

Future of Work in Health Care: Overview of Workforce Needs

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UW Center for Health Workforce Studies (CHWS)

- 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) the allied health workforce and 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

UW Primary Care Innovation Lab (PCI-Lab)

- Established in 2015 in Department of Family Medicine, UW
- Multidisciplinary team of researchers
- Primarily funded by contracts and grants from federal agencies and private-public partnerships
- **Mission**: To accelerate design, implementation, and productive use of technology that has potential to improve primary care practice and patient health, which we accomplish by:
 - Engaging companies with cutting-edge technologies
 - Produce evidence at every step of product development
 - Disseminate evidence to stakeholders

Current & Projected Shortages in the Health Care Field

Overview of Healthcare Landscape

- **Call to Action:** Improve the healthcare system with “Quadruple Aim”
 - 1) Improve patient experience of care; 2) Improve population health; 3) Reduce per capita cost of care; 4) Improve provider work life
- **Actions:**
 - Expansion of health insurance coverage through age eligibility of dependents, Medicaid (e.g., Apple Health) & Marketplaces (e.g., WA Health Benefit Exchange)
 - Connect providers through new models of delivery (e.g., Accountable Care Organizations, Patient-Centered Medical Home Models, integration of care)
 - Drive toward value-based care (e.g., bundled payment, MIPS, APM)
 - Increase monitoring and engagement of patients through technologies (e.g., electronic health records, telehealth, mobile health, sensors)

