RCCHI Prevention/Population Health Workgroup Recommendations

Executive Summary

The Finger Lakes Health Systems Agency (FLHSA) convened the Regional Commission on Community Health Improvement (RCCHI) to identify community goals, measures, and strategies to integrate and coordinate activities to meet the complex needs of individuals across the spectrum of care. Commission members, a multi-stakeholder group representing a variety of fields, met 12 times between November 2013 and March 2015 to develop a community blueprint to guide health reform efforts. Existing research and local data informed committee members’ establishment of the Prevention and Population Health workgroup, one of three workgroups, to improve population health in the Finger Lakes region.

After reviewing the literature and local data, and discussing their shared experiences, the Prevention & Population Health workgroup identified two priority areas for population health improvement: obesity and tobacco and environmentally-associated respiratory disease. Obesity is both a national and regional epidemic with obese individuals experiencing an increase in morbidity and mortality, higher healthcare costs, and decreased quality of life. Reducing obesity was selected as a primary prevention initiative due to its inclusion as a community health priority in all nine Finger Lakes counties’ Community Health Plans and its association with multiple, downstream chronic diseases, including hypertension and diabetes. Tobacco and environmentally-associated respiratory disease significantly contribute to premature morbidity and mortality in the form of lung cancer, COPD, and asthma. The workgroup recommended addressing the adverse health consequences of obesity and environmentally-associated respiratory disease through coalition-driven implementation of strategic health promoting policies and programs.

While identifying obesity as a focus area for population health improvement, the workgroup also recognized the difficulty in identifying, implementing, and measuring effective, evidenced-based prevention initiatives. Few programs or policies, other than the Diabetes Prevention Program, have demonstrated significant results. Moreover, sustainable results will take many years to demonstrate - a time horizon not well aligned with traditional funding cycles. To succeed, initiatives require sustained commitment, long-term funding, and intermediate measures to demonstrate incremental progress.
Introduction

Regional Commission on Community Health Improvement

Over the past several years, regional, state, and federal healthcare initiatives (e.g., the FLHSA 2020 Performance and Sage Commissions, CMS Care Transition Intervention initiatives, Health Homes (HH), Regional Behavioral Health Organizations (BHO), and Accountable Care Organizations (ACO)) have increasingly highlighted the need for a patient-centered, coordinated, and integrated system of care to best address patients’ needs, optimize resources, and improve care. In alignment with these initiatives, the Finger Lakes Health Systems Agency (FLHSA) convened the Regional Commission on Community Health Improvement (RCCHI), a multi-stakeholder group, to develop community goals, recommendations, and measures to address the complex medical, behavioral, developmental, and social needs of individuals.

RCCHI included representatives from a variety of fields, including: hospitals and health systems, long-term care and aging services, consumer representatives, school districts, primary care providers, social service providers, institutes of higher education, public health, and the business community. The Commission met 12 times between November 2013 and March 2015 to improve health outcomes by facilitating the integration and coordination of healthcare in the nine-county Finger Lakes region.

The Commission identified unlimited purview as too broad and ambitious to allow for the development of meaningful recommendations. In order to narrow and ultimately define areas of focus, commission members requested additional information for several healthcare sectors. Existing research and local data informed commission members’ selection of three areas of focus – Behavioral Health, Senior Health, and Prevention and Population Health – for development of community-wide goals and corresponding recommendations to achieve them.

Prevention and Population Health

Many of “the actual causes of [morbidity and] mortality in the United State lie in behavior that the individual healthcare system addresses unreliable or not at all, such as smoking, violence, physical inactivity, poor nutrition, and unsafe choices (Mokdad, 2004).” Such behaviors (e.g., tobacco use, poor diet, and physical inactivity) are the leading causes of poor health in the US (Centers for Disease Control and Prevention, 2014) and exert a greater effect on population health than genetics, clinical care, or any other single factor. Historically, the US healthcare system operated as an acute care system, focused on the treatment of disease rather than its prevention. This focus has resulted in US health outcomes that are

Finger Lakes Health Systems Agency
1150 University Avenue ● Rochester, New York ● 14607-1647
585.461.3520 ● www.FLHSA.org
worse than most other developed countries, despite a greater percentage of its resources spent on healthcare (World Health Report, 2010). Stakeholders in the US healthcare system have begun to realize that disease prevention is more effective, whether measured by outcomes or cost, than disease treatment. This realization is reflected in the current transformation of the US healthcare system. The chart below illustrates an aspirational path of transformation for the US healthcare system from the current model of episodic care to patient-centered care, and ultimately, population-centered care. Preventive care and population health are identified as critical components in the evolution of US healthcare system.

