
NALEO National Policy Institute on Workforce Development
Los Angeles, CA
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Twitter: @uwchws & @biancafrogner
Agenda

• Brief Overview of UW CHWS
• National View of Latinos in Health Workforce
• Health Workforce Shortage Debate
• Health Workforce Pipeline Barriers and Facilitators
• Recommendations Moving Forward
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UW Center for Health Workforce Studies

- Established in 1998 in Department of Family Medicine, UW
- Multidisciplinary team of researchers
- Primarily funded by contracts and grants from state, federal, and private organizations
- Houses 2 of 9 Center grants funded by the Health Resources and Services Administration (HRSA) to address:
  1) Allied health workforce
  2) Health equity and health workforce diversity

**Mission:** To elevate the importance of workers in the delivery of health care in policy discussions, which we accomplish by:
- Conducting health workforce research to inform health workforce planning and policy
- Providing consultation to local, state, regional and national policy makers on health workforce issues
- Developing and refining analytical methods for measuring health workforce supply and demand
Example HRSA-Funded Studies Conducted by UW CHWS

• Allied Health:
  • Apprenticeships as pathways to healthcare careers
  • Allied health professionals and the “gig economy”
  • State incentive programs that encourage allied health professionals to provide care for underserved populations
  • Career paths of allied health professionals

• Health Equity
  • Examining wage disparities by race and ethnicity
  • Implicit race and gender bias, bias awareness, and impact of a course for clinical faculty
Other HRSA-Funded Health Workforce Research Centers

- GW Health Workforce Research Center
- UNC Program on Health Workforce Research and Policy
- UCSF Health Workforce Research Center on Long-Term Care
- UMich Behavioral Health Workforce Research Center
- Oral Health Workforce Research Center at University at Albany, SUNY
- Health Workforce Technical Assistance Center
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Conceptual Model Linking Workforce Diversity and Health Equity

Data Sources

• Current Population Survey (CPS)
  • Monthly survey of 60,000 household collected by U.S. Bureau of Labor Statistics
  • March supplement detailed information on income and employment
  • Hispanic = persons identifying as Hispanic/Spanish/Latino

• Integrated Postsecondary Education System (IPEDS)
  • Annual mandatory survey of institutions/applicants of federal assistance program (Title IV) conducted by U.S. Dept of Education
  • Hispanic = persons identifying as Hispanic/Latino

• Association of American Medical Colleges (AAMC)
  • Multiple data sources including American Medical Association Masterfile and AAMC Minority Physician Database
Percent Hispanics within Healthcare Jobs, 2013 and 2018

- Higher representation in lower skilled occupations
- Increasing representation over time across all occupations

<table>
<thead>
<tr>
<th>Occupation</th>
<th>2013 (n=15,355,589)</th>
<th>2018 (n=17,367,998)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All HC Jobs</td>
<td>10.9%</td>
<td>17.7%</td>
</tr>
<tr>
<td>Aides/assistants</td>
<td>12.1%</td>
<td>19.6%</td>
</tr>
<tr>
<td>Technicians/Technologists</td>
<td>12.0%</td>
<td>12.1%</td>
</tr>
<tr>
<td>LPN/LVN</td>
<td>10.3%</td>
<td>12.8%</td>
</tr>
<tr>
<td>Community-based</td>
<td>10.0%</td>
<td>11.2%</td>
</tr>
<tr>
<td>Therapists</td>
<td>7.5%</td>
<td>9.9%</td>
</tr>
<tr>
<td>RNs/APRNs</td>
<td>6.1%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Other High Skilled Professions</td>
<td>6.0%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Physicians</td>
<td>3.8%</td>
<td>7.1%</td>
</tr>
</tbody>
</table>

Source: calculated from Current Population Survey, Annual Economic Supplement
Distribution of Hispanics and non-Hispanics across Job Categories, 2018

- Hispanics more frequently working in lower skilled occupations
- *Slight* movement over time toward higher skilled jobs (not shown)

Source: calculated from Current Population Survey, Annual Economic Supplement
Percent Hispanics within Healthcare Jobs Grouped by Minimum Education Requirement, 2013 and 2018

- Higher representation in jobs requiring post-secondary or below
- Increasing representation over time across nearly all educ categories

