# Chapter 1 CURRENT HEALTHCARE ENVIRONMENT

In the years since publication of the 2014 Supplement, the state of Connecticut has continued to advance prevention initiatives focused on sustaining and supporting enrollment in the state-run health insurance exchange, expanding the primary care and public health workforce, strengthening chronic disease management initiatives, and promoting healthy lifestyles through programs such as tobacco cessation and obesity prevention. The following provides an update regarding changes in the healthcare environment in Connecticut since the 2014 Supplement was published.

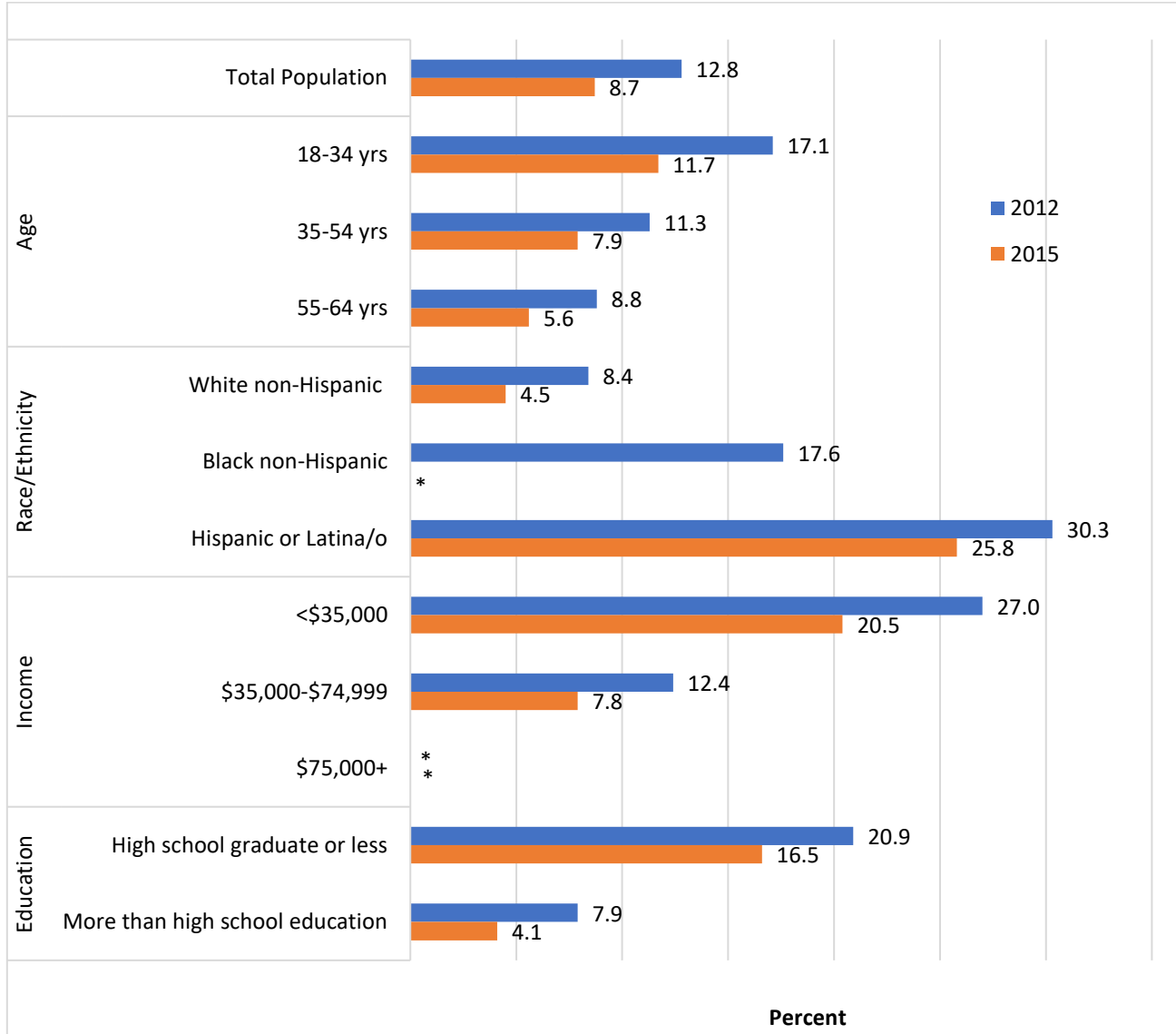**PATIENT PROTECTION AND AFFORDABLE CARE ACT: IMPLEMENTATION UPDATE**

Since the United States (US) Congress passed the PPACA in 2010, the nation's healthcare system has undergone significant and ongoing transformation. These changes to the healthcare landscape have been shaped by several mandates that affect the healthcare regulatory environment, such as incentivizing healthcare cost containment strategies, promoting community-level prevention-oriented initiatives, expanding health insurance access and improving access to preventive services.

**HEALTH INSURANCE COVERAGE AND VULNERABLE POPULATIONS**

**Health Insurance Coverage**

The PPACA's individual mandate required that most Americans obtain health insurance by 2014 or pay a tax penalty. According to estimates from the DPH-managed Behavioral Risk Factor Surveillance Survey (BRFSS), an ongoing statewide voluntary phone survey of Connecticut adults 18 years of age and over[1], the proportion of uninsured Connecticut adults between 18 and 64 years of age declined between 2012 and 2015 (Figure 1.1), corresponding with expanded Medicaid coverage and the establishment of the Connecticut Health Insurance Exchange (Access Health CT). There were meaningful declines in the percentage of adults without health insurance across most age, racial/ethnic, income and educational status groups. These declines were greatest for young adults, Hispanics or Latinas/os, those with incomes less than $35,000 or with a high school education or less. However, the at-risk groups that experienced the greatest declines in uninsured rates, such as Hispanic or Latinas/os, remain more likely to lack coverage than the less at-risk cohorts. As of May 2017, an estimated 103,000 Connecticut residents were enrolled in private health insurance plans through the state-run Access Health CT.[2]

**Figure 1.1. Percent of Adults (18-64 Years of Age) with No Health Insurance, Connecticut, 2012 vs. 2015**



| | | 2012 | 2015 |
|---|---|---|---|
| | Total Population | 12.8 | 8.7 |
| Age | 18-34 yrs | 17.1 | 11.7 |
| | 35-54 yrs | 11.3 | 7.9 |
| | 55-64 yrs | 8.8 | 5.6 |
| Race/Ethnicity | White non-Hispanic | 8.4 | 4.5 |
| | Black non-Hispanic | 17.6 | * |
| | Hispanic or Latina/o | 30.3 | 25.8 |
| Income | <$35,000 | 27.0 | 20.5 |
| | $35,000-$74,999 | 12.4 | 7.8 |
| | $75,000+ | * | * |
| Education | High school graduate or less | 20.9 | 16.5 |
| | More than high school education | 7.9 | 4.1 |

Percent

Source: Source: Connecticut Department of Public Health, Connecticut Behavioral Risk Factor Surveillance System 2012 and 2015.
Note: *Estimate not reliable due to small cell count.
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From 2014 to 2015, the proportion of adults 18 years of age and over in Connecticut covered by Medicare increased while the proportion covered by private health insurance declined. Those reporting Medicaid as their source of coverage remained unchanged (Figure 1.2).

**Figure 1.2. Health Insurance Type, Connecticut, 2014 vs. 2015**
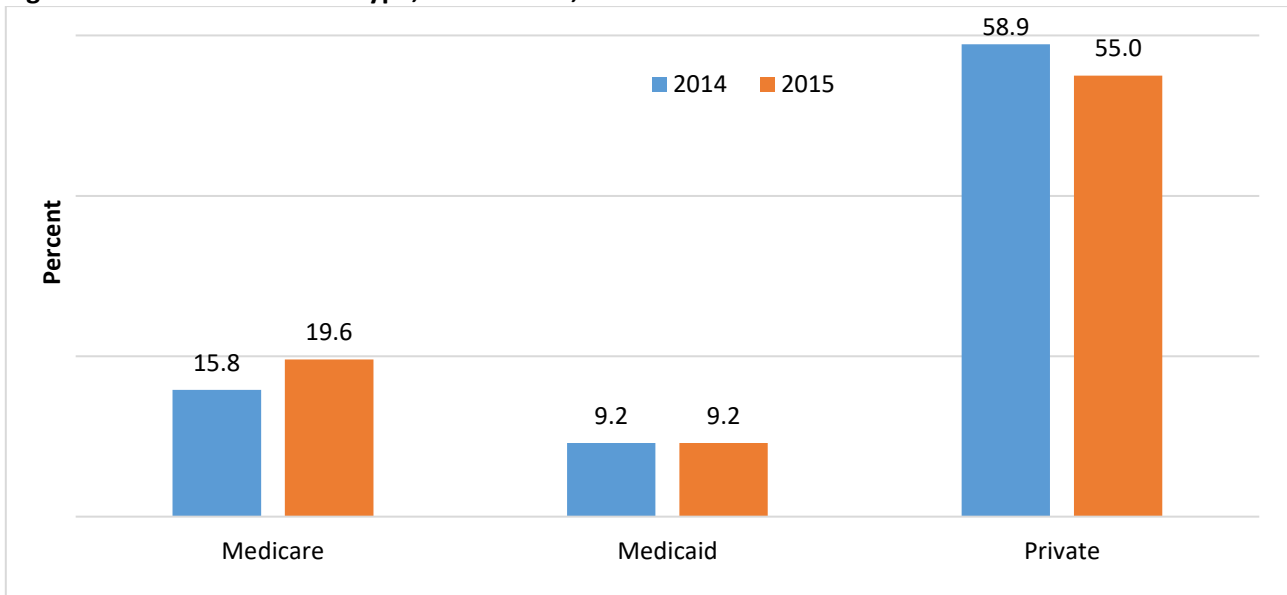


Source: Connecticut Department of Public Health, Connecticut Behavioral Risk Factor Surveillance System 2014 and 2015.

