



**Middlesex Hospital
Community Health Needs Assessment
Implementation Strategy**

**Middletown, CT
September 2013**

Executive Summary

Continuous dedication to the communities we serve remains the hallmark of Middlesex Hospital's purpose. Our Community Benefit program enables us to live our commitment to improving the health and wellbeing of our community members by measuring health, creating programs that respond to identified need, and collaborating with community partners to develop meaningful and sustained health improvement.

The process of formally measuring the health of the community through a community health needs assessment allows for a comprehensive understanding of a community's health status as well as the needs, gaps and barriers to health and health services. Using this data, Middlesex Hospital has developed a prioritized implementation strategy to address identified need.

We are grateful to the Chatham Health District for inviting Middlesex Hospital to participate in a community health needs assessment through the Centers for Disease Control and Prevention Community Transformation Grant capacity-building project. We have enjoyed the collaboration with the Chatham Health District, CT River Area Health District, Essex Health Department, the Middletown, Durham and Cromwell Health Departments, and a wide array of Middlesex County community partners representing the sectors of public health, healthcare, social services, community services and education and look forward to continuing to work together to improve community health.

Middlesex Hospital is pleased to present our community health needs assessment implementation strategy, which outlines the process for prioritization and serves as the foundation for our Community Benefit strategic plan. Based on analysis of the community health needs assessment data, the Hospital has selected the following five priority areas:

1. **Mental Health** - increasing access to care
2. **Substance Abuse** - increasing access to care
3. **Older Adults** - increasing access to care
4. **MCCOCW Tobacco Free Living** - support and collaboration
5. **MCCOCW Clinical Preventive Services, Hypertension** - support and collaboration

Middlesex Hospital focuses on keeping our community healthy and strong. Whether this is accomplished through treatment in the Hospital or through community-based preventive care and education, our purpose has always been, and continues to be, to improve the health and wellbeing of the communities we serve.



Vincent G. Capece, Jr.
President/CEO
Middlesex Hospital

About Middlesex Hospital

Middlesex Hospital, founded in 1904, is a not-for-profit, acute-care community hospital located in Middletown, CT. It is the only acute-care hospital in its service area, which includes Middlesex County and the lower Connecticut River Valley region. The Hospital is licensed for 275 beds and serves a total population of over 265,000 persons.

Middlesex Hospital is part of the Middlesex Health System, which employs 3,031 people and has 433 physicians on its medical staff. The Health System offers comprehensive community-based inpatient and emergency services as well as extensive outpatient care, including diagnostic, rehabilitation, behavioral health, disease management, radiology, laboratory, cancer care, homecare, wound care, surgical services, and a network of primary care offices. The Hospital has a long-standing commitment to teaching, as exemplified by its Family Medicine Residency Program which has been in existence for over 40 years. In addition to its Emergency Department in Middletown, the Health System operates two satellite medical centers in Essex and Marlborough that feature fully accredited, stand-alone emergency departments. Combined, the three locations serve the 3rd highest emergency patient volume of all CT hospitals. In 2012, the Health System had 14,158 inpatient discharges (FY), 642,083 outpatient visits (FY) and 92,456 combined emergency department visits (CY).

Our Purpose

Middlesex Hospital's mission is to provide the safest, highest quality health care and the best experience possible for our community. Our vision is to be the clear first choice for medical care. Our core values are to pursue excellence, uphold honesty, cooperate and collaborate, support innovation and deliver compassionate care.

We have a longstanding commitment to community benefit and providing programs and services that meet identified need, most specifically for underserved and vulnerable populations. Our Community Benefit program exemplifies our core purpose of bettering the health of the community we serve by measuring community health need, creating programs that respond to need, and collaborating with partners to improve population health. We understand the importance of building evidence-based programs with measurable, benchmarked results and positive outcomes.

