9.0 PRIMARY CARE

9.1 RELATIONSHIP TO CERTIFICATE OF NEED

Most primary care services provided in facility settings are licensed as Outpatient Clinics. Connecticut General Statutes Section 19a-639(10) provides the definition of a health care facility for Certificate of Need purposes. Outpatient Clinics are not contained within that definition. Consequently, Outpatient Clinics do not require Certificate of Need approval. In addition, primary care services provided by a licensed private practitioner do not require Certificate of Need approval. However, as provided by subsection (a) of Section 19a-638, the termination of hospital operated primary care services generally require Certificate of Need authorization.

9.2 SERVICE INTRODUCTION

This section of the plan contains information on what primary care facilities and services, especially safety net services, are readily available and accessible in local communities statewide; identifies gaps in services and unmet need; provides an inventory of on-going public and private initiatives to address gaps in services and unmet need; and recommends areas that may benefit from a policy change or further investigations for future versions of the Plan.

For the purposes of this Plan, primary care is that care provided by licensed independent practitioners specifically trained for and skilled in comprehensive first contact and continuing to address personal health care needs including but not limited to: prevention, care of chronic illness and routine care and not limited by problem origin (biological, behavioral, or social), organ system or diagnosis.174

Identifying primary care providers and describing the nature of their services are integral to defining primary care.175 Designing a comprehensive system of primary care in which the role of other health care professionals is clearly defined facilitates efficient allocation of resources and increases access to quality and effective care.

Most health care practitioners in any setting provide some primary care related service. But a primary care practitioner is distinctly one with whom a patient makes first contact and serves as a personal clinician who continues to diagnose, treat and educate the patient to meet most of his/her health care needs and maintain wellness in an outpatient setting within the community. The care is not episodic in nature and involves the widest scope of health care. In Connecticut, the legislatively mandated Statewide Primary Care Access Authority (SPCAA), in its 2010 report to the General Assembly, defined primary care practitioners to include physicians with specialties in family practice, internal medicine, pediatrics, obstetrics and gynecology, homeopathic medicine and naturopathy, advance practice registered nurses, licensed nurse midwives, and physician assistants.176

The range of health care conditions a primary care practitioner may diagnose, treat and educate patients on and the associated services provided to patients includes:

- Comprehensive preventive care such as infant/child, adolescent and adult preventative care, immunization services, screenings for cancers, health promotion counseling including injury prevention, tobacco/drug counseling, heart disease prevention;
- Treatment of common acute illnesses such as those that are urologic or gynecologic in nature or infectious;
- Providing ongoing treatment of common chronic diseases that may be cardiovascular, rheumatoid arthritis, acne, gastrointestinal or genitourinary;
- Providing on-going treatment for common behavioral problems such as depression, anxiety disorder, substance abuse and other problems such as stress and grief reaction; and
- Other services such as community/public health services, consultant care coordination, comprehensive health assessment and patient education.177

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9.3 OVERVIEW OF PRIMARY CARE DELIVERY IN CONNECTICUT

People with health insurance coverage are most likely to access primary care services on a regular basis. For the underinsured and uninsured, with the enactment of the PPACA, it is predicted that with the planned coverage expansion through Medicaid and premium assistance, there will be an increase in primary care services accessed. This, together with an increasingly aging population in poor health, implies rising demand for health care services in Connecticut.178

At least 89% of Connecticut’s 3.5 million residents had health insurance coverage in the last 5 years.179 Generally, health insurance coverage was either privately funded, i.e., employer-sponsored (67%), or individually or directly purchased (10%), or government-funded, i.e., Medicare, Medicaid or Military (26%).180 Most health care plans available through these sources require beneficiaries to have a personal primary care practitioner to diagnose, treat, educate and coordinate the services they access under the plans. The majority of the insured, particularly the privately insured and those with Medicare coverage, obtain their care in primary care practitioner offices or practices. In contrast the uninsured and Medicaid beneficiaries generally obtain their primary care services at a safety net provider facility such as a community health center, outpatient clinic or hospital emergency department.181

For purposes of this Plan, a primary care practice is one that employs at least one primary care practitioner who is responsible for all the primary care needs of all the practice’s patients. In Connecticut, a primary care practice, office, clinic or group may be operated under a clinician’s license, the license of a general or children’s general hospital or a broad outpatient clinic license category.182 DPH is the licensing authority and does not have a separate license category for primary care practices or clinics.

9.4 PRIMARY CARE SERVICES PROVIDED IN FACILITY SETTINGS

Below are descriptions of the primary care practice settings and the populations they serve in Connecticut. Where available, office locations, hours of operation, populations served and services provided are listed for each setting in the companion document, the Inventory of Health Care Facilities, Services and Equipment.

The five main categories of primary care facilities covered in this section based on DPH health care provider license types or patient populations are:

1. Primary care practitioner offices/practices;
2. Primary care providers licensed as outpatient clinics;
3. Hospital operated primary care centers/clinics;
4. Limited primary care services providers; and

9.4.1 PRIMARY CARE PRACTITIONER OFFICES/PRACTICES

Over two-thirds of the US population receives their primary care services from a primary care practitioner (PCP) who operates in a solo office/practice, in a single-specialty or multispecialty group practice.183 Most of these offices/practices are operated under the individual license of a clinical practitioner as permitted by law. A few practitioners operate urgent care/walk-in, retail or free clinics, each of which is discussed later in this section.

178 According to U.S. Census Bureau’s population projections, the number of Connecticut residents 65 and over is expected to grow from 13.8% of the total population in 2000 to 21.5% in 2030. In 2010, residents in the same age group were three times more likely than the general population to be in poor to fair health.
180 Percentages do not add up to 89% because individuals may have multiple sources of health insurance coverage.
At the time of publication of this Plan, there was insufficient information on non-hospital related primary care practitioner practices available to DPH. Two potential sources for obtaining the information are through a statewide survey or an all-payer claims database (APCD). The DPH Connecticut Primary Care Office (PCO)\textsuperscript{184} is in the process of administering a survey of primary care practitioners. Also, the Governor has created a multi-payer claims data workgroup which is in the process of developing an APCD for Connecticut. The legislature also lent support to this concept recently by passing Public Act 12-166, which requires the Office of Health Reform and Innovation (OHRI) to plan, implement and administer the APCD.