Figure 1.3 shows that the percentage of adults between 18 and 64 years of age with health insurance coverage increased between 2012 and 2015. This increase was shown across most age, racial/ethnic, income levels and educational attainment groups. Adults with a high school education or less experienced the greatest increase over this three-year period. These health insurance coverage patterns as well as demographic changes, as discussed below, have implications for demand for and access to healthcare and unmet need for vulnerable populations, as discussed in other sections.

**Figure 1.3. Percent of Adults (18-64 Years of Age) with Health Insurance, Connecticut, 2012 vs. 2015**
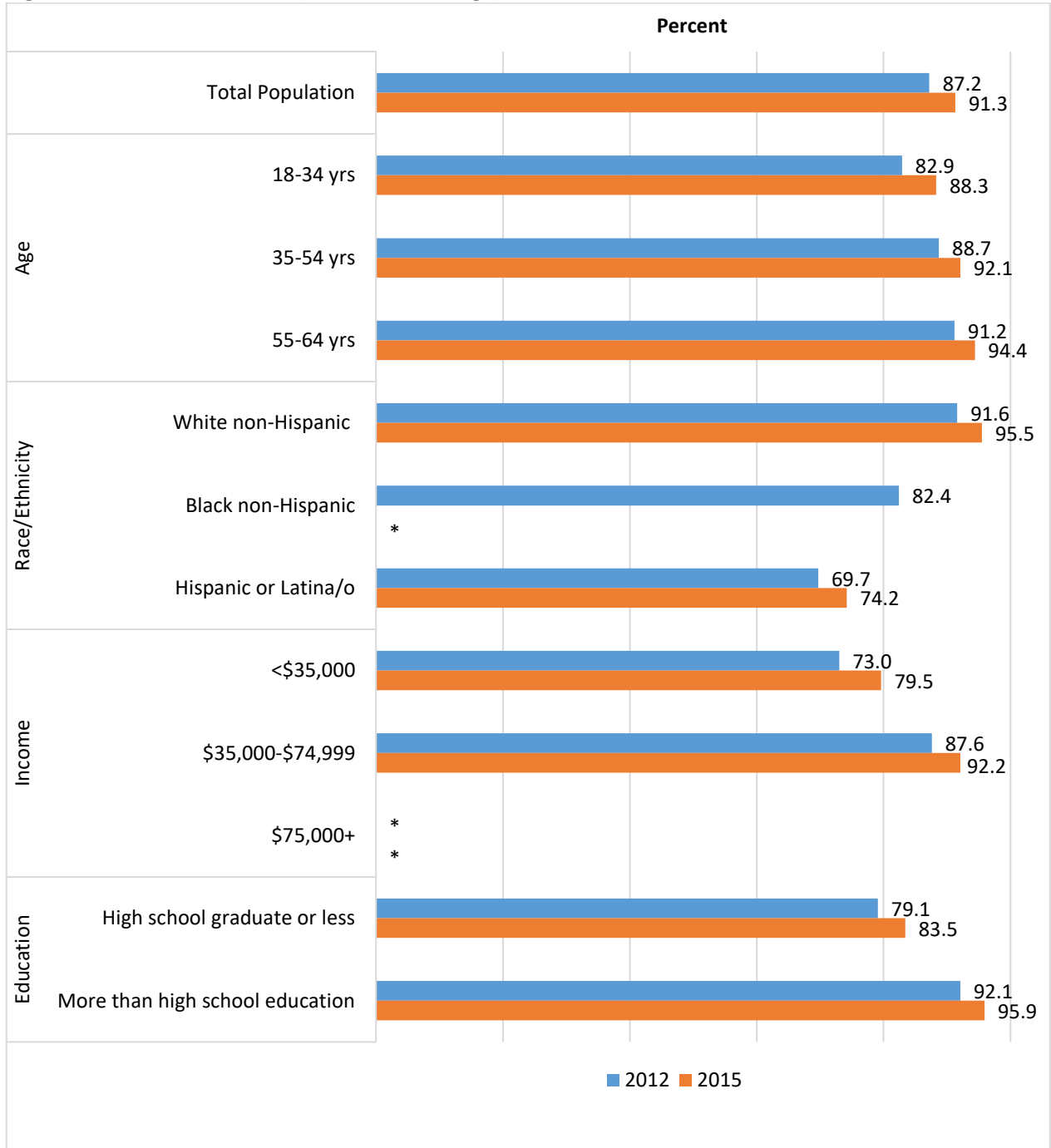


Source: CT DPH Behavioral Risk Factor Surveillance Survey, 2012 and 2015.
Note: *Estimate not reliable due to small cell count.

**Demographic Changes in Connecticut and Implications**

Compared to the nation, Connecticut has relatively lower proportions of vulnerable populations, with the exception of adults 65 years of age and over. The age distribution and trend changes for vulnerable populations across Connecticut were similar to patterns for the US between 2012 and 2015, including substantial increases in the proportion of adults 65 years of age and over (Table 1.1). As increasing age is associated with adverse health outcomes, it is important that the aging of the state's residents be incorporated into plans for and regulation of Connecticut's healthcare system. Over this same period, the proportions of non-White Connecticut residents also increased at rates higher than the nation's. In contrast, the proportion of Connecticut residents with household incomes below federal poverty level increased, but declined for the US. Also, by 2015, there were relatively fewer adult residents with less than a college education in Connecticut but more adults living with a disability.

**Table 1.1. Select Populations, US vs. Connecticut, 2010 and 2015**

| Populations | US (%) | | | Connecticut (%) | | |
|---|---|---|---|---|---|---|
| | 2010 | 2015 | Change | 2010 | 2015 | Change |
| Under 18 years | 24.0 | 22.9 | -5 | 22.8 | 21.3 | -7 |
| 18-64 years | 62.9 | 62.2 | -1 | 63.0 | 63.0 | 0 |
| 65+ years | 13.1 | 14.9 | 14 | 14.2 | 15.7 | 11 |
| Hispanic or Latina/o | 16.4 | 17.6 | 7 | 13.5 | 15.4 | 14 |
| Black non-Hispanic | 12.3 | 12.3 | 0 | 10.0 | 10.6 | 6 |
| Asian non-Hispanic | 4.7 | 5.3 | 13 | 3.8 | 4.4 | 16 |
| American Indian non-Hispanic | 0.7 | 0.6 | -14 | 0.2 | 0.2 | 0 |
| Other/2+ races | 2.0 | 2.3 | 15 | 2.5 | 3.2 | 28 |
| Below federal poverty level | 15.3 | 14.7 | -4 | 10.1 | 10.5 | 4 |
| High School Graduate or Less (25+ years of age) | 42.4 | 39.9 | -6 | 39.6 | 37.2 | -6 |
| Disability | 11.9 | 12.6 | 6 | 10.4 | 11.0 | 6 |

Source: US Census Bureau, American Community Survey 1-Year Estimates, Connecticut and US, 2010 and 2015, File S0101, C03002, S1703, S2820 and S0501.

While Connecticut has an overall favorable health and socioeconomic profile compared to most states, the proportions of healthy residents are not equally distributed across population groups or geographic regions within the state. Barriers to the opportunities to live a healthy life tend to concentrate disproportionately among certain populations, such as racial and ethnic minorities, low-income populations, those with lower educational attainment, those living with disabilities or older adults. The influences of socioeconomic factors on health patterns and outcomes are often intertwined and demonstrably result in health disparities. **Error! Reference source not found.** in Chapter 4 provides additional information on Connecticut's vulnerable populations and their self-reported health status. Healthcare system planning to meet future demand for healthcare and to achieve health equity must address any unmet healthcare needs of these vulnerable populations.

**Health Equity**

Health equity entails achieving the highest level of health possible for all people and requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices. Achieving this goal entails the elimination of health and health care disparities, defined by Healthy People 2020, in part, as a type of health difference that is closely linked with social, economic, and/or environmental disadvantage.[3]

Not only do health disparities affect the quality of life enjoyed by residents, there are also additional medical costs generated as a result. For example, racial and ethnic groups use high cost acute care services differently. In 2012, Black non-Hispanics generated higher total charges due to more visits and with more severe conditions. The total excess hospital costs in Connecticut for Black non-Hispanics and Hispanics relative to Whites were $218 million and $39 million, respectively. The comparatively higher hospital costs generated suggest that substantial savings could be realized through disparity reduction.[4]

In response to persistent and, in some cases, growing disparities in health outcomes for multiple vulnerable populations, there have been several national mandates to improve healthcare access and delivery. In 2016, the Department of Health and Human Services (HHS) implemented the Nondiscrimination in Health Programs and Activities rule, which advances section 1557 of the PPACA.[5] The rule protects individuals from discrimination in healthcare, health insurance and healthcare-related marketing on the basis of race, color, national origin, age, disability or sex and strengthens language assistance for patients with limited English proficiency. [6]

There have also been several national initiatives to promote health equity through collaborations among communities, governmental and private sector entities and across agencies charged with promoting and protecting the public's health and access to healthcare. The *National Stakeholder Strategy for Achieving Health Equity*, a roadmap produced by the National Partnership to End Health Disparities, provides recommendations for strategic and cooperative initiatives to reduce health disparities.[7] These recommendations include:
- Improving awareness of the significance of health disparities affecting vulnerable populations and action needed to eliminate these disparities;
- Strengthening leadership capacity to address health disparities;
- Enhancing health and healthcare outcomes for racial/ethnic minority and other vulnerable populations and ensuring non-discrimination in healthcare access and delivery;
- Strengthening cultural and linguistic competency and the diversity of the public health and healthcare workforce; and
- Improving research and evaluation processes related to these efforts.

