Health Care is a Complex Industry
“Health care is an indispensable service, just like running water, electricity, public education, police and fire protection, roads and highways, and other hallmarks of developed nations. Because everyone needs a doctor at some point, it’s an industry with a guaranteed customer base.”

Alaska DOLWD
Growth in Health Care Jobs Continues

Health Care Continues to Climb
Alaska, 2002 to 2013

<table>
<thead>
<tr>
<th>Year</th>
<th>Growth Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>7.1%</td>
</tr>
<tr>
<td>2003</td>
<td>10.4%</td>
</tr>
<tr>
<td>2004</td>
<td>6.9%</td>
</tr>
<tr>
<td>2005</td>
<td>3.6%</td>
</tr>
<tr>
<td>2006</td>
<td>2.7%</td>
</tr>
<tr>
<td>2007</td>
<td>0.8%</td>
</tr>
<tr>
<td>2008</td>
<td>1.5%</td>
</tr>
<tr>
<td>2009</td>
<td>4.1%</td>
</tr>
<tr>
<td>2010</td>
<td>6.7%</td>
</tr>
<tr>
<td>2011</td>
<td>4.7%</td>
</tr>
<tr>
<td>2012*</td>
<td>4.6%</td>
</tr>
<tr>
<td>2013</td>
<td>4.6%</td>
</tr>
</tbody>
</table>

*Preliminary
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

Fastest Growing Senior Population in U.S.

Health Care Jobs to Lead Overall Growth
Alaska occupational categories, 2010 to 2020

Note: Occupational categories are based on the federal Standard Occupational Classification Manual.
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section
Industry Training/Education Requirements

<table>
<thead>
<tr>
<th></th>
<th>Construction</th>
<th>Oil and Gas</th>
<th>Health</th>
</tr>
</thead>
<tbody>
<tr>
<td># Firms</td>
<td>2388</td>
<td>76</td>
<td>1290</td>
</tr>
<tr>
<td># Occupations</td>
<td>108</td>
<td>102</td>
<td>146</td>
</tr>
<tr>
<td># AA+</td>
<td>14</td>
<td>32</td>
<td>71</td>
</tr>
<tr>
<td>% AA+</td>
<td>13%</td>
<td>31%</td>
<td>49%</td>
</tr>
</tbody>
</table>

Training Levels for Occupations by Alaska Industry

- Construction
- Oil and Gas
- Health
Chronic Health Workforce Shortages

Vacant Health Care Estimated Positions by Category

- Overall Vacancy Rate = 8%

DOLWD Projected Need for Health Care Workers

<table>
<thead>
<tr>
<th>Health-Related Occupations*</th>
<th>Employment</th>
<th>Openings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010</td>
<td>2020</td>
</tr>
<tr>
<td></td>
<td>36,139</td>
<td>46,104</td>
</tr>
</tbody>
</table>

*Includes: Health Practitioner and Technical, Healthcare Support, and partial Education/Training/Library, Personal Care and Services, Management, Community and Social Services, Office and Administrative Support, Installation/Maintenance/Repair, Production

Overall Vacancy Rate
Urban/Rural
7%/10%

Health Degrees - AY2010

- Nursing 225 28%
- Allied Health 323 40%
- Behavioral Health 207 25%
- Other 61 7%
% of Workers 50+ Years Old (> 33% over 50)

