

JOINT REPORT OF THE COUNCIL ON MEDICAL EDUCATION AND THE COUNCIL ON MEDICAL SERVICE

The following report was presented by Mahendr S. Kochar, MD, Chair, Council on Medical Education and Donna E. Sweet, MD, Chair, Council on Medical Service:

THE STRUCTURE AND FUNCTION OF INTERPROFESSIONAL HEALTH CARE TEAMS

Reference committee hearing: see report of [Reference Committee J](#).

HOUSE ACTION: RECOMMENDATIONS ADOPTED AS FOLLOWS AND REMAINDER OF REPORT FILED

See Policies [H-35.975](#), [H-160.912](#), [H-160.947](#), [H-160.950](#) and [D-160.936](#).

Health care and how it is delivered in this country is evolving at a rapid pace. The delivery and payment of health care has been transitioning for many years away from a fragmented system toward interprofessional team-based delivery and payment models. The trends toward the “patient-centered medical home” (PCMH) and “accountable care organizations” (ACOs) and increased attention on “population health” have prompted a greater focus on the need for interprofessional team-based care. Some physicians have been practicing in a team-based environment for decades, but for others, interprofessional team-based health care poses a new way of practicing medicine.

Due to the potential complexity of the health care delivery system, independent practice by any professional has become very difficult. Team-based health care is one step in ensuring that patients receive the most patient-centered, highest quality care possible. All professions in a health care team bring with them great strengths and unique perspectives that can be utilized when looking at how to provide the safest, best possible care to patients.

The Council on Medical Education and the Council on Medical Service have collaborated to outline the practice of team-based medicine and the roles and responsibilities of health care professionals working in interprofessional health care teams. Such teams will likely be an important component of addressing anticipated access problems generated by the Patient Protection and Affordable Care Act (ACA).

This report provides background on the growing need for interprofessional team-based care, outlines the health professionals shortage and increasing demand for health care services, reviews quality and cost of health care, highlights key aspects of an interprofessional collaborative medical practice, and identifies interprofessional education programs. The report also summarizes relevant AMA policy and a new membership opportunity, discusses potential avenues for AMA advocacy and policy development, and provides recommendations on interprofessional health care teams including principles to guide physician leaders.

INTERPROFESSIONAL TEAM-BASED CARE

There is a growing need for interprofessional team-based health care. Numerous analyses of the US health care system call for an integration of care to more effectively and efficiently provide health care to the nation’s growing, aging and increasingly sicker population. At the time this report was finalized, the Institute of Medicine (IOM), National Academy of Sciences, had developed a discussion paper that was expected to be released in October 2012, which outlines the following core principles to achieve high-value team-based health care: shared goals, clear roles, mutual trust, effective communication and measurable processes and outcomes. The IOM paper is intended to guide coordinated collaboration among health professionals to help accelerate interprofessional team-based care.¹ Regarding health care professionals’ training, team-based care will be the focus of a new national health education center, the Coordinating Center for Interprofessional Education and Collaborative Practice, which was established in 2012 through the Health Resources and Services Administration (HRSA), and aims to accelerate the health care system’s transformation to an integrated system of coordinated, collaborative, team-based care. At the time of this writing, HRSA is accepting applications and plans to award a five-year, \$800,000 grant by September 30, 2012.²

In March 2012, a legislative example of collaboration between physicians and nurses occurred in the state of Virginia, which enacted “Practice of Nurse Practitioners; Patient Care Teams Act.” The Act was the result of a joint effort between the Medical Society of Virginia and the Virginia Council of Nurse Practitioners with an emphasis on

collaboration and consultation between physicians and nurse practitioners who function in care teams as well as identifying opportunities to expand access to care.^{3,4} The Act specifies that nurse practitioners must practice as part of patient care teams and that health care teams be led and managed by a physician. It is anticipated that the new practice model will specifically benefit patients in medically underserved areas of the state as well as help address a future increase of patients with health insurance coverage. The Councils believe that this legislation can serve as a model for other states seeking to reinforce the important and long-standing relationships between physicians and nurses while improving access to care for their citizens. The AMA is developing a state-based campaign to assist states that wish to pursue similar legislation as Virginia's landmark new law.

