# **SECTION 1 CHAPTER 2 OVERARCHING ISSUES**

# 2.0 OVERARCHING ISSUES

This chapter presents an overview of key overarching issues that shape the current health care environment and will affect its future as well. These issues include health care reform, health information technology and workforce concerns.

# 2.1 HEALTH CARE REFORM

The Patient Protection and Affordable Care Act (PPACA), as amended by the Health Care Education Reconciliation Act, of 2010 (collectively referred to as federal health care reform) is far-reaching legislation that will transform Connecticut's health care system in many ways. The legislation has numerous provisions that will be implemented over several years; thus the short- and long-term ramifications of reform will not be fully realized for some time. What is clear, however, is that an increase in the number of insured residents, coupled with changes in funding, reimbursement, transparency and innovation will certainly affect Connecticut's health care facilities and providers, their administrative costs and the services they provide. In addition, the implementation of new models of care may require the adoption of new analyses of systems of care needs and performance.

#### 2.1.1 INSURANCE COVERAGE EXPANSION

The PPACA contains a number of provisions aimed at increasing health insurance coverage, including an optional State expansion of Medicaid to cover individuals in households with incomes below 133% of the federal poverty level (FPL); a requirement that states (or the federal government) develop and run health insurance exchanges through which individuals and small businesses can purchase health insurance coverage; a requirement that large and mid-size employers provide employee coverage or face possible penalties; and a requirement that most individuals obtain coverage through a private source or a public program or be penalized for non-compliance.<sup>16</sup>

Connecticut has a relatively low uninsured rate. Approximately 13% of the state's non-elderly are uninsured, compared to a national average of 18%. This rate reflects, in part, the state's high rate of employer-sponsored coverage, relatively generous Medicaid eligibility limits and a new Medicaid program for low-income adults that replaced its State-Administered General Assistance (SAGA) medical program. It is estimated that, with health care reform, the proportion of Connecticut residents with health insurance will increase from 89 to 95%, or 170,000 residents, by 2016. Additionally, enrollment in Medicaid is estimated to increase by 130,000, or 31%. Although expanded coverage options offered under the PPACA will likely result in a surge in demand for health care services statewide, some individuals are likely to remain uninsured (e.g., undocumented persons will not be eligible to purchase coverage from a health insurance exchange).

Consequently, beginning in 2014, payments to hospitals through the Disproportionate Share Hospital (DSH) program<sup>19</sup> will be significantly reduced by 75%.<sup>20</sup> After the initial reduction, payment increases will be based on the percentage of the population that is uninsured and the amount of uncompensated care provided. Hospitals have expressed concern however, that the increase in insured individuals may not make up for the decrease in revenue.

Retrieved from http://www.rand.org/content/dam/rand/pubs/technical\_reports/2011/RAND\_TR973.1.pdf

<sup>18</sup>Auerbach, et al

<sup>19</sup>Designed to assist hospitals financially with their uncompensated and undercompensated care costs.

<sup>&</sup>lt;sup>16</sup>Auerbach, D., Nowak, S., Ringel, J.S., Girosi, F., Eibner, C., McGlynn, E.A. & Wasserman, J. (2011). Rand Health Technical Report. The Impact of the Coverage-Related Provisions of the Patient Protection and Affordable Care Act on Insurance Coverage and State Health Care Expenditures in Connecticut. An Analysis from RAND COMPARE. 1.

<sup>&</sup>lt;sup>17</sup>Urban Institute and Kaiser Commission on Medicaid and the Uninsured estimates based on the Census Bureau's March 2010 and 2011 Current Population Survey (CPS: Annual Social and Economic Supplements).

Retrieved from <a href="http://www.statehealthfacts.org/comparetable.jsp?ind=126&cat=3">http://www.statehealthfacts.org/comparetable.jsp?ind=126&cat=3</a>

<sup>&</sup>lt;sup>20</sup>Main, D. C. & Starry, M.M. (2010). *The Effect of Health Care Reform on Hospitals*: A Summary Overview. 4. Retrieved from <a href="http://www.pillsburylaw.com/siteFiles/Publications/2C9547A6BFCBB37D8366EA2272190123.pdf">http://www.pillsburylaw.com/siteFiles/Publications/2C9547A6BFCBB37D8366EA2272190123.pdf</a>

Healthcare coverage, alone, does not guarantee access to health care services. Successful implementation of federal health care reform will depend on Connecticut's response to access issues including workforce and infrastructure capacity, and the regional supply of health care services. Access to health care will depend on the adequacy of the state's health care infrastructure (e.g., hospitals, clinics, etc.), available technology and necessary workforce capacity.<sup>21</sup> The capacity of the state's workforce is discussed later in this chapter.