Each of the health insurance plans authorized by the Connecticut Department of Insurance (DOI) to be sold in the state has a dedicated phone line and/or a web-enabled database to assist beneficiaries in locating primary care practitioners and other health care practitioners.

Population served: Mostly people with health insurance coverage or the self-pay. Some practices offer discounted or free services to the underinsured, uninsured and/or Medicaid beneficiaries. Potential patients have to contact individual practices to determine if they are accepting new patients, a particular health insurance plan or payment type.

To access: To purchase a health plan and/or find a primary care practitioner in its network, visit the DOI’s webpage http://www.ct.gov/cid/cwp/view.asp?a=1272&Q=480608 for a current list of health plans and contact information.

9.4.2 PRIMARY CARE PROVIDERS LICENSED AS OUTPATIENT CLINICS

The DPH’s license category Outpatient Clinics Operated by Corporations or Municipalities covers a wide range of health care facilities. This license covers outpatient clinics, other than those operated by a hospital, which provide ambulatory medical or dental care for diagnosis, treatment and care of persons with chronic or acute conditions which do not require overnight care, or for preventive and maintenance of health services for well persons.\textsuperscript{185} This section identifies the facilities that are primary care providers as defined in this Plan.

9.4.2.1 Community Health Centers/Federally Qualified Health Centers (CHCs/FQHCs)

Community health centers (CHCs) are licensed outpatient clinics. Under the State’s administrative regulations and Public Health Code (PHC), federal statutes and regulations, CHCs are defined as public or private non-profit health care facilities located in areas which have demonstrated medical need based on geography, demographics and economic factors. Typically, CHCs are safety net providers and serve as access points especially for the poor, medically underserved populations and areas, and those at risk for poor health status. CHCs provide care to all patients regardless of health insurance status, on a sliding fee schedule based on federal poverty level, family income and size. To ensure that a CHC is responsive to the needs of the community, it is mandated to be governed by a community board of directors, the majority of whom are required to be active registered clients of the center and representative of the race and ethnicity of the population(s) served.

CHCs provide comprehensive, culturally appropriate primary care, behavioral health and/or dental health care services in medically underserved areas, and enabling\textsuperscript{186} services in some locations. Core services that CHCs provide directly to patients or through contractual or cooperative agreements include:

- preventive and primary care;
- diagnostic services (lab and x-ray);
- family planning;
- prenatal and perinatal care;
- well child care and immunizations;
- screening for elevated blood levels, communicable diseases, and cholesterol;
- eye, ear and dental screening for children;
- preventive dental services;
- emergency medical and dental services;
- hospitalization; and
- pharmacy services.

\textsuperscript{184}A description of PCO and its responsibilities are provided in a later section of this chapter.


\textsuperscript{186}For example, translation, transportation, case management, staff training, and education and health promotion services.
A CHC that receives grants under Section 330 of the Federal Public Health Service Act and is certified to receive cost-based reimbursements for treating Medicare and Medicaid patients is referred to as a federally qualified health center (FQHC). A FQHC look-alike meets all the requirements as grant-funded FQHC but does not receive Section 330 federal grant funding.\footnote{Designated by the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Bureau of Primary Health Care (BPHC) and the Centers for Medicare and Medicaid (CMS).}

There are 14 FQHC corporations in Connecticut.\footnote{United Community and Family Services in Norwich does not receive Section 330 grant funds.} Except for Community Health Center, Inc., the remaining FQHCs are also members of the state's Primary Care Association (PCA), the Community Health Center Association of Connecticut (CHCACT). In addition to core CHC services the federal government requires FQHCs to offer:

- Behavioral health care;
- Cancer and other disease screening;
- Referrals to specialty care and hospital services;
- Medicaid eligibility services;
- Services that enable patients to access services e.g. transportation, translation, case management, home visitation and health education;
- After hours coverage including early morning, evening and weekend hours;
- Written contractual agreements and referral agreements with providers of required services the center does not provide;
- Physical location near a major road or public transportation for easy access;
- Appropriate mix of services for target population;
- Establishment and regular update of health care goals and objectives to address priority needs of the target population; and
- A medical director and appropriately licensed clinicians.

**Population served:** CHCs accept all patients, with particular focus on poor, underserved, persons at risk for poor health, Medicaid beneficiaries, migrant farmers, the homeless, or the uninsured. CHCs served as the family doctor and medical home for over 8% of the state's population in 2010.

In 2010, federally supported health center corporations with their 175 delivery sites served almost 300,000 patients. The patients were low-income residents, that is the poor below 100% (67%) and 200% (94%) of federal poverty levels; the uninsured (23%); Medicaid beneficiaries (58%); Hispanic/Latinos (46%); African Americans (26%); rural residents (23%); over 1,300 seasonal farmworkers; and 15,000 homeless patients.\footnote{National Association of Community Health Centers. (2010). *Connecticut Health Center Fact Sheet.* Retrieved from http://www.nachc.com/client/documents/CT10.pdf}

**To Access:** See Inventory Table 22 for the locations of Connecticut's CHC delivery sites.

### 9.4.2.2 School-Based Health Centers (SBHCs)

School based health centers (SBHCs) are free-standing medical centers, licensed by the Connecticut DPH as outpatient clinics or as hospital satellite clinics, located within or on the grounds of schools. Often, a school may partner with a community health center, hospital or local health department to operate the clinic.\footnote{U.S. Department of Health and Human Services, Health Resources and Administration Services. (2012). *School Based Health Centers.* Retrieved from http://www.hrsa.gov/ourstories/schoolhealthcenters/} SBHCs are safety net providers operated under the guidance of a medical director and staffed by a multidisciplinary team with expertise in caring for children and/or adolescents. The most common disciplines staffing SBHCs include nurse practitioners, physician assistants, physicians, social workers, dentists, dental hygienists, dental assistants, outreach workers, nutritionists and health educators.\footnote{Connecticut School Based Health Centers. 2006-2007 Annual Report. (2009, April). *Healthy Students Make Better Learners.*}