HEALTH CARE PROFESSIONALS SHORTAGE AND INCREASING DEMAND FOR CARE

The ACA contains provisions for the expansion of health insurance coverage. However, obtaining health insurance does not ensure access to health care. There is mounting concern about the ability of the health care profession to handle the expected surge in patient volume given the shortage of both physicians and nurses for the foreseeable future. According to a 2010 analysis by the Association of American Medical Colleges (AAMC), the shortage of all physicians is estimated to reach 130,600 by 2025.⁵ According to a 2009 analysis, the shortage of registered nurses (RNs) is expected to reach 260,000 by 2025.⁶

The ACA attempts to address the shortage of physicians by increasing Medicaid payments for primary care services provided by primary care physicians (i.e., family medicine, general internal medicine or pediatric medicine) to 100 percent of the Medicare payment rates for 2013 and 2014. However, the increased payment may not be enough to sustain physician participation in Medicaid and it is questionable whether the enhanced payments will continue past 2014. The ACA also includes provisions that support graduate medical education as well as programs to increase the number of primary care health care providers. For example, the legislation authorizes appropriations for an additional \$1.5 billion to the National Health Service Corps and increased funding for Title VII and Title VIII health professions and diversity programs, which support the recruitment of primary care health care providers, including physicians and nurse practitioners to work in underserved areas.

The shortage of physicians and nurses is being exacerbated by an ever-increasing demand for health care services. Factors influencing the demand include a projected surge of about 30 million more insured Americans starting in 2014 due to the passage of the ACA; a growing and aging US population; increasing numbers of patients with chronic disease including those related to lifestyle factors resulting in epidemics of obesity, diabetes, and hypertension; and patients' high expectations of the health care delivery system. In addition, many health care professionals have deferred retirement due to the recent global economic downturn, but they will be unable to do so indefinitely.

QUALITY AND COST OF HEALTH CARE

In 2011, the American Academy of Family Physicians (AAFP) commissioned a study by the University of Missouri to evaluate the quality of existing studies comparing primary care physicians with nurse practitioners, specifically evaluating health care outcomes and cost effectiveness. The authors found that while the evidence is insufficient to make conclusions about comparability of care, substituting independent nurses for primary care physicians is not sufficiently supported by current research either.⁷ In comparing the training of family physicians and that of nurse practitioners, the AAFP predicts that the differences would likely impact breadth and depth of patient care.⁸ The AAFP suggests that nurse practitioners should not work as independent health care providers, but instead, should be part of an integrated practice arrangement under the direction of a physician.⁹

There are many examples from across the nation demonstrating that physician-led integrated care results in improved access to high-quality, cost-effective health care. Community Care of North Carolina (CCNC), a physician-led patient-centered medical home model established in 1998, is one such example. CCNC includes 14 networks of 3,200 physicians covering 67 percent of the state's Medicaid population. The networks include physicians, case managers, hospitals, social service agencies and health departments. A 2011 assessment found that from 2007 to 2010 the cost savings attributable to the program was \$984 million. The analysis suggests that CCNC reduced North Carolina Medicaid costs through care management activities resulting in lower hospital and emergency room costs.¹⁰ Other examples are discussed below.

Most Americans agree that a physician-led team-based approach to care with each team member playing the role they are educated and trained to play is key to ensuring high quality care. Results from the AMA Advocacy Resource Center's 2012 Truth in Advertising survey indicate that patients want a physician to lead the health care team. Key findings include:

- Ninety-one percent of respondents said that a physician's years of medical education and training are vital to optimal patient care, especially in the event of a complication or medical emergency;
- Eighty-six percent said that patients with one or more chronic diseases benefit when a physician leads the primary health care team; and
- Eighty-four percent said that they prefer a physician to have primary responsibility for the diagnosis and management of their health care.

