Preventive Medicine 118 (2019) 166–170

Contents lists available at ScienceDirect

Preventive Medicine

journal homepage: www.elsevier.com/locate/ypmed

Discussion

Credentialing and privileging the preventive medicine physician☆

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ARTICLE INFO

Keywords:
Preventive medicine
Medical practice
Physicians
License
Credentialing
Privileging

ABSTRACT

The practice of preventive medicine remains ill-defined, and the specialty is threatened by a void in the definition of the specialty's practice. The authors propose a cohesive, active identification of skills provided by trained preventive medicine physicians through the credentialing and privileging process. The privileging process should incorporate clinical skills specific to the provider and non-clinical skills based on preventive medicine residency training competency requirements, preventive medicine board certification examination requirements, and the ten essential public health services. The specialty may benefit from development of clinical training based on public health clinical services as well as privileging of physicians in health organization leadership positions.

1. Introduction

In spite of recent considerations regarding the identity of the specialty of preventive medicine (Jung and Lushniak, 2017a; Jung and Lushniak, 2018), the practice of preventive medicine remains ill-defined. Preventive medicine, hereunto referring categorically to the specialty of Public Health and General Preventive Medicine and not the specialties of Occupational Medicine or Aerospace Medicine, is a unique specialty in which practitioners are trained in both clinical medicine as well as public health and population health.

However, whereas the preventive medicine specialty has a hold on its training and certification, there is a void in the definition of the specialty's practice. There are many reasons for this, including the ability of preventive medicine specialists to successfully occupy numerous divergent professional jobs, from a straightforward clinician to a public health administrator, and countless roles in between, each of which are fostered and enabled by the specialty's multifaceted training. As a result, preventive medicine physicians occupy non-direct patient care positions at more than double the rate of other specialists (Liang et al., 1995) and at more than triple the rate of primary care physicians (Primary Care Workforce Facts and Stats No. 1, 2011).

Despite the medical profession's recognition that caring for populations is just as critical as caring for individuals (Fineberg, 2011), the expected practice of physicians actually trained in these skills remains ambiguous. The authors found no published papers related specifically to the topic of preventive medicine's scope of practice, and believe this inconsistency has led to significant threats to the specialty, such as denial of licensure (Hull et al., 2013) and a steady decline in the number of residents within its training programs (Lane, 2000).

It is simplistic and dangerous to suggest that preventive medicine physicians can simply claim carte blanche any public health, population health, or administrative activity as the practice of preventive medicine. Instead, the authors propose a cohesive, active identification of exactly those specialized skills provided by trained preventive medicine physicians. And these skills should provide the basis for credentialing and privileging physicians in order to delineate and clarify the preventive medicine physician's scope of practice.

2. Credentialing the preventive medicine physician

Credentialing is a mechanism of “obtaining, verifying and assessing the qualifications of a practitioner to provide care or services” (Care Program, n.d.). This includes validating a physician's academic degrees, medical training, board certification(s), license(s), maintenance of certification, continuing education credits, and any other credentials relevant to the specialty.

Credentialing the preventive medicine physician is complicated by the various pathways through which a physician can become certified

☆ Financial disclosures:
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https://doi.org/10.1016/j.ypmed.2018.10.015
Received 5 July 2018; Received in revised form 9 October 2018; Accepted 19 October 2018
Available online 30 October 2018
0091-7435/ Published by Elsevier Inc.

Table 1
Credentialing requirements for preventive medicine physicians.

