

## **WORKGROUP TO DEFINE A MINIMAL DATA SET**

Report on a Recommended Framework for a Minimal Physician Data Set

*Adopted as policy by the Federation of State Medical Boards in April 2012*

### **TABLE OF CONTENTS**

Introduction and Charge	4
Importance of a Minimal Physician Data Set	5
Methodology	6
Framework for a Minimal Physician Data Set	7
Graphic Representation of a Minimal Physician Data Set	9
Recommended Data Elements for a Minimal Physician Data	10
Set Recommended Questions for a Minimal Physician Data Set	11
Conclusion	16
References	17
Participants	18

**FEDERATION OF STATE MEDICAL BOARDS  
WORKGROUP TO DEFINE A MINIMAL DATA SET**

**Report to the Federation of State Medical Boards of the United States, Inc.**

**INTRODUCTION AND CHARGE**

The passage of the Patient Protection and Affordable Care Act (ACA) in 2010, the aging of the population and the overall growth of the population have been described as three of the most important factors influencing why accurate assessments of the supply and demand for physicians are critical to understanding the health care needs of residents throughout the United States and its territories. Under the ACA, it is estimated that by 2019 an additional 32 million Americans may become insured.<sup>i</sup> In terms of demographics, the total population of the United States is projected to grow by 60 million, to a total of 373 million, by 2030.<sup>ii</sup> Additionally, baby boomers started turning 65 in 2011 and each day for the next 19 years an estimated 10,000 boomers will reach age 65.<sup>iii</sup> By 2030, all boomers will be 65 years of age or older and represent nearly 20% of the total population.<sup>iv</sup> Health-care reform, a growing and aging population combined with a projected physician shortage as high as 130,000 by 2025,<sup>v</sup> underscore the importance of knowing as much as possible about the physician workforce. How this challenge is addressed will impact many areas of the physician education and qualification process, including initial medical licensure (e.g., number of test administrations) and Maintenance of Licensure (MOL), specialty certification and Maintenance of Certification (MOC) and Osteopathic Continuous Certification (OCC).

As part of their ongoing effort to protect the public, the nation's state medical boards regularly collect and disseminate information about actively licensed physicians in their jurisdictions to the Federation of State Medical Boards (FSMB) Physician Data Center. In 2010, the FSMB systematically collated and analyzed all of this data to determine an accurate count of the number, age, specialty certification, and location by region of actively licensed physicians in the United States and the District of Columbia.<sup>vi</sup> The inaugural 2010 FSMB Census was successful and highlighted the need for additional research. A limitation of the 2010 FSMB Census data was that it did not contain information about a physician's professional activity. Physicians engage in patient care and/or other non-patient care activities, including teaching, administration, research or other professional activities. Although non-patient care includes important activities that contribute to quality health care delivery, many physicians involved in such activities may have an active license, which may contribute to an overestimation of the current physician workforce of physicians able to directly deliver health care. Furthermore, a licensed physician may be retired or work only part time, which could also contribute to an overestimation of the current physician workforce.

It was clear from the census that opportunities exist for future analyses that could be maximized with an expanded data-collection collaboration between the FSMB, its member boards, and other organizations within the house of medicine. In 2011, the FSMB House of Delegates adopted a

resolution that called for the FSMB, in cooperation with state medical boards, to develop a minimum physician demographic and practice data set, as well as a data collection tool and physician data repository. The FSMB Board of Directors, led by Board Chair Janelle Rhyne, MD, MA, MACP, created the FSMB Workgroup to Define a Minimal Data Set.

The FSMB's Minimal Data Set (MDS) Workgroup convened in the summer of 2011 and was charged with consulting with national workforce groups such as the National Center for Health Workforce Analysis (NCHWA) to facilitate development of a minimal physician demographic data set as well as to develop a minimum physician demographic data collection tool and a physician demographic data repository. In carrying out its charge, the MDS Workgroup was asked to build and recommend a framework for state boards, or their designated affiliate organizations, to collect and share with the FSMB additional demographic and practice data for physicians licensed in their jurisdictions.