Measuring Community Health

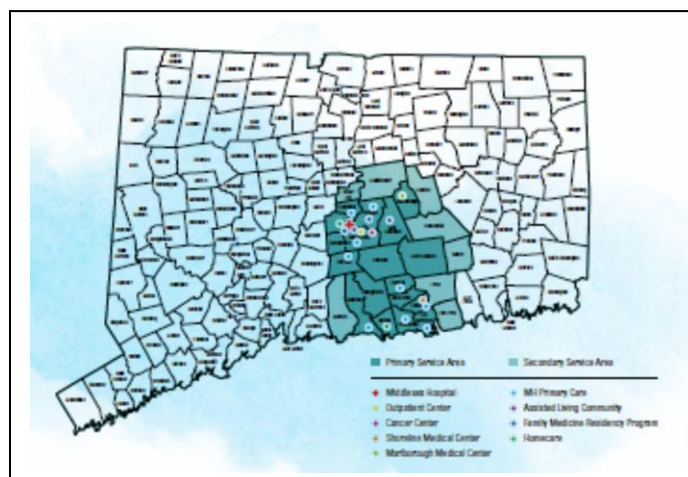
Prior to enactment of the Patient Protection and Affordable Care Act (the "Affordable Care Act") on March 23, 2010, Middlesex Hospital's Community Benefit policy required that we conduct a community health needs assessment at regular intervals with input from key community stakeholders, prioritize needs, and develop a plan that includes measurable goals and objectives. Our experience in conducting health needs assessments and focusing on access to care for identified priority areas enables us to live our community benefit philosophy of improving the health and wellbeing of the communities we serve.

Section 501(r) under the Affordable Care Act requires that tax-exempt hospitals complete a community health needs assessment once every three years with input from persons representing the broad interests of the community and adopt an implementation strategy to meet the community health needs identified in the assessment.¹

The purpose of a community health needs assessment is to systematically collect and review the primary and secondary as well as the quantitative and qualitative data of a specific geographic area. Through a rigorous process, this data is carefully analyzed in order to understand a community's health status and identify the needs, gaps, access issues and barriers to both health and health services. The results of this process enable the prioritization of health problems and the development and execution of a community health implementation strategy.

Description of Community Served

Middlesex Hospital's primary service area encompasses 24 municipalities, including the 15 towns of Middlesex County (Middletown, Cromwell, Portland, East Hampton, East Haddam, Haddam, Middlefield, Durham, Killingworth, Chester, Deep River, Essex, Old Saybrook, Westbrook, Clinton) and 9 towns on Middlesex County's periphery (Rocky Hill, Glastonbury, Hebron, Marlborough, Colchester, Salem, Lyme/Old Lyme, Madison, Guilford).



With a population of 165,676 (2010 Census), Middlesex County ranks 3rd of the eight CT counties in population size.² 72% of the county's residents live in urban areas with 28% living in rural environments.³ The county's racial composition is 89.2% white, 4.6% Black or African American, 2.6% Asian Pacific, 0.2% Native American and 3.4% Other/Multi-Race, with an ethnic make-up of 5.1% Hispanic or Latino (2011).⁴ Middletown is the largest municipality in the county, with a population of 47,648 (2010 Census) and demographically stands alone from the other towns within Middlesex County. Middletown's racial composition is 76% white, 12% Black or African American, 4% Asian Pacific, 0.1% Native American and 7.5% Other/Multi-Race, with an ethnic make-up of 6.8% Hispanic or Latino (2010).⁵ Regarding the socioeconomic measures of income level, poverty rate, and education attainment: 1) the average annual household income is \$61,791 in Middletown and \$74,627 in Middlesex County (2010);⁵ 2) the poverty rate

is 11.8% in Middletown and 5.8% in Middlesex County (2009);⁵ and 3) 10.3% of adults age 25 or older in Middletown don't have a high school diploma compared to 7% in Middlesex County (2007-2011).^{6,7}

Community Collaborative

Middlesex Hospital is a member of the Middlesex County Coalition on Community Wellness (MCCOCW), an inclusive and representative partnership comprised of constituents from the sectors of public health, health care, social services, community services and education. The purpose of MCCOCW is to work collaboratively, through a multi-sectorial effort, as agents of change to improve the health and wellbeing of the communities it serves.