Furthermore, 79 percent of respondents stated that nurse practitioners should not be able to practice independently of physicians or run their own medical practices without physician supervision, collaboration, or oversight. According to a majority (885) of respondents, while nurse practitioners are critical to the health care team, they should assist the physician who should have the lead role in determining the type and level of care to be administered. These results, combined with a close look at interprofessional collaborative medical practices, show overwhelming support for physician-led, team-based health care.¹¹

INTERPROFESSIONAL COLLABORATIVE MEDICAL PRACTICE

A June 2011 American College of Surgeons study assessed the capacity of an interprofessional collaborative medical practice, including physicians, advanced practice nurses (APNs), and physician assistants (PAs), to meet the future demand for health care services. While the study concluded that efforts must be made to increase the output of physicians, APNs and PAs, it emphasized that strengthening the clinical practice infrastructure and facilitating the delegation of tasks to a broader spectrum of caregivers in new delivery models is key to addressing the access problems.¹¹ The study's suggestion is consistent with AMA support for a physician-led interprofessional team-based approach to providing care, which is already being implemented in many physician practices throughout the country and through some of the nation's leading health care systems.

The Centers for Disease Control and Prevention's National Center for Health Statistics reported in August 2011 that 49 percent of office-based physicians worked in practices that utilized nurse practitioners (NPs), certified nurse midwives (CNMs), or PAs. According to the report's data, from the 2009 National Ambulatory Medical Care Survey, the physicians most likely to work with NPs, CNMs, or PAs are aged 54 and younger and are concentrated in primary care, in larger and multi-specialty group practices, and in practices with a higher proportion of Medicaid revenue.¹²

Kaiser Permanente in California, Intermountain Healthcare in Utah, Geisinger Health System in Pennsylvania and the Mayo Clinic in Minnesota are four examples of the nation's largest health care systems.¹³ All are physician-led team-based health care systems that employ a mixture of health care professionals to create interprofessional teams focused on patient-centered care. All place accountability for patient care with the physician team leaders. These systems rely heavily on structured clinical protocols tailored to their health systems to improve the experience of care and health of their patient population as well as reduce the cost of health care. They embrace and depend upon the expertise that each health care practitioner brings to the team. The use of information technology such as electronic health records or centralized patient databases is viewed as vital to delivering efficient, high quality, clinical care. The incorporation of disease management, care coordination and social services focuses on the health of a population while also keeping the care patient-focused. In addition, these systems routinely use continuous quality improvement mechanisms such as tracking patient outcomes. All identify strong physician leadership and physician support of their organization's mission and team-based approach to care as being keys to success.

INTERPROFESSIONAL EDUCATION

In May 2011, the Interprofessional Education Collaborative (IPEC), sponsored by the Association of American Medical Colleges, American Association of Colleges of Nursing, American Association of Colleges of Osteopathic Medicine, American Association of Colleges of Pharmacy, American Dental Education Association, and the

Association of Schools of Public Health, released its report, “Core Competencies for Interprofessional Collaborative Practice.” The report emphasizes that teaching students to work effectively as members of clinical teams is a fundamental part of health care education. As such, the report outlines the following core competencies that all training programs should address: values/ethics, roles/responsibilities, communication, and teamwork/team-based practice. The IPEC aims to help schools develop interprofessional training programs to better prepare health care professionals for team-based care.¹⁴

An increasing number of medical schools are shifting their educational focus to provide learning experiences with other future health care professionals in a team-based care environment. The following are three examples:

- Loyola University Chicago is moving its nursing school to an adjoining building on the same campus as its medical school. Starting this fall, medical and nursing students will train together in a new, virtual six-bed hospital, learning to work as a team on simulated patients.¹⁵
- New York University School of Medicine and College of Nursing are collaborating on a new inter-professional project that features team-based learning including real and virtual case studies on common clinical problems. In 2010, the two schools launched a pilot program that paired 15 medical students with 15 nursing students. The students were presented with different types of health crises and collaborated on treatment plans for the patients featured in simulations.¹⁶
- The University of Toledo (UT) Colleges of Medicine, Nursing, Health Science & Human Service and Pharmacy have developed a series of interprofessional educational, clinical research and regional/global outreach programs over the past five years. The broad curricular impact of the UT Interprofessional Immersive Simulation Center (IISC) has also continued to enhance team-based education and clinical care. In addition, the multi-year experiences with a Team Leadership Curriculum, offered as a part of the Bridge to Clerkship Course to all medical students by the UT College of Business, has been well accepted.¹⁷ All of these curricular changes are assessed from a competency development perspective as well as a learner satisfaction view point.

In August 2010, the Office of Academic Affiliations (OAA) issued a request for proposals to establish Centers of Excellence in Primary Care Education. As part of US Department of Veterans Affairs’ (VA) New Models of Care initiative, the five centers that have been selected to participate will utilize VA primary care settings to develop and test innovative approaches to prepare physician residents and students, advanced practice nurse and undergraduate nursing students, and associated health trainees for primary care practice in the 21st Century. The purpose of the Centers will be to foster transformation of clinical education by preparing graduates of health professional programs to work in and lead patient-centered interprofessional teams that provide coordinated longitudinal care.¹⁸

There are a number of studies about the positive outcomes of interprofessional education (IPE). However, there is concern about implementing IPE programs due to such things as differing schedules across programs, “packed” curricula that do not permit additional IPE experiences, and faculty and administrative resistance. Council on Medical Education Report 2-I-12, being considered by the House of Delegates at this meeting, provides more information about IPE, including a summary of current AMA policies and recommendations on medical education for IPE.

IPE is also available for practicing physicians and other health care professionals. The Community Health Leadership Program at Duke University provides a three day intensive study with Duke Medical Center faculty and hands-on interactions with many Durham community organizations. Students complete the remainder of the program via distance-based learning, allowing them to return to work while gaining the knowledge and skills to design and implement innovative programs to serve the health needs of communities across the country.¹⁶ An example that brings the training to the practice setting, the Agency for Healthcare Research and Quality in collaboration with the Department of Defense, has been giving hospitals and practitioners a boot camp in team-based care since 2006. The TeamSTEPPS program focuses on building up core competencies in teamwork.¹⁹

Physician leadership and management skills are becoming essential as primary care providers and a wide array of specialists become jointly responsible for the quality and cost of health care. Brody School of Medicine at East Carolina University has established a Physician Leadership Institute to foster the development of physician leaders. This continuing medical education program is designed to enhance and develop leadership knowledge, skills and abilities through group sessions, case studies, independent study, and practical application. Applicants to the

program must possess aspiration for leadership and meet a set of criteria before they can participate in the program.²⁰

RELEVANT AMA POLICY

The AMA advocates that physicians maintain authority for patient care in any team care arrangement to assure patient safety and quality of care. The AMA believes that the ultimate responsibility for the individual patient's medical care rests with the physician. Physicians must be responsible and have authority for initiating and implementing quality-control programs for non-physicians delivering medical care in integrated practices. To assure quality patient care, the medical profession and allied health professionals should have continuing dialogue on patient care functions that may be delegated to allied health professionals consistent with their education, experience and competency (Policies H-360.987[1,2,6], H-200.994 and D-35.985[5,6]). The AMA advocates that the appropriate ratio of a supervising physician to non-physician practitioners should be determined by the physician at the practice level, consistent with good medical practice, and state law where relevant (Policy H-35.975).

