

HOD ACTION: Recommendations in Council on Medical Education Report 9 adopted and the remainder of the report filed.

REPORT 9 OF THE COUNCIL ON MEDICAL EDUCATION (A-23)
The Impact of Midlevel Providers on Medical Education (Resolution 201-A-22)
(Reference Committee C)

EXECUTIVE SUMMARY

Resolution 201-A-22, “The Impact of Midlevel Providers on Medical Education,” was authored by the American Medical Association (AMA) Resident and Fellow Section and submitted to the 2022 Annual Meeting of the House of Delegates (HOD). The resolution, which was subsequently referred by the HOD, requests that the AMA conduct several studies related to the education of physicians in interprofessional teams and the training and continuing education requirements of nurse practitioners and physician assistants.

This report, which is in response to the referral, addresses the multiple facets of the resolution, to include the challenges in studying bias in interprofessional education and developing a rigorous, statistically valid, and high-quality study suitable for publication by a peer-reviewed journal. This report concludes that such research is beyond the scope of the AMA, although the AMA can encourage investigators to study how interprofessional learning and team-building work promotes the development of physician leadership in team-based care.

This report describes the growth in team-based care and widespread adoption of the physician-led team as the preferred model for high-quality health care, underscoring the need for incorporating interprofessional principles into medical education and training. In addition, existing medical education accreditation standards related to interprofessional education in undergraduate and graduate medical education are highlighted. The report recommends that these standards be expanded and strengthened to state that physicians’ education and training make them uniquely qualified to lead the health care team, as reflected in AMA policy.

In addition, this report notes that the AMA does not directly oversee the education and training of nonphysician health care professionals, which makes adoption of Resolves 3 and 4 of the referred resolution neither feasible nor enforceable.

Relevant AMA policies are highlighted (and noted in the appendix). In particular, H-160.912, “The Structure and Function of Interprofessional Health Care Teams,” provides a road map to the appropriate interprofessional education of medical students and resident/fellow physicians to take on the pivotal responsibility of leadership of the interprofessional health care team.

HOD ACTION: Recommendations in Council on Medical Education Report 9 adopted and the remainder of the report filed.

REPORT OF THE COUNCIL ON MEDICAL EDUCATION

CME Report 9-A-23

Subject: The Impact of Midlevel Providers on Medical Education (Resolution 201-A-22)

Presented by: John P. Williams, MD, Chair

Referred to: Reference Committee C

1 Resolution 201-A-22, “The Impact of Midlevel Providers on Medical Education,” was authored by
2 the American Medical Association (AMA) Resident and Fellow Section and submitted to the 2022
3 Annual Meeting of the House of Delegates (HOD). The resolution reads as follows:

4
5 RESOLVED, That our American Medical Association study, using surveys among other
6 tools that protect identities, how commonly bias against physician-led healthcare is
7 experienced within undergraduate medical education and graduate medical education,
8 interprofessional learning and team building work and publish these findings in peer-
9 reviewed journals (Directive to Take Action); and be it further

10
11 RESOLVED, That our AMA work with the Liaison Committee on Medical Education and
12 the Accreditation Council for Graduate Medical Education to ensure all physician
13 undergraduate and graduate training programs recognize and teach physicians that they are
14 the leaders of the healthcare team and are adequately equipped to diagnose and treat
15 patients independently only because of the intensive, regulated, and standardized education
16 they receive (Directive to Take Action); and be it further

17
18 RESOLVED, That our AMA study the harms and benefits of establishing mandatory
19 postgraduate clinical training for nurse practitioners and physician assistants prior to
20 working within a specialty or subspecialty field (Directive to Take Action); and be it
21 further

22
23 RESOLVED, That our AMA study the harms and benefits of establishing national
24 requirements for structured and regulated continued education for nurse practitioners and
25 physician assistants in order to maintain licensure to practice. (Directive to Take Action)

26
27 The resolution was subsequently referred by the HOD for a report back the House; this report is in
28 response to the referral.

29
30 **BACKGROUND**

31
32 *Concerns expressed by the resolution’s authors*

33
34 The resolution stipulates concerns with interprofessional education as well as the training and
35 practice of nonphysicians. For example, the authors claim that physicians are being reprimanded or
36 fired for speaking out about discrepancies between physician and nonphysician training. In
37 addition, concern is expressed about the growth in the number of graduate-level training programs

1 for nonphysicians, even though they are not required to pursue such training, as well as the lack of
2 any requirement for equivalent continuing education by nonphysicians, versus the need for
3 physicians to pursue such education to maintain board certification, state licensure, and often
4 hospital credentials. Finally, the resolution notes that midlevel providers are free to move between
5 various fields of medicine without any formal, regulated training or education, but physicians are
6 limited to the scope of their specialty of medicine by credentialing and board certification.

7
8 Note: The term “advanced practice providers,” including but not limited to nurse practitioners
9 (NPs) and physician assistants (PAs), is often used instead of “midlevel providers.” This report is
10 primarily concerned with these two fields.

11
12 *Reference Committee C testimony on the resolution*

13
14 The report of Reference Committee B at the 2022 Annual Meeting reflected the mixed testimony
15 on this item of business, including input from multiple specialties. Testimony highlighted that the
16 AMA has extensive policy on scope of practice, including support for physician-led team-based
17 care, as well as policy that medical education should prepare students to practice in physician-led
18 teams and that physician-led interprofessional education should be incorporated into medical
19 education and residency programs. Support was also expressed for interprofessional collaboration
20 and the role of nonphysicians as important members of the care team. General support was heard
21 for further studies about scope of practice, but testimony did note that the AMA already has
22 extensive information and existing resources outlining the differences in graduate education and
23 training of nonphysicians versus physicians. It was also noted that the directives in Resolution 201
24 were not feasible or could be costly to implement. In addition, the AMA does not have direct
25 authority over graduate clinical training or continuing education requirements for nonphysicians.
26 These requirements are set by each health profession’s accrediting, certifying, and licensing bodies,
27 who may not align themselves with AMA policies. For these reasons, the resolution was
28 recommended for referral by Reference Committee C; the HOD concurred with this decision.

