HOD ACTION: Council on Medical Education Report 3 adopted as amended, and the remainder of the report filed.

REPORT 3 OF THE COUNCIL ON MEDICAL EDUCATION (I-18)
Developing Physician-Led Public Health/Population Health Capacity in Rural Communities
(Reference Committee C)

EXECUTIVE SUMMARY

American Medical Association (AMA) Policy D-295.311, "Developing Physician Led Public Health/Population Health Capacity in Rural Communities," asks that our AMA, with the participation of the appropriate educational and certifying entities, study innovative approaches that could be developed and/or implemented to support interested physicians as they seek qualifications and credentials in preventive medicine/public health to strengthen public health leadership, especially in rural communities.

Our country's need for public health and preventive medicine investments continues to grow, spurred by many factors (e.g., the closing of rural hospitals, lack of access to urban health care, maintaining the viability of safety-net hospitals, the opioid crisis, increasing prevalence of lifestyle diseases, etc.), and resource deficiencies have been documented in both rural and urban communities. It is well documented that investments in preventive medicine and public health are cost effective and save lives. Therefore, support for physicians seeking qualifications and credentials in these areas is desirable.

A wide range of organizations, both physician- and non-physician focused, offers education and resources regarding this important topic. Rural training tracks and programs are available at the UME, GME, and postgraduate level, and multiple national public/population health organizations offer strategies and solutions to individuals and entities seeking to improve their public health knowledge and gain new skills. The AMA also offers resources that help physicians expand their knowledge base in population/public health, including STEPSforward™ modules and the Health Systems Science textbook, which focuses on providing a fundamental understanding of how health care is delivered, how health care professionals work together to deliver that care, and how the health system can improve patient care and health care delivery. Programs are also available to address the multiple complex issues related to the advancement of women's health and fulfilling women's potential for leadership in education, research, and clinical practice.

This report focuses on existing and planned educational interventions that are intended to help physicians and medical students develop professional skills and qualifications related to preventive, public, population, and rural health. The report: 1) outlines previous Council on Medical Education reports related to this topic; 2) summarizes relevant available resources; and 3) makes recommendations to the House of Delegates.

HOD ACTION: Council on Medical Education Report 3 adopted as amended, and the remainder of the report filed.

REPORT OF THE COUNCIL ON MEDICAL EDUCATION

CME Report 3-I-18

Subject: Developing Physician-Led Public Health/Population Health Capacity in Rural Communities

Presented by: Carol Berkowitz, MD, Chair

Referred to: Reference Committee C
(Peter C. Amadio, MD, Chair)

INTRODUCTION

American Medical Association (AMA) Policy D-295.311, "Developing Physician Led Public Health/Population Health Capacity in Rural Communities," asks that our AMA, with the participation of the appropriate educational and certifying entities, study innovative approaches that could be developed and/or implemented to support interested physicians as they seek qualifications and credentials in preventive medicine/public health to strengthen public health leadership, especially in rural communities. Previous reports on this topic include Council on Medical Education Report 11-A-09, "Integrating Content Related to Public Health and Preventive Medicine Across the Medical Education Continuum"; Council on Medical Education Report 8-A-08, "One-Year Public Health Training Options for All Specialties"; and Council on Medical Education Report 12-A-07, "One-Year Public Health Training Options for All Specialties."

This report focuses on existing and planned educational interventions that are intended to help physicians and medical students develop professional skills and qualifications related to preventive, public, population, and rural health. The report: 1) outlines previous Council on Medical Education reports related to this topic; 2) summarizes relevant available resources; and 3) makes recommendations to the HOD.

BACKGROUND

Our country's need for public health and preventive medicine investments continues to grow, spurred by a number of factors (e.g., the closing of rural hospitals, lack of access to urban health care, maintaining the viability of safety-net hospitals, the opioid crisis, and the increasing prevalence of lifestyle diseases), and resource deficiencies have been documented in both rural and urban communities.[1,2,3,4] The Affordable Care Act (ACA) reduced the number of uninsured persons due to Medicaid expansion, health insurance marketplaces, the employer mandate to provide health insurance, and a provision permitting young adults to remain on a parent's health insurance plan until 26 years of age. However, an estimated 27 million U.S. citizens remain uninsured.[5] Inpatient, emergency, and ambulatory services for this population, as well as for millions of other patients, particularly Medicaid beneficiaries, continue to rely on safety-net health systems that provide health care regardless of the patient's ability to pay. Although a few programs, such as Emergency Medicaid, provide some payment for lifesaving treatments and limited recovery services, longer-term care, such as psychiatric care, is also disproportionately delivered by safety-net health systems.[5]

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In 2017, Congress eliminated the individual mandate penalty for not having health insurance (effective 2019);[4] this will have the greatest effect on safety net hospitals that are already in poor financial condition, especially those in rural and suburban areas. Without the mandate, more people are likely to forgo insurance and, if they later need care, will seek that care from safety-net health systems. Since the total demand for uncompensated care in a health care market does not change, evidence suggests that there is nearly complete spillover of uncompensated care to neighboring hospitals.[5]

It is well documented that investments in preventive medicine and public health are cost effective and save lives.[6,7,8,9] Therefore, support for physicians seeking qualifications and credentials in these areas is desirable.

The AMA Council on Medical Education (CME) has addressed related topics on several previous occasions.

