletic Trainer or applicant:

3.1 Practices in accordance with the most current BOC Practice Standards

3.2 Knows and complies with applicable local, state and/or federal rules, requirements, regulations and/or laws related to the practice of athletic training

3.3 Collaborates and cooperates with other healthcare providers involved in a patient’s care

3.4 Respects the expertise and responsibility of all healthcare providers involved in a patient’s care

3.5 Reports any suspected or known violation of a rule, requirement, regulation or law by him/herself and/or by another Athletic Trainer that is related to the practice of athletic training, public health, patient care or education

3.6 Reports any criminal convictions (with the exception of misdemeanor traffic offenses or traffic ordinance violations that do not involve the use of alcohol or drugs) and/or professional suspension, discipline or sanction received by him/herself or by another Athletic Trainer that is related to athletic training, public health, patient care or education

3.7 Complies with all BOC exam eligibility requirements and ensures that any information provided to the BOC in connection with any certification application is accurate and truthful

3.8 Does not, without proper authority, possess, use, copy, access, distribute or discuss certification exams, score reports, answer sheets, certificates, certificant or applicant files, documents or other materials
3.9 Is candid, responsible and truthful in making any statement to the BOC, and in making any statement in connection with athletic training to the public

3.10 Complies with all confidentiality and disclosure requirements of the BOC

3.11 Does not take any action that leads, or may lead, to the conviction, plea of guilty or plea of nolo contendere (no contest) to any felony or to a misdemeanor related to public health, patient care, athletics or education; this includes, but is not limited to: rape; sexual abuse of a child or patient; actual or threatened use of a weapon of violence; the prohibited sale or distribution of controlled substance, or its possession with the intent to distribute; or the use of the position of an Athletic Trainer to improperly influence the outcome or score of an athletic contest or event or in connection with any gambling activity.

3.12 Cooperates with BOC investigations into alleged illegal or unethical activities; this includes but is not limited to, providing factual and non-misleading information and responding to requests for information in a timely fashion

3.13 Does not endorse or advertise products or services with the use of, or by reference to, the BOC name without proper authorization

**Code 4: Research**

The Athletic Trainer or applicant who engages in research:

4.1 Conducts research according to accepted ethical research and reporting standards established by public law, institutional procedures and/or the health professions

4.2 Protects the rights and well-being of research subjects

4.3 Conducts research activities with the goal of improving practice, education and public policy relative to the health needs of diverse populations, the health workforce, the organization and administration of health systems and healthcare delivery

**Code 5: Social Responsibility**

The Athletic Trainer or applicant:

5.1 Uses professional skills and knowledge to positively impact the community
Code 6: Business Practices

The Athletic Trainer or applicant:

6.1 Refrains from deceptive or fraudulent business practices

6.2 Maintains adequate and customary professional liability insurance
APPENDIX E

RECRUITMENT LETTERS
Appendix E

Recruitment Letters

ATEP Director,

My name is Nathan Blue. I am a certified athletic trainer and graduate student at Kent State University. I am currently undertaking a thesis project titled *Understanding the Perceptions of Professionalism in Athletic Training with the use of a Professionalism Questionnaire*. Professionalism in medical and allied health education is complex in both definition and breadth. Professionalism is a *Foundational Behavior of Professional Practice* within the Athletic Training Educational Competencies to be instructed and assessed within ATEPs. The extent and perceptions of professionalism differ within athletic training. Various professionalism assessment technique and methods have been validated within medical literature; few have been designed for athletic training.

This study will attempt to determine if differences exist among athletic training students and certified athletic trainers in the perceptions and attitudes of professionalism. I am specifically looking at CAATE accredited athletic training education programs within the Mid-American Conference. An adopted version of the Penn State College of Medicine (PSCOM) Professionalism Questionnaire (Copyright Penn State, 2003) will be utilized as the primary survey instrument throughout my research. Although the PSCOM Professionalism Questionnaire was designed for assessing professionalism in medical students, faculty and staff I am hopeful that the validity and reliability will carry over into athletic training.

I am writing this email for several reasons. First and foremost, I would like to take this opportunity to invite you, your athletic training students and fellow athletic training colleagues to participate in my professionalism questionnaire. Please take a few moments to complete this questionnaire. Secondly, I am asking for your assistance in distributing a second email containing the link to the athletic training students, graduate students, academic faculty and clinical staff associated with your ATEP. Again, the second email will contain the link to assess the questionnaire which is published on Survey Monkey. Lastly, in approximately 3 weeks I will be sending a reminder email urging anyone who hasn’t completed the survey to do so. I appreciate your assistance in forwarding/distributing the reminder email as well.