SBHCs offer comprehensive services to address medical, mental and oral health needs of students in grades pre-K through 12. All students are eligible but require written parental permission to access services. Services are available during school hours throughout the academic year, from September through June, excluding weekends, holidays and school vacations. Some sites provide services year-round.
All SBHCs provide, at the minimum, primary and preventative care services in accordance with federal and American Academy of Pediatrics standards. They include:

- Physical exams/health assessments/screenings for health problems;
- Diagnosis and treatment of acute illness and injury;
- Diagnosis and management of chronic illness;
- Immunizations;
- Health promotion and risk reduction;
- Nutrition and weight management;
- Reproductive health care;
- Laboratory tests;
- Prescription and/or dispensing of medication for treatment; and
- Referral and follow-up for specialty care that is beyond the scope of services they provide.

SBHCs also provide mental health services, social services, and health education in accordance to the following prescribed standards;

1. Mental Health/Social Services\(^{192}\): Services must be provided in accordance with nationally recognized and accepted standards such as the Child Welfare League of America or the National Association of Social Workers, Inc. Other nationally recognized and accepted standards may be utilized as a framework for professional practice with prior DPH approval.

Mental health/social services provided include:

- Assessment, diagnosis and treatment of psychological, social and emotional problems;
- Crisis intervention;
- Individual, family and group counseling or referral for same if indicated;
- Substance abuse and HIV/AIDS prevention;
- Risk reduction and early intervention services;
- Outreach to students at risk;
- Support and/or psycho-educational groups focusing on topics of importance to the target population;
- Advocacy and referral for such services as day care, housing, employment, job training, etc.;
- Consultation to school staff and parents regarding issues of child and adolescent growth and development; and
- Referral and follow-up for care that is beyond the scope of services provided in the SBHC.

2. Health Education Services: Services must be supportive of existing health education activities of state and local education agencies including:

- Consultation to school staff regarding issues of child and adolescent growth and development;
- School staff and parent training regarding issues of importance in target population;
- Individual and group health education; and
- Classroom presentations.

\(^{192}\)Mental health treatment services provided in the school based health center setting is licensed by the Department of Children and Families for services to children seventeen years of age and younger and by the Department of Public Health for adults eighteen years of age and older. Substance abuse treatment services provided in the school based health center setting is licensed by the Department of Public Health. Refer to Chapter 8 for a discussion on behavioral health care.
3. Oral Health Services: Some SBHCs provide oral health on-site or in partnership with community dental programs. If provided, services conform with nationally recognized and accepted standards such as those recommended by the American Academy of Pediatric Dentistry. Other nationally recognized and accepted standards may be utilized as a framework for professional practice, with prior DPH approval. Services may include:

- Screenings;
- Prophylaxis;
- Fissure sealants; behavioral
- Diagnostic X-rays;
- Treatment for carries;
- Simple extractions; and
- Referral and follow-up for care that is beyond the scope of services provided in the SBHC.

There are a total of 121 SBHCs located in 22 towns statewide, serving over 44,000 students annually. Many of these sites receive programmatic funding from DPH.

**Population served:** Students in grades pre-K to 12 authorized by a parent or guardian to access services at the SBHC. SBHCs accept all student patients with particular focus on the poor, the underserved, those at-risk for poor health, Medicaid, children of migrant farmers, the homeless and the uninsured.

**To Access:** See Inventory Table 23 for the location of Connecticut's SBHCs.

### 9.4.2.3 Free Clinics

Free or charitable clinics are tax-exempt facilities licensed by DPH as outpatient clinics and are “volunteer-based, safety net health organizations that provide a range of medical, dental, pharmacy, vision and/or behavioral health services to economically disadvantaged individuals,” predominantly uninsured. While CHCs/FQHCs and hospitals are well known as safety net providers, the contributions of free clinics tend to be overlooked. Free clinics are expected to respond to unmet need not accommodated by safety net providers, even since passage of the PPACA.

Free clinics are mostly independent entities, operating in owned or leased facilities, mostly funded through private charitable donations from civic groups, churches, foundations and business organizations with some affiliated with hospitals. Clinic staff consists of paid employees and volunteers who tend to be physicians, nurses, nurse practitioners, physician assistants, social workers and psychologists.

Free clinics in the state offer scheduled and walk-in appointments to a broad range of quality services that include adult and pediatric medical care, chronic disease management, reproductive health services, screenings and health education, dental care, dispensing medication directly to patients or through local pharmacies, referrals to specialty care, laboratory services and some on/off site testing or procedures.

Connecticut has eight free clinics with 12 provision sites. In 2010, the clinics treated nearly 6,000 patients in over 15,000 visits while operating between 12 and 38 hours per week. Over 600 volunteers, including over 130 primary care providers, staffed the clinics.

**Population served:** The uninsured or underinsured, people with low-income, racial/ethnic minorities, non-citizens, people with low English proficiency and the homeless.

**To Access:** New patients are screened based on insurance status, income, and residency before qualifying to receive care. The locations are shown in Inventory Table 24.

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194 CT Department of Public Health Office of Health Care Access Health Care. *Facilities, Equipment and Services Plan Inventory.*
197 The National Association of Free and Charitable Clinics.
9.4.2.4 Limited or Special Populations Clinics

Also under the DPH outpatient clinic license are 16 health care practices or facilities operated by corporations or municipalities for a limited or special population. The facilities manage a specific condition or set of conditions, including, chronic diseases such as asthma, diabetes or human immunodeficiency virus (HIV). These facilities provide primary care services to specialized populations such as the chronically ill, pregnant women, lesbian, gay, bi-sexual and transgender residents and HIV/AIDS patients. Members of these populations have such special needs or cannot easily access primary care services in other settings either because of their condition or the unavailability/inaccessibility of alternatives. The limited or special populations clinics are included in the Plan to ensure available primary care services are not underrepresented.