CME Report 11-A-09, "Integrating Content Related to Public Health and Preventive Medicine Across the Medical Education Continuum," identified ways in which medical students are educated in public health and reported on strategies for integrating public health-related content across the medical education continuum. The report further recommends that our AMA encourage medical schools, schools of public health, graduate medical education programs, and key stakeholder organizations to develop and implement longitudinal educational experiences in public health for medical students in the pre-clinical and clinical years and to provide both didactic and practice-based experiences in public health for residents in all specialties including public health and preventive medicine; and that our AMA encourage the Liaison Committee on Medical Education and the Accreditation Council for Graduate Medical Education to examine their standards to assure that public health-related content and skills are included and integrated as appropriate in the curriculum.

CME Reports 8-A-08 and 12-A-07, both titled "One-Year Public Health Training Options for All Specialties," concluded that a strong public health infrastructure is necessary to further advancements that have been made in public health as well as to combat existing and future threats to the nation's health. Further, these reports noted that concern over the nation's ability to produce the number of well-trained public health physicians needed to address these public health needs has been growing, and that there is clear need for a cadre of physicians prepared for public health practice.

CME Report 4-A-10, "Educational Strategies to Promote Physician Practice in Underserved Areas," does not specifically address public or population health. However, it does link the importance of exposure to rural training experiences to eventual rural practice.

DISCUSSION

A wide range of organizations, both physician- and non-physician-focused, offers education and resources regarding this important topic.

American Board of Preventive Medicine

The American Board of Preventive Medicine (ABPM) offers four pathways to achieve board certification in Public Health and General Preventive Medicine.

- Residency Pathway
  The ABPM Residency Pathway is open to all individuals "who have completed an Accreditation Council for Graduate Medical Education (ACGME)-accredited residency of not less than two years, in the specialty area for which certification is being sought."[10] Participation in the pathway requires a supervised year of postgraduate clinical training, including at least 10 months of direct patient care; completion of an ACGME-accredited residency training program accredited in the specialty area for which certification is being pursued; successful completion of an MPH or equivalent graduate degree; and demonstration of current practice if more than 24 months have passed since completion of residency training (unless otherwise engaged in specialty or subspecialty training).

- Complementary Pathway
  The ABPM Complementary Pathway, meant to engage mid-career physicians seeking to change their specialty practice, requires two years of supervised postgraduate clinical training in an ACGME-accredited training program; a year of ACGME-accredited residency training in the specialty area in which certification is sought; postgraduate level coursework in epidemiology, biostatistics, health services administration, environmental health sciences, and social and behavioral health sciences; and proof of current practice (unless in training) for two of the last five years.

- Special Pathway
  The ABPM Special Pathway allows ABPM diplomates with current certification in Aerospace Medicine, Occupational Medicine, or Public Health and General Preventive Medicine to pursue certification in another ABPM primary specialty. (Diplomates with current subspecialty certification in Addiction Medicine, Clinical Informatics, Medical Toxicology, and Undersea and Hyperbaric Medicine are not eligible for this pathway.) In addition to ABPM specialty certification, candidates must also be able to demonstrate they have been practicing (or training) for two of the last five years in the specialty/subspecialty area in which they are seeking additional certification.

- Alternative Pathway
  The ABPM Alternative Pathway is only applicable to those individuals who graduated from medical school prior to January 1, 1984, and who do not qualify for certification through one of the three previously described pathways. In addition to the graduation year requirement, candidates must have completed a year of supervised postgraduate training in an ACGME-accredited GME program, including at least 10 months of direct patient care; postgraduate level coursework in epidemiology, health services administration, environmental health sciences, and social and behavioral health sciences; and demonstration of practice for at least two of the last five years. For this category, the required, demonstrated number of years in practice is dependent on ABMS member board certification status; completion of residency training in the specialty area in which certification is sought; and possession of an MPH degree or equivalent.

American College of Physicians

The American College of Physicians (ACP) sponsors an ACP Leadership Academy, which provides leadership training and resources.[11] The Academy offers an 18-month certificate program in conjunction with the American Association for Physician Leadership, including a combination of formal training (through webinar or live coursework), group discussions, and a capstone project.

The Leadership Academy also offers free webinars,[12] several of which (population health, leadership principles for women in medicine) are directly related to this report.

Recently, the ACP released a position paper noting that, "The American College of Physicians recommends that social determinants of health and the underlying individual, community, and systemic issues related to health inequities be integrated into medical education at all levels."[13] The paper also reviews particular health challenges associated with rural locations.

Efforts of the Accelerating Change in Medical Education Consortium

Many Accelerating Change in Medical Education Consortium members have been working to address population, public, and rural health education at the UME level.[14]

- The partnership between A.T. Still University's School of Osteopathic Medicine in Arizona and the National Association of Community Health Centers embeds second-, third-, and fourth-year medical students in rural health centers. Additionally, second-year students participate in a year-long course in epidemiology, biostatistics, and preventive medicine, during which they work with community stakeholders and health centers to identify and address local issues of community concern.
- The Brody School of Medicine at East Carolina University integrates a population health component into its comprehensive longitudinal core curriculum.
- Case Western Reserve University School of Medicine incorporates a patient navigator model into its curriculum, and medical student navigators learn to use and create registries for population health management in specific population groups.
- The curriculum at Dell Medical School at the University of Texas at Austin is built around instruction in leadership, which is incorporated into all four years of education. During the third year, students can choose to focus on specific areas of study, including population health.
- Upon joining the consortium, Florida International University Herbert Wertheim College of Medicine enhanced its "Green Family Foundation Neighborhood Health Education Learning Program" (NeighborhoodHELP™), which provides a longitudinal, interprofessional community-based experience for medical students and partnerships with local hospitals.
- The blended learning curriculum at the Mayo Clinic School of Medicine focuses on six content domains, one of which is population-centered care. Students can also pursue an additional 12 credits to receive a master's degree in health care delivery science, which includes instruction in population and preventive health. Further, Mayo has created milestones for students related to population health in alignment with ACGME competencies.
- The New York University School of Medicine's Health Care by the Numbers curriculum uses very large de-identified datasets to train students to improve the health of populations.
- Ohio University Heritage College of Osteopathic Medicine integrates population health into its continuous, longitudinal curriculum.
- The University of Connecticut School of Medicine's MDelta curriculum has been specifically designed so that all students can achieve a certificate in public health, with a specific focus on disparities and the social determinants of health. Additionally, the school has incorporated the Regenstrief EHR Clinical Learning Platform into the MDelta curriculum. This platform includes large numbers of de-identified patient records, allowing students to research population health issues.

