



#### AN OHIOHEALTH AFFILIATE

Southeastern Ohio Regional Medical Center

Community Health Needs Assessment

September 2019



Southeastern Ohio Regional Medical Center is a premier medical facility located in Cambridge and serving Guernsey and Noble Counties in southeastern Ohio. Over the years, we've grown from a small community hospital into an innovative, acute health care center serving more than 4,000 who were admitted into the hospital and nearly 100,000 outpatients each year.

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### Introduction

Located in Guernsey County, Ohio, Southeastern Ohio Regional Medical Center (SEORMC) has served Guernsey and Noble Counties and surrounding communities since 1952. SEORMC continues to address the changing healthcare needs of the local communities (Southeastern Med Hospital, 2019). SEORMC is also more commonly called Southeastern Med in the community. SEORMC, and its compassionate team of healthcare providers and support staff, provides top quality, holistic care to patients and families within their own local community (Southeastern Med Hospital, 2019). Southeastern Ohio Regional Medical Center, located at 1341 Clark St., Cambridge, Ohio 43725, is a 98-bed hospital facility that offers adult medical and surgical care, an adult intensive care unit and labor and delivery services (Southeastern Med Hospital, 2019). Southeastern Ohio Regional Medical Center has 49 active medical staff, and offers various surgical procedures, treatment options, therapies and primary care services. Outpatient services include laboratory services, computed tomography (CT) scanning, mammography, magnetic resonance imaging (MRI), x-ray, oncology and infusion services, and a cardiac and pulmonary rehabilitation program (Southeastern Med Hospital, 2019). In 2018, Southeastern Ohio Regional Medical Center had 3,384 inpatient admissions, 24,027 emergency department visits, 133,358 outpatient visits and 3,500 surgeries.

SEORMC operates six satellite facilities: (a) Outpatient Laboratory draw station located at 1350 Clark St., Cambridge, Ohio 43725 (Guernsey County); (b) Outpatient Physical Therapy Caldwell Office located at 18125 Woodsfield Road, Caldwell, Ohio 43724 (Noble County); (c) Family Practice Office located at 18125 Woodsfield Rd., Caldwell, Ohio, 43724 (Noble County); (d) WorkPro Occupational Medicine located at 10095 Brick Church Rd, Cambridge, Ohio 43725 (Guernsey County); and (e) Outpatient Physical Therapy Cambridge Office located at 10095 Brick Church Rd, Cambridge, OH 43725 (Guernsey County). SEORMC also operates the Cambridge Regional Cancer Center, which is a multidisciplinary approach to cancer treatment. The cambridge Regional Cancer Center offers state-of-the-art equipment for radiation oncology, 3D treatment planning and delivery techniques and intensity modular radiation therapy (IMRT),

SEORMC has been an affiliate of OhioHealth since 2017. OhioHealth is a nationally recognized, not-for-profit, charitable, healthcare outreach of the United Methodist Church. Based in Columbus, Ohio, OhioHealth is currently recognized by Fortune Magazine as one of the "100 Best Companies to Work For." Serving its communities since 1891, it is a family of 30,000 associates, physicians and volunteers, and a network of 12 hospitals, 60+ ambulatory sites, hospice, home-health, medical equipment and other health services spanning a 47-county area (OhioHealth, 2015-2019). OhioHealth's mission is "to improve the health of those we serve." Through its affiliation with OhioHealth, SEORMC is a member of the OhioHealth Stroke Network and has access to OhioHealth's expertise in heart and vascular care, cancer care, genetic counseling, and hospital management.

Southeastern Ohio Regional Medical Center has received various awards, recognitions related to excellent patient care, and the use of advanced technology:

- Approved Provider Unit with Distinction though Ohio Nurses Association (ONA) for continuing
   nursing education-March 2018 ONA is the largest approver unit of continuing education in the country,
   accredited by the American Nurses Credentialing Center's Commission on Accreditation. An approved
   provider unit with distinction is the highest honor awarded to provider units through the ONA.
- Healthgrades Outstanding Patient Experience Award 2016-2017, 2017-2018 The Outstanding Patient Experience Award™ recognizes hospitals for providing outstanding patient experience based on 10 measures related to doctor and nurse communication, hospital cleanliness and noise levels, and medication and post-discharge care instructions.
- American College of Radiology Breast Imaging Center of Excellence The Breast Imaging Center of
  Excellence (BICOE) designation is awarded to breast imaging centers that achieve excellence by seeking
  and earning accreditation in all ACR voluntary breast-imaging accreditation programs and modules, in
  addition to the mandatory Mammography Accreditation Program.

- OhioHealth's Level One Trauma Golden Hour Award SEORMC received OhioHealth's Level One Trauma Golden Hour Award. The recognition honors SEORMC's Emergency Room and Emergency Medical Services outstanding service of response and stabilization of a trauma patient. The "golden hour" refers to the sixty minutes following an accident or injury in which the chances of survival are most likely if treated appropriately by healthcare professionals. The long-term side effects of injury are also significantly decreased if treated during the "golden hour".
- Healthy Business Council of Ohio, Healthy Worksite Bronze Award 2018 These awards recognize
  Ohio employers who demonstrate a commitment to employee wellness through comprehensive worksite
  health promotion and wellness programs. Applicants are scored on the extent to which their wellness
  programs facilitate and encourage employee health, enhance productivity and ensure a healthy work
  environment.
- Sleep Lab Accreditation though Accreditation Commission for Health Care IACHC) By achieving
  ACHC Accreditation, sleep health care providers demonstrate their commitment to providing the highestquality service through compliance with national regulations and industry best practices.
- American Cancer Society Excellence in Mission This award is for the organization that makes an
  extraordinary impact on the mission of the American Cancer Society through health initiatives, advocacy or
  research. SEORMC was nominated because of its involvement in cancer prevention and control or through
  an impactful leadership role within multiple mission priority areas: (a) information, (b) quality of life,
   (c) prevention and early detection, advocacy, disparities, and research.
- National Accreditation Program for Breast Centers: Accreditation by the National Accreditation Program
  for Breast Centers (NAPBC) is granted only to those centers that have voluntarily committed to provide the
  highest quality care to patients with diseases of the breast. Each center must undergo a rigorous evaluation
  and review of its performance and compliance with the NAPBC standards.
- The Joint Commission Joint Commission Accreditation: Joint Commission standards are the basis of
  an objective evaluation process that can help health care organizations measure, assess and improve
  performance. The standards focus on patient care and organization functions that are essential to providing
  safe, high-quality care. Earning their seal of accreditation is one of the highest honors a hospital can
  achieve.
- Ohio Association of Senior Centers Community Partnership Award: SEORMC is aware of the needs
  of low-income and other vulnerable persons and the community at large. Our team provides, alone or by
  collaborating with other community groups, a wide range of services that are intended to improve the health
  of individuals within the community. Often, these free or discounted services benefit people who are
  uninsured and underinsured.
- College of American Pathologists Accreditation 2017 & 2019: The College of American Pathologists
   (CAP's) Laboratory Accreditation Program accredits the entire spectrum of laboratory test disciplines with
   the most scientifically rigorous customized checklist requirements.
- Commission on Cancer Accreditation 2016 & 2019: The Commission on Cancer (CoC), a program of the American College of Surgeons, recognizes cancer care programs for their commitment to providing comprehensive, high quality, and multidisciplinary patient centered care. Through the CoC, Southeastern Med's Cancer Center has access to reporting tools to aid in benchmarking and improving outcomes.
- Health Resources and Services Administration National Hospital Organ Donation Campaign
   Platinum Level for 2016, 2017, and 2018: Recognition is given at platinum, gold, silver, and bronze

recognition levels for an organization's organ, eye, and tissue donation and registration efforts. Southeastern Med works closely with Donate Life Ohio to educate and register new donors.

The Patient Protection and Affordable Care Act of 2010 requires not-for-profit hospitals to conduct a community health needs assessment (CHNA) once every three years (Internal Revenue Service, 2018). Southeastern Ohio Regional Medical Center Hospital collaborated with the Cambridge-Guernsey County Health Department and Noble County Health Department and various community stakeholders to identify significant community health needs in Guernsey and Noble Counties and to determine the three priority health needs that will be addressed in the SEORMC 2020-2022 Implementation Strategy.

During the prioritization meeting held on July 24, 2019, the community stakeholders identified the top three priority health needs:

- (1) Mental health and addiction
- (2) Chronic disease
- (3) Access to care

In partnership with various community organizations and the Cambridge-Guernsey County Health Department and the Noble County Health Department, SEORMC has developed the 2020–2022 Implementation Strategy to meet community health needs in Guernsey and Noble Counties. Through these efforts, SEORMC aims to fulfill its mission, "to provide high quality, comprehensive, affordable, patient-centered health care in a caring and safe environment while addressing community needs." Moreover, SEORMC's Implementation Strategy will include actions and strategies that align with the Ohio 2017–2019 State Health Improvement Plan (Ohio Department of Health, 2019).

For information about SEORMC's CHNA process and for a copy of the reports please visit <a href="https://www.seormc.org/about/community-health-needs-assessment.html">https://www.seormc.org/about/community-health-needs-assessment.html</a> or contact Steven Brooks, vice president, telephone number 740.439.8185, email <a href="mailto:smbrooks@seormc.org">smbrooks@seormc.org</a>. Written comments regarding this CHNA report may also be submitted to Steven Brooks.

