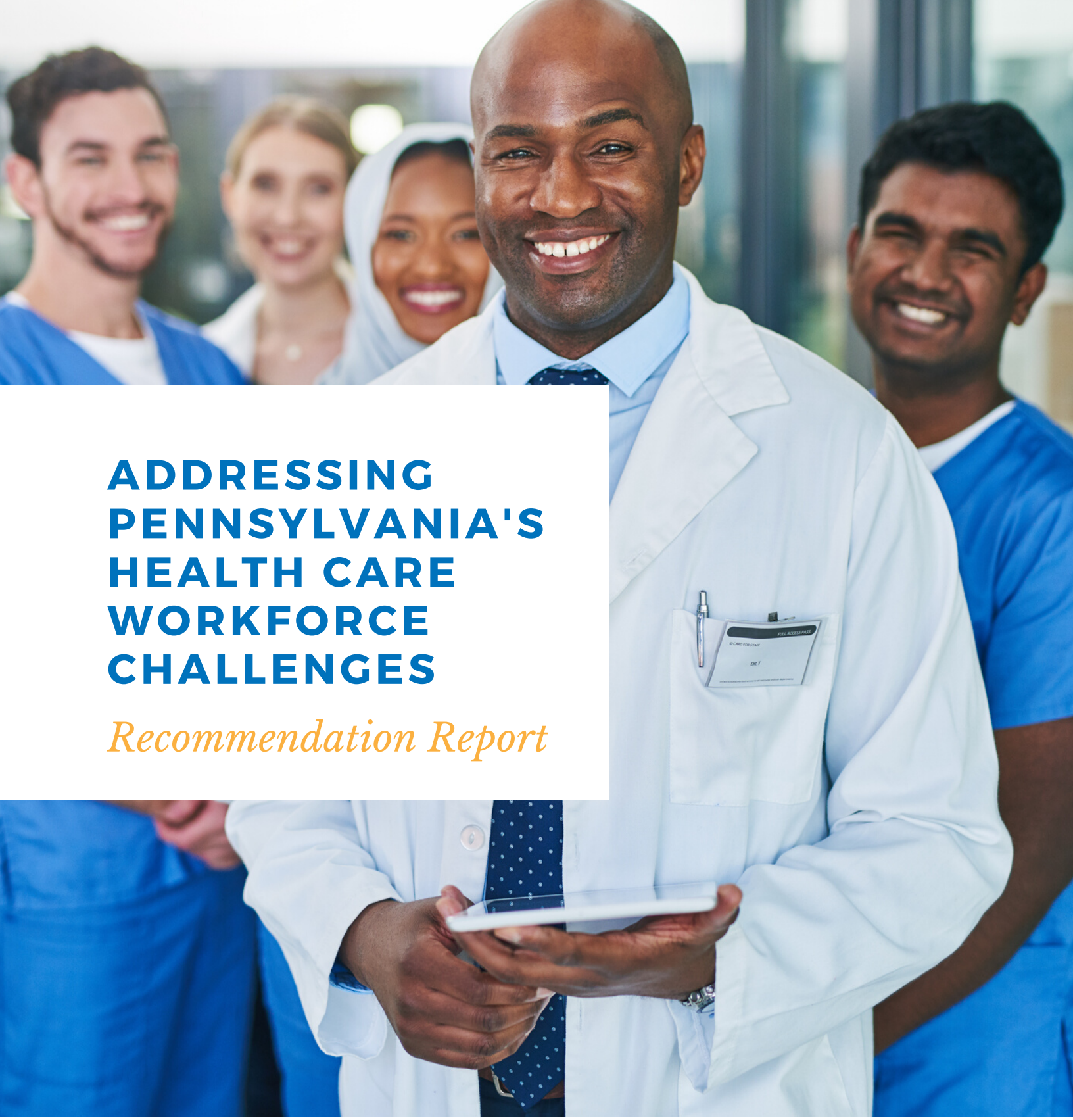

ADDRESSING PENNSYLVANIA'S HEALTH CARE WORKFORCE CHALLENGES

Recommendation Report

January 2020

The Hospital + Healthsystem Association of Pennsylvania

From the Task Force Chair and HAP's President & CEO

On behalf of the members of HAP's Health Care Talent Task Force, we are pleased to share with you *Addressing Pennsylvania's Health Care Workforce Challenges*.

During the past year, this task force—which includes experts in workforce planning and economics, administrative and clinical leaders, health professions educators, human resource professionals, and five HAP board members—conducted a thorough analysis of member hospital workforce needs and developed and recommended the board-approved strategies contained in this report. We want to acknowledge each task force member's work to develop the recommendations contained in this report. We also acknowledge the HAP Board members' support and input to this effort.

Highlights from the report include efforts to:

- Build the infrastructure to ensure collection of and access to health care workforce data
- Develop programs and activities to encourage individuals to enter and remain in health care fields
- Expand the Commonwealth's education and workforce development capacity to provide training and remove barriers to help transition qualified professionals into health careers
- Foster diversity in the workplace
- Incorporate changes in the structure and delivery of health care to promote improvements in quality and efficiency

We look forward to embarking on this very important work collectively with our members, the administration, policymakers, and legislators to ensure Pennsylvania has the policies and programs in place to attract and retain the health care workforce to meet the needs of Pennsylvania's families.

Armed with the recommendations and strategies for implementation, let's work together to develop, attract, and retain a top-performing health care workforce.

Hugh Lavery
Task Force Chair
Senior Vice President, Government/
External Affairs, Jefferson Health

Andy Carter
President and CEO,
The Hospital and Healthsystem
Association of Pennsylvania (HAP)

ACKNOWLEDGEMENTS

Health Care Talent Task Force

This report was developed by The Hospital and Healthsystem Association of Pennsylvania's (HAP) Health Care Talent Task Force, which was convened to help HAP explore workforce needs, new models of care, and strategies to improve the ability of Pennsylvania hospitals to attract and retain the necessary health care talent to serve their communities.

The following individuals served on the task force:

- **CHAIR: Hugh Lavery**, Senior Vice President, Government/External Affairs, Jefferson Health
- **Robert J. Batory**, Senior Vice President/Chief Human Resources Officer, WellSpan Health
- **Joseph Cassidy**, Vice President/Chief Human Resources Officer, Holy Redeemer Health System
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HAP appreciates the task force's efforts to provide guidance and direction to the following HAP staff in the development of this recommendation report: Jeff Bechtel, Senior Vice President, Health Economics and Policy; Mary Marshall, Director, Workforce and Professional Development.

HAP's research team and IMPAQ International—a public policy research and analytics firm—also contributed significantly to the development of this report.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Overview

The Hospital and Healthsystem Association of Pennsylvania's (HAP) 2018–2020 strategic plan calls for HAP to work with its members to enhance the health care team talent pool and transform the health care workforce given 21st century health care needs. Given that the hospital industry is a key driver of Pennsylvania's economy—HAP's recent economic impact analysis found that, in 2018, hospitals represented 17 percent of Pennsylvania's GDP and powered more than one out of ten jobs across the Commonwealth—this work is vitally important to the health of our economy and of Pennsylvanians.

In 2018, HAP conducted a survey of hospital human resource directors, about which staff positions members are struggling to hire or retain, including physicians, nurses, advanced practice professionals, therapists, allied health professionals, and other hospital employees. HAP used the data collected from the survey to evaluate members' current health care workforce issues around recruitment and retention. Findings from the survey informed HAP's advocacy and program efforts to develop innovative strategies to address the workforce needs of member hospitals and health systems.

Member Engagment

HAP convened a task force to guide the development of public policy strategies to support HAP's goal to assist members to enhance the health care team talent pool and transform the health care workforce. The task force included experts in workforce planning and economics, administrative and clinical leaders, health professional educators, human resource professionals, and five HAP board members who assisted HAP in exploring member hospital workforce needs and developing solutions to address those needs.

EXECUTIVE SUMMARY

Outcome

After careful review of Pennsylvania's health care workforce needs, the task force determined a plan of action focusing on four core recommendations:

Evaluating the Health Care Workforce: To address the shortage of practitioners, it is essential to have the best available data to estimate the gap between the current and expected supply, and the actual and future demand for health care practitioners. The nature of these recommendations focus on government action.

Recruitment—Building the Workforce Pipeline: It is essential to increase the size and capacity of the health care workforce in the Commonwealth. These recommendations seek to develop programs and activities to encourage individuals to enter health care fields. These recommendations focus on government action.

Retention Initiatives: Retaining a robust health care workforce is vitally important to maintain access to care and contribute to the Commonwealth's economic success. These recommendations seek to address Pennsylvania's health care workforce retention issues related to professional health care delivery with a focus on HAP and/or hospital/health system action.

Transforming the Workforce: Improving access to care by optimizing the skill set of health care practitioners through the use of technology or other practices is critical to make the most of the existing health care workforce. The nature of these recommendations focus on HAP and/or hospital/health system action.

Supporting HAP Initiatives: In addition to these recommendations, HAP continues to advocate for legislative and policy reforms that will improve the health care workforce environment and make working in health care in Pennsylvania more inviting. These advocacy activities include: efforts to maintain professional liability reforms adopted through the MCARE act; regulate burdensome and unnecessary prior authorization activities; support Pennsylvania's rural global health model; implement telehealth legislation that will serve to address access issues in rural and urban areas; and pass workplace safety legislation to decrease workplace violence in health care settings. See page 39.

RECOMMENDATIONS SUMMARY

Evaluating Pennsylvania's Health Care Workforce

- Strengthen the Commonwealth's data, education, workforce, and economic development infrastructure by working with the Governor's Office to create a Health Care Workforce Committee within the Keystone Economic Development and Workforce Command Center
- Establish an independent entity within state government to collect and analyze workforce and economic data
- Promote regular evaluation of workforce needs by the Joint State Government Commission (or other appropriate, qualified body) every three years
- Expand and develop supply/demand studies for more categories of health care professionals to improve the data available to make policy and funding decisions
- Develop benchmarking studies using state and national data sources

Recruitment—Building the Workforce Pipeline

- Establish a statewide program to promote early exposure to health-related professions, including the provision of grants to promote diversity and inclusion in health professions in order to ensure the health care workforce meets the hospital communities' physical and cultural needs
- Support efforts to transition Veterans to careers in health care, including providing support for legislation that credits military experience toward state licensing requirements
- Pursue Pennsylvania's recognition of international medical graduates (IMG) degrees and credentials to expand the Commonwealth's talent pipeline and address areas of need

RECOMMENDATIONS SUMMARY

Recruitment—Building the Workforce Pipeline

- Devote additional staff resources and/or create administrative flexibility for the Pennsylvania Department of Health to better administer the ARC J-1 VISA and Conrad 30 programs
- Promote partnerships between industry and Pennsylvania's education/workforce development systems to invest in education, develop initiatives that facilitate career progression, and enhance continuing education and professional development opportunities
- Support the costs associated with operating clinical programs, including strategies that focus on providing an adequate supply of health care educators and clinical education training sites
- Revise state loan repayment programs to enhance awards and increase length of service commitments to compete with contiguous states
- Support efforts to expand current physician and advance practice provider (APP) residency programs targeted to rural and underserved areas, and develop more seamless educational pathways for nurses to obtain baccalaureate degrees to support long-term talent pipeline development and retention of staff
- Develop partnerships for dual enrollment to enable community colleges to expand into offering baccalaureate degrees in nursing, and adopt a two-tiered statewide curriculum or competency model incorporating standardized requirements for diploma and associate degree programs in tier one with a standardized baccalaureate completion degree in tier two
- Build partnerships with the Commonwealth's local workforce investment boards to engage health care industry partners in activities that will strengthen the health care workforce

Commitment to Diversity and Inclusion: Underlying these recommendations is the commitment of the hospital community to increase focus on cultural competency through staff training and to continue to promote and work to improve diversity in governance and leadership roles that reflect the ethnic and racial makeup of their communities. Hospitals are committed to better addressing racial and national origin diversity, as well religious affiliation, language, physical size, gender, sexual orientation, age, disability (physical and mental), and socio-economic status diversity. To demonstrate this commitment, HAP signed the "Equity of Care" pledge, and partners with the American Hospital Association and other state associations to promote diversity and inclusion.