- The University of Nebraska Medical Center College of Medicine, through its focus on interprofessional education, has established official partnerships with its colleges of nursing, public health, pharmacy, dentistry, and allied health professions.
- The University of North Dakota School of Medicine and Health Sciences incorporates training in the use of telemedicine to connect remote patients and providers at multiple locations to address rural health care needs. Simulation training mimics common cases seen in rural settings.
- Medical students at the University of Texas Rio Grande Valley School of Medicine learn onsite in unincorporated *colonias* along the U.S./Mexico border, allowing incorporation of oral histories into the medical record. Students also have the opportunity to shadow community health workers, or *promotoras*, as part of a curriculum that simulates the process necessary to convince legislators to fund similar interventions.
- In Vanderbilt University School of Medicine's longitudinal, four-year Foundations of Health Care Delivery course, third- and fourth-year medical students complete self-directed modules in a number of topic areas, including advanced population health and public health.
- The Warren Alpert Medical School of Brown University offers nine courses in its Master of Science degree in population medicine, covering social determinants of health, disparities, instruction in population medicine research, leadership, and epidemiology. Some of these courses are required for all students, even if not pursuing the master's degree. Students are also required to prepare a thesis on population medicine.

Combined UME, GME, and Postgraduate Educational Programs and Rural and Public/Population Health Training Tracks

The topic of public/population health recently has been the focus of increased attention and study for physician learners,[15, 16] and a number of public health training opportunities are available to learners beginning at the UME level. According to the Association of American Medical Colleges (AAMC), 87 MD-MPH programs are currently offered at institutions spanning 37 states and the District of Colombia.[17] The American Association of Colleges of Osteopathic Medicine (AACOM) also maintains a list of dual degree programs. As of June 2018, 17 institutions offered combined DO-MPH degrees.[18]

In addition to MD- or DO-MPH programs, some medical schools offer specific experiences in rural training. For example, the Rural Opportunities in Medical Education (ROME) program at the University of North Dakota School of Medicine is available to third-year students and involves a multi-month, interdisciplinary assignment to a rural primary care setting.[19] Likewise, the Wisconsin Academy for Rural Medicine (WARM) is a training program intended to address rural physician shortages and ultimately improve the health of rural Wisconsin.[20] Of WARM graduates, 91 percent practice in Wisconsin, and 52 percent practice primary care medicine. Similar to the ROME program, the Rural Physician Associate Program (RPAP) offered by the University of Minnesota Medical School provides third-year medical students a hands-on opportunity to live and train in rural communities.[21]

Due to limited access to health care in some regions of West Virginia, the Rural Health Partners Scholarship Program is collaborating with third-year medical students who are interested in matching into a Charleston Area Medical Center (CAMC) Residency Program.[22] Scholarship recipients receive mentoring during their fourth year of medical school in preparation for the residency program; experience a one-month rural health rotation at one of the participating rural sites; complete a required research project; and then receive a $10,000 scholarship when they

1 successfully graduate from medical school and match into one of the participating CAMC
2 residency programs. The candidates must be medical students at West Virginia University,
3 Marshall University, or West Virginia School of Osteopathic Medicine. The educational base and
4 residency enable students to develop clinical and leadership experiences uniquely targeted for rural
5 and underserved areas.[20] (The "All-in Policy" for waivers from the National Resident Matching
6 Program is currently under review. Certain CAMC departments such as family medicine may
7 pursue and be awarded such a match waiver. Applicants will be notified of waiver status as that
8 information becomes available.)[20]
9
10 At the GME level, the ACGME Common Program Requirements include expectations that issues
11 related to public health be included in the educational program for all specialties. Among the
12 ACGME's six competencies, Systems-Based Practice is especially relevant to the integration of
13 public health. This competency states that "Residents must demonstrate an awareness of and
14 responsiveness to the larger context and system of health care, including the social determinants of
15 health, as well as the ability to call effectively on other resources to provide optimal health care."
16 This includes "advocating for quality patient care and optimal patient care systems…incorporating
17 considerations of value, cost awareness, delivery and payment, and risk-benefit analysis in patient
18 and/or population-based care as appropriate," and "understanding health care finances and its
19 impact on individual patients' health decisions."[23]
20
21 Several individual specialties also incorporate training in public health-related matters.
22 Accreditation requirements for pediatrics, for example, require structured activities designed to
23 prepare pediatric residents to be effective advocates for the health of children in the community.
24 Additionally, many family medicine residencies teach community-oriented primary care, which
25 integrates public health principles into primary care practice.
26
27 Combined residency programs also are available for trainees interested in pursuing experience in
28 public/population health. Of the 73 currently accredited residency training programs in preventive
29 medicine,[24] three are combined family medicine/preventive medicine programs, and six are
30 combined internal medicine/preventive medicine programs.[25] Furthermore, of the 11,300 ACGME-
31 accredited programs in all specialties, 357 indicated that they offer a separate rural track.[26]
32
33 For example, Texas Tech University has established a rural health residency training program in
34 family medicine at four sites (Andrews, Fort Stockton, Sweetwater, and Alpine). The program
35 began as a 1115 waiver project/grant of $3 million and has been successful enough that each of the
36 hospitals involved is now contributing funding to support the program. The program requires
37 residents to complete a one-year core program and then two years of training at a rural site in West
38 Texas. The goal is to place physicians in the region who will stay and provide care to the residents
39 of these locations. Texas currently has the largest number of at-risk hospitals of any state in the
40 nation (75).[27]
41
42 For medical school graduates, public/population health training opportunities exist beyond
43 combined residency training programs. The AAMC curates a list of public health pathways.[28]
44 Currently, the website identifies 57 public health fellowship, faculty development, and continuing
45 education opportunities.
46
47 At the postgraduate level, the Centers for Disease Control and Prevention (CDC), through its
48 Epidemic Intelligence Service (EIS) Program, offers two-year, postgraduate programs that train
49 physicians (and others) in infectious disease investigation, thereby preparing them to respond to
50 public health threats both domestically and internationally. In 2017, 71 EIS officers were trained
51 through this program, 65 of whom were U.S. citizens or permanent residents.[29]