Recognizing the significant role of health promotion and disease prevention in population health and its role in the transformation of the US healthcare system, the full commission selected Prevention and Population Health as one of three key areas of focus.
Prevention and Population Health Workgroup

The Prevention and Population Health workgroup, comprised of 35 community leaders representing business, insurers, hospitals, physician practices, academia, public health, and community groups, met 6 times during 2014 to recommend actionable recommendations to improve population health in the Finger Lakes region through health promotion and prevention. The workgroup identified risk factors for major chronic diseases as its focus and selected obesity and environmentally-associated respiratory disease as priority areas.

The workgroup’s focus, priority areas, and recommendations were informed by regional data, state-wide initiatives (e.g., DSRIP, the New York State Prevention Agenda), and county Community Health Improvement Plans, as well as its collective professional experience. The selected priority areas, obesity and environmentally-associated respiratory disease, deliberately align with the priority areas of all nine Finger Lakes counties’ Community Health Improvement Plans. All nine counties, identified obesity as a priority area. Obesity’s priority status reflects its prevalence and identification as a modifiable risk factor for multiple chronic conditions. Hypertension, diabetes, and heart disease were also identified as priority areas in several community health plans. By identifying obesity, an upstream risk factor for hypertension, diabetes, heart disease, and other chronic diseases, as a priority area, the workgroup also addressed these prevalent chronic conditions.

While identifying obesity as a focus area for population health improvement, the workgroup also recognized the difficulty in identifying, implementing, and measuring effective, evidenced-based prevention initiatives. Few programs or policies, other than the Diabetes Prevention Program, have demonstrated significant results. Moreover, sustainable results will take many years to demonstrate - a time horizon not well aligned with traditional funding cycles. To succeed, initiatives require sustained commitment, long-term funding, and intermediate measures to demonstrate incremental progress.

Reducing tobacco exposure is also a health prevention theme common to all counties in the Finger Lakes region. While public health initiatives continue to reduce the population’s exposure to tobacco, tobacco-related chronic respiratory diseases such as asthma and chronic obstructive pulmonary disease (COPD), remain problematic in the region. These diseases share many modifiable risk factors. Therefore, the workgroup elected to take a more comprehensive approach than tobacco exposure reduction and identified environmentally-associated respiratory disease as an outcome of prevention focus.
Together, the priority areas of obesity and environmentally-associated respiratory disease address what the workgroup acknowledged, and county Community Health Plans affirm, as the most critical factors for regional population health improvement.

Priority Issues in Regional Population Health

OBESITY

Obesity is both a national and regional epidemic. The regional prevalence of adult obesity and overweight ranges from 56% in Ontario County to 72% in Wayne County (Cook, 2009). Its prevalence varies across geographic, socioeconomic, racial, and ethnic strata. County level minority obesity/overweight prevalence was not available due to the sample sizes of BRFSS, but the 2012 Monroe County Adult Health Survey reported an overweight/obesity prevalence rate of 75% among Black adults (Monroe County Department of Health, 2013). Childhood obesity is also a significant public health concern; one-third of New York state school-age children are overweight or obese (NYS DOH, 2009).

Many theories exist for the increase in obesity prevalence. Dietary habits and nutritional content of food have changed over the last several decades and consistent access to nutritious food is not uniformly available to all segments of the population. Locally, 28% of Monroe County adults reported consuming fruit less than once per day and 20% reported consuming vegetables less than once per day. Significant differences in dietary habits are reported by gender, race/ethnicity, and location (urban/suburban). Males, minorities, and urban dwellers report an increased likelihood of consuming fruits and vegetables less than once per day (Monroe County Department of Health, 2013).

