Healthcare Workforce Update – Oct. 1, 2014
Health Care Reform Review Committee

Center for Rural Health
The University of North Dakota
School of Medicine & Health Sciences

School of Medicine & Health Sciences
Advisory Council
Outline of Presentation

• Updated demographic and healthcare workforce data for North Dakota
• Results of North Dakota hospital employment survey
  • “Big 6”
  • 36 Critical Access Hospitals (CAHs)
• Impact of the Affordable Care Act (ACA) in North Dakota
• Ongoing healthcare delivery challenges
• Healthcare Workforce Initiative update
• Options for decision-makers to consider
Important Disclaimer!

• Please remember that we’ve been asked to provide **preliminary** data for today’s meeting

• Some of the datasets still are incomplete and will be completed over the next month or two

• Final data acquisition and full data analysis will follow and will be provided in the *Third Biennial Report: Health Issues for the State of North Dakota 2015* to be published in December 2014 before the next Legislative Assembly

• You will receive a copy at that time, as we have done for the first two editions of the Biennial Report
Demographic Data
Population of North Dakota

![Graph showing the population of North Dakota over the years from 1910 to 2013. The population peaks around 1940 and experiences a significant increase towards the end of the period.]
Standardized Community Definitions

- **Metropolitan** – An area of the state with a core population of 50,000 people or greater
  - Examples are Fargo, Bismarck, and Grand Forks
- **Micropolitan** – An area of the state with a core population of 10,000 to 49,999 people
  - Examples are Dickinson, Williston, and Jamestown; Minot on the verge of becoming metropolitan
- **Rural** – An area of the state with a core population of less than 10,000 people
- **Frontier** – An area of the state with a population density of six or fewer people per square mile
Average Age in Regions of North Dakota

- **Metropolitan**
- **All North Dakota**
- **Micropolitan**
- **Rural**

<table>
<thead>
<tr>
<th>Year</th>
<th>Metropolitan</th>
<th>All North Dakota</th>
<th>Micropolitan</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>32</td>
<td>33</td>
<td>33</td>
<td>44</td>
</tr>
<tr>
<td>1990</td>
<td>33</td>
<td>33</td>
<td>35</td>
<td>35</td>
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<tr>
<td>2000</td>
<td>33</td>
<td>36</td>
<td>36</td>
<td>41</td>
</tr>
<tr>
<td>2010</td>
<td>33</td>
<td>37</td>
<td>37</td>
<td>37</td>
</tr>
</tbody>
</table>
Has Insurance: 88%
No Insurance: 12%
Healthcare Workforce Data
Healthcare Workforce Data
Two Perspectives

• Number of various healthcare employees in North Dakota compared with national norms (“supply”) - How many we have

• Current (summer of 2014) vacancy rates for North Dakota healthcare institutions based on recent survey by the Center for Rural Health (demand) – How many we need

• National vacancy reference level for healthcare workforce in general is around 10% or a little lower, although it is higher in some regions of the country for nurses and physicians
  • “Full employment” usually considered to be around 3-4%
  • “Nonaccelerating inflation rate of unemployment” (NAIRU) considered to be around 5-6%
Physicians in North Dakota

- Rural: ND: 5.8, Midwest: 8.1, US: 7.4
Age Distribution of Physicians in North Dakota

- ND
- Midwest
- US

Percent Physicians in Age Group

Physician’s Age
Nursing Workforce

• National nursing workforce now 2.7 million RNs, 500,000 more nurses than predicted 12 years ago
• Probably no national shortage (but with regional differences), although some maintain that there still is a significant national shortage
• Annual output of nursing schools has doubled over past decade
• Lingering economic slowdown has kept more RNs in the workforce
• Delayed retirement of older nurses, probably due to the economic downturn

Auerbach D I et al. Health Aff 2014;33:1474-1480
Numbers Of Full-Time-Equivalent (FTE) Registered Nurses In Selected Age Groups, 1979–2012.

Auerbach D I et al. Health Aff 2014;33:1474-1480

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Work Place of Nurses in North Dakota

<table>
<thead>
<tr>
<th>Workplace</th>
<th>RN</th>
<th>LPN</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>48</td>
<td>15</td>
<td>63</td>
</tr>
<tr>
<td>LTC</td>
<td>29</td>
<td>8</td>
<td>37</td>
</tr>
<tr>
<td>Clinic</td>
<td>28</td>
<td>13</td>
<td>41</td>
</tr>
<tr>
<td>Other</td>
<td>31</td>
<td>28</td>
<td>59</td>
</tr>
</tbody>
</table>

Percentage of Nurses in a Workplace
Psychologists in North Dakota

- Metropolitan: 4.0 Psychologists Per 10,000 Pop.
- Micropolitan: 2.3 Psychologists Per 10,000 Pop.
- Rural: 0.5 Psychologists Per 10,000 Pop.

