Nursing Workforce Data: Benefits Beyond Nurses

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Objectives

■ Identify the key partnerships that led to the development of the CT Nursing Workforce Data infrastructure.

■ Identify key milestones in the history and development of the CT Nursing Workforce Data infrastructure.

■ Understand the importance of the partnership with the CT Data Collaborative and its importance in making CT Nursing Workforce Data accessible to the public.
Funders and Partners
Genesis of the Data Initiative

- Deans and Directors Needs for Data
- Board of Nursing Education Regulatory Needs
- IOM report 2010: Nursing Workforce Data Infrastructure
- SIP grants from RWJF for CT Nursing Collaborative-Action Coalition (2013-15; 2015-17)
History of Nursing Data in CT
2005-present
Highlights & Concerns from CT Nursing Workforce Data

- Aging of CT Nursing Workforce
- Faculty shortage looming
- Nursing program enrollments are high but not enough seats
- Increasing number of RNs with minimum BSN (67%)
- High RN student retention rates (93%)
- Low diversity of faculty and students in RN programs
- High attrition rate from LPN programs (18-50%)
- Beginning shift from acute care to other health care settings (39% RNs in hospitals)
- Demand...stay tuned!
### TABLE ONE (RN): AGE DISTRIBUTION OF REGISTERED NURSES (RNS) IN CONNECTICUT

![Age Distribution of RNs](image_url)

Image courtesy of The Connecticut Department of Public Health, 2018
“THE MOST IMMEDIATE CONCERN IS HOW TO FACILITATE THE ‘TRANSFER OF KNOWLEDGE’ FROM THE EXPERT NURSE TO THE NOVICE NURSE.”

### Highlights & Concerns from CT Nursing Workforce Data

**CT RNs by Type of Work Setting**

<table>
<thead>
<tr>
<th>Work Setting</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>21,968</td>
<td>39%</td>
</tr>
<tr>
<td>Nursing home/extended care/assisted living facility</td>
<td>8,746</td>
<td>16%</td>
</tr>
<tr>
<td>Other</td>
<td>6,455</td>
<td>12%</td>
</tr>
<tr>
<td>Ambulatory Care setting</td>
<td>5,150</td>
<td>9%</td>
</tr>
<tr>
<td>Home Health</td>
<td>4,582</td>
<td>8%</td>
</tr>
<tr>
<td>Insurance claims/Benefits</td>
<td>2,397</td>
<td>4%</td>
</tr>
<tr>
<td>School Health Service</td>
<td>2,112</td>
<td>4%</td>
</tr>
<tr>
<td>Community Health</td>
<td>1,674</td>
<td>3%</td>
</tr>
<tr>
<td>Academic Setting</td>
<td>966</td>
<td>2%</td>
</tr>
<tr>
<td>Public Health</td>
<td>804</td>
<td>1.4%</td>
</tr>
<tr>
<td>Correctional Facility</td>
<td>415</td>
<td>1%</td>
</tr>
<tr>
<td>Occupational Health</td>
<td>341</td>
<td>1%</td>
</tr>
<tr>
<td>Policy/Planning/Regulatory/Licensing Agency</td>
<td>78</td>
<td>&gt;1%</td>
</tr>
</tbody>
</table>
Highlights & Concerns from CT Nursing Workforce Data

<table>
<thead>
<tr>
<th>Race</th>
<th>Number of RN/LPN</th>
<th>Race</th>
<th>Number of RN/LPN</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>56,142</td>
<td>Multiracial</td>
<td>907</td>
</tr>
<tr>
<td>Black/African American</td>
<td>7,092</td>
<td>Pacific Islander</td>
<td>137</td>
</tr>
<tr>
<td>Latinx</td>
<td>3,454</td>
<td>American Indian</td>
<td>104</td>
</tr>
<tr>
<td>Asian</td>
<td>3,357</td>
<td>Other</td>
<td>1,062</td>
</tr>
</tbody>
</table>
The Evolving Story of Demand Data

■ Barriers
  - Proprietary boundaries
  - Buy-in
  - Awareness of need

■ Facilitators
  - Awareness of need
  - Relationship building
  - Neutral convener

■ Shared goals
  - Buy-in: 96 unique settings represented!!
Evolution of CT Nursing Workforce Data

- Inward Facing to Outward Facing
Evolution of CT Nursing Workforce Data

■ Messaging impact
  - Statewide awareness of need for robust, diverse nursing workforce in CT
  - Increase support for data initiatives through state agencies, trade associations, etc.
  - Access to funding
  - Outside stakeholders approaching us for information to serve their needs
  - WIN-WIN!
Examples of Data Usage and Impact

- Nursing education program decision making
- Health care provider decision making re: nurse residencies, etc.
- Grantmaking and funding use: WIBs
- DOL recognizes nursing as a driving force for the CT economy
- Organizations seeking out CCNW for data
What’s Next: Open Data

- Connecticut Data Collaborative
- Data democratization
- Game Changer:
  - For CT citizens/community & pop. health
  - For CT nurses and nursing education programs
  - For CT care delivery systems
  - To build a culture of health
connecticut data collaborative

We empower an ecosystem of data users by democratizing access to public data and increasing data literacy.

- Make data accessible
- Liberate data
- Increase data literacy
- Census State Data Center

ctdata.org
About CT Data

Make data accessible

- Curate and process data
- Data portal of 200+ public datasets
  - Census American Community Survey, 5-year estimates
  - State agency public data
- Visualization tools
- Tell data stories

Liberate data

- Extract it from antiquated systems
  - Secretary of the State business registration data
- Add meaning to data
  - Health in Hartford’s Neighborhoods
- Public source for data
  - CT Racial Profiling Prohibition Project
Where do they live?

Bridgeport, Waterbury, New Haven, Milford, Hamden, and Stratford all house over 1,000 nurses. Most Registered Nurses live in Milford, West Hartford, Hamden, and Stamford. Most Licensed Practical Nurses live in Bridgeport and Waterbury (both over 500), followed by New Haven and West Haven.
Where do they work?

Some of the biggest clusters of primary work location for Connecticut nurses are New Haven, Hartford, Middletown, Bridgeport, and Danbury.
Where Nurses are Needed

In Connecticut, certain towns have higher % of elderly population or more opioid deaths than others. Use the map below to explore such places. Each circle represents a town. Diameters correspond to values. The background color represents how many nurses work in the zip-code area.
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Significance of Open Data

- Current, more complete data sets
- Easily triangulated with social variables of interest
- Ability to respond in timely and nimble fashion
- Enhances discussions about public health needs
- Positions discussions about nursing in a way that contributes to overall public good, policymaking and grantmaking
Conclusion and Recommendations

- CT nursing workforce data has moved beyond nursing to impact public good
- Evolution is constant
- Invest in relationships
- Network
- Cultivate shared interests
- Messaging matters
- Persistence and patience
- Think broadly
- Focus on the goal!
Thank you!

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