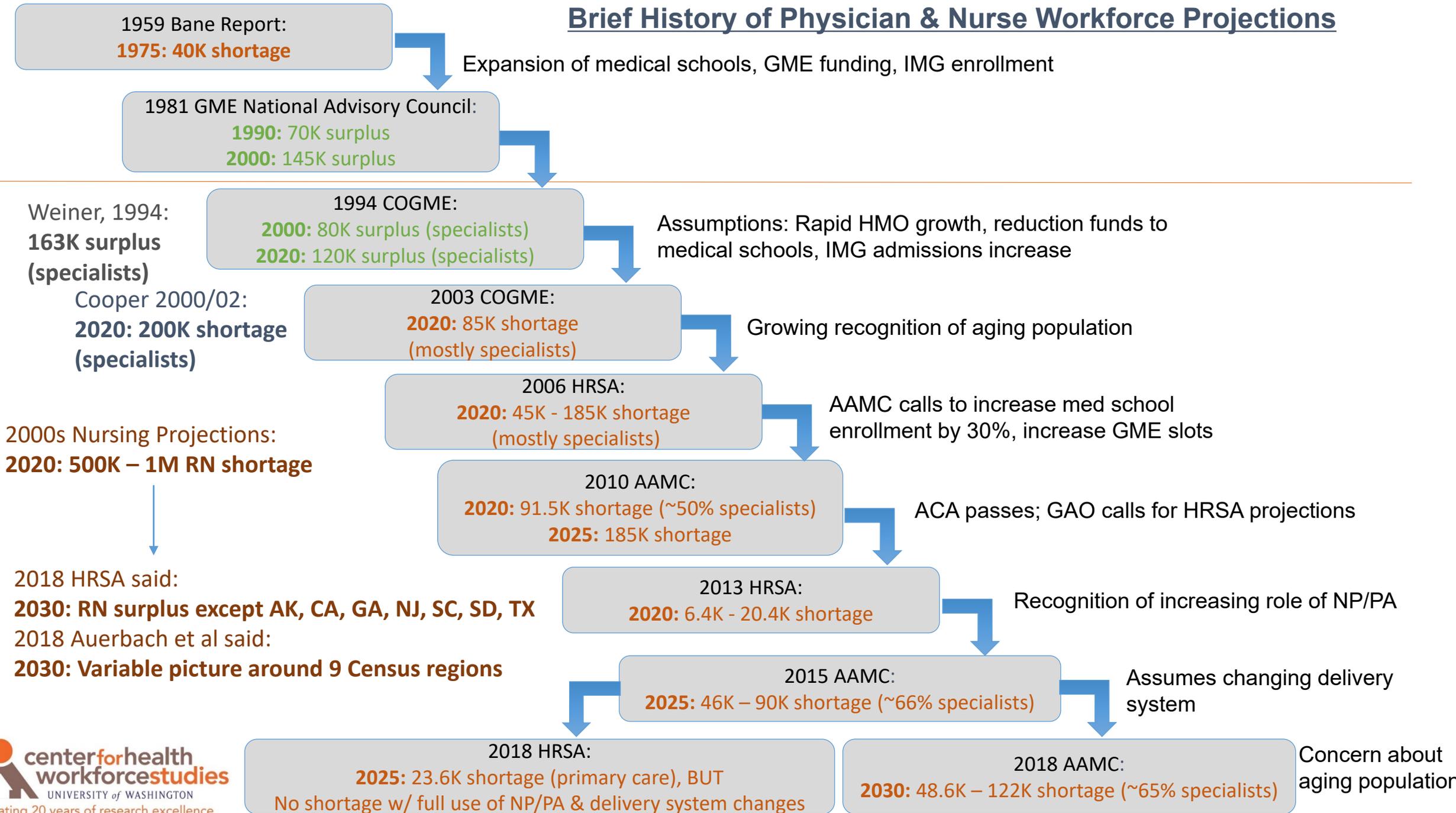
Overview of Health Workforce Concerns

- Identify ways to recruit new workers to healthcare, retain existing workers, increase productivity and improve distribution of workers to meet increasing healthcare demand from aging demographic and health insurance expansion
- 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 ¹)
- 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
- Deploy and connect workers in the community as care shifts away from hospital to keep elderly in their home

Do we have a shortage? If so, where?

- Debatable whether we have a national physician or nursing shortage

Brief History of Physician & Nurse Workforce Projections



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 ²
 - With skills and training in behavioral health ¹
 - Shortage of “low-skilled” workers ³

Recent Headlines

Health & Science

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

The Washington Post
Democracy Dies in Darkness

Forbes

7,265 views | Apr 18, 2018, 02:05pm

The Shortage Of Home Care Workers: Worse Than You Think

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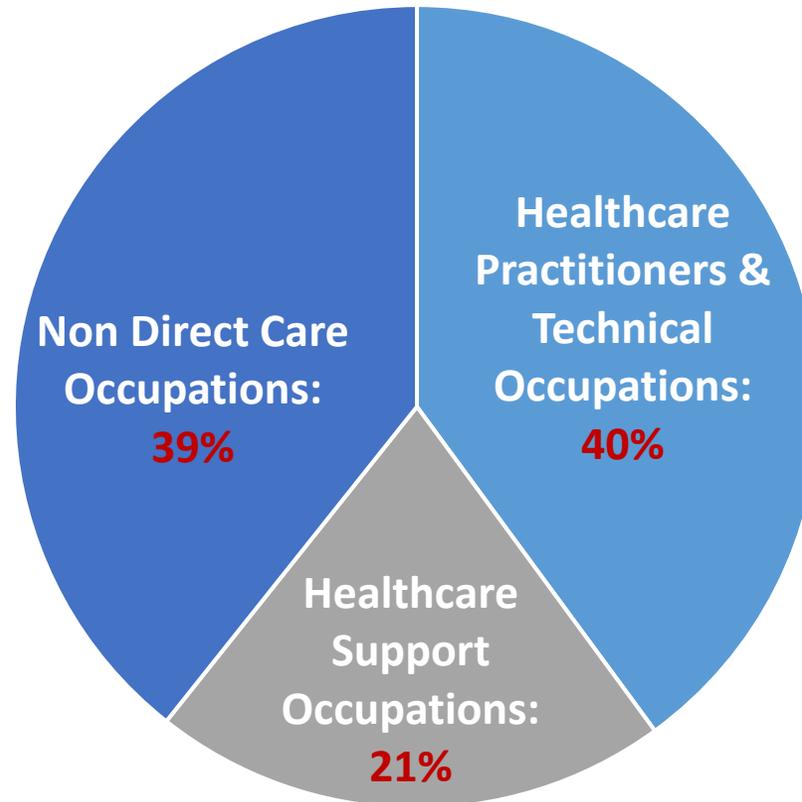
Life & S