RECOMMENDATIONS SUMMARY

Retention Initiatives

- Develop a hospital workforce engagement and retention toolkit for members to promote a culture of diversity and inclusion and the establishment of a best practice forum and shared training curriculum
- Establish member programs to focus on physician, advanced practice professionals, and nursing workload demands and employee burnout, including exploring alternative staffing models
- Provide training on strategies that support communication and collaboration between members of the health care team to improve outcomes and increase worker satisfaction
- Continue ongoing legislative advocacy efforts to prevent workplace violence and for the Joint State Government Commission (or other relevant government body) to evaluate workplace safety initiatives across the Commonwealth
- Develop peer support efforts to redesign workplace practices for the utilization of established professional staff to orient and train the new generation workforce
- Promote a culture of shared governance and accountability, thereby allowing for greater job satisfaction for Pennsylvania's health care workers

Transforming the Workforce

- Advocate for a regulatory structure that enables health care professionals to practice to the full extent of their education, training, and license
- Integrate the use of technological innovations that make the work process more efficient, thereby improving clinical outcomes as well as worker satisfaction
- Promote and support efforts to integrate the use of telehealth services throughout Pennsylvania's hospital community
- Ensure that Pennsylvania's professional practice acts and regulations are progressive
- Continue advocating that the application process for licensure and re-licensure by the Commonwealth's professional licensing boards is efficient and timely
- Align governmental regulations and programs to reduce the administrative burdens on the care providers within Pennsylvania's health care delivery system
- Continue efforts that promote and support patient-centered care

INTRODUCTION

The Hospital and Healthsystem Association of Pennsylvania's (HAP) 2018–2020 strategic plan calls for HAP to work with its members to enhance the health care team talent pool and transform the health care workforce given 21st century health care needs.

In 2018, HAP surveyed human resources directors at member organizations about workforce challenges, collecting data on which staff positions members are struggling to hire or retain, including physicians, nurses, advanced practice professionals, therapists, allied health professionals, and others.

With the results of this survey in hand, HAP convened a task force to guide HAP development of public policy strategies to support its goal in assisting members to enhance the health care talent pool and transform the health care workforce.

The task force included experts in workforce planning and economics; administrative and clinical leaders; health professional educators; human resource professionals; and five HAP board members who assisted HAP in exploring member hospital workforce needs and developing solutions to address those needs.

The task force objectives included analyzing HAP's workforce survey findings to identify and prioritize workforce needs statewide, identify and develop strategies and initiatives to address priority areas, guide the development of public policy strategies to improve the ability of hospitals and health systems to attract and retain necessary talent, and identify strategies and best practice models of care to support members' transformation of the health care workforce.

The task force was convened during February 2019. In-person meetings took place in May, August, and November 2019. Their work culminated in the development of this recommendation report that includes suggested strategies to assist hospital members to attract and retain the health care talent pool needed to provide quality patient-centered care for Pennsylvania communities.

UNDERSTANDING THE WORKFORCE

Introduction

To provide appropriate context for this report and the task force recommendations, it is important to understand information on the scope of the health care workforce shortages and the underlying trends driving these shortages.

This section of the report will:

- Review shortage projections relating to physicians, advanced practice professionals, nurses, and allied health professionals (both nationally and in Pennsylvania) to clarify the scope of the problem
- Discuss the trends affecting both demand and supply that are contributing to the problem
- Review information on how experts believe that the delivery of health care will change in the future, and how it will affect the health care workforce

While reviewing this background, it also is important to keep in mind the demographic diversity of Pennsylvania. In light of the high visibility of Pennsylvania's large urban centers, Philadelphia and Pittsburgh, one might not consider Pennsylvania to be a largely "rural" state. As of the 2010 Census, about 27 percent of the state's population live in areas that are designated as rural, spanning 75 percent of the state's land mass.[1] In fact, 48 of Pennsylvania's 67 counties are defined by the legislature as rural, based upon population density; four counties are 100 percent rural.[2]

This mix of large urban centers (such as Philadelphia, Pittsburgh, Allentown, Erie, and Reading) alongside the largely rural character of other areas of the state presents a challenge in addressing health care talent shortages that may vary across the Commonwealth. While urban and rural areas may share the same health care workforce challenges, the causes and the solutions to address those challenges may differ in each setting. Actions taken on the range of recommendations presented in this report may be tailored to urban and rural settings.

UNDERSTANDING THE WORKFORCE

Workforce Projections

Physicians

Looking forward from a national perspective, the United States likely will experience a significant shortfall of physicians. Evidence identified by the Joint State Government Commission's study on the health care workforce suggests a national provider shortage approaching 122,000 physicians by 2032.[3] As of March 2019, Pennsylvania had a total of 51,069 active physicians, including 24,302 primary care physicians (PCPs) and 26,767 specialist physicians.[4] Data suggests that PCP shortages will continue to be a problem here and around the nation; by 2030, the Commonwealth will lack more than 1,000 additional PCPs.[5]

Pennsylvania already is feeling the fallout, particularly among PCPs. For example, the Commonwealth has nearly twice as many medically underserved areas (MUAs) and 62 percent more medically underserved populations (MUPs) as the average state.[6],[7] It also is home to twice the number of primary care health professional shortage areas (HPSAs) compared to the region's average, or fully one third more HPSAs than the average state or territory nationally, according to data released during June 2019 by U.S. Department of Health and Human Services, Human Resources and Services Administration (HRSA).[8]

Table 1: Definitions for MUAs, MUPs, and HPSAs

MUAs and MUPs: MUAs and MUPs identify geographic areas and populations with a lack of access to primary care services.

- **MUAs** have a shortage of primary care health services for residents within a geographic area such as a whole county, a group of neighboring counties, a group of urban census tracts, or a group of county or civil divisions.
- **MUPs** are specific subgroups of people living in a defined geographic area with a shortage of primary care health services. These groups may face economic, cultural, or linguistic barriers to health care.

(Source: HRSA website)

HPSAs: HPSAs are defined service areas that demonstrate a critical shortage of primary care physicians, dentists, or mental health providers. A HPSA can be a distinct geographic area (such as a country, grouping, census tract, township, or borough), a specific population group within a defined geographic area (such as the population under 200 percent of poverty), or a specific public or non-profit facility (such as a prison).

Census data also points to shortages of PCPs in Pennsylvania's rural communities showing that the national average is 75 primary care providers per 100,000 residents, while Pennsylvania's rural counties have only 60 per 100,000.[9]

UNDERSTANDING THE WORKFORCE

Workforce Projections

Advanced Practice Professionals

Advanced Practice Professionals (APPs) include nurse practitioners, clinical nurse specialists, nurse anesthetists, nurse midwives, and physician assistants. While information on all APP categories in Pennsylvania is unavailable, the Pennsylvania State Board of Nursing calculates that, as of June 2019, Pennsylvania has 249 clinical nurse specialists and 13,707 active certified registered nurse practitioners.[10]

Based on projections from the U.S. Bureau of Labor Statistics (BLS), between 2016 and 2026, Pennsylvania will see the following increases in the number of new occupational openings for the following advanced practice professionals:[11]

Table 2: Occupational Openings

Profession	**PA: # of Providers (2016)**[1] (Note: may differ from number of licensees)	**PA: Projected # of Providers (2026)**	**PA: % Increase in number of new occupational openings (2016-2026)**
Nurse anesthetists	2,350	2,560	9%
Nurse midwives	230	270	17%
Nurse practitioners	5,140	6,710	31%
Physician assistants	5,500	7,220	31%

In addition, analyses by the Pennsylvania Department of Labor and Industry validate anticipated shortages of advanced practice professionals and identify physician assistants and nurse practitioners as the top two “developing occupations” in the Commonwealth—meaning that physician assistants and nurse practitioners have the largest 10-year projected demand growth of all occupations for which there were fewer than 10,000 individuals (and a demand of at least 360 FTEs) working in Pennsylvania during 2016.[13] Moreover, fully 38 percent of the top 50 developing occupations on that list are in the health care field.[14]

UNDERSTANDING THE WORKFORCE

Workforce Projections

Nurses

More than 3 million registered nurses comprise the largest segment of our nation's health care workforce.[15] According to the Pennsylvania State Board of Nursing, as of June 2019, Pennsylvania has nearly 225,000 registered nurses (RNs) and 52,351 licensed practical nurses (LPNs).[16]

The U.S. Bureau of Labor Statistics reports the job outlook for registered nurses will be "much faster" than the 5 percent estimated growth rate among all occupations.[17] For example, Projections Central, a contractor to the U.S. Department of Labor, predicts both a national (i.e., 15.0%) and a Pennsylvania-wide (i.e., 13.4%) increase in RN employment opportunities from 2016 to 2026.[18] This growth in demand is driving projections for continued shortages, particularly in parts of the country where economic growth is slower.

Pennsylvania will be second only to Texas in experiencing the nation's most significant shortages in LPNs by 2030, according to the U.S. Health Resources and Services Administration.[19] While the shortage of LPNs is partially outweighed by anticipated surpluses of registered nurses, there remains an overall projected shortage of nurses available to serve at the bedside. For example, HRSA reports that Pennsylvania is anticipated to have 5.1 percent more RNs (or 8,200 excess RNs) by 2030; however, that same report projects that demand for LPNs in Pennsylvania will exceed supply by 27.8 percent (i.e., a shortfall of 18,700 LPNs).[20]

This national and state shortage information has been confirmed by a 2018 HAP member workforce survey designed to help HAP better understand hospital workforce issues. Findings from the 107 respondents identified specific clinician specialties with which hospitals experienced challenges in recruitment and, separately, retention. This survey found that, among all hospital types (e.g., general acute care, rural, independent, teaching, etc.), nurses are in extremely high demand.

Although the list included ten categories of physicians, nine types of nurses, and 31 other clinicians, respondents most frequently reported that the top five most difficult positions to hire and retain were nurses in various units across the hospitals. (See Table 3, next page). Survey respondents most frequently identified nurses in the emergency department as challenging to hire and to retain. Data analysis indicated variation by region and rural/urban status, but identified that nursing assistants and nurses in specific units (i.e., emergency departments, critical care units, operating rooms, and medical/surge units) were most difficult to staff.

UNDERSTANDING THE WORKFORCE

Workforce Projections

Table 3: Results of HAP Workforce Survey, 2018.

	Hospitals Indicating a Hiring Issue (N=107)		Hospitals Indicating a Retention Issue (N=107)	
Response	Number	Percent of all Respondents	Number	Percent of all Respondents
ED Nurse	73	68%	48	45%
Critical Care Nurse	65	61%	36	34%
OR Nurse	59	55%	37	35%
Med/Surg Nurse	57	53%	39	36%
Nursing Assistant	52	49%	46	43%

Allied Health Professionals

Allied Health professionals include clinical lab technicians, dietitians, medical technologists, occupational therapists, physical therapists, respiratory therapists, and speech language pathologists, among others. In the case of allied health professions, projections generally show that supply will outweigh demand over the next decade and a half. However, the projections do not account for disparities in where the professionals are available to work. There could be shortages in some regions, and no issues or over-supply in others. Further, there may be perceived shortages today and into the future or shortages at specific facilities.

The Bureau of Labor Statistics estimates a nationwide 11 percent increase in the demand nationally for clinical laboratory technologists and technicians occupation between 2018 and 2028.[21] Meanwhile, HRSA projects a total demand growth of 22 percent for medical and clinical laboratory technologists and technicians between 2012 and 2025.[22]

According to an *American Journal of Clinical Pathology* article, the northeastern region of U.S. (including Pennsylvania) is experiencing the highest medical laboratories vacancy rate (i.e., 9.4 percent), compared with a nationwide average vacancy rate of 7.2 percent.[23] This information suggests future challenges in addressing this classification.

