Workforce Investment Strategies in Healthcare

Recommendations for aligning Connecticut's healthcare workforce supply and demand

Allied Health Workforce Policy Board

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Dr. Alice Pritchard, Executive Director of the CT Women's Education and Legal Fund serves as advisor to the Board and is responsible for the production of this report. For more information on the Board's activities, contact Dr. Pritchard at 860-247-6090 or apritchard@cwealf.org.

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During the current economic downturn, health care has been among the few industries to maintain its overall levels of employment, even increasing employment in some places and fields. At the same time, health care reform impacts future projections for the health care workforce. Other major factors driving change, including technology, new reimbursement practices, and other factors, combine to make this a vital time to examine Connecticut's rapidly changing workforce environment in health care—and to identify strategies for responding to emerging conditions.

The Allied Health Workforce Policy Board and the CT Employment and Training Commission undertook the Workforce Investment Strategies in Healthcare (WISH) planning process, with federal support, as the first step in a long-term strategic planning process to align health care workforce supply and demand. This report provides recommendations for strategic state and federal investments and the future leveraging and aligning of public and private resources.

Traditional Occupational Projections

Four major subsectors make up the Connecticut health care industry: ambulatory health care services; hospitals; nursing and residential care facilities; and social assistance.[1] Together, these sectors reported average employment of 261,786 in 2008. Industry projections for 2018 indicate this figure will rise to 298,913, an increase of 14 percent (37,117 jobs).

Ambulatory health care is projected to add nearly 13,000 jobs during this period, an increase of 16 percent. Hospitals are projected to add more than 6,500 jobs, an increase of nearly 10 percent. Nursing and residential care facilities are projected to add 6,387 jobs, and the social assistance sub-sector is expected to add 11,300 jobs.

These projections assume growth rates similar to those of recent years. However, a number of factors could significantly affect actual job growth in the health care industry and its subsectors. Demographic shifts, including the aging of the population, will continue to increase demand for health services such as nursing and residential care. Growth in chronic diseases, such as obesity and diabetes, are generating increasing demand for health services, including ambulatory care and hospitalization. The combination of these factors may increase worker demand in these subsectors.

[1] The NAICS defined "Social Assistance" subsector includes a wide variety of social assistance services, such as those for children, the disabled, elders, immigrants and others. They do not include residential services, except on a short stay basis. The NAICS classification is grouped with Health Care because the services are frequently intertwined.

Conversely, pressure to control health care costs and limit reimbursement rates may have the opposite effect. Innovations in health care services—such as the growth in the number of walk-in clinics and of health services embedded in pharmacies and other retail stores—may shift the locus of some health care employment. Policymakers and health care workforce analysts will need to stay abreast of innovations and market developments.

New Hires and Turnover

New data systems cooperatively developed by states and the U.S. Census Bureau provide a deeper look at employment dynamics, including hiring volume and worker separations. In Connecticut, over 100,000 new hires were reported in 2000 across the four major health care subsectors. In 2009, at the bottom of the economic downturn, some 81,100 hires—or 31 percent of 2008 employment—filled new positions and replaced workers who left the industry. "New hire rates" (2009 new hires as a percentage of 2008 employment) ranged from a high of 51 percent for the social assistance sector to 11 percent for hospitals. The rates were 33 percent for ambulatory health care services and 31 percent for nursing and residential care facilities. These rates reflect a steady increase in the provision of services outside hospitals, shifting hiring activity to the ambulatory care subsector.

The growing proportion of elderly residents will further stimulate hiring in nursing and residential care facilities. However, the growth in long-term care employment will shift somewhat toward home care, a change that is taking shape in Connecticut and the nation. This trend is not apparent using traditional labor market information tools because many home-care nurses are hired as contractors in new business models or directly (and often off the books) by patients and their families in an informal market.

While Connecticut's health care industry reported consistent employment increases over the past decade, significant numbers of workers left the industry each year, contributing to job churning (typically measured as an average of the number of new workers and the number leaving.) In 2000, more than 181,000 workers left the industry, and over 97,000 workers left in 2009. The tough economy in 2009 certainly contributed to higher rates of worker retention across all four subsectors, but recovery should lead to a gradual resumption of the previous level of churning. This will require education and training program providers to not only take account of future demand spurred by new growth but also recognize the relatively instability of the health care workforce as a driver of demand.

What Do Employers Tell Us About Demand?