### **IMPORTANCE OF A MINIMAL PHYSICIAN DATA SET**

The MDS Workgroup identified five key reasons why establishing a minimal data set is important to the health care system:

1. Physician workforce participation (entry, retention, exit and reentry) is subject to unpredictable economic factors, licensure and certification requirements, skills portability, as well as structural workforce issues such as participation levels, workforce aging, lifestyle factors, and gender.
2. Because physicians renew their license on a regular basis, working with state medical boards on a minimal data set is a cost-effective approach for collecting basic physician data.
3. It provides accurate and consistent information about physicians to state and federal policy makers which could be used in planning and resource allocation. Accurate projections of physician supply inform policymakers about the number and specialty composition of physicians, as well as help determine the need for other health care practitioners.
4. Some individuals hold licenses in more than one jurisdiction; uniform physician workforce data would lead to a better understanding of geographic participation and migratory patterns.
5. Physician supply and composition impact areas of the education and qualification process, including initial licensure, Maintenance of Licensure (MOL), specialty certification and Maintenance of Certification (MOC) and Osteopathic Continuous Certification (OCC).

## METHODOLOGY

The MDS Workgroup held teleconference meetings on July 12, 2011, and September 19, 2011. The workgroup also had one face-to-face meeting with representatives from the National Center for Health Workforce Analysis (NCHWA) in Washington, D.C., on November 22, 2011.

The MDS Workgroup agreed that a recommended framework for a minimal physician data set should be ready to be presented to the FSMB House of Delegates for a vote during the April 2012 FSMB Annual Meeting. However, if additional time was needed, an extension would be granted.

The MDS Workgroup used a knowledge-based approach to its deliberations. The workgroup reviewed pertinent health workforce literature, considered research conducted by other organizations, and studied standardized questions suggested by the NCHWA. To compare the current process being used and the physician workforce data elements being collected, the MDS Workgroup also gathered information available from 59 of the 69 FSMB member boards involved in licensing decisions. The information collected showed that 63 percent of responding boards collect at least some physician workforce data. As demonstrated by the findings, the procedures for collecting the data and the types of data elements collected vary noticeably for the 37 boards that indicated they collect information. Of the 37 boards that collect at least some physician workforce data the research indicates:

- 68 percent include workforce questions in their license renewal application
- 54 percent ask workforce questions that are voluntary
- 19 percent ask workforce questions that are mandatory
- 16 percent have a combination of voluntary and mandatory questions

In terms of demographic data sought by the boards, highlights from the 37 boards that collect data show similar variability:

- 49 percent ask for gender
- 46 percent ask for race
- 38 percent ask for ethnic background

The information collected also provided a range of other data points regarding physician characteristics and patient care. Generally, the research showed a fairly wide range of practices in terms of what kinds of questions are asked and what kind of information is being compiled by the boards.

Among the categories are questions about full-time vs. part-time practice, average hours per week per specialty area, hours per week spent in various practice settings, practice location and a variety of others.

- 78 percent ask if the physician works full time or part time
- 65 percent ask for practicing specialty(s)
- 49 percent ask average hours per week per specialty(s)
- 62 percent ask for average hours per week per practice setting