Source: calculated from Current Population Survey, Annual Economic Supplement
Distribution of Hispanics and Non-Hispanics within Healthcare Jobs Grouped by Education Entry Requirements, 2018

- Hispanics more frequently in jobs requiring post-secondary or below
- Slight movement over time toward jobs requiring higher educ (not shown)

Source: calculated from Current Population Survey, Annual Economic Supplement
Percent Hispanics who are New RN Graduates by Degree, 2013 and 2017

- Growing representation of Hispanics at all RN degree levels, except DNP

Source: calculated from IPEDS & AACN via RWJF Campaign for Action
Distribution of Hispanics and Non-Hispanics across Degree Programs for New RN Graduates, 2017

- Hispanics most frequently graduating with Associate degree in nursing

Source: calculated from IPEDS & AACN via RWJF Campaign for Action
Percent Hispanics among Medical School Applicants, Acceptances, and Graduates, 2015

- Hispanics underrepresented among applicants and acceptances
- Disparity b/n accepts and graduates, not related to changing demographics

Source: calculated from AAMC Data Warehouse
Percent Hispanics within Full-Time Medical School Faculty Ranks, 2015

- Hispanics underrepresented in all faculty ranks, particularly higher ranks

<table>
<thead>
<tr>
<th>Rank</th>
<th>Total (n=158,646)</th>
<th>Instructor (n=15,720)</th>
<th>Assistant Professor (n=71,760)</th>
<th>Associate Professor (n=32,632)</th>
<th>Full Professor (n=34,313)</th>
<th>Other (n=4,222)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.1%</td>
<td>2.5%</td>
<td>2.5%</td>
<td>1.9%</td>
<td>1.6%</td>
<td>1.8%</td>
</tr>
</tbody>
</table>

Source: calculated from AAMC Data Warehouse
Distribution of Hispanics across Medical School Faculty Ranks, 2015

- Majority of Hispanics are at Assistant Professor rank or below

<table>
<thead>
<tr>
<th>Rank</th>
<th>Percentage</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructor</td>
<td>11.5%</td>
<td>15,720</td>
</tr>
<tr>
<td>Assistant Prof</td>
<td>52.3%</td>
<td>71,760</td>
</tr>
<tr>
<td>Associate Prof</td>
<td>18.1%</td>
<td>32,632</td>
</tr>
<tr>
<td>Full Prof</td>
<td>16.0%</td>
<td>34,313</td>
</tr>
<tr>
<td>Other</td>
<td>2.2%</td>
<td>4,222</td>
</tr>
</tbody>
</table>

Source: calculated from AAMC Data Warehouse
Key Takeaways on Demographics of Health Workforce

• Representation of Hispanics has been increasing across all healthcare jobs at all education levels

• Hispanics are underrepresented in healthcare jobs compared to the U.S. population

• Hispanics are more frequently working in low-skilled jobs, or jobs that have lower educational requirements

• Potential challenges in getting Hispanics through the pipeline from acceptance to graduation to faculty
  • Hispanics also underrepresented in pipeline for students geared towards health services research career (not shown)\textsuperscript{1}

\textsuperscript{1} Frogner, \textit{Health Services Research}, 2018
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Do We Have a Shortage? If So, Where?

• Debatable whether we have a national physician or nursing shortage

• Where shortages may exist:
  • In rural and underserved communities
  • For primary care and long-term care settings
  • With skills and training in behavioral health
  • Shortage of “low-skilled” workers
Headlines Highlighting Healthcare Job Demand

From hospital to home, health care in 2019 will just keep growing
Consumer preference, payment reform pushes care outside the hospital walls

HEALTHCARE JOB GROWTH, DEMAND EXPECTED TO REMAIN STRONG THROUGH 2019
BY JOHN COMMINS | JANUARY 29, 2019

Healthcare Job Growth Outpaces Nearly Every Sector in 2018
— Healthcare created 346,000 new jobs last year, up from 284,000 in 2017
Occupations Projected with Highest Percent Change of Employment, 2016-2026

Healthcare jobs dominate list of fastest growing occupations, and most require less than a Bachelor’s degree to enter.