Hospitals

The hospital sector has little unmet demand for workers in most occupations. One of the critical exceptions is primary care physicians. The primary care physician shortage is exacerbated in Connecticut by the state's high cost of living. Some employers report that even when they can attract primary care physicians, it can be difficult to retain them due to the cost of living. Connecticut is also wedged between the Boston and New York health care markets, which are perceived to be higher status and therefore often more attractive to newly trained physicians.

A particular area of concern for many hospitals is that high school and college students are unaware of the full range of occupations in health care. The widespread perception is that health care is only about doctors and nurses, but demand will also increase for staff in allied health occupations. While the latter demand may not rise significantly, many hospitals are concerned about the future availability of medical technologists to replace retiring employees. Demand for skilled technicians is also anticipated to increase in the areas of sterile processing, radiology, nuclear medicine, respiratory therapy, X-ray, mammography, and MRI.

Health information technology is an area of workforce concern that will become more important over the next three to five years. Demand will also grow for workers in medical billing and coding positions, which are increasingly integrated within hospitals' IT systems. Currently, many IT workers in health care have come from the nursing ranks. The challenge for the hospital subsector is, in the words of one respondent, "As soon as you train them, they end up working for consulting companies." Not only may a nurse be lost from the bedside, but that nurse may also be lost from the institution where she or he has worked for many years.

Presently, most hospitals train their own employees for IT-related tasks and occupations, primarily staffing them from the ranks of critical care nurses. However, it seems unlikely that enough incumbent workers will transition to new positions to meet the increased demand. Therefore, the development of new methods of training and developing these workers should be a priority going forward.

A broad area of new occupational demand, and one that is likely to increase significantly over the next three to five years, is that of patient navigator and case manager. As the medical and reimbursement systems become more complex, patients will need professionals who can help them get the care they need. These new positions also will be critical to the ability of hospitals to receive insurance reimbursements for the services they provide. These occupations will

require people with project management skills, as well as the ability to work effectively with patients.

On the organizational side, many hospitals have begun hiring people with expertise in quality control and process engineering. These workers have the skills to examine how process problems can be reduced and quality increased in the complex medical environment. Demand for such occupations will increase as hospitals begin exploring and implementing new quality management system practices (e.g., Six Sigma, LEAN). The challenge in developing employees who can take on these jobs is to combine their quality-assurance and process-improvement capabilities with the requisite medical knowledge. This is another area that should be considered for new program development in the near future.

Long-term Care

The workforce demands of the long-term care subsector differ significantly from those of the hospital subsector. The direct care career ladder from Certified Nursing Assistant (CNA) to Licensed Practical Nurse (LPN) to Registered Nurse (RN) encompasses the vast majority of direct care workers in long-term care. Of these, CNAs are by far the largest group; their recruitment and retention is one of the greatest workforce challenges in this subsector, and will likely remain so over the next three to five years. Turnover is substantial, even in the current economic climate.

Much of the long-term projected demand for CNAs is due to replacing workers who leave their jobs rather than the creation of additional CNA positions. As in every health care subsector, there is substantial economic pressure for every employee to do more with less. It is difficult to get approval for additional CNA positions without a substantial increase in either insurance reimbursement rates or the number of clients served.

The LPN has been the traditional nursing provider in long-term care. However, this is changing. Few long-term care facilities are intentionally phasing out LPNs, but as LPNs retire or move on to new positions, employers are replacing many of them with RNs. In part, this is due to the increasing proportion of long-term care patients with chronic conditions, which require a higher level of skilled care. In addition, although the pay for LPNs is less, RNs add depth to the staff of a long-term care facility and are more flexible in terms of the services they can provide. Having additional RNs on staff also makes it easier to accommodate their personal scheduling needs and preferences, while still complying with regulatory requirements to have at least one RN on

site at all times. One of the key areas of demand for education and training is for bridge programs to help incumbent LPNs become RNs.

Another area of critical demand in the long-term care subsector is for therapist's assistants, particularly physical therapy assistants and certified occupational therapy assistants. Turnover is high: these positions are well paying, but the people in them do not necessarily feel a sense of allegiance to their employers, given the wide variety of options open to them in facilities and through contract services.