	Residency pathway	Complementary pathway	Special pathway	Alternate pathway
Medical degree	Accredited M.D. or D.O degree	Accredited M.D. or D.O degree	Accredited M.D. or D.O degree	Accredited M.D. or D.O degree with graduation date prior to January 1, 1984.
Medical license	Allopathic or osteopathic license from U.S. state or territory	Allopathic or osteopathic license from U.S. state or territory	Allopathic or osteopathic license from U.S. state or territory	Allopathic or osteopathic license from U.S. state or territory
Graduate coursework transcript	Coursework leading to master of public health or equivalent post-graduate degree. Courses must include biostatistics, epidemiology, health services management and administration, and environmental health.	At least 15 credits of graduate-level coursework in biostatistics, epidemiology, health services management and administration, environmental health, and behavioral health sciences.	At least 15 credits of graduate-level coursework in biostatistics, epidemiology, health services management and administration, environmental health, and behavioral health sciences.	[a]
Residency program verification	Completion of an ACGME-accredited residency in Public Health and General Preventive Medicine.	Completion of at least 2 years of graduate medical education.	Completion of an ACGME-accredited residency in either Aerospace Medicine or Occupational Medicine.	[a]
Clinical training verification	At least one year of ACGME-accredited clinical residency training, which includes at least 6-months of direct patient care comprising ambulatory and inpatient experience involving diagnostic workup and treatment of individual patients.	At least two years of ACGME-accredited clinical residency training, which includes at least 6-months of direct patient care comprising ambulatory and inpatient experience involving diagnostic workup and treatment of individual patients.	At least one year of ACGME-accredited clinical residency training, which includes at least 6-months of direct patient care comprising ambulatory and inpatient experience involving diagnostic workup and treatment of individual patients.	At least one year of ACGME-accredited clinical residency training, which includes at least 6-months of direct patient care comprising ambulatory and inpatient experience involving diagnostic workup and treatment of individual patients.
Practice experience	If more than 24 months since completion of residency, must have been practicing or been in training in Public Health and General Preventive Medicine for 1 of the 3 years prior to certification.	Must have been practicing or been in training in Public Health and General Preventive Medicine for 2 of the 5 years prior to certification.	Must have been practicing or been in training in Public Health and General Preventive Medicine for 2 of the 5 years prior to certification.	[a]
Maintenance of certification	Required for all diplomates of the American Board of Preventive Medicine certified after 1997; optional if certified before 1998. Requirements include 100 credits of ABPM-approved lifelong learning and self assessment credits, 150 additional continuing medical education credits, a patient safety course within the first two years of certification or recertification, successful completion of the recertification exam within the last 3 years of certification, and two assessments of practice performance within the 10-year certification cycle.	Required for all diplomates of the American Board of Preventive Medicine certified after 1997; optional if certified before 1998. Requirements include 100 credits of ABPM-approved lifelong learning and self assessment credits, 150 additional continuing medical education credits, a patient safety course within the first two years of certification or recertification, successful completion of the recertification exam within the last 3 years of certification, and two assessments of practice performance within the 10-year certification cycle.	Required for all diplomates of the American Board of Preventive Medicine certified after 1997; optional if certified before 1998. Requirements include 100 credits of ABPM-approved lifelong learning and self assessment credits, 150 additional continuing medical education credits, a patient safety course within the first two years of certification or recertification, successful completion of the recertification exam within the last 3 years of certification, and two assessments of practice performance within the 10-year certification cycle.	Required for all diplomates of the American Board of Preventive Medicine certified after 1997; optional if certified before 1998. Requirements include 100 credits of ABPM-approved lifelong learning and self assessment credits, 150 additional continuing medical education credits, a patient safety course within the first two years of certification or recertification, successful completion of the recertification exam within the last 3 years of certification, and two assessments of practice performance within the 10-year certification cycle.
Continuing medical education	At least 250 total credits per 10-year certification cycle, to include at least 100 credits of ABPM-approved lifelong learning and self assessment credits.	At least 250 total credits per 10-year certification cycle, to include at least 100 credits of ABPM-approved lifelong learning and self assessment credits.	At least 250 total credits per 10-year certification cycle, to include at least 100 credits of ABPM-approved lifelong learning and self assessment credits.	At least 250 total credits per 10-year certification cycle, to include at least 100 credits of ABPM-approved lifelong learning and self assessment credits.

[a] The Alternative Pathway allows certain physicians who graduated from medical school prior to 1984 to use various combinations of graduate coursework, residency training and board certification to become eligible for certification in Public Health and General Preventive Medicine. The variations are too numerous to list here. Full details are available on the American Board of Preventive Medicine website (Public Health and General Preventive Medicine).

in the specialty (American Board of Preventive Medicine, n.d.-a). Many of these credentials are interdependent — for example, physicians in the U.S. are unlikely to obtain a medical license without having graduated from accredited medical schools or residencies, so a valid license may presume satisfactory education and training. Nevertheless, primary verification and due diligence by each credentialing body is critically important. Each credential is essential in its own right and, given potential expiration dates as well as continuing maintenance requirements, should be validated independently.

Table 1 displays the various pathways a preventive medicine physician can reach board certification, as well as the continuing certification requirements for such physicians.

3. Privileging the preventive medicine physician

Privileging is a process to determine which duties and services, based on a physician's training and experience, may be performed by the physician (Hunt, 2012). Privileges are not limited only to procedures but may also extend to non-procedural functions such as the authorization to admit, evaluate, diagnose and treat patients (University Hospitals and Health System, n.d.), or to administer diagnostic tests and therapeutic interventions (Stanford Health Care, 2014). Privileges are requested by the physician, granted by a facility, and define a physician's scope of practice within that facility.