MCCOCW's goals are to:



- 1) work together to conduct a Middlesex County community health needs assessment
- 2) identify key issues that impact health and wellbeing
- 3) develop collaborative programs to meet identified need

County-Wide Effort

Middlesex County was a recipient of Centers for Disease Control and Prevention (CDC) Community Transformation Grant (CTG) funding for projects that improve the health and wellbeing of communities, reduce chronic disease rates and reduce health disparities. The CT Department of Public Health (DPH) was one of 61 CTG national recipients and secured funding for capacity building to improve community health by laying a solid foundation for community prevention efforts. Connecticut DPH identified 5 of the 8 counties with populations of less than 500,000 to receive funding, one of which was Middlesex County. Deliverables included: strengthening of multi-sectorial, county-wide coalitions; completion of policy scans to identify best practices and gaps (i.e. policies, programs, infrastructure); and completion of a county-wide health needs assessment.

The Chatham Health District provided the oversight for the administration of the CTG capacity-building deliverables in Middlesex County in partnership with the CT River Area Health District, Essex Health Department, the Middletown, Durham and Cromwell Health Departments, Middlesex Hospital and a wide array of community partners representing the broad interests of Middlesex County. The Chatham Health District Director of Health and the Middlesex Hospital Manager of Community Benefit serve as co-chairs of the coalition.

The Middlesex County Coalition on Community Wellness (MCCOCW) is the advisory body for the CDC Community Transformation Grant. The coalition is made up of 75+ members from Middlesex County, including those who have special knowledge or expertise in public health; a complete listing of coalition members is included in the MCCOCW 2013 Community Health Needs Assessment. Those who are unable to attend the monthly meetings are kept informed

and engaged via e-mail communications as well as meeting minutes, agendas and pertinent documents. The monthly meetings include updates on standing items (community health needs assessment status, grant deliverables, etc.) as well as Member Spotlights, which allow MCCOCW members to give overviews of their programs and share best practices.

In addition to the full-member coalition, the MCCOCW has a steering committee that is responsible for timeline adherence and ensuring that all deliverables are met. The steering committee frequently convenes in between monthly meetings to hold planning sessions and status reviews.

Middlesex County Coalition on Community Wellness Steering Committee

Name	Agency
Thad King, MPH, Director of Health (co-chair MCCOCW)	Chatham Health District
Catherine Rees, MPH, Manager Community Benefit (co-chair MCCOCW)	Middlesex Hospital
Wendy Mis, Director of Community Health	Chatham Health District
Midge Malicki, MPH, CHES, Community Wellness Coordinator	Middletown Health Department
Susan Dubb, RN, AEMT, Public Health Nurse	Chatham Health District
Sherry Carlson, RN, BSN, Public Health Nurse	CT River Area Health District
Lisa Fasulo, MPH, RS, Director of Public Health	Essex Health Department
Mary Jane Engle, MPH (until 2012; retired Health Director)	CT River Area District of Health

Methodology – Data Collection

To define the scope and breadth of a community's health, MCCOCW's community health needs assessment (CNHA) used primary, secondary, qualitative and quantitative data collection. Data was collected using the following methodologies:

- CDC CHANGE Tool
- Key Informant Surveys
- Focus Groups
- PhotoVoice
- Health Equity Index (Connecticut Association of Directors of Health)
- Asset Mapping
- Available national, state and county data sets

The purpose of using a variety of data collection methods is to provide coalitions with data that sufficiently and accurately represents health status and health needs. Analysis of comprehensive data sources allows for prioritizing community health needs, defining areas of opportunity and creating sustainable, population-based strategies that improve community health and wellbeing.

CDC CHANGE Tool: The Community Health Assessment and Group Evaluation (CHANGE) Tool focuses on five sectors: 1) Health Care; 2) Worksite; 3) School; 4) Community at Large; and 5) Community Institution/Organization and five focus areas: 1) Healthy Eating & Active Living; 2) Tobacco-Free Living; 3) Clinical Preventive Services; 4) Healthy & Safe Environments; and 5)

Social & Emotional Wellness. As the CDC Community Transformation Grant is county-based, the CHANGE Tool data was collected using representative sampling of towns within Middlesex County. Middletown was selected as it demographically stands alone from the other towns within Middlesex County. The remaining towns of Cromwell, Killingworth, East Haddam and Old Saybrook were chosen based on Health Reference Groups, which identify towns as urban centers, manufacturing centers, diverse suburbs, wealthy suburbs, mill towns and rural towns.

