AMERICAN BOARD OF PHYSICAL THERAPY RESIDENCY AND FELLOWSHIP EDUCATION

Mentoring Resource Manual

August 2014

Updated June 2019 to reflect the 2018 ABPTRFE Quality Standards for Clinical Physical Therapist Residency and Fellowship

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Table of Contents

I. Introduction

Historical Background

In November 1996, the Board of Directors of the American Physical Therapy Association (APTA) voted to implement a voluntary credentialing process for postprofessional clinical residency programs for physical therapists.

In November 2000, the Board expanded the scope of program credentialing to include clinical fellowship programs. The terminology of "credentialing" was changed to "accreditation" in February 2014 in recognition of the appropriate use of those terms.

Since its inception, the criteria for residency and fellowship accreditation have included mentoring as a critical facet to advance the program participant's patient/client management skills within the specialty or subspecialty. Through the years, the structure and format of mentoring have been revised.

- **2008:** To ensure the safety of patient/clients and competence of clinicians, a program must provide clinical mentoring that includes, but is not limited to, residents or fellows observing faculty providing care; and faculty providing mentoring of residents or fellows that includes management of patients/clients presenting with critical and/or complex care issues that require further expert consultation or referral.

- **2009:** All required minimum mentoring hours must be provided by a physical therapist. In addition, 100 of the 150 residency mentoring hours and 50 of the 100 fellowship mentoring hours must consist of examination, evaluation, diagnosis, prognosis, intervention, and outcome measurement at times when the resident/fellow-in-training is the primary provider of care. The remaining hours can be spent either in discussion about individual patient/client management (with or without the patient present), or during examination, evaluation, diagnosis, prognosis, intervention, and outcome measurement when the mentor is the primary provider of care.

  Clarification was provided in 2009 that mentoring is not the same as providing clinical instruction to the entry-level physical therapist student. Mentoring, rather, is preplanned to meet specific educational objectives and requires the advanced knowledge, skills, and clinical judgments of a clinical specialist. It further was outlined that loose or unsupervised patient/client management, physician or other health care provider observation, grand rounds, observation of other physical therapists during patient/client management, and clinical shadowing could not be included within the minimum required hours of mentoring.

  The evaluative criteria stated that the mentor not only teaches advanced clinical skills and decision making, but that he or she also facilitates development of advanced professional behaviors, proficiency in communications, and consultation skills. A mentor was defined as a practitioner who has the advanced knowledge, skills, and clinical judgments of a clinical specialist, and who provides instruction to a resident or fellow in patient/client management, advanced professional behaviors, proficiency in communications, and consultation skills. The mentor also may provide instruction in research, teaching, and/or service. The 6 functions frequently cited to describe the roles mentors play are teacher, sponsor, host, guide, exemplar, and counselor.

Following a generative discussion with accredited program directors and faculty during the 2010 Combined Sections Meeting in San Diego, California, on what mentoring means in the context of residency and fellowship education of physical therapists, ABPTRFE established a Mentoring Work Group in 2011 to develop a systematic approach to the development of guidelines and resources for clinical mentoring in physical therapy residency and fellowship education—the goals being to ensure consistent, high-quality mentoring across all postprofessional education programs.

- **2017:** ABPTRFE Quality Standards for Clinical Physical Therapist Residency and Fellowship Programs clarified for those mentoring hours beyond the required in-person mentoring, that synchronous or asynchronous methodologies may be utilized.

  The glossary of terms defines mentoring as instructional guidance provided by advanced and experienced physical therapists as a part of a residency or fellowship program in a defined area of practice. Mentoring focuses on advancing participants' knowledge and expertise in a defined area of practice and is delivered as a continual learning experience provided on an ongoing basis throughout the duration of the program.

Philosophy Statement

There are numerous definitions for mentoring, but there is no definitive consensus.[1] The research highlights that mentorship is a key component of professional development in any profession. As mentoring continues to be the foundation of residency and fellowship education of physical therapists, this document outlines the work of the Mentoring Work Group and specifically defines mentoring in the contexts of residency and fellowship education in physical therapy. This resource manual is designed to outline requirements that will be used to make accreditation decisions; assist programs in developing their mentoring efforts; and to inform residents and fellows what they should expect from mentoring.

Mentoring should not be confused with supervising, advising, career counseling, shadowing, or coaching.[2] Mentoring is workplace learning and must occur within that environment (institutional proximity and primarily direct, face-to-face[*] contact).[2,3]

Like the mentoring process itself, this document is dynamic and will be revisited on a regular, ongoing basis, as the profession of physical therapy progresses. While this manual is intended for use in developing and accrediting residency and fellowship programs, other audiences may find value in the information presented here.

Special Note

The ABPTRFE would like to thank the members of the Mentoring Work Group who dedicated their time and efforts to creating this resource:

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- Gail M. Jensen, PT, PhD, FAPTA
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[*] Refer to the ABPTRFE Quality Standards for required in-person mentoring hours.

- Carol Jo Tichenor, PT, MA, Honorary Fellow of the American Academy of Orthopaedic Manual Physical Therapists

1

II. Defining Mentoring for Residency and Fellowship Education in Physical Therapy

Clinical mentoring of physical therapists in residency and fellowship education is a continual learning experience that must be provided on an ongoing basis[†4] throughout the duration of the program.[2] It is focused on patient/client management[5] and includes examination, evaluation, diagnosis, prognosis, intervention, and outcome. It takes place before, during, and after a patient/client encounter.[6] For the purposes of program accreditation, there must be a minimum number of hours of 1:1[7,8,9,10] [‡]mentoring that involves the mentor, mentee, and patient. [§]

The purpose of a residency/fellowship program is to facilitate the development of advanced practitioners. The key to such development is mentoring[9] the resident/fellow in patient/client management.[6,11] Although the definition of mentoring centers on patient/client management, a resident/fellow must demonstrate other proficiencies, as well, in order to provide comprehensive patient/client care. Instruction in these proficiencies should be provided, however, via other learning experiences (ie, didactically, evidence-based reading, grand rounds, etc) and *cannot count* toward the minimum hour requirement for mentoring. Figure 1 demonstrates this learning module for residency education. The same model applies to fellowship programs, as they advanced the practitioner into the greater depth and breadth of knowledge of a subspecialist.

Mentoring is provided at a post-licensure level of specialty practice (for residents) or a subspecialty practice level (for fellows), with emphasis on the development of *advanced* clinical reasoning skills,[12**]as

[†] Please refer to the Competencies/Benchmarks section of this manual for guidance on providing mentoring on a "regular basis."

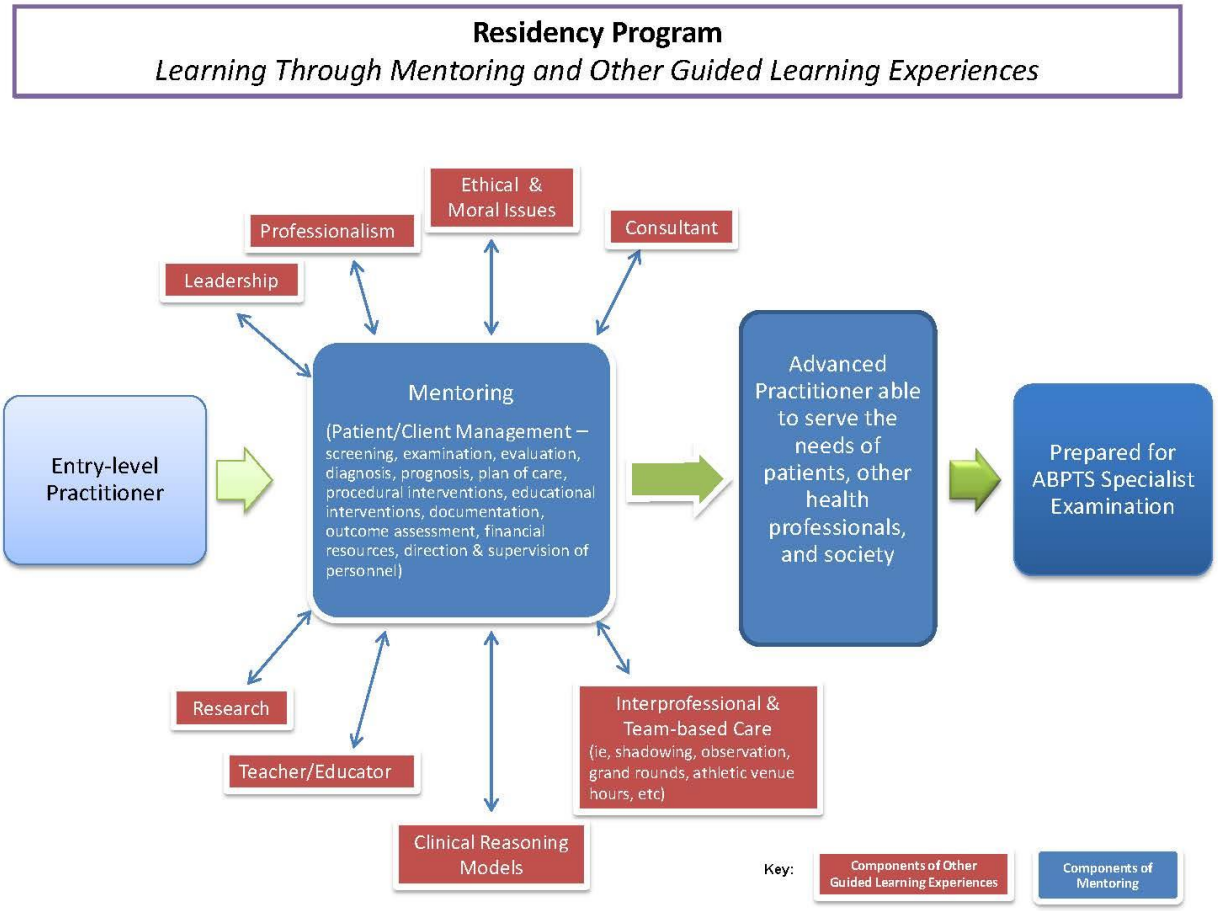
[‡] Clinical mentoring during patient/client management can occur in a 1:1, 1:2, or 1:3 (mentor: resident/fellow) model. Higher ratios can be employed during active reflection/discussion about patient care. Hours of mentoring must be divided equally among each resident/fellow during that mentoring session. For example, a 4-hour mentoring session that includes 1 faculty mentor and 2 residents/fellows would count as 2 hours of mentoring for each resident/fellow. A 3-hour mentoring session with 2 mentors and 6 residents/fellows would count as 1 hour of mentoring for each resident/fellow (A 2:6 mentor: resident/fellow model is the same as a 1:3 ratio). Please note that a program cannot count hours for more than 1 category (ie, hours within the program cannot be counted simultaneously as mentoring and hours spent in an athletic venue, shadowing, observation, or other learning opportunities).