#### 2.1.2 COMMUNITY BENEFIT

With approximately 385,600<sup>22</sup> currently uninsured persons in Connecticut, providing charity care has historically been a significant portion of hospital community benefit activities. As noted above, the PPACA includes coverage, subsidy and penalty provisions that will extend insurance coverage to an estimated 170,000 state residents.<sup>23</sup> As the provisions of health care reform are implemented, Connecticut's hospitals will likely have fewer patients relying on charity care. To ensure that nonprofit hospitals continue to provide community benefit, the PPACA establishes a new set of requirements for hospitals to maintain their tax-exempt status. The PPACA also requires non-profit hospitals to conduct a community needs assessment every three years and to adopt implementation strategies to

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Once completed by all of Connecticut's non-profit hospitals, they will become a valuable resource for hospital planning for future versions of the Plan as they will assist the State in identifying communities' health needs and establish priorities for addressing them.

meet identified community health needs. Under the Act, hospitals are required to give increased attention to working with others to determine community health needs and take action to meet those needs, and to implement financial assistance and billing and collection polices that protect consumers. Hospitals will be obligated to collaborate with public health agencies, align patient payment requirements with patient financial capacity, advance community participation and promote public knowledge regarding hospital practices.<sup>24</sup> This emphasis on hospital engagement in consultative processes with relevant stakeholders is intended to ensure that hospital community benefit activities reflect an inclusive and interactive planning process.<sup>25</sup>

As part of this mandate, non-profit hospitals are required to submit audited financial statements as evidence of the community benefits they report. Although the law does not base federal tax exemption on a nonprofit hospital's provision of community benefits at any specific quantitative level, the IRS will apply a 'facts and circumstances' test to determine whether the benefits a hospital provides to its community are sufficient to warrant its federal tax exemption.<sup>26</sup>

Hospitals' community needs assessments should collectively encompass all of the state's 169 towns. Once completed by all of Connecticut's non-profit hospitals, they will become a valuable resource for hospital planning for future versions of the Plan as they will assist the State in identifying communities' health needs and establish priorities for addressing them. Vulnerable populations and their needs may vary substantially from one community to another, and through implementation of its Statewide Health Care Facilities and Services Plan, DPH may have the opportunity to play a role in planning to channel community benefit efforts appropriately.<sup>27</sup> The state's acute care hospitals are actively working

<sup>&</sup>lt;sup>21</sup>Taylor, M. (2010). The Patient Protection and Accordable Care Act: An Overview of Its Potential Impact on State Health Programs. *California Legislative Analyst's Office*. 28. Retrieved from <a href="http://www.lao.ca.gov/reports/2010/hlth/fed">http://www.lao.ca.gov/reports/2010/hlth/fed</a> healthcare/fed healthcare 051310.pdf
<a href="https://www.lao.ca.gov/reports/2010/hlth/fed">https://www.lao.ca.gov/reports/2010/hlth/fed</a> healthcare 051310.pdf
<a href="https://www.lao.ca.gov/reports/2010/hlth/fed">https://www.lao.ca.gov/reports/2010/hlth/fed</a> healthcare 051310.pdf

<sup>&</sup>lt;sup>23</sup>Auerbach, et al.

<sup>&</sup>lt;sup>24</sup>Folkemer, D.C., Spicer, L.A., Mueller, C.H., Somerville, M.H., Brow, A.L.R., Milligan, Jr., C. & Boddie-Willis, C.L. (2011, January) Hospital Community Benefits after the ACA: The Emerging Federal Framework. *The Hilltop Institute*. 4.

Retrieved from <a href="http://www.hilltopinstitute.org/publications/HospitalCommunityBenefitsAfterTheACA-HCBPIssueBrief-January2011.pdf">http://www.hilltopinstitute.org/publications/HospitalCommunityBenefitsAfterTheACA-HCBPIssueBrief-January2011.pdf</a>
25 Somerville, M.H., Mueller, C.H., Boddie-Willis, C.L., Folkemer, D.C. & Grossman, E.R. Hospital Community Benefits after the ACA:
Partnerships for Community Health Improvement. The Hilltop Institute. (2012, February). 2-3
Retrieved from <a href="http://www.hilltopinstitute.org/publications/HospitalCommunityBenefitsAfterTheACA-HCBPIssueBrief3-February2012.pdf">http://www.hilltopinstitute.org/publications/HospitalCommunityBenefitsAfterTheACA-HCBPIssueBrief3-February2012.pdf</a>

<sup>&</sup>lt;sup>27</sup>CGS 19a-634 (b) states that the DPH commissioner, in consultation with hospital representatives, shall develop a process that encourages hospitals to incorporate the statewide health care facilities and services plan into hospital long-range planning and shall facilitate communication between appropriate State agencies concerning innovations or changes that may affect future health planning.

on their Community Needs Assessments that must be completed by 2014 to be in compliance with the PPACA. They are profiling communities, identifying partners and looking at common elements. DPH and the Connecticut Hospital Association (CHA) are communicating on the coordination of Community Needs Assessments with the statewide health improvement planning process.