The AMA lacks policy regarding the specific clinical roles and responsibilities for certain members of health care teams. However, Policy H-360.983 states that in order to provide optimum patient care, it is essential that registered nurses participate in the management of analgesic modalities. Specifically, a registered nurse, qualified by education, experience and credentials, who follows a patient-specific protocol written by a qualified physician, should be allowed to adjust and discontinue catheter infusions.

The AMA has developed the following guidelines for the integrated practice of physicians and nurse practitioners (Policy H-160.950):

- (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.

The AMA has developed the following guidelines for the integrated practice of physicians and physician assistants (Policy H-160.947):

- (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.

AMA INTEGRATED PHYSICIAN PRACTICE SECTION (IPPS)

At its 2012 Annual Meeting, the AMA House of Delegates established the Integrated Physician Practice Section (IPPS), acknowledging the physician-led integrated health care model as a specific mode of practice. An outgrowth of the Advisory Committee on Group Practice Physicians, the IPPS will represent doctors in physician-led, integrated health care organizations that coordinate patient care across specialties and among physicians who share common records and clinical care processes. Section membership includes two categories, Associate and Affiliate. Associate membership is directed toward physicians who are in physician-led, integrated health systems, while Affiliate membership allows for physicians who are in organizations working toward becoming physician-led, integrated health care systems. The inaugural meeting of the IPPS will be held in conjunction with the AMA's 2013 Annual Meeting of the House of Delegates.

DISCUSSION

Given the combined impact of health care budgetary constraints at the state and federal levels, the imminent coverage of up to 30 million more Americans starting in 2014, and shortages of both physicians and nurses for the foreseeable future, recognition of and support for physician-led team based care is building. Due to the potential complexity of the health care delivery system, independent practice by any professional has become very difficult. The future of health care delivery is patient-centered and focused on improving the experience of care, improving the health of populations and reducing per capita costs of health care. This focus is possible through the use of team-based models of health care delivery.

The Councils suggest defining "team-based health care" as the provision of health care services by a physician-led team of at least two health care practitioners who work collaboratively with each other and the patient and family to accomplish shared goals within and across settings to achieve patient-centered, coordinated, high-quality care.

In a physician-led interprofessional team-based environment, the physician leader should be empowered to perform the full range of medical interventions that she or he is trained and licensed to perform. All members of a physician-led interprofessional health care team should 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. Only when each practitioner, including the physician team leader, is practicing according to these demonstrated competencies, can the team as a group provide the highest quality care. As a result, the focus shifts toward what the team can do rather than what each individual practitioner can do.

In this setting, there is greater responsibility for the physician team leader than for other team members. Accordingly, the Councils have outlined a series of principles to guide physician leaders of health care teams. The physician team leader should make clear the team's mission, vision and values; direct and/or engage in collaboration with team members on patient care; be accountable for clinical care, quality improvement, efficiency of care, and continuing education; focus the team on patient and family-centered care; foster a respectful team culture and encourage team members to contribute the full extent of their professional insights, information and resources; encourage adherence to best practice protocols that team members are expected to follow; manage care transitions by the team so that they are efficient and effective, and transparent to the patient and family; 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; 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; facilitate the work of the team and be responsible for reviewing team members' clinical work and documentation; and review measures of "population health" periodically when the team is responsible for the care of a defined group.

Given the greater efficiencies and quality of care that team-based health care has the potential to provide, the Councils encourage independently practicing physicians and physicians in small practices to seek opportunities to connect with similar sized practices to form team-based health care networks. Such opportunities exist through independent practice associations, virtual networks or other networks of independent providers that may be practical given geographic and specialty specific circumstances. The use of more sophisticated information technology resources will likely facilitate communication among and between such networks and the teams of providers within them.