UNDERSTANDING THE WORKFORCE

Workforce Projections

HRSA's national supply and demand projections for occupational and physical therapists from 2016 through 2030 indicate that:

- Approximately 104,290 occupational therapists were active in the U.S. workforce in 2016. In 2030, the supply of occupational therapists is expected to increase approximately 45 percent to 150,810 [24]
- Approximately 237,550 physical therapists were active in the U.S. workforce in 2016. In 2030, the supply of physical therapists is expected to increase approximately 27 percent to 302,360 [25]
- In the cases of occupational therapists and physical therapists, projected demand is not estimated to grow as quickly as supply in both a status quo and evolving care delivery scenario. There may be an over-supply of these professionals by 2030 [26]

Additionally, HRSA data and subsequent projections for dietitians and respiratory therapists are as follows:

- Approximately 78,970 registered dieticians were active in the U.S. workforce in 2016. By 2030, the national supply of registered dieticians is expected to increase 24 percent to 97,940.[27] While this same source shows projections of an oversupply of dieticians in a status quo scenario, it projects shortage of dieticians in an evolving care delivery scenario
- Approximately 111,210 respiratory therapists were active in the U.S. workforce in 2016. By 2030, the national supply of respiratory therapists is expected to increase 50 percent to 166,930.[28] HRSA projects an oversupply of respiratory therapists in both the status quo and evolving care delivery scenarios.

UNDERSTANDING THE WORKFORCE

Workforce Trends

The previous section outlined current and anticipated future health care work force challenges. To help identify solutions, however, it is important to understand the trends/dynamics that are driving or contributing to the workforce challenges reflected in the data and survey results.

Aging Population

As noted by the Joint State Government Commission in a recent workforce report, the primary cause of the health care workforce shortage is the aging of the Baby Boomer generation. For example, between 2010 and 2030, the population of Americans over the age of 65 will increase by 75 percent from fewer than 40 million to 69 million; roughly one in five Americans will be a senior citizen.[29] This increase in the aging population will be largely responsible for a projected increase in total number of office visits to primary care physicians from 462 million during 2008 to 565 million during 2025.[30] The aging of the population is directly related to the health care shortage, as approximately 80 percent of older adults have at least one chronic condition, while 68 percent have at least two.[31] Because people with chronic diseases use more health care services, and people who are older have more chronic diseases, the Commonwealth's aging population will continue to generate a much higher demand for health care services.

In Pennsylvania, the senior population (age 65 and over) grew at a rate over 20 times that of the state's general population—an increase of 16.3 percent from 2010 to 2017. According to the Pennsylvania State Data Center, Pennsylvania ranked seventh in the nation for the percent of its population that is 65 years of age or older as of 2017.[32]

Increased Coverage

Another major contributor to the demand for health care professionals is the increased coverage provided by the Affordable Care Act, which permitted the Commonwealth of Pennsylvania to expand coverage under its Medicaid program and provides subsidized coverage to individuals and families to purchase insurance through the private market.

Presently, nearly 700,000 individuals have health care coverage because of Medicaid expansion.[33] More than 1.4 million people, or about one in seven Pennsylvanians aged 19–64, have been covered by Medicaid expansion since February 2015, bringing the state's uninsurance rate to an historic low of 5.5 percent during 2018,[34] down from 8.5 percent during 2014.[35]

UNDERSTANDING THE WORKFORCE

Workforce Trends

Numerous studies have examined the expansion of private insurance coverage and its link to medical care utilization. For example, one study projected that after the insurance expansion implemented through the ACA is completed, the U.S. will require nearly 52,000 additional primary care physicians by 2025, of which 8,000 (a three percent increase to the current primary care physician workforce alone) will be directly attributable to the insurance expansion.[36]

Aging Workforce

Just as the demand for health care workers is increasing, the current workforce is aging and leaving the workforce. For example, in HAP's recent workforce survey, fully 73 percent of Pennsylvania's hospitals (78 respondents) identified the aging nurse workforce as its top institutional barrier to workforce transformation.[37]

National data supports these Pennsylvania-specific findings. According to a 2013 survey conducted by both the National Council of State Boards of Nursing and The Forum of State Nursing Workforce Centers, more than half of the national RN workforce is 50 years of age or older.[38] In addition, the American Nursing Association projects that more than one million RNs will reach the age of retirement within the next 10 to 15 years.[39]

Medical Liability Insurance

Another factor that may influence the workforce supply is Pennsylvania's high malpractice insurance rates—for specialties like obstetrics, general surgery, and internal medicine, Pennsylvania remains in the top 10 most expensive states in which to purchase medical liability insurance.[40] Such premiums are anticipated to increase should the proposed Supreme Court change to the venue rule come to pass.

Faculty and Pipeline Limitations

Half of the 107 respondents to HAP's workforce survey identified educational programs (52 respondents, 49%) as key workforce challenges. Pennsylvania has a range of nursing degree programs, but the total number of graduates has fallen short of the Pennsylvania Department of Health's 2015 estimate of 8,111 RNs and 2,839 practice nurses (PNs).[41] In 2013 and 2014, the latest years for which data is available, Pennsylvania's RN programs* and PN programs, respectively, graduated 817 (10%) and 418 (16%) fewer students than expected.[42] A promising trend in this data: the annual raw number of RN-BS degree graduates has grown, albeit modestly, since 2011 (see Figure A, next page).

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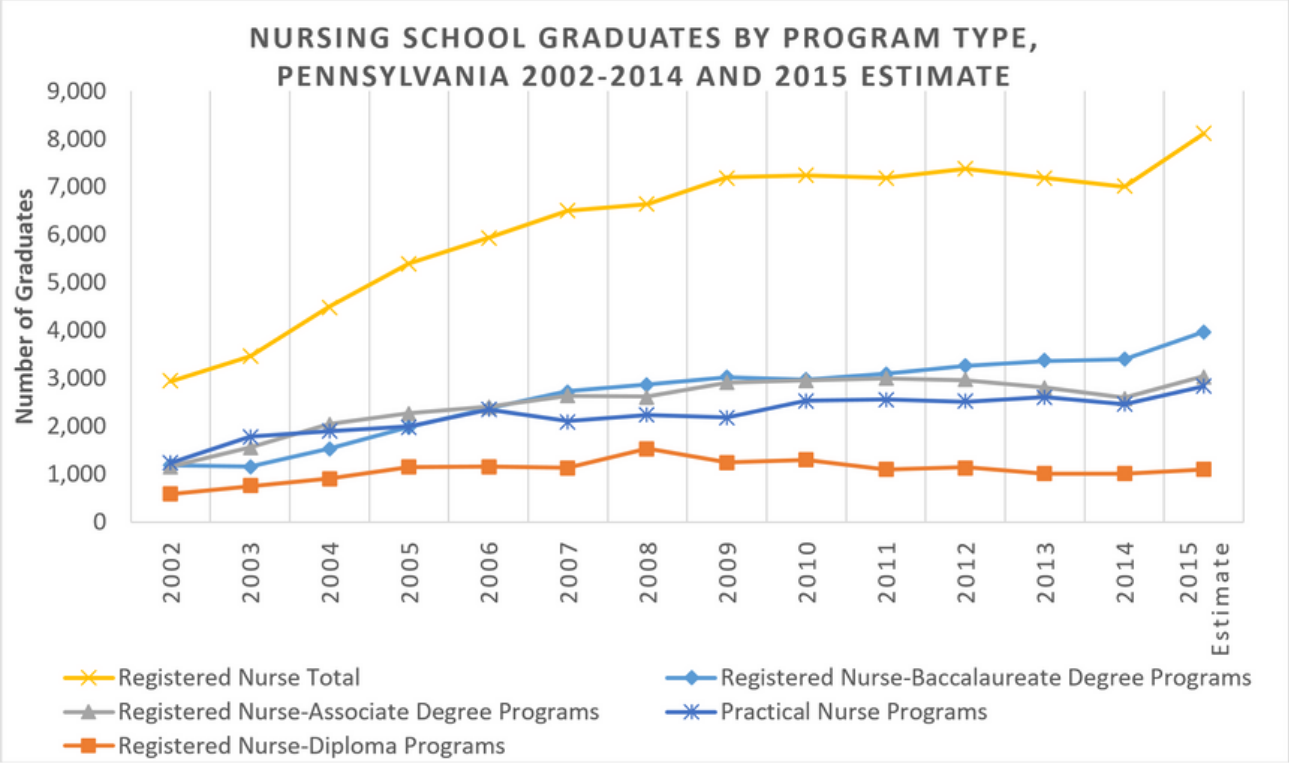
* Including Bachelor degree programs (RN-BS), hospital-based diplomas (RN-DIP), and associate degree (RN-AD) programs.

UNDERSTANDING THE WORKFORCE

Workforce Trends

Figure A: Nursing School Graduates by Program Type, Pennsylvania by Year[43]



Source: Pennsylvania Department of Health, Division of Plan Development, Bureau of Health Planning

Despite the positive trends, there are concerns related to ensuring adequate faculty to instruct and graduate sufficient future nurses. The age of current faculty, pay disparity, and availability of clinical education sites impact this issue.

According to 2012 data published by the American Association of Colleges of Nursing (AACN), the average age of nursing professors with doctoral training was 60.5.[44] In Pennsylvania, the majority of full-time nursing faculty during 2016 was over age 51 across the four program types:

- RN-Bachelor Degree—60% (23 out of 38 BSN nursing education programs)
- RN-Associate Degree—67% (18 out of 27 AD nursing education programs)
- RN-Diploma—71% (12 out of 17 hospital-based nursing education programs)
- Practical Nurse—51% (29 out of 57 LPN nursing education programs)[45]

UNDERSTANDING THE WORKFORCE

Workforce Trends

As professors retire, schools may find themselves turning away qualified students due to lack of classroom and preceptor capacity. A 2016 AACN report found that, nationally, nursing schools "turned away 64,067 qualified applicants from baccalaureate and graduate nursing programs," with almost two-thirds of responding nursing schools blaming faculty/clinical preceptor shortages.[46]

Pay disparity is another issue affecting the supply of health care educators—a nurse in clinical practice typically earns more than a nurse educator. According to U.S. Bureau of Labor Statistics, the 2018 mean annual salary for nurse practitioners was $110,030,[47] but was only $81,350 for nursing instructors and teachers.[48]

Clinical education provides students the opportunity to apply knowledge learned in the classroom to the care of real or simulated patients in settings closely monitored by experienced faculty. It is difficult to determine whether the Commonwealth has an abundance or dearth of clinical sites. However, general research points to challenges to ensure enough clinical education sites. Those challenges can range from cost implications, increased number of learners, a growing number of nurse practitioner and physician assistant programs, to distance education. This all leads to educational training shortfalls. Despite a lack of data regarding clinical education sites, the general consensus indicates a need for more sites.

Addressing the Opioid Crisis

The opioid epidemic has had a significant impact on the health care workforce. Drug abuse in Pennsylvania is particularly a significant concern; data from the Centers for Disease Control ranks Pennsylvania as having the most drug overdose deaths of any state.[49] Pennsylvania's hospitals—and in particular, their emergency departments—are often the front line for treatment for many suffering from substance use disorder, and emergency resources are being taxed by an increase of 911 calls for opioid-related incidents.[50]

Ending the opioid epidemic will require additional substance abuse, behavioral disorder, and mental health counselors to provide treatment and advise people who suffer from alcoholism, drug addiction, or other mental or behavioral problems. Further, it requires updated professional development for the current workforce to address these issues, including safety training to avoid opioid exposure during the provision of treatment.