[§] Please refer to ABPTRFE Quality Standards for Clinical Physical Therapist Residency and Fellowship Programs for the minimum number of hours within which mentoring must occur during the patient/client encounter when the resident/fellow must be the primary provider of care. Also, mentoring may occur before or after the patient/client encounter, and can include discussion centered around the resident's/fellow's caseload. Mentoring occurs with a variety of patients in the resident's/fellow's caseload—not simply with a single patient/client.

[**] Entry-level clinical performance is defined by APTA's Clinical Performance Instrument. A residency/fellowship program is responsible for taking an entry-level clinician and progressing his or her clinical reasoning skills to the specialist/subspecialist level (respectively), as outlined within the corresponding specialty's DRP, the subspecialty's DFP, or the ABPTRFE-approved analysis of practice (specialty or subspecialty). Please note, however, that the DRP and DFP documents are not updated regularly. Therefore, not all clinical reasoning skills currently required of a specialist/subspecialist are reflected in these documents.

defined by the respective Description of Residency Practice (DRP),[13] Description of Fellowship Practice (DFP),[14] or ABPTRFE-approved analysis of practice.

Figure 1. Mentoring Versus Other Forms of Learning.



The mentor prepares the resident/fellow to use evidence and multiple sources of information to make decisions about patient care and practice.[15,16] The mentor uses coaching strategies for remediation, insight, and self-discovery of the resident/fellow.[15] The mentor prepares the resident/fellow to address and manage the patient and make clinical judgments in the often-uncertain environment of practice and health care.[11,15] Mentors guide residents/fellows through the self-reflection process[6,17] and provide ongoing assessment of the resident/fellow throughout the learning experience, to determine how well the resident/fellow is developing along the continuum of professional development.[16]

The ABPTRFE Quality Standards outline the minimum requirements of mentoring for the purpose of accreditation, including mentor qualifications.

III. Aspects of Effective Mentoring

An effective mentoring program has many aspects. To be strong, it must be dynamic and use evidence of student learning and performance as means to continuous quality improvement.[††]

There are two main models for mentor selection.[9,18] In the first model, the program appoints mentors to its faculty and assigns them to residents/fellows based on the program's structure and needs. In the second model, the resident/fellow selects his or her mentor. In this model, the program must consider the selection process within the mentor application when approving/appointing mentors, in order to ensure a successful relationship.[19]

In the self-selection model, the program must have a well-designed appointment, training, and monitoring system in place to ensure the appropriateness and effectiveness of mentors.

The role of the program director—regardless of which mentoring selection model is used—is to oversee the mentoring relationship and foster growth within it.[4,16,18]

Programs must produce evidence that their mentors are meeting the following recommendations and competencies. By using a Mentor Abilities and Skills Competency Form (Appendix A), the program director can identify those individuals who are suitable to become a mentor within physical therapist residency and fellowship education.

Recommendations to be a Mentor in Physical Therapist Residency/Fellowship Education:

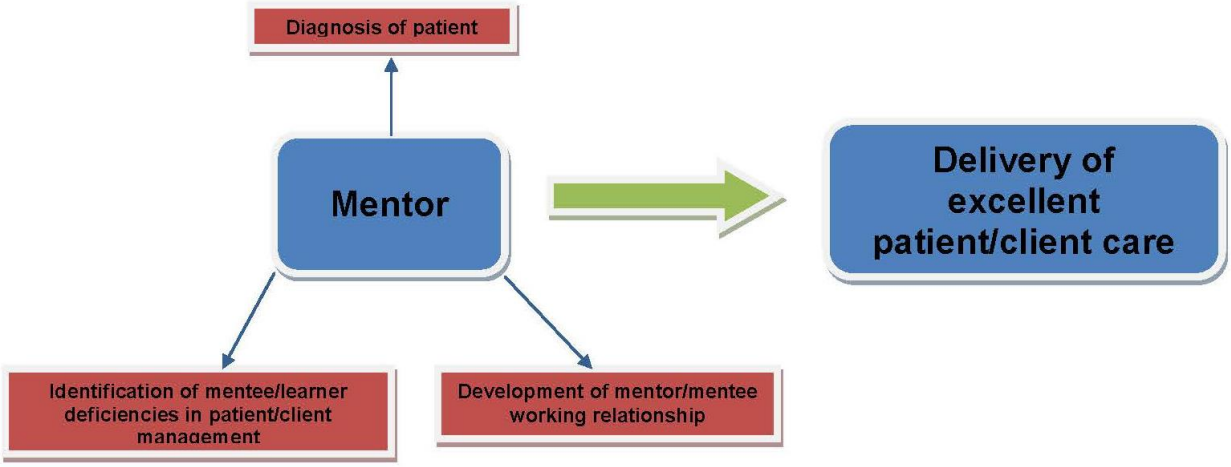
Every mentor within a program must meet residency/fellowship mentor qualifications as outlined within the ABPTRFE Quality Standards.

In addition, all mentors are encouraged to meet the following requirements:

- Be a physical therapist who can describe and demonstrate the difference between the various levels of teaching (instruction, collaborative and reflective questioning, mentoring, etc)
- Be a physical therapist who can provide a structured learning process for the mentee, tailored toward the learner
- Be a physical therapist who has demonstrated experience in academic or clinical teaching to students, peer-to-peer, and/or in in-service education
- Be a physical therapist who can manage multiple sources of information: diagnosis of the patient, educational diagnosis (or ability to identify clinical learning deficits of the resident/fellow), and development of the mentor/mentee working relationship. All of these components must be directed toward managing the patient and delivering excellent service. (Figure 2)

[††] The program must evaluate the participant's achievement of program goals and objectives, and the participant's advancement in patient/client management skills, in order to ensure that mentoring is meeting its intended purpose. The program should collect data on what it is trying to effect (eg, patient/client functional outcome measures), evaluate this data, develop a plan to improve the program, collect additional data following implementation of the improvement plan, evaluate the new data, and so on.

Figure 2. Mentor's Ability to Manage Multiple Sources of Information.



Core Competencies for Effective Mentoring

A successful clinical mentoring program requires certain knowledge, skills, and attributes. For those programs within which residents/fellows receive mentoring from only 1 mentor, each mentor must demonstrate the competencies described in the next paragraph. For programs whose residents/fellows are provided mentoring by more than 1 mentor, the combined skills and knowledge of the mentors must meet these competencies.

Mentors must demonstrate understanding of the mission, goals, and objectives of the program; incorporate the mission, goals, and objectives into all aspects of the program; and be able to evaluate[20,21] those competencies within the resident or fellow. The mentor must articulate constructive feedback[19,21,22,23,24] to the mentee that relates to the program's goals and objectives. The mentor must be able to analyze resident/fellow clinical performance in relation to program competencies[20,22] at various stages in the program, and to ask questions of the resident/fellow that expand and/or focus his or her patient/client management skills and associated clinical reasoning and decision making abilities.[6,11,23-25] Mentors must be involved in faculty development and professional growth through a lifelong learning process.[4,23,26] Mentors must be evaluated through multiple sources[‡‡] (see Section V) and be able to show change in their own performance based on this feedback/evaluation.[23,26,27] A program must provide a mechanism to protect both the mentor and the evaluator so that individuals feel free to express constructive feedback, where applicable, during an evaluation process.[4,27]

A great deal of work has been done on identifying core teaching competencies for medical residency programs. In 2011, leaders in medical education from the US and Canada developed, through a series of national and regional conferences, a competencies framework for residency teaching.[21] This framework brings the traditional core competencies of health professionals (eg, content knowledge, technical skills, and interpersonal and communication skills) together with core values and learning expectations for current and future practice (learner-centeredness, professionalism and role modeling, practice-based reflection and improvement, and systems-based thinking). The core educator competencies listed in Table 1 provide a foundational framework for consideration in mentoring within residency and fellowship education in physical therapy.

[‡‡] Effective mentor evaluation is expected but not explicitly required to include a 360-degree evaluation methods/procedures process that includes self-evaluation/reflection, top-down, bottom-up, and peer-to-peer methods. Use of technology such as Skype and videotape is acceptable in the evaluation process of faculty mentors.

Table 1. Core Competencies Required of Mentors in Physical Therapist Residency/Fellowship Education.

Competency[21]	**Description**	**Core Teaching Competencies** (This list, while not prescriptive, provides an overall framework of key teaching competencies that are part of the mentorship process and the continued professional development of mentors.)