3.1. Clinical privileges

Although there are basic clinical skills common to preventive medicine, clinical privileges may vary widely for preventive medicine physicians in the U.S. since some preventive medicine specialists complete full clinical residencies, while some may complete only partial clinical residencies, and others complete only an intern year, all in a multitude of specialties, including a “transitional” internship with its broad clinical training. Because of the wide variation in any given preventive medicine physician's clinical training, there is unfortunately no single standard set of clinical privileges against which a preventive medicine physician should be assessed. Even the current two-month requirement for each year of preventive medicine residency training makes no requirement that the activities during those months bear any relationship specific to preventive medicine (Accreditation Council on Graduate Medical Education, 2017). Instead, clinical privileges will be dependent on the provider, their specific level of expertise, as well as the needs of the facility.

One solution to the variation in clinical training may be the creation of preventive medicine-specific training, which could comprise traditional direct-patient care clinical services emphasizing prevention, but can also include clinical training specific to public health. For example, provision of directly observed therapy for tuberculosis, or the diagnosis and treatment of sexually transmitted diseases are clinical services provided by many health departments. By developing standardized clinical training for preventive medicine residents that incorporates clinical skills specific to public health, the profession may benefit from a standardized clinical model for the specialty (Jung and Lushniak, 2017b).

3.2. Non-clinical privileges

Privileges for non-clinical aspects of the specialty's practice, defined as activities not requiring direct patient care, may be less obvious but more important for the specialty. The authors propose a framework for developing preventive medicine privileges that incorporate three aspects of the specialty — training, certification, and public health practice. Specifically, non-clinical privileges should be based on preventive medicine residency training competencies, preventive medicine board certification examination requirements, and the ten essential public health services.

If clinical care roughly follows a standard Diagnosis-Assessment-Treatment paradigm, core public health functions follow a comparable Assessment/Research-Policy Development-Assurance model (Centers for Disease Control and Prevention, n.d.). These core functions can serve as the foundational platform for preventive medicine privileges, and preventive medicine competencies can be utilized at each node of this model.

The core public health functions can be further amplified into the preventive medicine competencies, which form the basis for preventive medicine residency training. These competencies are partly based on nine of the ten essential public health services (Accreditation Council on Graduate Medical Education, 2017). It is reasonable to expect preventive medicine training to manifest in practice, reflecting the essential public health services, which provide additional detail to core public health functions.

The American Board of Preventive Medicine (ABPM) certification exam measures a physician's mastery of topics in both core content (American Board of Preventive Medicine, n.d.-b), as well as public health and general preventive medicine specialty content (American Board of Preventive Medicine, n.d.-c). These topics include health services management and administration, epidemiology, biostatistics, clinical preventive medicine, environmental health, and behavioral and mental health. Each of these exam topics is further divided into multiple elements; for example, the topic of biostatistics is comprised of numerous statistical tests such as chi-square and multiple regression. These elements may provide additional specificity to the broader topics that form the basis for preventive medicine privileges. Health organizations developing privileging documents may choose general topics or specific elements as befits their needs.

Table 2 illustrates a sample model for non-clinical preventive medicine privileges utilizing the authors' suggested framework where public health core functions, divided into the essential public health services, are then matched to ABPM certification exam items, ultimately leading to a specific privilege relating to a task or duty in the preventive medicine physician's practice.

Table 2 is not meant to be an exhaustive preventive medicine privileging document – not all potential privileges are delineated. In fact, a complete listing of all possible preventive medicine privileges would be quite lengthy, but those germane to a specific position may simply be added to the privileging document.

Ultimately, Table 2 serves to illustrate the framework with several examples of non-clinical privileges and how they can be tied back to the training of preventive medicine specialists, the essential public health services, and core public health functions. Although limited and crude as shown, this framework can easily serve as a basis for more refined privileges for any number of public health or population health positions in any setting.

This is not an entirely new idea. There are examples of privileging documents for military preventive medicine physicians publicly available online (Department of the Navy, Bureau of Medicine, 2006; Air Force, n.d.; Army, 2004) and there may be similar privileging procedures within the private sector, which may provide additional templates for a general privileging process for preventive medicine physicians.

4. Discussion

Why credential and privilege preventive medicine physicians at all? By privileging both clinical and non-clinical portions of their jobs, individual preventive medicine physicians can benefit by developing a scope of practice based on matching their skills with the needs of their workplace. As this is expected of other specialties, privileging can demonstrate the ability of preventive medicine to fit into a health system's staffing structure. This can also benefit the specialty at large. As licensure of preventive medicine physicians has been an issue in the past (Hull et al., 2013), the provision of privileges to support licensure may

Table 2
Framework for non-clinical preventive medicine privileges.