Medical Graduates Leave

A final, additional trend that is driving the physician shortfall is the fact that Pennsylvania has difficulty maintaining Medical graduates. For example, the Commonwealth is home to nine medical schools, but data suggests that only 57.5 percent of Pennsylvania's medical school graduates remain here to practice medicine. Nationally, 66.8 percent of physicians practice within the same state in which they completed their medical education and residency.[51]

UNDERSTANDING THE WORKFORCE

Looking Ahead

Anticipating the future workforce needs of hospitals and health systems is key to ensuring that patients continue to receive the right care at the right time. HAP and its members, along with many others, are thinking about how changes in technology, consumer expectations, life expectancy, and health trends, and other factors will impact the care model and workforce needs.

Many have turned to a recent publication by the Deloitte Center for Health Solutions, *Forces of Change: The Future of Health* to frame the dialogue. In it, the authors suggest that "the future of health will likely be driven by digital transformation enabled by radically interoperable data and open, secure platforms. Health is likely to revolve around sustaining well-being rather than responding to illness." Its authors describe how technology will change not only the provision of care, but the expectations and demands of consumers for their own care. They further describe emergence of three new categories of organizational roles: data and platforms, well-being and care delivery, and care enablement. Finally, the authors predict that new business models will define the health landscape, and today's organizations should think about how they will fit in. Their prediction for hospitals and health systems is as follows:

Hospitals and health systems: The acute-care hospital will no longer serve as the center of gravity. Instead, the center of gravity in this new system will be consumers. Organizations that want to play a role in the delivery of care should determine how they can expand their points of access to get closer—both physically and digitally—to their customers. Health care providers should also find ways to decrease delivery costs to maintain margins. Near-term strategies might include enabling patient self-service, creating more remote and virtual health solutions, digitization, and advanced population management.[52]

Another example of leading thinking about the future of health care is put forth by the American Hospital Association (AHA). Authors of a report following an expert roundtable recognize that "the changes confronting the health care system are so significant that many of the models that the health care system has relied on, such as the traditional bedside care team, may no longer be the best, or even a plausible, approach to care." It concludes that "reconfiguring the model for a bedside care team" is necessary to address the evolving health care delivery system.[53]

UNDERSTANDING THE WORKFORCE

Looking Ahead

The health care delivery system is changing to keep pace with the use of technological innovations. Health care settings will require new staffing positions to continue providing state-of-the-art care. The competencies and skill sets of current practitioners will need to be enhanced. Hospitals and health systems will need a workforce across the board who are digitally prepared and capable of leveraging new technologies to do their jobs.

According to an AHA survey of health care leaders,[54] the technologies that will have the biggest effect on health care in 2020 will include:

- Telehealth (cited by 59.4% of respondents)
- Data analytics/big data (cited by 34.8% of respondents)
- Internet of medical things (cited by 28.6% of respondents)
- Machine learning and artificial intelligence (AI) (cited by 22.3% of respondents)

AHA research also concluded that AI could perform a large portion of tasks performed by non-clinical (40%) and clinical (33%) staff, with significant potential implications for improved productivity, efficiency, and performance. Such a shift suggests implications for the health care workforce, such as expanded job responsibilities or new digital skills necessary to collaborate with AI teams.[55]

While we cannot predict with certainty how, when and what changes will take place, we know that they are happening now, and that we must ensure we take the right actions today to ensure we have the right workforce in place to adjust to and drive these changes.

Conclusion

National, Pennsylvania-specific and HAP member data show the complicated challenges we face that require action today to continue to guarantee our citizens access to safe, quality care. Ensuring access to care means that we need to address Pennsylvania's health care workforce challenges by:

- Strengthening the Commonwealth's infrastructure for data collection
- Putting mechanisms in place to build the health care workforce pipeline
- Developing opportunities that retain Pennsylvania's current workforce
- Incorporating changes in the structure of health care delivery that promotes patient-centered care

The following sections of this report outline HAP's plan of action to address these challenges.

RECOMMENDATIONS

Part I – Evaluating Pennsylvania's Health Care Workforce

Introduction

Put simply, having good data on the supply and demand of the health care workforce in Pennsylvania is the cornerstone to taking strategic action to address the challenges we know exist. It is important to have the right practitioners in the right places across the Commonwealth now and into the future. This section sets forth recommendations to ensure an approach based in public-private partnerships, where HAP and our members work with the governor's office and state agencies to ensure collection of and access to health care workforce data. Starting with a recognition of the value of the governor's leadership on this issue, the task force addresses the following recommendations in this section:

- Strengthen Commonwealth infrastructure to support/promote the creation of a Health Care Workforce Committee within the Keystone Economic Development and Workforce Command Center
- Establish an independent entity within state government to collect and analyze workforce data
- Promote regular evaluation of workforce needs by the Joint State Government Commission (or other appropriate, qualified body) every three years
- Develop supply/demand studies for more categories of health care professionals to provide reliable workforce forecasting for the Commonwealth's health care community

Strengthening the Commonwealth's Infrastructure

Pennsylvania Governor Tom Wolf signed an executive order on February 19, 2019, calling for a long-term investment in workforce assessment, development, and recruitment. This initiative—the Keystone Economic Development and Workforce Command Center—intends to address Pennsylvania's workforce shortage and talent needs by expanding the collaboration between government and the private sector. However, at present this effort does not appear to include a targeted focus on the value of health care to the Commonwealth's statewide and regional economies, and the ongoing challenges with ensuring a qualified health care workforce today and into the future.

Keys to Driving Informed Decision-Making:

1. Development of infrastructure
2. Establish entity to analyze data
3. Support for data collection
4. Development of supply/demand studies

RECOMMENDATIONS

Part I – Evaluating Pennsylvania's Health Care Workforce

Since health care is one of the largest growing industry sectors in the state, **the task force recommends working with the governor's office to create a Health Care Workforce Committee to be an organizational catalyst for developing action-oriented strategies to respond to Pennsylvania's short- and long-term health care workforce challenges, including those related to data collection** that are described below, as well as efforts discussed in the section entitled "Recruitment – Building the Workforce Pipeline."

In order for the governor's administration to lead this effort for an industry critical to the state economy, we will advocate that the governor include the secretary of the Department of Health as a representative on the workforce command center's executive committee. Further, we will promote membership on the committee that includes hospitals and health systems, industry and professional associations, labor, and educational institutions.

Collection and Analysis of Workforce Data

Since 2002, the Pennsylvania Department of Health has been publishing health care workforce reports that include results from a survey of nurses, physicians, physician assistants, dentists, and dental hygienists working within the Commonwealth. While this data is valuable, its collection is fragmented and analysis is not always complete given challenges state agencies face to ensure that appropriate staff resources are available.

To address these issues, **the task force recommends that an independent entity within state government should collect and analyze workforce and economic data across multiple agencies and sources** and serve as a central clearinghouse for health care workforce data and information, including best practices from state and national sources. Data collection and analysis undertaken by this entity should be coordinated with existing data collection and analysis efforts conducted by individual hospitals and health systems, educational institutions, and labor and workforce development entities.

RECOMMENDATIONS

Part I – Evaluating Pennsylvania's Health Care Workforce

This data can be used to determine health workforce supply and demand projections to identify potential gaps and oversupply. It also can be used to determine the allocation of funding to support workforce initiatives. HAP will work with the state legislature and executive branch to promote additional or redirected financial and staff resources to establish this independent entity.

Evaluation of Health Care Workforce Needs

The task force recommends supporting/promoting the regular evaluation of workforce needs by the Joint State Government Commission (or other appropriate, qualified body) at least every three years. The changing economy, technological advancements, and changes in models of care will continue to impact our industry's workforce needs and the need for quality, timely, and accessible education and training opportunities.

An April 2019 report from the Joint State Government Commission, titled *Pennsylvania Health Care Workforce Needs*, provides a non-partisan study of the long-term workforce and workforce training needs of the Commonwealth's health care sector, and analysis of how federal and state statutes and regulations affect the ability of the Commonwealth's health care system to meet those needs. The report provides recommendations to ensure that the Commonwealth is able to adequately train, attract, and retain the workforce needed to meet those needs. HAP will work with the state legislature to recognize the value of this assessment, but also the need to conduct the necessary and regular follow-up studies and reviews to ensure that progress is made on the recommendations as proposed and supported by HAP members.

Promising Practice: Virginia's Health Care Workforce Data Center

Virginia completes regular assessments of workforce supply and demand issues among the 80 professions and 350,000 practitioners licensed by the Virginia Department of Health Professions. A governor's commission and legislation authorizing data collection were key to launching this initiative. This initiative has been ongoing for the past ten years.

LINK: https://www.dhp.virginia.gov/PublicResources/HealthcareWorkforceDataCenter/

Please see Appendix B on page 42 for more details.

RECOMMENDATIONS

Part I – Evaluating Pennsylvania's Health Care Workforce

Developing Supply/Demand Studies

Not all health professions currently are part of ongoing data collection efforts across the Commonwealth. For example, since 2002, the Pennsylvania Department of Health has been publishing health care workforce reports that include results from a survey of nurses, physicians, physician assistants, dentists, and dental hygienists working within the Commonwealth. The survey is conducted by the Pennsylvania Department of State through the re-licensure process. The raw data is provided to the health department for analysis. The Pennsylvania Department of Labor & Industry assists in the analysis of the survey results.

Data collection is fragmented and dependent upon state agencies that lack the necessary resources and staff. As previously stated, data is only collected on licensed practitioners (i.e., physicians, nurses, dentists); however, data is needed for practitioners who may only need specific certifications to practice.

The task force recommends expansion of supply and demand studies for more categories of health care professionals to improve the data available to make policy and funding decisions. We also advocate that the Commonwealth implement the use of licensure renewal surveys as a routine part of the licensure renewal process for all licensed health care professionals in order to have adequate evaluative data. Furthermore, mechanisms should be instituted to collect data for those practitioners who are required to obtain certifications to practice.

Finally, the task force recommends that the Commonwealth develop benchmarking studies using state and national data sources. To move forward with these recommendations, we will promote learning from other states where these practices are underway.

Promising Practice: New York's Center for Health Workforce Solutions

The center produces data reports that are used by various stakeholders across the state to assess both state and regional demand to determine policy priorities. With a 20-year history, this center provides ongoing support directly to New York and serves as a technical assistance center—with funding from Health Resources and Services Administration—on health workforce data.

LINK: http://www.chwsny.org/our-work/

Please see page 43 for more details.

RECOMMENDATIONS

Part II – Recruitment—Building the Workforce Pipeline

Introduction

Health care organizations cannot succeed without being able to attract people into health careers, expand education and workforce development to provide training to more individuals, and remove barriers to help transition qualified professionals into health careers.

The strategies described in this section seek to develop programs and activities to encourage individuals to enter health care fields and expand the Commonwealth's capacity to provide training that ensures access to safe, quality care for Pennsylvania's citizens. The task force recognizes that a diverse workforce better addresses the physical and culture needs of patients and we will continue to foster diversity in the workforce.

The following recommendations are addressed in this section:

- Establish a statewide program to promote earlier exposure to health-related professions
- Suppport efforts to transition Veterans to careers in health care
- Pursue Pennsylvania's recognition of international medical graduates (IMG) degrees and credentials
- Devote additional staff resources and/or create administrative flexibility for the Pennsylvania Department of Health to better administer the ARC J-1 VISA and Conrad 30 programs
- Promote partnerships between industry and Pennsylvania's education/workforce development systems
- Support the costs associated with operating clinical education programs, including strategies that focus on providing an adequate supply of health care educators and clinical education training sites
- Revise state loan repayment program to enhance awards and increase length of service commitments to compete with contiguous states
- Support efforts to expand current physician residency programs targeted to rural and underserved areas
- Provide more seamless educational pathways for nurses to obtain baccalaureate degrees
- Build partnerships with the Commonwealth's local workforce investment boards to engage health care industry partners in activities that will strengthen the health care workforce

RECOMMENDATIONS

Part II – Recruitment—Building the Workforce Pipeline

Promoting Health Careers and Diversity in Health Professions

In order to ensure Pennsylvania's health care workforce meets its communities' physical and cultural needs, HAP supports the development and implementation of statewide campaigns that promote health career awareness and efforts to increase diversity in health professions.