## **FRAMEWORK FOR A MINIMAL PHYSICIAN DATA SET**

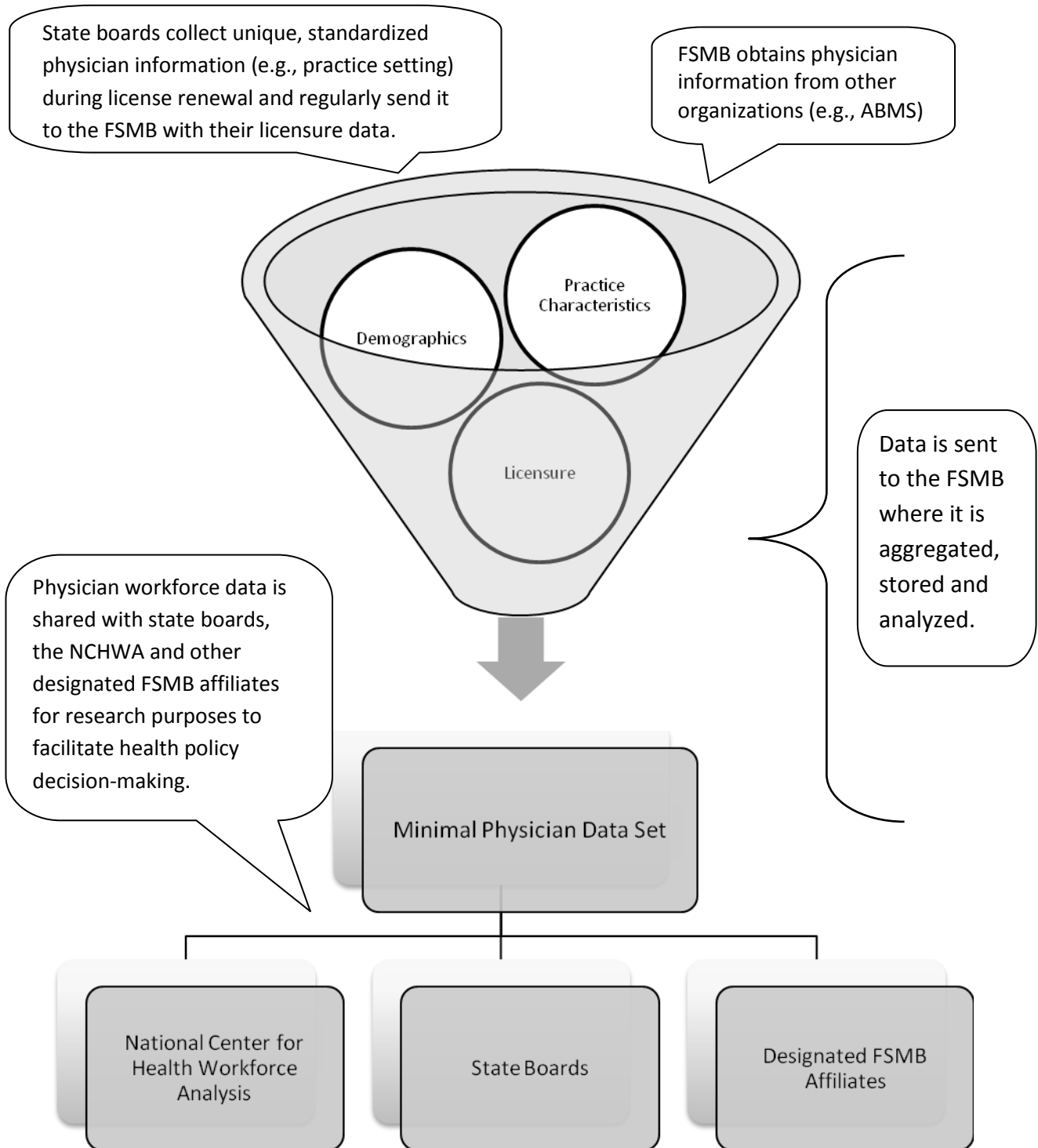
After reviewing applicable health workforce literature and analyzing information from state boards and the National Center for Health Workforce Analysis (NCHWA), the MDS Workgroup agreed that **a state board's license renewal process is a unique opportunity for collecting additional, up-to-date workforce information from physicians.** Twenty-six percent of state boards require physicians to renew their license every year, 66 percent require renewal once every two years and the remaining boards require renewal every three years or more. In addition, information gathered on the 37 boards that collect at least some physician workforce data indicated that the procedures for collecting data and the types of data elements collected vary considerably.