# A. Definition of the Community Served by the Hospital Facility and How the Community Served Was Determined

#### A1. Hospital Location and ZIP Codes of Communities Served

The Southeastern Ohio Regional Medical Center (SEORMC) is located at 1341 Clark St, Cambridge, OH 43725. SEORMC serves primarily residents from Guernsey and Noble Counties. The Guernsey County Zip Codes include all of 43722, 43723, 43725, 43732, 43733, 43736, 43749, 43750, 43755, 43768, 43772, 43773, 43778, 43780, and part of 43762, 43832, 43837, 43973, 43983 and 44699 (Datasheer, 2003-2019). The Noble County Zip Codes include all of 43711, 43717, 43724, 43779, 43788 and 45727 and part of 43732, 43772, 43773, 43778, 43780, 45715, 45744, 45745 and 45746 (Datasheer, 2003-2019).

#### A2. Percentage of Patients Served from Guernsey and Noble Counties, Ohio

Review of SEORMC internal data has shown that for Calendar Year 2018, 74.7 percent of all patients who were admitted at the hospital resided in Guernsey County at the time of admission. For Calendar Year 2018, a total of 7.2 percent of all patients who were admitted at the hospital resided in Noble County at the time of admission.

Review of SEORMC internal data has shown that for Calendar Year 2018, 74.7 percent of all patients who had outpatient visits and/or procedures at SEORMC resided in Guernsey County at the time of outpatient visits and/or when the procedure was done. For Calendar Year 2018, a total of 9.7 percent of all patients who had outpatient visits and/or procedures at SEORMC resided in Noble County at the time of outpatient visits and/or when the procedure was done.

# B. Community Demographics

#### **B1.** Total population

**Guernsey County** – In 2010, the population of Guernsey County was 40,087. In 2018, the estimated total population was 39,022 (Ohio Development Services Agency, n.d.[a]).

**Noble County** – In 2010, the population of Noble County was 14,645. In 2018, the estimated total population was 14,354. (Ohio Development Services Agency, n.d.[b]).

#### **B2.** Race and Ethnicity

**Guernsey County** – In 2018, among Guernsey County residents, 95.7 percent were White, 1.3 percent were African American, 0.2 percent were Native American, 0.3 percent were Asian, 0 percent Hawaiian or Pacific Islander, 1.1 percent were Hispanic (may be of any race), 0.4 percent were other races, and 2.2 percent were from two or more races (Ohio Development Services Agency, n.d.). Minorities represented 5.2 percent of the total population (Ohio Development Services Agency, n.d.[a]).

**Noble County** – In 2018, among Noble County residents, 92.4 percent were White, 5.4 percent were African American, 0.1 percent were Native American, 0.1 percent were Asian, 0 percent Haw aiian or Pacific Islander, 0.8 percent were Hispanic (may be of any race), 0.6 percent were other races, and 1.4 percent were identified as two or more races (Ohio Development Services Agency, n.d.[b]). Minorities represented 7.8 percent of the total population (Ohio Development Services Agency, n.d.[b]).

#### B3. Age

**Guernsey County** – In 2018, among Guernsey County residents, 6.0 percent of the population were younger than 5-years-old, 16.6 percent were ages 5–17, 8.0 percent were ages 18–24, 22.6 percent were ages 25–44, 28.6 percent were ages 45–64 and 18.2 percent were 65 years or older. The median age was 42.4 (Ohio Development Services Agency, n.d.[a]).

**Noble County** – In 2018, among Noble County residents, 4.9 percent of the population were younger than 5-years-old, 13.5 percent were ages 5–17, 5.8 percent were ages 18–24, 22.6 percent were ages 25–44, 28.1 percent were ages 45–64 and 25.1 percent were 65 years or older. The median age was 48.7 (Ohio Development Services Agency, n.d.[b]).

#### **B4.** Income

**Guernsey County** – The median household income in Guernsey County for 2017 w as \$42,744 and per capita income w as \$37,455. Approximately 16.5 percent of families and 20.2 percent of individuals had income below the poverty level (Ohio Development Services Agency, n.d.).

**Noble County** – The median household income in Noble County for 2017 was \$42,171 and per capita income was \$25,592. Approximately 9 percent of families and 12.9 percent of individuals had income below the poverty level (Ohio Development Services Agency, n.d.).

Additional demographic data for Guernsey and Noble Counties are available in Appendix B.

# C. Existing Healthcare Facilities and Resources within the Community Available to Respond to the Community's Health Needs

- C1. Healthcare Facilities and Community Resources Addressing Mental Health and Addiction
  - C1.1. Southeastern Ohio Regional Medical Center
    - C1.1.1. Emergency and Trauma Care Southeastern Med provides a 24-hour emergency service for more than 30,000 patients annually. When a trauma situation arises, Southeastern Med provides immediate, comprehensive, and skilled medical and nursing care to the seriously injured patient. Also, Southeastern Med has joined the OhioHealth Stroke Network to bring rapid access to advanced stroke care. Southeastern Med also provides 24/7 emergency care for adults and children, with direct access to a cardiac catheterization laboratory, computed tomography (CT) scanner and radiography rooms. The Electronic Medical Record system ensures emergency department physicians have instant access to medical records. When Southeastern Med discharges patients from the emergency department, they provide detailed instructions for follow-up care, along with any necessary prescriptions (Southeastern Med Hospital, 2019a).
    - C1.1.2. Quit Smoking & Tobacco Coaching Quitting smoking or tobacco use has numerous medical benefits. The Southeastern Med Wellness Department offers free coaching on tobacco cessation that uses evidence-based techniques. Southeastern Med also provides various tips for quitting tobacco, which includes removing temptation, seeking support, changing routine, coping with withdraw al, and changing one's way of thinking. (Southeastern Med Hospital, 2019b).
  - C1.2. Allwell Behavioral Health Services The Allwell Behavioral Health Services (ABHS) provides comprehensive help for every challenge, every family, every age. The ABHS have decades of experience with all diagnoses and ages, from toddlers to teens to older adults. Services provided include, but are not limited to, ADHD, Bi-polar disorder, addiction, anxiety, depression, child adolescent issues, and so on. (Allwell Behavioral Services, 2019).
  - C1.3. Genesis Healthcare System Genesis Healthcare System helps patients whose substance abuse disorders have affected their work, school, finances and health. Patients are guided to identify signs of chemical dependency and develop skills for solving problems and making positive changes in their lifestyle. Genesis provides adult substance abuse treatment, adolescent substance abuse treatment, and medically supervised hospital stay to provide withdrawal management service (Genesis Healthcare System, 2019).

- **C1.4. Guernsey County Children Services** The agency's primary focus is child safety. To meet the primary aim, the organization provides services such as screening, assessment/investigation, case management intervention, foster care, adoption, kinship care, independent living program, and prevention services (Guernsey County Children Services, 2018).
- C1.5. Guernsey County Department of Job and Family Services (GCDJFS) The Guernsey County Department of Job and Family Services is specifically assisting families by providing benefits for those who qualify The GCDJFS services provide immediate assistance on benefits that would aid a person in recovery. For instance, such individuals can apply for benefits and/or child support if they qualify. They can also utilize Ohio Means, which has partnered with American Job Center Network, to apply for jobs as they recover. The overall social services that GCDJFS provides in Guernsey County play a significant role in a fresh start for individual recovery from substance use (Guernsey County Department of Job and Family Services, 2019).
- C1.6. Alcohol and Drug Services of Guernsey County provides outpatient counseling, holistic rehabilitation, and alternative treatment. Other addiction treatment programs available include adolescents (teen) addiction treatment, court-ordered alcohol treatment for "Driving Under the Influence" (DUI) and "Driving While Intoxicated" (DWI) offenders, and court-ordered addiction treatment. (Freedom Healthcare of America, LLC, 2018).
- C1.7. Mid-Ohio Behavioral Health LLC provides behavioral health services to children, adolescents and adults in Zanesville, Cambridge, Coshocton and New ark. Mid-Ohio Behavioral Health LLC offers services such as (a) diagnostic evaluation, (b) therapy for individuals, group and family, (c) case management, psychiatric support services, care coordination, and medication management. Mid-Ohio Behavioral Health also provide transcranial magnetic stimulation (TMS) as a treatment for depression. (Mid-Ohio Behavioral Health LLC, n.d.).
- **C1.8. Cedar Ridge Behavioral Health Solutions** Provides recovery housing in a supervised environment. Services provided include individual therapy, group therapy, case management, mental health services, and job development. The recovery housing provides individual living with access to addiction treatment and other behavioral services (Cedar Ridge Behavioral Health Solutions, 2019).
- C1.9 Cam bridge Behavioral Hospital At Cambridge Behavioral Hospital, integrated treatment practices take into consideration the patient's mental, physical, and substance abuse/addiction (if present) and other issues that create barriers to leading a healthy lifestyle. A multidisciplinary team of physicians, licensed therapists, nurses, case managers, and mental health technicians work collaboratively to develop and implement a comprehensive treatment plan that matches each patient's unique needs. The Cambridge Behavioral Hospital treatment team works to assess, diagnose and stabilize acute mental health and co-occurring disorders, followed by a smooth transition to less intensive, appropriate levels of follow-up care and support. Aftercare planning is initiated at the time of admission and is ongoing throughout the patient's hospital stay (Oglethorpe, Inc., 2019).