29
30 *Council on Medical Education testimony on the resolution*

31
32 In its testimony before Reference Committee B, the AMA Council on Medical Education stated its
33 opposition to adoption of Resolution 201-A-22, noting the lack of feasibility of performing a study
34 regarding bias against physician-led teams in medical education and practice. In addition, the
35 Council noted that having such a study accepted and published in a peer-reviewed journal is
36 outside the AMA’s purview and control. Similarly, the AMA has no authority over the education or
37 licensure of other health care professionals, such that study of the education of these professionals,
38 as requested in the third and fourth resolved clauses, would be difficult to accomplish and the
39 recommendations from such a study are unlikely to be adopted by the affected professions. Finally,
40 the Council noted that its Report 5-A-22, “[Education, Training, and Credentialing Of Non-Physician Health Care Professionals and Their Impact on Physician Education and Training \(Resolution 305-J-21, Resolve 8\)](#),” addressed some of the issues outlined in Resolution 201-A-22.
41 This report led to AMA policy regarding learning about educational differences between
42 physicians and nonphysician health care professionals as well as supporting institutional oversight
43 of training programs of nonphysicians and their impact on medical education.
44
45

46
47 DISCUSSION

48
49 *Difficulty in fielding a study of bias in interprofessional education*

50

1 Resolve 1 of the referred resolution asks that the AMA “study, using surveys among other tools
2 that protect identities, how commonly bias against physician-led healthcare is experienced within
3 undergraduate medical education and graduate medical education, interprofessional learning and
4 team building work and publish these findings in peer-reviewed journals.” Investigators studying
5 this issue would first need to perform qualitative analyses of episodes of interprofessional learning
6 and team building work in medical education settings to describe the degree and nature of bias
7 against physician-led health care, if any. These findings would then inform surveys of medical
8 students and resident/fellow physicians of their experience with interprofessional learning and
9 team building work to determine the scope of the biases described by the qualitative research.
10 Investigators would require financial support to perform rigorous, statistically valid, high-quality
11 studies that would be accepted for publication by peer-reviewed journals. This research is beyond
12 the scope of the AMA; however, the AMA can encourage investigators to study how
13 interprofessional learning and team building work promotes the development of physician
14 leadership in team-based care.

15
16 *“Team sport:” The rise of the health care team*

17
18 Since World War II, medicine has seen the rapid development of new diagnostic, therapeutic, and
19 procedural techniques to improve the quality of patient care. Similarly, medicine has recognized
20 other factors influencing health outcomes, including population health,¹ structural and social
21 determinants of health,² and other key domains of health systems science.³ To address both the
22 rapid growth in medical science and technology and increased complexity of delivering high quality
23 health care, medicine has become increasingly specialized,⁴ with concordant expansion of
24 nonphysician members of the health care team. Accordingly, as team leader, the physician must
25 understand the appropriate role of each team member and ensure appropriate communication and
26 coordination of care for the patient’s benefit.⁵ Hospitals, academic practices, and health care
27 systems have increasingly adopted the physician-led team as the preferred model for high-quality
28 health care, highlighting the need for incorporating these principles into medical education and
29 training.

30
31 As physicians became increasingly specialized, PA and NP programs were established in the 1960s,
32 followed by the founding of the American Board of Family Medicine in 1969, to address the
33 workforce shortage in primary care. In addition, with the advances in the care of acute health
34 conditions, chronic disease management and the “new morbidities,”⁶ conditions arising from
35 social, behavioral, and developmental issues, began to dominate medical practice, demanding
36 multi-disciplinary teams to deliver high-quality care. Research on high-performing primary care
37 showed that access to primary care improved health outcomes, lowered health care spending, and
38 decreased health disparities.⁷ The benefits of high-performing primary care depend on patients
39 having a trusted, continuous relationship with a personal primary care physician who leads and
40 coordinates the patients’ health care team, also referred to as the medical home as defined in policy
41 [H-160.919](#), “Principles of the Patient-Centered Medical Home.”

42
43 Central to achieving optimal health outcomes is the need to define the role of the physician in
44 team-based care as the leader of the health care team. Because of the longer, more intensive
45 education and evaluation requirements in the medical profession compared to other health care
46 fields, a physician is the most qualified health professional to lead the care team in education and
47 practice. The AMA has extensive policy supporting physician-led team-based care and believes it
48 is appropriate to reinforce this concept within medical education, through which the privilege of
49 leadership is earned. In addition, the AMA’s ChangeMedEd initiative provides a real-life
50 laboratory for investigation of educational approaches to teach the primacy of the physician-led
51 team in medical education as the optimal model for ensuring quality of patient care.

