

Integrated clinical practice core competencies for doctor of chiropractic programs: a modified Delphi project

The chiropractic profession is rapidly growing in integrated settings and there is increasing opportunity for the Doctor of Chiropractic to collaborate as a member of interdisciplinary teams.¹ Interested chiropractors can pursue integrated clinical careers through the Veterans Health Administration (VHA) or Department of Defense (DoD), or opportunities in the private sector in hospital-based care and Federally Qualified Health Centers (FQHC).²⁻⁷ Doctor of Chiropractic program (DCP) students have the possibility of integrated clinical training opportunities at VHA, DoD, FQHC, and private hospital settings⁸, and early career chiropractors may pursue chiropractic residency programs accredited by The Council on Chiropractic Education.⁹ There is a need to explore development of additional competencies that may be applicable to integrated clinical practice.

Additionally, US medical school training has shifted to embrace interprofessional care and evidence-informed practice that emphasizes the importance of a whole person approach to health care in training primary care providers.¹⁰ With this strong focus on developing primary care providers, there is a growing trend toward team-based, collaborative interprofessional care, and the development of a workforce versed in whole person, patient-centered care approach.¹¹ This evolution of care delivery and the rapidly changing healthcare landscape provides the prospect for the chiropractic profession to work closely as part of an interdisciplinary team expanding our ability for career opportunities that focuses on collaboration and evidenced-informed practice. As a result of this shift in health professional education and interprofessional practice opportunities, we propose to develop a set of specific core competencies for DCPs to utilize in the training of their students to prepare them to deliver health care that focuses on interprofessional collaboration, evidenced-informed care, and patient-centered approach strengthening our ability to prepare graduates for these practice opportunities.

Competencies

Communication

Interprofessional

IP1. Understand the importance of using common language, terminology, and communication (e.g., diagnostic and prognostic terms, outcome assessment tools) amongst the integrated health care team.
IP2. Proficient in communication strategies to facilitate health care team interactions for patient care coordination (i.e., oral, written, and electronic).
IP3. Proficient in patient case presentation (i.e., oral, written, and electronic) to members of the integrated health care team.
IP4. Demonstrate timeliness in record keeping and communication for care coordination.
IP5. Respect patient confidentiality in all forms of communication consistent with HIPAA privacy rules. ¹²
IP6. Receptive and responsive to constructive feedback from various stakeholders (e.g., patients, supervisors, health care team members).

IP7. Demonstrate proficiency in conflict management (e.g., disagreement among health care team professionals regarding treatment plans).

IP8. Educate patients and stakeholders regarding standards of care, and case management that is concordant with guidelines and best practices.

Interpersonal

IR1. Exhibit emotional intelligence through a capacity to understand the emotional expression of others, awareness of one's own emotions, and emotional self-regulation.¹¹

IR2. Demonstrate cultural and professional humility, and respect for beliefs and practices.

IR3. Develop a trusting relationship with patients and other health care team members while maintaining appropriate boundaries.

IR4. Demonstrate active listening with the patient to foster a therapeutic relationship (e.g., facilitate goal setting, understand barriers and facilitators to care).

IR5. Use communication strategies that are conducive for positive patient behavioral change (e.g., motivational interviewing).

IR6. Encourage patient commitment to use of appropriate self-care practices (e.g., diet, exercise, mind-body practices).

IR7. Acknowledge patient perception and experiences when developing a therapeutic relationship (e.g., trust, openness, attentiveness, cultural awareness).

IR8. Differentiate patient education to align with patient's presentation and health literacy levels.

Clinical Excellence

Patient Safety

PS1. Deliver and document appropriate informed consent process inclusive of procedure description, potential treatment benefits, material risks or alternative management options, and answering all patient questions.

PS2. Identify when to modify evaluation procedures based on patient presentation and potential risk (e.g., patient is a high fall risk, acute spinal antalgia).

PS3. Demonstrate knowledge of patient safety best practices (e.g., occupational health regulations¹³, infection control, local clinical standard operating procedures, equipment cleaning procedures).

PS4. Ability to apply operational standards of safety in various clinical scenarios and settings (e.g., disaster preparedness, medical emergency response).

PS5. Recognize signs of risk to patient safety which would warrant referral (e.g., depression, post-traumatic stress disorder¹⁴, substance use disorder¹⁵, intimate partner violence¹⁶, suicidal¹⁷ or homicidal ideation).

PS6. Recognize signs and symptoms of potential contraindications to manual therapies or other interventions and refer when appropriate.¹⁸

Professional Literacy

PL1. Understand the role of scientific evidence, practitioner experience, and patient preferences in pragmatic management of health conditions.
PL2. Demonstrate ability to use scholarly databases and point-of-care medical resources to aid clinical decision making.
PL3. Critically apply peer-reviewed literature to case management with attention to quality and level of evidence.
PL4. Implement chiropractic and relevant musculoskeletal care clinical practice guidelines. ¹⁸⁻²⁹