#### C2. Healthcare Facilities and Community Resources Addressing Chronic Disease

- **C2.1. Southeastern Ohio Regional Medical Center** SEORMC is recognized for its heart and vascular, neurologydiabetes care, sleep medicine and health and wellness resources. Additionally, the hospital provides expanded services for cancer treatment, orthopedics, neurology, cardiology and vascular care through partnership with OhioHealth (Southeastern Med Hospital, 2019c).
- **C2.2. Cam bridge-Guernsey County Health Department** The organization's mission is "to improve quality of life for Guernsey County by promoting health, preventing disease, and assuring a safe environment" (Cambridge-Guernsey County Health Department, n.d.). The Cambridge-Guernsey County Health Department promotes community awareness on the importance of consuming the recommended amount of fruits and vegetables and regular physical activity.
- **C2.3. Noble County Health Department** The organization's mission is "to provide quality services that promote wellness, prevent disease and plan a healthy future for our community." The Noble County Health Department offers programs that address chronic diseases in children, men, women and families (Noble County Health Department, n.d.).

- **C2.4. Guernsey County Senior Citizens Center** Provides a variety of services and recreational activities to all senior citizens aged 60 and older. Activities include (but not limited to) quilting, bridge, crafts, bingo and monthly dinners. The Guernsey County Senior Citizens Center also provides free blood pressure check every Wednesday. Cholesterol and blood sugar exams, hearing screenings, and other health screenings are also provided by professional staff in the community as part of their organization's outreach to seniors (Guernsey County Senior Citizens Center, n.d.).
- C2.5. Area Agency on Aging, Region 9 Examples of services provided include nursing facility placement, transportation to and from medical appointments, and meal preparation (Area Agency on Aging, Region 9, Inc., 2019). Examples of the Area Agency on Aging, Region 9 programs include (a) Adult Protective Services, (b) assisted living, (c) care coordination, (d) Caring for Caregivers, (e) Healthy U, (f) Home Energy Assistance Program, (g) Home Choice, and (h) long-term care consults (Area Agency on Aging, Region 9, Inc., 2019).
- **C2.6. Cam bridge City Park** Provides recreational and health promotion programs to Cambridge and other Guernsey County residents. Amenities include pool, birding trail, walking trail, huge shade trees, modern restrooms, meeting rooms, city bands concerts, and more. (Cambridge/Guernsey VCB, 2019).
- **C2.7. The Ohio State University Extension- Guernsey County** The 4-H Youth development program provided by OSU Extension is designed to help Guernsey County youths develop a life-long learning experience through "learning by doing". The program involves approximately 1800 Guernsey County youth led by 250 adult volunteers. (The Ohio State University, 2019).
- C2.8. Cambridge-Guernsey County Health Department The department receives grant funding from the Ohio Department of Health for services provided through the Child and Family Health Services Grant (CFHS). Considering obesity in children is the second objective that is targeted with CFHS grant monies, (Cambridge-Guernsey County Health Department, n.d.) the Guernsey health department is providing nutrition services in two head start programs w hich address eating healthy and exercise.(Cambridge-Guernsey County Health Department, 2018).
- C2.9. Cambridge YMCA Provides access to a wide range of exercise equipment in an environment that is friendly to all ages. The center also provides scholarship assistant to those who cannot afford the full cost. Members can participate in fitness classes and coaching, and a wide range of programs offered by the facility. As part of the Y's initiative, every member can now enjoy any YMCA facility across the state. (Cambridge YMCA, 2017).

#### C3. Healthcare Facilities and Community Resources Addressing Access to Care

- C3.1. Southeastern Ohio Regional Medical Center—SEORMC provides a wide range of medical services to Guernsey and Noble County since 1952. Additionally, the hospital provides expanded services for cancer treatment, orthopedics, neurology, cardiology and vascular care through partnership with OhioHealth. (Southeastern Med Hospital, 2019). SEORMC is supporting the efforts of Noble County Health Department in its application for a federally qualified health center as means of providing access to care for Noble County residents and surrounding communities. SEORMC will also be partnering with OhioHealth in providing access to mobile health services such as mammography, bone scans, primary care, women's health and other telehealth services.
- C3.2. Cambridge-Guernsey County Health Department The organization's mission is "to improve quality of life for Guernsey County by promoting health, preventing disease, and assuring a safe environment" (Cambridge-Guernsey County Health Department, n.d.). The Cambridge-Guernsey County Health Department offers (a) w omen's health services, (b) w alk-in nursing services, (c) men's health services, (d) immunizations, (e) Child and Family Health Services, (f) health screenings, (g) access to Bureau of Children with Medical Handicaps, and (h) Women, Infants and Children (WIC) (Cambridge-Guernsey County Health Department, n.d.).

- C3.3. Noble County Health Department The organization's mission is "to provide quality services that promote wellness, prevent disease and plan a healthy future for our community" (Noble County Health Department, n.d.). As part of improving access to health care in Noble County, the Noble County Health Department provides the following community services: (a) breastfeeding support, (b) flu shots, (c) distribution of naloxone, (d) physical examinations, (e) speech therapy, (f) vision and hearing (Noble County Health Department, n.d.). Examples of programs of the Noble County Health Department include (a) Breast and Cervical Cancer Project, (b) Car Seat Program, (c) Children with Medical Handicaps Program, (d) Help Me Grow Home Visiting Program, (e) Personal Responsibility Education, (f) Reproductive Health and Wellness, (g) Women, Infants and Children. The Noble County Health Department also provides healthcare services such as (a) allergy shots, (b) birth control, (c) child health, (d) hemoglobin testing, (e) immunizations, (f) tracking and reporting of communicable diseases, (g) laboratory services, (h) men's health, (i) women's health, (j) sexually transmitted infection testing and (k) tuberculosis testing (Noble County Health Department, n.d.).
- **C3.4. Guernsey County Department of Job and Family Services** enables Guernsey County residents access to public assistance such as (a) Food assistance through the Supplemental Nutrition Assistance Program, (b) access to Medicaid, (c) cash assistance through "Ohio Works First" and Ohio's Disability Financial Assistance Program (Guernsey County Department of Job and Family Services, 2019).
- **C3.5. Noble County Department of Job and Family Services** provides cash assistance, food assistance, family and children services (Noble County Department of Job and Family Services, 2019).
- **C3.6. Guernsey County Senior Citizen Center, Inc.** provides access to transportation for seniors 60 years of age and above who reside in Guernsey County and New Concord so they can go to and from their Medicaid-eligible appointments. To schedule transportation, persons should call in advance at 740.439.6681 or toll-free 1.866.534.2349 (Guernsey County Senior Citizens Center, Inc. (n.d.).
- **C3.7. South East Area Transit** offers transportation services to patients to and from Medicaid-eligible appointments. To schedule transportation to appointments, persons should call 740.439.3393 (South East Area Transit, 2017)
- C3.8. Care Source Patients under the CareSource managed care program are eligible for transportation services to (a) any physician visit and other health care appointments, (b) Women Infants and Children (WIC) office, (c) Medicaid redetermination appointments at the County Department of Job and Family Services. Each CareSource member can ask for 15 free rides (30 one-way trips) per calendar year for trips less than 30 miles. CareSource provides transportation services to and from the provider's office. Members can call 1.800.488.0134 (CareSource, 2019).
- **C3.9. Molina Healthcare** offers 30 one-way trips that are non-emergency, every calendar year. If there is no provider close to the individual's home, Molina Heathcare offers transportation to individuals who must travel more than 30 miles to obtain health care services, Members can call 1.844.491.4761 (Molina Healthcare, Inc., 2019).
- **C3.10. Buckeye Heath Plan** provides round trip transportation services for trips to medical appointments that are at least 30 miles away. It offers 60 one-way trips (30 round trips) per member per year to covered healthcare and dental appointments, WIC visits, redetermination appointments with the County Department of Job and Family Services and visits to pharmacies. Members can call 2 business days in advance at 1.866.246.4358 to schedule transportation.
- **C3.11. United Health Care** pay for up to 30 one-way or 15 round trip transportation to medical visits or the pharmacy. Members can call 1.800.895.2017 (United Healthcare Services, Inc., 2019).
- C3.12. Paramount Advantage members may request transportation for (a) medical, dental, vision, therapy, mental health and appointments for addiction services, (b) health education, (c) pharmacy, (d) prenatal and postpartum visit and prenatal education, (e) Women, Infants and Children (WIC), food clinics, emergency food bank, and (f) redetermination for Medicaid. Each member is eligible for 30 one-way trips or 15 round trips per year. Members can call 1.866.837.9817 (Paramount, n.d.).

### D. How Data was Obtained

- **D1.** The definition of the community served by SEORMC was based on the percentage of patients who resided in Guernsey and Noble Counties during calendar year 2018, based on review and analysis of electronic medical records. See Section A.
- D2. The demographic data of Guernsey and Noble County's population was obtained from the Ohio Development Services Agency (Ohio Development Services Agency, n.d.[a,b]). See Section B.
- **D3.** Pertinent health data from Ohio's 2016 Community Health Assessment was summarized (Ohio Department of Health, 2016). See Appendix A.
- **D4.** Pertinent health data from the 2017 Noble County and Guernsey County Community Health Assessment were summarized (Noble County Health Department and Cambridge-Guernsey County Health Department, 2017). See Appendix B.
- **D5.** Pertinent health and social determinants of health data were summarized from the County Health Rankings (2019). See Appendix B.

No information gaps that would limit the ability to assess the community's health needs were identified.

# E. Significant Health Needs of the Community

On July 24, 2019 the community representatives identified three priority health needs:

- (1) Mental health and addiction includes (a) presence of detoxification services, (b) improve communication related to care of overdose patients, (c) care coordination, (d) invest resources in healthcare professionals to avoid compassion fatigue.
- (2) Chronic disease includes (a) assistance to patients with chronic childhood experiences, (b) employer engagement in community programs and (c) healthy lifestyle classes.
- (3) Access to care includes (a) support of Noble County's application for a federally qualified health center (FQHC), (b) transportation to medical appointments, (c) availability of mobile units to bring services to the community, and (d) availability of doctors to serve rural areas.