Content Knowledge[4,11]	The mentor must be able to instruct and evaluate the resident's/fellow's skills within his or her area of practice expertise.[20,24]	• Challenge and facilitate learners in practicing high-quality, compassionate patient care within their field of expertise[21]
		  o Apply established and evolving knowledge of the residency/fellowship curriculum, including clinical knowledge needed for effective care of patients[11]
		  o Prioritize and multitask patient care issues, including recognition of critical patient care issues[6]
		  o Provide opportunities for additional skill development for learners
		• Assess learners' progress in acquiring knowledge, skills, and attributes[4,20,21]
		• Challenge learners with graduated responsibility, based on their abilities[21,23]
		• Facilitate development of learners' clinical reasoning skills, including a collaborative and reflective educational experience for the resident/fellow[6,11,23-25]

Learner Centeredness[11,23,26]	The mentor must demonstrate a commitment to the resident's/fellow's success and well-being and assist him or her in that individual's professional roles.[19,24]	• Demonstrate respect for the learner[21,23,28]
		  o Explicitly value the learner's contributions to the teaching/learning environment[1,26]
		  o Demonstrate sensitivity[29] and responsiveness to the learner as an individual, including respect for his or her privacy, autonomy, and professional boundaries[19]
		  o Demonstrate sensitivity and responsiveness to learner diversity, including his or her abilities[19,20]
		• Demonstrate adaptability by investing in each learner's growth and skill development[23,26]
		  o Elicit each learner's barriers to learning and work to overcome them[4,21]
		  o Recognize when learners are in distress, and provide appropriate resources to assist them[4,21,23]
		• Create a learning climate in which learning is facilitated[21,23]
		  o Stimulate the best in the learner, while minimizing unwanted behaviors[19]
		  o Create an open atmosphere[19,24] that facilitates dialogue about different approaches to clinical issues

Interpersonal and Communication Skills[4,20,24,26]	The mentor must be able to tailor his/her teaching and	• Communicate expectations, goals, and information in ways that stimulate and engage learners[4,21,22] • Tailor communication and educational strategies to

	communication to the preferred learning style of the resident/fellow in order to facilitate learning.	optimize learning, based on the learning context and learner's needs[21,23,24] • Determine each learner's prior knowledge and skills through direct observation or questions[21] • Provide specific, honest feedback to each learner in a caring and constructive manner[19,21,23,24] • Offer both formative and summative feedback to help the learner improve[23] • Be open to alternative approaches to problems and issues[4,21] • Engage in problem-solving that is sensitive to the social-culture context of patient care and clinical teaching[21] • Facilitate dialogue and understanding during times of professional conflict[21]
Professional Integrity[1]	The mentor must demonstrate best practices and role-model these behaviors for residents/fellows.[4,19,22,28]	• Demonstrate professionalism. Inspire learners to achieve excellence in their field of expertise by modeling professional behaviors[19,22] • Exhibit honesty,[4] accessibility,[4] approachability, motivation, accountability,[22] supportiveness, encouragement, and respect by peers in the field[1,19,23] • Demonstrate effective leadership behaviors and organizational skills in a collaborative environment • Adhere to ethical principles in teaching and practice, demonstrating compassion and integrity[21,29] • Keep up to date on educational practices and resources within field of expertise[21,26] • Remain accountable for actions, and follow through on agreed-upon activities in a timely fashion[4,21,23]
Practice-based Self-Reflection in and on action[11,17,26]	The mentor must demonstrate continuous self-reflection and lifelong learning in order to ensure his/her effectiveness as a teacher.[4,25]	• Reflect routinely on education/teaching practices, gather feedback, and develop a plan to improve skills[26] o Actively seek input and feedback from multiple sources, including learners,[19,21] about the quality and effectiveness of one's own teaching. Use feedback and self-assessment to identify teaching strengths and weaknesses[21] o Modify teaching techniques and approaches to improve current educational practice[21] • Reflect upon clinical capabilities, expertise, clinical decision making, and clinical outcomes[6,26] o Maintain expert clinical abilities/skills o Enhance clinical expertise • Question assumptions • Demonstrate reflective clinical decision making[6] • Seek professional development opportunities to improve clinical and teaching skills[26] • Develop personal educational goals based on self-assessment, and implement a plan to achieve those goals[21]
Systems-based Learning	The mentor must use all available resources in order to create an optimal teaching/learning	• Integrate and translate evidence-based practice into patient/client management, including social determinants of health • Support teamwork (within and across disciplines) and

	environment.	collaboration
		• Use resources to advocate for learners, coordinate teaching endeavors, and optimize learning environments[4,21,24,29]
		  o Seek and use resources within the institution to improve education and the teaching environment within area of expertise
		  o Seek out and work with others, including across the health professions, to employ a broad spectrum of resources
		• Obtain resources to succeed in teaching within area of expertise[21]
		• Anticipate how trends within field of expertise and health care delivery system will affect clinical practice, and plan for curricular changes to meet those needs[21]

Mentor and Mentee (Resident/Fellow) Characteristics:[11,26,29]

Again, while the following characteristics are not prescriptive, a positive, successful mentoring relationship will most likely be achieved if the mentor and mentee model them.

Personal:

- Capacity for self-reflection and self-development
- Willingness to learn/teach[4,24]
- Eagerness to pursue excellence[11]
- Trusting stance[4,28]
- Intellectual humility[30]
- Internal locus of control (the individual feels that he or she can control events that happen)

Interactions:

- Good communicator[20]
- Values partnership and teamwork
- Demonstrates initiative and motivation[4,11]
- Confidence to try new patient/client management approaches[29,30]
- Commitment to learner engagement
- Identifies and provides care with sensitivity to generational and cultural differences.
- Open to feedback[4]
- Able to handle complex patient, provider, and organizational situations
- Able to function competently in uncertain situations (ie, when limited evidence exists, a therapist must make optimally appropriate patient/client management decisions)

Mentor and Mentee Responsibilities (Appendix B):[11,24,26]

Mentor[1,19]	Mentee[29]
Commits to mentoring[4,11]	Commits to learning[11] Has the appropriate preparation[4], attention, and work habits to incorporate new skills into practice[21]
Provides resources, experts, and source materials in the field[4,26]	Takes the initiative to maximize learning opportunities[23]
Offers guidance[22] and direction regarding	Sees the relationship between personal and

professional issues[4]	professional growth
Encourages and acknowledges mentee's ideas and professional contributions[4,26]	Is willing and confident to try new things[23,25,29]
Provides constructive and useful critique of the mentee's work and strategies for change[22]	Schedules time to routinely self-reflect (reflects on past actions, experiences, and behaviors, then considers how they may apply in future contexts and uses them as a springboard to improved performance)[6,11,23,25]
Challenges the mentee to expand his/her abilities[26]	Active learner[4] Extrapolates (applies knowledge, skills, and attributes—KSAs—to novel contexts, which results in improved or new KSAs)[23] Synthesizes (integrates established KSAs with each other or with new KSAs, thereby increasing the depth and/or strength of both)[23]
Provides timely, clear, and comprehensive feedback regarding mentee's performance and development[23]	Accepts feedback and makes change as applicable[4]
Respects and fosters mentee's independence,[20,22] creativity, and uniqueness[4]	Takes leadership roles and is willing to act independently, with minimal direct supervision[23] Exercises independence (residents/fellows need opportunities to act independently, with minimal direct supervision, and to take leadership roles) [23]
Shares with mentee the success and benefits of products and activities	Has high job investment

Keys To a Successful Mentoring Relationship[1,11,19,31]

The key to successful mentoring is the relationship between mentor and mentee.[4,29] It is not simply the characteristics that each person brings to the relationship, but the behaviors and interactions that occur between the parties.[4,29]

1. Focuses on acquisition of knowledge and development of advanced clinical reasoning skills, in order to competently manage a complex clinical situation
2. Consists of 3 components: emotional and psychological support, direct assistance with career and professional development, and role modeling[4,23]
    a. Emotional safety (calm temperament, patient, nonjudgmental, easy to approach with questions or concerns)[4,28]
    b. Support (provides trust,[4,28] conveys empathy, protects the rights and safety of the resident/fellow,[4] provides encouragement, maintains a positive attitude)[20]
    c. Respect (regards the resident/fellow as a colleague and treats each fairly and appropriately; respects the resident/fellow's goals and circumstances, uniqueness, ideas, work, and contributions)[4,28]
3. Is reciprocal—both mentor and mentee derive emotional or tangible benefits[4,32]
4. Is personal, involving direct interaction,[4] and informal (emphasizing collegiality and friendliness)[23,28]

5. Emphasizes the mentor's greater experience, influence, and achievement within a particular organization

IV. Program Responsibilities

Role of the Program Director

The program director oversees the entire mentoring program to ensure its success. He or she establishes appointment and training procedures for new mentors, promotes the professional development and growth of all mentors, creates evaluation procedures for mentors and active participants of the program, and employs knowledge of curriculum design. The program director demonstrates the ability to identify, evaluate, and facilitate a resolution whenever problems occur within the mentor-mentee relationship.[4,9,23]

Sequencing and Timing of Mentoring

Residency and fellowship programs must establish a set of competencies (milestones) related to patient/client management (eg, examination, evaluation, treatment selection, treatment progression, discharge planning) that the resident/fellow is expected to achieve over the course of the program. By meeting these established competencies, a resident/fellow demonstrates the progression of his or her skill set in patient/client management. Programs should establish a mentoring schedule that allows for evaluation and support in achieving these competencies/benchmarks—thus demonstrating the progression of the resident/fellow in patient/client management.[§§4] Residents and fellows must understand, upon entering the program, the expectations placed upon them for achieving these competencies/benchmarks.