National Public Health Organizations

Multiple national public/population health organizations currently offer strategies and solutions to individuals and entities seeking to improve their public health knowledge and gain new skills.

- The American Association of Public Health Physicians (AAPHP), founded to provide a voice to physician directors of state and local health departments at the national level, offers publicly available educational resources, ranging from ethics in public health, food safety, fracking, and gun violence/racism prevention.[30]

- In addition to a collection of reports, educational webinars, and policy statements on a broad range of public health topics, the American Public Health Association offers a substantial number of internships (not limited to physicians-in-training or physicians) in topics ranging from environmental health, government relations, injury and violence prevention, and public health policy, as well as a Public Health Fellowship in Government. This fellowship places future public health leaders into positions as staff members for elected officials in Congress.[31]

- The National Association of County and City Health Officials (NACCHO) offers a publicly available "toolbox" focusing on public health tools created by and for members of the public health community. Tools range from emergency preparedness and vector control to public engagement and injury and violence prevention. NACCHO also offers a library of best practices related to chronic disease management intended to help local health departments stay current in both knowledge and interventions.[32] Furthermore, NACCHO University is an online learning hub where public health professionals can access training and develop competencies.[33] Finally, NACCHO Consulting works with local public health departments on research and evaluation projects, performance improvement, workforce development, and public health topics.[34]

- The CDC has compiled a resource list "for health professional students, educators, and health professionals to learn more about issues affecting individuals at a population level, to become more familiar with other population health issues, to integrate public health into existing curricula, and for increased collaboration with public health."[35] This list comprises collaborative efforts, competencies, curricula, training opportunities, and peer-reviewed publications, among other resources.

- The Public Health Leadership Forum, funded by the Robert Wood Johnson Foundation, seeks to engage public health leaders and stakeholders in efforts that promote transformation in the field of public health.[36] The Forum has worked on a number of impactful projects, including the development of a set of foundational public health services for public health departments and the visioning of the future of high-functioning public health departments.

- The Association of State and Territorial Health Officials (ASTHO) has developed a list of educational tools and resources that support cooperation between public health and primary care organizations.[37] ASTHO also provides resources to state and territorial health officials regarding proven and cost-effective population health improvement approaches.[38]

- The National Network of Public Health Institutes serves as the national coordinating center for ten regional public health training centers and 40 additional local sites to "offer high-

quality training, tools, and resources for thousands of professionals engaged in the critical work of advancing public health practice and improving population health,”[39] and serves as facilitator of the Public Health Learning Network. These training centers and affiliate sites focus on building skills in change management, communication, diversity/inclusion, information/analytics, leadership, policy engagement, problem solving, resource management, and systems thinking on a wide range of topics in communities across the United States.

- In conjunction with other organizations, the Council of State and Territorial Epidemiologists currently sponsors four fellowships in applied epidemiology, public health informatics, health systems integration, and informatics (training in place).[40] Fellowship recipients commit to two years of on-the job training onsite at a state or local health agency, in step with recommendations from the National Academy of Medicine (NAM) that “State and large local health departments, in conjunction with medical schools and schools of public health, expand postresidency fellowships in public health that emphasize transition into governmental public health practice.”[41]

- Also supportive of this NAM recommendation are fellowships sponsored by the Association of Schools and Programs of Public Health (ASPPH). ASPPH notes that more than 2,200 “ASPPH Fellows and Interns have been placed at state/local health departments and federal agency offices across the U.S., and in 26 countries worldwide where U.S. agencies are assisting Ministries of Health.”[42]

Additional AMA Resources

The AMA’s STEPS Forward™ library includes a module on Project ECHO™, which is specifically designed to help coordinate care across rural areas in need of certain specialty care.[43] Additionally, the AMA published a STEPS Forward™ module on social determinants of health in September 2018.[44]

Further, the AMA’s groundbreaking work in the discipline of health systems science (HSS) has highlighted the importance of teaching physician learners how to advocate for their patients and communities and understand the socioecological determinants of health, health care policy, and health care economics. The AMA’s HSS textbook[45] is the first text that focuses on providing a fundamental understanding of how health care is delivered, how health care professionals work together to deliver that care, and how the health system can improve patient care and health care delivery. Along with the basic and clinical sciences, HSS is rapidly becoming a crucial “third pillar” of medical science, requiring a practical, standardized curriculum with an emphasis on understanding the role of human factors, systems engineering, leadership, and patient improvement strategies that will help transform the future of health care and ensure greater patient safety. As of the writing of this report, the AMA’s HSS textbook is in use by 32 medical schools across the country, and a second edition is scheduled to be released at the end of 2019.