**Population served:** An insured or uninsured special or limited population. Potential patients have to contact the facilities directly to determine if the facility is accepting new patients and the accepted sources of payment.

**To Access:** See Inventory Table 24 for the location of limited or special populations’ clinics.

9.4.3 HOSPITAL-OPERATED PRIMARY CARE CENTERS/CLINICS

Hospitals across the state provide a significant amount of primary care services through outpatient clinics, physician-based practices and foundations and rapid or urgent care services (a level below emergency care). Their medical staffs are organized into areas of care, including various primary care disciplines. Some hospitals have specialty services and clinics to address specific primary care needs based on condition or disease processes.

Additionally, hospitals play a vital role in ensuring that all patients have access and education about primary (and, where appropriate, specialty) care services. Hospitals provide all patients who come to the emergency department with assessment and appropriate treatment and needed follow-up care or referral for services. Hospitals are a vital resource for information and assistance in locating ongoing services, including primary care services.

Some primary care practices are hospital owned and operated or are affiliated and may be located on or off hospital campuses. Hospital-affiliated practices have complex relationships with the host hospitals, such as “aligned” but operated under a separate federal tax identification number. Some groups, which have admitting privileges to the hospital but no other direct affiliation, are not covered in this plan.

Services provided at hospital operated primary care clinics may include:

- Comprehensive preventive care (prenatal care, immunizations, cancer screening, infant/child/adolescent/adult/elderly preventive care, physical exams and health assessments);
- Diagnosis and treatment of common acute illnesses;
- Diagnosis and ongoing treatment of chronic illnesses;
- Diagnosis and ongoing treatment of common behavioral health problems;
- Counseling;
- Health promotion;
- Patient education;
- Care coordination; and
- Referrals to other health care professionals.

Of the 22 hospitals that responded to the survey, 12 hospitals provide these primary care services under their hospital license and tax identification number, at 26 on- or off-campus locations. Ten hospitals provide primary care services through an affiliate, such as an aligned physician practice group rather than as departments within the hospital, or do not provide any primary care services.

**Populations served:** Vary from location to location, including all ages, newborns, infants, children, adolescents, adults, elderly, pregnant women, uninsured.

**To Access:** Location and hours of operations for hospital-based primary care offices are provided in Inventory Table 25.

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199 Includes practices such as Western CT Medical Group, Bristol Hospital Multispecialty Group, UConn Medical Group, L&M Physician Association, MidState Medical Group, Norwalk Hospital Physicians and Surgeons and Franklin Medical Group.

200 With the assistance of the Advisory Body’s Primary Care Subcommittee, OHCA administered a survey to all 30 hospitals to identify those that provide primary care services under their hospital licenses and tax identification number.
9.4.4 LIMITED PRIMARY CARE SERVICES PROVIDERS

Health care facilities that provide episodic care and a limited range of primary care services to patients are also under the DPH outpatient clinic license. This category consists of urgent care centers, school infirmaries, clinics operated by municipalities, dental, well-child and family planning clinics. Retail or store-based clinics are limited primary care services providers, but they are not licensed facilities.

9.4.4.1 Urgent Care/Walk-in Clinics

Urgent care/walk-in clinics provide medical diagnosis and treatment for minor illnesses and conditions that do not require immediate attention such as injuries. They may provide vaccinations, physical examinations and ancillary services which may include x-ray and laboratory services. Usually, such clinics offer extended hours beyond the core working hours of 9 a.m. to 5 p.m., unlike primary practitioner offices or practices; do not require an appointment as needed to see a PCP; and provide services with shorter wait periods than usually experienced in a hospital emergency department (ED) for similar conditions. However, urgent care/walk-in clinics are not accessible 24 hours a day and seven (7) days a week and not subject to the Federal Emergency Medical Treatment and Active Labor Act (EMTALA). Urgent care or walk-in clinics provide a limited scope of services, which are episodic in nature compared to full service primary care providers such as PCPs and CHCs. They may be operated under the license of a primary care practitioner, an outpatient clinic, a hospital, or as a hospital satellite. Under State regulations and the Public Health Code, urgent care centers licensed as outpatient clinics must be operated by a medical director and a staff of qualified health care professionals.

Population served: Insured and self-pay patients of all ages with minor illnesses or conditions that do not require immediate attention.

To Access: See Inventory Table 26 for the location of Connecticut licensed urgent care/walk-in clinics. The web link http://www.healthcare311.com/ also provides contact information for a list of urgent care, walk-in clinics and retail clinics in various Connecticut communities.

9.4.4.2 Retail or Store-Based Health Clinics

No retail, store-based, minute or convenience care clinics are licensed as outpatient clinics in Connecticut. They are operated under the individual licenses of clinical practitioners, usually a nurse practitioner or physician assistant, who may or may not have an established relationship with a physician in the community. Retail clinics are usually based in a pharmacy or a supermarket and provide episodic care for the most common diagnoses that do not require immediate treatment (headaches, coughs, fever, nasal congestion and fever) and preventive care such as health screening, vaccinations and physical examinations.

Population served: Insured and self-pay patients of all ages, with minor illnesses or conditions that do not require immediate attention.

To Access: The web link http://www.healthcare311.com/ provides contact information for a list of retail or store based health clinics in Connecticut communities.

9.4.4.3 Licensed Outpatient Clinics Operated by Municipalities

Outpatient clinics operated by municipalities are authorized to provide ambulatory medical or dental care for diagnosis, treatment and care of persons with chronic or acute conditions which do not require overnight care, or medical or dental care to well persons including preventive services and maintenance of health. Currently, the 14 licensed facilities provide limited primary care services to residents of their communities. A list of clinics operated by municipalities and locations are provided in Inventory Table 26.