If a resident/fellow-in-training has more than 1 mentor over the course of the program, evaluation of the resident's/fellow-in-training's progression over the course of the program is the responsibility of the individual overseeing the program (eg, the program director or coordinator). Communication must occur between the resident and the program director/coordinator. Also there must be both inter- (mentor to mentor) and intra- (mentor to program director) mentor communication regarding the resident's/fellow-in-training's performance over the course of time.[33] The program director/coordinator is responsible for developing a plan of written and verbal communication regarding the mentoring process for all involved (eg, mentor, resident/fellow-in-training, and program director/coordinator).[3]

Mentor Development/Growth Through a Lifelong Learning Process

The program must develop and implement a mentor development plan.[9] At a minimum, it should:

- Help mentors develop and expand their knowledge, skills, and attributes/competencies in being a mentor[23]
    - Teach them how to structure and sequence a mentoring session (teaching-learning strategies)
    - Teach them how to assess mentee learning as it relates to program goals/objectives
    - Ensure their knowledge and understanding of the program's mission, goals, and objectives
    - Include regular mentor meetings between program and mentors (mentoring moments)
    - Teach them how to self-evaluate (critical self-evaluation skills)

[§§] If a program has a lumped in-person mentoring model (eg, part-time programs with scheduled onsite sessions), then that program must provide additional mentoring through electronic methods (eg, email, Skype, phone) during which case discussions regarding patient/client management occurs between these on-site, in-person mentoring session. This additional electronic mentoring session ensures that the program is evaluating the resident/fellow-in-training progression over time.

        - Develop themselves and others: Build their skills and capabilities to enhance their performance; seek and apply feedback; share their knowledge and contribute to others' learning
- Help mentors develop effective teaching strategies. Many resources are available. The chart below highlights several—available in print, through organizations' websites, and as continuing education options.

References	Website Resources	Continuing Education
Five-Step Microskills Model[34]	Stanford Faculty Development Center Community Resources	Faculty Development Workshop (APTA Academy of Physical Therapy Education)
Patricia Cranton's Deconstruct to Reconstruct model[35]	Accreditation Council for Graduate Medical Education	APTA Educational Leadership Institute Higher Education Leadership Fellowship
UCSF Faculty Mentoring Program	Reflective Practice (Minnesota State Colleges and Universities)	Successful Mentorship for Residency and Fellowship Education
Academic Medicine	International Society for the Scholarship of Teaching & Learning	Teaching Workshops (Sanford University School of Medicine)
Medical Teacher	American Association for Higher Education & Accreditation	Delmar Cengage Learning
Journal of Physical Therapy Education (APTA Academy of Physical Therapy Education)	American Educational Research Association	Executive Leadership in Academic Medicine (Drexel University)
Core Entrustable Professional Activities for Entering Residency	Carnegie Foundation for the Advancement of Teaching	Advanced Degrees in Education
ACGME Outcomes-based Milestones	Council for Advancement and Support of Education	Credentialed Clinical Instructor Program
Please refer to the resources located within the "Successful Mentorship for Residency and Fellowship Education" course	The Association for Medical Education in Europe	
	National Academies of Practice	

V. Use of Technology

Technology use may be appropriate for some of the mentoring[2] provided in physical therapy residency and fellowship education. A program should assess the competencies it is looking to instruct and evaluate within the program participant during that particular mentoring session in order to determine if technology use is appropriate. If, for example, the competency relates to skill acquisition occurring during the required mentoring hours when the program participant is the primary provider of care, or when the mentor is treating the patient, mentoring must occur face to face.[***2,3] However, when mentoring is focused on knowledge competencies—as performed during resident/fellow discussion of a shared patient experience, with or without the patient present—technology use may be appropriate.[2] Programs must assess the value of technology use versus face-to-face interaction.[2,3]

Programs are reminded to ensure that all faculty and program participants abide by all applicable[†††] policies and procedures related to patient confidentiality when technology is used.[36]

[***] When technology is used, there can be no immediate control or correction of participant treatment. Therefore, patient safety is at risk if virtual mentoring is occurring during these hours.

[†††] This may include federal, state, organization, or program policies and procedures.

VI. Tool and Forms

The following documents are provided as templates for use during mentoring. Programs can used them to evaluate the mentoring program, and also as guides to advance their mentoring process. Feel free to copy them for use in your residency or fellowship program.

If you are creating your own evaluation forms, we encourage you to review these forms and the literature for forms established by other health professions to evaluate mentoring.

1. **Mentor Abilities and Skills Competency:** The purpose of this form is to ensure that applicants to the program's mentoring faculty meet basic requirements.

2. **Mentoring Preparation Form (Appendix B):** A sample of forms are provided for use by the program participant to help develop his or her reflective clinical decision-making abilities.

3. **Program Director Evaluation of Mentor (Appendix C):** This form can be used in top-down evaluation of program mentors (program director/coordinator's evaluation of mentor).

   It is recommended that the program evaluates mentors after their appointment to the program and on an annual basis thereafter.

4. **Program Participant Evaluation of Mentor (Appendix D):** This form can be used in the bottom-up evaluation of program mentors. It also can be used by the program mentor to assess the participant's progression toward becoming an expert clinician**.**

   It is recommended this form be completed by the program participant monthly if the participant maintains the same mentor throughout the duration of the program, or after the third mentoring session if the participant changes mentors.

5. **Peer Evaluation of Mentor (Appendix E):** This form can be used in lateral evaluation of program mentors (program mentors evaluating each other).

6. **Universal Mentor Evaluation (Appendix F):** This form can be used by all evaluators (program director/coordinator, program participant, peer) to provide a 360-degree evaluation of program mentors.

Appendix A. Mentor Abilities and Skills Competency

American Board of Physical Therapy Residency and Fellowship Education

Mentor Abilities and Skills Competency

** The purpose of this form is to ensure that an applicant to the program's mentoring faculty is meeting basic mentor requirements when he or she is being evaluated for appointment.*

Full Name and Credentials:	**Name of Residency/Fellowship Program:**

Education:
Please include additional degrees in your attached curriculum vitae.

College or University	Start Date (MM/YYYY)	End Date (MM/YYYY)	Degree/Major

Physical Therapy License:
Please include additional licenses in your attached curriculum vitae.

State of Licensure	License Number

Residency/Fellowship Training:
Please include additional residency/fellowship training in your attached curriculum vitae.

Name of Program	Area of Practice (Specialty/Subspecialty)	Program Director	Start Date (MM/YYYY)	Completion Date (MM/YYYY)

Certifications:
List all certifications and credentials currently held (eg, board certification, clinical instructor certification, other health profession certifications, etc.). Include additional certifications and credentials within your attached curriculum vitae.

ABPTS:

Name of Specialty	**Date of Certification**	**Certification Number**	**Date of Recertification** (if applicable)

Other Certifications:

Name of Certification	**Issuing Board or Organization**	**Date of Certification**	**Certification Number**	**Renewal/ Recertification Date** (if applicable)

Professional Employment Experience:
List your experience in physical therapy practice for the last 10 years, most recent record first. Please include a brief description of your employment experience, including the types of patient diagnoses seen, within your attached curriculum vitae.

Name of Employer	**Location (City, State)**	**Job Title (clinician, manager, director)**	**Start Date (MM/YYYY)**	**End Date (MM/YYYY or Present)**

Academic/Clinical Teaching Experience:
List your teaching experience (eg, instructor, adjunct, faculty, mentor, program director, program coordinator, teaching assistant, guest lecturer, lab instructor, etc) for the last 10 years, most recent record first. Please include additional experiences in your attached curriculum vitae.

Name of Institution/Facility /Program Organization/ Conference	Job Title	Title of Session or Course	Start Date (MM/YYYY)	End Date (MM/YYYY)

Scholarly Activity/Publications:
List all research activities for the last 10 years, most recent record first. Please include additional activities in your attached curriculum vitae.

Name of Research Study/Topic	Name of Journal Research was Published	Presentation Type (platform, poster)	Presentation Date (MM/YYYY)	Presentation Location (City/State)

List your experience as a reviewer of contributed papers or manuscripts:

Name of Journal	Job Title (peer reviewer, editorial board)	Start Date (MM/YYYY)	End Date (MM/YYYY or Present)

Professional Memberships:

List your professional memberships (local, state, national, sections) for the last 10 years, most recent record first. Included additional memberships within your attached curriculum vitae.

Name of Group	Membership Number	Start Date (Year)	End Date (Year or Present)

Continuing Education:

List all continuing education courses taken in the last 5 years, most recent record first. Include additional courses within your attached curriculum vitae.

Name of Course	Location of Course (City, State)	Date Taken (MM/YYYY)

Active Service to Professional Organizations:

List any appointments to committees or other active service involvement in health organizations and associations at the local, state, and national levels. Please include a brief description of your role within or contribution to this group, as well as additional appointments and activities, within your attached curriculum vitae.

Name of Group/Organization	Position/Title (Board, council, committee, task force, workgroup member, etc.)	Date Appointed/ Start of Work (MM/YYYY)	End Date (MM/YYYY)

Honors and Awards:
List the names of any awards or honors demonstrating your achievement in, and contributions to, physical therapy practice. Include additional honors and awards achieved within your attached curriculum vitae.

Name of Award/Honor	Issuing Institution/Organization	Date Received (MM/YYYY)

Have you taken the Successful Mentorship for Residency and Fellowship Education course offered by APTA?
☐ Yes ☐ No *(If yes, please attach a copy of the course certificate to this form)*

For Program Use Only:

Upon interview, this individual is able to:

1. Describe and demonstrate the difference between the various levels of teaching (instruction, collaborative and reflective questioning, mentoring, etc).