Behavioral Health

A very diverse subsector, behavioral health has significant employment opportunities in the for-profit, nonprofit, and state government sectors. Across all three of these employer types, the occupations that are most difficult to fill require Master's degrees or above. There are many employment opportunities for psychiatrists, occupational therapists, pharmacists, social workers, and psychiatric and other advanced care nurses, and this situation is likely to continue over the next three to five years. Many employers anticipate that demand will rise across the board in behavioral health because of health care reform and the aging of the baby boomers, who tend to be more comfortable seeking out behavioral health services than were their parents.

In addition to filling direct-care positions, finding high-level managers with the requisite certifications and experience is anticipated to be a large challenge over the next three to five years. Asked about the projected demand in critical occupations, one interviewee responded by noting the need to replace "me, my COO, and my CFO. We'll be retiring." Initiatives to train managers and supervisors are common casualties of cost containment. Some employers are instituting mentorship programs to train the next generation of leaders internally. However, staff can be reluctant to take on additional training when it requires taking on additional hours and responsibility without commensurate pay increases.

Ambulatory Care

Ambulatory care encompasses three distinct subsectors with dramatically different skill requirements: community health centers; doctors' offices; and home health care. For community health centers, one of the most significant challenges over the next three to five years will be the development of leadership. Many key leaders are nearing retirement, and it is not clear where their successors will come from. Many of the same issues that community health centers face today will persist. Advanced practice RNs, physician's assistants, nurse

practitioners, and family physicians will be among the most difficult positions to fill over the next several years.[2]

In the doctors' offices subsector, two occupations are likely to see significant growth over the next three to five years. The first is primary care physician. As difficult as it can be now to find a primary care physician accepting new patients, it is likely to become more so in the future. The implementation of the Affordable Care Act, with its emphasis on the medical home model, gives primary care physicians an especially central role. The second area of growth will be medical assistant. If the scope of practice for medical assistants is enhanced so they can administer medications, this occupation will see significant growth, and it will come largely at the expense of LPNs, who currently provide the medications and vaccinations that are a staple of many office practices. This potential change was described as extremely beneficial by several employers in the physician's offices and long-term care sectors. Although no recent changes have occurred, interviewees noted current efforts in the legislature, which merit monitoring.

One of the most significant areas of hiring difficulty in office practices is mid-level management. With increased reporting requirements and issues relating to reimbursement, these responsibilities can no longer be handled by a receptionist. Increasingly, group practices have felt they must pay more attention to the business side of the work. The support occupations needed to keep up with this trend will be in significant demand in the near future.

Another support occupation likely to see significant growth is in the area of health information technology. Regulators are requiring office practices to have IT systems available, but many practices have limited financial and personnel resources to support the technology. Most practices rely on outside vendors for IT support, but this may not be a sustainable expense.

As noted, a critical emerging job is that of patient navigator. Navigators help patients and their families access the medical system and get care across multiple practices, hospitals, and other providers. There are relatively few training programs for this occupation. Most people who become patient navigators have experience in other direct-care occupations, such as nursing or medical assistant. These positions will be in great demand as the medical and reimbursement procedures driving demand for navigation assistance become more complex.

[2] Though "Nurse Practitioners" and APRNs are not distinct in State of Connecticut licensure, employers consider these to be different and hire for them differently. In particular, Nurse Practitioner is generally considered a sub-set of APRN, albeit one requiring more education than other specialties.

In home health, employment growth is likely to be substantial across all occupations as the subsector expands in response to new state policies. The largest occupational group in the subsector is home health aide, a job that is generally filled by a CNA trained for work in long-term care. In that subsector, CNAs have backup and support from RNs, LPNs, and others CNAs, but this is not available in home health. Therefore, another model of training for home health aides may have to be developed as this sector expands.

An emerging occupation in home health is the personal care assistant. It is challenging to classify the PCA occupation because people hire them in their homes, expecting to train them in the specific activities that need to be done. Connecticut does not have a model training program to develop or certify PCAs. As more and more people receive health care in their homes, it will become more important to develop such a program.

Finally, as noted, there may be a rise in demand for medical assistants in home health if the law changes to allow medical technicians to administer medications. Currently, only LPNs and RNs can administer medications. This is a crosscutting issue that affects all subsectors of ambulatory care.