#### 2.1.3 FINANCIAL ASSISTANCE POLICY

Non-profit hospitals are required to adopt, implement and widely publicize a written financial assistance policy. This policy must include the eligibility criteria for financial assistance and whether it includes free or discounted care, the basis for calculating patient charges and the process for applying for financial assistance. Each hospital must also adopt and implement a policy to provide emergency medical treatment to individuals. The policy must prevent discrimination in providing emergency care, including denial of service, against those eligible for financial assistance under the hospital's financial assistance policy or government assistance.<sup>28</sup> It is expected that there will be increased administrative costs for non-profit facilities to implement this provision.<sup>29</sup>

# 2.1.4 PROVIDER REIMBURSEMENT BASED ON PERFORMANCE

The PPACA includes provisions that will significantly affect providers and their reimbursement. Two payment systems have been established that directly tie reimbursement to performance –Value Based Purchasing (VBP) and bundled payments.

# 2.1.4.1 Value-based Purchasing

Effective October 1, 2012, the PPACA mandates a value based purchasing model for all hospitals, where incentive payments are given to hospitals that meet or exceed benchmarks set by the Centers for Medicare and Medicaid Services (CMS).<sup>30</sup> Beginning in 2013, under this provision, a percentage of payments to hospitals will be tied to their performance on certain quality measures for acute myocardial infarction, heart failure, pneumonia, surgeries and healthcare associated infections. It is expected that these quality measures and the accompanying reporting requirements will increase administrative costs. It is not yet known if the increased payments would offset the anticipated administrative costs.

# 2.1.4.2 Bundled Payments

In addition to the VBP reimbursement model, the PPACA established a 5-year Medicare voluntary bundled payment pilot, beginning in January 2013, for integrating care across hospitals, physicians and post-acute care providers during an episode of care for certain medical conditions. This pilot program pays for the overall management of a patient's health rather than discrete health care services, with a single reimbursement covering an entire episode of care<sup>31</sup> rather than separate payments to hospitals and doctors involved in different aspects of a patient's care. Parallel goals of this effort are to correct the inefficiency of the current fee-for-service model and to lower hospital readmission rates. If the pilot is successful in reducing costs while maintaining quality, the Act allows for program expansion in 2016.<sup>32</sup>

#### 2.1.4.3 Infection Control and Preventable Hospitalizations

There are also health care reform provisions designed to encourage higher-quality care. Hospitals will need to improve their infection control programs or face reduced Medicare payments. Medicare payments to hospitals will also be reduced for preventable readmissions for certain conditions.

<sup>29</sup>Main & Starry, 6.

<sup>32</sup>Main & Starry. 3.

<sup>&</sup>lt;sup>28</sup>Kasprak, J. (2011, May 10). Hospital Community Benefits after the ACA: Partnerships for Community Health Improvement. *Connecticut Office of Legislative Research*, OLR Research Report. 1-2.

<sup>&</sup>lt;sup>30</sup>Sharamitaro, A. & Drew, C. (2011). Healthcare Reform: Impact on Hospitals. Health Capital Topics: 4. 1. Retrieved at <a href="http://www.healthcapital.com/hcc/newsletter/1">http://www.healthcapital.com/hcc/newsletter/1</a> 11/aca.pdf

<sup>&</sup>lt;sup>31</sup>Beginning three days prior to hospital admission and ending thirty days after a patient is discharged.

# 2.1.5 INCENTIVES TO IMPROVE QUALITY, ACCESS, DELIVERY AND OUTCOMES

Federal health care reform includes numerous incentives and opportunities for states, health care providers and others to improve health care quality, access, delivery and outcomes. The Prevention and Public Health Fund is intended to provide ongoing support to public health and prevention programs at the national, state and local level. The burden of chronic disease (e.g., heart disease, cancer, stroke, and diabetes) presents a significant public health challenge to Connecticut. Since enactment of the PPACA in March 2010, the Department of Health and Human Services has awarded approximately \$8.28 million in grants to organizations in Connecticut through this fund for wellness and prevention efforts. These include \$790,000 for community and clinical prevention efforts, \$593,000 for strengthening the public health infrastructure and \$6,901,000 to support the expansion of the public health workforce.