1 *Medical education accreditation standards related to interprofessional education*

2
3 To ensure the quality of medical education and to implement recommended educational revisions in
4 response to the needs of medical students and resident/fellow physicians, as well as society and
5 patients, is a key role of accrediting bodies, including the Liaison Committee on Medical Education
6 (LCME) and Accreditation Council for Graduate Medical Education (ACGME) in undergraduate
7 and graduate medical education, respectively. Resolve 2 of the referred resolution asks the AMA to
8 “work with the Liaison Committee on Medical Education and the Accreditation Council for
9 Graduate Medical Education to ensure all physician undergraduate and graduate training programs
10 recognize and teach physicians that they are the leaders of the healthcare team and are adequately
11 equipped to diagnose and treat patients independently only because of the intensive, regulated, and
12 standardized education they receive.” Interprofessional education and practice are intended to
13 ensure that all members of the team learn to practice as part of a physician-led health care team.

14
15 Physicians, as team leaders, need to understand other members of the health care team’s roles as
16 well as their differences in education and training. Medical education should include knowledge of
17 the differences in the education and professional standards of other health professionals in the
18 health care team.

19
20 Current LCME and ACGME accreditation standards support interprofessional education. LCME
21 standards⁸ include two pertinent elements:

22
23 • 6.7 Academic Environments

24
25 The faculty of a medical school ensure that medical students have opportunities to learn in
26 academic environments that permit interaction with students enrolled in other health
27 professions, graduate and professional degree programs, and in clinical environments that
28 provide opportunities for interaction with physicians in graduate medical education
29 programs and in continuing medical education programs.

30
31 • 7.9 Interprofessional Collaborative Skills

32
33 The faculty of a medical school ensure that the core curriculum of the medical education
34 program prepares medical students to function collaboratively on health care teams that
35 include health professionals from other disciplines as they provide coordinated services to
36 patients. These curricular experiences include practitioners and/or students from the other
37 health professions.

38
39 The ACGME Common Program Requirements⁹ contain multiple references to interprofessional
40 education:

- 41
42 • Residents must demonstrate competence in . . . working in interprofessional teams to
43 enhance patient safety and improve patient care quality;
44
45 • The program must have a structure that promotes safe, interprofessional, team-based care
46
47 • Optimal patient safety occurs in the setting of a coordinated interprofessional learning and
48 working environment.

- 1 • Residents must participate as team members in real and/or simulated interprofessional
2 clinical patient safety activities, such as root cause analyses or other activities that include
3 analysis, as well as formulation and implementation of actions
4
- 5 • Residents must have the opportunity to participate in interprofessional quality improvement
6 activities
7
- 8 • Residents must care for patients in an environment that maximizes communication. This
9 must include the opportunity to work as a member of effective interprofessional teams that
10 are appropriate to the delivery of care in the specialty and larger health system.
11

12 Both sets of standards help underscore that interprofessional education is a priority in medical
13 education. That said, these standards could be expanded and strengthened to state that physicians'
14 education and training make them uniquely qualified to lead the health care team, as reflected in
15 AMA policy. In addition, it would be within the scope of the AMA to advocate for insertion of
16 qualifying modifiers in these standards where warranted—for example, inclusion of the phrase
17 “physician-led” to modify “interprofessional teams.” This report includes a recommendation to that
18 effect. Personal communication with LCME staff indicates that this change would be appropriate.
19

20 While interprofessional education is important, residency programs and their sponsoring institutions
21 need to ensure that the presence of other health professionals in the clinical setting does not
22 negatively impact resident education, including ensuring that residents have the appropriate
23 responsibility for patient care, case numbers, and case mix to prepare them for independent
24 practice. The ACGME’s Common Program Requirements state, in this regard, that “The presence
25 of other learners and other care providers, including, but not limited to, residents from other
26 programs, subspecialty fellows, and advanced practice providers, must enrich the appointed
27 residents’ education.”¹⁰ This concept is reflected in Policy H-310.913, “Physician Extenders,”
28 which notes in part that “procedural training is a critical portion of resident education and the
29 augmentation of patient care by nonphysician practitioners should not interfere with a resident's
30 ability to achieve competence in the performance of required procedures.”
31

32 *Education and training of other health professionals* 33

34 The AMA does not directly oversee the education and training of nonphysician health care
35 professionals. For several decades, beginning in the 1930s, the Council on Medical Education did
36 have oversight over accreditation of a significant number of allied health education programs
37 including physician assistants through its Committee on Allied Health Education and Accreditation,
38 or CAHEA. By the early to mid-1990s, that work was seen as outside the scope of the AMA and
39 ceased, leading to development of the Commission on Accreditation of Allied Health Education
40 Programs and other accreditation bodies to continue this essential role.
41

42 Despite this lack of direct oversight, the AMA can call on standard-setting organizations, such as
43 the American Board of Medical Specialties, to play a more active role in communicating with
44 policymakers the standards to which physicians are held, including maintenance of certification,
45 and why these standards serve as the basis for physician leadership of the health care team.
46

47 Resolves 3 and 4 of the referred resolution encompass AMA study of establishing “mandatory
48 postgraduate clinical training for nurse practitioners and physician assistants prior to working
49 within a specialty or subspecialty field” and “national requirements for structured and regulated
50 continued education for nurse practitioners and physician assistants in order to maintain licensure to
51 practice.”

1 For NPs, five different certifying bodies offer 19 different certificates in various fields of
2 medicine.¹¹ Certification is required to obtain state licensure for practice as an NP. Similarly, PAs
3 seeking to practice must obtain the PA-C certification. In addition, the National Commission on
4 Certification of Physician Assistants currently offers 10 certificates of added qualifications (CAQs)
5 in various fields (the CAQ is a voluntary credential and does not replace PA-C certification).¹² To
6 obtain one of these CAQs, a PA-C must have between 2 to 4 years of experience in the field. Since
7 2011, nearly 2,800 PA-Cs have earned CAQs in seven different specialties.