   ☐Strong Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

2. Describe how to provide a structured learning process for the mentee that is tailored toward the learner.

   ☐Strong Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

3. Demonstrate the ability to assimilate multiple sources of information in order to manage a patient and provide excellent service.

   ☐Strong Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

Based on review of the information provided in this form, the curriculum vitae, and the interview, this individual is appropriate for appointment as a mentor to this program:

☐Strong Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

Additional Comments from Program Director (eg, recommendations for areas needing growth):

Appendix B. Mentoring Preparation Forms.

The Physical Therapy Clinical Reasoning and Reflection Tool (PT-CRT)[‡‡‡]

I. Initial Data Gathering/Interview

a. History and present function

REFLECTION POINTS:
- ➢ Assess how the patient's medical diagnosis affects your interview.
- ➢ How might your personal biases/assumptions affect your interview?
- ➢ Assessing the information you gathered, what do you see as a pattern or connection between the symptoms?
- ➢ What is the value of the data you gathered?
- ➢ What are some of the judgments you can draw from the data? Are there alternative solutions?
- ➢ What is your assessment of the patient's/caregiver's knowledge and understanding of their diagnosis and need for PT?
- ➢ Have you verified the patient's goals and what resources are available?
- ➢ Based on the information gathered, are you able to assess a need for a referral to another health care professional?

II. Generation of Initial Hypothesis

a. Body structures/functions

b. Impairments

c. Activity limitations

d. Participation restrictions

REFLECTION POINTS:
- ➢ Can you construct a hypothesis based on the information gathered?
- ➢ What is that based on (biases, experiences)?
- ➢ How did you arrive at the hypothesis? How can you explain your rationale?
- ➢ What about this patient and the information you have gathered might support your hypothesis?
- ➢ What do you anticipate could be an outcome for this patient (prognosis)?
- ➢ Based on your hypothesis, how might your strategy for the examination be influenced?
- ➢ What is your approach/planned sequence/strategy for the examination?
- ➢ How might the environmental factors affect your examination?
- ➢ How might other diagnostic information affect your examination?

[‡‡‡] PT=physical therapy, ICF=*International Classification of Functioning, Disability and Health.*

III. Examination

a. Tests and Measures

RELECTION POINTS:

- ➢ Appraising the tests and measures you selected for your examination, how and why did you select them?
- ➢ Reflecting on these tests, how might they support/negate your hypothesis?
- ➢ Can the identified tests and measures help you determine a change in status? Are they able to detect a minimum clinically important difference?
- ➢ How did you organize the examination? What might you do differently?
- ➢ Describe considerations for the psychometric properties of tests and measures used.
- ➢ Discuss other systems not tested that may be affecting the patient's problem.
- ➢ Compare your examination findings for this patient with another patient with a similar medical diagnosis.
- ➢ How does your selection of tests and measures relate to the patient's goals?

IV. Evaluation

HEALTH CONDITION

BODY STRUCTURES/FUNCTION (IMPAIRMENTS)

ACTIVITY (TASKS)	
Abilities	Limitations

PARTICIPATION	
Abilities	Restrictions

ENVIRONMENTAL			
Internal		External	
+	–	+	–

(Continued)

IV. Evaluation (continued)

a. Diagnosis

b. Prognosis

REFLECTION POINTS:
- ➢ How did you determine your diagnosis? What about this patient suggested your diagnosis?
- ➢ How did your examination findings support or negate your initial hypothesis?
- ➢ What is your appraisal of the most important issues to work on?
- ➢ How do these relate to the patient's goals and identified issues?
- ➢ What factors might support or interfere with the patient's prognosis?
- ➢ How might other factors such as bodily functions and environmental and societal factors affect the patient?
- ➢ What is your rationale for the prognosis, and what are the positive and negative prognostic indicators?
- ➢ How will you go about developing a therapeutic relationship?
- ➢ How might any cultural factors influence your care of the patient?
- ➢ What are your considerations for behavior, motivation, and readiness?
- ➢ How can you determine capacity for progress toward goals?

V. Plan of Care

a. Identify short-term and long-term goals

b. Identify outcome measures

c. PT prescription (frequency/intensity of service, include key elements)

REFLECTION POINTS:
- ➢ How have you incorporated the patient's and family's goals?
- ➢ How do the goals reflect your examination and evaluation (ICF framework)?
- ➢ How did you determine the PT prescription or plan of care (frequency, intensity, anticipated length of service)?
- ➢ How do key elements of the PT plan of care relate back to primary diagnosis?
- ➢ How do the patient's personal and environmental factors affect the PT plan of care?

VI. Interventions

a. Describe how you are using evidence to guide your practice

b. Identify overall approach/strategy

c. Describe and prioritize specific procedural interventions

d. Describe your plan for progression

REFLECTION POINTS:

- ➢ Discuss your overall PT approach or strategies (eg, motor learning, strengthening).
- ➢ How will you modify principles for this patient?
- ➢ Are there specific aspects about this particular patient to keep in mind?
- ➢ How does your approach relate to theory and current evidence?
- ➢ As you designed your intervention plan, how did you select specific strategies?
- ➢ What is your rationale for those intervention strategies?
- ➢ How do the interventions relate to the primary problem areas identified using the ICF?
- ➢ How might you need to modify your interventions for this particular patient and caregiver? What are your criteria for doing so?
- ➢ What are the coordination of care aspects?
- ➢ What are the communication needs with other team members?
- ➢ What are the documentation aspects?
- ➢ How will you ensure safety?
- ➢ Patient/caregiver education:
- ➢ What are your overall strategies for teaching?
- ➢ Describe learning styles/barriers and any possible accommodations for the patient and caregiver.
- ➢ How can you ensure understanding and buy-in?
- ➢ What communication strategies (verbal and nonverbal) will be most successful?

VII. Reexamination

a. When and how often

REFLECTION POINTS:

- ➢ Evaluate the effectiveness of your interventions. Do you need to modify anything?
- ➢ What have you learned about the patient/caregiver that you did not know before?
- ➢ Using the ICF, how does this patient's progress toward goals compare with that of other patients with a similar diagnosis?
- ➢ Is there anything that you overlooked, misinterpreted, overvalued, or undervalued, and what might you do differently? Will this address any potential errors you have made?
- ➢ How has your interaction with the patient/caregiver changed?
- ➢ How has your therapeutic relationship changed?
- ➢ How might any new factors affect the patient outcome?
- ➢ How do the characteristics of the patient's progress affect your goals, prognosis, and anticipated outcome?
- ➢ How can you determine the patient's views (satisfaction/frustration) about his or her progress toward goals? How might that affect your plan of care?
- ➢ How has PT affected the patient's life?

VIII. Outcomes

a. Discharge plan (include follow-up, equipment, school/work/community re-entry, etc)

REFLECTION POINTS:

- ➢ Was PT effective, and what outcome measures did you use to assess the outcome? Was there a minimum clinically important difference?
- ➢ Why or why not?
- ➢ What criteria did you or will you use to determine whether the patient has met his or her goals?
- ➢ How do you determine the patient is ready to return to home/community/work/school/sports?
- ➢ What barriers (physical, personal, environmental), if any, are there to discharge?
- ➢ What are the anticipated life-span needs, and what are they based on?
- ➢ What might the role of PT be in the future?
- ➢ What are the patient's/caregiver's views of future PT needs?
- ➢ How can you and the patient/caregiver partner together for a lifetime plan for wellness?

IX. Mentor Feedback:

Strengths:

Opportunities for development:

UPMC Centers for Rehab Services
Physical Therapy Residency Program
Mentoring Prep Form

Resident's Name:		Date:
Patient's Initials	Age:	Start of Care:
Primary Diagnosis:		Date of Surgery:
Differential Diagnoses:		

Functional Limitations:

Key Impairments:

Treatment Approach:

Expected Outcome:

Response to Current Treatment:

Resident's Discussion Points:
1.

2.

Alternate Case to Review:

Mentor Feedback
The resident demonstrated appropriate:
□ Introduction of Mentor and Session
□ Presentation of Clinical Case
□ Professional Behaviors
Mentor Comments:

Take Home Points of Session:
1.
2.
3.

☐ **Follow-Up Required**
Due Date:
Mentor:

Primary Provider of Treatment: □ Resident □ Mentor **Total Time:**_____

_____Date:_____
Mentor's signature

Patient Presentation Form

(for patients to be seen with mentor)

Date: _____ Patient's Name _____ Age _____

Occupation/Recreational Status-Goals

_____

_____

Current Status:

Condition Severity: _____

Condition Irritability: _____

Condition Nature: _____

Condition Stage/Stability: _____

Current Outcome Score: _____

Subjective Status:

_____

_____

Current Asterisk Sign

_____

_____

Objective Status: (posture/biomechanics, mobility; stability/strength, swelling/effusion, etc)

_____

_____

What intervention have you performed to date?

What is the current home program?

What has been successful? (Rationalize why you think this patient has progressed or not)

What is your progression plan?

What additional resources/referrals/consultations do you need?

What do you feel you need guidance/assistance with?

Appendix C. Program Director Evaluation of Mentor.

Program Director's Evaluation of Mentor

Mentor_____ **Score _____/ _____ points = _____%**
Evaluator_____ Date_____

Rating scale Key

5 excellent: mastery demonstrated
4 very good: exceeds minimal expectations
3 good: meets minimal expectations
2 fair: needs improvement to more consistently meeting minimal expectations
1 poor: does not meet minimal expectations
n/o criteria not a focus of observed mentoring session
****

Mentors must attain an 80% score, or a remediation plan will be put in place. A score of "1" will require remediation. Any individual criteria with a score of "3" or "2" also may require remediation. Continuation as a mentor will be contingent upon successful completion of an agreed-upon remediation plan. For items marked "Not Observed," please indicate at the bottom of the form what other methods were employed by the program director to evaluate this information. If a score of 3 or below is noted, a comment is required.