I thank you in advance for assisting me by participating in my thesis *Understanding the Perceptions of Professionalism in Athletic Training with the use of a Professionalism Questionnaire* as well as distributing an email to the members of the ATEP. Please feel free to contact me further with questions, concerns or comments.

Sincerely,

Nathan C. Blue, ATC, LAT
Kent State University
Graduate Student
266A MACC Annex
Kent, Ohio 44242
nblue@kent.edu
440-858-7745
Dear Certified Athletic Trainer, Athletic Training Faculty/Staff or Athletic Training Student,

My name is Nathan Blue. I am a certified athletic trainer and graduate student at Kent State University. I am currently undertaking a thesis titled *Understanding the Perceptions of Professionalism in Athletic Training with the use of a Professionalism Questionnaire*. Professionalism in medical and allied health education is complex in both definition and breadth. Professionalism is a *Foundational Behavior of Professional Practice* within the Athletic Training Educational Competencies to be instructed and assessed within ATEPs. The extent and perceptions of professionalism differ within athletic training. Various professionalism assessment technique and methods have been validated within medical literature; few have been designed for athletic training.

Below is a link to the professionalism questionnaire which is published on Survey Monkey. Please take a few moments of your time to read the consent form and consider participating in this study. Once you have read and given consent click the “I agree” button to begin the questionnaire. Completing the questionnaire should take no more than twenty minutes of your time.

https://www.surveymonkey.com/s/95YVSDM

I thank you in advance for your consideration in assisting me with my study *Understanding the Perceptions of Professionalism in Athletic Training with the use of a Professionalism Questionnaire*. If you have any questions or concerns please feel free to contact me.

Nathan C. Blue, ATC, LAT
Kent State University
Graduate Student
266A MACC Annex
Kent, Ohio 44242
nblue@kent.edu
APPENDIX F

QUESTIONNAIRE
### Appendix F

**Questionnaire**

<table>
<thead>
<tr>
<th>1. Participant Consent Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding the Perceptions of Professionalism in Athletic Training with the use of Professionalism Questionnaire</td>
</tr>
</tbody>
</table>

Thank you for your time and consideration in taking part in the research study "Understanding the Perceptions of Professionalism in Athletic Training with the use of Professionalism Questionnaire". Please read the following paragraphs briefly describing the structure, time commitment, and other considerations. Read the following consent form carefully before clicking on the "I Agree" button at the bottom of the page if you understand the statements and freely consent to participate in the study. This study will take approximately 20-25 minutes and is strictly anonymous. Participation in this research is voluntary, and participants may withdraw from the study at any time without penalty or loss of benefits to which they are otherwise entitled. If participants have further questions about this study or their rights, or if they wish to lodge a complaint or concern, they may contact the principal investigator (Katheriine@kent.edu) or the Institutional Review Board at (330) 672-2704.

*If you are 18 years of age or older, understand the statements above, and freely consent to participate in the study, click on the "I Agree" button to begin the experiment.*

- [ ] I agree
- [ ] I do not agree
# 2. Demographics

**How old are you?**

---

**What is your gender?**

- [ ] Male
- [ ] Female

**Your race/ethnicity—please choose all that apply:**

- White/Caucasian
- Black/African American
- American Indian or Alaskan Native
- Asian
- Hawaiian/Pacific Islander
- Hispanic/Latino
- Other
- Other (please specify) __________

**Please indicate your membership status within state and national organizations:**

- [ ] Yes
- [ ] No

- [ ] NATO
- [ ] State Organization
3. Athletic Training Students ONLY

Are you presently an Athletic Training Student?
☐ Yes – go on to the next Question
☐ No – go on to the next PAGE

Please indicate your level in the athletic training program:
☐ Pre-professional phase
☐ 1st year professional phase
☐ 2nd year professional phase
☐ 3rd year professional phase
4. Certified Athletic Trainers ONLY

Please indicate the number of years as a Certified Athletic Trainer:

- [ ] Less than 1 year
- [ ] 1-2 years
- [ ] 3-5 years
- [ ] 5-10 years
- [ ] 10-15 years
- [ ] 15-20 years
- [ ] 20-25 years
- [ ] 25+ years