Based on this information, the MDS Workgroup developed and recommended a framework for a uniform minimal physician data set to be presented to the FSMB Board of Directors, state boards, and finally the FSMB House of Delegates at the 2012 FSMB Annual Meeting with the intent of future implementation by state medical and osteopathic boards. **The recommended principles of the framework for a minimal physician data set are:**

- **Workforce questions for a minimal physician data set should be added to a renewal application or be a separate questionnaire tied directly to the renewal process.** The collection process should be determined by each board, but the workgroup strongly recommends that the questions be a mandatory component to the renewal process to stress the importance of the data and maximize the quantity and quality of data collected. If a state board does not have authority to collect the majority of data suggested as part of license renewal, the board should consult with the FSMB and other state boards about establishing a survey to obtain workforce information from their licensees.
- **Workforce questions for a minimal physician data set should be standardized across all state boards and not found in other sources.** Questions should be straightforward for licensees, take about 10 minutes or less to answer, and be in an easy-to-use electronic format that follows best practices for user-friendly, survey interface design (e.g., drop-down menus).

- State boards may choose to collect data using various methods. To further enhance the value of their data, state boards may also choose to expand their data by adding other questions not recommended for the minimal physician data set. **State boards should share their methods for collecting physician data and the additional information they collect with the FSMB and other state boards to help establish best practices for collecting physician workforce data.**
- **The minimal physician data set is a shared responsibility, and the FSMB will assist state boards in building the database.**
- **Data for the minimal physician data set should be aggregated and stored in the FSMB's Federation Physician Data Center (FPDC).** The FPDC is a comprehensive central repository of state-based data that contains some biographical, educational and disciplinary information about physicians licensed in jurisdictions throughout the United States and its territories. The complete database contains more than 1.6 million physician records, including information about physicians who are currently licensed, no longer licensed, or deceased. The FPDC is continuously updated and the majority of state boards provide medical licensure information to the FPDC on a monthly or quarterly basis. The workgroup strongly recommends that the boards include physician data from standardized workforce questions with their regular transmissions of licensure data to the FPDC.
- **The FSMB should maintain a central repository of physician workforce data and create a confidential database for use by state boards, the NCHWA and other designated FSMB affiliates for research purposes.**
- **The FSMB should continue to collaborate with state boards and affiliate health care organizations to improve the collection and accuracy of physician workforce data.**

# GRAPHIC REPRESENTATION OF A MINIMAL PHYSICIAN DATA SET



## RECOMMENDED DATA ELEMENTS FOR A MINIMAL PHYSICIAN DATA SET

The MDS Workgroup identified the data elements listed below to be included in a uniform, minimal physician data set. The workgroup believes that many of the elements identified fall into one of three categories: (1) data currently provided by state boards as part of their regular transmissions of licensure data; (2) data that is or may be obtained by the FSMB through data sharing agreements with other organizations; or (3) unique and standardized data that state boards can obtain by adding questions to their renewal application or by asking questions as part of a separate questionnaire tied directly to the renewal process.