Challenges Raised by Employers

Pressures on Demand and Supply

While workforce shortages in health care have lessened recently, industry employment will continue to experience solid growth because of several long-term drivers of demand, particularly Connecticut's aging population. At the same time, the state will be hard pressed to keep the supply of health care workers on pace because of the aging workforce, the outmigration of young adults, and flat and by some measures declining student achievement in the long-term pipeline. It will be crucial to maintain investment in training for traditional occupations, including nurse and primary care physician, as overall demand continues expanding.

Technology and Business Model Innovations

Demand for new skills is emerging, driven by several factors. Recent advances in technology and new organizational models in the health care industry are creating demand for new and emerging occupations in health information technology and patient navigation. In addition, most traditional health occupations will require augmented and new skills in technology, problem solving, and customer management as technology and business models evolve.

Legislative and Budget Changes

The challenges above will combine with new health care legislation and the intensification of budget pressures to accelerate change and introduce more uncertainty in the short term. This will demand still more nimble market responsiveness by various types of institutions. Yet communication between employers and education and training institutions is lower than desired, according to some employers, and academic institutions face barriers to acting quickly when they do see changes in demand.

Coordinating Complex Challenges and Resources

Connecticut possesses many valuable resources and initiatives for health care education and training, including a large number of strong institutions, and recent initiatives have laid a foundation for shared planning and action. However, the strategies of many institutions are as of yet uncoordinated. Major sectors of the health care industry face common workforce challenges that call for collaborative action. And while some sector and regional differences call for independent specialized action, there is much room for linked efforts that address cross-sector challenges.

Facilitating and Improving the Consistency of Market Analyses

The many sources of health care workforce information are not coordinated in a way that supports complete analyses or shared understanding and strategy development. The departments of Labor, Board of Regents of Higher Education, and Public Health, as well as other public and private institutions, maintain data systems that are integrated to some extent but not adequately. Standardization and quality control issues affect the interoperability of data systems for frequent comprehensive analyses. New sources of information, like real-time labor market information, are not capitalized upon to gain new insights, cross check assumptions, or monitor rapid change.

Identified Priorities and Recommendations

The following recommendations were identified in planning sessions held at the regional and statewide level with employers, educators and advocates.

1. Adopt results-oriented state policy and oversight

Connecticut defines healthcare as a strategically significant industry whose strength is critical to its future economic vitality. The State must establish and support a vehicle to assure effective oversight, coordination and direction of statewide policy- and strategy-related efforts to build and sustain the skilled and productive workforce/talent essential to grow Connecticut's healthcare sector.

Recommendations:

- Align accreditation, certification, and licensure requirements with the practical realities and demands of the contemporary healthcare workplace.
- Develop a comprehensive state strategy that includes policies, investments and programs to address the looming shortage of qualified, well-compensated faculty needed to prepare the state's healthcare workforce.
- Strengthen the instructional content and job performance-related outcomes of non-credit training programs.
- Develop workforce program funding streams and procurement policies to incentivize specific accountability objectives and maximize outcomes, including: job placement and retention as desired outcomes; effective collaboration among employers and educators; replicability; interdisciplinary education; etc.
- Authorize the CT Employment and Training Commission's Allied Health Workforce Policy Board as the state-level vehicle to plan, oversee, coordinate, and provide policy direction for Connecticut's healthcare workforce agenda reporting to the Governor's office and key legislative committees of cognizance.
- Create and disseminate an inventory of best practices to promote the replication of effective programs and services.

2. Collect and strategically utilize healthcare workforce data

The State must have the capacity and infrastructure (and resources) to collect, analyze and make timely use of critical healthcare workforce-related data to support effective planning and informed decision-making concerning healthcare workforce policy, strategy and related investments.

Recommendations:

- Develop and ensure the funding necessary to sustain an internet-based healthcare workforce data portal to provide efficient and effective access to key information (labor market information, socio-economic trends, demographics, performance-related information, educational institutional capacity and limitations, etc.) to inform strategy, planning, policy development and implementation, evaluation, etc.
- Use the data collected in the portal to support the development of a strategic plan to ensure that the workforce matches employer needs and that the appropriate number and variety of programs exist to train the needed professionals.
- Address pre-service and in-service training for stakeholders in the use of such data related to their agency and programs.

3. Promote mutually beneficial employer/educator collaborations

Healthcare employers in Connecticut and the educators and training providers whose mission is to prepare and sustain a well-educated, highly-skilled healthcare workforce need to partner effectively in offering opportunity for productive collaboration with shared priorities, challenges and resources.