PROMOTING PUBLIC HEALTH LEADERSHIP

A review of the medical education literature finds recommendations for strategies to improve the development of public health leadership capacity across the medical education continuum. Such strategies include instituting specific public health leadership curricula;[46] looking at how public health leadership is currently defined;[47] focusing on the specific skills and talents public health leaders require;[48] and considering the risks and benefits of engaging non-clinician celebrity diplomacy.[49]

1 Additional studies focus more specifically on the limits of public health leadership programs.
2 Grimm et al. note that the number of public health leadership programs has declined since 2012
3 and consequently proposed a framework for greater uniformity in leadership development and
4 evaluation.[50] Others note that evaluation of public health leadership interventions is often lacking.[51]
5
6 *Leadership Roles for Women*
7
8 Although their numbers in leadership roles are increasing, women remain underrepresented in the
9 top echelons of health care leadership, and gender differences exist in the types of leadership roles
10 women do attain.[52] The Department of Health and Human Services Office on Women's Health,
11 through its National Center of Excellence initiative, has encouraged the institutions participating in
12 the initiative to address the multiple complex issues that are impeding the advancement of women
13 in education, research, and clinical practice and are preventing the realization of women
14 physicians' full potential for leadership.[53]
15
16 Considering the many ways that sex and gender influence disease presentation and patient
17 management, there have been various studies and initiatives to improve the integration of these
18 topics into medical education. A growing network of medical and academic institutions,
19 professional organizations, government agencies, and individuals who share a vision of women's
20 health and sex- and gender-specific medicine are developing materials for medical education and
21 clinical practice. The Laura W. Bush Institute for Women's Health and the Texas Tech University
22 Medical Center Women's Health Committee have developed a website that provides resources on
23 sex- and gender-specific health and continuing medical education programs. The Sex and Gender
24 Women's Health Collaborative maintains a digital resource library of sex- and gender-specific
25 materials. The Office of Research on Women's Health website offers a series of courses for
26 researchers, clinicians, and students to provide a foundation for sex and gender accountability in
27 medical research and treatment. Articles that present a case for the inclusion of sex- and gender-
28 focused content into medical education curricula are summarized in a bibliography that was
29 recently developed for the AMA Council on Medical Education website.
30
31 Programs are also available to educate women on the practices needed to enhance their leadership
32 skills and effectiveness. One example is the Emerging Women Executives in Health Care Program,
33 offered through the Harvard T.H. Chan School of Public Health.[54]
34
35 RELEVANT AMA POLICY
36
37 The AMA has extensive policy related to this topic; these policies are listed in the Appendix.
38
39 SUMMARY AND RECOMMENDATIONS
40
41 Leadership in public and population health remains an important topic deserving of continued
42 interest within the community of medicine. In addition to the ongoing focus on available training
43 opportunities related to public/population health leadership for physicians and medical students,
44 attention should be directed to the future composition of the country's public health leaders. A
45 recent study found that 73 percent of deans of schools of public health were male, and 70 percent
46 received their terminal degree more than 35 years ago; 64 percent of state health directors received
47 their terminal degree more than 25 years ago; and 26 percent of state health directors hold no
48 terminal degree.[14] There is no evidence to suggest that these individuals are anything other than
49 effective, dedicated leaders who are passionate about promoting public/population health in their
50 communities and throughout the country. However, these statistics should perhaps spark a
51 discussion within the medical community regarding how individuals are currently encouraged and

incentivized to enter public health leadership positions, and how to ensure that current public/population health leaders are actively engaging in relevant lifelong learning.

The Council on Medical Education therefore recommends that the following recommendations be adopted and the remainder of the report be filed:

1. That Policy D-295.311, "Developing Physician Led Public Health / Population Health Capacity in Rural Communities," be rescinded, as having been fulfilled by this report. (Rescind HOD Policy)

2. That our American Medical Association (AMA) reaffirm the following policies:
   D-295.327, "Integrating Content Related to Public Health and Preventive Medicine Across the Medical Education Continuum"
   D-305.964, "Support for the Epidemic Intelligence Service (EIS) Program and Preventive Medicine Residency Expansion"
   D-305.974, "Funding for Preventive Medicine Residencies"
   H-425.982, "Training in the Principles of Population-Based Medicine"
   D-440.951, "One-Year Public Health Training Options for all Specialties"
   H-440.954, "Revitalization of Local Public Health Units for the Nation"
   H-440.888, "Public Health Leadership"
   H-440.969, "Meeting Public Health Care Needs Through Health Professions Education"
   (Reaffirm HOD Policy)

3. That our AMA encourage the Association of American Medical Colleges (AAMC), American Association of Colleges of Osteopathic Medicine (AACOM), and Accreditation Council for Graduate Medical Education (ACGME) to highlight public/population health leadership learning opportunities to all learners, but especially encourage dissemination to women physician groups and other groups typically underrepresented in medicine. (Directive to Take Action)

4. That our AMA encourage public health leadership programs to evaluate the effectiveness of various leadership interventions. (Directive to Take Action)

Fiscal Note: $1,000.