Please indicate which position BEST describes your day-to-day responsibilities (if more than 1, please select where majority of time/responsibilities are spent):

- [ ] Academic Faculty
- [ ] Clinical Faculty
- [ ] Graduate Student
- [ ] Other (including BOC eligible GA/TA)
- [ ] Dual Role (split 50/50)

Please indicate the number of years in your current job setting:

- [ ] Less than 1 year
- [ ] 1-2 years
- [ ] 3-5 years
- [ ] 5-10 years
- [ ] 10-15 years
- [ ] 15-20 years
- [ ] 20-25 years
- [ ] 25+ years

Please indicate the number of years in current job position:

- [ ] Less than 1 year
- [ ] 1-2 years
- [ ] 3-5 years
- [ ] 5-10 years
- [ ] 10-15 years
- [ ] 15-20 years
- [ ] 20-25 years
- [ ] 25+ years

Please indicate the number of years as ACI or CI:

- [ ] I am not an ACI or CI
- [ ] Less than 1 year
- [ ] 1-2 years
- [ ] 3-5 years
- [ ] 5-10 years
- [ ] 10-15 years
- [ ] 15-20 years
- [ ] 20-25 years
- [ ] 25+ years

Please indicate degree(s) obtained:

- [ ] BS
- [ ] BA
- [ ] MS
- [ ] MA
- [ ] PT
- [ ] Ed.D
- [ ] ME.d
- [ ] Ph.d
- [ ] DPT
- [ ] Other

Other (please specify):

[ ]
5. Item Group #1

Carefully read each item statement, keeping in mind how it fits YOUR definition of professionalism and how important it is to that definition.

<table>
<thead>
<tr>
<th>Item Statement</th>
<th>Never</th>
<th>Little</th>
<th>Some</th>
<th>Much</th>
<th>Great Deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upholds scientific standards and bases decisions on scientific evidence and experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintains relationships that do not exploit personal financial gain, privacy or sexual advantage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Takes time to review other colleagues' work and provides meaningful and constructive comments to improve it</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seeks self improvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reports data consistently, accurately and honestly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoids offensive speech that offers unkind comments and unfair criticisms to others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rank order the items in this group from 1 to 6, using each number only once, with 1 being highest importance and 6 being lowest importance.

- Upholds scientific standards and bases decisions on scientific evidence and experience
- Maintains relationships that do not exploit personal financial gain, privacy or sexual advantage
- Takes time to review other colleagues' work and provides meaningful and constructive comments to improve it
- Seeks self improvement
- Reports data consistently, accurately and honestly
- Avoids offensive speech that offers unkind comments and unfair criticisms to others
6. Item Group #2

Carefully read each item statement, keeping in mind how it fits YOUR definition of professionalism and how important it is to that definition.

<table>
<thead>
<tr>
<th>Item</th>
<th>Never</th>
<th>Little</th>
<th>Some</th>
<th>Much</th>
<th>Great Deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shows a willingness to initiate and offer assistance toward a colleague's professional and personal development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotes the welfare and development of junior faculty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refusal to violate one's personal and professional code of conduct</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appreciates and respects the diverse nature of research subjects and honors these differences in one's work with them</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attends faculty meetings, seminars, and student research presentations as a reflection of support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Works collaboratively and respectfully within a team to the contribution of research</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rank order the items in this group from 1 to 6, using each number only once, with 1 being highest importance and 6 being lowest importance.

<table>
<thead>
<tr>
<th>Item</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shows a willingness to initiate and offer assistance toward a colleague's professional and personal development</td>
<td></td>
</tr>
<tr>
<td>Promotes the welfare and development of junior faculty</td>
<td></td>
</tr>
<tr>
<td>Refusal to violate one's personal and professional code of conduct</td>
<td></td>
</tr>
<tr>
<td>Appreciates and respects the diverse nature of research subjects and honors these differences in one's work with them</td>
<td></td>
</tr>
<tr>
<td>Attends faculty meetings, seminars, and student research presentations as a reflection of support</td>
<td></td>
</tr>
<tr>
<td>Works collaboratively and respectfully within a team to the contribution of research</td>
<td></td>
</tr>
</tbody>
</table>
### 7. Item Group #3

Carefully read each item statement, keeping in mind how it fits YOUR definition of professionalism and how important it is to that definition.