The task force recommends establishing a statewide program to promote early exposure to health-related professions, including the provision of grants for regional initiatives to promote a diverse workforce. The earlier we can connect to students, parents, and school counsellors, the greater the likelihood that we will be able to drive interest in the health care industry, and we support efforts to reach out to underrepresented populations to further expand the health care talent pool. Using social media and other interactive methods to promote health careers will allow better connections to K-12 students, as well as minority, re-entry, and non-traditional populations. While we describe our recommendations to expand education and workforce capacity later in this section, recruitment into the health care careers requires investment in programs that support in-depth career exploration such as job shadowing, mentoring programs, internships, and summer programs.

An example of a model to consider is from the California Office of Statewide Health Planning and Development, which operates the Health Professions Career Opportunity Program. The program provides mini-grants that support and encourage underrepresented and disadvantaged individuals to pursue health careers in order to develop a more culturally and linguistically competent health care workforce. These grants help public, non-profit and for-profit organizations conduct career awareness conferences or workshops, facilitate professional development opportunities for minorities, and conduct relevant workforce research and data analysis in the field of minority and disadvantaged health professional development. Please see page 47 for more details.

RECOMMENDATIONS

Part II – Recruitment—Building the Workforce Pipeline

Facilitate Transition into Health Care Professions for Veterans

We can expand our pipeline of qualified health care professionals by removing barriers to entry into health care occupations for individuals who have existing qualifications or certifications. As such, the task force recommends supporting efforts to transition Veterans to careers in health care, including providing support for legislation that credits military experience toward state licensing requirements.

Further, HAP will explore opportunities to ease licensure transfer processes for military spouses who have recently moved to Pennsylvania, which may be a promising avenue to further support military families and expand the pipeline of available talent.

Transition into Health Care Professions for International Medical Graduates (IMG)

The task force recommends pursuing Pennsylvania's recognition of international medical graduates' (IMG) degrees and credentials to expand Pennsylvania's talent pipeline and address areas of need. The state could promote programs similar to one instituted at the University of California Los Angeles, where the IMG program aims to increase the number of family medicine physicians practicing in the state's underserved communities who have bicultural skills to meet the needs of the patients they serve.

Promising Practice: Midwestern Higher Education Compact

The Midwestern higher Education Compact convenes an interstate partnership of 13 states (Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin) in the multi-state collaborative or military credit to explore best practices in translating military training and experience into meaningful college credits. Pennsylvania could explore lessons from this regional higher education compact to expand credit recognition for military training and experience.

LINK: https://www.mhec.org/convening/multi-state-collaborative-military-credit/mcmc-resources

Please see Appendix B on page 44 for more details.

RECOMMENDATIONS

Part II – Recruitment–Building the Workforce Pipeline

The program provides a structured, intensive academic and clinical environment for IMGs to prepare for the U.S. medical licensing examinations and since its inception in 2006, the program has placed 128 graduates. Please see page 46 for more details.

The task force also recommends devoting additional staff resources and/or creating administrative flexibility for the Pennsylvania Department of Health to better administer the ARC J-1 VISA and Conrad 30 programs.

As outlined in the April 2019 report by the Joint State Government Commission, Pennsylvania's programs are being underutilized. Specifically, the report indicates that "as of March 4, 2019, the Pennsylvania Department of Health received 28 applications for the Conrad 30 J-1 Visa Waiver for the 2018–2019 application period, of which 12 applications were recommended for approval leaving 18 remaining slots. As of the same date, there were three applications received for the ARC J-1 Visa Wavier, and one application was recommended for approval. There is no limit on the number of positions for the ARC J-1 waiver; however, it is unclear if lack of knowledge about the program on the part of applicants or an unwillingness on the part of employers to sponsor their non-U.S. IMGs for this visa waiver program contribute to its underutilization."

Promising Practice: Minnesota's IMG Program

Minnesota implemented a comprehensive program to integrate international medical graduates (IMGs) into their physician workforce with clinical experience through the University of Minnesota. The program is charged with developing a roster of IMGs in the state, supporting clinical readiness assessment programs, and providing career guidance and support.

LINK: https://www.health.state.mn.us/facilities/ruralhealth/img/docs/2018imgleg.pdf

Please see page 45 for more details.

RECOMMENDATIONS

Part II – Recruitment—Building the Workforce Pipeline

Strengthen and Expand Education and Workforce Development Capacity

The task force has defined capacity as the ability of the education and workforce development systems to prepare health care practitioners within a given discipline. Three issues regarding education capacity emerged during the task force discussions: the current structure of education and workforce models and programs; the availability of high-quality faculty and clinical training sites; and funding to support and sustain educational capacity.

The task force believes that public and private sector leadership is essential to address the structure and capacity of Pennsylvania's education and workforce systems. The Health Care Workforce Committee that we include as part of the infrastructure recommendation (See Part I—Evaluating Pennsylvania's Health Care Workforce) will promote partnerships between industry and Pennsylvania's education/workforce development systems to invest in education, develop initiatives that facilitate career progression, and enhance continuing education and professional development opportunities.

Promising Practice: Colorado's Workforce Development Council (CWDC)

The CWDC promotes sector partnerships by aligning economic development, workforce development, and education resources to industry needs. The state supports regional partnerships that target key industries, including health care. An example of a regional approach is the Greater Metro Denver Healthcare Partnership. They work together on career awareness efforts, recruitment, diversity, addressing skills gpas, defining apprenticeships, and informing and improving existing and new educational programs. The partnership leverages resources from its members, including public funds, and is eligible to apply for additional funding available from the state through the Workforce Innovationa nd Opportunity Act (WIOA). Colorado uses WIOA Governor's Reserve funding to incentivize and further support these partnerships.

LINKS:

- http://healthcaredenver.com/
- https://www.mycoloradojourney.com/journey
- https://www.colorado.gov/pacific/cwdc/sector-partnerships

Please see page 47 for more details.

RECOMMENDATIONS

Part II – Recruitment—Building the Workforce Pipeline

The hospital communities' voices are essential to the design of programs that educate the health care workforce since they know the skills requirements and career progression opportunities across health care occupations. HAP will build on existing partnerships between its member organizations and educational and workforce development institutions, and learn lessons from other states that have established statewide efforts focused on growing the health care workforce. For example, Colorado has an established focus on the health care workforce through its state Workforce Development Council, but they have tailored programs according to regional industry needs through their sector partnership work across the state.

Pennsylvania has long been a leader in implementing sector-based career pathways activities. The current effort out of the Pennsylvania Department of Labor and Industry is the Next Generation Industry Partnerships (Next Gen IP). As part of the PAsmart initiative, funding is available for strategic, competitive, and cross-sector investments focused on meeting the education and workforce development needs of students, workers, employers, and communities across Pennsylvania. **The task force recommends building partnerships with the Commonwealth's local workforce investment boards (local WIBs) to promote health care industry partnership initiatives for hospitals.**

In addition to providing leadership and direction to expand education capacity, HAP also recognizes that Pennsylvania's health care education programs (including enhanced salaries for all practitioner educators) need sufficient public and private funding. HAP will target its advocacy efforts to **support the costs associated with operating clinical education programs, including strategies that focus on providing an adequate supply of health care educators and clinical education training sites.**

RECOMMENDATIONS

Part II – Recruitment—Building the Workforce Pipeline

The task force also recommends, consistent with previous recommendations of the Joint State Government Commission, revising state loan repayment programs to enhance awards and increase length of service commitments to compete with contiguous states. The current loan repayment programs should be leveraged to:

- Increase funding to allow more awards under the current program
- Increase the amount and length of service commitment for loan repayment for physicians and other professionals
- Encourage the General Assembly to allow the Pennsylvania Department of Health to manage the program without statutory amendments

The task force also recommends that HAP support efforts to expand current physician residency programs targeted to rural and underserved areas, and develop more seamless educational pathways for nurses to obtain baccalaureate degrees to support long-term talent pipeline development and retention of staff. Part of the effort to expand residency programs could include the passage, at the federal level, of the Opioid Workforce Act, which would increase the number of GME slots by 1,000 in hospitals that have, or are in the process of establishing, accredited residency programs in addiction medicine, addiction psychiatry, or pain management.

Promising Practice: New Jersey, New York, and Ohio Loan Repayment Programs

Some of our neighboring states provide larger loan repayment awards over longer periods to increase access to primary care for underserved populations. New Jersey, New York, and Ohio each reimburse up to $120,000 to promote service in underserved areas.

LINKS:

- https://www.nj.gov/health/fhs/primarycare/provider-placement/
- https://www.health.ny.gov/professionals/doctors/graduate_medical_education/doctors_across_ny/
- https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/primary-care-office/Ohio-Physician-Loan-Repayment-Program/

Please see Appendix B on page 48 for more details.

RECOMMENDATIONS

Part II – Recruitment—Building the Workforce Pipeline

To further support the career development of incumbent nurses, **the task force recommends developing partnerships for dual enrollment; allowing community colleges to expand into offering baccalaureate degrees in nursing; and adopting a two-tiered statewide curriculum or competency model incorporating standardized requirements for diploma and associate degree programs in tier one with a standardized baccalaureate completion degree in tier two.**

A collaboration between two of Pennsylvania's own programs serve as a promising practice that may be considered in other parts of the state. Alvernia University has an affiliation with the Reading Hospital School of Health Sciences (RHSHS) to partner with the goal of increasing bachelor-prepared nurses (BSN). The dual enrollment model allows for each student to be enrolled at both institutions, simultaneously earning a diploma in nursing from RHSHS and an Associate of Science Degree in Applied Health from Alvernia University, with the opportunity to immediately continue in the Alvernia University Registered Nurse (RN)-BSN program to complete the BSN degree in a total of four years. The four year dual enrollment curriculum was planned collaboratively resulting in no repeated coursework and a seamless process to earn the BSN degree at relatively low cost.

In addition, Reading Hospital has offered employment to qualified graduates of the RHSHS/Alvernia University dual enrollment program, providing 100 percent tuition reimbursement for the RN-BSN portion of the program promoting recruitment and retention of the RN program graduates within the Commonwealth. See https://www.alvernia.edu/academics/reading-hospital-school-health-sciences

RECOMMENDATIONS

Part III – Retention Initiatives

Introduction

Multiple factors can affect efforts to maintain a stable workforce, including an aging workforce, a decreasing supply of younger workers choosing health careers, and issues of burnout and workplace safety. Maintaining a robust health care workforce is vitally important to Pennsylvania citizens' quality of life as well as to the Commonwealth's economic success. Because it costs more to hire and train a new employee than to retain an existing employee, efforts to retain health care workers can save significant funds while improving the service offered to patients. Health care organizations are increasingly looking at not only hiring and employee practices, but at their organizational attitudes, values, behaviors, and relationships that contribute to a positive working environment and a culture of safety.

The task force proposes the following recommendations:

- Develop a hospital workforce engagement and retention toolkit for HAP members
- Establish member programs to focus on physician and nursing workload demands and employee burnout
- Provide training on strategies that support communication and collaboration between members of the health care team
- Continue ongoing legislative advocacy efforts to prevent workplace violence
- Support the development of peer support efforts to redesign workplace practices for the utilization of established professional staff to orient and train the new generation workforce
- Support strategies that promote a culture of shared governance and accountability

Retention Toolkit and Training to Address Burnout

The task force recommends HAP develop a hospital workforce engagement and retention toolkit for members to promote a culture of diversity and inclusion and the establishment of a best practice forum and shared training curriculum. HAP can learn from the Minnesota Hospital Association and others as HAP embarks on providing resources to help HAP members focus on retention.