ESTABLISHMENT OF MENTORING RELATIONSHIP

1. An effective mentoring relationship is established. ☐ n/o

☐ 5 "Always": Mentor demonstrates excellence and is a role model of behaviors described. Mentor always establishes a supportive, honest, attentive, "safe," collaborative relationship that facilitates learning for both the mentor and mentee. Mentor always is learner-centered, accurately and effectively tailoring mentoring to meet the learner's needs. Independent thought and creativity are encouraged.

☐ 4 "Often": Mentor consistently demonstrates behaviors that contribute to establishing a supportive, honest, attentive, "safe," collaborative relationship that facilitates learning for both mentor and mentee. Mentor is consistently learner-centered, accurately and effectively tailoring mentoring to meet the learner's needs. Independent thought and creativity are encouraged

☐ 3 "Sometimes": Mentor inconsistently demonstrates behaviors that contribute to establishing a supportive, honest, attentive, "safe," collaborative relationship that facilitates learning for both mentor and mentee. At times he or she may be overly directive, not learner-centered. Independent thought or creativity may not always be encouraged.

☐ 2 "Seldom": Mentor rarely or never demonstrates behaviors that contribute to establishing an effective mentoring relationship. Mentor is primarily teacher-centered and may demonstrate an imbalance in time spent teaching/directing the resident/fellow, versus mentoring focused on encouraging independent thought and creativity.

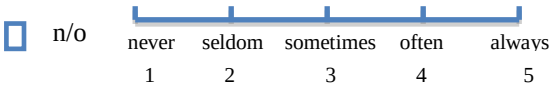
☐ 1 "Never": Mentor does not demonstrate behaviors that contribute to establishing an effective mentoring relationship. Mentor is primarily teacher-centered, and may

demonstrate an imbalance in time spent teaching/directing the resident/fellow, versus mentoring focused on encouraging independent thought and creativity.

Comments:

ESTABLISHMENT OF STRUCTURED, PRE-PLANNED, GOAL-ORIENTED MENTORING

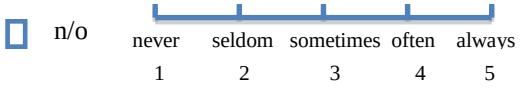
2. Mentoring sessions are pre-planned and goal-oriented, and designed to meet pre-specified learning goals/objectives that are appropriate to the mentee's level of development.



- ☐ 5 "Always": Mentor demonstrates excellence and is a role model of behaviors described. Pre-planning always is effective in establishing an appropriate focus with associated goals for the session. Goals are based on mentor's and mentee's previous assessments of performance and learning needs. Goals are set collaboratively, ahead of time. Criteria are agreed upon to determine how well goals are being achieved.
- ☐ 4 "Often": Pre-planning is effective in establishing an appropriate focus with associated goals for the session. Goals are based on mentor's and mentee's previous assessments of performance and learning needs. Goals are set collaboratively, ahead of time. Criteria are agreed upon to determine how well goals are being achieved.
- ☐ 3 "Sometimes": Pre-planning is effective in establishing appropriate goals. Goals are usually but not always set ahead of time. Goals and/or achievement criteria setting may not always be the result of collaborative discussion. Criteria are not always effectively developed to determine the level of goal achievement.
- ☐ 2 "Seldom"": Pre-planning is seldom organized or focused. Sessions are not consistently goal-oriented. Goal setting is rarely collaborative. Criteria are rarely agreed upon to determine the level of goal achievement.
- ☐ 1 "Never": Pre-planning is unorganized or unfocused, or does not occur at all. Sessions are not explicitly or implicitly goal-oriented. Goal setting is not collaborative. Criteria are not agreed upon to determine the level of goal achievement.

Comments:

3. Mentoring sessions include a debriefing discussion that encourages the resident/fellow to critically reflect (accurately identify strengths and deficits, question assumptions, identify blind spots or knowledge gaps) on level of goal achievement , and to identify and evaluate other relevant performance and/or clinical reasoning-oriented issues. The mentor strikes an appropriate balance between teaching and mentoring, based on the student's level of performance.



- ☐ 5 "Always": Mentor demonstrates excellence and is a role model of the behaviors described. Discussion always is focused and organized. Accurate feedback is given on the depth,

breadth, and accuracy of the mentee's self-assessment. Other issues (beyond set goals) that arise during the session are appropriately acknowledged, and feedback is given. Mentee is always facilitated in critical self-reflection, and discussion includes explicit links to ongoing development and adjustment of goals. Feedback is timely, constructive, detailed/explicit, formative and/or summative (as appropriate), and is delivered in an honest, supportive manner.

☐ 4 "Often": Discussion is consistently focused and organized. Accurate feedback is given on depth, breadth, and accuracy of mentee's self-assessment. Other issues (beyond set goals) that arise during the session are appropriately acknowledged ,and feedback is given. Mentee is facilitated in critical self-reflection, and discussion includes explicit links to ongoing development and adjustment of goals. Feedback is timely, constructive, detailed/explicit, formative and/or summative (as appropriate), and is delivered in an honest, supportive manner.

☐ 3 "Sometimes": Discussion is sometimes unfocused and/or unorganized. Feedback is usually given accurately and is focused on the mentee's self-assessment. Mentoring effectively facilitates critical self-reflection; mentor may not always recognize or effectively address assumptions or blind spots. Occasionally, links to mentee's overall development and further goals may be lacking. Some feedback may be offered too early or too late for optimal learning. Feedback may occasionally lack in specificity or clarity.

☐ 2 "Seldom": Debriefing discussion is seldom focused and/or organized. Evaluation of performance may be unduly mentor-driven, lacking in a focus on resident's/fellow's critical self-assessment. Explicit links are lacking to level of achievement of pre-set goals and/or development of future ones. Feedback is nonspecific, lacks clarity, and may be delivered in ways that are not constructive or are not supportive.

☐ 1 "Never": Debriefing discussion is consistently unfocused and/or disorganized. Evaluation of performance is inadequate or unclear, and is overly focused on the mentor's evaluation. Evaluation lacks appropriate incorporation of resident's/fellow's critical self-assessment. Explicit links are lacking to level of achievement of pre-set goals and/or development of future ones. Feedback is nonspecific, lacks clarity, and may be delivered in ways that are not constructive or are not supportive.

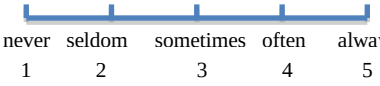
Comments:

FOCUS OF MENTORING SESSIONS

Facilitation of metacognition/reflection-in-action

4. Mentoring during patient encounters is appropriately learner-centered and is focused on facilitating development of the mentee's metacognition and reflection-in-action ("asking" more than "telling"). Teaching (guiding, demonstrating) is employed appropriately. Mentor is focused on effectively assessing the extent to which mentee can "think on his/her feet." Mentees are free to struggle with uncertainty and are encouraged to engage in trial and error.

☐ n/o



☐ 5 "Always": Mentor demonstrates excellence and is a role model of behaviors described. Mentor is skilled in making an accurate "educational diagnosis" of learner's needs in the

moment, and always appropriately focuses on facilitating mentee's progress toward goals through questioning that reveals metacognition (thinking about thinking) and reflection-in-action to stimulate learning through trial and error, as the situation evolves.

☐ 4 "Often": Mentor is skilled in making an accurate "educational diagnosis" of learner's needs in the moment, and appropriately focuses on facilitating mentee's progress toward goals through questioning that reveals metacognition (thinking about thinking) and reflection-in-action to stimulate learning through trial and error, as the situation evolves.

☐ 3 "Sometimes": Mentor attempts to make an "educational diagnosis" and is usually but is not always accurate in assessing the learner's needs as the session evolves. Mentor usually but not always succeeds in facilitating mentee's clinical reasoning and critical reflection through questioning. Mentor occasionally jumps in/inappropriately takes over and/or is directive, rather than letting mentee engage in trial and error.

☐ 2 "Seldom": Mentor is seldom successful in accurately determining the mentee's learning deficits and needs as the session evolves. Mentor rarely focuses session on revealing/developing mentee's metacognitive abilities. Mentor seldom encourages trial and error, and may take unwarranted control of the session.

☐ 1 "Never": Mentor does not attempt to determine, or is unsuccessful in accurately determining, the mentee's learning deficits and needs as the session evolves. Mentor does not focus session on revealing/developing mentee's metacognitive abilities. Mentor does not encourage trial and error, and often takes unwarranted control of the session.

Comments:

Facilitation of skills development

5. Focus/scope of mentoring is appropriately comprehensive and addresses learning goals related to skills development, as specified by program's mission, goals, and objectives.

☐ n/o

never (1) seldom (2) sometimes (3) often (4) always (5)

☐ 5 "Always": Mentor demonstrates excellence and is a role model of behaviors described. Focus of mentoring always relates to advancing skill development, in all appropriate aspects of skills performance.

☐ 4 "Often": Focus of mentoring consistently relates to advancing skill development, in all appropriate aspects of skills performance.

☐ 3 "Sometimes": Focus of mentoring does not always appropriately relate to advanced skill development. Mentor may omit mentoring for some aspects of skills performance, and may sometimes stray without adequate rationale from focus on learning goals.

☐ 2 "Seldom": Focus of mentoring routinely is not related to advanced skill development. Mentoring seldom focuses adequately on all aspects of skills performance, or on learning goals.

☐ 1 "Never": Mentoring is not related to advanced skill development or all aspects of skills performance. Mentoring routinely fails to focus on learning goals.