8
9 In summary, the third and fourth Resolves of the referred resolution are neither feasible nor
10 enforceable as our AMA does not have the authority or purview over post-graduate clinical training
11 or continuing education requirements for nonphysicians. These requirements are set by the
12 individual profession's accrediting, certifying, and licensing bodies. In addition, the AMA does not
13 have the ability to conduct a study on harms and benefits of additional training and certification
14 requirements for NPs and PAs to work as licensed professionals.

15 16 RELEVANT AMA POLICY

17
18 The AMA has several policies in support of interprofessional education. For example, Policy D-
19 295.934, "Encouragement of Interprofessional Education Among Health Care Professions
20 Students," specifies the phrase "physician-led" in its verbiage:

- 21
22 2. Our AMA supports the concept that medical education should prepare students for practice
23 in physician-led interprofessional teams.

24
25 In addition, the policy (most recently amended via Council on Medical Education Report 5-A-22)
26 includes language that encompasses the spirit of and obviates the need for Resolve 3 of Resolution
27 201-A-22:

- 28
29 Our AMA supports a clear mechanism for medical school and appropriate institutional leaders
30 to intervene when undergraduate and graduate medical education is being adversely impacted
31 by undergraduate, graduate, and postgraduate clinical training programs of non-physicians.

32
33 Other relevant policies are noted in the appendix, to include H-160.912, "The Structure and
34 Function of Interprofessional Health Care Teams," which uses the term "physician-led" in three of
35 its six clauses. Indeed, this policy provides a road map to the appropriate interprofessional
36 education of medical students and resident/fellow physicians to take on the pivotal responsibility of
37 leadership:

- 38
39 4. Our AMA adopts the following principles to guide physician leaders of health care teams:
40 a. Focus the team on patient and family-centered care.
41 b. Make clear the team's mission, vision and values.
42 c. Direct and/or engage in collaboration with team members on patient care.
43 d. Be accountable for clinical care, quality improvement, efficiency of care, and continuing
44 education.
45 e. Foster a respectful team culture and encourage team members to contribute the full
46 extent of their professional insights, information and resources.
47 f. Encourage adherence to best practice protocols that team members are expected to
48 follow.
49 g. Manage care transitions by the team so that they are efficient and effective, and
50 transparent to the patient and family.

- 1 h. Promote clinical collaboration, coordination, and communication within the team to
- 2 ensure efficient, quality care is provided to the patient and that knowledge and expertise
- 3 from team members is shared and utilized.
- 4 i. Support open communication among and between the patient and family and the team
- 5 members to enhance quality patient care and to define the roles and responsibilities of the
- 6 team members that they encounter within the specific team, group, or network.
- 7 j. Facilitate the work of the team and be responsible for reviewing team members' clinical
- 8 work and documentation.
- 9 k. Review measures of 'population health' periodically when the team is responsible for the
- 10 care of a defined group.

11
12 It should also be noted that existing AMA policy supports advocacy and action to allow for
13 appropriate intervention when undergraduate and graduate medical education are adversely
14 affected by undergraduate, graduate, and postgraduate clinical training programs for nonphysicians
15 (as stated in Policy D-295.934 (6), "Encouragement of Interprofessional Education Among Health
16 Care Professions Students," which resulted from CME Report 5-A-22).

17
18 In short, the AMA has clear and extensive policy supporting physician-led team-based care, as well as
19 policy that medical education should prepare students to practice in physician-led teams and that
20 physician-led interprofessional education should be incorporated into medical education and residency
21 programs. Our AMA also supports interprofessional collaboration and the unique skills all health care
22 professionals bring to the health care team.

23 24 SUMMARY AND RECOMMENDATIONS

25
26 Resolution 201-A-22 requests that the AMA conduct several studies related to the education of
27 physicians in interprofessional teams and the training and continuing education requirements of
28 nurse practitioners and physician assistants. The Council on Medical Education would note that to
29 perform the requested investigations such that they meet the standard for peer-reviewed publication
30 would involve significant effort and resources that are beyond the scope of the AMA. While the
31 findings from such research could inform policymakers, it should be noted that the AMA does not
32 have direct oversight over nonphysician education, training, and practice to directly implement
33 changes based on such research.

34
35 Reinforcing the principle that interprofessional teams in education and practice are led by
36 physicians is within the scope of the AMA and is a key element of its work to protect patients.
37 A number of AMA policies encompass interprofessional education, such as D-295.934,
38 "Encouragement of Interprofessional Education Among Health Care Professions Students," and
39 provide the policy basis for the AMA to advocate for the physician as the leader of the health care
40 team. In addition, the AMA, through its Advocacy unit, plays an active and essential role in
41 preventing inappropriate expansion of practice among nonphysician health care professionals. Part
42 of this work is ensuring that health care teams are led by physicians and that nonphysicians have
43 requisite physician supervision. For this reason, the Council makes the recommendations below to
44 ensure use of the phrase "physician-led" to modify "interprofessional teams" in medical education
45 accreditation standards.