Keys to Staff Retention:

1. Create a toolkit for HAP members
2. Provide training
3. Advocate for workplace violence prevention
4. Devleop supports for workplace redesign
5. Promote a culture of shared accountability

RECOMMENDATIONS

Part III – Retention Initiatives

Burnout and employee wellness have long been a concern in health care, but the challenges are becoming more acute. The task force recommends HAP establish member programs to focus on physician and nursing workload demands and employee burnout, including exploring alternative staffing models.

Summaries and studies of alterative staffing models exist across different care settings and for different positions. For example, the Medstar Health Institute, with support from the Robert Wood Johnson Foundation, studied three complex care programs in South Carolina, Virginia, and Wisconsin that use non-traditional workforce to extend the reach of their clinics to better engage complex patients in their homes, at medical appointments, and other community locations.

Premier Inc. reviewed staffing models, performance, and costs in family medicine and primary care clinics specific to care provided by Medical Assistants, RNs, and LPNs and found that to pinpoint variation across staffing models and identify opportunities for improvement. We can explore these and other resources to examine opportunities for improved practitioner well-being and cost efficiencies.

Promising Practices:

Minnesota Hospital Association Employee Retention—The Minnesota Hospital Association Employee Retention Toolkit identifies aspects of the work environment that affect retention: 1) career growth and development; 2) workplace culture and values; 3) cultural and generational diversity; 4) human resources; and 5) workplace design. The toolkit provides real-life solutions from Minnesota hospitals, features a self-assessment worksheet to help identify areas for improvement, and lays out a process to implement specific action items. Please see page 50 for more details.

LINK: https://www.mnhospitals.org/Portals/0/Documents/policy-advocacy/workforce/employee-retention-workbook.pdf

Promising Practice: U.S. DHHS Agency for Healthcare Research and Quality (AHRQ) TeamSTEPPS Program—AHRQ has designed TeamSTEPPS, an evidence-based set of teamwork tools for optimizing patient outcomes and employee retention by improving communication and teamwork skills among health care professionals. The course is designed to help health care leaders develop and deploy a customized plan to train their staff in teamwork skills. The AHRQ website contains research that outlines some of the different approaches used in specific settings of care and evaluation efforts.

LINK: https://www.ahrq.gov/teamstepps/index.html

RECOMMENDATIONS

Part III – Retention Initiatives

Supporting the Health Care Team

It is important to ensure staff have the time and support to care for patients in an atmosphere that best supports their work. HAP recognizes solutions need to balance time spent care giving with time spent documenting care, and will share and promote member efforts that achieve this balance. HAP also will watch for efforts that leverage automated processes and/or use new technologies that enable increased time on patient care.

The task force also recommends HAP continue advocating for **the provision of training on strategies that support communication and collaboration between members of the health care team to improve outcomes and increase worker satisfaction.** HAP will leverage existing resources to determine which are the most useful for its members, including those available through Agency for Healthcare Research and Quality (AHRQ).

Workplace Safety and Support

The task force research uncovered that HAP members agree that there is a clear need to address workplace safety on multiple levels. As such, **the task force recommends that HAP we continue ongoing legislative advocacy efforts to prevent workplace violence and for the Joint State Government Commission (or other relevant government body) to evaluate workplace safety initiatives across the Commonwealth.**

HAP also recognized that a key to retention is support for Pennsylvania's aging health care workers and for younger and mid-career staff that are ready for professional growth and more responsibility. The task force recommends HAP advocate for the **development of peer support efforts to redesign workplace practices for the utilization of established professional staff to orient and train the new generation workforce.**

We also **recommend strategies that promote a culture of shared governance and accountability, thereby allowing for greater job satisfaction for Pennsylvania's health care workers.** An engaged workforce leads to better worker satisfaction and better patient outcomes.

Promising Practice: Occupational Safety and Health Administration (OSHA) Worker Safety Program

Because workplace safety affects patient care and employee retention, the U.S. Department of Labor's OSHA created a workplace safety program, "Worker Safety in Hospitals," that is a suite of resources to help hospitals assess workplace safety needs, implement safety and health management systems, prevent workplace violence, and enhance safe patient handling. OSHA created a collection of 14 resources—summaries, booklets, presentation, questionnaires, comparisons, self-assessments, road maps, checklists, and profiles—to help hospitals protect workers from injuries and illnesses.

LINK: https://www.osha.gov/dsg/hospitals/

RECOMMENDATIONS

Part IV – Transforming the Workforce

Introduction

Pennsylvania's health care facilities strive to achieve the triple aim of providing better health care, improving the health of patient populations, and reducing health care costs.

Health care organizations are incorporating changes in the structure and delivery of health care to promote improvements in quality and efficiency. These changes include redesigning patient care and increasing the capacity of their current workforce.

Improving access to care by optimizing the skill set of health care practitioners is vital. The task force proposed the following recommendations:

- Ensure that Pennsylvania's professional practice acts and regulations are progressive, allowing practitioners to practice to the top of their license
- Integrate the use of technological innovations that makes the work process more efficient
- Promote and support efforts to integrate the use of telehealth services
- Continue advocating for improvements to the Commonwealth's application process for licensure and re-licensure
- Reduce administrative burdens on the care providers

Utilization of Practitioners to the Top of their License and Training

The changing nature of health care requires that all members of the health care team work together as part of an inter-professional team. In order to meet the growing health care needs in the Commonwealth, every member of the health care team must be able to practice to the full extent of their education, training, and license.

The task force recommends that HAP continue its efforts to ensure that Pennsylvania's professional practice acts and regulations are progressive and continue to advocate that the application process for licensure and re-licensure by the Commonwealth's professional licensing boards is efficient and timely.

Keys for Transformation:

1. Utilize practitioners to the top of their license and training
2. Provide services through telehealth
3. Practice patient-centered care

RECOMMENDATIONS

Part IV – Transforming the Workforce

HAP also supports efforts that **align governmental regulations and programs to reduce the administrative burdens on the care providers within Pennsylvania's health care delivery system.** HAP will continue to **advocate for a regulatory structure that enables health care professionals to practice to the fullest extent of their education, training, and license.** Health care facility and professional licensure requirements should seek to enhance the quality and safety of patient care without hindering the delivery of that patient care.

Technological Innovations

Improving the efficiency and effectiveness in the health care delivery process requires a strategic direction that aligns workflow processes and expectations. **The task force encourages the use of comprehensive strategies that integrate the use of technological innovations that make the work process more efficient, thereby improving clinical outcomes as well as worker satisfaction.**

HAP promotes the use of telehealth in the provision of patient care. Telehealth is the use of medical information exchanged from one site to another via electronic communications to improve a patient's clinical health status. It is not a separate service in health care, but instead is a tool for diagnosis management and health education that helps patients access high-quality, specialized care. Telehealth can increase a patient's access to health care in urban, suburban, and rural areas.

Pennsylvania hospitals serve a very diverse population. Telemedicine can help all Pennsylvanians by enabling hospitals to expand their care offerings and address regional specialty shortages. It also increases access to patients for whom transportation is a barrier to care, including those with difficulty traveling to a provider due to distance, illness, disability, or age.

The task force recommends HAP continue to promote and support efforts to integrate the use of telehealth services throughout Pennsylvania's hospital community.

Patient-Centered Care

A long-time concern regarding the United States health care delivery system is that it fails to provide consistent, high-quality care in a manner that is organized around the needs of the patient. All too frequently, patients and their families find themselves thrust into an environment of mysterious and perplexing medical care that makes them feel powerless, ignored, helpless, and confused. Unfamiliar terminology, lack of personal choice, little consideration given to cultural, language, or spiritual preferences, and schedules convenient to providers rather than consumers cause patients to feel that their medical care is something done to them, as opposed to with them.

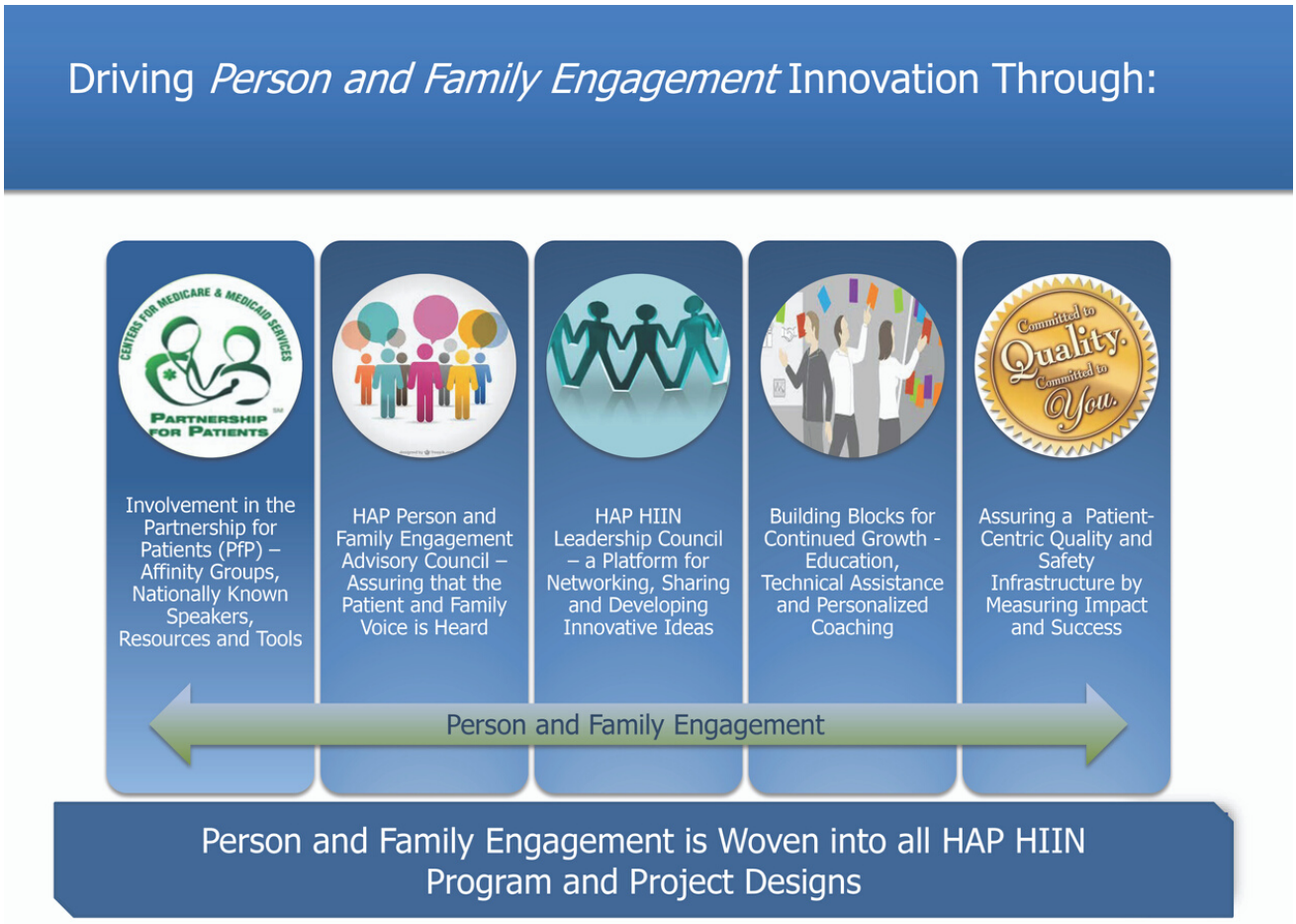
RECOMMENDATIONS

Part IV – Transforming the Workforce

However, when patients are meaningfully engaged in making health care decisions, the caregiving dynamic changes. Instead of being passive recipients of care, patients become an activated part of the process. This leads to better health outcomes, as research has demonstrated that a satisfying patient experience leads to better outcomes, greater compliance with treatment, fewer unhealthy behaviors, and fewer visits to the emergency room.

Driven by a strategic imperative to improve quality and patient safety, wellness, and clinical integration of health care, HAP developed the nation's first state hospital association-sponsored Patient and Family Advisory Council (PFAC) during 2013. This enabled HAP and Pennsylvania hospitals to benefit from the guidance of a diverse group of patients, family members, community leaders, and health care providers, as they work to improve the patient experience of care.