Core functions of public health	Essential public health services & ACGME residency competency	Suggested ABPM certification exam element	Potential preventive medicine privilege[a]
Assessment & research	Monitor health status to identify and solve community health problems.	PH/GPM content: Epidemiology: data sources: reportable disease	Develop and manage a reportable disease surveillance system.
	Diagnose and investigate health problems and health hazards in the community.	PH/GPM content: Biostatistics: statistics: chi-square	Apply biostatistics to investigations into community health problems.
		PH/GPM content: biostatistics: meta-analysis	Plan and execute a meta-analysis of community health interventions.
	Research for new insights and innovative solutions to health problems.	PH/GPM content: health services administration: financing and delivery: financing mechanisms	Identify and apply innovative financing mechanisms to fund new public health programs.
Policy development	Inform, educate, and empower people about health issues.	Core content: environmental: risk communication	Write, edit and/or deliver public statements on health issues on behalf of the health agency.
	Mobilize community partnerships and action to identify and solve health problems.	Core content: health services management: organizational structure and development: organizational development/effectiveness	Develop and maintain appropriate community partnerships to advance health programs.
	Develop policies and plans that support individual and community health efforts.	Core content: behavior and mental health: substance abuse: screening	Develop and manage substance abuse screening programs in the community.
Assurance	Enforce laws and regulations that protect health and ensure safety.	PH/GPM content: health services administration: public health practice: legal & Ethical Issues	Employ applicable laws and regulations in determining quarantine decisions.
	Link people to needed personal health services and assure the provision of health care when otherwise unavailable.	Core content: health systems management: financing and delivery: public sector	Develop and manage a program to provide health care access information to community members.
	Assure competent public and personal health care workforce.	Core content: health services management: health care delivery: models	Develop and implement a preventive medicine privileging program for all physicians hired at health agency.
	Evaluate effectiveness, accessibility, and quality of personal and population-based health services.	PH/GPM content: health services administration: Systems-based practice: Quality measurement, assurance and improvement	Develop and manage quality assurance program for agency health services.

PH/GPM = Public Health and General Preventive Medicine.
[a] These sample privileges are generated solely by the authors and are merely presented as suggestions; they do not necessarily reflect expert opinion or professional consensus.

prove useful to state medical boards that may not understand the role of a physician without practice privileges.

Health organizations may also derive benefits from a preventive medicine privileging program. The Public Health Accreditation Board maintains standard 8.2: “Ensure a competent workforce through the assessment of staff competencies, the provision of individual training and professional development, and the provision of a supportive work environment” (Public Health Accreditation Board, 2013). Specifically, Measure 8.2.2A requires documentation of “Recruitment of qualified individuals for specific positions”, “A process to verify staff qualifications” and “Verified qualifications for all staff hired.” This measure also recommends, “The health department must document the recruitment of individuals *who are qualified* for their public health specific specialty position” (italics added by the authors). Privileging physicians at health departments using preventive medicine criteria may be one method of directly satisfying this accreditation measurement.

Not every health organization's leadership positions require a physician, although research indicates that physician leadership of health organizations improves outcomes (Sarto and Veronesi, 2016). To be clear, the authors do not claim that only preventive medicine specialists can fulfill health leadership roles. However, developing privileging criteria based on the specialty of preventive medicine may be a natural starting point to match job requirements with physician competencies as there will likely be overlap between those requirements and the specialty's competencies, which include management and administration.

The practice of public health should be held to a critical standard just like direct patient care – lives depend on it. Whether a physician in a health care leadership position brings anything more than authority, credibility or gravitas can be determined directly through matching the necessary skills for their position with the skills that the physician possesses. Just as it would be dangerous and negligent for uncredentialed and unprivileged clinicians to roam unregulated within a clinical setting, it may be just as dangerous and negligent for uncredentialed and unprivileged physicians to work unregulated in the non-clinical realm.

5. Conclusion

Preventive medicine is not merely a catch-all specialty for any non-clinical duties within a health organization; there are well-defined activities that encompass preventive medicine practice. To stabilize the foundational moors of preventive medicine practice, the authors propose a serious, deliberate and methodical attempt to define the specialty's practice through a framework for granting privileges based on preventive medicine training, certification, and public health services.

The authors believe that privileging preventive medicine physicians can only benefit the specialty as it grapples with comparisons to other clinical specialties, the lack of practice standards endorsed by the specialty's professional society, as well as the general obscurity of the specialty (Jung and Ambrose, 1996).

Zaza et al. (2018) suggest health organizations explore a “privilege-granting process” for preventive medicine physicians. The framework delineated herein could be used to establish a functional privileging program to ensure that physicians working in preventive medicine fields are properly vetted, and that those without sufficient training or experience in non-clinical skills are not inappropriately permitted to practice what they are neither trained or experienced to do. National specialty bodies such as the American College of Preventive Medicine should explore the development of a standardized template for the privileging of the specialty.

The authors agree with Zaza et al. (2018) but also propose that health organizations consider privileging *all* physicians working in leadership positions, based on the criteria relevant to the work of the organization and to the specialty of preventive medicine; they are likely to find that preventive medicine physicians may be the most qualified

for these positions.

The authors welcome comments, discussion and suggestions about this proposal.

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