#### 2.1.6 INNOVATION

Health care reform is leading to innovations in the delivery of health care, focusing on primary care, care coordination and chronic disease management. They include:

- Accountable Care Organizations (ACOs), which are networks of physicians, hospitals and other health
  professionals, that coordinate patient care and share in the savings generated for the government by keeping
  Medicaid patients healthy. It should be noted that it remains to be seen if the success of ACOs in achieving
  goals (reducing duplication of services, improving care and saving money), and consequently reducing hospital
  utilization, will create direct competition between physicians and hospitals, as the physicians will be incentivized to
  reduce hospital admissions;
- Medical homes, which are health care settings such as a primary care practice, that serve as the central coordinator for a patient's health care needs; and
- Health Information Technology improvements, discussed in more detail in the section below.

# 2.2 HEALTH INFORMATION TECHNOLOGY

#### 2.2.1 HEALTH INFORMATION TECHNOLOGY AND EXCHANGE

The healthcare system in Connecticut and across the country is facing increasing costs, inconsistent payer rates, and independent information systems. One of the strategies to address these challenges is the coordination of health information exchange to improve health status and the experience of care for patients while reducing the cost of care. Health information technology and exchange (HITE) makes it possible for health care providers to better manage patient care through secure use and sharing of health information. A key component of HITE is the use of electronic health records (EHRs) instead of paper medical records to report patients' diagnostic data among healthcare providers serving that patient.

The 2009 American Recovery and Reinvestment Act (ARRA) includes the Health Information Technology for Economic and Clinical Health Act of 2009 (the HITECH Act) that sets forth a plan for advancing the appropriate use of health information technology to improve quality of care and establish a foundation for health care reform. The Act committed more than \$48 billion over five years to develop data exchange systems and to encourage 'meaningful use' of health data exchange in a secure technological environment. These efforts, along with healthcare practices, support the five-year goals of better technology and information to transform health care for providers, payers and patients.

Healthcare professionals in all fields will be required to assess and modify clinical practice, adapt roles and responsibilities, and create an environment that encourages innovation in practice through health IT/HIE. Direct patient care organizations such as hospitals, community clinics and private practices represent key settings for transforming the way health information is used to support improvements in the quality of care and efficiency of the Connecticut healthcare system.

In Connecticut, the HITECH Act authorized over \$13 million for multiple projects to advance health information exchange. The Connecticut Department of Public Health (DPH) serves as advocate, regulator, and consumer of health

<sup>&</sup>lt;sup>33</sup>HealthCare.gov. The Affordable Care Act's Prevention and Public Health Fund in Your State: Connecticut. Retrieved at <a href="http://www.healthcare.gov/news/factsheets/prevention/states/ct.html">http://www.healthcare.gov/news/factsheets/prevention/states/ct.html</a>

information technology and exchange to serve public health and health care needs in Connecticut. In June 2009, DPH published the Connecticut State Health Information Technology Plan to set the agenda for health care information exchange and technology. By the end of 2009, DPH was designated as the State Health Information Exchange grantee to plan for a sustainable statewide health information exchange system for Connecticut. DPH contracted with the Health Information Technology Exchange of Connecticut (HITE-CT) to build and manage an HIE System.

A majority of the HITECH Act investment is allocated for incentive payments from the Centers for Medicare and Medicaid Services (CMS) to clinicians and hospitals when they use electronic health records (EHRs) in specific meaningful ways to improve care.

The health care system's infrastructure in Connecticut ranges from a one-physician office to a 1,000 bed general hospital, with the scope of health care services expanding this range exponentially. The diverse and extensive components of Connecticut's health care system share a common issue - a limited infrastructure and capacity to exchange health information in a secure, efficient, and timely manner.

# 2.2.2 MEANINGFUL USE

CMS and the US Office of the National Coordinator (ONC) established the Meaningful Use of Health Information Exchange priority for healthcare providers. The CMS Incentive Payment Program is based on a provider's attestation of meaningful use of electronic health data exchange. The requirements for meaningful use focus on medical objectives and certified electronic health record (EHR) technology for exchanging patient data on medications, laboratory results, diagnostics, radiological, and continuing care or medical home specific needs.

#### 2.2.3 HEALTH INFORMATION TECHNOLOGY AND EXCHANGE OF CONNECTICUT

The Health Information Technology Exchange of Connecticut (HITE-CT) was established under Connecticut General Statute Section 19a-750 as a quasi-public agency managed by an appointed Board of Directors to coordinate and oversee Health Information Exchange (HIE) activities for the State. The members of the Board include key Connecticut stakeholders representing health care providers, medical researchers, academia, payers, employers, attorneys, State agencies, consumers and consumer advocates.