SEORMC will develop its 2020–2022 Implementation Strategy to address these three priority health needs. SEORMC will align with the Ohio 2017–2019 State Health Improvement Plan by partnering with the Guernsey County Health Department, Noble County Health Department and other community partners in addressing these three priority health needs.

# F. Primary, Chronic Disease and Other Health Needs of Uninsured, Low-Income and Minority Populations

The primary and chronic disease needs and other health issues of uninsured, low-income and minority populations and the latest data for each need are summarized in Appendices A and B.

# G. Process for Identifying and Prioritizing Community Health Needs

On July 24, 2019, SEORMC hosted a community meeting at the hospital campus that was attended by 21 persons representing 11 community and government organizations, including:

- + Allwell Behavioral Health Services Guernsey Center represented by Maggie Ault, director
- + Area Agency on Aging \Region 9 represented by Carol Baker, outreach and communications officer
- + Cedar Ridge Behavioral Health Solutions represented by Alicia Beynon, owner and chief executive officer; Troy Beynon, chief operating officer and general counsel; and Debra Brown, director of marketing and community engagement
- + Guernsey County Department of Job and Family Services represented by Kathy Jamiel, director
- Guernsey County Senior Citizens Center represented by Billi Pierce, outreach coordinator and Kylee Quinn, wellness coordinator
- + Muskingum Valley Health Centers represented by Kylie Emmert, quality analyst
- + Noble County Commissioners represented by Brad Peoples, county commissioner
- + **Noble County Health Department** represented by Shawn Ray, health commissioner and Shari Rayner, director of nursing
- OhioHealth represented by Mary Ann G. Abiado, data management and evaluation specialist and community health nurse, Community Health Partnerships; Rebecca Barbeau, operations director, Community Health Partnerships
- + Southeastern Ohio Regional Medical Center (SEORMC) represented by Steven Brooks, vice president; Human Resources; Lindsey Kulpa, director, Emergency Services; Thomasina Crock, board member, SEORMC, and Noble County resident; Denise Stephens, director of case management, Dominic Crock, director of cancer services; Gina Woods, chief nursing officer and vice president, patient care services; Marjorie Clayman, manager of communications.
- + **The Ohio State University Extension Noble County Office** represented by Gw ynn Stew art, extension educator

The objective of the July 24, 2019 meeting was to identify the top three priority health needs in Guernsey and Noble Counties that SEORMC will have to address in its Calendar Year 2020-2022 Implementation Strategy. The meeting was facilitated by Mary Ann G. Abiado, PhD, MSN, RN, data management and evaluation specialist and community health nurse from OhioHealth Community Health Partnerships. The facilitation process is described below:

- G.1. Dr. Abiado discussed the availability of primary and secondary data in the 2017 Community Health Assessment (CHA) that was developed by Guernsey and Noble Counties (Noble County Health Department and Cambridge-Guernsey County Health Department, 2017) in collaboration with Illuminology and The Ohio State University College of Public Health. The Cambridge-Guernsey County Health Department and Noble County Health Department also have developed the 2018-2020 Community Health Improvement Plan (Cambridge-Guernsey County Health Department, 2018; Noble County Health Department, 2018). Copies of the Noble County-Cambridge-Guernsey County Community Health Assessment report were also made available during the meeting. It is noteworthy that the majority of those who attended the SEORMC community meeting on July 24, 2019 were involved in the development of the 2017 Noble County and Cambridge-Guernsey County Community Health Assessment and Community Health Improvement Plan.
- G.2. Dr. Abiado discussed that, based from the Noble County and Cambridge-Guernsey County Community Health Assessment and their respective Community Health Improvement Plans, the three priority health needs that were identified include the following: (a) drug dependency/substance abuse, (b) chronic disease (especially heart disease and obesity), and (c) mental health (especially depression and anxiety).

- **G.3.** Dr. Abiado distributed the secondary data for Guernsey and Noble Counties that were obtained from the County Health Rankings (2019).
- G.4. Dr. Abiado divided the large group into four small groups. Each small group was asked to discuss the specific health-related concerns under the three priority health needs that were identified in 2017 in Guernsey and Noble Counties. After a 25-minute group discussion, a group-selected team leader presented the top three health issues for each priority health need and a team recorder wrote these issues in three large easel notes labelled (a) drug dependency/substance abuse, (b) chronic disease (especially heart disease and obesity), and (c) mental health (especially depression and anxiety).
- **G.5.** After all the groups presented and a final list of health concerns was created, each of the meeting attendees were asked to vote on the top three health concerns under each priority health need based on the community data and their experiences in their respective organizations. The voting results are presented below:

#### (a) Drug dependency/substance abuse

- + Presence of detoxification services 16 votes
- + Coordination of care hand-off 11 votes
- + Adolescent education 6 votes
- + Increase availability of recovery housing 6 votes
- + Consistent branding needed for drug coalitions -3 votes
- + Medication-assisted treatment programs 2 votes
- + Increase services for older adults and caregivers 1 vote
- + Seek grant funding to promote or enhance current programs 1 vote
- + Increase counseling services 0 vote
- Increase support groups 0 vote
- Increase services for drug-addicted pregnant moms 0 vote

#### (b) Chronic disease (especially heart disease and obesity)

- + Mental health assistance with chronic childhood experiences 13 votes
- + Employer-buy-in of community programs offered 9 votes
- + Healthy lifestyle classes (expand to more Counties) 9 votes
- + Transportation (South East Area Transit) 6 votes
- + Partnership with schools 5 votes
- + Access to fresh fruit 4 votes
- Drug cost assistance for seniors 2 votes
- + Increase diabetes education programs 1 vote
- Increase older adult chronic disease programs 1 vote
- + Increase smoking cessation program offerings 1 vote
- + Promote child obesity programs ("Crunch for Health", "Fun to be Fit") -1 vote
- Diabetes 1 vote

#### (c) Mental health (especially depression and anxiety)

- + Better market mental health services in the area to be more accessible 14 votes
- + Improve linkage to community services 13 votes
- Improve overdose communication process before sending people back to community 12 votes
- + Invest resources for health care professionals to avoid compassion fatigue 9 votes
- + Suicide prevention services 8 votes
- + Improve crisis intervention services 7 votes
- + Improve services that address elderly loneliness 3 votes
- + Have more mental health screenings 1 vote
- + Increase emotional or mental health resources for first responders 0 vote
- + Support for grandparents raising grandchildren 0 vote

- G.6. Dr. Abiado discussed that SEORMC is required to demonstrate alignment with the Ohio 2017-2019 State Health Improvement Plan for two of the three priority areas: (a) mental health and addiction, (b) chronic disease and (c) maternal and infant health. Dr. Abiado asked the meeting participants if they approve or not combining drug dependency and substance abuse (Priority Health Need 1) with mental health (especially depression and anxiety) (Priority Health Need 3). There was a unanimous decision to adopt Mental Health and Addiction as Priority Health Need 1 for SEORMC. The meeting participants decided to include the following health issues under Mental Health and Addiction:
  - + Presence of detoxification services 16 votes
  - + Improve overdose communication process before sending people back to community 12 votes
  - + Coordination of care hand-off 11 votes
  - + Invest resources for health care professionals to avoid compassion fatigue 9 votes
- G.7. One of the meeting attendees suggested to add Access to Care as Priority Heath Need 3 so there will be three priority health needs. Dr Abiado asked the meeting participants if they approve or not of this suggestion. There was a unanimous decision to include Access to Care as Priority Health Need 3. The meeting participants wanted to include the following health issues under Access to Care:
  - + Support Noble County's application for a Federally Qualified Health Center (FQHC)
  - + Access to transportation for healthcare appointments
  - + Access to mobile units to bring services to the community
  - + Availability of doctors to serve rural areas
- G.8. Dr. Abiado explained to the meeting participants that SEORMC intends to collaborate with the Cambridge-Guernsey County Health Department and Noble County Health Department in implementing strategies for mental health and addiction and chronic disease that align with the Ohio 2017-2019 State Health Improvement Plan. The meeting participants unanimously approved this plan.
- **G.9.** Dr. Abiado discussed with the meeting participants that SEORMC will develop an Implementation Strategy for 2020-2022 to address the priority health needs that were identified during the meeting.
- **G.10.** Dr. Abiado thanked the meeting participants for their active engagement in the meeting and support of SEORMC's programs and services. The meeting was adjourned.

# H. Process for Consulting with Persons Representing the Community's Interests and Input Provided

Appendix C shows the organizations that were represented in SEORMC's community meeting that was held on July 24, 2019. For each organization, the following information is presented: (a) names of representatives, (b) characteristics of persons served by these organizations, (c) inputs, (d) timeframe of inputs, (e) website, (f) mission of organization and (g) examples of programs and services.

# I. Impact of Actions Taken to Address the Significant Health Needs Identified in the Hospital Facility's 2016 Community Health Needs Assessment (CHNA)

Appendix D summarizes the impact of Southeastern Ohio Regional Medical Center's strategies that addressed the priority health needs in the 2016 board-approved community health needs assessment and implementation strategy (Southeastern Med, 2016). In 2016, the priority health needs that were identified include (a) access to health care services, (b) cancer, (c) lifestyle-related diseases and risk factors, and (d) substance abuse. Appendix D summarizes the outcomes during Calendar Years 2017 and 2018.