46
47 As noted in this report, if preparation for physician practice does not include leadership of teams as
48 a component, then this element should be incorporated into medical education. Toward this end, the
49 Council would refer interested delegates to a second report slated for the 2023 Annual Meeting,
50 Council on Medical Education Report 7-A-23, "Management and Leadership Training in Medical
51 Education." This report seeks to "study the extent of the impact of AMA Policy D-295.316,

1 'Management and Leadership for Physicians,' on elective curriculum and "expand efforts to
2 promote the tenets of health systems science to prepare trainees for leadership roles and address
3 prevalent challenges in the practice of medicine and public health."
4

5 The Council on Medical Education therefore recommends that the following recommendations be
6 adopted in lieu of Resolution 201-A-22 and the remainder of the report be filed:
7

- 8 1. That the American Medical Association (AMA) encourage appropriate medical education
9 accreditation organizations in allopathic and osteopathic medicine including the Liaison
10 Committee on Medical Education, Commission on Osteopathic College Accreditation,
11 American Osteopathic Association, and Accreditation Council for Graduate Medical
12 Education to:
13
14 A) Incorporate the phrase "physician-led" as a modifier for "interprofessional education"
15 into their relevant medical education accreditation standards, where appropriate;
16
17 B) Require education in and evaluation of competency in physician-led interprofessional
18 health care team leadership as part of the systems-based practice competency in medical
19 education accreditation standards. (New HOD Policy)
20
- 21 2. That the AMA encourage medical educators to study how interprofessional learning and
22 teamwork promote the development of physician leadership in team-based care. (New HOD
23 Policy)
24
- 25 3. Amend D-295.934 (2) by addition as follows: "Our AMA supports the concept that medical
26 education should prepare students for practice in, and leadership of, physician-led
27 interprofessional health care teams." (New HOD Policy)
28
- 29 4. That the AMA encourage medical standards-setting organizations, including the American
30 Board of Medical Specialties and its member boards, to inform policymakers of the
31 standards physicians are held to for independent practice in order to protect patients and that
32 these standards make physicians the appropriate leaders of the interprofessional health care
33 team. (Modify Current HOD Policy)

Fiscal note: \$1,000

APPENDIX: RELEVANT AMA POLICY

[D-295.934, “Encouragement of Interprofessional Education Among Health Care Professions Students”](#)

1. Our AMA recognizes that interprofessional education and partnerships are a priority of the American medical education system.
2. Our AMA supports the concept that medical education should prepare students for practice in physician-led interprofessional teams.
3. Our AMA will encourage health care organizations that engage in a collaborative care model to provide access to an appropriate mix of role models and learners.
4. Our AMA will encourage the development of skills for interprofessional education that are applicable to and appropriate for each group of learners.
5. Our AMA supports the concept that interprofessional education include a mechanism by which members of interdisciplinary teams learn about, with, and from each other; and that this education include learning about differences in the depth and breadth of their educational backgrounds, experiences, and knowledge and the impact these differences may have on patient care.
6. Our AMA supports a clear mechanism for medical school and appropriate institutional leaders to intervene when undergraduate and graduate medical education is being adversely impacted by undergraduate, graduate, and postgraduate clinical training programs of non-physicians.

(Res. 308, A-08; Appended: CME Rep. 1, I-12; Modified: CME Rep. 1, A-22; Appended: CME Rep. 5, A-22)

[H-160.912, “The Structure and Function of Interprofessional Health Care Teams”](#)

1. Our AMA defines 'team-based health care' as the provision of health care services by a physician-led team of at least two health care professionals who work collaboratively with each other and the patient and family to accomplish shared goals within and across settings to achieve coordinated, high-quality, patient-centered care.
2. Our AMA will advocate that the physician leader of a physician-led interprofessional health care team be empowered to perform the full range of medical interventions that she or he is trained to perform.
3. Our AMA will advocate that all members of a physician-led interprofessional health care team be enabled to perform medical interventions that they are capable of performing according to their education, training and licensure and the discretion of the physician team leader in order to most effectively provide quality patient care.
4. Our AMA adopts the following principles to guide physician leaders of health care teams:
 - a. Focus the team on patient and family-centered care.
 - b. Make clear the team's mission, vision and values.
 - c. Direct and/or engage in collaboration with team members on patient care.
 - d. Be accountable for clinical care, quality improvement, efficiency of care, and continuing education.
 - e. Foster a respectful team culture and encourage team members to contribute the full extent of their professional insights, information and resources.
 - f. Encourage adherence to best practice protocols that team members are expected to follow.
 - g. Manage care transitions by the team so that they are efficient and effective, and transparent to the patient and family.

- h. Promote clinical collaboration, coordination, and communication within the team to ensure efficient, quality care is provided to the patient and that knowledge and expertise from team members is shared and utilized.
- i. Support open communication among and between the patient and family and the team members to enhance quality patient care and to define the roles and responsibilities of the team members that they encounter within the specific team, group or network.
- j. Facilitate the work of the team and be responsible for reviewing team members' clinical work and documentation.
- k. Review measures of 'population health' periodically when the team is responsible for the care of a defined group.

5. Our AMA encourages independent physician practices and small group practices to consider opportunities to form health care teams such as through independent practice associations, virtual networks or other networks of independent providers.

6. Our AMA will advocate that the structure, governance and compensation of the team should be aligned to optimize the performance of the team leader and team members.

(Joint CME-CMS Rep., I-12; Reaffirmation I-13; Reaffirmed: CMS Rep. 1, I-15; Reaffirmed: BOT Action in response to referred for decision: Res. 718, A-17)

[D-35.985, "Support for Physician Led, Team Based Care"](#)

Our AMA:

1. Reaffirms, will proactively advance at the federal and state level, and will encourage state and national medical specialty societies to promote policies H-35.970, H-35.973, H-35.974, H-35.988, H-35.989, H-35.992, H-35.993, H-160.919, H-160.929, H-160.947, H-160.949, H-160.950, H-360.987, H 405.969 and D-35.988.

2. Will identify and review available data to analyze the effects on patients' access to care in the opt-out states (states whose governor has opted out of the federal Medicare physician supervision requirements for anesthesia services) to determine whether there has been any increased access to care in those states.