Several initiatives underway in Connecticut have laid the groundwork for a state structure, and the priorities and concerns of the stakeholders involved will shape the state system. There are many local and regional health information exchange efforts underway in Connecticut. While most are still in the early planning stages, a number of initiatives are well developed, building stakeholder support and developing business plans with the expectation that they will move to implementation in the near future. Several of these are collaborations between hospitals and their affiliated providers; the goal being to help providers implement a single EHR product that would provide data exchange between them, the hospital, and other connected providers.

#### 2.3 WORKFORCE

The implementation of the Patient Protection and Affordable Care Act (PPACA) will likely increase demand for health care services as a result of expanded coverage.<sup>34</sup> Public health officials expect that following an initial surge, demand will level, but will likely remain greater than levels prior to PPACA implementation. As the health care delivery model continues to evolve, it will be important to monitor and assess whether the size, clinician mix and statewide distribution of the health care workforce is sufficient to meet the additional demand.

The number of Connecticut residents age 65 and older is projected<sup>35</sup> to increase by 60%, from 500,000 in 2010 to 800,000 in 2030 (Fig 2.1). In 2030, one out of every five Connecticut residents will be 65 years of age or older.

Demand for health care services increases with age. For example, Connecticut's 65-and-older population is at least three times more likely than younger people to have an inpatient hospital stay (Table 2.1). Similar inpatient hospital use rates applied to the 2030 population estimates would result in 100,000 additional 65-and-older hospital inpatients. Emergency

<sup>&</sup>lt;sup>34</sup>Taylor, M. 6.

<sup>&</sup>lt;sup>35</sup>Connecticut State Data Center population projections

4,000,000 3,500,000 3,000,000 2,500,000 2,884,681 2,929,687 2,975,536 3.002.389 2,000,000 3.027.884 1,500,000 1,000,000 500,000 817,719 740,303 647.238 571,496 506.202 2010 2015 2020 2025 2030 Under 65 ■ Age 65 and Over

Fig 2.1: Connecticut's Aging Population, 2010-2030

Source: Connecticut State Data Center population projections

and outpatient health care services could experience similar increases in demand. Shifts in the type of care required by the elderly may also occur as Connecticut attempts to rebalance its long term care system from nursing home care to community placement, under the Money Follows the Person (MFP) program.<sup>36</sup>

Table 2.1: Inpatient Utilization Projections by Age Group, Connecticut, 2010 and 2030

| Age Group   | FY 2010<br>Inpatient<br>Discharges | Estimated<br>Population<br>2010 <sup>a</sup> | FY 2010<br>Inpatient Use<br>Rate per 1,000<br>Population | Projected<br>Population<br>2030 <sup>a</sup> | FY 2030<br>Projected<br>Inpatient<br>Discharges | FY 2010-30<br>Inpatient<br>Discharge<br>Change |
|-------------|------------------------------------|--|--|--|---|--|
| 0 to 19     | 66,044                             | 878,168                                      | 75.2   | 852,449                                      | 64,110  | (1,934)  |
| 20 to 24    | 15,522                             | 250,950                                      | 61.9   | 205,439                                      | 12,707  | (2,815)  |
| 25 to 29    | 19,567                             | 224,491                                      | 87.2   | 214,924                                      | 18,733  | (834)  |
| 30 to 64    | 167,835                            | 1,674,275                                    | 100.2  | 1,611,869                                    | 161,579   | (6,256)  |
| 65 and over | 159,460                            | 506,202                                      | 315.0  | 817,719                                      | 257,592   | 98,132   |
| All Ages    | 428,428                            | 3,534,086                                    | 121.2  | 3,702,400                                    | 514,721   | 86,293   |

Source: Connecticut DPH, Office of Health Care Access Acute Care Hospital Inpatient Discharge Database

The growing number of people with chronic diseases and the continued need to treat behavioral and mental health issues will likely result in greater demand for health care services. In addition, evolving changes in health care delivery models, reimbursement and government policy changes will have a significant effect on the types of care, provider types and service location. The demand for healthcare workforce outside of acute care settings is growing and may require Connecticut's future health care workforce to adjust to satisfy demand for additional ambulatory and home health care services in the community.

<sup>&</sup>lt;sup>a</sup>Connecticut State Data Center population projections

<sup>&</sup>lt;sup>36</sup>Money Follows the Person (MFP) is a federal demonstration program designed to help states rebalance their long term care systems to better support people living in institutions who want instead to live in the community. The MFP program is intended to serve elderly people and others with mental illness and developmental disabilities.

