Building Blocks to Health Workforce Planning: Data Collection and Analysis

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The Case for Health Workforce Data Collection

• Need to better understand supply and distribution of current health workforce

• Need to assess the adequacy of primary care capacity

• Need to understand the relationship between access to care and health workforce availability
What Workforce Data Are Needed?

- Workforce supply
- Educational Pipeline
- Demand for workers
Survey of State Health Workforce Data Collection Activities

• Growing interest in developing state health workforce data collection and monitoring systems
  o driven in part by health reform initiatives that are reshaping health care service delivery and health workforce demand

• HWTAC launched an on-line survey of states about their health workforce data collection activities on
  o Supply
  o Demand
  o Educational pipeline
Who Collects Workforce Data?

- State agencies
- State universities
- Nursing centers
- Area Health Education Centers
To Date, 40 Organizations in 32 States Report Collecting Health Workforce Data
Health Workforce Supply Data Collection

• Professions vary by state:
  o Physicians (27 states)
  o Nurse practitioners (23 states)
  o Dentists (22 states)
  o Registered nurses (22 states)
Health Workforce Supply Data Collection
Mandatory, Voluntary or Both?

- Mandatory for All Professions: 19
- Mandatory for Some Professions: 10
- Not Mandatory: 3

http://chws.albany.edu
Supply Data Collection Strategies

• 26 states collect supply data routinely in conjunction with licensing/relicensing
• 8 states report using recurring surveys that are not associated with licensing process
• Some states report different data collection strategies for different professions

A few states report other strategies such as telephone or in-person
What Supply Data Variables are Collected?

• Most states report collecting health professional supply data on:
  o Demographics characteristics (30 states)
  o practice characteristics (30 states) and
  o educational background (26 states)

• 25 states collect health professional supply data in all three of these categories
Using Survey Data in Small Area Analysis of Primary Care Capacity

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Other Sources of Health Professions Supply Data

- American Community Survey
- Bureau of Labor Statistics
  - Occupational Employment Statistics
- National Practitioner Identifier
- AMA Masterfile
- Propriety databases (e.g., SK&A)
Organizations in 15 States Collect Health Workforce Demand Data

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Health Workforce Demand Data Collection: Professions, Settings and Variables

• Most frequently targeted professionals: registered nurses (10 states), physicians (9 states), nurse practitioners (9 states), and licensed practical nurses (9 states)

• Most frequently targeted settings: hospitals (10 states) and nursing homes (8 states)

• Most frequently collected variables: vacancies (11 states), recruitment difficulty (10 states), turnover (9 states) and retention difficulties (4 states)
Demand Surveys Provide Evidence of HWF Recruitment and Retention Issues

• Involves collaborations with provider associations

• In 2015, NY providers reported:
  o All providers: experienced RNs hard to recruit, but newly trained RNs are not
  o Hospitals: Hard to recruit and retain clinical laboratory technologists, HIT staff and medical coders
  o Nursing homes and home health: Hard to recruit occupational therapists, physical therapists, speech language pathologists, dieticians/nutritionists
  o Community health centers: Hard to recruit dentists, geriatric nurse practitioners and psychiatric nurse practitioners
Organizations in 19 States Collect Information About the Health Workforce Educational Pipeline

[Map showing states with data collection and those with no response]

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Educational Pipeline Data Collection Strategies

• Educational pipeline data collection is most likely for registered nurses (13 states), physicians (11 states), and licensed practical nurses (10 states)

• Data collection is recurring in 17 states

• Data are collected from education programs in 15 states and from individuals in training in 7 states

• Most states report collecting information on graduation rates (17 states), enrollment rates (15 states) and the demographic characteristics of trainees (13 states)
  
  o A small number of states report collecting information on about trainees’ post-graduation plans (4 states) and job market experiences (1 state)

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Resident Exit Survey Tracks In-State Retention of New Physicians Who Complete Training in NY

Percent of new physicians with confirmed practice plans in New York

## Emerging Data Sources: Claims Data

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<thead>
<tr>
<th>City/Town</th>
<th>Total Patients Receiving Dental Services</th>
<th>Mean Commuting Distance to Dental Provider in Miles</th>
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Supply Data Collected as Part of Licensing Process: What Are the Issues?

- Value of MDS data to licensing bodies
- Data ownership and data sharing
- Funding sources
- Mandatory or optional?
Data Use/Data Sharing

• Who owns the data?
• Who has access to data?
• What are data sharing rules?
  o Data use agreements
  o IRB approval
  o Sign off on publicly released reports or journal articles
Funding Strategies:
One Size Does Not Fit All

- Licensing fee increases
- Annual state appropriation
- Private foundations
- In-kind contributions of state stakeholders
- Revenues generated through data requests
Recommendations

• Build collaborations with key stakeholders
• Help stakeholders appreciate the value of timely and accurate data
• Build support for health workforce data collection and analysis
• Disseminate, disseminate, disseminate....
• Stay relevant to state-specific issues
Thank You

Questions?