Central to these recommendations is community engagement in these processes and multi-sectoral partnerships that actively engage individuals and organizations representing the healthcare sector, as well as those whose mission and initiatives shape the healthcare system.

Additionally, HHS issued the first *HHS Plan to Reduce Racial and Ethnic Health Disparities,* which builds on national goals and mandates for reducing health disparities such as Healthy People 2020 and the PPACA, respectively.[8] This plan includes:
- Evaluating the impact of all HHS policies, programs, and processes on health disparities;
- Fostering integrated approaches across HHS agencies towards the goal of reducing health disparities;
- Supporting the implementation of evidence-based programs and best practices in each of these efforts;

- Transforming healthcare to improve healthcare quality for vulnerable populations;
- Increasing the availability, quality, and use of data to improve the health of vulnerable populations; and
- Monitoring and evaluating HHS's success in implementing these activities to advance innovations in reducing health disparities.

Together, the initiatives outlined above provide a solid foundation for action to reduce health outcomes disparities and to provide a model for how states can move these national agendas forward. On that basis, *Healthy Connecticut 2020,* provides a framework for strategic and coordinated initiatives to promote health and reduce disparities in access and outcomes across Connecticut through a focus on the social determinants of health and improved access to and the quality and coordination of preventive healthcare services.[9]

Currently, DPH provides a leadership role in convening partners to implement the State Health Improvement Plan (SHIP), the focus of which has transitioned from planning to strategic action.[10] The SHIP has seven main focus areas, each spearheaded by an "action team." The focus areas are: maternal, infant, and child health; environmental health; chronic disease prevention; infectious disease prevention; injury and violence prevention; mental health and substance abuse; and health systems.[11] The action teams are guided by the expertise of the Connecticut Health Improvement Coalition, a group of local, regional, and statewide organizations and agencies. DPH has also established a web based dashboard to track progress as the action teams focus on the first three years of the SHIP implementation of priority objectives, also known as phase one.[12]

**IMPROVING ACCESS TO CARE AND HEALTH OUTCOMES FOR VULNERABLE POPULATIONS**

There are several initiatives across Connecticut targeted at improving healthcare for vulnerable populations with respect to quality, affordability and care coordination among providers. The initiatives rely on the use of health information technology (HIT) and exchange (HIE). The trends and patterns in healthcare services availability and utilization outlined in Chapters 2 and 3 are informed by and reflect several of the healthcare initiatives described below.

**State Innovation Model (SIM) Grant Status to Date**

The Connecticut State Innovation Model (SIM) is a program funded by the Center for Medicare and Medicaid Innovation (CMMI). SIM was created under the PPACA to promote innovations to increase healthcare quality, reduce costs and improve population health.[13] For example, in 2014, Connecticut received a four-year, $45 million SIM grant to test healthcare payment and service delivery models funded by an earlier grant.[14]

SIM aims to improve population health by reducing statewide rates of chronic diseases such as asthma, diabetes and hypertension while addressing associated health disparities. The program also seeks to improve healthcare outcomes related to performance on several key quality measures including, but not limited to, at-risk populations' rates of adults with a regular source of care, ambulatory care sensitive condition admissions and well-child visits. SIM's ultimate goal is to reduce annual healthcare spending growth by two percentage points by 2020.

SIM aims will be achieved by integrating the following drivers: (1) promoting payment models that reward improved quality, care experience, health equity and lower cost; (2) strengthening capabilities of healthcare providers to deliver higher quality, better coordinated, community-integrated, and more efficient care; (3) engaging consumers in healthy lifestyles, preventive care and chronic disease self-management; and (4)

promoting policies, health provider systems, and environmental changes that address socioeconomic factors that impact health. [15] SIM implements the drivers through various initiatives or "work streams." Although these initiatives are designed to target specific focus or populations, the initiatives are intended to have statewide impact.

For example, the Person Centered Medical Home Plus program (PCMH+) and other complementary initiatives strive to align the results of electronic patient data -- available through health information technology (HIT) -- with target quality measurements to promote payment models that reward improved quality, care experience, health equity and lower costs. Other initiatives, the Community and Clinical Integration (CCI), Advanced Home and Community Health Worker policy framework seek to strengthen capabilities of healthcare providers, in Advanced Networks (ANs) and federally qualified health centers (FQHCs), to deliver higher quality, better coordinated, community integrated and more efficient care. The CCI initiative complements the Department of Social Services' (DSS) Medicaid Quality Improvement and Shared Savings Program (MQISSP) described below. SIM is recruiting 150 practices to participate in the CCI initiative. In November 2016, SIM requested applications from ANs lacking a federal advance medical home designation and from independent primary care practices. Final applications were due June 2017.

Another work stream, the DPH-led Population Health Initiative, promotes policy and system changes that establish formal links between community prevention providers and healthcare agencies within the context of the new payment reforms. To that end, the SIM program and its stakeholders propose an operational model to enhance connectivity between community-based organizations and the healthcare sector. The community Prevention Services Initiative, complemented by an inter-sectoral and financial infrastructure model (Health Enhancement Community), will build stronger community health capabilities. Finally, the SIM Population Health work stream develops a system of regional health indicators and community health improvement measures to assess the impact of community-oriented approaches for better care and prevention. The scope of the population health plan is depicted in Figure 1.4.

**Fig. 1.4 Scope of Population Health Plan under SIM**
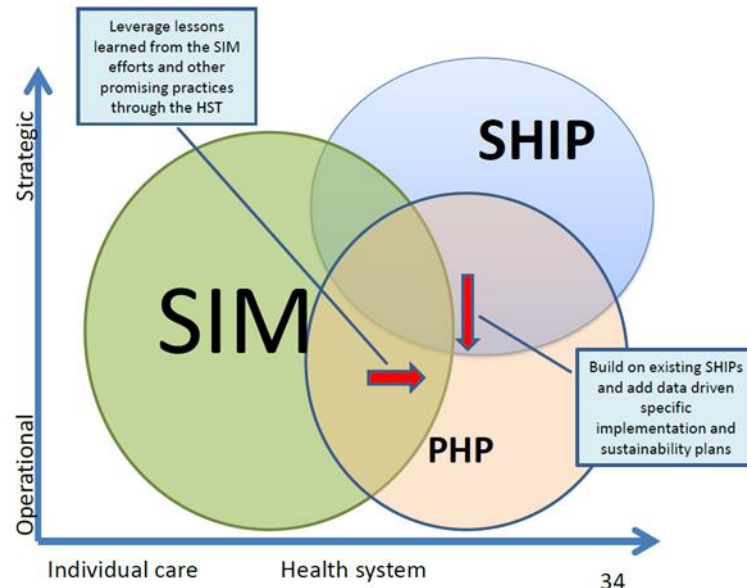


Source: Source: SIM Population Health Council Meeting Slides and Presentations

**Advanced Networks**

To encourage medical homes, the SIM initiative in Connecticut developed the Advanced Medical Home Program to help practices create the infrastructure required for transformation. In addition to transforming care at the practice level, SIM seeks to transform care at the "network" level. Many of the services and resources that need to be incorporated in a truly person-centered healthcare delivery system lie outside of the individual primary care office. Some of these services exist or could be built into large networks of primary care practices, which sometimes include healthcare facilities and other providers. Provider networks that are organizing to take financial responsibility for clinical quality, total cost of care, and patient health outcomes, are better positioned to adopt this broader approach to health services.

There are two provider networks, or ANs, participating in both PCMH+ and SIM/CCIP; St. Vincent's Medical Center (acting as lead for Value Care Alliance) and Northeast Medical Group. VCA consists of Western Connecticut Health Network (Danbury and Norwalk Hospitals), Griffin and Middlesex Hospitals and St. Vincent's Medical Center and six hospitals' affiliated physician groups. The seven FQHCs also participating in PCMH+ are: Community Health Center, Inc., Cornell Scott-Hill Health Corporation, Fair Haven Community Health Clinic, Inc., Southwest Community Health Center, Generations Family Health Center, Inc., OPTIMUS Healthcare, Inc. and Charter Oak Health Center, Inc.

Local health departments/districts (LHDs) are linked to ANs and FQHCs and play a role that aligns with their mission of preventing communicable and chronic disease and injury, with a focus on community health. LHDs already offer a variety of services throughout the state, such as immunizations and health promotion programming. Others have clinics that address pressing medical needs of that community.  Many provide interventions for asthma as well as smoking cessation programs.