9.4.4.4 Infirmary Operated by an Educational Institution

Outpatient facilities licensed by DPH as school infirmaries and operated by educational institutions are not the same as school based health centers. Though their scope of services may lend itself to primary care, e.g. asthma, diabetes care

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and observation stays on college campuses and private schools, the care is not comprehensive or continuous and is provided to a limited population. The infirmary license allows a practitioner of the healing arts to provide care, treatment and overnight accommodation to students, faculty and employees for medical conditions that do not require the staff skill level and equipment of a hospital. A list of 19 licensed school infirmaries and their locations is provided in Inventory Table 26.

9.4.4.5 Well Child Clinics

Currently, 15 well child clinics are operated in Connecticut primarily by visiting nurse associations and municipalities. These facilities are licensed by DPH as outpatient clinics. A list of the clinics is provided in Inventory Table 26.

9.4.4.6 Family Planning Clinics

There are 21 family planning clinics licensed by DPH as outpatient clinics. Family planning clinics provide reproductive health care services for males and females, including clinical exams, contraception information and prescriptions, emergency contraception, pregnancy testing and counseling, STD and HIV testing and counseling, and other reproductive health services. Some sites provide pregnancy termination services. A list of the clinics is provided in Inventory Table 26.

9.4.5 FEDERAL GOVERNMENT PRIMARY CARE CLINICS

The federal government operates a small number of facilities that provide health care service to a limited and specific population. Patients include veterans of the United States armed forces, their dependents and survivors, active service men and their dependents residing on military bases; and the federal prison population. The U.S. Veteran Affairs Veterans Health Administration (USVHA) runs the VA Connecticut Healthcare System which has a hospital campus and six community based outpatient clinics that provide a variety of services. The federal government also operates a Naval Branch Health Clinic in Groton and a medical clinic at the Coast Guard Academy in New London. Federally operated facilities are noted here to indicate they are part of the overall health care environment serving residents of the state; however, no additional information is provided on them in this plan.

9.5 EVALUATION OF UNMET NEED AND GAPS IN SERVICES

Identifying the settings or access points for primary care services is important for policymaking on health status assessments and improvements. To evaluate unmet need and identify gaps in services, it is equally important to know the capacity available relative to the population, how appropriate, timely and accessible the services are, and the outcome of care.

In 2010, Connecticut ranked 12th in the nation with 89.9 primary care physicians active in patient care per 100,000 of the state’s population, compared to 79.4 for the nation. In 2012, the number of primary care practitioners with an unexpired Connecticut license was 13,050 or 364.4 per 100,000 of the population (Table 9.1).

The SPCAA also noted in its report that the problem is not how many primary care practitioners there are but how they are distributed throughout the state relative to the population and it health care needs.

Together, these data support the SPCAA 2010 observation that the overall supply of primary care practitioners in Connecticut is adequate. However, most of the uninsured and under-insured underutilize health care services, because they delay accessing unaffordable but needed services. It is generally accepted that the PPACA health insurance coverage expansion will likely lead to new and increased demand for primary care services as discussed earlier.

The SPCAA also noted in its report that the problem is not how many primary care practitioners there are but how they are distributed throughout the state relative to the population and its health care needs. Other considerations are how many practitioners in direct patient care are accepting new patients and/or Medicaid-covered patients, the wait times for appointments, and availability and access to vulnerable populations residing in urban and rural towns in particular.

The DPH online licensing database, eLicense, provides an inventory of licensed primary care practitioners; however, the practitioners do not uniformly provide information on their place of work and whether or not they are actively providing direct patient care in the state. Also, eLicense does not provide the specialties of the PAs and APRNs. This makes it difficult to determine the distribution of active clinical practitioners providing direct patient care, to identify the gaps in services and unmet need by geographic areas. Counting unexpired licenses leads to an overestimation of the supply or capacity, since the number includes out-of-state residents and those not practicing or not in direct patient care.

Through the HPSA/MUA designation program, the PCO has identified areas, populations and health care facilities in all eight Connecticut counties experiencing shortages in primary care, dental and mental health professionals and indicating residents’ reduced access to primary care services. As of April 2012, there were 106 HPSA designations in all or part of 99 mostly poorer communities with, a majority located in the three most populous counties, Fairfield, Hartford and New Haven (Table 9.2).

Table 9.1: Number of Primary Care Practitioners with an Unexpired Connecticut License, August 2012

<table>
<thead>
<tr>
<th>Primary Care Practitioner</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physicians (M.D. and D.O.)*</td>
<td>7,302</td>
</tr>
<tr>
<td>1. Internal Medicine</td>
<td>4,310</td>
</tr>
<tr>
<td>2. Family Practice</td>
<td>696</td>
</tr>
<tr>
<td>3. Pediatrics</td>
<td>1,260</td>
</tr>
<tr>
<td>4. Obstetrics and Gynecology</td>
<td>748</td>
</tr>
<tr>
<td>5. Homeopathic Medicine</td>
<td>9</td>
</tr>
<tr>
<td>6. Naturopathic Physicians</td>
<td>279</td>
</tr>
<tr>
<td>Licensed Nurse Midwives (LNM)</td>
<td>217</td>
</tr>
<tr>
<td>Advanced Practice Registered Nurse (APRN)</td>
<td>3,664</td>
</tr>
<tr>
<td>Physician Assistants (PA)</td>
<td>1,867</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13,050</strong></td>
</tr>
</tbody>
</table>

Source: DPH online practitioner license database at https://www.elicense.ct.gov/

*About 1% (or 76) physicians are licensed in more than one primary care specialty
Table 9.2: Number of Medically Underserved Areas or Population (MUA/P) Shortage Designations and Health Professional Shortage Areas (HPSA) by Connecticut County, April 2012

