A Novel Way to Obtain and Deploy Health Workforce Demand Data: The Washington State Health Workforce Sentinel Network

March 20, 2018
Health Workforce Technical Assistance Center Webinar

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Funding

Initial: Washington State Healthier Washington Initiative (CMMI SIM grant & CMS DSRIP – Medicaid Transformation), subcontract

The project described was supported by Funding Opportunity Number CMS-1G1-14-001 from the U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services. The contents provided are solely the responsibility of the authors and do not necessarily represent the official views of HHS or any of its agencies.

Current: Workforce Innovation and Opportunity Act (WIOA) Governor’s Discretionary Funds

To: Washington State Workforce Training and Education Coordinating Board, subcontracting with University of Washington Center for Health Workforce Studies
Sentinel Network’s Purpose

The workforce is key to healthcare transformation.

We need early signals of changes in the occupations, skills, and roles needed to deliver quality care in order to respond appropriately.

The Sentinel Network supports efficient and effective health workforce preparation and deployment by:

• Identifying emerging signals of health workforce demand needs/changes

• Rapidly disseminating information to education, training and policy partners who can take action based on findings

www.wasentinelnetwork.org
Washington’s Health Workforce Sentinel Network

**Industry Sentinels**
- Employer/workforce input:
  - Changes in needed skills and roles
  - New workforce demand signals
  - Review results to identify actionable findings

**Data Hub**
- Web-based data collection and analysis
- Rapid dissemination on the Workforce Board website:
  - Recent results from industry
  - Trends
  - Relevant health workforce data from other sources

**Education/Training & Policy Stakeholders**
- Information review & dissemination facilitated by the WA Health Workforce Council
- Review and respond to actionable information emerging from the Data Hub and Health Workforce Council:
  - Address emerging skills needs
  - Identify emerging roles
  - Respond to increases and decreases in demand for specific occupations

Feedback to industry and data/information system
Registration and Questions

Registration Information
Sentinel employers first “register” by providing:

• facility type(s) where employed, and
• locations (counties)

Registration information populates subsequent question logic

For each facility type, Sentinels prompted to select occupations (based on SOC codes) that experienced recent change in demand

A Sentinel’s registration data is saved for the next reporting period.
Questions

Recently (in the past 3–4 months):

• Occupations experiencing exceptionally long vacancies
• Occupations with increased or decreased demand
• New occupations that they did not previously employ
• New roles for existing employees
• Changes in orientation/onboarding procedures for new employees
• Changes in training priorities for existing employees

AND qualitative input about which, how, and reasons why
1. Hearing from Sentinels

Washington’s Health Workforce Sentinel Network
Sentinel Data Collection Dates

Round 1: Jun/Jul 2016
Round 2: Nov/Dec 2016
Round 3: Apr/May 2017
Round 4: Sept/Oct 2017
Round 5: June 2018?
Round 6, 7.... Dates to be determined

Phase I  Phase II
## Responses from Sentinels

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>July 2016</th>
<th>Nov 2016</th>
<th>May 2017</th>
<th>Sept 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral-mental health clinic/outpatient mental health and substance abuse clinic</td>
<td>26</td>
<td>30</td>
<td>16</td>
<td>33</td>
</tr>
<tr>
<td>Skilled nursing facility</td>
<td>17</td>
<td>28</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Federally qualified health center (FQHC) or community clinic providing care free or on sliding fee scale</td>
<td>19</td>
<td>18</td>
<td>19</td>
<td>23</td>
</tr>
<tr>
<td>Nursing &amp; personal care facility (not a Skilled Nursing or Intermediate Care Facility)</td>
<td>7</td>
<td>15</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Acute care hospital (25 beds or fewer)</td>
<td>10</td>
<td>12</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Education</td>
<td>10</td>
<td>10</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Primary care medical clinic (not FQHC or community clinic)</td>
<td>19</td>
<td>7</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Intermediate care facility</td>
<td>1</td>
<td>7</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Specialty medical clinic</td>
<td>29</td>
<td>6</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Home health care service</td>
<td>11</td>
<td>4</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Psychiatric/substance abuse hospital</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Medical/diagnostic laboratory</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Public health</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Dentist office/dental clinic</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>3</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Acute care hospital (more than 25 beds)</td>
<td>12</td>
<td>1</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>177</strong></td>
<td><strong>154</strong></td>
<td><strong>118</strong></td>
<td><strong>127</strong></td>
</tr>
</tbody>
</table>
Response Counts by Facility Type and Geography

Note: Each facility could serve clients/patients in more than one county, which is why the totals in the chart below are greater than the totals in the table above.

Data collected June 15, 2016 - July 30, 2016

Data collected Nov. 1, 2016 - Dec. 15, 2016
Why Do We Need to Hear from Sentinels?