Source: https://www.bls.gov/ooh/fastest-growing.htm
Headlines Pointing to Trouble

The disabled and the elderly are facing a big problem: Not enough aides

The Shortage Of Home Care Workers: Worse Than You Think

Caregiver Shortage Could Mean 7.8 Million Unfilled Jobs By 2026

By Bailey Bryant | January 28, 2019
Key Takeaways on Health Workforce Shortage

• Decades long debates about physician shortage
  • Impacts decisions on distribution of GME $ and role of IMGs
  • Debatable if shortage when consider role of NPs and PAs
  • Concern about maldistribution in rural areas & move away from primary care
  • Multiple comparing substitutability of NPs v. MDs on quality of care

• Simultaneous concerns of RN shortage, but never materialized
  • Delayed retirement of RNs during Great Recession
  • Concerns about pipeline restrictions due to lack of nursing faculty, esp w/ IOM Future of Nursing call for 80% of RNs to have Bachelor’s degree by 2020

• Growing recognition that healthcare has been a job engine and healthcare jobs are in high demand
  • Many types of jobs contributing to patient care -> How to leverage?
  • Growth in low-skilled jobs, but job quality and career ladder are questionable
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Long-term Care Transitions, 2003-2013

• Half of workers in long-term care leave jobs without employment or exit the labor force despite high demand for jobs

<table>
<thead>
<tr>
<th>Industry</th>
<th>Entry from what industry?</th>
<th>Most common occupation of entrants</th>
<th>Exit to what industry?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Health Care Services</td>
<td>14% Hospitals</td>
<td>42% Nursing, psych &amp; home health aides</td>
<td>33% Out of labor force</td>
</tr>
<tr>
<td></td>
<td>14% Nursing care facilities</td>
<td>23% Personal care aides</td>
<td>18% Unemployed</td>
</tr>
<tr>
<td>Nursing Care Facilities</td>
<td>18% Hospitals</td>
<td>37% Nursing, psych &amp; home health aides</td>
<td>27% Out of labor force</td>
</tr>
<tr>
<td></td>
<td>12% Leisure &amp; hospitality</td>
<td>10% Registered nurses</td>
<td>19% Unemployed</td>
</tr>
<tr>
<td>Residential Care Services</td>
<td>14% Leisure &amp; hospitality</td>
<td>21% Personal care aides</td>
<td>25% Out of labor force</td>
</tr>
<tr>
<td></td>
<td>8% Out of labor force</td>
<td>13% Food preparation</td>
<td>16% Unemployed</td>
</tr>
</tbody>
</table>

## Selected Characteristics of Long-term Care Transition Groups, 2003-2013

- Shared characteristics is high level of work disability among leavers

<table>
<thead>
<tr>
<th>Industry</th>
<th>% not a citizen</th>
<th>% rural residence</th>
<th>% disabled</th>
<th>% below poverty</th>
<th>% full-time</th>
<th>Wages from past year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Home Health Care Services</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrants</td>
<td>10%</td>
<td>20%</td>
<td>4%</td>
<td>18%</td>
<td>74%</td>
<td>$19,666</td>
</tr>
<tr>
<td>Leavers</td>
<td>9%</td>
<td>20%</td>
<td>10%</td>
<td>22%</td>
<td>59%</td>
<td>$15,289</td>
</tr>
<tr>
<td>Stayers</td>
<td>11%</td>
<td>19%</td>
<td>4%</td>
<td>14%</td>
<td>66%</td>
<td>$19,799</td>
</tr>
<tr>
<td><strong>Nursing Care Facilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrants</td>
<td>8%</td>
<td>24%</td>
<td>2%</td>
<td>16%</td>
<td>75%</td>
<td>$20,677</td>
</tr>
<tr>
<td>Leavers</td>
<td>7%</td>
<td>25%</td>
<td>8%</td>
<td>16%</td>
<td>72%</td>
<td>$17,409</td>
</tr>
<tr>
<td>Stayers</td>
<td>8%</td>
<td>26%</td>
<td>2%</td>
<td>8%</td>
<td>78%</td>
<td>$22,527</td>
</tr>
<tr>
<td><strong>Residential Care Services</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrants</td>
<td>6%</td>
<td>17%</td>
<td>4%</td>
<td>14%</td>
<td>74%</td>
<td>$19,517</td>
</tr>
<tr>
<td>Leavers</td>
<td>7%</td>
<td>17%</td>
<td>8%</td>
<td>13%</td>
<td>73%</td>
<td>$16,123</td>
</tr>
<tr>
<td>Stayers</td>
<td>6%</td>
<td>19%</td>
<td>3%</td>
<td>5%</td>
<td>79%</td>
<td>$21,203</td>
</tr>
</tbody>
</table>