Key Informant Surveys: MCCOCW developed a key informant interview survey in order to capture the knowledge, belief, and perspective of key stakeholders in Middlesex County who have in-depth understanding of health needs, areas of concern and social determinants of health. Key informant surveys representing the five CDC CHANGE Tool sectors were administered via face-to-face interviews, electronically and through mail. A total of 54 key informants completed surveys.

Key Informant Survey: What is your vision for a healthy community?

"That there is easy access to all levels of health care for all citizens; no one is forgotten or left behind"

"The saying, "it takes a village" could never be overused. We need to be sensitive to our overwhelming diversities, cultural issues, socio-economic imbalance, day to day stressors that overwhelm people affecting their ability to function well"

"Everyone is housed, has access to the care they desire/need, has enough food for their families, are employed if they are able...and has a social network of friends and family members where they feel connected and loved"

"Asking, "what can we do together as a community?" because together as a community, what a power we will be"

Focus Groups: MCCOCW developed focus group questions specific to the five CDC CHANGE Tool sectors and invited representative community members and stakeholders to attend sector-specific sessions with facilitator-directed discussion. Three focus groups were conducted.

PhotoVoice: Coalition members were asked to contribute visual representations of the CHANGE Tool's five focus areas using PhotoVoice, socially engaged photography where the community point of view is portrayed through photographs.

Health Equity Index: Secondary data was collected using the Health Equity Index (HEI), an electronic tool developed by the Connecticut Association of Directors of Health. The HEI uses several types of data to provide community-specific scores on seven social determinants of health and thirteen health outcomes, the correlations between them, and Geographic Information System maps that illustrate the community-specific scores. Scores range from one to ten, with ten being the best possible score and one being the lowest.⁸

Asset Mapping: Asset mapping provides an inventory of community resources that helps identify strengths and opportunities for capacity building. Once priority strategies are selected, the resources uncovered during the asset mapping process can help to be solutions to possible deficits within the community.

Methodology – Data Analysis

Middlesex County Coalition on Community Wellness members were invited to join one of five sector work groups (Healthcare, Worksite, School, Community at Large, and Community Institution/Organization). Each work group was tasked with reviewing sector-specific quantitative and qualitative data for emerging/common themes.

The individual work groups met for several months, culminating with a large All-Sector work group meeting on March 28, 2013. Prior to the All-Sector meeting, each sector work group identified key themes from their respective data sources; these overviews were distributed to the attendees of the All-Sector meeting so that all who were present were reviewing the same data sets. Participants were asked to divide into groups and review each data set for identification of the most common themes across all sectors. Collectively, the members present provided foundational work by refining the data for future review, analysis, discussion and prioritization by the full MCCOCW.

Methodology – Prioritization

The Middlesex County Coalition on Community Wellness conducted priority setting based on the CDC Community Transformation Grant focus areas and Middlesex Hospital conducted priority setting from its Community Benefit perspective.

Middlesex County Coalition on Community Wellness: On April 9, 2013, the MCCOCW held a prioritization and implementation planning meeting. The original sector-specific data sets that were reviewed by the All-Sector work group meeting were compiled into a resource document and distributed to the full MCCOCW via e-mail and at the April 9th meeting. The MCCOCW Co-Chairs presented the findings and themes from all collected data sources and the sector-specific work group reviews. Prioritization facilitation was conducted by the Executive Director of the Connecticut Association of Directors of Health. During the breakout session, committee members were asked to sit at one of the five CHANGE Tool focus area tables (Healthy Eating & Active Living; Tobacco-Free Living; Clinical Preventive Services; Healthy & Safe Environments; and Social & Emotional Wellness). Each breakout group was asked to review the data synopses for the respective focus area, develop 3 strategies, and assess each strategy for:

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|---------------------------------|---|
| ▪ Feasibility | ▪ Champion person or organization |
| ▪ Magnitude of potential impact | ▪ Data to collect or track |
| ▪ Cost | ▪ Short-term or long-term results |
| ▪ Resources needed | ▪ Benchmarks to evaluate progress |
| ▪ Existing assets | ▪ Readiness |
| ▪ Stakeholders | ▪ Settings/sectors available for implementation |

Breakout group members then ranked their respective focus area strategies by readiness and importance on a scale of one to three and presented a summary of findings to the larger group.

The Middlesex County Coalition on Community Wellness has selected the following two CDC Community Transformation Grant strategic directions:

1) Tobacco Free Living: Prevent and Reduce Tobacco Use through Tobacco Free Policies in Public Parks

Based on Behavioral Risk Factor System (BRFSS) findings, Middlesex County ranked sixth among the eight CT counties in smoking prevalence, with a smoking rate of 16%, which mirrors the 16% smoking rate for the state of CT. The proposed strategy is one of the CDC-Recommended Evidence- and Practice-Based Strategies and is included as a recommendation in the U.S. National Prevention Strategy.²

2) Clinical Preventive Services: Implement a Clinical Preventive Protocol for Management of Individuals who are Identified with Hypertension

Hypertension is a prevalent condition in Middlesex County residents which contributes to significant adverse health outcomes including premature death, heart attack, renal insufficiency and stroke. Individuals who experience uncontrolled blood pressure will be identified, educated and engaged in care management with the goal of blood pressure control.²

Middlesex Hospital: Middlesex Hospital's last community health needs assessment (CHNA) priority areas were the basis of its Community Benefit annual goals, which include specific goal, rationale, and measure(s) of success. The priority areas selected by Middlesex Hospital for the 2013 CHNA will continue to be the foundation for its Community Benefit annual goals for the next three years, at which point another CHNA will need to be conducted to stay within compliance of the Affordable Care Act, Section 501(r). To select its priority areas from the 2013 CHNA, Middlesex Hospital's Community Benefit Steering Committee, along with members of its executive staff, reviewed the quantitative and qualitative results and themes of the following data sources, analysis and strategies:

- Health Equity Index
- Key Informant Surveys – Healthcare Sector
- Focus Groups – Healthcare Sector
- CDC CHANGE Tool
- Available national, state and county data sets
- MCCOCW Prioritization Analysis
- MCCOCW CDC Community Transformation Grant Priority Strategies

Qualitative analysis of the healthcare sector key informant surveys and focus group identified themes that occurred with the highest frequency, which were supported by the quantitative data within the CHNA. Top areas of concern were **mental health**, **substance abuse** and **older**

adults, including availability of services, access, and coordination of care. These priority areas are consistent with the findings of Middlesex Hospital's last community health needs assessment and have been past community benefit focus areas. The Hospital's Community Benefit Steering Committee and members of its executive staff reviewed 1) the vulnerability of the target populations; 2) the breadth of people affected; 3) problem severity; and 4) the Hospital's ability to make significant and lasting improvements. Given the positive impacts that have been made in these three priority areas due to the Hospital's community benefit organizational commitment, the Hospital has elected to continue to build upon earlier successes by continuing to focus on these vulnerable populations and areas of identified need.

Community Health Needs Assessment Priority Areas to be Addressed by Middlesex Hospital

Through the findings of the MCCOCW 2013 Community Health Needs Assessment, Middlesex Hospital will engage in five initiatives, three of which the Hospital will take a leadership role and two of which the Hospital will take a supportive role. Oversight of Middlesex Hospital's 2013 CHNA Implementation Strategy will reside under Community Benefit, where Hospital staff will collaborate with community agencies whenever possible and build evidence-based programs, where needed, with measurable, benchmarked results and the goal of achieving positive outcomes. The Hospital's priority areas focus on the needs of the following identified vulnerable populations:

Priority Area #1: Mental Health – access and care coordination

Rationale: The MCCOCW 2013 Community Health Needs Assessment identified mental health emergency department treatment and hospitalizations to be an issue in Middletown. In addition, mental health concerns were identified by the healthcare sector key informant surveys and focus group to be a top health priority for Middlesex County with regard to access, available services and coordination of care.