<table>
<thead>
<tr>
<th>County</th>
<th># of MUA/P Designations</th>
<th># of HPSA Designations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dental</td>
<td>Primary Care</td>
</tr>
<tr>
<td>Fairfield</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Hartford</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Litchfield</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Middlesex</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>New Haven</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>New London</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Tolland</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Windham</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Tribal Nation</td>
<td>a</td>
<td>1</td>
</tr>
<tr>
<td>Connecticut</td>
<td>29</td>
<td>40</td>
</tr>
</tbody>
</table>

Source: CT DPH Primary Care Office

*Tribal nations have their own special designations

The ability of a specific area to meet demand with existing capacity can be measured by considering the ratio of its rate of uninsured to number of primary care physicians per 100,000 of an area population. A lower ratio than the state implies a county has a better ability to meet demand increases vis-à-vis the supply of practitioners. Conversely, a higher ratio implies reduced ability to absorb increases in demand for primary care services.

Table 9.3: Ratio of Primary Care Physicians per 100,000 of Population to Uninsured Rate by County, 2010-2011

<table>
<thead>
<tr>
<th>County</th>
<th>Population Density People/Mile</th>
<th>% Racial/Ethnic Minority</th>
<th>% Medicaid Beneficiaries</th>
<th>% Uninsured</th>
<th>Primary Care Physician (PCP)/100,000</th>
<th>Ratio of Uninsured Rate to PCP/100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairfield</td>
<td>1,430.2</td>
<td>30.2</td>
<td>11.9</td>
<td>13.4</td>
<td>129.93</td>
<td>0.1166</td>
</tr>
<tr>
<td>Hartford</td>
<td>1,192.2</td>
<td>30.2</td>
<td>17.6</td>
<td>11.8</td>
<td>130.04</td>
<td>0.1019</td>
</tr>
<tr>
<td>Litchfield</td>
<td>204.7</td>
<td>7.6</td>
<td>11.0</td>
<td>10.7</td>
<td>77.34</td>
<td>0.1503</td>
</tr>
<tr>
<td>Middlesex</td>
<td>444.5</td>
<td>12.0</td>
<td>9.9</td>
<td>10.8</td>
<td>93.74</td>
<td>0.1303</td>
</tr>
<tr>
<td>New Haven</td>
<td>1,396.0</td>
<td>29.3</td>
<td>18.1</td>
<td>11.5</td>
<td>143.84</td>
<td>0.0888</td>
</tr>
<tr>
<td>New London</td>
<td>401.5</td>
<td>18.4</td>
<td>13.9</td>
<td>10.1</td>
<td>75.01</td>
<td>0.1391</td>
</tr>
<tr>
<td>Tolland</td>
<td>361.3</td>
<td>11.0</td>
<td>7.8</td>
<td>11.4</td>
<td>69.09</td>
<td>0.1795</td>
</tr>
<tr>
<td>Windham</td>
<td>228.3</td>
<td>12.5</td>
<td>18.7</td>
<td>11.1</td>
<td>57.85</td>
<td>0.1856</td>
</tr>
<tr>
<td>Connecticut</td>
<td>738.1</td>
<td>22.4</td>
<td>17.0</td>
<td>11.9</td>
<td>105.5</td>
<td>0.1126</td>
</tr>
</tbody>
</table>

Source: HRSA Area Resource File 2010-2011 data and U.S. Census 2010*

The three most populous counties, Fairfield, Hartford and New Haven, which have the highest rate of uninsured, also have the highest number of PCPs per 100,000 population and therefore the lowest ratios (Table 9.3). In contrast, the less populous Windham, Tolland and Litchfield Counties with the largest share of rural communities in the state, have relatively lower number of PCPs per 100,000 population and may experience additional access constraints to already strained primary care systems. This is further compounded, especially in Windham County, by a high rate of Medicaid beneficiaries. However, the physician to population estimates do not include all primary care providers (in particular, LNM, APRNs and PA) the number of which have grown 19%, 54% and 85%, respectively, since 2007, and are likely to have a significant impact.

Potentially avoidable ED visits and hospitalizations rates provide additional insight into the quality of the outpatient care system and are used in assessing availability of timely and effective primary care and disease management. In 2008, one in ten hospitalizations for 255,000 patient days and $1.2 billion in charges could potentially have been avoided with timely outpatient care. Additionally, in 2010, as in prior years, nearly one-half of ED visits could have been avoided through timely treatment or management in a primary care setting such as a doctor’s office, FQHC or urgent care center. Even when residents have a usual source of primary care, when there are barriers to timely access, the EDs become the alternative source of care.

Hartford and New Haven Counties have higher rates of potentially avoidable ED visits and preventable hospitalizations than the state as a whole despite their relatively higher PCP per 100,000 population rates, Tables 9.3 and 9.4. As further proof of a constrained system, Windham County also had the second highest rate of avoidable ED use in the state; New London County had the highest. These areas have relatively high rates of racial/ethnic minority and elderly populations, are relatively low-income and are either rural or urban.

### Table 9.4: Rates of Potentially Avoidable Emergency Department Visits and Preventable Hospitalizations by County

<table>
<thead>
<tr>
<th>County</th>
<th>2010 Avoidable ED Visits</th>
<th>Rate/1,000</th>
<th>2008 Preventable Hospitalizations</th>
<th>Rate/10,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairfield</td>
<td>136,845</td>
<td>149.3</td>
<td>10,680</td>
<td>120.8</td>
</tr>
<tr>
<td>Hartford</td>
<td>177,616</td>
<td>198.7</td>
<td>12,636</td>
<td>146.1</td>
</tr>
<tr>
<td>Litchfield</td>
<td>25,214</td>
<td>132.8</td>
<td>1,931</td>
<td>102.6</td>
</tr>
<tr>
<td>Middlesex</td>
<td>26,374</td>
<td>159.2</td>
<td>1,728</td>
<td>106.9</td>
</tr>
<tr>
<td>New Haven</td>
<td>161,066</td>
<td>186.7</td>
<td>13,984</td>
<td>167.8</td>
</tr>
<tr>
<td>New London</td>
<td>61,906</td>
<td>225.9</td>
<td>3,535</td>
<td>136.3</td>
</tr>
<tr>
<td>Tolland</td>
<td>19,128</td>
<td>125.3</td>
<td>1,321</td>
<td>89.9</td>
</tr>
<tr>
<td>Windham</td>
<td>23,827</td>
<td>201.2</td>
<td>1,530</td>
<td>132.5</td>
</tr>
<tr>
<td><strong>Connecticut</strong></td>
<td><strong>631,977</strong></td>
<td><strong>176.8</strong></td>
<td><strong>47,345</strong></td>
<td><strong>137.1</strong></td>
</tr>
</tbody>
</table>