Mental health care appointments often come with a long wait. 3 ways to cope while help is delayed

Occupations within Healthcare Industry, 2017 (n=16,523,690)

Examples:

Home/Personal Care Aides
Community Health Workers
Social Workers
Administrative/Financial/
Management
Grounds/Maintenance
Food Preparation



Examples:

Physicians
Dentists
Pharmacists
Therapists
Physician Assistants
Nurses
- APRN
- RN
- LPN/LVN

Examples:

Nursing Assistants
Home Health Aides
OT/PT Assistants
Medical Assistants
Pharmacy Aides
Dental Assistants

Issue #1: Defining Need is Difficult

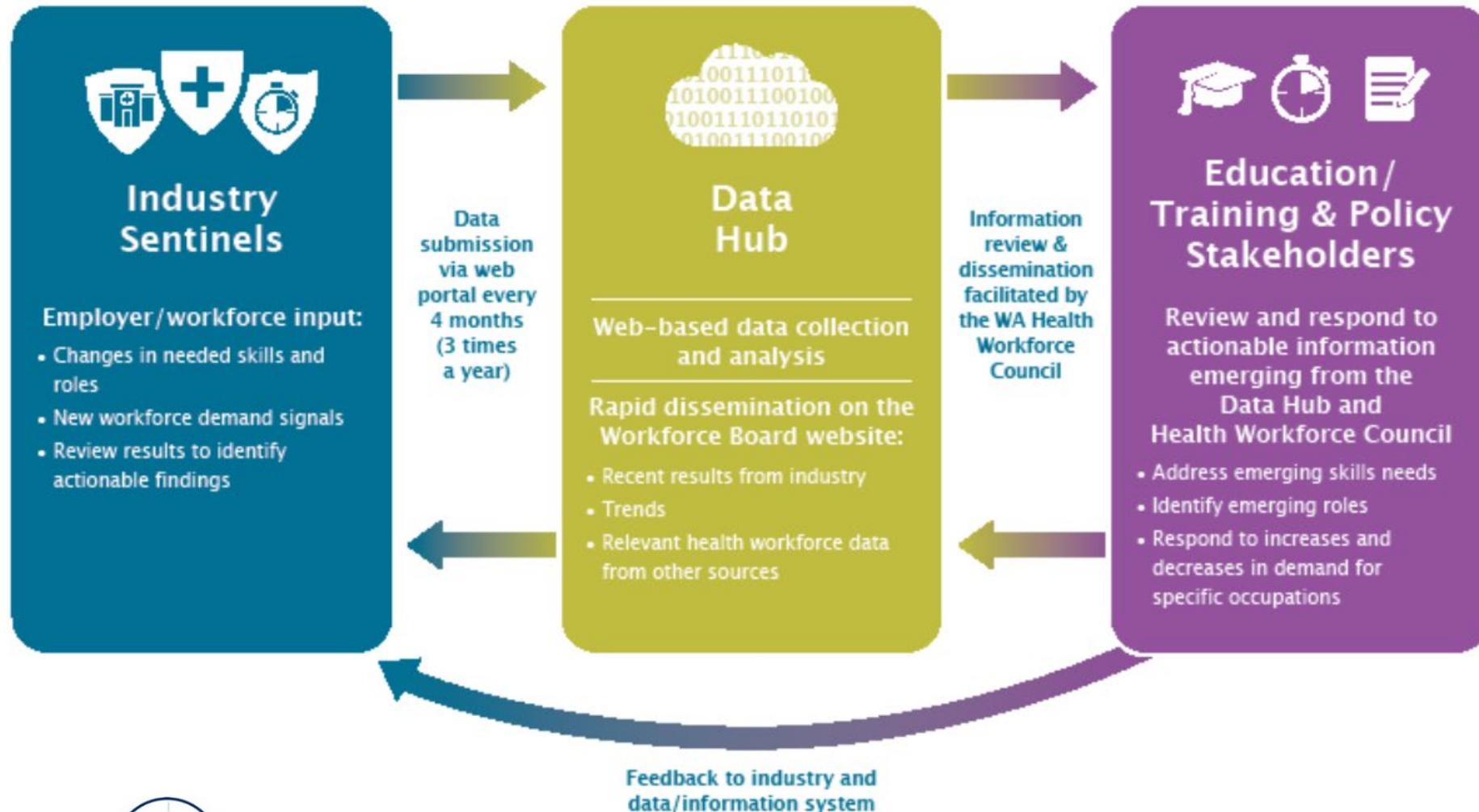
- **Challenges**

- Projections of need focus on provider-to-patient ratios, which does not equate to access or quality
- Limited discussion around available providers to fill the gap (e.g., Health Professional Shortage Areas designation focused only on few professions)
- Insufficient data: 2+ year lags, poor geographic detail, limited availability for non-licensed professionals, and lack of information related to roles

- **Approaches**

- Consider all members of the “care team” including patient at the center
- Seek multiple perspectives, sources, and approaches to assess need
- Use rapid and novel data collection methods such as WA Sentinel Network

Washington's Health Workforce Sentinel Network



Issue #2: Recruitment & Developing Pipeline

- **Challenges**

- Access to providers significantly varies by patient geography (e.g., rural) and insurance type (e.g., Medicaid and uninsured)
- While healthcare jobs have been a “job engine” for the economy and are among the fastest growing, healthcare will likely face increasing competition for low-skilled workers from hospitality, retail, and other service sectors ³

Occupations Projected with Highest Percent Change of Employment, 2016-2026

OCCUPATION	GROWTH RATE, 2016-26	2017 MEDIAN PAY
Solar photovoltaic installers	105%	\$39,490 per year
Wind turbine service technicians	96%	\$53,880 per year
Home health aides	47%	\$23,210 per year

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

Mathematicians	29%	\$103,010 per year
Physical therapist aides	29%	\$25,730 per year
Bicycle repairers	29%	\$28,390 per year
Medical assistants	29%	\$32,480 per year
Genetic counselors	29%	\$77,480 per year
Occupational therapy assistants	29%	\$59,310 per year

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- **Approaches**

- Introduce students to wide range of healthcare careers early (K-12) through mentorship and experiential learning