Clinical Acumen

CA1. Understand the importance and limitations of scope of practice.
CA2. Demonstrate the ability to obtain a comprehensive health history. ^{18,29}
CA3. Perform a patient evaluation consistent with a biopsychosocial approach. ²⁰
CA4. Develop a differential diagnosis that recognizes pain classification subgroups (e.g., nociceptive, nociplastic, neuropathic). ³⁰⁻³⁴
CA5. Recognize clinical indications for diagnostic imaging and testing consistent with American College of Radiology ³⁵ and American College of Occupational and Environmental Medicine guidelines. ³⁶
CA6. Consider relevant imaging and testing findings for correlation with clinical presentation to construct a differential diagnosis, prognosis, and treatment plan.
CA7. Identify appropriate clinical indications to collaborate with other health professionals (e.g., specialist consultation or referral).
CA8. Manage complex patients (e.g., patients with multiple comorbidities ³⁷) through team-based interprofessional shared decision-making.
CA9. Develop treatment plans that are evidence-informed, patient-centered, and goal-oriented. ^{2,38-41}
CA10. Employ active care educational strategies which promote self-care management and optimizes patient-independence.
CA11. Recognize the impact of how contextual factors (e.g., words used, attire, environment, body language) influence a patient's experience and clinical outcomes. ^{42,43}
CA12. Knowledgeable of health screening and disease prevention guidelines for health promotion (e.g. US Preventive Service Taskforce recommendations). ^{44,45}
CA13. Advocate for health promotion relevant to primary, secondary, tertiary, and quaternary prevention of musculoskeletal conditions. ^{19,44}
CA14. Understand the unique clinical needs of special populations (e.g. pediatrics, older adults, various racial and ethnic groups, individuals with disabilities, LGBTQIA+, pregnant, veterans).
CA15. Appreciate the influence of social determinants of health on health and wellness(e.g., discrimination, education access, health care access, economic stability, neighborhood environment). ⁴⁵

Ethics

ET1. Demonstrate high standards of personal and professional ethical conduct.
ET2. Place the patient at the center of health care delivery. ⁴⁶
ET3. Possess an understanding of the professional legal obligations (e.g., mandatory reporting) consistent with jurisdictional licensure and regulations, health care system policies (e.g., credentialing and privileging).
ET4. Responsibly use existing and burgeoning technology for patient care when appropriate (e.g., health technology, electronic health record systems, artificial intelligence).
ET5. Proficient in ethical diagnostic and procedural coding that is commensurate with services rendered.

Collaboration

Roles and Responsibilities

RR1. Understand the roles, responsibilities, and contributions of each health care team member.
RR2. Demonstrate and communicate the importance of teamwork in patient-centered care.
RR3. Recognize how one's uniqueness (e.g., experience level, culture, hierarchy) impacts interprofessional working relationships.
RR4. Communicate effectively with health care professionals and health-related agencies
RR5. Communicate assessment and care plan recommendations to health care professionals.
RR6. Develop effective relationships with referring, consulting, or collaborating health care team members.
RR7. Articulate professional opinions with competence, confidence, and respect, using inclusive and shared language that avoids chiropractic-specific language.

Cooperation, Respect and Engagement

CR1. Seek out, integrate, and value the input of health care team members.
CR2. Engage health care team members to develop strategies to meet specific health and health care needs of patients and populations.
CR3. Share accountability for patient outcomes when co-managing with other clinicians.
CR4. Ability to give timely, sensitive, and constructive feedback to colleagues.

Self-Reflection

SR1. Practice critical self-appraisal to identify training gaps for development.
SR2. Engage in evidence-based continuing education and self-guided learning.
SR3. Consider one's own health and well-being as fundamental to health care delivery.
SR4. Demonstrate a commitment to continuous professional and personal self-improvement.

Digital Health

DH1. Be knowledgeable in the practices of virtual health care delivery (e.g., patient preferences, patients that live in rural areas, lack transportation).
DH2. Be familiar with evidence-based digital format patient education resources.
DH3. Interact professionally with colleagues and patients through electronic communication and messaging (e.g., e-mail, patient portal, virtual visits)
DH4. Interact professionally and in alignment with evidence-based practices when utilizing social media. ⁴⁷
DH5. Adhere to jurisdictional and facility standards regarding timeliness in record keeping, communicating diagnostic findings, and using decision support tools.
DH6. Engage with systems to track performance, productivity, and outcomes for continuous quality improvement.

Organizational Responsibility and Safety

OR1. Demonstrate understanding of organizational structure, chain of command, and role within a system.
OR2. Understand institutional credentialing and privileging concepts.
OR3. Demonstrate an ability to understand and communicate the financial impact of musculoskeletal conditions on health care facilities and healthcare systems.
OR4. Provide services that are consistent with facility service line agreements, functional statements, and/or memorandums of understanding.
OR5. Identify and report near-misses, accidents, and/or adverse events per facility standards.
OR6. Demonstrate ability to identify and report disruptive behavior in the workplace per facility standards.
OR7. Demonstrates knowledge of equipment safety standards.
OR8. Utilize proper techniques to prevent clinician environmental risks and injury.
OR9. Understand and apply relevant clinical care pathways. ^{2,24,28}
OR10. Facilitate efficient care coordination within the of the health care system.
OR11. Demonstrate understanding of various factors and limitations on a healthcare system (e.g., care access, inefficient or ineffective consultation triaging, physical space availability, commercial insurance reimbursement)

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