Figure 1.5 depicts the linkage model between ANs/FQHCs, CBOs and LHDs. Healthcare providers in ANs/FQHCs will refer patients to CBOs and LHDs contracted to provide effective preventive services in the community. Multiple CBOs in three regions will receive SIM-funded technical assistance focusing on developing business strategies and formal contractual arrangements with ANs/FQHCs.[16]

**Fig. 1.5 SIM Prevention Service Initiative Linkage Model**
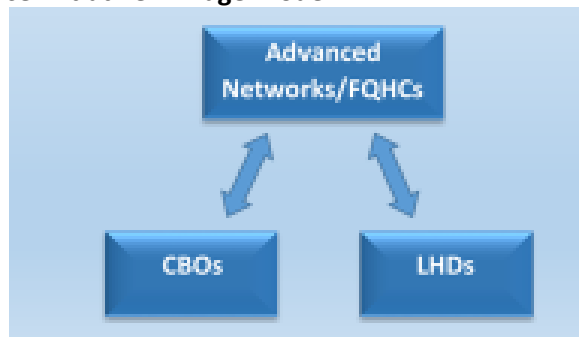


Source: SIM Population Health Council Meeting Slides and Presentations

**Patient-Centered Medical Homes**

Medicaid serves an estimated 700,000 beneficiaries, or nearly 20% of Connecticut's residents, who are low-income, disabled or elderly.[17] As the program has broad reach, this provides opportunities to reduce healthcare disparities and costs for a significant portion of the state's population most at-risk to experience unfavorable access and outcomes. In January 2017, as part of the MQISSP, DSS launched the PCMH+ initiative, in which participating providers must meet specified quality standards, including those described in the SIM section, to receive a portion of any related Medicaid savings. PCMH+ builds on existing intensive care management and medical home initiatives to enhance person-centered care coordination and reform provider reimbursement structures to promote prevention.[18, 19]

The PCMH+ Initiative's ANs and FQHCs will provide and coordinate care for patients and contract with community based organizations and local health departments/districts to provide preventive services. This will facilitate the integration of primary, oral and behavioral healthcare. PCMH+ prospective participants must demonstrate an ability to link Medicaid beneficiaries with community assistance services addressing issues such as housing instability, food insecurity, lack of personal safety, limited provider hours, chronic conditions and illiteracy. The initiative additionally includes measures to develop disability and cultural competence among providers and leverages claims data to prevent, identify and serve under-serviced beneficiaries.

**Health Information Technology and Exchange**

The Health Information Technology for Economic and Clinical Health (HITECH) Act of the 2009 American Recovery and Reinvestment Act serves to advance the adoption of HIT to facilitate population and public health improvements while ensuring privacy and security of personal health information. HITECH and related Medicare and Medicaid electronic health records programs incentivize eligible providers and hospitals to adopt HIT management systems. HIT is important to improving primary care. Components of meaningful use of HIT include the submission of immunization data, lab results of notifiable diseases and conditions and syndromic data to public health agencies.[20] In addition to the sharing of these data, HIT can foster reductions in errors, improve access to records and data, and be leveraged for health and healthcare alerts, clinical decision support and prescription activities.[21] The ultimate goal is to create an enabling HIT infrastructure to improve clinical and population health outcomes, increase transparency and efficiency, empower individuals to make informed healthcare decisions and provide robust data on health systems.[22]

By 2018, each eligible provider or hospital must be certified. Centers for Medicare and Medicaid (CMS) provides incentive payments to eligible providers that effectively utilize electronic health records to meet the meaningful use guidelines.[23] CMS' current emphasis is on meaningful use modified stage 2, which involves eligible providers and hospitals effectively utilizing certified electronic health record technology for care coordination and patient information exchange to improve outcomes.[24]

In 2014, DSS became the lead agency for developing Connecticut's HIT. Responsibilities include developing the infrastructure to support the electronic submission of real time healthcare utilization, quality and cost data, implementing industry standards and promoting efficiency in the healthcare system. Passage of PA 16-77 in May 2016 enabled the Lieutenant Governor, lead on the state's health reform initiatives, to designate a HIT Officer (HITO).[25] The HITO coordinates all statewide HIT-related activities and leads efforts to establish a statewide Health Information Exchange (HIE) in addition to administering the program. A multi-stakeholder HIT Advisory Council advises on statewide HIT issues.[26]

In 2014, through the SIM grant, the SIM Program Management Office secured funds to accelerate investments to promote statewide HIE for patient information sharing among doctors, hospitals and other healthcare providers through a secure, electronic network. The information exchange consists of real time notifications for care coordination and quality improvement for admitted and discharged patients including a tool to measure and track quality of healthcare services provided. To date, with the input of stakeholders and an environment scan, the HITO and HIT Advisory Council have created a roadmap for developing a strategic and financially sustainable HIE Plan that includes governance and operational structure. In addition, the HIE infrastructure design leverages existing and/or new technology assets and service providers. Existing assets include provider registry, enterprise master person index, direct secure messaging health information service provider infrastructure and analytic capabilities. [27]

As of August 2016, Connecticut has received and disbursed approximately $366 million to over 6,500 eligible professionals (physicians, dentists and other practitioners), hospitals and FQHCs to adopt certified electronic health records.[28] The primary goals are to engage the provider community and care managers to reduce preventable readmissions and improve care coordination for Medicaid patients.

## ONGOING CHANGES IN AVAILABILITY AND DELIVERY OF HEALTHCARE SERVICES

The healthcare landscape is rapidly changing due, in part, to federal incentives and mandates to implement prevention-oriented initiatives. The absorption of hospitals and medical groups across Connecticut into larger healthcare systems has additionally contributed to the reshaping of healthcare delivery in Connecticut. The following sections provide brief overviews of some of these changes.

The American Hospital Association (AHA) has identified ten services as essential for vulnerable populations: primary care; psychiatric and substance use treatment services; emergency department and observation care; prenatal care; medical and personal transportation; diagnostic services including laboratories and X-ray services; home care for illness and injury to allow patients to stay at home, regain their independence and become self-sufficient; preventive and basic dentistry services; and a robust referral structure that provides access to a full spectrum of healthcare services, including specialty care and medications for rural and urban communities.[29]

AHA also identified promising strategies for ensuring access to these essential services for vulnerable populations, including: addressing the social determinants of health; global budget payments rather than volume-based payments; shifting healthcare resources from inpatient to outpatient care; establishing emergency medical or outpatient urgent care centers in rural and urban communities characterized by unmet healthcare needs; delivering virtual healthcare to health professional shortage areas; extending healthcare to geographically isolated areas; integrating rural hospitals and health clinics; and improving access to healthcare and care coordination for Indian Health Services facilities and other healthcare providers delivering care to Native American communities.[30]

### Transition of Healthcare toward Prevention and Early Intervention

The PPACA emphasizes and incentivizes the reallocation of healthcare resources from tertiary inpatient care towards preventive healthcare in outpatient settings. Through an emphasis on and improving access to prevention-oriented public health and healthcare initiatives outlined in the PPACA, prevention and early intervention may contribute to reductions in avoidable emergency department use and hospitalizations.

**Hospital Acquisitions**

In an era of healthcare reform and diminishing resources, the strength of the healthcare system is dependent upon the financial stability of its providers. Today, healthcare reform at both the national and state levels is requiring hospitals to integrate service delivery and assume responsibility for achieving specific quality, cost and service outcomes. Significant financial operating deficits resulting from shrinking reimbursement levels, outstanding debt, mounting pension liabilities, lower investment returns and the need to make substantial, ongoing investments in new medical and information technology and facility infrastructure has intensified the desire by some of the state's hospitals to partner with other healthcare institutions.

Hospitals that are not part of larger health systems may lack the clinical expertise and financial resources necessary to create and support a continuum approach to care delivery that is critical to improved population health, higher quality patient care and reduced per capita healthcare costs. Collaboration and affiliation between health systems and networks are intended to lower costs through shared resources as well as identify best practices -- outcomes needed to achieve financial strength and success in the current environment. By affiliating with a larger or stronger delivery system, hospitals may gain access to economies of scale, improved purchasing power and enhanced physician recruitment, among other benefits.

Although smaller community hospitals may face more significant financial challenges, even relatively large hospitals may find themselves severely affected by the rapid pace of change in the healthcare environment. In Connecticut, four transfers of ownership of hospitals have occurred since the publication of the 2014 Plan. Table 1.2 identifies the parent corporations and overarching systems for Connecticut hospitals that, at the time of publication, are affiliated with other hospitals. Table 1.3 identifies the parent corporations of those health systems that do not include more than one hospital.

According to CON applications received in the past two years, the motivation to partner with another healthcare institution has been driven by key factors related to the need to gain the resources and expertise necessary to meet current challenges and increase the chances of future success, including:

- Costs associated with aging infrastructure and quality improvements;
- Challenges in recruiting and retaining physicians;
- Desire to establish physician partnerships, share clinical expertise and best practices;
- Need to provide the health services the community requires and redesign clinical services;
- Necessity of economies of scale for information technology, finance, insurance, equipment, supplies and other administrative services; and
- Access to capital and resources necessary to reduce the cost of operations and to sustain and grow high quality medical services.

To ensure the continued provision of needed services and as a safeguard against increasing costs to consumers that may result from hospitals gaining a larger share of the market, OHCA places certain conditions on hospitals as part of the transfer of hospital ownership approval process. In general, hospitals agree, for a period of three years, to:

- Limit reduction or relocation of services that would result in reduced access to care;
- Submit a plan for any consolidation, reduction, elimination or expansion of existing services or introduction of new services;

- Conduct CHNAs, develop implementation plans and adopt evidence-based interventions identified in the Centers for Disease and Prevention's (CDC) [6|18 Initiative](#) if CHNA health priorities correlate;
- Submit capital investment plans and reports on financial measurements, cost savings achieved and their effect on quality of care;
- Adopt/maintain the most generous charity care policy between the transacting parties;
- Maintain community benefit programs and building activities; and
- Assure culturally and linguistically appropriate services are available and integrated throughout the organization.