Source: "Connecticut Hospital Association Chime, Inc. Emergency Department Data"  
"CT DPH Office of Health Care Access Acute Care Inpatient Discharge Database System"

#### 9.6 PRIMARY CARE FACILITIES AND AVOIDABLE ED VISITS

Despite a concentration of primary care centers for the poor and medically underserved and the existence of hospital-operated primary care services, urban core and periphery cities (notably Stamford, Bridgeport, Waterbury, New Britain, Hartford, Meriden, New London and Groton) have the highest incidences of avoidable ED visits per 1,000 (Figure 9.1). These rates far exceed the state average rate of 416.3 visits per 1,000 residents. Certain areas of the state, largely concentrated in Litchfield and New London Counties and mostly rural, also have higher incidences of avoidable ED use rates per 1,000 residents than the state in general. There are few or no primary care centers alternatives in these areas. These two counties also have a reduced ability to meet demand for primary care services with the existing supply of primary care physicians (Table 9.3). A high proportion of residents without a usual source of care increases the likelihood of ED visits for non-emergent conditions. According to a New London County health assessment, New London and Norwich residents have the highest percentages of residents without a usual source of care.

The reasons for the relatively higher avoidable ED utilizations rates may vary from area to area. Additional investigation is required to identify the exact reasons and the impact of coverage expansion from PPACA to determine the appropriate methods and policies to implement in each area to reduce these rates.

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Figure 9.1: Primary Care Centers and Avoidable ED Use Per 1,000 Residents

Avoidable ED Visits in FY 2010 for Towns that Exceed Average State Rate of 416.3 Visits per 1,000 Persons

Primary Care Facilities
- Hospital Primary Care Services
- Community Health Centers
- School Based Health Centers

Prepared June 2012 DHP OHCA
Source: CHIME ED Database, FY 2010 and DPH Licensure
In the last several years, both public and private entities explored and researched primary care issues and concerns in the state and suggested or implemented initiatives to address identified problems. Highlights of some of the initiatives and programs designed to address primary care service needs to fill the gaps in the system are given below.

9.7.1 DEPARTMENT OF PUBLIC HEALTH - CONNECTICUT PRIMARY CARE OFFICE

DPH Primary Care Office (PCO) was created to improve the health of Connecticut's residents living in underserved areas, through assessment, planning, and assistance; and to increase access to primary care providers for medical, dental, and mental health services. The PCO identifies trends and develops strategies to address primary-care-related deficiencies through in-depth research and analyses of the healthcare delivery system and the populations served.

The PCO works with communities to identify geographic areas, population groups and health care facilities experiencing critical shortages of primary care, dental and mental health providers, in accordance with the Federal Health Resources and Services Administration (HRSA) Shortage Designation Branch (SDB) guidelines for Health Professional Shortage Area (HPSA) designations. The PCO provides information about the designation process; technical assistance to individuals and health care organizations/facilities preparing designation applications; identifies areas with underserved populations who have limited access to health professionals; and develops and submits applications to the federal government.

It is the PCO's goal to ensure that Connecticut recruits and retains highly qualified primary care professionals throughout the state. Working with HRSA, the PCO serves as the point of contact for many federal and state workforce assistance programs, designed to help attract new and experienced health professionals of various disciplines to join Connecticut's healthcare provider community. The PCO collaborates with the state's Primary Care Association, the Community Health Center Association of CT (CHCACT), and the coordinator of the Student/Resident Experiences and Rotations in Community Health (SEARCH) program which places students and residents at the FQHCs in the state.

9.7.2 DEPARTMENT OF PUBLIC HEALTH - OFFICE OF ORAL HEALTH

There is an integral relationship between oral health and general health, including associations between chronic oral infections and diabetes, osteoporosis, heart and lung conditions, and certain adverse pregnancy outcomes. Oral diseases are progressive and cumulative, and can affect economic productivity. Oral health disparities exist across population groups at all ages, including dental caries (tooth decay), periodontal or gingival diseases, oral and pharyngeal cancer, and conditions resulting from the side effects of over-the-counter drugs.

The DPH Office of Oral Health (OOH) was established to coordinate and direct State and national dental public health programs activities in the state to: serve as a chief advisor on oral health issues; plan, implement and evaluate oral health programs within the state; and promote population-based approaches to improving the oral health of Connecticut's residents. The OOH's three main objectives are assessment, policy development and assurance. These are accomplished by implementing an oral health surveillance system for disease detection, and policy formulation and evaluation; providing leadership and collaborating with community partners to identify and implement solutions to address oral health needs; informing and empowering the public to access quality oral health services; and promoting laws and regulations that protect Connecticut residents' overall health and well-being.

Initiatives and programs OOH has implemented or partnered with a coalition of stakeholders to implement include:

1. Develop and publish the first Oral Health Improvement Plan of Connecticut;
2. Collaborate with the PCO to survey dentists to identify dental HPSAs in Connecticut;
3. The Home by One Program;

Additional information on PCO is available at http://www.ct.gov/dph/cwp/view.asp?a=3138&q=388118
4. Establish the Task Force on Oral Health for Older Adults to develop actionable strategies to improve oral health of older adults; and

5. Conduct the Every Smile Counts oral health surveillance system to assess the oral health status of Connecticut pre-school and elementary school children, and vulnerable older adults.