3. Will identify and review available data to analyze the type and complexity of care provided by all non-physician providers, including CRNAs in the opt-out states (states whose governor has opted out of the federal Medicare physician supervision requirements for anesthesia services), compared to the type and complexity of care provided by physicians and/or the anesthesia care team.

4. Will advocate to policymakers, insurers and other groups, as appropriate, that they should consider the available data to best determine how non-physicians can serve as a complement to address the nation's primary care workforce needs.

5. Will continue to recognize non-physician providers as valuable components of the physician-led health care team.

6. Will continue to advocate that physicians are best qualified by their education and training to lead the health care team.

7. Will call upon the Robert Wood Johnson Foundation to publicly announce that the report entitled, "Common Ground: An Agreement between Nurse and Physician Leaders on Interprofessional Collaboration for the Future of Patient Care" was premature; was not released officially; was not signed; and was not adopted by the participants.

(BOT Rep. 9, I-11; Reaffirmed: CMS Rep. 1, A-12; Reaffirmed: CMS Rep. 07, A-17; Reaffirmed: CMS Rep. 10, A-19; Reaffirmed: CMS Rep. 6, A-21)

[H-160.950, "Guidelines for Integrated Practice of Physician and Nurse Practitioner"](#)

Our AMA endorses the following guidelines and recommends that these guidelines be considered and quoted only in their entirety when referenced in any discussion of the roles and responsibilities of nurse practitioners:

- (1) The physician is responsible for the supervision of nurse practitioners and other advanced practice nurses in all settings.
- (2) The physician is responsible for managing the health care of patients in all practice settings.
- (3) Health care services delivered in an integrated practice must be within the scope of each practitioner's professional license, as defined by state law.
- (4) In an integrated practice with a nurse practitioner, the physician is responsible for supervising and coordinating care and, with the appropriate input of the nurse practitioner, ensuring the quality of health care provided to patients.
- (5) The extent of involvement by the nurse practitioner in initial assessment, and implementation of treatment will depend on the complexity and acuity of the patients' condition, as determined by the supervising/collaborating physician.
- (6) The role of the nurse practitioner in the delivery of care in an integrated practice should be defined through mutually agreed upon written practice protocols, job descriptions, and written contracts.
- (7) These practice protocols should delineate the appropriate involvement of the two professionals in the care of patients, based on the complexity and acuity of the patients' condition.
- (8) At least one physician in the integrated practice must be immediately available at all times for supervision and consultation when needed by the nurse practitioner.
- (9) Patients are to be made clearly aware at all times whether they are being cared for by a physician or a nurse practitioner.
- (10) In an integrated practice, there should be a professional and courteous relationship between physician and nurse practitioner, with mutual acknowledgment of, and respect for each other's contributions to patient care.
- (11) Physicians and nurse practitioners should review and document, on a regular basis, the care of all patients with whom the nurse practitioner is involved. Physicians and nurse practitioners must work closely enough together to become fully conversant with each other's practice patterns.

(CMS Rep. 15 - I-94; BOT Rep. 6, A-95; Reaffirmed: Res. 240, A-00; Reaffirmation A-00; Reaffirmed: BOT Rep. 28, A-09; Reaffirmed: BOT Rep. 9, I-11; Reaffirmed: Joint CME-CMS Rep., I-12; Reaffirmed: BOT Rep. 16, A-13)

[H-160.906, “Models / Guidelines for Medical Health Care Teams”](#)

1. Our AMA defines 'physician-led' in the context of team-based health care as the consistent use by a physician of the leadership knowledge, skills and expertise necessary to identify, engage and elicit from each team member the unique set of training, experience, and qualifications needed to help patients achieve their care goals, and to supervise the application of these skills.

2. Our AMA supports the following elements that should be considered when planning a team-based care model according to the needs of each physician practice:

Patient-Centered:

- a. The patient is an integral member of the team.
- b. A relationship is established between the patient and the team at the onset of care, and the role of each team member is explained to the patient.
- c. Patient and family-centered care is prioritized by the team and approved by the physician team leader.
- d. Team members are expected to adhere to agreed-upon practice protocols.
- e. Improving health outcomes is emphasized by focusing on health as well as medical care.
- f. Patients' access to the team, or coverage as designated by the physician-led team, is available twenty-four hours a day, seven days a week.
- g. Safety protocols are developed and followed by all team members.

Teamwork:

- h. Medical teams are led by physicians who have ultimate responsibility and authority to carry out final decisions about the composition of the team.
- i. All practitioners commit to working in a team-based care model.
- j. The number and variety of practitioners reflects the needs of the practice.
- k. Practitioners are trained according to their unique function in the team.
- l. Interdependence among team members is expected and relied upon.
- m. Communication about patient care between team members is a routine practice.
- n. Team members complete tasks according to agreed-upon protocols as directed by the physician leader.

Clinical Roles and Responsibilities:

- o. Physician leaders are focused on individualized patient care and the development of treatment plans.
- p. Non-physician practitioners are focused on providing treatment within their scope of practice consistent with their education and training as outlined in the agreed upon treatment plan or as delegated under the supervision of the physician team leader.
- q. Care coordination and case management are integral to the team's practice.
- r. Population management monitors the cost and use of care, and includes registry development for most medical conditions.

Practice Management:

- s. Electronic medical records are used to the fullest capacity.
- t. Quality improvement processes are used and continuously evolve according to physician-led team-based practice assessments.

- u. Data analytics include statistical and qualitative analysis on cost and utilization, and provide explanatory and predictive modeling.
- v. Prior authorization and precertification processes are streamlined through the adoption of electronic transactions.