APPENDIX: RELEVANT AMA POLICY

8.11, "Health Promotion and Preventive Care"

Medicine and public health share an ethical foundation stemming from the essential and direct role that health plays in human flourishing. While a physician's role tends to focus on diagnosing and treating illness once it occurs, physicians also have a professional commitment to prevent disease and promote health and well-being for their patients and the community.

The clinical encounter provides an opportunity for the physician to engage the patient in the process of health promotion. Effective elements of this process may include educating and motivating patients regarding healthy lifestyle, helping patients by assessing their needs, preferences, and readiness for change and recommending appropriate preventive care measures. Implementing effective health promotion practices is consistent with physicians' duties to patients and also with their responsibilities as stewards of health care resources.

While primary care physicians are typically the patient's main source for health promotion and disease prevention, specialists can play an important role, particularly when the specialist has a close or long-standing relationship with the patient or when recommended action is particularly relevant for the condition that the specialist is treating. Additionally, while all physicians must balance a commitment to individual patients with the health of the public, physicians who work solely or primarily in a public health capacity should uphold accepted standards of medical professionalism by implementing policies that appropriately balance individual liberties with the social goals of public health policies.

Health promotion should be a collaborative, patient-centered process that promotes trust and recognizes patients' self-directed roles and responsibilities in maintaining health. In keeping with their professional commitment to the health of patients and the public, physicians should:
(a) Keep current with preventive care guidelines that apply to their patients and ensure that the interventions they recommend are well supported by the best available evidence.
(b) Educate patients about relevant modifiable risk factors.
(c) Recommend and encourage patients to have appropriate vaccinations and screenings.
(d) Encourage an open dialogue regarding circumstances that may make it difficult to manage chronic conditions or maintain a healthy lifestyle, such as transportation, work and home environments, and social support systems.
(e) Collaborate with the patient to develop recommendations that are most likely to be effective.
(f) When appropriate, delegate health promotion activities to other professionals or other resources available in the community who can help counsel and educate patients.
(g) Consider the health of the community when treating their own patients and identify and notify public health authorities if and when they notice patterns in patient health that may indicate a health risk for others.
(h) Recognize that modeling health behaviors can help patients make changes in their own lives.

Collectively, physicians should:
(i) Promote training in health promotion and disease prevention during medical school, residency and in continuing medical education.
(j) Advocate for healthier schools, workplaces and communities.
(k) Create or promote healthier work and training environments for physicians.
(l) Advocate for community resources designed to promote health and provide access to preventive services.
(m) Support research to improve the evidence for disease prevention and health promotion.

H-225.949, "Medical Staff and Hospital Engagement of Community Physicians"

2. Our AMA encourages medical staffs and hospitals to engage community physicians, as appropriate, in medical staff and hospital activities, which may include but need not be limited to: (a) medical staff duties and leadership; (b) hospital governance; (c) population health management initiatives; (d) transitions of care initiatives; and (e) educational and other professional and collegial events.

D-295.327, "Integrating Content Related to Public Health and Preventive Medicine Across the Medical Education Continuum"

1. Our AMA encourages medical schools, schools of public health, graduate medical education programs, and key stakeholder organizations to develop and implement longitudinal educational experiences in public health for medical students in the pre-clinical and clinical years and to provide both didactic and practice-based experiences in public health for residents in all specialties including public health and preventive medicine.
2. Our AMA encourages the Liaison Committee on Medical Education and the Accreditation Council for Graduate Medical Education to examine their standards to assure that public health-related content and skills are included and integrated as appropriate in the curriculum.
3. Our AMA actively encourages the development of innovative models to integrate public health content across undergraduate, graduate, and continuing medical education.
4. Our AMA, through the Initiative to Transform Medical Education (ITME), will work to share effective models of integrated public health content.
5. Our AMA supports legislative efforts to fund preventive medicine and public health training programs for graduate medical residents.
6. Our AMA will urge the Centers for Medicare and Medicaid Services to include resident education in public health graduate medical education funding in the Medicare Program and encourage other public and private funding for graduate medical education in prevention and public health for all specialties

H-295.868, "Education in Disaster Medicine and Public Health Preparedness During Medical School and Residency Training"

1. Our AMA recommends that formal education and training in disaster medicine and public health preparedness be incorporated into the curriculum at all medical schools and residency programs.
2. Our AMA encourages medical schools and residency programs to utilize multiple methods, including simulation, disaster drills, interprofessional team-based learning, and other interactive formats for teaching disaster medicine and public health preparedness.
3. Our AMA encourages public and private funders to support the development and implementation of education and training opportunities in disaster medicine and public health preparedness for medical students and resident physicians.
4. Our AMA supports the National Disaster Life Support (NDLS) Program Office's work to revise and enhance the NDLS courses and supporting course materials, in both didactic and electronic formats, for use in medical schools and residency programs.
5. Our AMA encourages involvement of the National Disaster Life Support Education Consortium's adoption of training and education standards and guidelines established by the newly created Federal Education and Training Interagency Group (FETIG).
6. Our AMA will continue to work with other specialties and stakeholders to coordinate and encourage provision of disaster preparedness education and training in medical schools and in graduate and continuing medical education.

