

Assessing State Physician Workforce Requirements:

Methodological Issues

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The Center for Health Workforce Studies at the University at Albany

- Conducts studies of the supply, demand, use and education of the health workforce
- Committed to collecting and analyzing data to understand workforce dynamics and trends
- Goal to inform public policies, the health and education sectors and the public
- One of six regional centers with a cooperative agreement with HRSA/Bureau of Health Professions

Core Components of a State-Level Methodology



- ❑ A profile of the state's physician workforce
- ❑ A profile of medical education and training in the state
- ❑ A demographic analysis of the state's population
- ❑ Forecasts of future physician supply and demand in the state



Analysis of the State Physician Supply

- **Basic physician counts and per capita ratios**
- **Specialty distribution statewide and by sub-state region**
- **Demographic profile of practicing physicians in the state**
- **Current practice patterns**
- **Medical school education and residency training of physicians active in the state**



Analysis of Medical Education and Training in the State

- Profile of medical education in state
- Profile of graduate medical training
- In-state retention for physicians who
 - attended medical school in the state
 - completed graduate medical training
 - did both
- Assessment of medical school capacity



Analysis of State Population and Demographic Trends

- Construct current and future population profiles of a state using data from
 - US Census Bureau or
 - any state sources of population forecasts
- Assess changes in the composition of the population
 - age, gender, and race/ethnicity
- Consider impact of immigration, emigration, over the next 10 years



Forecasts of Future Physician Supply and Requirements

- Builds on and applies the data collected in the first three components to develop
 - Supply Forecasts
 - Demand/Requirements Forecasts



Supply Forecasts

- The number of new physicians entering the active supply of physicians
- Specialty selection
- Migration of physicians into and out of the state
- Separation from the active physician supply



Demand/Requirements Forecasts

Future requirements should be forecasted within two simulated health care delivery environments:

- status quo or baseline
- assumes changes within the health care delivery and financing system
 - Removal of access barriers
 - Increased public health and preventive measures
 - Changes in age-specific utilization rates
 - Substitution
 - Technology



Options for Primary Data Collection

- **Surveys of physicians licensed in the state – snapshot vs. continuous**
 - **NYS physician re-registration survey**
- **Surveys of residents**
 - **NYS Resident Exit Survey**
- ***Survey of key organizations employing physicians in a state***



Issues Related to State-Level Physician Workforce Assessments

1. What's the question ?

- The sponsor
- The stakeholders
- State politics
- Potential for collaborations



Supply Issues

- Trying to determine the main sources of physicians (in-state, out of state)
- The distribution of physicians across the state, particularly in trying to forecast how physicians will move around:
 - status quo
 - follow population growth;
 - follow economic growth;
 - follow demand growth
- Other scenarios: productivity and work effort, etc.



Demand Issues

- Finding good economic and demographic forecasts at the small area level
- Understanding the potential for health care delivery system changes
- Recognizing sub-state differences in the health care delivery system/resources



State Idiosyncracies

- Population centers (current and future)
- Patterns of migration
- Economic changes
- Established patterns of care
- Geographic distribution of physicians and transportation routes



Making a Long-Term Commitment...

- Small area analyses REQUIRE accurate, up-to-date data
 - Developing workforce monitoring systems
- Forecasts should be updated frequently – this is particularly important for state and sub-state analyses – these relationships are dynamic



Successful State Level Studies...

- Help policy makers, medical educators and others in the state:
 - to understand the key factors driving future physician supply and requirements
 - To identify the best options and strategies for responding to physician maldistribution or shortages