

# **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

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- 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*

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- **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*

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- 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*

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



# Supply Forecasts

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- 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*

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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

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- **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*

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- 1. What's the question ?**
  - The sponsor
  - The stakeholders
  - State politics
  - Potential for collaborations



## *Supply Issues*

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- 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*

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- 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*

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- 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...*

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- 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...*

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- 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