New delivery models, such as team-based health care, are resulting in new payment models, such as bundled payment methods and incentives that support and reward higher performance. The Councils believe that innovative payment mechanisms should appropriately compensate the team and all team members for team-based health care. In addition, the Councils believe that the structure, governance and compensation of the team should be aligned to optimize the performance of the team leader and team members. The governance of the team needs to provide authority to the physician team leader. It is critical that the physician team leader, in addition to assuming greater responsibility, be given the authority to make management decisions about the team such as determining staffing needs, committing resources, constructing budgets, setting goals and objectives, evaluating performances, and distributing incentives.

Health care teams fall into several categories, such as medical care, care coordination and health care. Different teams provide different functions just as different team members provide different functions. While team-based care is a group effort, physicians, due to their training and expertise, are the natural leaders in overall care delivery.²¹ With this team leadership comes accountability, even if the physician is practicing in an established health care system. Care coordination teams often operate seemingly independently, with a designated team leader who most likely is not a physician. Even so, the care coordination team leader should be obligated to report to and collaborate with a physician team leader of the medical care team. Every medical procedure performed by non-physicians must ultimately be approved, whether according to an outlined protocol or by the physician reviewing and signing off on clinical notes. Patients interact with different teams according to any changes in their health conditions. The Councils believe that transitions between teams should be managed by the teams and be transparent to the patient.

In a physician-led interprofessional team-based model, the ratio of non-physician practitioners to the physician leader has been considered. The “optimum” ratio is outlined in state law and therefore varies across the country. Policy H-35.975 addresses the ratio issue in general, although the Councils recommend amendments to update this policy in order to modernize the terminology from “physician extenders” to “non-physician practitioners” and to include elements that should be taken into consideration when determining the appropriate ratio of consulting physician leader to non-physician practitioners, such as the specialty, physician’s panel size and disease burden of the patient case mix.

The Councils believe that Policy H-160.950, which provides guidelines for the integrated practice of physicians and nurse practitioners, and Policy H-160.947, which provides guidelines for the integrated practice of physicians and physician assistants are still relevant and should be reaffirmed.

RECOMMENDATIONS

The Council on Medical Education and the Council on Medical Service recommend that the following be adopted and that the remainder of the report be filed:

1. That our American Medical Association (AMA) define “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. That our AMA 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. That our AMA 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. That our AMA adopt 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. That our AMA encourage 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. That our AMA study innovative payment mechanisms that appropriately compensate the physician and/or team for team-based health care, with a report back to the House of Delegates.
7. That our AMA advocate that the structure, governance and compensation of the team should be aligned to optimize the performance of the team leader and team members.
8. That our AMA modify Policy H-35.975 by insertion and deletion to read as follows:

Our AMA endorses the principle that the appropriate ratio of physician to ~~non-physician extenders~~ practitioners should be determined by physicians at the practice level, consistent with good medical practice, and state law where relevant, taking into consideration the physician's specialty, physician's panel size and disease burden of the patient case mix.
9. That our AMA reaffirm Policy H-160.950, which provides guidelines for the integrated practice of physicians and nurse practitioners.
10. That our AMA reaffirm Policy H-160.947, which provides guidelines for the integrated practice of physicians and physician assistants.

REFERENCES

1. Core Principles & Values of Effective Team-Based Health Care. Discussion Paper. *Institute of Medicine, National Academy of Sciences*. In press.
2. Krupa, C. Team-Based Care will be Focus of National Health Education Center. *AM News*. July 9, 2012. Available at: www.ama-assn.org/amednews/2012/07/09/prsb0709.htm
3. Virginia House Bill 346, Practice of Nurse Practitioners; Patient Care Teams. Signed March 10, 2012. Available at: <http://leg1.state.va.us/cgi-bin/legp504.exe?121+sum+HB346>
4. Krupa, C. Virginia Law Promotes Team-Based Care by Doctors and Nurse Practitioners. *AM News*. April 23, 2012. Available at: www.ama-assn.org/amednews/2012/04/23/prsa0423.htm