Comments:

Facilitation of communication skills

☐ n/o

never seldom sometimes often always
1 2 3 4 5

6. Focus/scope of mentoring includes learner-centered, pre-specified goals related to developing proficiency in communication (with patients/clients, peers, other health care team members).

☐ 5 "Always": Mentor demonstrates excellence and is a role model of behaviors described. Focus of mentoring includes attention to developing proficiency in communication in all relevant contexts.

☐ 4 "Often": Mentoring consistently devotes appropriate attention to developing proficiency in communication (in relevant contexts).

☐ 3 "Sometimes": Mentoring inconsistently devotes appropriate attention to developing proficiency in communication (in relevant contexts).

☐ 2 "Seldom": Mentoring seldom devotes appropriate attention to developing proficiency in communication (in relevant contexts).

☐ 1 "Never": Mentoring routinely fails to devote appropriate attention to developing proficiency in communication (in relevant contexts).

Comments:

Facilitation of clinical reasoning development

☐ n/o

never seldom sometimes often always
1 2 3 4 5

7. Focus/scope of mentoring is appropriately comprehensive and addresses learning goals related to the development of advanced clinical resoning.[1]

☐ 5 "Always": Mentor demonstrates excellence and is a role model of behaviors described. When appropriate, mentoring always relates to development of advanced clinical reasoning. Mentor incorporates relevant clinical reasoning strategies,[1] as dictated by the nature of the patient/client encounter.

☐ 4 "Often": Mentoring consistently relates to development of advanced clinical reasoning. Mentor incorporates relevant clinical reasoning strategies,[1] as dictated by the nature of the patient/client encounter.

☐ 3 "Sometimes": Mentoring does not always relate to advanced clinical reasoning. It may occasionally stray, without sufficient rationale, from focusing on pre-determined learning goals. Mentoring may be inconsistent in addressing all clinical reasoning strategies that are relevant to the patient/client encounter.

☐ 2 "Seldom": Mentoring infrequently relates to advanced clinical reasoning or learning goals. There is little discussion of relevant clinical reasoning strategies.

☐ 1 "Never": Mentoring is not related to advanced clinical reasoning, learning goals, or the most relevant clinical reasoning strategies.

Clinical Reasoning Strategies Model[1]:

- Diagnostic reasoning
- Procedural reasoning
- Predictive reasoning
- Narrative reasoning
- Interactive reasoning
- Ethical reasoning
- Collaborative reasoning
- Teaching as reasoning

[1]Edwards I, Jones M, Carr J, Braunack-Mayer A, Jensen G. Clinical Reasoning Strategies in Physical Therapy. *Phys Ther.* 2004;84:312-335.

Comments:

Ratings for the following 3 criteria are achieved indirectly through interview(s) with resident(s).

Facilitation of consultation skills

8. Focus/scope of mentoring includes learner-centered, pre-specified goals related to development of consultation skills (with patients/clients, peers, other health care team members). ☐ n/o

never 1 | seldom 2 | sometimes 3 | often 4 | always 5

☐ 5 "Always": Mentor demonstrates excellence and is a role model of behaviors described. In all relevant contexts, mentoring always includes appropriate attention to developing consultation skills.

☐ 4 "Often": In all relevant contexts, mentoring consistently includes appropriate attention to developing consultation skills.

☐ 3 "Sometimes": In all relevant contexts, mentoring inconsistently includes appropriate attention to developing consultation skills.

☐ 2 "Seldom": In all relevant contexts, mentoring infrequently includes appropriate attention to developing consultation skills.

☐ 1 "Never": In all relevant contexts, mentoring routinely fails to pay appropriate attention to developing consultation skills.

Comments:

Facilitation of appropriate integration of research evidence into practice

9. Focus/scope of mentoring appropriately focuses on evaluating ☐ n/o

never 1 | seldom 2 | sometimes 3 | often 4 | always 5

and integrating current research evidence into practice.

☐ 5 "Always": Mentor demonstrates excellence and is a role model of behaviors described. When appropriate, mentor always incorporates the appropriate evaluation, determination, and application of current research evidence into patient/client examination, management, prognosis, and outcomes assessment.

☐ 4 "Often": When appropriate, mentor consistently incorporates the appropriate evaluation, determination, and application of current research evidence into patient/client examination, management, prognosis, and outcomes assessment.

☐ 3 "Sometimes": Even when appropriate, mentor does not always incorporate the appropriate evaluation, determination, and application of current research evidence into patient/client examination, management, prognosis, and outcomes assessment.

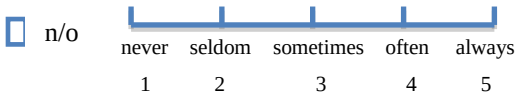
☐ 2 "Seldom": Even when appropriate, mentor infrequently incorporates the appropriate evaluation, determination, and application of current research evidence into patient/client examination, management, prognosis, and outcomes assessment.

☐ 1 "Never": Even when appropriate, mentor fails to incorporate the appropriate evaluation, determination, and application of current research evidence into patient/client examination, management, prognosis, and outcomes assessment.

Comments:

Facilitation of professionalism, leadership, collaboration, and self-directed learning skills

10. Focus/scope of mentoring includes learner-centered, pre-specified goals related to development of professionalism, leadership, collaboration, and self-directed learning skills consistent with program's mission, goals and objectives.



☐ 5 "Always": Mentor demonstrates excellence and is a role model of behaviors described. Mentoring always is appropriately attentive to the development of professionalism, leadership, collaboration, and/or self-directed learning skills.

☐ 4 "Often": Mentoring consistently is appropriately attentive to the development of professionalism, leadership, collaboration, and/or self-directed learning skills.

☐ 3 "Sometimes": Mentoring inconsistently is appropriately attentive to the development of professionalism, leadership, collaboration, and/or self-directed learning skills.

☐ 2 "Seldom": Mentoring infrequently is appropriately attentive to the development of professionalism, leadership, collaboration, and/or self-directed learning skills.

☐ 1 "Never": Mentoring is not appropriately attentive to the development of professionalism, leadership, collaboration, and/or self-directed learning skills.

Comments:

For those items marked “Not Observed,” please indicate what other methods were used by the program director to evaluate this information. Provide documentation as appropriate.

“n/o” Criteria #	Methods utilized to evaluate (other than direct observation)	Plan and timeline for future evaluation (if evaluation not completed)

Remediation Plan Documentation:

Appendix D. Program Participant Evaluation of Mentor.

Mentor Evaluation by Program Participant

Mentor_____ Date_____
Evaluator_____

Rating Scale Key

SA Strongly Agree
A Agree
D Disagree
SD Strongly Disagree
N/O Criteria not a focus of observed mentoring session
****

Mentors must attain an "Agree" score, or a remediation plan will be put in place. In addition, for any criteria with a score of "Agree," the program may establish a faculty development plan to further enhance the mentor's skills and effectiveness. Continuation as a mentor will be contingent upon successful completion of an agreed-upon remediation plan. If the score is "disagree" or "strongly disagree," a comment is required.

ESTABLISHMENT OF MENTORING ENVIRONMENT

1. The mentor created an environment of emotional safety (eg, provided specific, honest feedback in a caring and constructive manner, and demonstrated sensitivity to diversity, including my ability to learn).

   ☐ SA ☐ A ☐ D ☐ SD ☐ N/O

   Comments:

2. The mentor created an environment of support and encouragement (eg, demonstrated commitment to my success and well-being while assisting me in the progression of my professional roles).

   ☐ SA ☐ A ☐ D ☐ SD ☐ N/O

   Comments:

3. The mentor created an environment of learner-centeredness (eg, demonstrated adaptability by investing in my growth and skill development, and created a learning climate that facilitated learning).

   ☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

4. The mentor created an environment of informality that promoted collegiality and friendliness (eg, fostered an open atmosphere that facilitated dialogue about different approaches to clinical issues).

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

5. The mentor created an environment of responsiveness (eg, provided timely, clear, and comprehensive feedback on my performance and development; was regularly accessible; was accountable for his or her actions, and followed through in a timely fashion on agreed-upon activities).

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

6. The mentor created an environment of respect (eg, explicitly valued my contribution to the teaching/learning environment; demonstrated sensitivity to me as an individual, and respected my privacy, autonomy, and professional boundaries).

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

EFFECTIVENESS OF MENTOR

1. The mentor allowed me to exercise independence (eg, respected and fostered my creativity and uniqueness, and entrusted me with graduated responsibility based on my abilities).

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

2. The mentor facilitated my reflection on my performance (eg, facilitated development of my clinical reasoning skills by providing me with a collaborative and reflective educational experience; encouraged me to assess my clinical capabilities, knowledge, clinical decision-making abilities, and clinical outcomes; and promoted the advancement of my clinical expertise).

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

3. The mentor helped me develop the ability to extrapolate my knowledge, skills and abilities (KSAs) to new contexts (eg, to apply KSAs to novel contexts, and thus improve established KSAs and develop new ones), and challenged me to practice high-quality, compassionate patient care.

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

MENTOR CHARACTERISTICS AND BEHAVIORS

1. The mentor offered guidance and direction regarding professional issues.

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

2. The mentor provided constructive and useful critiques of my work and offered strategies for change.

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

3. The mentor provided timely, clear, and comprehensive feedback on my performance and development.

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

4. The mentor shared with me the success and benefits of the work achieved.

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

5. The mentor modeled professional behaviors.

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

ADDITIONAL FINDINGS

1. The most valuable aspects of the mentoring sessions were:

2. One thing I would change about the mentoring sessions was:

3. Additional comments:

Appendix E. Peer Evaluation of Mentor.