- LTC workers have high rates of being uninsured, even if working full-time
- LTC workers have high reliance on financial assistance programs such as Medicaid and food stamps (not shown)

**Figure 7: Percentage of Part- versus Full-Time Healthcare Workers at Financial Risk among Those Employed in Occupations Requiring Bachelor’s Degree or Below by Work Setting**

<table>
<thead>
<tr>
<th>Financial Risk</th>
<th>Part-time (n=685,294)</th>
<th>Full-time (n=3,906,738)</th>
<th>Part-time (n=878,696)</th>
<th>Full-time (n=3,245,321)</th>
<th>Part-time (n=774,541)</th>
<th>Full-time (n=2,091,246)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings below $15 per hour</td>
<td>13.4%</td>
<td>5.6%</td>
<td>11.8%</td>
<td>7.0%*</td>
<td>17.9%</td>
<td>14.8%</td>
</tr>
<tr>
<td>At or below federal poverty level</td>
<td>7.4%</td>
<td>8.5%</td>
<td>10.8%</td>
<td>7.9%</td>
<td>16.8%</td>
<td>12.8%</td>
</tr>
<tr>
<td>Uninsured</td>
<td>5.6%</td>
<td>3.8%</td>
<td>2.2%</td>
<td>2.2%</td>
<td>9.1%</td>
<td>7.9%</td>
</tr>
</tbody>
</table>

*Significant differences at p≤0.001 between part-time versus full-time by financial risk category conducted using unpaired two sample t-test

Note: Financial risk defined as individuals earning below $15 per hour, being at or below the poverty level, or being uninsured

**Source:** Frogner BK, Skillman SM, Patterson DG, Snyder CR. Comparing the Socioeconomic Well-Being of Workers Across Healthcare Occupations. Center for Health Workforce Studies, UW, Dec 2016.
Other Notes about Barriers and Facilitators

• Lot of literature on physician burnout and physician/nurse recruitment incentives to rural/underserved communities
  • Physician recruitment/retention related to where they do residencies more than where they train
  • Incentive programs mostly target high-skilled jobs and they are hard to evaluate
• Relatively little is known about improving job quality among low-skilled healthcare workers
  • Basic needs (health insurance, food, transportation, etc.) should be addressed
  • Improve clarity on career ladders and understand opportunities offered in competing industries
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More work to be done to connect diversity of workforce with reducing health disparities and achieving health equity.

Health Workforce Researchers are...

• Moving away from “nose counting” to predict supply
  • Recognition of geographic variability
  • More complex projection models with increasing data

• Focusing on the “team” and relate to patient need
  • Monitoring and evaluating new and novel ways in which health care workers are being used
  • Identify and clarify career pathways, including barriers/facilitators
  • Understand how diversity of workforce translates to better patient care
  • Evaluate how reimbursement impacts team configuration
Moving Healthcare Workforce Discussion Forward

• Identify ways to recruit new workers that reflect population demographics and retain existing workers especially in low-skilled, high demand jobs

• Improve distribution of workers to meet increasing healthcare demand from aging demographic and health insurance expansion

• Assess needs of health workers that will increase productivity

• Monitor and evaluate evolving roles and emerging occupations often operating within restricted budgets and scope of practice to meet the needs of new delivery and payment models

• Train new and existing workers to keep up with the changing needs of a population experiencing high disease burden (e.g., opioid use disorder and other behavioral health problems)

• Deploy and connect workers in the community as care shifts away from hospital to keep elderly in their home
If you want to read more about our work:


- Frogner BK and Spetz J. Entry and Exit of Workers in Long-Term Care. UCSF Health Workforce Research Center Report. 2015. Available at: [https://healthworkforce.ucsf.edu/sites/healthworkforce.ucsf.edu/files/Report-Entry_and_Exit_of_Workers_in_Long-Term_Care.pdf](https://healthworkforce.ucsf.edu/sites/healthworkforce.ucsf.edu/files/Report-Entry_and_Exit_of_Workers_in_Long-Term_Care.pdf)


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