Data Element	Source and Rationale (when applicable)
Licensure status (active or inactive)	Currently provided by state boards.
Date of birth (mm/dd/yy)	Currently provided by state boards. FSMB has the date of birth for more than 96% of physicians with an active license.
Medical school graduated	Currently provided by state boards. FSMB has medical school matriculation data for more than 99% of physicians with an active license.
Medical school graduation year	Currently provided by state boards. FSMB has the medical school graduation year for more than 98% of physicians with an active license.
Specialty and subspecialty board certification	Obtained by FSMB. Specialty and subspecialty certification data is currently provided to FSMB by ABMS on a daily basis. FSMB is working with AOA to obtain access to their specialty and subspecialty certification data.
Maintenance of Certification and Osteopathic Continuous Certification	Obtained by FSMB from the ABMS and the AOA as the information becomes available.
Maintenance of Licensure	Provided by state boards as MOL programs are adopted and implemented.
Employment status	State board question. Physicians may hold an active license but be retired.
Provide clinical or patient care.	State board question. Physician may hold a position in a field of medicine, but do not provide direct patient care (important for reentry decisions by state boards).
If <u>no</u> , number of years since provided clinical or patient care	State board question. Provides important input for physician re-entry.
Areas of practice	State board question. This question provides input on the true areas of practice for a physician (primary care, dermatology, surgery).
Practice settings	State board question. Physician can practice in different settings (e.g., clinic or hospital).
Number of weeks worked during the past year	State board question. This information will help state boards better understand the level of participation among licensed physicians in their jurisdictions.
Average number of hours worked per week by activity	State board question. Some physicians are involved in direct patient care and work as an administrator and conduct research during the same week.
Clinical locations	State board question. Some physicians may work in more than one location.
Hours per week providing patient care by location	State board question. Some physicians may work varying amounts in more than one location.
Gender	State board question. FSMB to supplement with AAMC, AACOM, and ECFMG data.
Race (optional)	State board question. FSMB to supplement with AAMC, AACOM, and ECFMG data.
Ethnicity (optional)	State board question. FSMB to supplement with AAMC, AACOM, and ECFMG data.
Languages spoken (optional)	State board question.



## RECOMMENDED QUESTIONS FOR A MINIMAL PHYSICIAN DATA SET

The MDS Workgroup strongly recommends that the physician workforce questions presented in this section be added to state boards' renewal applications or be a separate questionnaire tied directly to the renewal process. The questions serve as a guide for standardizing a minimal set of data for physicians across all state boards.

1. What is your current employment status?
  - Actively working in a position that requires a medical license
  - Actively working in a field other than medicine
  - Not currently working
  - Retired
  
2. Are you currently providing direct clinical or patient care on a regular basis?
  - Yes
  - No
    - a. If no, how many years has it been since you provided clinical or patient care?
      - Less than 2 years
      - 2 to 5 years
      - 5 to 10 years
      - More than 10 years

3. Which of the following best describes the area(s) of practice in which you spend most of your professional time:

Area of Practice	Principal	Secondary	Completed Accredited Residency Program or Fellowship
Adolescent Medicine	0	0	0
Anesthesiology	0	0	0
Allergy and Immunology	0	0	0
Cardiology	0	0	0
Child Psychiatry	0	0	0
Colon and Rectal Surgery	0	0	0
Critical Care Medicine	0	0	0
Dermatology	0	0	0
Endocrinology	0	0	0
Emergency Medicine	0	0	0
Family Medicine/General Practice	0	0	0
Gastroenterology	0	0	0
Geriatric Medicine	0	0	0
Gynecology Only	0	0	0
Hematology & Oncology	0	0	0
Infectious Diseases	0	0	0
Internal Medicine (General)	0	0	0
Nephrology	0	0	0
Neurological Surgery	0	0	0
Neurology	0	0	0
Obstetrics and Gynecology	0	0	0
Occupational Medicine	0	0	0
Ophthalmology	0	0	0
Orthopedic Surgery	0	0	0
Other Surgical Specialties	0	0	0
Otolaryngology	0	0	0
Pathology	0	0	0
Pediatrics (General)	0	0	0
Pediatrics Subspecialties	0	0	0
Physical Med. & Rehab.	0	0	0
Plastic Surgery	0	0	0
Preventive Medicine/Public Health	0	0	0
Psychiatry	0	0	0
Pulmonology	0	0	0
Radiation Oncology	0	0	0
Radiology	0	0	0
Rheumatology	0	0	0
Surgery (General)	0	0	0
Thoracic Surgery	0	0	0
Urology	0	0	0
Vascular Surgery	0	0	0
Other Specialties	0	0	0

4. Which of the following categories best describes your primary and secondary practice or work setting(s) where you work the most hours each week?