**9.7.3 CONNECTICUT ORAL HEALTH INITIATIVE**

The Connecticut Oral Health Initiative (COHI) is a statewide oral health advocacy organization which addresses the needs of all Connecticut residents focusing on the underserved. COHI seeks “broad system change that will address the inequities in the state’s oral health care policy, access to care, and the service delivery model.”

**9.7.4 THE STATEWIDE PRIMARY CARE ACCESS AUTHORITY**

The Connecticut General Assembly established the Statewide Primary Care Access Authority (SPCAA) for a 4-year term beginning August 2007 to develop: an inventory of the state’s existing primary care infrastructure; a system that could serve the primary care needs of the state; and an implementation and evaluation plan for the new system.

SPCAA’s 2010 Interim Report included interim recommendations to improve and sustain a vital primary care clinical workforce and primary care system in the state to fulfill all residents’ primary care needs “regardless of insurance status, geographic location, health status, or demographic characteristics.”

1. Support development of patient centered medical homes:
   - Financial support for non–FQHC practices seeking PCMH (Primary Care Medical Home) recognition.
   - Financial support modeled after the “regional extension center” model to coach and train practices in transformation to the PCMH model.

2. Enhance efforts to secure timely, on-going primary care workforce data:
   - Mandatory on-line electronic licensure renewal for all MDs, NPs, PAs, dentists.
   - Implement full survey at re-licensure, using data set developed by SPCAA and approved by DPH.
   - Direct DPH to devote appropriate resources to analyze submitted data and report to legislature annually.
   - Mandate annual report by Dean of UCONN School of Medicine on number and percent of graduating students choosing primary care residency.

3. Invest in sustained strategies to improve recruitment and retention of primary care providers to practices in Connecticut:
   - Designate a primary care healthcare workforce office at the State level charged with continually monitoring workforce adequacy, and primary care access across Connecticut.
   - Maximize efforts to recruit NHSC scholars and Loan Repayment providers to CT.
   - Implement key recommendations of the Institute of Medicine’s Future of Nursing report that impact primary care.
   - Leverage federal funding opportunities to develop new and expanded access points for primary care in schools, public housing nurse managed health centers, and FQHCs.

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212 Connecticut Public Act 07-185.

4. Address existing barriers to efficient primary care practice:
   • Remove prohibitions against non-licensed personnel administering medication in the primary care setting and allow medical assistants, under the willing supervision of licensed health care providers, to administer routine immunizations and vaccines.
   • Establish Medicaid pilot to provide transition care to enrollees admitted to hospital and monitor impact on re-hospitalization for Medicaid enrollees relative to other populations.

5. Expand primary care capacity through investment in additional delivery sites, particularly in underserved areas:
   • Support continued development of school based health centers and community health centers.
   • Support public and private colleges and community organizations in securing grant funding for education and training at both pre-licensure and post-licensure level.

6. Promote greater integration of primary care and mental/behavioral health:
   • Align reimbursement with primary care.
   • Modify billing systems.

7. Establish an “all payer claims” database (APCD) for Connecticut and enroll the State in the All Claims Database Council system:
   • Specifically, track indicators for Obesity, Ambulatory sensitive admission to hospital, ER utilization, patient experience/satisfaction.
   • Mandate annual report card to legislature on measures of health status of Connecticut’s population.

9.7.5 COMMUNITY HEALTH CENTER ASSOCIATION OF CONNECTICUT

The Community Health Center Association of Connecticut is a non-profit service organization that supports the clinical and administrative operations of its member community health centers across Connecticut. It offers advocacy, program administration and technical assistance services to its member health centers. Its mission is to enable federally qualified health centers to provide access to the highest quality health care and social services to Connecticut’s underserved populations through a joint initiative with the State to increase levels of service, extend hours of operations, enhance facilities, acquire state-of-the-art equipment and recruit qualified physicians and medical personnel.214

9.7.6 SCREENING, BRIEF INTERVENTION, REFERRAL AND TREATMENT (SBIRT)

The Connecticut Screening, Brief Intervention and Referral to Treatment Program is a private-public partnership between the Connecticut Department of Mental Health and Addiction Services, University of Connecticut Health Center, the Community Health Center Association of Connecticut and 9 federally qualified health centers. Ten Health Educators work at each of the participating health centers.

The purpose of the program is to increase identification and treatment of adults, ages 18 and older, who are at-risk for substance misuse or diagnosed with a substance use disorder through the implementation of services at health centers statewide. It also furthers the linkages between primary care and behavioral health care at health centers and partnering substance abuse treatment agencies.

9.7.7 THE CONNECTICUT CENTER FOR PRIMARY CARE215

In 2002, ProHealth Physicians founded the non-profit Connecticut Center for Primary Care to preserve and strengthen the delivery of primary medical care services and the health of communities. Its mission is primary care research, translation of research into practice, quality improvement and patient safety, transforming the Connecticut primary care system, catalyzing the care coordination of its various elements, and sustaining change. It is also involved in the CareConcepts initiative to improve the process of chronic illness care in primary care practices and clinical outcomes.

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9.7.8 CONNECTICUT ASSOCIATION OF SCHOOL BASED HEALTH CENTERS  

The Connecticut Association of School Based Health Centers is an advocacy and networking organization committed to increasing access to quality health care for all children and adolescents in Connecticut schools. It advocates on behalf of school based health centers across the state as a vital part of the safety net for children. The Association studies and reports on obesity, asthma, immunization programs and mental health. Its Oral Health Improvement Project provides outreach and education to increase the number of SBHCs that have an oral health component. They also partner with other clinics or participate in initiatives to provide dental services through provider education, to teach child and adolescent clients on the importance of oral health and oral health habits.

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