Case study: Medical Assistants
Example: A Surplus of Medical Assistants?

Washington State Health Workforce Council Report:

Medical Assistants
Educational output:* 2,821 MAs
Job Vacancies:** 592 MAs

*Integrated Postsecondary Education Data System (IPEDS, National Center for Education Statistics) 2015

Screen Shot – Sentinel Network Dashboard

Washington State Health Workforce Sentinel Network

**What is the Sentinel Network?**

The Sentinel Network is an information network linking the healthcare industry with partners in education and training, policymakers and workforce planners to collectively identify and respond to new and changing demand for healthcare workers, skills and roles. Part of the Healthier Washington initiative, the Sentinel Network is a collaboration of state’s Workforce Board and the University of Washington Center for Health Workforce Studies, with funding from Washington’s Health Care Authority.

**Join the Sentinel Network!**

As a Sentinel, you will:

- Help ensure the state’s health workforce is prepared to respond to the transforming health care environment.
- Have access to current and actionable information about emerging workforce needs.
- Compare your organization’s experience and emerging workforce demand trends with similar employer groups.

**Sentinel Network Findings to Date**

Results from data submitted June/July and November/December 2016 are now available!

- View Findings
Washington State Health Workforce Sentinel Network

Findings as reported by facility type

Click on the buttons to explore the results by question topic; use the menu that will appear in the sidebar as you scroll to explore findings by other questions.

Click here to see all questions asked of Sentinels.

Vacancies  Demand Increase  Demand Decrease  Onboarding  Training  New Roles

New Occupations
Vacancies

Sentinels were asked: "Recently (in the past 3-4 months), has your facility type experienced exceptionally long vacancies for any open position? If yes, for which occupations and what are possible reasons why?"

I. Select a facility type(s) to begin exploring data. Ctrl/Cmd + Click to show multiple facility types.
II. Select the data collection period(s) and the number of occupations to show for the selected facility type(s).
III. Reasons: Click on an occupation (or Ctrl/Cmd + Click on multiple occupations). Move your cursor over the bars to see respondents' comments.
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Exceptionally Long Vacancies by Facility Type

<table>
<thead>
<tr>
<th>Facility Type(s)</th>
<th>Data Collection Date(s)</th>
<th>Number of Occupations to Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federally qualified health center (FQHC) or community clinic providing care free or on sliding fee scale</td>
<td>(All)</td>
<td></td>
</tr>
</tbody>
</table>

Occupations with Exceptionally Long Vacancies

Click on an occupation (Ctrl/Cmd + Click on multiple occupations) to view reasons

- Sept. 6, 2017 - Oct. 15, 2017
  - Federally qualified health center (FQHC) or community clinic providing care free or on sliding fee scale
  - Medical Assistant
  - Dental Assistant
  - Nurse, Registered
  - Physician/Surgeon
  - Mental Health Counselor
  - Nurse Practitioner
  - Chemical Dependency Pro.
  - Dentist
  - Psychologist - Clinical, Co.
  - Social Worker, Clinical

- Apr. 1, 2017 - May 15, 2017
  - Federally qualified health center (FQHC) or
  - Physician/Surgeon
  - Social Worker, Clinical
  - Mental Health Counselor
  - Dental Assistant
For Sentinels representing a(n) Federal qualified health center (FQHC) or community clinic providing care free or on sliding fee scale, 8/23 (35%) reported the occupation Medical Assistant as experiencing exceptionally long vacancies in the past 3-4 months.
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I. Select a facility type(s) to begin exploring data. Ctrl/Cmd + Click to show multiple facility types.
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### Exceptionally Long Vacancies by Facility Type

#### Occupations with Exceptionally Long Vacancies

Click on an occupation (Ctrl/Cmd + Click on multiple occupations) to view reasons

- **Sept. 6, 2017 - Oct. 15, 2017**
  - Federally qualified health center (FQHC) or community clinic providing care free or on sliding fee scale
  - Medical Assistant
  - Dental Assistant
  - Nurse, Registered
  - Physician/Surgeon
  - Mental Health Counselor
  - Nurse Practitioner
  - Chemical Dependency Professional
  - Dentist
  - Psychologist - Clinical, Co., Social Worker, Clinical

- **Apr. 1, 2017 - May 15, 2017**
  - Federally qualified health center (FQHC) or community clinic providing care free or on sliding fee scale
  - Medical Assistant
  - Social Worker, Clinical
  - Mental Health Counselor
  - Dental Assistant

#### Reasons for Exceptionally Long Vacancies

Move your cursor over the bars to read comments for the selected occupation(s)

- **Sept. 6, 2017 - Oct. 15, 2017**
  - Federally qualified health center (FQHC) or community clinic providing care free or on sliding fee scale
  - Not enough...
  - Recruitment...
  - [Medical Assistant] high expectations on experience

- **Apr. 1, 2017 - May 15, 2017**
  - Federally qualified health center (FQHC) or community clinic providing care free or on sliding fee scale
  - Salary/wage...
  - Recruitment...
  - [No reason...