<b>Practice Setting</b>	<b>Principal</b>	<b>Secondary</b>
Office/Clinic—Solo Practice	<input type="radio"/>	<input type="radio"/>
Office/Clinic—Partnership	<input type="radio"/>	<input type="radio"/>
Office/Clinic—Single Specialty Group	<input type="radio"/>	<input type="radio"/>
Office/Clinic—Multi Specialty Group	<input type="radio"/>	<input type="radio"/>
Hospital—Inpatient	<input type="radio"/>	<input type="radio"/>
Hospital—Outpatient	<input type="radio"/>	<input type="radio"/>
Hospital—Emergency Department	<input type="radio"/>	<input type="radio"/>
Hospital—Ambulatory Care Center	<input type="radio"/>	<input type="radio"/>
Federal Government Hospital	<input type="radio"/>	<input type="radio"/>
Research Laboratory	<input type="radio"/>	<input type="radio"/>
Medical School	<input type="radio"/>	<input type="radio"/>
Nursing Home or Extended Care Facility	<input type="radio"/>	<input type="radio"/>
Home Health Setting	<input type="radio"/>	<input type="radio"/>
Hospice Care	<input type="radio"/>	<input type="radio"/>
Federal/State/Community Health Center(s)	<input type="radio"/>	<input type="radio"/>
Local Health Department	<input type="radio"/>	<input type="radio"/>
Telemedicine	<input type="radio"/>	<input type="radio"/>
Volunteer in a Free Clinic	<input type="radio"/>	<input type="radio"/>
Other (specify):	<input type="radio"/>	<input type="radio"/>

5. How many weeks did you work in medical related positions in the past 12 months?

6. For all medical related positions held in (insert state name), indicate the average number of hours per week spent on each major activity:

Clinical or patient care	_____ hours/week
Research	_____ hours/week
Teaching/Education	_____ hours/week
Administration	_____ hours/week
Volunteering (medical related only)	_____ hours/week
Other (specify): _____	_____ hours/week

*Another approach to obtaining this information would be to ask licensees: (1) number of weeks worked in the past 12 months, (2) average number of hours worked per week, and (3) the percentage of time per week spent on each major activity (e.g., clinical or patient care, research etc.).*

7. What is the location of the site(s) where you spend most of your time providing direct clinical or patient care? Please enter the complete address for up to three locations and your direct patient care hours per week at each site.

*(The workgroup strongly recommends collecting full addresses if all possible, but zip codes only would be acceptable for a minimal data set.)*

Principal Location Address

_____		
Number	Street	
_____		
City/Town	State	Zip Code: □□□□□
Direct patient care hours per week at site: _____		

Second Location Address

_____		
Number	Street	
_____		
City/Town	State	Zip Code: □□□□□
Direct patient care hours per week at site: _____		

Third Location Address

_____		
Number	Street	
_____		
City/Town	State	Zip Code: □□□□□
Direct patient care hours per week at site: _____		

8. What is your sex?

- Male
- Female

9. What is your race? (1 or more categories may be selected)—Recommended as Optional

- White
- Black or African American
- American Indian or Alaska Native
- Asian
- Native Hawaiian/Other Pacific Islander
- Other (specify)

*The workgroup acknowledges that this is a condensed list and state boards may choose to use more detailed response sets (e.g., HHS Data Standards for Race and US Census Bureau Race Categories).*

10. Ethnicity: Are you Hispanic, Latino/a, or of Spanish origin?

(1 or more categories may be selected)—Recommended as Optional

- No
- Yes, Mexican, Mexican American, Chicano/a
- Yes, Puerto Rican
- Yes, Cuban
- Yes, Another Hispanic, Latino/a, or of Spanish origin (specify)

11. Do you speak a language other than English at home? (optional)

- a. Yes
- b. No

12. What is this language? (if you answered Yes to #11)

- a. Spanish
- b. Other Language (identify)