Additionally, under certain circumstances, hospitals are also required to:

- Contract with an independent monitor to ensure compliance with conditions; and
- Initiate a Cost and Market Impact Review to determine the impact of healthcare costs and market performance and to establish a baseline cost structure.

Once these compliance and reporting requirements are fully complete, OHCA can better assess hospital acquisitions' impact on administration, clinical efficiencies, quality of care, care affordability and consumer costs. It remains unclear how impending changes at the federal level will affect Connecticut hospitals' ability to meet the healthcare need of those they serve, particularly vulnerable and at-risk populations. There will be a need to revisit these issues periodically as the healthcare system continues to evolve.

Some Connecticut hospitals are pursuing other strategies to remain financially viable and independent of large healthcare systems through the creation of alliances. The VCA providers (described above) are collaborating through clinical integration and investing in infrastructure: to enhance efficient, coordinated care; standardize care based on evidence-based protocols; and to ensure patient safety at each member organization, all to increase quality and reduce cost.[31]

**Table 1.2. Hospitals and Parent Companies for Affiliated Hospitals, Connecticut 2017**

| CORPORATE AFFILIATIONS BETWEEN ACUTE CARE GENERAL HOSPITALS   (ordered by higher level parent name) | | | | | |
|---|---|---|---|---|---|
| Hospital (Full Legal Name) | Town (Main Campus) | Parent Corporation (Full Legal Name) | Higher Level (System) Parent Corporation (Full Legal Name) | Affiliation Date | Other acute care hospitals currently under the same parent corporation |
| St. Vincent's Medical Center | Bridgeport | Ascension Health, Inc. | N/A | 1999 | Multiple hospitals across the US under larger parent, Ascension Health Alliance. No others within Connecticut |
| Prospect Manchester Memorial Hospital, Inc. | Manchester | Prospect ECHN, Inc. | Prospect CT, Inc. [a] | 2016 | Manchester Memorial Hospital Rockville General Hospital Waterbury Hospital |
| Prospect Rockville Hospital, Inc. | Vernon | | | | |
| Prospect Waterbury Hospital, Inc. | Waterbury | Prospect CT, Inc. [b] | Prospect Medical Holdings, Inc. | | |
| Vassar Health Connecticut, Inc. d/b/a Sharon Hospital | Sharon | Health Quest Systems, Inc. [c] | | 2017 | Multiple hospitals across NY under parent No others within Connecticut |
| Hartford Hospital | Hartford | Hartford Healthcare Corporation | N/A | N/A | Hartford Hospital Hospital of Central Connecticut Midstate Medical Center William W. Backus Hospital Windham Community Memorial Hospital |
| Midstate Medical Center | Meriden | | | 1996 | |
| Hospital of Central Connecticut at New Britain General and Bradley Memorial | New Britain | | | 2011 | |
| Windham Community Memorial Hospital, Inc. | Windham | | | 2009 | |
| William W. Backus Hospital, The | Norwich | | | 2013 | |
| Johnson Memorial Hospital, Inc. | Stafford Springs | Trinity Health of New England, Inc. | Trinity Health Corporation | 2016 | Johnson Memorial Hospital, Inc. Saint Francis Hospital and Medical Center, Inc. Saint Mary's Hospital as well as a Massachusetts hospital system |
| Saint Francis Hospital and Medical Center, Inc. | Hartford | | | 2015 | |
| Saint Mary's Hospital | Waterbury | | | 2016 | |
| Danbury Hospital, The | Danbury | Western Connecticut Health Network, Inc. | N/A | 2010 | Danbury Hospital New Milford Hospital Campus Norwalk Hospital |
| Norwalk Hospital Association, The | Norwalk | | | 2014 | |
| Bridgeport Hospital | Bridgeport | Yale New Haven Health Services Corporation | N/A | 1996 | Bridgeport Hospital Greenwich Hospital Yale New Haven Hospital Lawrence + Memorial Hospital as well as a RI hospital system |
| Yale New Haven Hospital, Inc. | New Haven | | | N/A | |
| Greenwich Hospital | Greenwich | Greenwich Healthcare Services, Inc. | Yale New Haven Health Services Corporation | 1998 | |
| Lawrence + Memorial Hospital, Inc. | New London | Lawrence + Memorial Corporation | Yale New Haven Health Services Corporation | 2016 | |

[a] On October 1, 2016, ECHN's subsidiaries Manchester Memorial Hospital and Rockville General Hospital became wholly owned subsidiaries of Prospect ECHN, Inc. and renamed Prospect Manchester Hospital, Inc. d/b/a The Manchester Memorial Hospital, Inc. and Prospect Rockville Hospital, Inc. d/b/a The Rockville General Hospital, Inc.; ECHN, Inc. became a wholly owned subsidiary of Prospect CT, Inc. and renamed Prospect ECHN, Inc. d/b/a as ECHN. Prospect Medical Holdings, Inc. is the highest level parent.

[b] On October 1, 2016, Waterbury Hospital became a wholly owned subsidiary of Prospect CT, Inc. a subsidiary of the Prospect Medical Holdings, Inc. system and was renamed Prospect Waterbury, Inc. d/b/a Waterbury Hospital.

[c] On August 1, 2017, Sharon Hospital became a wholly owned subsidiary of Health Quest Systems, Inc. and was renamed Vassar Health Connecticut, Inc. d/b/a Sharon Hospital.

*Information current though publication of FY 2016 Financial Stability Report* .

**Table 1.3. Hospital and Parent Companies for Non-Affiliated Hospitals, Connecticut 2016**

| Hospital (Full Legal Name) | Parent Corporation (Full Legal Name) | Higher Level Parent Corporation (Full Legal Name) | Other Acute Care Hospitals Currently Under the Same Parent Corporation | Town Hospital Service Area |
|---|---|---|---|---|
| **HEALTH SYSTEMS THAT DO NOT INCLUDE MORE THAN ONE HOSPITAL (Non Affiliated Hospitals)** (ordered by higher level parent name) | | | | |
| Bristol Hospital, Inc. | Bristol Hospital & Healthcare Group | N/A | N/A | Bristol, Plymouth, Southington |
| Charlotte Hungerford Hospital [a] | N/A | N/A | N/A | Litchfield, Torrington, Winchester |
| Day Kimball Healthcare, Inc. d/b/a Day Kimball Hospital | Day Kimball Healthcare, Inc. | N/A | N/A | Brooklyn, Killingly, Plainfield, Putnam, Thompson |
| Connecticut Children's Medical Center | CCMC Corporation, Inc. | N/A | N/A | Avon, Bloomfield, Bristol, Colchester, Coventry, Danbury, East Hartford, Enfield, Farmington, Glastonbury, Griswold+Lisbon, Hartford, Manchester, Meriden, Middletown, Naugatuck, New Britain, Newington, Norwich, Rocky Hill, Simsbury, South Windsor, Southington, Tolland, Torrington, Vernon, Waterbury, Watertown, West Hartford, Wethersfield, Windham, Windsor |
| Griffin Hospital | Griffin Health Services Corporation | N/A | N/A | Ansonia, Derby, Naugatuck, Oxford, Seymour, Shelton |
| Middlesex Hospital | Middlesex Health System, Inc. | N/A | N/A | Chester, Clinton, Colchester, Cromwell, Durham, East Haddam, East Hampton, Essex, Haddam, Middletown, Old Lyme+Lyme Old Saybrook, Portland, Westbrook |
| Milford Hospital | Milford Health & Medical, Inc. | N/A | N/A | Milford, West Haven, Orange |
| Stamford Hospital | Stamford Health System | N/A | N/A | Stamford, Norwalk |
| John Dempsey Hospital | University of Connecticut Health Center | N/A | N/A | Avon, Bloomfield, Bristol, Canton, East Hartford, Farmington, Hartford, Manchester, New Britain, Newington, Plainville, Simsbury, Southington, Torrington, West Hartford |

[a] On November 28, 2016, OHCA received Docket Number 16-32135, a Certificate of Need application to transfer ownership of Charlotte Hungerford Hospital to Hartford Healthcare Corporation. A decision on the application was pending as of publication of this Plan.

**PAYING FOR HEALTHCARE SERVICES**

A provision of the PPACA guarantees access to health insurance coverage for the previously under- or uninsured and those with pre-existing condition(s) through a state or federally run health insurance exchange or Medicaid expansion. In 2015, nearly one-quarter (or 522,000) of non-elderly Connecticut residents had pre-existing conditions that would have made it difficult or prohibitively expensive to buy or obtain coverage pre-PPACA.[32]

Despite the coverage expansion, individuals, employers, and state and federal governments continue to struggle to pay for healthcare. The US and Connecticut primary payment model, the fee-for-service system, has been identified as the key barrier to healthcare delivery system improvement and cost reduction.[33] The PPACA provisions enable testing for new delivery models, and shifting to value based purchasing through accountable care organizations or bundled payments.

The US CDC 6|18 Initiative also provides recommendations for six chronic and infections conditions, which it considers to be "high burden health care conditions": tobacco use, high blood pressure, health-care associated infections, asthma, unintended pregnancy and diabetes.[34] It has identified those as conditions for which the treatment of would have the greatest health and cost impacts. The CDC has further provided evidence-based interventions to prevent or control them. The 6|18 Initiative recommendations are intended to inform discussions with purchasers, payers and providers regarding strategies to reform delivery models and payment structures towards improving healthcare coverage, access, utilization and quality.