The task force recommends that HAP continue its efforts to promote and support patient-centered care.



SUPPORTING HAP INITIATIVES

Appropriate public policy should set the foundation for the delivery of safe, quality care; but should not be so onerous that they hinder care delivery. Policymakers need to understand that setting policies in one area may adversely affect policies addressing health care delivery in another area. While previous sections of this report present areas that HAP will take action to inform public policy through building partnerships and promoting specific action, **this section outlines key advocacy areas that the task force recommends HAP continue to address that impact the environment in which the health care workforce operates.**

Workplace Safety

While health care workers comprise only 13 percent of the United States workforce, 60 percent of workplace assaults occur in health care settings.

HAP supports two pieces of legislation aimed in decreasing workplace violence in health care settings:

- Senate Bill 351, which would add all health care practitioners to a protected class in the event of an on-duty assault and increase the penalty
- House Bill 1880, which allows health care workers to remove their last names from their facility identification badges
- Both bills are backed by Pennsylvania's hospital community to address growing concerns about the safety of health care workers in Pennsylvania.

While hospitals follow workforce safety guidance, requirements, and best practices from The Joint Commission and the Pennsylvania Department of Health, and are engaging in individual measures to improve the safety of their staff, more action is needed.

Improving the workplace safety of Pennsylvania's health care workers remains a top priority for HAP.

SUPPORTING HAP INITIATIVES

Medical Liability

In late 2018, the Civil Procedural Rules Committee of the Pennsylvania Supreme Court proposed to repeal medical professional liability venue reforms adopted during 2002 and re-institute the venue rules that significantly contributed to Pennsylvania's medical liability insurance crisis.

Following a significant outcry, the Pennsylvania Supreme Court Civil Procedural Rules Committee announced that it will delay making changes to a key medical liability rule until it has reviewed the results of a legislative study. HAP will take all available actions to ensure that the repeal does not take place.

HAP will continue to advocate against the proposal by the Pennsylvania Supreme Court to repeal medical professional liability venue reforms adopted during 2002 and re-institute venue rules that contributed to Pennsylvania's medical liability insurance crisis.

Telehealth

Telehealth can be used to connect a specialist to a patient at a distance and address specialty shortages that some areas may experience. It can be used to deliver life-saving as well as routine care in a timely, cost-effective manner and can range from mobile patient-centric applications to complex clinician interactions.

Patients in rural areas can use telehealth to access specialists, saving patients from extensive travel times and costs. About 27 percent of the state's 12.8 million residents—nearly 3.4 million people—lived in Pennsylvania's 48 rural counties during 2017.

In urban and suburban areas, telehealth also expands access—particularly when patients are unable to secure convenient appointment times or need to quickly see high-demand specialists—particularly when in a health care emergency.

SUPPORTING HAP INITIATIVES

Telemedicine can help all Pennsylvanians by enabling hospitals to expand their care offerings and address regional specialty shortages. It also increases access to patients for whom transportation is a barrier to care, including those with difficulty traveling to a provider due to distance, illness, disability, or age.

The health care delivery system is rapidly changing, and the adoption and implementation of telehealth technology is an expensive undertaking. HAP believes that all health insurers should be required to provide payment for telehealth services if they pay for that same service in person. Currently, some health insurers cover telehealth, but not all; it is not required.

HAP supports Pennsylvania legislation that:

- Defines telehealth
- Offers guidelines outlining who is able to provide health care services through telehealth
- technology
- Requires all health insurers to provide payment for telehealth services if they pay for the same service in person

Practices that Impede Patient Care

While prior authorization requirements and utilization review activities are necessary to ensure quality and control unnecessary utilization, these requirements and activities can be used to inappropriately deny payment for medically necessary care and impose unnecessary administrative burdens that impede patient care and cause practitioner dissatisfaction.

HAP will continue to pursue prior authorization reform via legislation and through advocacy with government payors (e.g. Medicaid and Medicare).

Additionally, HAP will continue to promote evaluation of Pennsylvania’s rural global health model, which promises to reduce billing complexities and permit more effective use of the health care workforce.

APPENDICES

Appendix A—Additional Resources

Addressing Employee Wellness

- National Academy of Medicine Report: Taking Action Against Clinician Burnout—A Systems Approach to Professional Well-Being—https://nam.edu/wp-content/uploads/2019/10/CR-report-highlights-brief-final.pdf

Anticipating Future Workforce Needs

- American Hospital Association's White Paper: Reconfiguring the Bedside Care Team of the Future—https://www.aha.org/system/files/content/13/beds-whitepapergen.pdf

Apprenticeships

- U.S. Department of Labor, Office of Apprenticeships: Inventory of health care related apprenticeship information, resources, and promising practices—https://apprenticeshipusa.workforcegps.org/resources/2017/06/29/17/24/ApprenticeshipUSA-Healthcare

Patient Portals

- National Learning Consortium Fact Sheet: How to Optimize Patient Portals—https://www.healthit.gov/sites/default/files/nlc_how_to_optimizepatientportals_for_patientengagement.pdf

Promoting Diversity

- American Hospital Association's Resource Page: Diversity in the Workforce—http://www.diversityconnection.org/diversityconnection/membership/Resource%20Center%20Docs/Assessment%20Tool%20v4(20-page%20bklt).pdf
- Main Line Health Whitepaper: Culture of Diversity, Respect, and Inclusion—https://www.healthcare.siemens.com/news/insights-series-issue-2.html

Transitioning Veterans into Health Careers

- U.S. Chamber of Commerce Foundation: Hiring Our Heroes—https://www.hiringourheroes.org/employers/
- University of Washington Center for Health Workforce Studies: Pathways for Military Veterans to Enter Health Care Careers—http://depts.washington.edu/fammed/chws/wp-content/uploads/sites/5/2016/05/Pathways_for_Military_Veterans_FR_2016_May_Snyder.pdf

Use of Artificial Intelligence (AI)

- America Hospital Association's Market Insights Report: AIs Impact on Health Care—https://www.aha.org/center/emerging-issues/market-insights/ai

APPENDICES

Appendix B—Compendium of Promising Practices

Evaluating the Health Care Workforce

Case Study 1:
Virginia Healthcare Workforce Data Center Infrastructure and Data Collection

Virginia completes regular assessments of workforce supply and demand issues among the 80 professions and 350,000 practitioners licensed by the Virginia Department of Health Professions (DHP). The DHP program was initially developed in conjunction with the Virginia Longitudinal Data System, funded by the U.S. Department of Education's Longitudinal Data Systems grant program.

A Governor's Commission and legislation authorizing data collection were key to launching this effort in the Commonwealth of Virginia. The Healthcare Workforce Data Center began with an advisory council of 17 key stakeholders as well as workgroups that addressed workforce surveys, the development of the data center, and which directly aided in reporting information. This effort required the collaboration of multiple government agencies, not-for-profit organizations, and was directly informed by employers.

Outcomes: The program has been successful, with new data collected regularly, and new reports provided online to all stakeholders.

- An example report of survey results and data collection efforts (demand) for nursing can be found here: https://www.dhp.virginia.gov/media/dhpweb/docs/hwdc/nurse/0001RN2018.pdf
- An example report of nursing education programs (supply) can be found here: https://www.dhp.virginia.gov/media/dhpweb/docs/hwdc/nurse-ed/NurseEduc18.pdf

Viability: In order for this type of large-scale effort to succeed, there may need to be connection to the Pennsylvania Information Management System database, support from the governor's office; or in the absence of that, may need to include supportive legislation to encourage agencies to work together. This would require the leveraging of existing governmental relationships, as well as initial funding to launch the initiative, if the state is not already able to provide support for this effort.

Link:
- https://www.dhp.virginia.gov/PublicResources/HealthcareWorkforceDataCenter/

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APPENDICES

Appendix B—Compendium of Promising Practices

Evaluating the Health Care Workforce

Case Study 2:
New York Health Workforce Data System Infrastructure and Data Collection

The Center for Health Workforce Studies (CHWS) is the home for New York's Health Workforce Data System and serves as the host for a health careers website. Data reports, briefs, and presentations are available online for all stakeholders, and are updated frequently.The Health Workforce Tracking report appears to be published annually. For the Workforce Monitoring report (occupational level data), the center aligns data obtained at the time of licensure as well as Medicaid claims data for seven licensed professions through the voluntary surveying of physicians, registered nurses, dentists, dental hygienists, physician assistants, and midwives, and a mandatory survey of nurse practitioners. With a 20-year history, CHWS provides ongoing support directly to New York and also serves as a technical assistance center (with funding from Health Resources and Services Administration [HRSA]) on health workforce data specifically. CHWS also receives state funding from the NY State Departments of Education and Health.

Outcomes: Data reports are used by various stakeholders across the state to assess both state and regional demand and determine policy priorities, and have been cited in legislative testimony.

- An example annual overview report can be found here: http://www.chwsny.org/our-work/reports-briefs/trends-in-health-care-employment-in-new-york-state/
- A Nurse Practitioner occupation specific profile can be found here: http://www.chwsny.org/wp-content/uploads/2018/10/NP_Brief_10_18.pdf

Viability: CHWS receives state funding (NY State Departments of Education and Health), as well as federal funding from HRSA. As with other case studies in this series, the delivery of ongoing data collection and analysis requires interagency cooperation along with direct connection to employers and workers, as well as braided funding streams. Replication of the state-specific structures and reports would take significant time and resources, but CHWS can provide Pennsylvania assistance through the Health Workforce Technical Assistance Center.

Link:
- http://www.chwsny.org/our-work/

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APPENDICES

Appendix B—Compendium of Promising Practices

Recruitment—Building the Workforce Pipeline

Case Study 1: Promoting Health Careers
California Office of Statewide Health Planning and Development (OSHPD)
Promoting Health Careers

OSHPD was created by state legislation and has components that address health care workforce and community development. It is separate from other state agencies.

- Song-Brown Program—Between 2015 and 2018, OSHPD awarded more than $43 million to family medicine and primary care residencies, family nurse practitioner, physician assistant, and registered nurse training programs to support the education and training of 9,000 residents and students. During the current competition, grants will be awarded to organizations that work to attract underrepresented minorities and those from underserved communities, train students in underserved areas, and place graduates in underserved areas. $1.35 million is available
- The Health Professions Career Opportunity Program provides Mini-Grants that support and encourage underrepresented and disadvantaged individuals to pursue health careers in order to develop a more culturally and linguistically competent health care workforce. The program made $100,000 available in funds to public, non-profit and for-profit organizations

Viability: State legislation and funding are required to implement these types of programs.

Link:
- https://oshpd.ca.gov

APPENDICES

Appendix B—Compendium of Promising Practices

Recruitment—Building the Workforce Pipeline

Case Study 2: Transitioning Veterans into Health Careers
Midwestern Higher Education Compact

The Midwestern Higher Education Compact (MHEC) convenes an interstate partnership of 13 states (Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin) in the Multi-State Collaborative on Military Credit (MCMC) to explore best practices in translating military training and experience into meaningful college credits.

The collaborative has three goals:

1. Assist with transitions from military service to post-secondary education, and then to civilian employment
2. Create models for awarding credit for military training and experience that can be scaled regionally and nationally
3. Establish a strong network of support, communication, documentation, and data collection among stakeholders to promote shared interests and track the efficacy of efforts to enhance Veterans' educational success

In 2017, MHEC compiled a comprehensive list of the applicable military/service member legislation and laws of its member states. This document provides links to the legislative text of various laws enacted to expand the pool of health care providers with experienced military Veterans, such as Indiana's Combat to College program.