7. Our AMA encourages all medical specialties, in collaboration with the National Disaster Life Support Educational Consortium (NDLSEC), to develop interdisciplinary and inter-professional training venues and curricula, including essential elements for national disaster preparedness for use by medical schools and residency programs to prepare physicians and other health professionals to respond in coordinated teams using the tools available to effectively manage disasters and public health emergencies.
8. Our AMA encourages medical schools and residency programs to use community-based disaster training and drills as appropriate to the region and community they serve as opportunities for medical students and residents to develop team skills outside the usual venues of teaching hospitals, ambulatory clinics, and physician offices.
9. Our AMA will make medical students and residents aware of the context (including relevant legal issues) in which they could serve with appropriate training, credentialing, and supervision during a national disaster or emergency, e.g., non-governmental organizations, American Red Cross, Medical Reserve Corps, and other entities that could provide requisite supervision.
10. Our AMA will work with the Federation of State Medical Boards to encourage state licensing authorities to include medical students and residents who are properly trained and credentialed to be able to participate under appropriate supervision in a national disaster or emergency.
11. Our AMA encourages physicians, residents, and medical students to participate in disaster response activities through organized groups, such as the Medical Response Corps and American Red Cross, and not as spontaneous volunteers.
12. Our AMA encourages teaching hospitals to develop and maintain a relocation plan to ensure that educational activities for faculty, medical students, and residents can be continued in times of national disaster and emergency.

D-305.964, "Support for the Epidemic Intelligence Service (EIS) Program and Preventive Medicine Residency Expansion"

Our AMA will work to support increased federal funding for training of public health physicians through the Epidemic Intelligence Service program and work to support increased federal funding for preventive medicine residency training programs.

D-305.974, "Funding for Preventive Medicine Residencies"

Our AMA will work with the American College of Preventive Medicine, other preventive medicine specialty societies, and other allied partners, to formally support legislative efforts to fund preventive medicine training programs.

D-385.963, "Health Care Reform Physician Payment Models"

8. Our AMA recommends that state and local medical societies encourage the new Accountable Care Organizations (ACOs) to work with the state health officer and local health officials as they develop the electronic medical records and medical data reporting systems to assure that data needed by Public Health to protect the community against disease are available.
9. Our AMA recommends that ACO leadership, in concert with the state and local directors of public health, work to assure that health risk reduction remains a primary goal of both clinical practice and the efforts of public health.
10. Our AMA encourages state and local medical societies to invite ACO and health department leadership to report annually on the population health status improvement, community health problems, recent successes and continuing problems relating to health risk reduction, and measures of health care quality in the state.

H-425.982, "Training in the Principles of Population-Based Medicine"

The AMA will continue to monitor and support the progress made by medical and public health organizations in championing disease prevention and health promotion; and will support efforts to bring schools of medicine and public health back into a closer relationship.

H-425.984, "Clinical Preventive Services"

Implications for Adolescent, Adult, and Geriatric Medicine: (1) Prevention should be a philosophy that is espoused and practiced as early as possible in undergraduate medical schools, residency training, and continuing medical education, with heightened emphasis on the theory, value, and implementation of both clinical preventive services and population-based preventive medicine. (2) Practicing physicians should become familiar with authoritative clinical preventive services guidelines and routinely implement them as appropriate to the age, gender, and individual risk/environmental factors applicable to the patients in the practice at every opportunity, including episodic/acute care visits. (3) Where appropriate, clinical preventive services recommendations should be based on outcomes-based research and effectiveness data. Federal and private funding should be increased for further investigations into outcomes, application, and public policy aspects of clinical preventive services.

H-425.986, "Challenges in Preventive Medicine"

It is the policy of the AMA that (1) physicians should become familiar with and increase their utilization of clinical preventive services protocols; (2) individual physicians as well as organized medicine at all levels should increase communication and cooperation with and support of public health agencies. Physician leadership in advocating for a strong public health infrastructure is particularly important; (3) physicians should promote and offer to serve on local and state advisory boards; and (4) in concert with other groups, physicians should study local community needs, define appropriate public health objectives, and work toward achieving public health goals for the community.

H-425.993, "Health Promotion and Disease Prevention"

The AMA (1) reaffirms its current policy pertaining to the health hazards of tobacco, alcohol, accidental injuries, unhealthy lifestyles, and all forms of preventable illness; (2) advocates intensified leadership to promote better health through prevention; (3) believes that preventable illness is a major deterrent to good health and accounts for a major portion of our country's total health care expenditures; (4) actively supports appropriate scientific, educational and legislative activities that have as their goals: (a) prevention of smoking and its associated health hazards; (b) avoidance of alcohol abuse, particularly that which leads to accidental injury and death; (c) reduction of death and injury from vehicular and other accidents; and (d) encouragement of healthful lifestyles and personal living habits; and (5) strongly emphasizes the important opportunity for savings in health care expenditures through prevention.

H-440.888, "Public Health Leadership"

Our AMA: (1) urges that appropriately trained and experienced licensed physicians (MDs or DOs) be employed by state and local health departments to be the responsible leader when patient care decisions are made, whether for individuals in the STD or TB Clinics or for the community at large when an epidemic is to be managed; and

(2) defines public health leadership and decision-making that promotes health and prevents disease in the community as the practice of medicine, requiring a licensed practitioner with all the skills, training, experience and knowledge of a public health trained physician.

H-440.892, "Bolstering Public Health Preparedness"

Our AMA supports: (1) the concept that enhancement of surveillance, response, and leadership capabilities of state and local public health agencies be specifically targeted as among our nation's highest priorities; and (2) in principle, the funding of research into the determinants of quality performance by public health agencies, including but not limited to the roles of Boards of Health and how they can most effectively help meet community needs for public health leadership, public health programming, and response to public health emergencies.