- Recruit students from rural and underserved communities
- Provide training opportunities in rural and underserved communities
- Expand healthcare apprenticeships especially in primary care and long-term care

Issue #3: Retention

- **Challenges**

- High turnover especially in long-term care in part due to disability and tough work environment ³
- Unclear career pathways especially for low-skilled workers ⁴
- Low pay in part due to limited leverage to negotiate higher reimbursement rate

- **Approaches**

- Clarify benefits/advantages of working in healthcare
- Develop career advancement opportunities with clear pathways and training support ⁵
- Provide security net (e.g., insurance, food support, transportation) especially for part-time workers and “gig” workers ⁶

Impacts of Innovation and Technologies

What Technologies Look Promising?

- Artificial Intelligence & predictive analytics to assist patient-provider communications
 - Chatbots to facilitate patient intake
 - Listening devices to scribe clinical notes
 - Diagnosis and treatment decision support tools
- Point of Care Technologies
 - Handheld ultrasounds
 - New diagnostic tests (including genetic testing) delivered at home or in provider office
- Remote patient monitoring
 - Telehealth
 - Sensor devices & internet of things
 - Mobile health apps

Issue #4: Technological Disruption

- **Challenges**

- Limited input from providers in development of health tech
- Technology often negatively impacts productivity upon adoption^{7,8,9}
- Unclear reimbursement strategy to support integration of tech

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- **Approaches**

- Develop stronger evidence before introducing technology into clinical workflow to better identify what support (financially and personnel) are needed¹⁰
- Provide forums for providers to engage with tech companies at early stages of development
- Identify training needs to not only prepare workers for current technologies but to help develop next generation of technologies¹¹

Closing Thoughts

- Build workforce that matches patients' needs
 - Focus less on headcounts
- Take a wider view of who works in healthcare
 - Focus less on siloed occupations and more on the team
- Clarify and plan for career pathways in healthcare
 - Including support for training and other social assistance
- Engage healthcare workers in development of future technologies

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Thank you!

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