Goal: To take a leadership role in increasing access to care through resource identification, care coordination and interagency collaboration for community members experiencing mental illness.

Priority Area #2: Substance Abuse – access and care coordination

Rationale: The MCCOCW 2013 Community Health Needs Assessment identified alcohol related deaths to be an issue in every town in Middlesex County. In addition, substance abuse concerns were identified by the healthcare sector key informant surveys and focus group to be a top health priority with regard to access, available services and coordination of care.

Goal: To take a leadership role in increasing access to care through resource identification, care coordination and interagency collaboration for community members experiencing substance abuse.

Priority Area #3: Older Adults – access and care coordination

Rationale: Middlesex County has a higher distribution of residents over the age of 65 (15.1%) when compared to the state (14.2%).² Similar to nationwide trends, Middlesex County is experiencing a dramatic demographic shift in the older adult population. In addition, geriatric concerns were identified by the healthcare sector key informant surveys and focus group with regard to access, available services, coordination of care, and ability to meet the needs of a growing older adult population.

Goal: To take a leadership role in increasing access to care through resource identification, care coordination and interagency collaboration for older adults living in Middlesex County.

Priority Area #4: MCCOCW Tobacco Free Living – support and collaboration

Rationale: The MCCOCW 2013 Community Health Needs Assessment identified that Middlesex County ranked sixth among the eight CT counties in smoking prevalence, with a smoking rate of 16%, which mirrors the 16% smoking rate for the state of CT. A CDC Community Transformation Grant focus area is Tobacco-Free Living.

Goal: To be a supportive partner to and collaborate with MCCOCW on its Tobacco Free Living priority area.

Priority Area #5: MCCOCW Clinical Preventive Services, Hypertension – support and collaboration

Rationale: The MCCOCW 2013 Community Health Needs Assessment identified hypertension as a prevalent condition in Middlesex County. A CDC Community Transformation Grant focus area is Clinical Preventive Services.

Goal: To be a supportive partner to and collaborate with MCCOCW on its Clinical Preventive Services, Hypertension priority area.

Adoption of the Implementation Strategy

The Middlesex Hospital Board of Directors reviewed the Hospital's Community Benefit Community Health Needs Assessment Implementation Strategy for addressing five priority areas identified in the MCCOCW 2013 Community Health Needs Assessment and approved the strategy on September 20, 2013.

Community Health Needs Not Addressed:

Middlesex Hospital recognizes that it cannot focus on all the health needs identified in the MCCOCW 2013 Community Health Needs Assessment. Given the significant resources and in-kind time needed to address health priority areas uncovered by a community health needs assessment, the Hospital engaged in a thorough process of data review and discussion to identify the areas of greatest need, impact potential and feasibility.

The MCCOCW 2013 Community Health Needs Assessment will be widely disseminated to Middlesex County community agencies with the hope that the study will be used to initiate focus on CHNA findings that are outside the scope of the Hospital's selected priority areas. As many local community based organizations are dedicated to meeting the needs of county residents, the Hospital realizes that these organizations may be better suited to take a leadership role in improving certain health outcomes. As with our previous community health needs assessment, the Hospital will continue to be a willing partner, when able, for initiatives not related to its selected CHNA priority areas.

In addition, the MCCOCW 2013 Community Health Needs Assessment will be disseminated among Middlesex Hospital directors, managers, supervisors and medical staff so that internal departments are able to use the findings to work collaboratively with community partners, when able, to improve the health and wellbeing of specific populations.

Sources

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2. Chatham Health District, *Middlesex County Coalition on Community Wellness Community Health Needs Assessment*, Chatham Health District, East Hampton, CT; July 2013
3. http://www.city-data.com/county/Middlesex_County-CT.html
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