A second dimension in understanding the obesity epidemic is its association with physical activity. Despite recognition of sedentary behavior as a risk factor for obesity, physical activity among children and adults has declined over time. Within Monroe County, 84% of adults reported participating in leisure-time physical activity in the past month (Monroe County Department of Health, 2013). This percentage is higher than the 75% reported state-wide in 2012. Unlike the state data, however, the 2012 Monroe County Adult Health Survey was conducted during the summer months, when residents tend to be more active. As with diet, disparities exist in leisure-time physical activity. Monroe County residents living in the suburbs were 15% more likely to engage in leisure-time physical activity than their urban counterparts, while white non-Hispanic residents were 22.2% more like to participate than minority residents (Monroe County Department of Health, 2013).
While recognizing the role of diet and physical inactivity in the obesity epidemic, public health experts consider “a host of overarching and powerful influences beyond the individual’s control to be the pivotal causes of obesity.” (Friedman & Schwartz, 2008). Therefore, from a prevention and policy stand-point it is more useful to: examine the obesegenic environments where we live, develop a comprehensive strategy to change the environment, and advance public health policy to implement and sustain the change (Friedman & Schwartz, 2008). Increasingly communities recognize the need for policy change to effectively address the obesity epidemic. Locally the Healthi Kids Coalition, a FLHSA initiative funded by the Greater Rochester Health Foundation, strives to create a healthier, more active environment for local children. By advocating for public support of: more nutritious school food, safer play areas, food standards at childhood centers, at least 60 minutes of in-school physical activity, and policies that support breastfeeding, Healthi Kids aims to reduce the “powerful influences of obesity.”

The CDC identified obesity, nutrition, and physical activity as “winnable battles.” Despite this designation, few programs or policies have demonstrated significant or sustained obesity reduction. (The Diabetes Prevention Program (DPP), a community-based program that focuses on modifying dietary behaviors and physical activity to reduce weight and maintain the healthy behaviors over time, provides a rare example of a successful intervention.) Public health experts now believe improvement is achieved by developing policy, systems, and environmental initiatives that make healthy choices available, affordable, and easy. Such initiatives are costly to implement, difficult to measure, and require long time horizons to demonstrate results. As such, initiatives require sustained effort and long-term funding.

ENVIRONMENTALLY-ASSOCIATED RESPIRATORY DISEASE

Tobacco causes death through many types of cancer, heart disease, stroke, and chronic obstructive pulmonary disease (COPD). It also contributes to disability associated with these and other conditions. The prevalence of tobacco smoking, the most significant modifiable risk factor for respiratory diseases, ranges from 16.7% of adults in Livingston County to 30.8% in Chemung County, and averages approximately 17% in the Finger Lakes region, as well as New York State (FLHSA, 2014). While the overall prevalence of smoking has declined, populations with disproportionate burden remain. The prevalence of smoking among individuals of low socioeconomic status and educational attainment is 28% (NYS Prevention Agenda Data, 2014). Moreover, smoking is the leading cause of death among those
with a serious mental health condition. Despite its decline, smoking and tobacco exposure remain significant causal factors in poor population health outcomes.

Chronic obstructive pulmonary disease (COPD) and asthma, also contribute to the region’s respiratory disease burden. Many people have accumulated irreversible lung damage which ultimately manifests as symptomatic COPD. Individuals with COPD become high consumers of healthcare and experience marked reductions in productivity and life quality. The COPD mortality rate in the Finger Lakes region was similar to the national average in 2000 at 45/100,000. More recently, however, national declines in COPD mortality have not been matched in the upstate and Finger Lakes regions and suggest room for improvement. Although COPD is not reversible, the reduction and/or elimination of triggering exposures and early disease identification can help stabilize lung function and slow functional decline.

Lastly asthma, the most prevalent chronic respiratory disease, affects an estimated 8.2% of the US population. While occurring across the age-spectrum, asthma is particularly prevalent in children. Marked differences in asthma prevalence exist across population subgroup; those of female gender, low income, and black race are at increased risk of asthma (Centers for Disease Control, 2012). SPARCs emergency department visit and discharge data suggest asthma incidence is stable, if not declining across New York State and the Finger Lakes region. However, pockets of the region, most notably Chemung County, demonstrate an increased asthma burden relative to other counties in the region and suggest that additional preventive measures are warranted.

The cost of preventable disease, whether measured in terms of direct expenditures, lost productivity, or quality of life, is enormous. The US spent an estimated $190 billion, or 21% of medical spending, on obesity-related healthcare expenses in 2005 (Cawley, 2012). Smoking-attributable economic costs in the US are estimated at $289 billion/year, including at least $133 billion for the direct medical care of adults and more than $156 billion in lost productivity (Centers for Disease Control and Prevention, 2014). Moreover, the costs associated with these risk factors, including the many diseases associated with them, vary by income, education, work setting, and environment. Minority populations are disproportionately burdened.
Recommendations