**Health Insurance Exchange**

Connecticut's health insurance exchange, Access Health CT, is recognized as one of the nation's most successful state-run health insurance exchanges.[35] As Access Health CT closes its fourth enrollment period, there have been several notable changes. Exchange carriers now only include Anthem and ConnectiCare, with HealthyCT closing in 2016 and United Healthcare exiting in 2017 due to unsustainable costs.[36] As of early May 2017, about 100,000 Connecticut residents were enrolled in and continued to pay premiums for health insurance through Access Health CT.[37] This is lower than open enrollment numbers in May 2016 (103,000) and 2017 (111,542) because people either ceased paying premiums for, or dropped, coverage. According to a CMS exit survey, consumers canceled or terminated their 2017 enrollment because of high premium costs and lack of affordability.[38]

The state's Department of Insurance estimates an average rate increase of 22.8% in health insurance premiums in 2018 for individual market plans in the exchange.[39] According to Kaiser Family Foundation estimates, if the federal government eliminates cost-sharing subsidy payments, the premiums could increase by an additional 19%.[40] These increases will further erode the number enrolled in the Access Health CT exchange.

**Accountable Care Organizations**

Accountable Care Organizations (ACOs) are voluntary networks of physicians, hospitals and other healthcare providers who coordinate and deliver quality healthcare and receive payments linked to quality indicators and cost of care.[41] Many ACOs pertain to the coordination of care to Medicare patients.[42] Coordinated care is important for ensuring that patients, particularly those with chronic conditions, receive appropriate healthcare, while also reducing the potential for duplication of healthcare services and medical errors. Successful ACO models also achieve shared savings.

In Connecticut, there are about 10 physician- or physician/hospital-led Medicare ACOs each covering at least 5,000 residents and providing primary, behavioral health, hospital or multi-specialty care.[43] As 9.6% of Connecticut residents had Medicare coverage in 2015,[44] this indicates that a sizable proportion of Connecticut residents stand to be affected by the ACO models unfolding across Connecticut.

The Connecticut SIM Prevention Service Initiative involves utilizing ACOs that currently include two ANs and seven FQHCs that will contract with community based organizations and local health departments/districts to deliver effective prevention services in their communities. Additional details are provided in previous sections. The VCA, one of PCMH+'s two ANs, coordinates care for 16,000 Medicaid beneficiaries and also has an ACO agreement with Aetna to coordinate and deliver patient care to Aetna members in Connecticut.[45]

**IDENTIFYING AND ADDRESSING GAPS IN SERVICES AND UNMET NEED**

**Community Health Needs Assessments (CHNAs)**

As required by the PPACA to maintain their non-profit status, non-profit hospitals must conduct a CHNA every three years to identify unmet need and engage in a community health improvement planning process to develop strategies to address those identified needs.[46] OHCA also requires for-profit hospitals to conduct CHNAs through CON agreed settlements.  Each of these processes involves input from local public health experts and community members, and the final assessment and health improvement plans must be publicly accessible. CHNAs conducted in Connecticut are discussed further in Chapter 4.

**Chronic Disease Management**

To improve quality and promote patient-centered care for chronic conditions, CMS produces Hospital Performance Reports that evaluate hospital performance on publicly reported indicators of quality care for patients with myocardial infarction, heart failure, and pneumonia.[47] Indicators included in this report are 30-day risk-standardized mortality and complication and readmission measures. DPH hosts a MONAHRQ-generated website, which displays the CMS hospital performance reports and other evidence-based health reports for use by providers, policymakers and consumers in improving the quality and affordability of care, and patient safety and experience.[48]

In 2014, the DPH outlined the *Live Healthy Connecticut: Coordinated Chronic Disease Prevention and Health Promotion Plan*,[49] which establishes goals for 12 priority areas: health equity, nutrition and physical activity, obesity, tobacco, heart health, cancer, diabetes, asthma, oral health, genomics, healthcare quality and healthcare access. Strategies to address these priority areas encompass three approaches: environmental approaches to promote, support and reinforce health-promoting behaviors; health systems interventions to strengthen the delivery of care and use of preventive services; and improving linkages between community resources and clinical settings.

With respect to chronic disease, the SHIP's health assessment identified reducing the prevalence of asthma-related emergency department visits, obesity, dental decay and tobacco use among students as areas of particular concern.[50] To address some of these concerns, the DPH SHIP chronic disease action team in 2016 supported successful legislation for new water fluoridation standards and published an Asthma Action Plan in conjunction with the Department Education.[51]

**30-Day Hospital Readmissions**

The majority of all-cause 30-day hospital readmissions are preventable.[52] The PPACA includes provisions to reduce payments to hospitals with excess readmissions.[53] The leading conditions that are linked with 30-day readmissions often vary by payer and population. For example, in 2011 congestive heart failure, septicemia and pneumonia were the leading causes of 30-day readmissions for Medicare patients, while mood disorders, schizophrenia, and diabetes were the leading causes of readmissions for Medicaid patients. Maintenance chemotherapy, mood disorders and complications of surgical or medical care were the leading conditions for privately-insured patients across the US.[54] Thirty-day readmissions are often attributed to quality of care during hospitalization, the hospital discharge process and characteristics of follow-up care.[55] Coordination of care mechanisms that plan transitions from inpatient to outpatient care, follow-up care, medication management and end-of-life care are important for reducing preventable hospitalizations.[56]

Since October 2012, CMS has been reducing Medicare payments to hospitals with excessive 30-day readmissions for heart attack, heart failure, pneumonia, COPD, hip/knee replacements and coronary artery bypass graft surgery. CMS reduces payments if the predicted number of 30-day readmissions for a hospital for any of the listed conditions exceeded the expected number for an average hospital with similar patients.[57] In 2016, CMS reduced payments by 3% to affected hospitals. Connecticut-specific 30-day readmissions are discussed further in Chapter 4.

**Preventable Hospitalizations and Emergency Department Use**

Preventable hospitalizations are classified as hospitalizations for conditions that could have been prevented through primary or preventive care (e.g., asthma, urinary tract infections and diabetes-related complications), but which culminated in increased emergency department visits or inpatient hospitalizations.[58] From 2005 to 2012, there was a 19% decline in preventable hospitalizations across the US, a decrease that was greater for acute conditions (25%) than chronic (14%) conditions.[59] However, this decrease in preventable hospitalizations was accompanied by an increase in emergency department visits from 2008 to 2012. Connecticut-specific information about preventable hospitalizations is discussed in Chapter 4.

**Emergency Department Visits and Behavioral Health**

Persons with behavioral health issues often access needed care through hospital emergency departments and inpatient hospitalizations, straining the resources of hospitals that may not have appropriate behavioral health services and contributing to rising healthcare costs.[60] These patterns coincide with continued stigma around mental health and substance use issues; a substantial decline in funding for state behavioral healthcare services; insufficient financial support for community agencies to deliver behavioral healthcare; and continued fragmentation of mental health, substance abuse and primary care.[61] The AHA's Behavioral Health Task Force provides six recommendations for hospitals to address behavioral health need.[62] These recommendations include: incorporate behavioral health issues into hospital community health needs assessments; review the hospital's behavioral health plan to evaluate whether it meets the needs identified in the assessment; collaborate with community agencies and leaders to develop and implement a community behavioral health plan; educate payers on the healthcare and social costs of not treating patients with behavioral health needs to increase behavioral health reimbursements; implement employer practices to support behavioral health services; and engage in regional, state and national advocacy to support behavioral health.

Additionally, the Substance Abuse and Mental Health Services Administration (SAMHSA) has outlined strategic initiatives to reduce behavioral healthcare needs.[63] These include: increasing awareness and understanding of mental and substance use disorders, promoting mental wellbeing, preventing substance abuse and mental illness, improving access to effective treatment and supporting recovery.

CGS section 17a-22bb mandates the Connecticut Department of Children and Families (DCF) to implement strategies to prevent or mitigate the life course implications of childhood mental, emotional and behavioral health issues.[64] Some of the strategies are: implementing early identification and early intervention programs; providing access to developmentally appropriate services; engaging communities, evaluating behavioral healthcare services to monitor progress towards goals; and engaging a data-driven quality improvement strategy.

In 2010, DCF launched the Emergency Mobile Psychiatric Services Crisis Intervention Services program.[65] This program offers free, 24/7, community-based crisis stabilization and short-term intervention to children with behavioral health needs and their families statewide. Early intervention diverts children from emergency departments and the juvenile justice system. The program also entails quality data reporting and analysis for quality improvement and training. The distribution of behavioral health related ED visits in Connecticut is discussed further in Chapter 4.

**Opioid Overdose Epidemic**

Across the US and in Connecticut, there has been an increase in deaths due to opioid overdoses. Opioids, or prescription pain medications, synthetic opioids and heroin, accounted for 28,648 deaths in 2014 across the nation.[66] Accidental drug overdose related deaths increased from 568 in 2014 to 917 in 2016 in Connecticut.[67] The state's residents are more likely to die from unintentional drug overdose, particularly prescription opioid painkillers, than a motor vehicle accident.[68] In 2013, the state's age-adjusted rate for drug induced mortality was 16.4 per 100,000 population compared to the national rate of 14.6. Also, the number of people entering the criminal justice system for opioid-related issues has increased, dramatically. More than one-half of the overdose related deaths in Connecticut (479) occurred among people incarcerated in the state's prisons. Prisoners account for 8% of the state's population. [69]

There are several state and federal level actions to reverse the accelerating substance dependency and accidental overdose-related hospital use and deaths. Since 2015, PA 15-198 and PA 15-5 Sec. 54 require prescribers of controlled substances to review a patient's chart before prescribing more than a 72-hour supply and also at least once every ninety days for patients needing continuous or prolonged use of such substances. In 2016, PA 16-43 required creation and maintenance of a centralized database, the Connecticut Prescription Monitoring Program, to collect controlled substances prescription data and also extended the mandate to every pharmacy, outpatient pharmacy in a hospital or institution and each dispenser.[70]

In September 2016, SAMHSA awarded the State two competitive grants worth nearly $5 million to expand access to medication-assisted treatment for opioid addiction and to strengthen drug abuse prevention efforts statewide.[71] The Connecticut Opioid REsponse (CORE) Initiative is actively implementing six strategies to address opioid misuse and abuse,[72] many of which align with the CDC recommendations for preventing opioid overdose.[73] CORE strategies include: increasing access to medication-assisted treatment; reducing overdose risk among high risk populations; improving provider adherence to opioid prescribing guidelines; increasing access to and tracking of naloxone; enhancing data sharing across agencies to strengthen capacity to monitor and respond to opioid outbreaks; and strengthening community

understanding of opioid misuse and abuse and evidence-based strategies to promote treatment and reduce stigma.