Recommendations:

- Establish and strengthen regional partnerships focused on healthcare to promote opportunities for employers and educators to communicate to ensure understanding of the level of preparation needed and the true nature of the job and to facilitate the aligning and securing of resources for workforce training.
- Align education and training program cycles with employers' needs to fill vacancies and support clinical placements/internships.
- Create mechanism for employers to contribute to the establishment of core competencies for entry-level jobs, curriculum design, developing "common language", internship content, hands-on training options, etc.

- Promote collaboration between employers, educators and other stakeholders to provide education on cultural and linguistic competency, health disparities, patient-centered care and the importance of a diverse healthcare workforce.
- Develop an online workforce registry that allows individuals to post resumes and employers post employment and to search for needed workers.

4. Develop the incumbent healthcare workforce

Increasingly rigorous job-related demands of the rapidly changing healthcare workplace mean that most currently employed healthcare workers will need to upgrade their skills and knowledge on a regular basis to remain competitive and productive and most importantly provide culturally proficient, patient care. Effective incumbent worker training strategies, resourced at sufficient scale, are essential to support both career advancement and ongoing professional development.

Recommendations:

- Ensure incumbent worker training provides participants with a practical understanding of the larger health care business model as well as the internal and external factors (i.e. policies, economic conditions) that impact healthcare professions and the provision of healthcare services.
- Provide public/private resources to support workplace-based incumbent healthcare worker training to meet employer demand statewide.
- Provide financial assistance (including loan forgiveness) to support incumbent workers participating in training while simultaneously continuing to perform their jobs.
- Review incumbent worker training programs to award academic credit towards degrees.
- Promote opportunities for educators/schools to collaborate to locate and operate incumbent worker education programs on-site in workplace settings.
- Develop pathways that assess, educate and integrate foreign-trained professionals into CT's healthcare workforce.
- Facilitate and financially support the use of refresher courses to re-integrate previous healthcare employees back into the workforce.

5. **Prepare the prospective healthcare workforce**

Many Connecticut citizens interested in pursuing healthcare careers in this state do not understand well enough nor are sufficiently informed about the work-related realities and demands of the industry, often lacking the requisite skills (across a broad spectrum) to be successful and productive in the workplace.

Recommendations:

- Standardize core competencies including emphasis on: basic skills; workplace behavioral norms; soft skills; customer service; computer skills; critical thinking and problem solving skills; cultural and linguistic competency; patient-centered care; effective team collaboration; integrated services business model, etc.
- Provide resources needed to re-establish the Health Care Advisor positions at the regional level to offer rigorous sector-focused orientation services which include career awareness, screening, assessment, referral, and additional pre-employment workshops.
- Fund sector-focused remedial education options for nearly-job-ready candidates lacking core basic skills who are interested in heath care employment.

6. **Identify and promote promising healthcare training practices**

Connecticut educational institutions, professional development organizations and training providers have implemented effective healthcare workforce preparation and development strategies and programs, across a broad spectrum of disciplines. The lessons learned from these efforts suggest an array of promising workforce development practices and principles that should be replicated at scale in Connecticut.

Recommendations:

- Provide compensation and/or necessary flexibility to engage qualified individuals as preceptors and intern supervisors.
- Develop and financially support effective ongoing professional development strategy for preceptors and supervisors.
- Encourage development of dedicated education and training centers within healthcare facilities to increase opportunities for training in clinical, simulation and laboratory settings.

- Increase opportunities and remove barriers (e.g., liability) for workplace-based internships and develop standardized internship guidebook for various healthcare employers.
- Promote job shadowing, internships, nurse residency, hands-on/workplace-based and on-the-job training (OJT) opportunities for healthcare students that are culturally and linguistically competent, interdisciplinary in nature and provide increasing levels of exposure, training and responsibility starting with entry level employees through graduate professionals.

7. Address the workplace impact of technology

Rapid changes in the use of technology – both in patient-care services and medical records management – require increasingly critical technology-related skills and a capacity or willingness to learn new technology-related methods and practices.

Recommendations:

- Target recruitment and training efforts on IT workers interested in making the career transitions to health information-related jobs.
- Develop IT simulation labs to prepare the needed health information technology workers.
- Promote efforts among businesses to standardize software across companies to facilitate and enhance worker productivity.
- Create training curricula and foster instructional strategies that address the need to allay the fears of underprepared adult learners as they work to master changing workplace technology demands.