- **Nov. 1, 2016 - Dec. 15, 2016**
  - Federally qualified health center (FQHC) or community clinic providing care free or on sliding fee scale
  - Not enough...
  - Salary/wage...
  - Recruitment...
  - [No reason...

- **June 15, 2016 - July 31, 2016**
  - Federally qualified health center (FQHC) or community clinic providing care free or on sliding fee scale
  - Not enough...
  - Salary/wage...
  - Recruitment...
  - [No reason...

- **Other**
  - Recruitment...
Medical assistants
Medical Assistants

By facility type: MAs were among the top occupations with exceptionally long vacancies reported by
- FQHCs/community clinics
- Other primary care clinics
- Specialty medical clinics
- Acute care hospitals (<25 beds)

By geography: MAs were among occupations with exceptionally long vacancies
- July 2016: 8 of 9 Accountable Communities of Health (ACHs)
- Nov. 2016: 9 of 9 ACHs
- April 2017: 9 of 9 ACHs
- October 2017: 8 or 9 ACHs
Changes in Onboarding & Training Priorities

Medical Assistants

Examples of comments:

EHR/HIT
• EHR training/more EHR skills
• Knowledge of quality data tracking
• Onboarding curriculum tailored to focus on EHR competency and documentation of clinical measures.

Other Skills
• Gathering SO/GI [sexual orientation/gender identity] demographics
• Enhanced training to work to full scope of role
• Expansion of customer service training
• Organization-wide training and implementation of AIDET* customer service model; increased localized trainings on integration of care with an emphasis on a care team based approach to healthcare and synchronization of services

*Acknowledge, Introduce, Duration, Explanation, and Thank You.
Sentinels Suggest Solutions

Medical Assistants

Examples of comments:

• *We have an MA Trainer they are paired with. We also do an MA apprenticeship program to grow our own.*

• *[We developed] a residency program for MAs.*

• *Looking at partnering with a local college.*
2. Connecting with Stakeholders

Washington’s Health Workforce Sentinel Network

Industry Sentinels
- Employer/workforce input:
  - Changes in needed skills and roles
  - New workforce demand signals
  - Review results to identify actionable findings

Data Hub
- Web-based data collection and analysis
- Rapid dissemination on the Workforce Board website:
  - Recent results from industry
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Education/Training & Policy Stakeholders
- Review and respond to actionable information emerging from the Data Hub and Health Workforce Council
  - Address emerging skills needs
  - Identify emerging roles
  - Respond to increases and decreases in demand for specific occupations

Feedback to industry and data/information system
Demand for Medical Assistants

*Sentinel Network signals that there’s not a statewide surplus of MAs that meet the hiring needs of employers*

Next steps to investigate with stakeholders:
- Explore if there’s a drop-off between MA program completion and certification
- Skills/preparedness variability in completers from different education programs
- Possible need for remote/distance education for MAs?
- Expansion of apprenticeships?
- More information needed on specific skills that MA candidates lack for some employers:
  - EHR/HIT – more that can be provided in education programs?
Sentinel Network

Highlights of Other Findings
Washington State’s Sentinels Report --

Registered Nurses

By facility type:

RNs are the top occupation with exceptionally long vacancies recently reported by
• Small acute care hospitals
• Home health care services

By geography:

RNs were the top ranked occupation with exceptionally long vacancies
• July 2016: in 7 of 9 Accountable Communities of Health (ACHs)
• Nov. 2016: in 9 of 9 ACHs
• April 2017: in 7 ACHs (2nd in Better Health Together and 3rd in Greater Columbia)
• Oct. 2017: in 4 ACHs (2nd or 3rd in 4 other ACHs)
Washington State’s Sentinels Report --

Registered Nurses

Examples of reasons for RNs’ exceptionally long vacancies:

**RNs in Hospitals**
- New grads looking for acute care wage and experience; workforce does not meet demand.
- Difficulty in recruitment for more rural areas; lack of experienced specialty nurses who wish to come to a rural area.
- Nights hard to fill.
- Too many open positions elsewhere and traveling companies are scooping up what is out there promising them almost $100 an hour.