Under the PPACA, treatment for substance use is covered by health insurance plans available through health insurance exchanges. To meet the growing need for opioid treatment and prevention, in the FY 2017 budget, funding was allocated to expand treatment of opioid misuse and abuse.[74] The budget also provided for the expansion of state-level prescription drug overdose prevention strategies such as medication-assisted treatment, access to the overdose-reversal drug naloxone, and support for strategic enforcement initiatives.[75] This effort builds on, and extends considerably, several public and private sector initiatives, including prescriber training programs, expanded access to prescription drug monitoring program data, drug take-back programs and dispensing naloxone to local law enforcement officers to prevent opioid overdose. The distribution of opioid related ED visits in Connecticut is discussed further in Chapter 3.

**Health Professional Shortage Areas and Medically Underserved Areas or Populations**

The US Health Resources and Services Administration (HRSA), Office of Shortage Designation (OSD), provides guidelines for determining federally qualified health professional shortage areas (HPSAs).[76] OSD also provides guidelines for determining medically underserved areas or populations (MUA/Ps) as geographic areas or populations with limited access to primary care services.[77] A designation may help attract new primary care, mental health, and dental health workers and it may increase Medicare and Medicaid reimbursement to the professionals already providing care in a community.[78]

The three types of HPSA designations may be geographic, population group, facility or automatic based on a shortage of primary care, dental or mental health providers.[79] The designations provide both federal and state government benefits for communities, healthcare facilities and providers who participate in the federal loan repayment programs. A HPSA designation may be geographic which demonstrates a shortage of providers for the total population of an area or population group-based for a shortage of providers for at least one of the following populations:

- Low income populations (greater than 30% of population with incomes at or below 200% of the federal poverty level);
- Migrant and/or seasonal farmworkers and families;
- Medicaid – eligible;
- Native Americans or native Alaskan;
- Homeless; and
- Other populations isolated from access by means of a specified language, cultural barriers, or handicaps

A facility HPSA designation is only for facilities including community health centers, rural health clinics, and federal correctional institutions. Each HPSA is given a score by the OSD based on specific criteria for each type of HPSA.[80] This score indicates the degree of shortage. An automatic HPSA designation refers to the designations given to FQHCs as defined by Section 330 of the Public Health Service Act (42 USC. §254b).

An MUA can encompass an entire county, a group of counties or civil divisions or urban census tracts. An MUP includes groups of persons who face documented economic, cultural or linguistic barriers to healthcare. MUA/Ps are designated based upon four criteria: low ratio of population to providers, high percentage population with incomes below the federal poverty level, high percentage population over age 65 and high infant mortality rate. Unlike an HPSA, this type of designation does not expire.

In Connecticut, to obtain an HPSA or MUA/P designation, DPH's Primary Care Office (PCO) submits a web-based GIS application to HRSA for approval. The first step for the application is to develop a rational service area which entails locating a specific area where the majority of the population would expect to receive healthcare services. A rational service area could be the entire or part of a county, town, city or a census tract. The application must address the area's population as having similar socio-economic characteristics, such as the percent of population below 100% or 200% of the federal poverty level, the racial/ethnic distribution, physical access barriers (e.g., bordered by state forest/park, mountains, bodies of water or a river without bridge access, interstates, highways include mountains, railway yards, industrial areas, etc.), public transportation patterns, and the area having an established neighborhood and/or community which displays a strong self-identity. Rational service area boundaries are from the population center of the proposed service area (census tracts or minor civil division with the highest resident civilian population) to outer boundaries not exceeding a 40-minute travel time. Then availability of providers (primary care, mental/behavior health, and dental care) within up to a 40 minute radius of the area is assessed to determine if providers in these areas are over-utilized or inaccessible to the proposed service area population. If any area demonstrates significant socio-economic or racial/ethnic disparities from the rational service area, then the area is considered inaccessible. If there are significant physical barriers, then the population is considered isolated from nearby resources. Provider services in the surrounding areas exceeding 40 minutes from the population center are considered excessively distant and inaccessible.

In addition to the mapping component for all designation application requests, a written justification is submitted to explain the importance of obtaining a federal designation. Once the application is submitted to HRSA, the general public has thirty days to provide comments to the proposed designation. HRSA has established a timeline to review and make a final determination within three months upon submission. All HPSA designations are re-evaluated every three years.

Currently, the DPH PCO utilizes the State Department of Mental Health & Addiction Services' Catchment Area Council (CAC) as a way to further support HPSAs in mental health. The CAC is a citizen body and a grassroots level of citizen involvement in planning for needed services. This includes establishing catchment areas which are a defined geographic area, based on population that receives mental health services as a unit. The role of the CAC is to study and evaluate existing mental health services in the catchment area and to make recommendations about the types of services that are needed. The defined catchment areas are used in identifying and designating mental health HPSAs. The distribution of HPSAs and MUA/Ps in Connecticut is discussed further in Chapter 4.

**OTHER FACTORS THAT MAY IMPACT THE HEALTHCARE ENVIRONMENT**

**Parity Laws**

In 2000, Connecticut implemented a parity law requiring that individual and group health insurance policies delivered or issued in Connecticut that cover hospital, medical and surgical services provide mental health benefits as well.[81] These provisions prevent unreasonable healthcare costs associated with accessing mental health diagnostic and treatment services.[82] Connecticut's parity requirements were strengthened by similar federal provisions under the PPACA. As depressive disorder is disproportionately concentrated among lower income adults and persons with lower levels of educational attainment (as illustrated in Chapter 4), parity laws may improve access to needed mental healthcare for populations of lower socioeconomic status.

**All Payers Claims Database and Price Transparency**

The Connecticut All Payers Claims Database (APCD), administered by Access Health CT, is designed to be a dynamic repository of historical healthcare claims data for 2012 and beyond reported by multiple payers for healthcare utilization in all settings. The APCD would provide valuable information about high risk patients, quality metrics, pharmacy utilization and healthcare costs. As this information is publicly available to healthcare consumers, state agencies, employers, healthcare providers, researchers and the Connecticut Health Insurance Exchange, the APCD may improve transparency of healthcare quality and costs. Recent precedent established in Vermont ruled that payers are not mandated to report data for consumers covered by employer self-insured plans.[83] Subsequently, Connecticut's APCD may only represent outcomes for about one-half of the state's residents covered by commercial insurance, but collection is ongoing. Efforts to include Medicaid and Medicare data continue. Access Health CT is coordinating with the SIM program to apply to CMS for Medicare data, a response was expected by the end of June 2017. A date for procuring Medicaid data is still unknown.[84]

The APCD website ([www.analyzehealthct.com](www.analyzehealthct.com)) recently launched in December 2016 and will be published in phases, with indicators such as disease prevalence and healthcare coverage, physician density, hospital readmissions, price transparency and healthcare utilization patterns being incorporated.[85] The data release infrastructure development is underway. The APCD may be leveraged to identify disparities in healthcare delivery and policy opportunities to improve healthcare access and outcomes for vulnerable populations. However, only approximately 5% of consumers report their racial/ethnic identification when enrolling in a health insurance plan and there is a lack of uniformity in whether payers collect that information at all.[86] However, availability of any such data will facilitate benchmarking healthcare and outcomes for at-risk and vulnerable populations.

**Certificate of Need (CON) Review**

Under CGS section 19a-639, OHCA must consider the implications of CON applications for vulnerable populations. This law mandates that when reviewing CON applications, DPH's OHCA consider the current provision of or any change in access to services for Medicaid recipients and indigent populations.[87]

CGS section 19a-639(e) mandates additional review requirements when ownership of a hospital will be transferred to a for-profit purchaser or not-for-profit purchaser with net patient revenue surpassing a set threshold.  In such instances, OHCA selects an independent consultant to act as a post-transfer compliance officer to monitor conformance with any conditions placed on the transaction, facilitate meetings with community members, and report on the hospital's provision of uncompensated care and community benefits.

PA 15-146 section 34 also required the Commissioner of Public Health to make recommendations to the General Assembly's Joint Standing Committee on Public Health regarding the potential impact of eliminating certain CON requirements and of introducing an expedited approval process for certain applications. In addition, the Governor convened a panel of industry experts to further review the role of the CON program.