(CMS Rep. 6, A-14; Reaffirmed: CMS Rep. 07, A-16; Reaffirmed: CMS Rep. 05, A-17)

[H-360.987, “Principles Guiding AMA Policy Regarding Supervision of Medical Care Delivered by Advanced Practice Nurses in Integrated Practice”](#)

Our AMA endorses the following principles: (1) Physicians must retain authority for patient care in any team care arrangement, e.g., integrated practice, to assure patient safety and quality of care.H-35.

(2) Medical societies should work with legislatures and licensing boards to prevent dilution of the authority of physicians to lead the health care team.

(3) Exercising independent medical judgment to select the drug of choice must continue to be the responsibility only of physicians.

(4) Physicians should recognize physician assistants and advanced practice nurses under physician leadership, as effective physician extenders and valued members of the health care team.

(5) Physicians should encourage state medical and nursing boards to explore the feasibility of working together to coordinate their regulatory initiatives and activities.

(6) Physicians must be responsible and have authority for initiating and implementing quality control programs for nonphysicians delivering medical care in integrated practices.

(BOT Rep. 23, A-96; Reaffirmation A-99; Reaffirmed: Res. 240, and Reaffirmation A-00; Reaffirmed: CMS Rep. 6, A-10; Reaffirmed: BOT Rep. 9, I-11; Reaffirmation A-12; Reaffirmed: BOT Rep. 16, A-13)

[10.5, “Allied Health Professionals”](#)

Physicians often practice in concert with optometrists, nurse anesthetists, nurse midwives, and other allied health professionals. Although physicians have overall responsibility for the quality of care that patients receive, allied health professionals have training and expertise that complements physicians’. With physicians, allied health professionals share a common commitment to patient well-being.

In light of this shared commitment, physicians’ relationships with allied health professionals should be based on mutual respect and trust. It is ethically appropriate for physicians to:

- (a) Help support high quality education that is complementary to medical training, including by teaching in recognized schools for allied health professionals.
- (b) Work in consultation with or employ appropriately trained and credentialed allied health professionals.
- (c) Delegate provision of medical services to an appropriately trained and credentialed allied health professional within the individual’s scope of practice.

AMA Principles of Medical Ethics: I,V,VII

The Opinions in this chapter are offered as ethics guidance for physicians and are not intended to establish standards of clinical practice or rules of law.

(Issued: 2016)

[H-35.989, "Physician Assistants"](#)

1. Our AMA opposes legislation to increase public funding for programs to train physician assistants and supports a careful reevaluation of the need for public funding at the time that present legislative authorities expire.
2. A physician assistant should provide patient care services only in accord with the medical practice act and other applicable state law, and such law should provide that the physician assistant's utilization by a physician or group of physicians be approved by the medical licensing board. A licensed physician or group of physicians seeking to utilize a physician assistant should submit to the medical licensing board an application for utilization that identifies: the qualifications and experience of the physician assistant, the qualifications and experience of the supervising physician and a description of his or her practice, and a description of the manner and the health care settings in which the assistant will be utilized, and the arrangements for supervision by the responsible physician. Such an application should also specify the number of physician assistants that the physician or group of physicians plans to employ and supervise. A physician assistant should be authorized to provide patient care services only so long as the assistant is functioning under the direction and supervision of a physician or group of physicians whose application for utilization has been approved by the medical licensing board. State medical licensing boards, in their review of applications for utilization of a physician assistant, should take special care to insure that the proposed physician assistant functions not be of a type which: (a) would unreasonably expand the professional scope of practice of the supervising physician, (b) cannot be performed safely and effectively by the physician assistant, or (c) would authorize the unlicensed practice of medicine.
3. The physician assistant should function under the direction of and supervision by a duly qualified licensed physician. The physician must always maintain the ultimate responsibility to assure that high quality care is provided to every patient. In discharging that responsibility, the physician should exercise that amount of control or supervision over a physician assistant which is appropriate for the maintenance of quality medical care and in accord with existing state law and the rules and regulations of the medical licensing authority. Such supervision in most settings includes the personal presence or participation of the physician. In certain instances, such as remote practice settings, where the physician assistant may function apart from the supervising physician, such remote function (if permitted by state law) should be approved by the state medical licensing board on an individual basis. Such approval should include requirements for regular reporting to the supervising physician, frequent site visits by that physician, and arrangements for immediate communication with the supervising physician for consultation at all times. The physician assistant may serve the patients of the supervising physician in all types of health care settings, including but not limited to: physician's office, ambulatory or outpatient facility, clinic, hospital, patient's home, long-term care facility or nursing home. The state medical licensing board should determine on an individual basis the number of physician assistants that a particular physician may supervise or a group of physicians may employ.
4. While it is preferable and desirable that the physician assistant be employed by a physician or group of physicians so as to ensure appropriate physician supervision in the interests of the patient, where a physician assistant is employed by a hospital, the physician assistant must provide patient

care services in accordance with the rules and procedures established by the organized medical staff for utilization of physician-employed physician assistants functioning in that institution, and under the direction and supervision of a designated physician who has been approved by the state medical licensing board to supervise that physician assistant in accordance with a specific utilization plan and who shall be directly responsible as the attending physician for the patient care services delegated to his physician assistant.

5. The AMA opposes legislation or proposed regulations authorizing physician assistants to make independent medical judgments as to the drug of choice for an individual patient.

6. In view of an announced interest by HHS in considering national legislation which would override state regulatory systems for health manpower, the AMA recommends that present Association policy supporting state prerogatives in this area be strongly reaffirmed.