**Long Term Care (home health, skilled nursing, nursing and personal care)**
- Not enough RN's for all the facilities and hospitals and a new regulation requiring skilled nursing facilities to have 24 hour RN coverage (SNF)
- Nursing homes are unattractive to potential candidates, low candidate pool, competition with local hospital (pay/environment) (NH)
- A local hospital opened over 100 RN positions. Severe impact on community. Not enough RNs to fill open positions.
- Lack of experienced RNs willing to work in this capacity (HH)
- Multiple new jobs being opened to RNs. (SNF)
- Wage compression from new minimum wage (SNF)
Registered Nurses: Training Needs/Onboarding

- EHR training and responsibilities; new EMRs; HIT
- Knowledge of quality data tracking
- Customer service
- Behavioral training (multiple facility types)
- Dementia knowledge (SNF)
- Ongoing training to support nursing faculty in their roles as instructors (hospital)
- Root cause/SBAR/Assessments/Care plans (SNF)
- Investing in staff by offering more training (SNF)
- Address needs of workers with little prior experience (SNF)
- New grad nurses getting more orientation and training; we are spending more time with new employees during the onboarding/orientation process (SNF)
**Demand for Registered Nurses**

_Sentinel Network signals include:_
- *RNs are in high demand across healthcare sectors*
- *EHR/HIT related skills are among ongoing training needs*
- *Experience remains important to employers*
- *Nurses follow better salaries*

**Next steps :**
- Engage more discussion with stakeholders
- Solutions – explore:
  - Turn up the education “spigot”?  
  - Enhance skills/roles of incumbent RNs?  
  - Focus on retention strategies?
Behavioral Health Occupations
Chemical dependency professionals (CDPs) and substance abuse and behavioral disorder counselors

By facility type:
The combined occupations of chemical dependency professionals (CDPs) and substance abuse and behavioral disorder counselors were the top occupation with exceptionally long vacancies recently reported by:

- Large hospitals
- Behavioral health clinics
- Psychiatric/ substance abuse hospitals

They were also among the top 10 occupations listed with long vacancies at FQHCs.

Examples of reasons for exceptionally long vacancies:
- Low wages and difficult working conditions, increased client acuity, lack of qualified candidates.
- Integration with managed care means many new positions do not exclusively require CDP/ Substance Abuse skills and there has been a flood of new positions on the market, leading to a shortage.
- Many CDPs have obtained dual licensure and have opted to be employed under Mental Health due to higher pay in that area.
- Long licensing process, including supervision requirements.
Sentinel Network Evaluation

• Internal, led by Davis Patterson, UW CHWS
• Inquiries and feedback from gathered from users throughout implementation in 2016 and 2017
• An online evaluation questionnaire sent to Sentinel Network users August-September 2017
  58 responses
  • health service delivery organizations (60.5%)
  • education and training organizations (15.8%)
  • government (13.2%)
  • advocacy organizations (7.9%)
  • professional organizations (7.9%)
  • as well as a community-based organization, local public health, and a non-profit community agency
Sentinel Network Evaluation

Usefulness of Sentinel Network Findings: Percentage of Users Reporting that Findings Were “Very” or “Extremely Useful”

- Findings by Facility Type: 48.5%
- Findings by Geographic Region: 53.2%
- Overview of Findings: 52.9%
## Sentinel Network Evaluation

**Sentinel Network Information Uses: Percentage of Users Reporting Each Type of Use**

<table>
<thead>
<tr>
<th>Use</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared Sentinel Network data or information with someone</td>
<td>57.9%</td>
</tr>
<tr>
<td>Used Sentinel Network data to inform my work</td>
<td>42.1%</td>
</tr>
<tr>
<td>Referred someone to the Sentinel Network website</td>
<td>23.7%</td>
</tr>
<tr>
<td>Made recommendations to others based on Sentinel Network information</td>
<td>10.5%</td>
</tr>
</tbody>
</table>
Value of the Sentinel Network Approach

• Rapid turnaround signals of workforce demand changes
• Relatively inexpensive
• Provides “how and why” behind signals
• Identifies skills needed
• Highlights local conditions that may make hiring difficult
• Engages the full network of stakeholders needed to identify and solve workforce problems
Use of Sentinel Network Findings: Examples

- Informed Washington State Behavioral Health Workforce Assessment

- Reported in-depth by Washington Health Workforce Council

- Accountable Communities of Health exploring SN use in monitoring health workforce demand in state healthcare transformation regions

- State Community College Health Programs Deans and Directors group engaged in interpreting findings

- HR Directors groups very interested in findings

- Being considered for use in other states
Sentinel Network Phase II

Funded February 2018 through June 2019, in partnership with the Washington Workforce Board

Currently working with Washington’s Health Workforce Council on improvements to increase effectiveness

Considering:

• Additional formats to display findings
• Less frequent data collection
• Methods for greater engagement with response panel and stakeholders (to lead interpretation and dissemination of findings)
• More options for user interaction
• Possible customizable modules
• Long term sustainability plan
Washington State’s Health Workforce Sentinel Network

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