US: 2.9 Psychologists Per 10,000 Pop.
ND: 2.6 Psychologists Per 10,000 Pop.
Pharmacists in North Dakota

- Metropolitan: 16.4 Pharmacists Per 10,000 Pop.
- Micropolitan: 10.0 Pharmacists Per 10,000 Pop.
- Rural: 9.7 Pharmacists Per 10,000 Pop.

US: 8.6 Pharmacists Per 10,000 Pop.
Pharmacy Techs in North Dakota

Per 10,000 Pop.

Metropolitan: 6.6
Micropolitan: 5.5
Rural: 3.3

US: 5.9 Dentists Per 10,000 Pop.
ND: 5.4 Dentists Per 10,000 Pop.
Physical Therapists in North Dakota

- Metropolitan: 10.0
- Micropolitan: 5.3
- Rural: 4.1

ND: 7.2 Physical Therapists Per 10,000 Pop.
US: 5.9 Physical Therapists Per 10,000 Pop.
North Dakota Hospital Employment Survey
# North Dakota Healthcare Workforce Survey

**Summer, 2014**

## Vacancy Rate

<table>
<thead>
<tr>
<th>Nursing Staff</th>
<th>Critical Access Hospitals</th>
<th>Big 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN</td>
<td>7.6%</td>
<td>8.1%</td>
</tr>
<tr>
<td>Nurse Practitioner</td>
<td>12.2%</td>
<td>11.4%</td>
</tr>
<tr>
<td>LPN</td>
<td>6.2%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Nursing assistants</td>
<td>9.2%</td>
<td>17.0%</td>
</tr>
</tbody>
</table>
North Dakota Healthcare Workforce Survey
Summer, 2014

Vacancy Rate

<table>
<thead>
<tr>
<th>Laboratory Staff</th>
<th>Critical Access Hospitals</th>
<th>Big 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT/CLS</td>
<td>6.0%</td>
<td>4.7%</td>
</tr>
<tr>
<td>MLT/CLT</td>
<td>16.0%</td>
<td>8.5</td>
</tr>
</tbody>
</table>
North Dakota Healthcare Workforce Survey
Summer, 2014

Vacancy Rate

<table>
<thead>
<tr>
<th>Other Staff</th>
<th>Critical Access Hospitals</th>
<th>Big 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiology</td>
<td>3.4%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Medical Records</td>
<td>4.9%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>6.4%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Physician Assistants</td>
<td>3.4%</td>
<td>14.1%</td>
</tr>
<tr>
<td>Physical Therapists</td>
<td>6.0%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Occupational Therapists</td>
<td><strong>13.7%</strong></td>
<td><strong>2.0</strong></td>
</tr>
<tr>
<td>Others</td>
<td>9.8%</td>
<td>5.8%</td>
</tr>
<tr>
<td>Management</td>
<td>1.0%</td>
<td>3.8%</td>
</tr>
</tbody>
</table>
Very and Somewhat Difficult to Fill Urban Vacancies By Workforce Type

- Licensed Pharmacists: 3.8
- MT/CLS (lab): 3.5
- Entry-Level Jobs: 3.5
- Surgical Techs: 3.4
- RNs: 3.3
- LPNs: 3.3
- MLT/CLT (lab): 3.3
- Coders: 3.3
- Computer Techs: 3.0
- Physician Assistants: 3.0
- Dieticians: 3.0

Difficulty Recruiting for Vacancies (Most Difficult)
(1=Very Easy; 2=Somewhat Easy; 3=Somewhat Difficult; 4= Very Difficult)
Very and Somewhat Difficult to Fill Rural Vacancies By Workforce Type

Draft -- North Dakota Hospital Workforce Survey: September 2014

- MT/CLS: 3.4
- Ultrasound Techs: 3.4
- Surgical Techs: 3.3
- Physical Therapists: 3.3
- Occupational Therapist: 3.3
- Physician Assistants: 3.3
- Licensed Pharmacists: 3.3
- MLT/CLT: 3.3
- NPs: 3.2
- Radiation Therapy Techs: 3.2
- Coders: 3.2

Difficulty Recruiting for Vacancies (Most Difficult)
(1=Very Easy; 2=Somewhat Easy; 3=Somewhat Difficult; 4= Very Difficult)
Trends in State-wide Physician Recruitment

• Slowing of physician hiring by Big 6 hospitals coincident with many changes (i.e., decreases) in hospital reimbursement

• Some improvement in rural physician supply, in part due to the burgeoning impact of the RuralMed Scholarship program
  • Hettinger
  • Devils Lake
Primary Care Physician Vacancies in Other than the Four Cities (Rural and Micropolitan)

Based on a survey by the ND Primary Care Office at UND SMHS in August 2014
Impact of Affordable Care Act
ACA’s Initial Reception

How states fared in the first year’s effort to enroll individuals in private coverage through the Affordable Care Act. Percentages reflect by how much enrollment in each state by April 2014 exceeded or fell short of targets held by the Obama administration. Some states say their own targets differed.