Mentor Evaluation by Peer

Mentor_____Date_____
Evaluator_____

Rating scale Key

SA Strongly Agree
A Agree
D Disagree
SD Strongly Disagree
N/O Criteria not a focus of observed mentoring session
****

Mentors must attain an "Agree" score, or a remediation plan will be put in place. In addition, for any criteria with a score of "Agree," the program may establish a faculty development plan to further enhance the mentor's skills and effectiveness. Continuation as a mentor will be contingent upon successful completion of an agreed-upon remediation plan. If the score is "disagree" or "strongly disagree," a comment is required.

1. The mentor demonstrates professionalism through the contributions he/she makes to the program, community, and profession.

   ☐ SA ☐ A ☐ D ☐ SD ☐ N/O

   Identify specific contributions for which you feel this faculty member should be recognized:

2. The mentor demonstrates effective teaching, mentoring, and curriculum-development skills.

   ☐ SA ☐ A ☐ D ☐ SD ☐ N/O

   Identify areas of strength in his/her teaching, mentoring, and/or other curriculum activities.

3. The mentor seeks professional development opportunities to improve his/her clinical and teaching skills.

   ☐ SA ☐ A ☐ D ☐ SD ☐ N/O

   Identify areas for continued professional development/growth:

4. The mentor supports teamwork (within and across disciplines) and collaboration of care.

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

5. The mentor skillfully tailors his/her teaching and communication (verbal and written) to the preferred learning style of the program participant, facilitating learning.

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

6. The mentor models self-reflection in and on action (eg, seeks input and feedback about the quality and effectiveness of his/her teaching from multiple sources, including the learner; shares this self-knowledge; and thus contributes additionally to the learning of others).

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

7. The mentor displays accountability for his/her actions, and follows through activities in a timely fashion (eg, takes ownership for commitments, teaching/mentoring skills, and how these skills impact the learning environment of the resident/fellow).

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

8. The mentor is committed to providing service to team members, residents/fellows and other providers/customers.

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

9. The mentor demonstrates innovation in teaching and practice (eg, contributes to the ongoing evolution of the curriculum through innovative teaching practices and/or his/her recommendations for change).

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

Appendix F: Universal Mentor Evaluation.

Universal Mentor Evaluation

Mentor_____Date_____
Evaluator_____

Rating scale Key

SA Strongly Agree
A Agree
D Disagree
SD Strongly Disagree
N/O Criteria not a focus of observed mentoring session
****

Mentors must attain an "Agree" score, or a remediation plan will be put in place. In addition, for any criteria with a score of "Agree," the program may establish a faculty development plan to further enhance the mentor's skills and effectiveness. Continuation as a mentor will be contingent upon successful completion of an agreed-upon remediation plan. If the score is "disagree" or "strongly disagree," a comment is required.

MENTOR COMPETENCIES

1. Content knowledge: The mentor is able to instruct and evaluate the resident/fellow's skills within his/her area of practice expertise.

Sample Behaviors:

- Challenges and facilitates learners in practicing high-quality, compassionate patient care within his/her field of expertise
    - Applies established and evolving knowledge of the residency/fellowship curriculum, including the clinical knowledge necessary to effectively care for patients
    - Prioritizes and multitasks patient-care issues, including the recognition of critical matters
    - Provides learners with opportunities for additional skill development
- Assesses learners' progress in acquiring knowledge, skills, and attributes
- Entrusts learners with graduated responsibility based on their abilities
- Facilitates development of learners' clinical reasoning skills; includes providing the resident/fellow with a collaborative and reflective educational experience for the resident/fellow

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

2. Learner-centeredness: The mentor demonstrates a commitment to the program participant's success and well-being, and facilitates the individual's progress in his/her professional roles.

Sample behaviors:

- Demonstrates respect for the learner
    - Explicitly values the learner's contributions to the teaching/learning environment
    - Demonstrates sensitivity and responsiveness to the learner as an individual; respects learner's privacy, autonomy, and professional boundaries
    - Demonstrates sensitivity and responsiveness to learner diversity, including specific learner abilities
- Demonstrates adaptability by investing in learner's growth and skill development
    - Determines each learner's barriers to learning and works to overcome them
    - Recognizes learners in distress and provides appropriate resources to assist them
- Creates a climate in which learning is facilitated
    - Stimulates the best in the learner, while minimizing unwanted behaviors
    - Creates an open atmosphere that facilitates dialogue about different approaches to clinical issues

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

3. Interpersonal and communication Skills: The mentor tailors his/her teaching and communication to the preferred learning style of the resident/fellow, facilitating learning.

Sample behaviors:

- Communicates expectations, goals, and information in ways that stimulate and engage learners
- Tailors communication and educational strategies to optimize learning, based on the context and the learner's needs
- Determines each learner's current knowledge and skills through direct observation or questions
- Provides specific, honest feedback to each learner in a caring and constructive manner
- Offers both formative and summative feedback to help the learner improve
- Is open to alternative approaches to problems and issues
- Engages in problem-solving that is sensitive to the social-culture context of patient care and clinical teaching
- Facilitates dialogue and understanding during times of professional conflict

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

4. Professional integrity: The mentor demonstrates best practices and role-models these behaviors for residents/fellows.

Sample behaviors:

- Demonstrates professionalism. Inspires learners to excellence in their field of expertise by modeling professional behaviors
- Exhibits honesty, accessibility, approachability, motivation, accountability, supportiveness, and encouragement, and is respected by peers in field
- Demonstrates effective leadership behaviors and organizational skills, in a collaborative environment
- Adheres to ethical principles in teaching and practice, demonstrating compassion and integrity
- Keeps up to date on educational practices and resources within field of expertise
- Is accountable for his/her actions, and follows through on agreed-upon activities in a timely fashion

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

5. Practice-based self-reflection in and on action: The mentor is committed to continuous self-reflection and lifelong learning, seeking to improve his/her effectiveness as a teacher.

Sample behaviors:

- Regularly reflects upon his/her education/teaching practices, gathers feedback, and develops a plan to improve his/her skills
    - Actively seeks input and feedback from multiple sources, including the learners , about the quality and effectiveness of his/her teaching
    - Employs feedback and self-assessment to identify his/her teaching strengths and weaknesses
    - Modifies his/her teaching techniques and approaches to improve educational practice
- Reflects upon his/her clinical capabilities, expertise, clinical decision-making abilities, and clinical outcomes
    - Maintains expert clinical abilities/skills
    - Advancing his/her clinical expertise
- Questions his/her assumptions
- Demonstrates reflective clinical decision-making
- Seeks professional development opportunities to improve clinical and teaching skills
- Develops personal educational goals based on self-assessment, and implements a plan to achieve those goals

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

6. System-based learning: The mentor takes advantage of available resources to provide an optimal teaching/learning environment.

Sample behaviors:

- Integrates and translates evidence-based practice (including social determinants of health) into patient/client management
- Supports teamwork (within and across disciplines) and collaboration
- Uses resources to advocate for learners, coordinate teaching endeavors, and optimize learning environments
    - Seeks and uses resources within the institution to improve education and the teaching environment within the area of expertise
    - Seeks and works with others, within physical therapy and across the health professions, to tap a broad spectrum of resources
- Obtains resources within area of expertise
- Anticipates how trends within his/her field of expertise and the health care delivery system will affect clinical practice, and plans curricular changes to meet those needs

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

MENTOR CHARACTERISTICS

The mentor displays the following personal characteristics and interactions while teaching:

Personal:

- Capacity for self-reflection and self-development
- Willingness to learn
- Eagerness to pursue excellence
- Trusting nature
- Intellectual humility
- Internal locus of control as defined in the Mentoring Resource Manual

Interactions:

- Good communicator
- Values partnership and teamwork
- Demonstrates initiative and motivation
- Confident to try new patient/client management approaches
- Committed to learner engagement
- Identifies and provide scare with sensitivity to generational and cultural differences
- Open to feedback
- Can handle complex patient, provider, and organizational situations
- Functions competently in uncertain situations (such as when limited evidence exists and he/she must make optimal patient/client-management decisions)

MENTOR RESPONSIBILITES

The mentor meets the following responsibilities:

Responsibilities:

- Commitment to mentoring
- Provides resources, experts, and source materials in the field
- Offers guidance and direction regarding professional issues
- Encourages and acknowledges the program participant's ideas and professional contributions
- Provides constructive and useful critiques of the program participant's work and offers strategies for change
- Challenges the program participant to expand his/her abilities
- Provides timely, clear, and comprehensive feedback regarding the program participant's performance and development
- Respects and fosters the program participant's independence, creatively, and uniqueness
- Shares with the program participant success and benefits of the work achieved

☐ SA ☐ A ☐ D ☐ SD ☐ N/O

Comments:

KEYS TO A SUCCESSFUL MENTORING RELATIONSHIP

1. The mentor creates an environment that focuses on the program participant's achievement or acquisition of knowledge.

   ☐ SA ☐ A ☐ D ☐ SD ☐ N/O

   Comments:

2. The mentor creates an environment of emotional safety, support, and respect.

   ☐ SA ☐ A ☐ D ☐ SD ☐ N/O

   Comments:

3. The mentor creates an environment that is reciprocal—both the program participant and the mentor derive emotional and tangible benefits.

   ☐ SA ☐ A ☐ D ☐ SD ☐ N/O

   Comments:

4. The mentor creates an environment that is personal in nature, with direct interaction that is informal (collegial and friendly).

   ☐ SA ☐ A ☐ D ☐ SD ☐ N/O

   Comments:

5. The mentor creates an environment that emphasizes the mentor's greater experience, influence, and achievement within a particular organization.

   ☐ SA ☐ A ☐ D ☐ SD ☐ N/O

   Comments:

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