The workgroup recommended policies and programs to reduce the regional prevalence of obesity and environmentally-associated respiratory disease. In addition to the policies and programs outlined below, the workgroup identified community coalitions as the ideal coordinators and implementers of public health initiatives. Multi-stakeholder coalitions are well-positioned to establish commitment across varied jurisdictions, and effectively and efficiently advance coordinated public health initiatives. They provide an opportunity to implement policy and programs widely and, where appropriate, consistently to achieve the broadest population effect. Coalition discussion of regional health issues helps identify emerging issues and promote identification and evaluation of existing policies and programs to optimize community health resources and outcomes. Such multi-sector coalitions can identify community prevention best practices within the Finger Lakes region and natural or strategic opportunities to extend the reach to maximize the effect of such opportunities. Experts agree that improvement in public health will be achieved by developing policy, systems, and environmental initiatives that make healthy choices available, affordable, and easy. Such policy, system, and environmental initiatives are most effectively identified, implemented, and sustained by a unified coalition of diverse healthcare and community stakeholders.

The recommendations set forth below include tables which list specific examples of evidenced-based policies and programs consistent with the workgroup’s direction.

Recommendation #1: Develop and implement local policies that support regional promotion of healthy, active living across the lifespan by changing the contexts in which people live, learn, work, and play.

Policies should:

- Focus on:
  - Increasing healthy eating
  - Increasing physical activity
  - Reducing smoking
  - Reducing exposure to environmental respiratory triggers
-Engage strategic government and community partners to effect change through policy implementation. Include partners from:

- Business leaders and worksites
- Policymakers and elected officials
- Municipalities and governmental agencies (including public health)
- Schools and universities
- Hospitals and healthcare providers

**Table 1. Examples of Evidence-based Policies Consistent with Workgroup Recommendations**

<table>
<thead>
<tr>
<th>Policy Focus</th>
<th>Potential Community Partners</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breastfeeding</td>
<td>Worksites, hospitals, healthcare, policymakers, government agencies</td>
<td>Increase healthy eating from infancy</td>
</tr>
<tr>
<td>Healthy food cafeteria/vending</td>
<td>Schools, early childhood, universities, businesses, worksites, hospitals, healthcare</td>
<td>Increase healthy eating by improving healthy choices and reducing unhealthy choices</td>
</tr>
<tr>
<td>Complete streets or active</td>
<td>Municipalities, government agencies, schools, worksites, universities</td>
<td>Increase physical activity by making it easier/safer to walk, bike, use transit</td>
</tr>
<tr>
<td>transportation promotion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical activity/recess or joint</td>
<td>Schools, early childhood, universities</td>
<td>Increase physical activity by requiring students to be active and providing exercise space for community residents on school campuses/facilities</td>
</tr>
<tr>
<td>use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoke-free campus</td>
<td>Schools, early childhood, worksites, universities, municipalities, government agencies (including public health departments)</td>
<td>Prevent/reduce smoking</td>
</tr>
</tbody>
</table>

**Recommendation #2:** Recommend and support policies that better incentivize and deliver preventive care in a meaningful and consistent way. The following policies were identified:

- Implement evidence-based, clinical, preventive guidelines across the region
- Support the practice of preventive medicine with appropriate and available technology
Recommendations #3: Implement evidence-based programs that prevent or manage obesity and environmentally-associated respiratory disease through education and support of behavioral change in diverse, strategic settings. Prioritize programs:

- To serve:
  - Individuals in key life stages that set an early course for lifetime healthy behavior (e.g., mothers and infants during pregnancy and the post-natal period, children and adolescents, and seniors)
  - Individuals with a high risk of developing, or who have developed obesity, hypertension, diabetes, or environmentally-associated respiratory disease

- To engage community partners to implement programs in diverse, strategic settings such as:
  - Homes
  - Worksites
  - Faith communities
  - YMCAs/recreation centers
  - WIC sites/resource centers
  - Community centers/FQHCs