5. The Impact of Health Care Reform on the Future Supply and Demand for Physicians Updated Projections through 2025. *Association of American Medical Colleges Center for Workforce Studies*. June 2010. Available at: www.aamc.org/download/158076/data/updated_projections_through_2025.pdf
6. Buerhaus, P., Auerbach, D and Staiger, D. The Recent Surge In Nurse Employment: Causes and Implications. *Health Affairs*. July/August 2009; volume 28, no. 4, w 657-w668. Available at: <http://content.healthaffairs.org/content/28/4/w657.full.pdf+html>
7. Lindbloom, E., Acevedo-Espinoza, S., Meadows, S., Morris, L., Swenson, A. Evidence for Substituting Nurses for Primary Care Physicians is Lacking. *AAFP News NOW*. November 2011. Available at: www.aafp.org/online/en/home/publications/news/news-now/opinion/20111123npeditorial.html
8. Primary Health Care Professionals: A Comparison. American Academy of Family Physicians. Available at: www.aafp.org/online/en/home/media/kits/fp-np.html
9. AAFP Policies on Nurse Practitioners. 2009. Available at: www.aafp.org/online/en/home/policy/policies/nursepractitioners.html
10. Cosway, R., Girod, C., Abbott, B. Analysis of Community Care of North Carolina. Milliman Incorporated. December 2011.
11. Sargen, M., Hooker, R., Cooper, R. Gaps in the Supply of Physicians, Advance Practice Nurses, and Physician Assistants. *Journal of the American College of Surgeons*. Volume 212, Issue 6, Pages 991-999, June 2011.
12. Park, M., Cherry, D., Decker, S. Nurse Practitioners, Certified Nurse Midwives, and Physician Assistants in Physician Offices. *United States Department of Health and Human Services. Centers for Disease Control and Prevention. National Center for Health Statistics*. Data Brief. No. 69. August 2011. Available at: www.cdc.gov/nchs/data/databriefs/db69.pdf
13. McCarthy, D. and Mueller, K. Organizing for Higher Performance: Case Studies of Organized Delivery Systems. The Commonwealth Fund. July 2009.
14. Core Competencies for Interprofessional Collaborative Practice. *Interprofessional Education Collaborative. Report of an Expert Panel*. May 2011. Available at: www.aacn.nche.edu/education-resources/ipecreport.pdf
15. Krupa, C. Medical Schools Shift Focus to Team Based Care. *AM News*. March 2012. Available at: www.ama-assn.org/amednews/2012/03/19/pr120319.htm
16. Educating Nurses and Physicians: Toward New Horizons Conference Summary. *The Carnegie Foundation for the Advancement of Teaching in collaboration with the Josiah Macy Jr. Foundation*. June 16-18, 2010. Available at: [www.macyfoundation.org/docs/macy_pubs/JMF_Carnegie_Summary_WebVersion_\(3\).pdf](http://www.macyfoundation.org/docs/macy_pubs/JMF_Carnegie_Summary_WebVersion_(3).pdf)
17. The University of Toledo, Interprofessional Immersive Simulation Center (UT-IISC). Available at: www.utoledo.edu/centers/iisc/index.html
18. VA Centers of Excellence in Primary Care Education. *United States Department of Veterans Affairs. Office of Academic Affiliation*. Available at: www.va.gov/OAA/COE_PCE.asp
19. TeamSTEPPS®: National Implementation. Agency for Healthcare Research and Quality. U.S. Department of Health and Human Services. Available at: <http://teamstepps.ahrq.gov/>
20. Materials provided through July 2012 communication with Paul R. G. Cunningham, MD, FACS, Dean and Senior Associate Vice Chancellor for Medical Affairs, East Carolina University.
21. Medicare and Medicaid Programs; Reform of Hospital and Critical Access Hospital Conditions of Participation; Final Rule. *Centers for Medicare and Medicaid Services. Federal Register*, Volume 77, No. 95. May 16, 2012. Available at: www.gpo.gov/fdsys/pkg/FR-2012-05-16/pdf/2012-11548.pdf