#### 2.3.1 WORKFORCE AGE

As Connecticut's general population is aging, so too is its workforce. Many of Connecticut's health care providers are approaching retirement age (Table 2.2 and Appendix D). Between one quarter and one third of Connecticut's licensed physicians, dentists, psychologists and alcohol/drug counselors are 60 years of age and older. In addition, in seven of the ten major licensed practitioner categories, at least 20% of the workforce is 60 years of age and older.

Connecticut's largest cohort of health care practitioner type is registered nurses. Approximately 57,000 registered nurses are licensed at a rate of 1,606.8 per 100,000 population. However, determining the adequacy of Connecticut's practitioner supply is difficult. The use of existing licensing data may inflate practitioner supply, as key workforce elements (actively practicing, participating in direct patient care, or type of industry employed in) are not fully captured. DPH is presently collaborating with the National Council of State Boards of Nursing (NCSBN) to enhance its ability to collect workforce data for future planning efforts. NCSBN is a not-for-profit organization working to create a national public use nursing workforce database. DPH has initiated the collection of additional workforce data through its E-licensing program and is working to become a fully participating member in this national effort.

Table 2.2: Selected Licensed Practitioners, Connecticut, 2012

|                                     |                       | 60 Years of             |         |                            |  |  |
|-------------------------------------|-----------------------|-------------------------|---------|----------------------------|--|--|
|                                     | СТ                    | Mean Age                | Age and | Rate Per 100,000           |  |  |
| Practitioner Type                   | Licensed <sup>a</sup> | (in Years) <sup>b</sup> | Older⁵  | CT Population <sup>c</sup> |  |  |
| Advanced Practical Registered Nurse | 3,664                 | 48.7                    | 19%     | 102.5                      |  |  |
| Certified Alcohol/Drug Counselor    | 286                   | 53.9                    | 29%     | 8.0                        |  |  |
| Dental Hygienist                    | 3,654                 | 45.4                    | 11%     | 102.2                      |  |  |
| Dentist                             | 3,385                 | 50.7                    | 29%     | 94.7                       |  |  |
| Licensed Alcohol/Drug Counselor     | 773                   | 54.3                    | 33%     | 21.6                       |  |  |
| Licensed Practical Nurse            | 13,249                | 47.8                    | 24%     | 370.7                      |  |  |
| Physician Assistant                 | 1,867                 | 40.5                    | 7%      | 52.2                       |  |  |
| Physician/Surgeon/Osteopath         | 17,154                | 51.7                    | 27%     | 480.0                      |  |  |
| Psychologist                        | 1,879                 | 53.4                    | 35%     | 52.6                       |  |  |
| Registered Nurse                    | 57,429                | 48.8                    | 22%     | 1,606.8                    |  |  |

Source: Connecticut DPH Practitioner licensure data

#### 2.3.2 WORKFORCE DEMAND

Connecticut's health care industry currently faces personnel shortages in physicians, surgeons, specialty areas, nurses and allied health professionals. In addition, the high cost of malpractice premiums and significant on-call burden have hindered the state's ability to meet the demand for surgeons and subspecialty surgeons. Hospitals face several significant cost issues involving recruiting and the retention of nurses. High vacancy rates are being seen in specialty fields such as emergency department and psychiatric nursing.<sup>37</sup>

Projecting future workforce demand is difficult, given the uncertainty of future demand factors. It is clear that Connecticut has an aging population and older patients require more frequent and complex care. However, other factors are not as clearly defined. Shifts in patient care trends and proposed changes in health care related law (i.e., potential medication administration changes) may rapidly change the health care settings and practitioner mix necessary to deliver optimal, affordable patient care.

<sup>&</sup>lt;sup>a</sup>Includes all practitioners holding an active Connecticut license

<sup>&</sup>lt;sup>b</sup>Erroneous age values and age values of less than 14 and greater than 90 have been omitted from the calculation

<sup>&</sup>lt;sup>c</sup>Based on Census 2010 data

<sup>&</sup>lt;sup>37</sup>State of Connecticut, Task Force Report. (2008). Hospital System Strategic Task Force Report-Findings and Recommendations. 1-28.



The U.S. Department of Health and Human Services (DHHS) estimates that by 2020, there will be a national shortage of 808,416 nurses.<sup>38</sup> Connecticut will face a similar shortage of 21,791 nurses, the second worst shortage in the nation.<sup>39</sup> Furthermore, Connecticut's ranking as 49th out of 50 states in producing registered nurses is just one indicator of the need for Connecticut to establish new priorities, resources, and policies for nursing education and workforce professional development.<sup>40</sup> Supply and demand for RNs in Connecticut is shown in Table 2.3.