### References

- Allwell Behavioral Health Services. (2016-2019). Services. Retrieved September 5, 2019, from <a href="http://allwell.org/services/">http://allwell.org/services/</a>
- Area Agency on Aging, Region 9. (2019). Services. Programs. Retrieved September 11, 2019, from <a href="https://aaa9.org/find-the-right-program/">https://aaa9.org/find-the-right-program/</a>
- Cambridge/Guernsey County VCB. (2019). Cambridge City Park. Retrieved
- Cambridge-Guernsey County Health Department. (2018, February). Guernsey County Community Health Improvement Plan. Retrieved September 4, 2019, from <a href="http://www.guernseycountyhealthdepartment.org/wp-content/uploads/2018/03/Guernsey-County-CHIP-February-2018.pdf">http://www.guernseycountyhealthdepartment.org/wp-content/uploads/2018/03/Guernsey-County-CHIP-February-2018.pdf</a>
- Cambridge-Guernsey County Health Department. (n.d.). Home. Welcome to the Cambridge-Guernsey County Health Department. Your pathway to better health. Retrieved September 3, 2019 from <a href="http://www.guernseycountyhealthdepartment.org/">http://www.guernseycountyhealthdepartment.org/</a>
- CareSource. (2019). Additional services. Transportation. Retrieved September 8, 2019, from <a href="https://www.caresource.com/oh/plans/medicaid/benefits-services/additional-services/">https://www.caresource.com/oh/plans/medicaid/benefits-services/additional-services/</a>
- Cedar Ridge Behavioral Health Solutions. (2019).Services. Retrieved September 9, 2019, from <a href="http://www.midohiobh.com/home.html">http://www.midohiobh.com/home.html</a>
- Cedar Ridge Behavioral Health. (2019). Services. Retrieved September 6, 2019, from <a href="https://www.crbhs.org/">https://www.crbhs.org/</a>
  Datasheer, LLC. (2003-2019). Free Zip Code Finder. Retrieved September 9, 2019, from <a href="https://www.zip-">https://www.zip-</a>
- codes.com/search.asp?fld-city=&fld-state=OH&fld-county=Guernsey&fld-areacode=&srch=Search
- Freedom Healthcare of America, LLC. (2018). Alcohol and Drug Services of Guernsey County. Retrieved September 9, 2019, from <a href="https://www.rehabcenter.net/rehab-centers/ohio-rehab-centers/cambridge/alcohol-and-drug-services-of-guernsey-county">https://www.rehabcenter.net/rehab-centers/ohio-rehab-centers/cambridge/alcohol-and-drug-services-of-guernsey-county</a>
- Genesis Healthcare System. (2019). Drug and alcohol recovery treatment. Retrieved September 9, 2019, from <a href="https://www.genesishcs.org/care-treatment/behavioral-health/drug-and-alcohol-recovery-treatment/">https://www.genesishcs.org/care-treatment/behavioral-health/drug-and-alcohol-recovery-treatment/</a>
- Guernsey Health Choices, Inc. (n.d.). Clean Start. Retrieved September 11, 2019, from <a href="https://quernseyhealthchoices.org/community-involvement/">https://quernseyhealthchoices.org/community-involvement/</a>
- Guernsey County Children Services. (2018). Services. Retrieved September 9, 2019, from <a href="http://guernseycountycs.org/services1/">http://guernseycountycs.org/services1/</a>
- Guernsey County Department of Job and Family Services. (2019). About us. Retrieved September 5, 2019, from <a href="http://www.quernseycountyifs.org/AboutUs.aspx">http://www.quernseycountyifs.org/AboutUs.aspx</a>
- Guernsey County Department of Job and Family Services. (2019). Public assistance. Retrieved September 3, 2019, from <a href="http://www.guernseycountyjfs.org/PublicAssistance.aspx">http://www.guernseycountyjfs.org/PublicAssistance.aspx</a>
- Guernsey County Senior Citizens Center. (n.d.). Services. Retrieved September 3, 2019, from <a href="http://www.guernseysenior.org/transportation.html">http://www.guernseysenior.org/transportation.html</a>
- Guernsey County Senior Citizens Center. (n.d.). Welcome to your senior center. Retrieved September 5, 2019, from http://www.guernseysenior.org/
- Internal Revenue Service. (2018, November 07). Community health needs assessment for charitable hospital organizations Section 501(r)(3). Retrieved September 9, 2019, from <a href="https://www.irs.gov/charities-non-profits/community-health-needs-assessment-for-charitable-hospital-organizations-section-501r3">https://www.irs.gov/charities-non-profits/community-health-needs-assessment-for-charitable-hospital-organizations-section-501r3</a>
- Mid-Oho Behavioral Health LLC. (n.d.). BH services. Retrieved September 9, 2019, from <a href="http://www.midohiobh.com/home.html">http://www.midohiobh.com/home.html</a>
- Molina Healthcare, Inc. (2019). Transportation. Retrieved September 8, 2019, from
  - https://www.molinahealthcare.com/members/oh/en-US/hp/mycare/duals/coverd/services/Pages/transport.aspx
- Muskingum Valley Health Centers. (2019). Patient services. Retrieved September 11, 2019, from <a href="https://www.mwhccares.org/">https://www.mwhccares.org/</a>
- Noble County Community Health Improvement Plan. (2018, April). Retrieved September 4, 2019, from https://noblecohd.org/w.p-content/uploads/2018/09/Noble-County-CHIP-April-2018.pdf
- Noble County Department of Job and Family Services. (2019). Agency overview. Retrieved September 3, 2019, from <a href="http://www.ncdifs.org/index.html">http://www.ncdifs.org/index.html</a>
- Noble County Health Department (n.d.). About us. Retrieved September 3, 2019, from <a href="https://noblecohd.org/about-us/">https://noblecohd.org/about-us/</a>
- Noble County Health Department and Cambridge-Guernsey County Health Department. (2017, May). Noble County | Guernsey County Community Health Assessment (2017). Retrieved June 11, 2019, from <a href="http://www.guernseycountyhealthdepartment.org/noble-guernsey-county-community-health-assessment/">http://www.guernseycountyhealthdepartment.org/noble-guernsey-county-community-health-assessment/</a>
- Noble County Health Department. (n.d.). About us. Retrieved September 5, 2019, from <a href="https://noblecohd.org/about-us/">https://noblecohd.org/about-us/</a>.
- Noble County, Ohio (2019). The Noble County Commissioners. Retrieved September 6, 2019, from https://noblecountyohio.gov/commissioners/

- Oglethorpe, Inc. (2019). Cambridge Behavioral Hospital. Retrieved September 10, 2019, from <a href="https://cbhohio.com/">https://cbhohio.com/</a> Ohio Department of Health. (2019, May 1). State Health Assessment and State Health Improvement Plan. Retrieved September 9, 2019, from <a href="https://odh.ohio.gov/wps/portal/gov/odh/about-us/sha-ship">https://odh.ohio.gov/wps/portal/gov/odh/about-us/sha-ship</a>
- Ohio Development Services Agency (n.d.[b]). Ohio county profiles. Noble County. Retrieved September 3, 2019, from <a href="https://development.ohio.gov/files/research/C1062.pdf">https://development.ohio.gov/files/research/C1062.pdf</a>
- Ohio Development Services Agency. (n.d.[a]). Ohio county profiles. Guernsey County. Retrieved September 3, 2019, from <a href="https://development.ohio.gov/files/research/C1031.pdf">https://development.ohio.gov/files/research/C1031.pdf</a>
- OhioHealth. (2015-2019). OhioHealth in the community. Retrieved September 6, 2019, from <a href="https://www.ohiohealth.com/in-the-community/">https://www.ohiohealth.com/in-the-community/</a>
- Paramount. (n.d.). Medicaid. Additional services Transportation assistance program. Retrieved September 8, 2019, from <a href="https://www.paramounthealthcare.com/medicaid/additional-services/transportation-assistance-program">https://www.paramounthealthcare.com/medicaid/additional-services/transportation-assistance-program</a>
- September 11, 2019, from <a href="https://visitguernseycounty.com/what-to-do/play/parks-lakes/116-cambridge-city-park.html">https://visitguernseycounty.com/what-to-do/play/parks-lakes/116-cambridge-city-park.html</a>
- South East Area Transit. (2017). Home. South East Area Transit. We move people to provide hope. Retrieved September 3, 2019, from <a href="http://seatbus.org/">http://seatbus.org/</a>
- Southeastern Med Hospital (2019). Your community hospital. Retrieved September 9, 2019, from <a href="https://www.seormc.org">https://www.seormc.org</a>
- Southeastern Med Hospital. (2019a). Emergency and trauma care. Retrieved September 9, 2019, from <a href="http://www.seormc.org/specialties-services/emergency-trauma-care.html">http://www.seormc.org/specialties-services/emergency-trauma-care.html</a>
- Southeastern Med Hospital. (2019b). Cancer services. Retrieved September 7, 2019, from <a href="https://www.seormc.org/specialties-services/cancer-services.html">https://www.seormc.org/specialties-services/cancer-services.html</a>
- Southeastern Med Hospital. (2019c). Specialties and services. Retrieved September 10, 2019, from <a href="http://www.seormc.org/">http://www.seormc.org/</a>
- Southeastern Med. (2016). We're in this together: 2016 community health needs assessment report and hospital implementation strategies. Retrieved September 5, 2019, from <a href="http://www.seormc.org/images/CHNA%202016.pdf">http://www.seormc.org/images/CHNA%202016.pdf</a>
- State of Ohio. (2019). Start Talking! Building a drug-free future. Retrieved September 11, 2019, from <a href="https://starttalking.ohio.gov/Schools/Parents360-Rx">https://starttalking.ohio.gov/Schools/Parents360-Rx</a>
- The Ohio State University. (2019). OSU Extension. Noble County. Retrieved September 5, 2019, from <a href="https://noble.osu.edu/about">https://noble.osu.edu/about</a>
- United Healthcare Services, Inc. (2019). UnitedHealthcare Community Plan. Benefits and features. Rides and other help. Retrieved September 8, 2019, from <a href="https://www.uhccommunityplan.com/oh/medicaid/community-plan">https://www.uhccommunityplan.com/oh/medicaid/community-plan</a>
- University of Pittsburgh. (2019). Group Lifestyle Balance Program. Retrieved September 7, 2019, from <a href="https://www.diabetesprevention.pitt.edu/index.php/for-the-public/">https://www.diabetesprevention.pitt.edu/index.php/for-the-public/</a>

# Appendix A

#### Summary of Data and Information from the Ohio 2016 State Health Assessment

1. Ohio's rank on national scorecards (Ohio Department of Health, n.d.)

Various national scorecards, namely America's Health Rankings, 2015 edition, Commonwealth State Scorecard, 2015 edition, Gallup-Healthways Wellbeing Index, 2014 and Health Policy Institute of Ohio 2014 Health Value Dashboard, indicated that Ohio is in the bottom quartile of U.S. states for health outcomes.