7. Our AMA opposes legislation or regulation that allows physician assistant independent practice.

(BOT/CME/CMS Joint Rep., I-80; Reaffirmed: CLRPD Rep. B, I-90; Reaffirmation A-99; Reaffirmed: CME Rep. 2, A-09; Reaffirmed: BOT Rep. 9, I-11; Appended: Res. 230, I-17)

[H-160.947, "Physician Assistants and Nurse Practitioners"](#)

Our AMA will develop a plan to assist the state and local medical societies in identifying and lobbying against laws that allow advanced practice nurses to provide medical care without the supervision of a physician.

The suggested Guidelines for Physician/Physician Assistant Practice are adopted to read as follows (these guidelines shall be used in their entirety):

- (1) The physician is responsible for managing the health care of patients in all settings.
- (2) Health care services delivered by physicians and physician assistants must be within the scope of each practitioner's authorized practice, as defined by state law.
- (3) The physician is ultimately responsible for coordinating and managing the care of patients and, with the appropriate input of the physician assistant, ensuring the quality of health care provided to patients.
- (4) The physician is responsible for the supervision of the physician assistant in all settings.
- (5) The role of the physician assistant in the delivery of care should be defined through mutually agreed upon guidelines that are developed by the physician and the physician assistant and based on the physician's delegatory style.
- (6) The physician must be available for consultation with the physician assistant at all times, either in person or through telecommunication systems or other means.
- (7) The extent of the involvement by the physician assistant in the assessment and implementation of treatment will depend on the complexity and acuity of the patient's condition and the training, experience, and preparation of the physician assistant, as adjudged by the physician.

(8) Patients should be made clearly aware at all times whether they are being cared for by a physician or a physician assistant.

(9) The physician and physician assistant together should review all delegated patient services on a regular basis, as well as the mutually agreed upon guidelines for practice.

(10) The physician is responsible for clarifying and familiarizing the physician assistant with his/her supervising methods and style of delegating patient care.

(BOT Rep. 6, A-95; Reaffirmed: Res 240 and Reaffirmation A-00; Reaffirmed: Res. 213, A-02; Modified: CLRPD Rep. 1, A-03; Reaffirmed: BOT Rep. 9, I-11; Reaffirmed: Joint CME-CMS Rep., I-12; Reaffirmed: BOT Rep. 16, A-13)

[H-310.913, "Physician Extenders"](#)

1. In academic environments, our AMA will only support payment models for non-physician practitioners that do not interfere with graduate medical training.
2. Our AMA supports the concept that procedural training is a critical portion of resident education and the augmentation of patient care by non-physician practitioners should not interfere with a resident's ability to achieve competence in the performance of required procedures.
(Res. 208, I-10; Appended: CME Rep. 8, A-13)

REFERENCES

- ¹ Kindig D, Stoddart G. What is population health? *Am J Public Health*. 2003 Mar;93(3):380-3. Available at: doi: 10.2105/ajph.93.3.380. Accessed March 21, 2023.
- ² Andermann A; CLEAR Collaboration. Taking action on the social determinants of health in clinical practice: a framework for health professionals. *CMAJ*. 2016 Dec 6;188(17-18):E474-E483. Available at: doi: 10.1503/cmaj.160177. Accessed March 21, 2023.
- ³ Health Systems Science. American Medical Association. Available at: <https://www.ama-assn.org/topics/health-systems-science>. Accessed March 21, 2023.
- ⁴ Donini-Lenhoff FG, Hedrick HL. Growth of Specialization in Graduate Medical Education. *JAMA*. 2000;284(10):1284–1289. Available at: doi:10.1001/jama.284.10.1284. Accessed March 21, 2023.
- ⁵ Van Dyke M. Redefining the Physician’s Role as Care Team Leader. American Hospital Association. Available at: <https://trustees.aha.org/defining-physicians-role-care-team-leader>. Accessed March 21, 2023.
- ⁶ Giardino, AP, Sanborn, RD. (2013). “New Morbidities 2.0,” *Journal of Applied Research on Children: Informing Policy for Children at Risk*: Vol. 4 : Iss. 1 , Article 2. Available at: <https://digitalcommons.library.tmc.edu/childrenatrisk/vol4/iss1/2>. Accessed February 14, 2023.
- ⁷ Rixey S. The Biggest Bang for the Buck: A Conversation With Barbara Starfield, M.D., M.P.H. *Maryland Medicine*. Summer 2008. Available at: https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-primary-care-policy-center/Publications_PDFs/E74.pdf. Accessed February 14, 2023.
- ⁸ Functions and Structure of a Medical School. Standards for Accreditation of Medical Education Programs Leading to the MD Degree. March 2022. Available at: <https://lcme.org/publications/>. Accessed January 4, 2023.
- ⁹ ACGME Common Program Requirements (Residency). Accreditation Council for Graduate Medical Education. Available at: https://www.acgme.org/globalassets/pfassets/programrequirements/cprresidency_2022v3.pdf. Accessed January 4, 2023.
- ¹⁰ ACGME Common Program Requirements (Residency). Accreditation Council for Graduate Medical Education. Available at: https://www.acgme.org/globalassets/pfassets/programrequirements/cprresidency_2022v3.pdf. Accessed February 16, 2023.
- ¹¹ Nurse Practitioner (NP) Certification. American Association of Nurse Practitioners. Available at: <https://www.aanp.org/student-resources/np-certification>. Accessed February 14, 2023.
- ¹² Certificates of Added Qualifications (CAQs). National Commission on Certification of Physician Assistants. Available at: <https://www.nccpa.net/specialty-certificates/>. Accessed February 14, 2023.