Table 2.3: Supply and Demand for Registered Nurses; CT and US 2000-2020

|      |           |           |           | Excess/  | Percent of |
|------|-----------|-----------|-----------|----------|------------|
| Year | State/U.S | Supply    | Demand    | Shortage | Shortage   |
| 2000 | СТ        | 25,407    | 30,137    | -3,730   | -12%       |
|      | US        | 1,889,243 | 1,999,950 | -110,707 | -6%        |
| 2005 | CT        | 24,175    | 31,919    | -7,744   | -24%       |
|      | US        | 2,012,444 | 2,161,831 | -149,387 | -7%        |
| 2010 | CT        | 22,422    | 34,158    | -11,736  | -34%       |
|      | US        | 2,069,369 | 2,344,584 | -275,215 | -12%       |
| 2015 | CT        | 19,841    | 36,786    | -16,945  | -46%       |
| 2015 | US        | 2,055,491 | 2,562,544 | -507,063 | -20%       |
| 2020 | CT        | 17,870    | 39,662    | -21,791  | -55%       |
|      | US        | 2,001,998 | 2,810,414 | -808,416 | -29%       |

Source: DHHS, HRSA, Projected Supply, Demand and Shortages of RNs 2000-2020, (July 2002)

#### 2.3.4 FIVE MOST IN-DEMAND HEALTH OCCUPATIONS

An August 2011 report, *Connecticut Health Care Workforce Assessment*<sup>41</sup>, presents workforce demand projections based on aggregated "real-time" job postings from the internet, and provides information on the types of health care positions that employers are seeking to fill. Ranked by the projected number of annual openings between 2008 and 2018, the five most in-demand health occupations are: Registered Nurses, Home Health Aides, Nursing Aides, Orderlies and Attendants, Licensed Practical and Licensed Vocational Nurses and Medical Assistants (Table 2.4). The data suggest that many of the job openings in nursing are due to replacement of lost workers, sometimes referred to as "churning," and indicate that a significant portion of new practitioner hiring will maintain and not increase numbers.

Table 2.4: Occupational Demand Measures: Top 30 Health Occupations, By Projected Openings

|                           | Employmen | t      | Annual                  |        | Replac | ement             | Total            |
|---------------------------|-----------|--------|-------------------------|--------|--------|-------------------|------------------|
| Occupational Group/Title  | 2008      | 2018   | Openings<br>2008 - 2018 | Growth | Number | Percent<br>due to | Postings<br>2010 |
| Registered Nurses         | 36,715    | 42,049 | 1,174                   | 533    | 641    | 55%               | 8,668            |
| Home Health Aides         | 13,600    | 18,248 | 600                     | 465    | 135    | 23%               | 383              |
| Nursing Aides, Orderlies, |           |        |                         |        |        |                   |                  |
| Attendants                | 25,835    | 27,767 | 450                     | 193    | 257    | 57%               | 647              |
| LPN and LVN Nurses        | 8,969     | 9,531  | 337                     | 56     | 281    | 83%               | 738              |
| Medical Assistants        | 6,421     | 7,553  | 185                     | 113    | 72     | 39%               | 712              |

Source: Connecticut Health Care Workforce Assessment (August 2011)

<sup>&</sup>lt;sup>38</sup>The U.S. Department of Health and Human Services (DHHS). (2002). *Projected Supply, Demand and Shortages of Registered Nurses:* 2000-2020. 1-22.

<sup>&</sup>lt;sup>39</sup>DHHS, 18.

<sup>&</sup>lt;sup>40</sup>Connecticut League for Nursing (2008). Nursing Workforce Demographics and educational and Economic Trends. 1-12.

<sup>&</sup>lt;sup>41</sup>Holm, R., Quimby, S., Dorrer, J. (2011). Connecticut Health Care Workforce Assessment. Office of Workforce Competitiveness and the Connecticut Employment and Training Commission. 1-88.

Potential changes in health care policy and programs may also affect the nursing vocation. If the scope of practice for Medical Assistants is expanded to include the administration of medication, demand for Medical Assistants may rise significantly, as LPNs currently provide medication and vaccinations. As elder advocates and government agencies seek to maintain elderly patients in the community, a growing demand for home health workers such as Personal Care Assistants and Home Health Aides may be required, in addition to registered nurses, to provide at-home care.

The *Connecticut Health Care Workforce Assessment* report also states that in regard to workforce, the worst supply/ demand mismatch is for primary care physicians.<sup>42</sup> "If reimbursement practices are changed to bring primary reimbursement into closer alignment with specialty practice, then more physicians may go into primary care practice. Without this change, there will continue to be a primary care physician shortage."<sup>43</sup>

According to the most recent data available from the Health Resources and Services Administration (HRSA), Connecticut has a professional shortage<sup>44</sup> of primary care (72 full time equivalents), dental (75) and mental health (38) practitioners on a statewide basis (Figure 2.2).