2. Mental health and addiction (Ohio Department of Health, n.d.)

Death from opiate overdose is an immediate threat to Ohioans' health. In 2014, 37 percent of addiction treatment admissions were for heroin and prescription opioids, relative to seven percent in 2001. The death rate due to unintentional injuries (primarily from drug overdoses) increased by 30 percent from 2009 to 2014, demonstrating that opiate addiction and tobacco use are major challenges in Ohio.

- **2.1.** Poor mental health days 4.1 percent (Ohio); 3.7 percent (U.S.)
- 2.2. Unmet need for mental health 21.3 percent (Ohio); 20.3 percent (U.S.)
- 2.3. Youth with depression who did not receive mental health services 64 percent (Ohio); 64.1 percent (U.S.)
- **2.4.** Unmet need for illicit drug use treatment 2.7 percent (Ohio); 2.4 percent (U.S.)
- 3. Chronic disease (Ohio Department of Health, n.d.)
  - 3.1. Heart disease and cancer were the two leading causes of death in Ohio in 2014.
  - **3.2.** Heart disease prevalence 4.8 percent (Ohio); 4.2 percent (U.S.)
  - 3.3. Cancer incidences 174 per 100,000 population (Ohio); 168 per 100,000 population (U.S.)
  - 3.4. Adult obesity 32.6 percent (Ohio); 29.6 percent (U.S.)
  - 3.5. Youth obesity 13 percent (Ohio); 13.7 percent (U.S.)
  - **3.6.** Hypertension prevalence 33.5 percent (Ohio); 31.4 percent (U.S.)
  - **3.7.** Adult diabetes 11.7 percent (Ohio); 10 percent (U.S.)
  - 3.8. Adult asthma 10.8 percent (Ohio); 8.9 percent (U.S.)
  - 3.9. Child asthma 14.3 percent (Ohio); 14 percent (U.S.)
- 4. Maternal and infant health (Ohio Department of Health, n.d.)
  - 4.1. Infant mortality rate 6.8 per 1,000 live births (Ohio); 6 per 1,000 live births (U.S.)
  - **4.2.** In 2014, the infant mortality rate among African Americans w as 14.3 per 1,000 live births, compared to the w hite infant mortality rate of 5.3 per 1,000 live births and Hispanic infant mortality rate of 6.2 per 1,000 live births. Compared to w hites and Hispanics, black Ohioans were the least likely to obtain prenatal care w ithin the first trimester of pregnancy.
  - **4.3.** Breastfeeding at six months 42.1 percent (Ohio); 49.4 percent (U.S.)
  - **4.4.** Two notable areas of progress in Ohio: (a) teen birth rate declined 15.8 percent from 2012 to 2014, (b) percentage of infants most often laid on their back to sleep ("safe sleep") 76 percent (Ohio); 71.7 percent (U.S.)
  - **4.5.** Preterm birth 10.3 percent (Ohio): 9.6 percent (U.S.)
  - 4.6. Low birth weight 8.5 percent (Ohio); 8.0 percent (U.S.)
- 5. Tobacco use and perceived risks (Ohio Department of Health, n.d.)
  - 5.1. Adult smoking 21 percent (Ohio); 18.1 percent (U.S.)
  - **5.2.** Youth tobacco use 28.4 percent (Ohio); 25.3 percent (U.S.)
  - **5.3.** Smoking during pregnancy 16.3 percent (Ohio); 8.4 percent (U.S.)
  - **5.4.** Perceived risk of cigarettes 64.7 percent (Ohio); 65.3 percent (U.S.)
- 6. Alcohol, other drug use and perceived risks (Ohio Department of Health, n.d.)
  - **6.1.** Illicit drug use 8.7 percent (Ohio); 9.8 percent (U.S.)
  - 6.2. Excessive drinking 19.1 percent (Ohio); 18.2 percent (U.S.)
  - 6.3. Perceived risk of alcohol abuse 37 percent (Ohio); 39.1 percent (U.S.)
  - 6.4. Perceived risk of marijuana use 24.7 percent (Ohio); 23.5 percent (U.S.)
- 7. Healthy eating (Ohio Department of Health, n.d.)
  - **7.1**. Fruit consumption 41.7 percent (Ohio); 39.2 percent (U.S.)
  - **7.2.** Vegetable consumption 26.3 percent (Ohio); 22.9 percent (U.S.)

- 8. Lack of physical activity (Ohio Department of Health, n.d.)
   8.1. Physical inactivity 25 percent (Ohio); 23.7 percent (U.S.)
- 9. Lack of sleep (Ohio Department of Health, n.d.)
  9.1. InsufficieMedint sleep 37.1 percent (Ohio); 34.2 percent (U.S.)

## Appendix B

- B1. Summary of Data and Information from the 2017 Noble County and Guernsey County Community Health Assessment (Noble County Health Department and Cambridge-Guernsey County Health Department, 2017)
- B1.1. Social determinants of health

#### B1.1.1 Health insurance

- With health insurance 87.2 percent in Guernsey County; 87.1 percent in Noble County; 89.1 percent in Ohio
- With private health insurance 60.9 percent in Guernsey County; 60.2 percent in Noble County;
   69.3 percent in Ohio
- + **With public health insurance** 39.4 percent in Guernsey County; 43.8 percent in Noble County; 32.1 percent in Ohio

#### B1.1.2. Licensed practitioners

- + **Medical doctor and doctor of osteopathy** 1:428 persons in Guernsey County; 1:2,394 persons in Noble County; 1:250 persons in Ohio
- Licensed dentists 1:2,199 persons in Guernsey County; 1:14,363 persons in Noble County;
   1:1,662 persons in Ohio
- + **Licensed optometrists** 1:13,197 persons in Guernsey County; 1 in 14,363 persons in Noble County; 1:6,005 persons in Ohio
- **B1.1.3.** Did not see a physician because of cost approximately 20 percent of adult residents of Guernsey County and 11.1 percent of adult residents of Noble County needed to see a doctor but were not able to do so due to cost.
  - + **Due to primary care needs** 19.3 percent (Guernsey County); 40.4 percent (Noble County)
  - Due to hospital, emergency department or urgent care needs 3.6 percent (Guernsey County); 12.7 percent (Noble County)
  - Due to blood tests, CT scan, MRI, x-ray or mammogram 8.5 percent (Guernsey County);
     12.7 percent Noble County
  - Due to obstetrics/gynecology (OB/GYN) care needs 5.6 percent Guernsey County;
     percent Noble County
  - + Due to dental care needs 7.3 percent in Guernsey County; 10.3 percent in Noble County

#### B1.1.4. Level of education

- Bachelor's degree or higher 13.2 percent in Guernsey County; 9.5 percent in Noble County;
   25.6 percent in Ohio
- + Some college credits or completed an associate degree 28.6 percent in Guernsey County; 19.5 percent in Noble County; 28.8 percent in Ohio
- Graduated high school 43.4 percent in Guernsey County; 51.7 percent in Noble County; 34.5 percent in Ohio
- Did not graduate high school 14.7 percent in Guernsey County; 19.2 percent in Noble County;
   11.2 percent in Ohio

#### B1.1.5. Income and poverty

- + Per capita income \$21,559 in Guernsey County; \$20,719 in Noble County; \$26,520 in Ohio
- + **Median household income** \$40,420 in Guernsey County; \$37,126 in Noble County; \$48,849 in Ohio
- + Families below poverty level 15.2 percent in Guernsey County; 9.6 percent in Noble County; 11.7 percent in Ohio
- + **Children and youth below poverty level** 31.2 percent in Guernsey County; 25.9 percent in Noble County; 23.1 percent in Ohio

#### B1.1.6. Food access

- + **Households experiencing food insecurity** 15.4 percent in Guernsey County; 14.8 percent in Noble County; 16.8 percent in Ohio
- Households on food stamps 19 percent in Guernsey County; 13.2 percent in Noble County;
   15 percent in Ohio

#### B1.1.7. Employment status

+ Unemployed - 6.3 percent in Guernsey County; 8 percent in Noble County; 4.9 percent in Ohio