<table>
<thead>
<tr>
<th>Occupation</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgeons</td>
<td>66.7</td>
</tr>
<tr>
<td>Psychiatrists</td>
<td>64.5</td>
</tr>
<tr>
<td>Pediatricians, General</td>
<td>57.4</td>
</tr>
<tr>
<td>Medical and Health Services Managers</td>
<td>48.0</td>
</tr>
<tr>
<td>Occupational Health and Safety Specialists (Oil and Gas)</td>
<td>46.0</td>
</tr>
<tr>
<td>Licensed Practical and Licensed Vocational Nurses</td>
<td>45.5</td>
</tr>
<tr>
<td>Nurse Practitioners</td>
<td>44.5</td>
</tr>
<tr>
<td>Nurse Anesthetists</td>
<td>41.9</td>
</tr>
<tr>
<td>Medical and Clinical Laboratory Technologists</td>
<td>41.7</td>
</tr>
<tr>
<td>Registered Nurses</td>
<td>41.3</td>
</tr>
<tr>
<td>Physician Assistants</td>
<td>41.1</td>
</tr>
<tr>
<td>Obstetricians and Gynecologists</td>
<td>40.0</td>
</tr>
<tr>
<td>Clinical, Counseling, and School Psychologists</td>
<td>39.4</td>
</tr>
<tr>
<td>Medical Equipment Repairers</td>
<td>39.3</td>
</tr>
<tr>
<td>Dietetic Technicians</td>
<td>38.9</td>
</tr>
<tr>
<td>Medical Transcriptionists</td>
<td>38.9</td>
</tr>
<tr>
<td>Speech-Language Pathologists</td>
<td>37.8</td>
</tr>
<tr>
<td>Anesthesiologists</td>
<td>37.5</td>
</tr>
<tr>
<td>Medical Scientists, Except Epidemiologists</td>
<td>37.0</td>
</tr>
<tr>
<td>Internists, General</td>
<td>36.8</td>
</tr>
<tr>
<td>Dentists, General</td>
<td>36.5</td>
</tr>
<tr>
<td>Optometrists</td>
<td>36.4</td>
</tr>
<tr>
<td>Family and General Practitioners</td>
<td>36.1</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>35.8</td>
</tr>
<tr>
<td>Radiologic Technologists</td>
<td>35.2</td>
</tr>
<tr>
<td>Dental Hygienists</td>
<td>34.8</td>
</tr>
<tr>
<td>Home Health Aides</td>
<td>34.3</td>
</tr>
<tr>
<td>Recreational Therapists</td>
<td>34.1</td>
</tr>
</tbody>
</table>
Occupations w >10% Vacancy Rates and >500 Estimated Positions

• Certified Nursing Assistants 14%
• Behavioral Health Case Managers/Care Coordinators 15%
• Emergency Medical Technicians 16%
• Physical Therapists 21%
• General Practitioners and Family Physicians 11%
• Community Health Aides/Practitioners 18%
• All Other Health Information Occupations 11%
Highest Vacancy Rates - 20%+ (and estimated vacancies)

- Audiologists 21% (7)
- Dental Health Aide Therapists 20% (10)
- Orthotists and Prosthetists 50% (25)
- Physical Therapist Aides 28% (16)
- Physical Therapists 21% (142)
- Psychiatric and Mental Health Aides 20% (1)
- Speech-Language Pathologists 20% (24)
- Other Practitioner Support Technicians/Technologist 25% (25)
- Other Therapists Support Workers (not T/T) 23% (49)
- Nurse Educators (Healthcare Facility or Multi-Site) 22% (33)
- Women’s Healthcare Nurse Practitioners 43% (16)
- Psychiatrists 22% (20)
Shortages are Due to Inadequate Local Supply, Growing Demand, Recruitment and Retention Issues

Major Strategies:

- UA “Grow Our Own, Close to Home”
- Alaska Area Health Education Center (AHEC) System – “Pipeline Workers”
- Alaska Health Workforce Coalition – *Health Workforce Plan* and *Action Agenda*
Health Programs Impact UA

% of Students in Health Programs

UA Graduates 2003-2012 (N=34,114)

UAA Graduates 2003-2012 (N=19,758)

Enrollment Growth

UA HEALTH STUDENTS* 2000-2013

* Pre-Majors and Majors

UA Health Students – Fall 01-11

Majors/Pre-Majors

Pre-Majors
Majors
UAA Awards in High Demand Health Job Areas
FY 2004-2013

+27.7
Health Awards Occur at Every Level

UA Health Degrees by Level - 2013 (Total = 914)
(also several partner programs)

Certificates: [VALUE] 18%
Associates: [VALUE] 37%
Bachelors: [VALUE] 37%
Graduate: [VALUE] 8%
Health Programs Across the State

• All campuses provide and/or receive health programs
• System-wide Alliances and faculty work groups – active since 2002; planning/coordination
• A wide variety of programs (>80)
  • Medicine/primary care/pharmacy
  • Nursing
  • Allied health
  • Therapies
  • Behavioral health
  • Public health and wellness
  • Medical office and health information
Our Graduates Make a Vital Contribution to Alaska

• Of the 5,378 health graduates between 2003 and 2010, 4,469 were Alaska residents two years after graduation (83%).