<table>
<thead>
<tr>
<th>Program</th>
<th>Target Population</th>
<th>Delivery Setting</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse Family Partnership (NFP)</td>
<td>First time mothers, infants/toddlers 0-2</td>
<td>In home</td>
<td>Reduced smoking and hypertension for mothers (prevent pregnancy associated hypertension and tobacco abuse)</td>
</tr>
<tr>
<td>Diabetes Prevention Program (DPP)</td>
<td>Adults 45+ that are overweight or pre-diabetic</td>
<td>Worksites, faith, YMCAs/community centers</td>
<td>Lose weight to prevent or delay onset of type 2 diabetes (prevent diabetes, manage obesity)</td>
</tr>
<tr>
<td>Stanford Chronic Disease Self-Management (CDSM)</td>
<td>Adults with chronic conditions (e.g., heart disease, lung disease, arthritis)</td>
<td>Worksites, faith, YMCAs/community centers</td>
<td>Increased exercise, physician communication, general health (manage obesity and respiratory disease)</td>
</tr>
<tr>
<td>Tobacco Cessation Programs:</td>
<td>Adult smokers</td>
<td>In home, by phone</td>
<td>Reduced smoking (prevent and delay respiratory disease)</td>
</tr>
<tr>
<td>- Proactive NYS Quitline</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- High intensity 1-1 counseling</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Examples of Evidence-based Programs Consistent with Workgroup Recommendations
**Recommendation #4:** Develop a diverse and culturally competent healthcare workforce that possesses the following skills:

- Understands the social and environmental determinants of health
- Values health promotion and wellness
- Works effectively in multidisciplinary teams within practices, across care settings, and with community partners
- Engages patients through motivational interviewing, self-determination theory, health literacy, cultural and linguistic competency
- Uses IT, telehealth, and EHR mining/health informatics to improve population health
- Continually monitors and reinforces the issues of cultural competence

Workforce development issues are common to all RCCHI workgroups. As such, the RCCHI Blueprint should include a recommendation that the FLHSA develop a workforce consortium to coordinate and design a regional healthcare workforce plan. The above recommendations, endorsed by the Prevention and Population Health workgroup, could be addressed by the planned workforce consortium. Lastly, although the workgroup did not identify research as a specific area of transformational change, it recognized the role of research and measurement in public health and prevention. Given the long time horizon needed to demonstrate the effect of prevention initiatives on health outcomes, the workgroup focused on change in health behaviors, an intermediate outcome. Accordingly, the workgroup recommended the following research and measurement initiatives:

**Recommendation #5:** Document and evaluate the outcomes, costs, challenges, and lessons learned of key community prevention efforts, including:

- Measure population health behavior outcomes, for example:
  - Percent of adults with regular physical activity
  - Percent of adults meeting fruit and vegetable guidelines
  - Percent of children with regular physical activity
  - Percent of adults who smoke
  - Percent of workplaces covered by smoke-free workplace policies

- Perform ongoing assessment to identify populations with healthcare disparities.
References

Active Living Research Brief. (2009).


FLHSA. (2014). *Regional Health Profile.*


Appendix

Regional Commission on Community Health Improvement
Prevention/Public Health Work Group

Byron Kennedy, Co-Chair
Monroe County Department of Public Health
Janice Harbin
Jordan Health Center

John Urban, Co-Chair
Greater Rochester Health Foundation
Kim Hess
Monroe Plan for Medical Care

Rosemary L. Anthony
Arnot Health, Community Health Services
Gloria Hitchcock
Rochester RHIO

Mary Beer
Ontario County Public Health Department
Leesha Hoilette
URMC, Strong Pediatric

Nancy M. Bennett
URMC, Center for Community Health
Jeffrey Kaczorowski
The Children’s Agenda

Dawn Borgeest
United Way
Marcia Kasprzyk
Schuyler County Public Health Department

Lauren Deutsch
Perinatal Network of Monroe County
Anne Kern
Monroe County Department of Public Health

Gladys Pedraza Burgos
IBERO American Action League
Melissa Klossner
Chemung County Public Health Department

William Clark
Urban League of Rochester
Katrina Korfmacher
Environmental Health Sciences Center

Diane Devlin
Wayne County Department of Health
Marty Lustick
Excellus BCBS

Vicki Fuerst
Steuben County Public Health and Nursing
Kelli Mannon-Guilford
Steuben Rural Health Network

Andrea Haradon
S2ay Networks
Deb Minor
Yates County Public Health
Kelly A. Mueller  
American Diabetes Association, Upstate NY

James Norman  
Action for a Better Community

Nycole Parks - Guest  
Arnot Health

Nina Randazza  
Monroe Plan for Medical Care

Jennifer Rodriguez  
Livingston County Department of Health

James Schuppert  
Corning Incorporated

Emilie Sisson  
Wayne County Rural Health Network

Vickie Swinehart  
Seneca County Department of Public Health

Mary Tantillo  
University of Rochester School of Nursing

Leslie Trezise  
Monroe Plan for Medical Care