Source: Department of Health and Human Services

The Wall Street Journal
Medicaid enrollment and ACA data were obtained from the ND Department of Human Services on 9/25/2014.
Healthcare Delivery Challenges
The new head of the Department of Veterans Affairs, Sloan Gibson, told a Senate committee last week that he needed $17.6 billion over the next three years to hire some 1,500 doctors, 8,500 nurses and other clinicians to reduce the unconscionably long waiting times that many veterans now endure before they are able to see a doctor.
That news was bad enough, but the department’s problems are emblematic of an even deeper problem: a nationwide shortage of doctors, especially primary care doctors, and other health care professionals, that will only get worse in coming years. No less alarming, the current medical education system is ill-equipped to train the number of professionals needed.
Issues Cited in Editorial

• Shortage of doctors acute for primary care, especially in rural and poor urban neighborhoods
• Imbalance of providers, with too many specialists in urban areas and too few primary care providers in rural areas
• Too many providers not practicing at the top of their scope of practice
• Shortage of residency slots
• Shortage of community training sites
Issues Cited in Editorial

• Editorial calls for:
  • Increase in the number of residency slots
  • Expansion of the cadre of other health care providers
  • Improvement in the efficiency of health care delivery
Special Healthcare Delivery Challenges in North Dakota

- Mal-distribution of providers
- Elderly rural population
- Geriatric care in general
- Mental and behavioral health
- Rural emergency medical services (EMS)
- Dental/oral health
- Itinerant workers/trauma care
Healthcare Workforce Initiative
Healthcare Workforce Initiative

• Reduce disease burden
  • Master of Public Health degree programs (UND and NDSU) have graduated their first cohort of students
  • Further programming approaches under study to address mental and behavioral health issues in the state

• Retain more healthcare provider graduates for North Dakota
  • RuralMed program has 26 students accepted or enrolled
  • UND SMHS recognized as #1 in the nation for the percentage of its graduating class going into family medicine
  • UND SMHS recognized as #2 in the nation for rural health training
Healthcare Workforce Initiative

• Train more healthcare providers
  • Medical student class increased by 16/year
  • Health sciences students increased by 30/year
  • Resident slots increased by 17/year
    • Approved additional slots in rural family medicine, rural surgery, hospitalist, geriatrics, rural psychiatry (via telemedicine)

• Improve efficiency of delivery system
  • Training in interprofessional healthcare teams
  • Use of “learning communities” in new building
Issues Cited in Editorial

• Editorial calls for:
  • Increase in the number of residency slots ✓
  • Expansion of the cadre of other health care providers ✓
  • Improvement in the efficiency of health care delivery ✓
HWI IMPLEMENTATION
TOTAL ADDITIONAL STUDENTS ENROLLED/YEAR
(AT END OF EACH BIENNUIUM)

2011-2013: 32
2013-2015: 127
2015-2017: 197
2017-2019: [VALUE]
New UND SMHS Building Update
UNDA SMHS Building Update

- Located at northeast corner of Bronson property
- Four floors (no basement and 5th mechanical floor)
- 325,446 sq. ft.
- Concrete poured up to third floor
- Formal groundbreaking June 12, 2014
- Building to open summer 2016
- http://www.med.und.edu/construction/index.cfm
- On budget and on time!
Learning Community
Options for Decision-makers to Consider
Options for Decision-makers to Consider

- North Dakota state income tax credit for healthcare practitioners who volunteer to teach healthcare students
- Expansion of the RuralMed program if it reaches full enrollment (32 slots)
- Creation of a RuralMed-like (or other financial incentive) program to encourage rural practice for other needed non-physician providers (e.g., addiction counselors, MLT, nursing assistants, etc.)
Options for Decision-makers to Consider

• Expansion of residency slots available through the HWI
• Support for expanded mental and behavioral health care
• Endorsement of the request for a collaborative interprofessional healthcare educational campus at Williston State College, and perhaps elsewhere in the western part of the state (in the SBHE budget request)
Questions?

View from Southeast corner