• Of those residents, 4,060 were working in the state two years after graduation (91%).

• And 3,553 of those residents were working in occupational categories where you would expect to find health programs graduates (88%):
  • Health Practitioner and Technical
  • Healthcare Support
  • Community and Social Services
  • Personal Care Services
  • Management
  • Education, Training and Library
  • Office and Administrative Support
By Program Category

• Allied Health:
  • 1014 graduates 2003-2010
  • 855 residents 2 years after graduation (84%)
  • 812 working in Alaska (95%)
  • 635 employed in the 7 fields (78%) and 86 more in Protective Services (includes firefighters) for a total of 721 (89%)

• Behavioral Health:
  • 2381 graduates 2003-2010
  • 1986 residents 2 years after graduation (83%)
  • 1716 working in Alaska (86%)
  • 1441 employed in the 7 fields (84%)

• Nursing:
  • 1568 graduates 2003-2010
  • 1295 residents 2 years after graduation (83%)
  • 1247 working in Alaska (96%)
  • 1210 employed in the 7 fields (97%)
By Program Category

• **Public Health/Wellness:**
  • 63 graduates 2005-2010
  • 47 residents 2 years after graduation (75%)
  • 39 working in Alaska (83%)
  • 31 employed in the 7 fields (79%)

• **Medical Office/Health Information:**
  • 345 graduates 2003-2010
  • 281 residents 2 years after graduation (81%)
  • 240 working in Alaska (85%)
  • 219 employed in the 7 fields (91%).

• Medicine/Other Primary Care/Therapies: Do not yet have data for partner programs
Allied Health Programs

- **Dental Hygiene (AAS)** — 3% vacancy rate:
  - 100 graduates 2003-2010
  - 90 residents 2 years after graduation (90%)
  - 90 working in Alaska (100%)
  - **89** employed in the 7 fields (100%)

- **Medical Laboratory Technology (AAS)** — 5% vacancy rate:
  - 26 graduates 2003-2010
  - 21 residents 2 years after graduation (81%)
  - 20 working in Alaska (95%)
  - **20** employed in the 7 fields (100%)

- **Medical Technology (BS)** — 9% vacancy rate:
  - 70 graduates 2003-2010
  - 58 residents 2 years after graduation (83%)
  - 53 working in Alaska (91%)
  - **50** employed in the 7 fields (94%)
Nursing Programs

• **Nursing (AAS)** – 8% vacancy rate:
  • 505 graduates 2003-2010
  • 424 residents 2 years after graduation (84%)
  • 419 working in Alaska (99%)
  • 408 employed in the 7 fields (97%)

• **Nursing (BS)** – 8% vacancy rate:
  • 824 graduates 2003-2010
  • 662 residents 2 years after graduation (80%)
  • 640 working in Alaska (97%)
  • 627 employed in the 7 fields (98%)

• **Nursing (MS)** – 13% vacancy rate:
  • 96 graduates 2003-2010
  • 87 residents 2 years after graduation (91%)
  • 78 working in Alaska (90%)
  • 78 employed in the 7 fields (100%)
Behavioral Health Programs

• **Psychology (BA/BS):**
  • 789 graduates 2003-2010
  • 596 residents 2 years after graduation (76%)
  • 508 working in Alaska (85%)
  • **389** employed in the 7 fields (**77%**)

• **Social Work (MSW)** - ~ 10% vacancy rate:
  • 175 graduates 2003-2010
  • 151 residents 2 years after graduation (56%)
  • 139 working in Alaska (92%)
  • **128** employed in the 7 fields (**92%**)