H-440.912, "Federal Block Grants and Public Health"

(1) Our AMA should collaborate with national public health organizations to explore ways in which public health and clinical medicine can become better integrated; such efforts may include the development of a common core of knowledge for public health and medical professionals, as well as educational vehicles to disseminate this information.
(2) Our AMA urges Congress and responsible federal agencies to: (a) establish set-asides or stable funding to states and localities for essential public health programs and services, (b) provide for flexibility in funding but ensure that states and localities are held accountable for the appropriate use of the funds; and (c) involve national medical and public health organizations in deliberations on proposed changes in funding of public health programs.
(3) Our AMA will work with and through state and county medical societies to: (a) improve understanding of public health, including the distinction between publicly funded medical care and public health; (b) determine the roles and responsibilities of private physicians in public health, particularly in the delivery of personal medical care to underserved populations; (c) advocate for essential public health programs and services; (d) monitor legislative proposals that affect the nation's public health system; (e) monitor the growing influence of managed care organizations and other third party payers and assess the roles and responsibilities of these organizations for providing preventive services in communities; and (f) effectively communicate with practicing physicians and the general public about important public health issues.
(4) Our AMA urges state and county medical societies to: (a) establish more collegial relationships with public health agencies and increase interactions between private practice and public health physicians to develop mutual support of public health and clinical medicine; and (b) monitor and, to the extent possible, participate in state deliberations to ensure that block grant funds are used appropriately for health-related programs.
(5) Our AMA urges physicians and medical societies to establish community partnerships comprised of concerned citizens, community groups, managed care organizations, hospitals, and public health agencies to: (a) assess the health status of their communities and determine the scope and quality of population- and personal-based health services in their respective regions; and (b) develop performance objectives that reflect the public health needs of their states and communities.
6. Our AMA: (a) supports the continuation of the Preventive Health and Health Services Block Grant, or the securing of adequate alternative funding, in order to assure preservation of many critical public health programs for chronic disease prevention and health promotion in California and nationwide, and to maintain training of the public health physician workforce; and (b) will communicate support of the continuation of the Preventive Health and Health Services Block Grant, or the securing of adequate alternative funding, to the US Congress.

D-440.951, "One-Year Public Health Training Options for all Specialties"

1. Our AMA encourages additional funding for public health training for more physicians. 2. Our AMA, in conjunction with other appropriate organizations, supports the work of relevant groups to initiate the development of specific physician competencies for physicians engaged in public health practice. 3. Our AMA will inform medical students and physicians of existing opportunities for physician training in preparation for public health practice.

H-440.954, "Revitalization of Local Public Health Units for the Nation"

The AMA (1) reaffirms its support of state and local health departments; (2) recommends that health departments be directed by well qualified public health trained physicians; and (3) urges federal, state and local governments to study public health and preventive services, and urges the allocation of necessary resources to maintain these services at a high level of quality.

H-440.960, "The IOM Report (The Future of Public Health) and Public Health"

Our AMA
(1) encourages medical societies to establish liaison committees through which physicians in private practice and officials in public health can explore issues and mutual concerns involving public health activities and private practice;
(2) seeks increased dialogue, interchange, and cooperation among national organizations representing public health professionals and those representing physicians in private practice or academic medicine;
(3) actively supports promoting and contributing to increased attention to public health issues in its programs in medical science and education;
(4) continues to support the providing of medical care to poor and indigent persons through the private sector and the financing of this care through an improved Medicaid program;
(5) encourages public health agencies, as the IOM report suggests, to focus on assessment of problems, assurance of healthy living conditions, policy development, and activities such as those mentioned in the "Model Standards";
(6) encourages physicians and others interested in public health programs to apply the messages and injunctions of the IOM report as these fit their own situations and communities; and
(7) encourages physicians in private practice and those in public health to work cooperatively, striving to ensure better health for each person and an improved community as enjoined in the Principles of Medical Ethics.

H-440.969, "Meeting Public Health Care Needs Through Health Professions Education"

(1) Faculties of programs of health professions education should be responsive to the expectations of the public in regard to the practice of health professions. Faculties should consider the variety of practice circumstances in which new professionals will practice. Faculties should add curriculum segments to ensure that graduates are cognizant of the services that various health care professionals and alternative delivery systems provide. Because of the dominant role of public bodies in setting the standards for practice, courses on health policy are appropriate for health professions education. Additionally, governing boards of programs of education for the health professions, as well as the boards of the institutions in which these programs are frequently located, should ensure that programs respond to changing societal needs. Health professions educators should be involved in the education of the public regarding health matters. Programs of health professions education should continue to provide care to patients regardless of the patient's ability

to pay and they should continue to cooperate in programs designed to provide health practitioners in medically underserved areas.
(2) Faculty and administrators of health professions education programs should participate in efforts to establish public policy in regard to health professions education. Educators from the health professions should collaborate with health providers and practitioners in efforts to guide the development of public policy on health care and health professions education.

H-450.933, "Clinical Data Registries"

1. Our AMA encourages multi-stakeholder efforts to develop and fund clinical data registries for the purpose of facilitating quality improvements and research that result in better health care, improved population health, and lower costs.

D-478.974, "Quality Improvement in Clinical / Population Health Information Systems"

Our American Medical Association will invite other expert physician associations into the AMA consortium to further the quality improvement of electronic health records and population health as discussed in the consortium letter of January 21, 2015 to the National Coordinator of Health Information Technology.

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