#### B1.1.8. Other indicators

- Violent crime 1.3 per 1,000 population in Guernsey County; 0.1 per 1,000 population in Noble County; 2.8 per 1,000 population in Ohio
- Property crime 16.2 per 1,000 population in Guernsey County; 0.1 per 1,000 population in Noble County; 28 per 1,000 population in Ohio

#### B1.2. Perceived Health Problems

+ **Abuse of drugs and alcohol as most important perceived health problem** – reported by 55.4 percent of Guernsey County residents; reported by 48.7 percent of Noble County residents

- + Cancer as second most important perceived health problem reported by 14.9 percent of Guernsey County; reported by 24.4 percent of Noble County residents
- Obesity or poor diet and exercise as third most important perceived health problem —
  reported by 12.2 percent of Guernsey County residents; reported by 12.5 percent of Noble County
  residents
- Heart disease, high blood pressure, high cholesterol as fourth most important perceived health problem — reported by 5.8 percent of Guernsey County residents; reported by 5.4 percent of Noble County residents
- Cost of health insurance or lack of health insurance as fifth most important perceived health
   problem reported by 4.7 percent of Guernsey County residents; reported by 3.8 percent of Noble County residents

#### B1.3. Behavioral Risk Factors

#### B1.3.1. Tobacco and alcohol consumption

- + Cigarette use (current smokers) 20.5 percent in Guernsey County; 20.1 percent in Noble County; 21.6 percent in Ohio
- Binge drinkers 29.3 percent in Guernsey County; 33 percent in Noble County; 18.2 percent in Ohio
- + Smoking allowed in the home 12.3 percent in Guernsey County; 9.2 percent in Noble County

#### B1.3.2. Know anyone with a drug abuse or addiction problem

- Know anyone with a heroin problem 17.2 percent in Guernsey County; 20.1 percent in Noble County
- Know anyone with a methamphetamine problem 15.7 percent in Guernsey County; 17.4 percent in Noble County
- Know anyone with a prescription pain medicine 27.1 percent in Guernsey County; 21.1 percent in Noble County

#### B1.4. Drug-related mortality and convictions

**B1.4.1. Unintentional drug overdose** – 22.9 per 100,000 population in Guernsey County; 34.9 per 100,000 population in Noble County; 26.3 per 100,000 population in Ohio

#### B1.5. Self-reported misuse of marijuana and prescription medicines

- **B1.5.1.** Have misused marijuana in the past six months 8.5 percent in Guernsey County; 4.9 percent in Noble County
- **B1.5.2.** Have misused prescription medication in the past six months 1.1 percent in Guernsey County; 0.5 percent in Noble County

#### B1.6 Body mass index

- **B1.6.1.** Overweight (body mass index 25 to 29.9 29.3 percent in Guernsey County; 31.5 percent in Noble County; 36.7 percent in Ohio
- **B1.6.2. Obese (body mass index 30 and above)** 44.9 percent in Guernsey County; 43.9 percent in Noble County; 29.8 percent in Ohio

#### B1.7. Nutrition

- **B1.7.1.** Consumption of at least one serving of fruit daily 84.6 percent in Guernsey County; 82.4 percent in Noble County
- **B1.7.2.** Consumption of at least one serving of vegetable daily 94.5 percent in Guernsey County; 97.1 percent in Noble County

#### B1.8 Physical activity in past month

B1.8.1. Participated in physical activity such as running or walking for exercise, calisthenics, golf, gardening and other forms of exercise — 61 percent of Guernsey County residents had physical activity for an average of four times per month; 62 percent of Noble County residents had physical activity for an average of four times per month

#### B1.9. Wellness Care

- B1.9.1. Cervical cancer screening (pap smear within past three years among women age 18+ 72.3 percent in Guernsey County; 74.2 percent in Noble County
- B1.9.2. Breast cancer screening (mammogram within past two years) among women age 40+ 76.4 percent in Guernsey County; 85.8 percent in Noble County
- **B1.9.3.** Has had flu vaccine in the past 12 months 34.7 percent in Guernsey County; 36 percent in Noble County
- **B1.9.4.** Has had pneumonia shot or pneumococcal vaccine 33.8 percent in Guernsey County; 31.4 percent in Noble County
- B1.9.5. Visited the dentist within the past year 55 percent in Guernsey County; 52 percent in Noble County

#### B1.10. Maternal and Child Health

- **B1.10.1** Estimated pregnancies among adolescents age 10-14 years 0.9 per 1,000 females in Guernsey County; no data in Noble County; 0.5 per 1,000 females in Ohio
- **B1.10.2. Estimated pregnancies among adoles cents age 15-17 years** 21.4 per 1,000 females in Guernsey County; 4.8 per 1,000 females in Noble County; 16.2 per 1,000 females in Ohio
- **B1.10.3. Estimated pregnancies among adoles cents age 18-19 years** 105.6 per 1,000 females in Guernsey County; 38.7 per 1,000 females in Noble County; 66.5 per 1,000 females in Ohio
- **B1.10.4.** Estimated live births among adolescents age 10-14 years less than 1 per 1,000 females in Guernsey County; no data in Noble County; 0.3 per 1,000 live births in Ohio

- **B1.10.5. Estimated live births among adoles cents age 15-17 years** 16.6 per 1,000 females in Guernsey County; 0 per 1,000 females in Noble County; 10.7 per 1,000 females in Ohio
- **B1.10.6.** Estimated live births among adolescents age 18-19 years 79.4 per 1,000 females in Guernsey County; 32.3 per 1,000 females in Noble County; 46.9 per 1,000 females in Ohio
- **B1.10.7.** Percent low birth weight babies 10 percent in Guernsey County; 4 percent in Noble County; 6.9 percent in Ohio. The Healthy People 2020 target for low birth weight is 7.8 percent (U.S. Department of Health and Human Services, 2019). Guernsey County did not meet this target. Noble County and Ohio met this target.
- **B1.10.8.** Percent preterm births 11 percent in Guernsey County; 9 percent in Noble County; 12.2 percent in Ohio. The Healthy People 2020 target for preterm birth is 9.4 percent (U.S. Department of Health and Human Services, 2019). Guernsey County and Ohio did not meet this target. Noble County met this target.
- **B1.10.9** Childhood immunization rates for measles, mumps and rubella (MMR) 96.4 percent in Guernsey County; 95.6 percent in Noble County; 91.9 percent in Ohio
- **B1.10.10. Childhood immunization rates for he patitis B** 96.6 percent in Guernsey County; 97.2 percent in Noble County; 95.2 percent in Ohio
- **B1.10.11** Childhood immunization rates for polio 96.8 percent in Guernsey County; 97.2 percent in Noble County; 92.5 percent in Ohio

#### B1.11 Mental and Social Health

- B1.11.1 Days in which poor physical or mental health kept resident from doing self-care, work or recreation 39.5 percent of Guernsey County residents reported average of 4.5 days in the past month; 30.7 percent of Noble County residents reported average of three days in the past month
- B1.11.2 Diagnosis of depressive disorder such as depression, major depression, dysthymia, or minor depression 30 percent in Guernsey County; 23.1 percent in Noble County
- B1.11.3. Diagnosis of anxiety disorder such as acute stress disorder, anxiety, generalized anxiety disorder, obsessive-compulsive disorder, panic disorder, phobia, post-traumatic stress disorder, or social anxiety disorder 29.6 percent in Guernsey County; 21 percent in Noble County
- **B1.11.4. Suicide** 16.5 per 100,000 population in Guernsey County; no data for Noble County; 12.7 per 100,000 population in Ohio
- **B1.11.5. Homicide** 2.5 per 100,000 population in Guernsey County; none in Noble County; 3.9 per 100,000 population in Ohio
- **B1.11.6.** Count of domestic violence incidents 154 in Guernsey County; 105 in Noble County; 72,899 in Ohio
- **B1.11.7. Child abuse (physical abuse)** 45 percent of all child abuse cases in Guernsey County; 24 percent of all child abuse cases in Noble County. 29 percent of all child abuse cases in Ohio
- **B1.11.8. Child abuse (sexual abuse)** 12 percent of all child abuse cases in Guernsey County; 12 percent of all child abuse cases in Ohio

**B1.11.9. Child abuse (neglect)** – 21 percent of all child abuse cases in Guernsey County; 30 percent of all child abuse cases in Noble County; 29 percent of all child abuse cases in Ohio

#### B1.12. Death, Illness and Injury

#### B1.12.1 Leading causes of death

- + **Lung and bronchus cancer** 70.6 per 100,000 population in Guernsey County; 90.7 per 100,000 population in Noble County; 49.5 per 100,000 population in Ohio
- + Coronary artery disease 66.7 per 100,000 population in Guernsey County; no data in Noble County; 52.7 per 100,000 population in Ohio
- + **Chronic obstructive pulmonary disease** 49.7 per 100,000 population in Guernsey County; no data in Noble County; 34.5 per 100,000 population in Ohio
- Dementia 42.3 per 100,000 population in Guernsey County; no data in Noble County; 40.1 per 100,000 population in Ohio
- + **Heart attack** 40.8 per 100,000 population in Guernsey County; no data in Noble County; 34.8 per 100,000 population in Ohio
- **B1.12.2.** Leading causes of cancer-related deaths in Guernsey and Noble Counties lung and bronchus cancer, colon and rectum cancer, breast cancer, prostate cancer, pancreatic cancer