Viability: Pennsylvania could explore joining this regional higher education compact to expand credit recognition for military training and experience. In addition, the use of compact agreements in licensing for health professions (including for Veterans) may be another approach. The Council of State Governments houses resources on this topic here: http://licensing.csg.org/

Links:

- https://www.mhec.org/convening/multi-state-collaborative-military-credit/mcmc-resources
- https://www.mhec.org/sites/default/files/resources/Military_Servicemember_Legislation_and_Laws.pdf

APPENDICES

Appendix B—Compendium of Promising Practices

Recruitment—Building the Workforce Pipeline

Case Study 3: Expanding the Talent Pipeline
Minnesota International Medical Graduates Program

Minnesota implemented a comprehensive program to integrate International Medical Graduates (IMGs) into the physician workforce. This program addresses barriers to practice faced by IMGs beyond the waiver of J-1 visas. IMGs must pass a two-step licensing exam and complete a U.S. medical residency, which can cost $150,000 per year. Not only are there limited residency positions in Minnesota, but IMGs also must have U.S. clinical experience as a pre-requisite for residency. The IMG Assistance Program offers clinical experience through a partnership with the University of Minnesota. The program also is charged with developing a roster of IMGs in the state, supporting clinical readiness assessment programs, and providing career guidance and support. The program receives $1 million of state funding annually, with more than half of the resources focused on funding residencies. IMGs who accept a residency position must pay $15,000 or 10 percent of their annual salaries into a revolving account for five years, beginning in the second year of post-residency employment.

Outcomes: As of 2018, the IMG Assistance Program has developed a database of 158 immigrant physicians. The Minnesota Department of Health entered into grant agreements with two nonprofit organizations to provide career guidance and support to program participants. The program has funded five IMGs in residency programs in the state. In 2016, the health department awarded grant funding to the University of Minnesota Medical School to implement clinical assessment and preparation components into the program, which has four participants. The health department, the Minnesota Board of Medical Practice, and other stakeholders continue to study changes in professional licensure and regulation that would be necessary to allow more IMGs to practice in the state. They are looking at the viability of two options for developing a skilled pathwayan—IMG Primary Care Integration License and an amendment to the Medical Practice Act to include an exemption for practice in primary care in a rural/underserved area.

Viability: This approach could take considerable time and resources to set up, and may not result in quantities of medical professionals necessary to address the needs of Pennsylvania. However, there may be lessons to watch from Minnesota that could benefit the Commonwealth, particularly in the area of licensing exams.

Links:
- https://nosorh.org/promising-practice-minnesota-program-aims-to-help-immigrant-physicians-practice-in-the-state/
- https://www.health.state.mn.us/facilities/ruralhealth/img/docs/2018imgleg.pdf

APPENDICES

Appendix B—Compendium of Promising Practices

Recruitment—Building the Workforce Pipeline

Case Study 4: Expanding the Talent Pipeline
University of California at Los Angeles International Medical Graduates Program

The University of California at Los Angeles (UCLA) International Medical Graduates (IMG) Program aims to increase the number of family medicine physicians practicing in the state's underserved communities who have bicultural skills to meet the needs of the patients they serve. The program provides a structured, intensive academic and clinical environment for IMGs to prepare for the U.S. Medical Licensing Examinations (USMLE) and to compete successfully in the state's family medicine residency program.

UCLA's IMG scholars commit to pursuing a family medicine residency in California and to continue working in a federally-designated primary care shortage area in the state for at least two years after completing their residencies.

Outcomes: Since its inception in 2006, the UCLA IMG Program has placed 128 graduates into family residency programs. Since 2015, program graduates have accounted for more than 10 percent of all California medical school graduates matching into family medicine residencies in the state—all are fully bicultural and bilingual. The program is able to prepare IMGs from Latin America for state family medicine training at low cost.

Viability: This approach requires significant time and resources to set up, but depending on the quantity of incoming scholars attending Pennsylvania schools, this may be of interest.

Links:
- https://www.uclahealth.org/Family-Medicine/img-program
- http://newsroom.ucla.edu/releases/immigrant-doctors-help-bridge-physician-shortage

APPENDICES

Appendix B—Compendium of Promising Practices

Recruitment—Building the Workforce Pipeline

Case Study 5: Expanding Workforce Development Capacity
Colorado Workforce Development Council

Colorado's Workforce Development Council promotes sector partnerships across the state, aligning economic development, workforce development, and education resources to industry needs. The state supports regional partnerships that target key industries, including health care. An example of a regional approach is the Greater Metro Denver Healthcare Partnership, which brings Colorado's top employers and local workforce together to find solutions to workforce needs. They work together on career awareness efforts, recruitment, diversity, addressing skills gaps, defining apprenticeships, and informing and improving existing and new educational programs. The partnership leverages resources from its members, including public funds, and is eligible to apply for additional funding available from the state through the Workforce Innovation and Opportunity Act (WIOA). Colorado uses WIOA Governor's Reserve funding to incentivize and further support these partnerships.

Viability: Pennsylvania has long been a leader in implementing sector-based career pathways activities. The current effort of the PA Department of Labor and Industry is the Next Generation Industry Partnerships (Next Gen IP). As part of the PAsmart initiative, the FY2018–19 enacted budget included $30 million for strategic, competitive, and cross-sector investments focused on meeting the education and workforce development needs of students, workers, employers, and communities across Pennsylvania. Of this amount, up to $4.6 million is available for Next Gen IPs, with the FY18–19 Next Gen IP Notice of Grant Availability forthcoming.

Links:
- https://www.colorado.gov/pacific/cwdc/sector-partnerships
- https://www.nationalskillscoalition.org/resources/publications/file/Sector-Partnership-Scan-1.pdf
- https://www.dli.pa.gov/Businesses/Workforce-Development/Pages/Industry-Partnerships.aspx

APPENDICES

Appendix B—Compendium of Promising Practices

Recruitment—Building the Workforce Pipeline

Case Study 6: Expanding Physician Residency Programs
New York, New Jersey, and Ohio Loan Repayment Programs

To remain competitive with other states providing health care educational loan assistance, Pennsylvania might consider devoting more resources to its Pennsylvania Primary Care Loan Repayment Program. Currently, the program provides up to $100,000 for educational loan repayment to primary care practitioners serving medically underserved populations for full-time service, and $50,000 for half-time service, for two-year terms. Other practitioners can apply for up to $60,000 full-time and $30,000 half-time for two years of service.

States such as New York, New Jersey, and Ohio provide larger loan repayment awards over longer periods to increase access to primary care for underserved populations.

New York Program: The New York Physician Loan Repayment and Physical Practice Support programs award up to $40,000 per year for three years—$120,000 total—for qualified physicians who agree to practice full time in an underserved area (not limited to health Professional Shortage Areas) for a three-year service obligation period. Up to $9 million in funding is available, which is expected to result in 75 three-year awards. Funding can be used to pay educational debt, to cover the costs of establishing or joining a medical practice, or for a health care facility to recruit/retain a physician by providing a sign-on bonus, loan repayment, or enhanced compensation. Applications are not currently being accepted. The next opportunity is anticipated in early 2020.

Link:

- https://www.health.ny.gov/professionals/doctors/graduate_medical_education/doctors_across_ny/

APPENDICES

Appendix B—Compendium of Promising Practices

Recruitment—Building the Workforce Pipeline

Case Study 6: Expanding Physician Residency Programs
New York, New Jersey, and Ohio Loan Repayment Programs

New Jersey Program: The primary care practitioner loan redemption program of New Jersey encourages primary care physicians, dentists, certified nurse midwives, certified nurse practitioners, and certified physician assistants to practice in state or federally designated underserved areas. Eligible New Jersey primary care providers can redeem up to $120,000 over a four-year period of service in qualifying education loans in exchange for providing primary health care services at an approved placement site for two–four years. Part-time service is available for New Jersey Loan Repayment Program participants in their third and fourth years of service. The program is subject to state appropriations and available funding. Effective July 1, 2019, the program is not providing funding for new applicants. Additionally, a prior restriction requiring primary care providers to apply to the program no later than two years after graduation or residency completion is no longer applicable.

Links:
- https://www.nj.gov/health/fhs/primarycare/provider-placement/
- https://rbhs.rutgers.edu/lrpweb/

Ohio Program: The Ohio Physician Loan Repayment Program allows full-time primary care, mental health, and dental providers to receive $120,000 over four years for repayment of outstanding medical school debt. The program operates in two-year contracts. Physicians receive $25,000 annually for the first two years of service in an underserved community, and $35,000 per year for remaining at their practice sites for an additional two years (optional). Part-time participants may receive up to half the amount of full-time participants. Physicians and their practice sites also must commit to accepting Medicare and Medicaid, and to see patients regardless of their ability to pay. Eligible primary care providers include physicians specializing in pediatrics, geriatrics, psychiatry, family or internal medicine, obstetrics and gynecology, general and pediatric dentists, and registered dental hygienists.

Link:
- https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/primary-care-office/Ohio-Physician-Loan-Repayment-Program/

APPENDICES

Appendix B—Compendium of Promising Practices

Recruitment—Retention Initiatives

Case Study 1: Retention Toolkit
Minnesota Hospital Association Employee Retention Toolkit

The Minnesota Hospital Association Employee Retention Toolkit focuses on six content areas related to health care worker retention. The toolkit goes beyond surveys, exit interviews, and turnover data to identify other aspects of the work environment that affect retention: 1) career growth and development; 2) workplace culture and values; 3) cultural and generational diversity; 4) human resources; 5) workplace design. The toolkit provides real-life solutions from Minnesota hospitals for each content area. It also features a self-assessment worksheet to help identify areas for improvement and lays out a process to implement specific action items.

Link:
- https://www.mnhospitals.org/policy-advocacy/priority-issues/developing-a-future-workforce/employee-retention-toolkit

Case Study 2: Retention Toolkit
Avera LIGHT (Live, Improve, Grow, Heal, and Treat)

Avera Health, based in South Dakota, created a voluntary set of programs that aim to reduce or prevent burnout of physicians, physician assistants, and nurse practitioners. Through coaching courses, the program provides strategies to build resiliency, encourage enjoyment of job and home, implement practice changes, and create improved work/life balance.

Link:
- https://www.avera.org/health-care-professionals/light-provider-wellness-program/

APPENDICES

Appendix B—Compendium of Promising Practices

Transforming the Workforce

Case Study 1: The Hospital and Healthsystem Association of Pennsylvania (HAP) Patient/Family Engagement Initiative

Promoting Patient-Centered Care

HAP was awarded the Centers for Medicare & Medicaid Services (CMS) Partnership for Patients Hospital Engagement Network (HEN) contract during 2012 in order to work with Pennsylvania hospitals on ten hospital-acquired conditions plus readmissions. CMS demonstrated commitment to patient-and-family-centered care from the onset of the collaboration by developing five Patient and Family Engagement Metrics with the intent that HEN and later the Hospital Improvement Innovation Network (HIIN) contractors work with hospitals to engage patients in their own health care. All HIIN hospital-acquired conditions project designs include a Patient and Family Engagement component for 100 percent participation in this subject matter.

Ninety-two hospitals and health systems are collaborating to implement the five CMS Patient and Family Engagement Metrics. One focus group per metric assures that hospitals have the opportunity to focus on individual opportunities for growth while participating in an "all teach/all learn" atmosphere of collaboration and networking.

The many layers of variance in all parts of health care is what makes this system so complex. Through the years, HAP's commitment to patient and family centered care has remained steadfast: relationship-based care via a cultural transformation model that improves safety, quality, patient satisfaction, and staff satisfaction by improving every relationship within an organization. Consideration of patients' cultural traditions and beliefs, personal preferences and values, family situations, and lifestyles make the patient and their loved ones an integral part of the care team who collaborates with health care professionals in making clinical decisions, and ensures that transitions between providers, departments, and health care settings are respectful, coordinated, and efficient.

Links:

- https://innovations.ahrq.gov/profiles/statewide-association-creates-nation-s-first-statewide-patient-and-family-engagement
- https://www.haponline.org/Resource-Center?resourceid=98

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APPENDICES

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APPENDICES

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APPENDICES

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