![Psychology BA/BS](chart1.png)

![Social Work MSW](chart2.png)
Recent Highlights

• Anchorage Dental Mission of Mercy
  • 40 UAA Dental Assistant and Hygiene students participated
  • 1332 volunteers
  • 1589 patients
  • Value of care ~$1.157 million
  • Fairbanks in 2015

• 5-year ($145k/year) grant to UAA School of Social Work
  • Recruit students for employment with Office of Children’s Services
  • With UAF BSW program and SOA OCS

• First–year WWAMI students
  • AHEC placed 15 in rural communities for summer clinical rotations

• Geriatric Education Series
  • Over 250 health providers across Alaska participated via distance
Highlights, continued

• Ikautaq Project
  • Recruit 80 Alaska Native students to enroll in OEC
    • Children’s Behavioral Health Specialist or Direct Service Specialist
    • In their home villages
    • Partnership: Center for Human Development, Prince William Sound Community College, Aqqaluk Trust

• Livable Wage Task Force
  • To study, define and make recommendations regarding livable wage for direct service workers

• SHARP program received legislative funding for FY15
  • Loan repayment/employment incentives
Challenges for UA Health Programs

- Budgetary Crisis
- Facilities Limitations
- Faculty/Staff Turnover and Recruitment
- Other Issues
Current Initiatives

• **Physical Therapy Assistant Program**
  • Accreditation visit this summer/fall
  • Students likely begin in Spring 2015

• **Physical Therapy Program**
  • Working with UW to develop a partnership
  • Using distance delivery
  • Designed to be self-sustaining

• **Pharmacy Program**
  • Working with Idaho State University to develop a partnership
  • Using distance delivery
  • Designed to be self-sustaining

• **Medical Assisting – Southeast Alaska (UAS)**
  • Collaborative program development – UAS, UAA, UAF, OHPD
Current Initiatives, continued

• **UAF TAACCCT grant** – expand distance allied health education at rural campuses

• **Healing Our Heroes** – train rural providers to improve service to veterans (AHEC)

• **Health Program of Study** – prepare rural high school students for post-secondary health programs (Interior AHEC)

• **Distance BS in Nursing Science** – pilot in Fairbanks

• **Health Information Technology OEC** – collaboration between UAS Sitka and CITC

• **Alaska Health Workforce Coalition Action Agenda update**
Why is there such a long time gap between pre-requisite completion and starting the (BS) nursing program? Is there a solution?

**BS Nursing Admission Cohorts**

<table>
<thead>
<tr>
<th></th>
<th>Summer 14</th>
<th>Fall 14</th>
<th>Spring 15</th>
<th>Summer 15</th>
<th>Fall 15</th>
<th>Spring 16</th>
<th>Summer 16</th>
<th>Fall 16</th>
<th>Spring 17</th>
<th>Summer 17</th>
<th>Fall 17</th>
<th>Spring 18</th>
<th>Summer 18</th>
<th>Fall 18</th>
<th>Spring 19</th>
<th>Summer 19</th>
<th>Fall 19</th>
<th>Spring 20</th>
<th>Summer 20</th>
<th>Fall 20</th>
<th>Spring 21</th>
</tr>
</thead>
<tbody>
<tr>
<td>backlog from 12/13</td>
<td>200</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>admitted october 13</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>admitted february 14</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>admit october 14</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>admit october 15</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>admit october 16</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>admit october 17</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>admit october 18</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>admit october 19</td>
<td>120</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40</td>
<td>40</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>admit october 20</td>
<td>120</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: It won’t take this long to achieve equilibrium, as some students do not take their seats, allowing others to move up.
FAQ

• Why doesn’t Alaska have its own medical school/pharmacy school/…?

  High Cost
  Small Population
  Limited Demand
  Consortium/Partner Model

  More economical
  Alaska-sized cohorts
  Focus on state need
FAQ

• What does the AHEC do? Why does it need so much money?