The Governor's Executive Order 51 established the CON Taskforce to review and analyze the CON program and determine if program changes are necessary to ensure access to quality care for residents while preserving an open and competitive healthcare market in the state.[88] The Taskforce included representatives of the Connecticut Governor's Office, Office of Policy and Management, DPH and DSS; as well as at least one representative of each of the following groups: a physician group practice, a nursing

home, a free-standing outpatient provider, a health plan participating in the Connecticut Health Insurance Exchange, the healthcare industry, healthcare labor interests, consumer interests, health economists and entities regulated by CON. The Taskforce submitted its recommendations to the Governor on January 15, 2017.[89] The Taskforce's final report is available at:
http://portal.ct.gov/en/Office-of-the-Governor/Working-Groups/Certificate-of-Need-Taskforce

Table 1.4 below illustrates the types of CON applications submitted to OHCA in the last three years. In some instances, CON applications have been reflective of issues faced by the state's population. Between 2014 and 2016, the number of behavioral health CON applications OHCA received tripled, and were primarily focused on providing specialized services such as treating eating disorders and, even more so, substance abuse. The growth in applications for establishing services to treat substance abuse has been fueled by the opioid epidemic faced not only by Connecticut but also the nation as a whole.

In other instances, CON applications submitted reflect systemic changes in healthcare delivery. Changes to federal laws and regulations, reimbursement policies, state of the art technology standards, shifts in patient care settings and other factors have created a state of instability in the healthcare system. CONs related to hospital acquisitions by both not-for-profit and for-profit entities have represented a significant portion of CON activity since 2014, as Connecticut hospitals need to adjust and adapt to both federal and state mandates as well as economic pressures.

Remaining independent has become more challenging for some of the state's hospitals. Installing expensive mandated electronic health record systems, acquiring costly state-of-the-art equipment and upgrading older physical plants can be prohibitively expensive, especially if operating margins are thin. For some hospitals, consolidating with another hospital or hospital system provided a solution to dealing with both economic and policy pressures that necessitate new strategies in order to remain viable.

CON applications for transfers of ownership related to outpatient surgical facilities and group practices also showed substantial growth during the same period. There were also increases in the number of transfers of ownership related to hospital acquisitions or conversions as well as hospitals or management companies seeking to become majority owners of outpatient surgical facilities.

OHCA has also seen significant CON activity related to termination of services since 2014. Some of this activity was attributable to hospitals attempting to balance declining or low utilization of certain services with the cost to provide those services. The availability of physicians to provide those services and patients' ability to access those services at another location within a hospital system or with another provider in the area also influenced hospitals' choosing to terminate certain services.

Some terminations were actually related to regionalization of services, such as the development of a regional inpatient rehabilitation center of excellence in Milford. Although services were terminated in New Haven and Bridgeport, a regional inpatient rehabilitation center was established that allowed for improved quality and delivery of care in a more efficient and cost effective manner.

Between 2014 and 2016, OHCA also saw an overall increase in agreed settlements, which contain conditions that an Applicant must agree to abide by as a condition of approval of the CON. In general, conditions required by OHCA with respect to hospital acquisitions and conversions were related to maintaining access to services, prohibiting price increases and meeting the health needs of the community. Behavioral health and Imaging CON agreed settlements were focused on requiring Applicants to participate in the Medicaid program and serve Medicaid clients.

**Table 1.4. Certificate of Need Applications, Connecticut, 2014-2016**

| CON Type | CY 2014 | CY 2015 | CY 2016 |
|---|---|---|---|
| Behavioral Health | 2 | 3 | 6 |
| Change of Ownership | | | |
|    Outpatient Surgical Facility, Clinic | 2 | | |
|    Outpatient Surgical Facility, Group Practice | | 6 | 12 |
|    Hospital Acquisition | | 4 | |
|    Hospital Conversion to For-Profit | 3 | 2 | |
| Establishment of New Facility/Service | | | |
|    Healthcare Facility | 2 | 1 | 1 |
|    New Service (Cardiac) | | 1 | |
| Increase in Operating Rooms | | | 1 |
| Medical Equipment (e.g. MRI, CT, PET-CT, LiNac) | 4 | 7 | 5 |
| Terminations | 5 | 9 | 5 |
| **Applications** | **18** | **33** | **30** |
| **Approvals/Agreed Settlements** | **7** | **17** | **12** |
| **Determinations** | **58** | **46** | **54** |

Source: CT DPH Office of Health Care Access Certificate of Need Database

**Potential Changes Following New Presidential Administration**

Mandates and incentives embedded in or catalyzed by the PPACA have shaped several of the achievements in improving the healthcare environment and access to health insurance described in this Plan, as well as institutional changes that are continuing to unfold (e.g., hospital mergers). However, in recent months, the President and Congress have taken preliminary steps to dismantle the PPACA and provide a replacement. The long-term consequences of the changes in healthcare at both the federal and state level may be profound and are still uncertain, as at the time of publication of this Plan, Congress is continuing to debate what will take the place of the PPACA.

The two federal bills (US House and Senate) recently released propose significant Medicaid and subsidy cuts, may allow states to opt out of pre-existing conditions coverage, allow states to define essential health benefits, change how premium subsidies are determined and eliminate the individual and large employer insurance mandates. Although the exact consequences of these bills are unknown, it is likely that individuals, healthcare systems and providers will be adversely affected. A decline in Medicaid and health exchange market enrollment and an increase in the number of uninsured are highly likely. Anticipated reductions in utilization of hospital services and increases in uncompensated care are expected to impact hospitals' operating margins. Thus, there remains uncertainty regarding future institutional and political support for sustaining and advancing several of the changes to the healthcare environment outlined in this section.

[1] BRFSS is the only available resource in the state to monitor health risk and proactive behaviors related to the leading causes of mortality and morbidity among demographic subgroups of age, race/ethnicity, income and educational level. The Centers for Disease Control and Prevention funds the survey in all 50 states. http://www.ct.gov/dph/cwp/view.asp?a=3132&q=388096&dphNav_GID=1832%20

[2] Healthinsurance.org (2016, November). Connecticut Health Insurance Exchange/Marketplace. https://www.healthinsurance.org/connecticut-state-health-insurance-exchange/

[3] Office of Disease Prevention and Health Promotion, *Healthy People 2020*. https://www.healthypeople.gov/2020/about/foundation-health-measures/Disparities.

[4] Dalal, Mehul, Poulin, Stephanie and Kianoush, Sina (2014) *Quantifying the Potential Benefits of Health Equity in Connecticut: Disparities in Hospital Charges and Costs among Blacks and Hispanics compared to Whites, 2005-2012. Connecticut Department of Public Health, Community Health and Prevention Section.* http://www.ct.gov/dph/lib/dph/hems/chronic_dis/disparityanalysis/poster_-_final.pdf

[5] US Department of Health and Human Services. (2016) *HHS Finalizes Rule to Improve Health Equity Under the Affordable Care Act*. Washington, D.C.: US Department of Health and Human Services. http://www.hhs.gov/about/news/2016/05/13/hhs-finalizes-rule-to-improve-health-equity-under-affordable-care-act.html

[6] US Department of Health and Human Services. (2016) *HHS Finalizes Rule to Improve Health Equity Under the Affordable Care Act*. Washington, D.C.: US Department of Health and Human Services. http://www.hhs.gov/about/news/2016/05/13/hhs-finalizes-rule-to-improve-health-equity-under-affordable-care-act.html

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[8] US Department of Health and Human Services. (2011) *HHS Action Plan to Reduce Racial and Ethnic Health Disparities: A Nation Free of Disparities in Health and Healthcare.* Washington, D.C.: US Department of Health and Human Services. http://minorityhealth.hhs.gov/assets/pdf/hhs/HHS_Plan_complete.pdf

[9] Connecticut Department of Public Health. (2014) Healthy Connecticut 2020: Creating the State Health Improvement Plan. http://www.ct.gov/dph/cwp/view.asp?a=3130&Q=542346&PM=1

[10] Connecticut Department of Public Health. (2017) Connecticut Health Improvement Coalition. http://www.ct.gov/dph/cwp/view.asp?a=3130&Q=515380&PM=1

[11] Connecticut Department of Public Health. (2017) Connecticut Health Improvement Coalition. http://www.ct.gov/dph/cwp/view.asp?a=3130&Q=515380&PM=1

[12] Connecticut Department of Public Health. (2015) Health CT 2020: State Health Improvement Plan – Year One Annual Report. http://www.ct.gov/dph/lib/dph/state_health_planning/sha-ship/2016/healthy_ct_2020_ship_-_year_one_annual_report(web).pdf

[13] Connecticut State Innovation Model (SIM) – Frequently Asked Questions. http://www.healthreform.ct.gov/ohri/lib/ohri/sim/plan_documents/ct_sim_faq_final.pdf

[14] Connecticut State Innovation Model. *SIM at a Glance.* (2015) Connecticut State Innovation Model. http://www.healthreform.ct.gov/ohri/lib/ohri/SIM_at_a_glance_05122015.pdf

[15] Connecticut State Innovation Model. *SIM at a Glance.* (2015) Connecticut State Innovation Model. http://www.healthreform.ct.gov/ohri/lib/ohri/SIM_at_a_glance_05122015.pdf

[16] CT SIM Population Health Council meetings and presentations. http://www.healthreform.ct.gov/ohri/cwp/view.asp?a=2765&q=336572

[17] Connecticut Department of Social Services. (2015) *Overview of the Medicaid Quality Improvement and Shared Savings Program.* Connecticut Department of Social Services. http://ct.gov/dss/lib/dss/pdfs/pgr/simsteeringcommitteemqissp.pdf

[18] Connecticut Department of Social Services. (2015) *Overview of the Medicaid Quality Improvement and Shared Savings Program.* Connecticut Department of Social Services. http://ct.gov/dss/lib/dss/pdfs/pgr/simsteeringcommitteemqissp.pdf

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