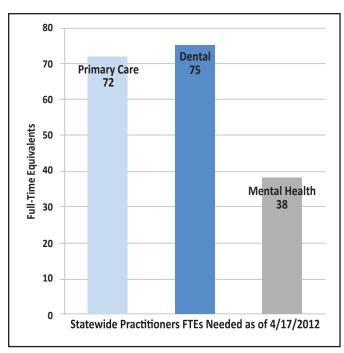


Figure 2.2: Connecticut Health Care Practitioner Full Time Equivalent (FTE) Shortages

Source: U.S. Dept. of Health and Human Services, Health Resources and Services Administration (HRSA)

Furthermore, a 2011 Robert Wood Johnson Foundation report, *Primary Care Health Workforce in the United States*, <sup>45</sup> indicated that the supply of physicians is not the only determinant of access to quality care. The report concludes that "An adequate number of health care providers is necessary, but not sufficient, to provide access to high quality care." The report asserted that health care policy makers should focus their efforts on the geographic maldistribution of primary care providers to improve patient access and outcomes rather than looking exclusively at practitioner volumes. It will also be important to examine and determine the optimal mix of primary care providers (MD/APRN/PA) for Connecticut's health care needs.

<sup>42</sup>Holm, et al., 23.

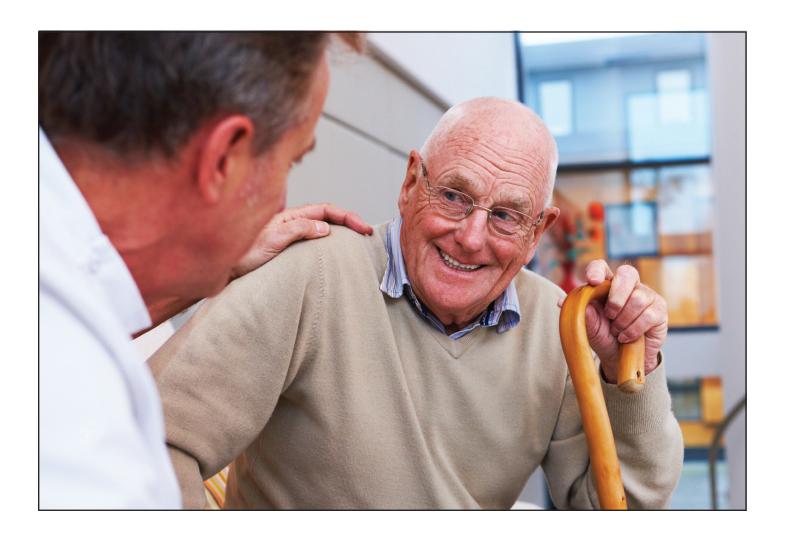
<sup>&</sup>lt;sup>43</sup>Holm, et al.

<sup>&</sup>lt;sup>44</sup>Further information on Health Professional Shortage Areas can be found at the U.S. Department of Health and Human Services HRSA Web site: <a href="http://bhpr.hrsa.gov/shortage/">http://bhpr.hrsa.gov/shortage/</a>

<sup>&</sup>lt;sup>45</sup>Dower, C., O'Neil, E. (2011). Primary care health workforce in the United States. *Robert Wood Johnson Foundation, Research Synthesis* Report No. 22. 1-20.

# 2.3.5 HEALTH PROFESSIONAL SHORTAGE AREA (HPSA) DESIGNATIONS

Although Connecticut has an adequate number of health care providers statewide, 106 areas within the state (affecting all counties and tribal nations) have been identified as Health Professional Shortage Areas (HPSAs). HPSAs are designated by the Health Resources and Services Administration (HRSA) as having shortages of primary medical care, dental or mental health providers, and are further classified as being a specific geographic area, a specific population group, or in some cases, a specific facility.<sup>46</sup> Connecticut currently has 39 Primary Medical Care, 40 Dental and 27 Mental Health shortage areas. Thus, even with an adequate overall supply of health care providers,<sup>47</sup> their practice focus and distribution throughout Connecticut may not be optimal. Additional details on HPSAs are included in Chapter 9.



<sup>&</sup>lt;sup>46</sup>Further information on Health Professional Shortage Areas can be found at the U.S. Department of Health and Human Services HRSA Web site: <a href="http://bhpr.hrsa.gov/shortage/">http://bhpr.hrsa.gov/shortage/</a>

<sup>&</sup>lt;sup>47</sup>Maine's 2008-2009 State Health Plan states that New England exceeds U.S. averages on available physicians – CT has 156 primary care docs per 100,000 (2006).