<table>
<thead>
<tr>
<th>Item</th>
<th>Never</th>
<th>Little</th>
<th>Some</th>
<th>Much</th>
<th>Great Deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participates in corrective action processes toward those who fail to meet professional standards of conduct</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does not seek to advance one's career at the expense of another's career</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volunteers one's skills and expertise for the welfare of the community</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meets commitments and obligations in a conscientious manner</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respects the rights, individuality, and diversity of thought of colleagues and students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meaningfully contributes to the teaching mission of the athletic training education department</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rank order the items in this group from 1 to 6, using each number only once, with 1 being highest importance and 6 being lowest importance.

<table>
<thead>
<tr>
<th>Item</th>
<th>Rank 1</th>
<th>Rank 2</th>
<th>Rank 3</th>
<th>Rank 4</th>
<th>Rank 5</th>
<th>Rank 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participates in corrective action processes toward those who fail to meet professional standards of conduct</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does not seek to advance one's career at the expense of another's career</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volunteers one's skills and expertise for the welfare of the community</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meets commitments and obligations in a conscientious manner</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respects the rights, individuality, and diversity of thought of colleagues and students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meaningfully contributes to the teaching mission of the athletic training education department</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8. Item Group #4

Carefully read each item statement, keeping in mind how it fits YOUR definition of professionalism and how important it is to that definition.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Little</th>
<th>Some</th>
<th>Much</th>
<th>Great Deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shows compassion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrates adaptability in responding to changing needs and priorities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotes justice in the athletic training system by demonstrating efforts to eliminate discrimination</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respects patient autonomy and helps them make informed decisions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assumes leadership in patient management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recognizes one's own limitations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rank order the items in this group from 1 to 6, using each number only once, with 1 being highest importance and 6 being lowest importance.

|                                |       |        |      |      |            |
| Shows compassion               |       |        |      |      |            |
| Demonstrates adaptability in responding to changing needs and priorities |       |        |      |      |            |
| Promotes justice in the athletic training system by demonstrating efforts to eliminate discrimination |       |        |      |      |            |
| Respects patient autonomy and helps them make informed decisions |       |        |      |      |            |
| Assumes leadership in patient management |       |        |      |      |            |
| Recognizes one's own limitations |       |        |      |      |            |
9. Item Group #5

Carefully read each item statement, keeping in mind how it fits YOUR definition of professionalism and how important it is to that definition.

<table>
<thead>
<tr>
<th>Item Statement</th>
<th>Never</th>
<th>Little</th>
<th>Some</th>
<th>Much</th>
<th>Great Deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assumes personal responsibility for decisions regarding patient care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participates in activities aimed at attaining excellence in care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reports medical or research errors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acts in ways that show a commitment to confidentiality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adopts uniform and equitable standards for patient care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrates empathy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rank order the items in this group from 1 to 6, using each number only once, with 1 being highest importance and 6 being lowest importance.

<table>
<thead>
<tr>
<th>Item Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assumes personal responsibility for decisions regarding patient care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participates in activities aimed at attaining excellence in care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reports medical or research errors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acts in ways that show a commitment to confidentiality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adopts uniform and equitable standards for patient care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrates empathy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
10. Item Group #6

Carefully read each item statement, keeping in mind how it fits YOUR definition of professionalism and how important it is to that definition.

<table>
<thead>
<tr>
<th>Item</th>
<th>Never</th>
<th>Little</th>
<th>Some</th>
<th>Much</th>
<th>Great Deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advocates a research subject’s interest over one’s own interest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discloses any conflicts of interest in the course of professional duties and activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is professionally attired in a manner that is respectful of others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responds to constructive criticism by working to improve one’s capability in the area criticized</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commits to implement cost-effective care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Represents information and actions in a truthful way</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rank order the items in this group from 1 to 6, using each number only once, with 1 being highest importance and 6 being lowest importance.

Advocates a research subject’s interest over one’s own interest
Discloses any conflicts of interest in the course of professional duties and activities
Is professionally attired in a manner that is respectful of others
Responds to constructive criticism by working to improve one’s capability in the area criticized
Commits to implement cost-effective care
Represents information and actions in a truthful way

Thank you for completing this survey.
REFERENCES


Howe, A. (2002). Professional Development in the Undergraduate Medical Curricula – the Key to the Door of a New Culture. Medical Education, 36, 353-359.