## **CONCLUSION**

The MDS Workgroup believes that state medical boards can play a vital role in helping to accurately determine the size, distribution and demographic make-up of the physician workforce in the United States. The type of medicine physicians practice and how the services they provide impact patients in their areas is just as important and better data is needed on the geographic distribution of physician supply to target state and federal resources designed to help ensure access. The MDS Workgroup believes that state boards have a unique opportunity to contribute to accurate workforce planning by collecting physician demographic and practice information at the time of license renewal. Uniformity of a basic set of questions asked across multiple jurisdictions at the time of license renewal would yield a better understanding of whether the supply of physicians can meet the needs of a growing and aging population.

The MDS Workgroup recommends that the 2012 FSMB House of Delegates support and adopt the recommended framework for a uniform minimal physician data set. It is recognized that there may be challenges to implementation of a minimal physician data set. However, the MDS Workgroup believes that the framework is feasible, reasonable, consistent with the resolution adopted by FSMB's House of Delegates in May 2011, and suitable for use by state medical boards. Furthermore, the MDS Workgroup believes that the FSMB can and should commit to a leadership role by providing state boards resources to help them implement a minimal physician data set.

## REFERENCES

---

- <sup>i</sup> *H.R. 4872, Reconciliation Act of 2010 (Final Health Care Legislation)*. s.l. : Congressional Budget Office, 2010.
- <sup>ii</sup> *Projections of the Population and Components of Change for the United States: 2010 to 2050 (NP2008-T1)* . s.l. : Population Division, U.S. Census Bureau, 2008.
- <sup>iii</sup> Cohn, D’Vera and Taylor, Paul. *Baby Boomers Approach Age 65 -- Glumly: Survey Findings about America's Largest Generation*. s.l. : Pew Research Center, 2010.
- <sup>iv</sup> *Projections of the Population by Selected Age Groups and Sex for the United States: 2010 to 2050 (NP2008-T2)*. s.l.: Population Division, U.S. Census Bureau, 2008.
- <sup>v</sup> *Physician Shortages to Worsen Without Increases in Residency Training*. s.l. : AAMC Center for Workforce Studies, 2010.
- <sup>vi</sup> Young A, Chaudhry H, Rhyne J, Dugan M. A Census of Actively Licensed Physicians in the United States, 2010. *Journal of Medical Regulation*. 2010-11, Vol. 96 (4).

## **PARTICIPANTS ON THE WORKGROUP TO DEFINE A MINIMAL DATA SET**

### **WORKGROUP MEMBERS**

Richard A. Whitehouse, Esq., CMBE, Chair  
Board of Directors, Federation of State Medical Boards  
Executive Director, State Medical Board of Ohio

Mark A. Eggen, MD  
Minnesota Board of Medical Practice

William L. Gant, MEd  
Chair, Washington Board of Osteopathic Medicine and Surgery

Margaret (Meg) B. Hansen, PA-C, MPAS  
Executive Director, South Dakota Board of Medical and Osteopathic Examiners

Dinesh Patel, MD, FACS  
Partners Healthcare, Massachusetts

Linda K. Whitney, MA  
Executive Director, Medical Board of California

### **EX OFFICIO**

Janelle A. Rhyne, MD, MA, MACP  
Chair, Federation of State Medical Boards  
Past President, North Carolina Medical Board

Lance A. Talmage, MD  
Chair-elect, Federation of State Medical Boards  
State Medical Board of Ohio

### **STAFF**

Aaron Young, PhD  
Senior Director, Research and Analytics  
Federation of State Medical Boards

Michael P. Dugan, MBA  
Chief Information Officer  
Federation of State Medical Boards

Humayun J. Chaudhry, DO  
President and CEO  
Federation of State Medical Boards

Sheila R. Still  
Admin Asst, Education and Library  
Federation of State Medical Boards