#### B1.12.3. Chronic health conditions

- + High blood pressure 46.8 percent in Guernsey County; 57.3 percent in Noble County
- + Arthritis 38.8 percent in Guernsey County; 36 percent in Noble County
- + **High cholesterol** 37.5 percent in Guernsey County; 32.6 percent in Noble County
- + **Diabetes** –18.9 percent in Guernsey County; 12.9 percent in Noble County
- + Cancer 14.5 percent in Guernsey County; 12.6 percent in Noble County
- + Asthma 17.6 percent in Guernsey County; 11.1 percent in Noble County
- **B1.12.4** Perceived health status as "good", "very good", or "excellent" 75 percent in Guernsey County; 82 percent in Noble County
- **B1.12.5.** Emergency department visits at Southeastern Ohio Regional Medical Center 25,997 emergency department visits in 2016
- **B1.12.6** Leading causes of emergency department-related hospital admissions septicemia or severe sepsis, pulmonary edema and respiratory failure, chronic obstructive pulmonary disease, pregnancy-related diagnoses, cellulitis
- **B1.12.7** Leading causes of non-emergency department-related hospital admissions vaginal and caesarian deliveries, joint replacement, uterine and adnexa procedures

#### B1.12.8 Incidence of Infectious disease

- + **Chlamydia** 320.8 per 100,000 population in Guernsey County; 257.6 per 100,000 population in Noble County; 490.8 per 100,000 population in Ohio
- + **Influenza-associated hospitalization** 45.5 per 100,000 population in Guernsey County; 41.8 per 100,000 in Noble County; 45 per 100,000 population in Ohio
- + **Streptococcal pneumonia** 2.5 per 100,000 population in Guernsey County; 34.8 per 100,000 population in Noble County; 2.4 per 100,000 population in Ohio
- + **Gonorrhea** 58.1 per 100,000 population in Guernsey County; 13.9 per 100,000 population in Noble County; 143.4 per 100,000 population in Ohio
- Syphilis 0 per 100,000 population in Guernsey County; 13.9 per 100,000 population in Noble County;
   11.7 per 100,000 population in Ohio

#### B2. Summary of Data and Information from the County Health Rankings (2019)

#### B2.1. Length of Life

- **B2.1.1.** Life expectancy ("average number of years a person can expect to live") 75.1 years in Guernsey County; 81.4 years in Noble County; 77 years in Ohio
- **B2.1.2.** Premature age-adjusted mortality (number of deaths among residents under age 75 per 100,000 population) 480 deaths under 75 years of age per 100,000 population in Guernsey County; 320 deaths under 75 years per 100,000 population in Noble County; 400 deaths under 75 years per 100,000 population in Ohio
- **B2.1.3.** Child mortality (number of deaths among children underage 18 per 100,000 population) 60 in Guernsey County; no data in Noble County; 60 in Ohio
- **B2.1.4.** Infant mortality (number of all infant deaths before age one per 1,000 live births) 8 per 1,000 live births in Guernsey County; no data in Noble County; 7 per 1,000 live births in Ohio

#### B2.2. Quality of Life

- **B2.2.1.** Frequent physical distress (percentage of adults reporting 14 or more days of poor physical health per month) 13 percent in Guernsey County; 11 percent in Noble County; 13 percent in Ohio
- B2.2.2. Frequent mental distress (percentage of adults reporting 14 or more days of poor mental health per month) 14 percent in Guernsey County; 12 percent in Noble County; 14 percent in Ohio
- **B2.2.3.** Diabetes prevalence (percentage of adults aged 20 and above with diagnosed diabetes) 12 percent in Guernsey County; 14 percent in Noble County; 12 percent in Ohio
- **B2.2.4.** HIV prevalence (number of people aged 13 years and older living with a diagnosis of human immunodeficiency virus infection per 100,000 population) 58 per 100,000 population in Guernsey County; 209 per 100,000 population in Noble County; 213 per 100,000 population in Ohio
- **B2.2.5.** Percent of adults reporting poor or fair health 19 percent in Guernsey County; 15 percent in Noble County; 17 percent in Ohio
- **B2.2.6.** Average number of physically unhealthy days reported by adults in the past month 4.1 days in Guernsey County; 3.7 days in Noble County; 4 days in Ohio
- **B2.2.7.** Average number of poor mental health days reported by adults in the past month 4.3 days in Guernsey County; 3.9 days in Noble County; 4.3 days in Ohio
- **B2.2.8.** Percent low birth weight 9 percent in Guernsey County; 7 percent in Noble County; 9 percent in Ohio. The Healthy People 2020 target for low birth weight is 7.8 percent (U.S. Department of Health and Human Services, 2019). Guernsey County and Ohio did not meet the Healthy People 2020 target. Noble County met the Healthy People 2020 target for percent low birth weight

#### B2.3. Health Behaviors

- **B2.3.1.** Food insecurity (percent of population who lack adequate access to food) 16 percent in Guernsey County; 14 percent in Noble County; 15 percent in Ohio
- B2.3.2. Limited access to healthy foods (percent of low-income population who do not live close to a grocery store) 6 percent in Guernsey County; 13 percent in Noble County; 7 percent in Ohio
- **B2.3.3. Drug overdose deaths** 31 people per 100,000 population in Guernsey County; 26 people per 100,000 population in Noble County; 37 people per 100,000 population in Ohio
- B2.3.4. **Motor vehicle crash deaths** 13 crash deaths per 100,000 population in Guernsey County; 12 crash deaths per 100,000 population in Noble County; 10 crash deaths per 100,000 population in Ohio

- B2.3.5. Insufficient sleep (percent of adults who report less than average of seven hours of sleep) 38 percent in Guernsey County; 37 percent in Noble County; 38 percent in Ohio
- **B2.3.6.** Percent of adults who are current smokers 21 percent in Guernsey County; 18 percent in Noble County; 23 percent in Ohio
- B2.3.7. Percent of adults age 20 and older that reports a body mass index greater than or equal to 30 35 percent in Guernsey County; 36 percent in Noble County; 32 percent in Ohio.
- **B2.3.8.** Percent of adults age 20 and older that reports no leisure time physical activity 27 percent in Guernsey County; 30 percent in Noble County; 25 percent in Ohio.
- **B2.3.9.** Percent of population with adequate access to locations for physical activity 49 percent in Guernsey County; 32 percent in Noble County; 84 percent in Ohio
- **B2.3.10.** Percent of adults reporting binge or heavy drinking 17 percent in Guernsey County; 17 percent in Noble County; 19 percent in Ohio.
- **B2.3.11.** Percent of driving deaths with alcohol involvement 31 percent in Guernsey County; 57 percent in Noble County; 33 percent in Ohio.
- **B2.3.12.** Number of newly diagnosed chlamydia cases per 100,000 population 295.5 per 100,000 in Guernsey County; 167.5 per 100,000 population in Noble County; 520.9 per 100,000 population in Ohio
- **B2.3.13.** Number of births per 1,000 female population ages 15-19 34 per 1,000 females in Guernsey County; 29 per 1,000 females in Noble County; 26 per 1,000 females in Ohio.

#### B2.4. Clinic Care

- **B2.4.1.** Uninsured adults (percent of adults under age 65 without health insurance) 8 percent in Guernsey County; 8 percent in Noble County; 8 percent in Ohio
- **B2.4.2.** Uninsured children (percent of children under age 19 without health insurance) -4 percent in Guernsey County; 5 percent in Noble County; 4 percent in Ohio
- B2.4.3. Percent uninsured 7 percent in Guernsey County; 7 percent in Noble County; 7 percent in Ohio
- **B2.4.4.** Access to primary care physicians 2,300 Guernsey County residents to one primary care physician; 4,760 Noble County residents to one primary care physician; 1,300 Ohio residents to one primary care physician.
- **B2.4.5.** Access to primary care providers such as nurse practitioners, physician assistants and other advanced practice providers 1,564 Guernsey residents to 1 primary care provider; 2,058 Noble County residents to 1 primary care provider; 1,161 Ohio residents to 1 primary care provider
- **B2.4.6.** Access to dentists 1,860 Guernsey County residents to one dentist; 3,600 Noble County residents to one dentist; 1,620 Ohio residents to one dentist
- **B2.4.7.** Access to mental health providers 690 Guernsey County residents to one mental health provider; 1,440 Noble County residents to one mental health provider; 470 Ohio residents to 1 mental health provider
- B2.4.8. Preventable hospital stays per 100,000 Medicare beneficiaries (rate of hospital stays for ambulatory care sensitive conditions) 6,312 per 100,000 Medicare population in Guernsey County; 5,081 per 100,000 Medicare beneficiaries in Noble County; 5,135 per 100,000 Medicare population in Ohio
- B2.4.9. Mammography screening (percentage of female Medicare beneficiaries ages 65-74 that received an annual mammography screening) 42 percent in Guernsey County; 36 percent in Noble County; 41 percent in Ohio.

B2.4.10. Flu vaccinations - 47 percent in Guernsey County; 46 percent in Noble County; 47 percent in Ohio.

#### B2.5. Social and Economic Factors

- **B2.5.1** Percent of teens and young adults ages 16-19 who are neither working nor in school 10 percent in Guernsey County; 19 percent in Noble County; 6 percent in Ohio
- B2.5.2. Median household income (income where half of households in a county earn more and half of households earn less) \$43,700 in Guernsey County; \$44,800 in Noble County; \$54,100 in Ohio
- **B2.5.3.** Percent of children enrolled in public schools that are eligible for free or reduced-price lunch 64 percent in Guernsey County; 50 percent in Noble County; 39 percent in Ohio
- **B2.5.6.** Homicide 4 deaths per 100,000 population in Guernsey County; no data in Noble County; 6 deaths per 100,000 population in Ohio
- **B2.5.7.** Firearm fatalities 11 deaths due to firearms per 100,000 population in Guernsey County; no data in Noble County; 12 deaths due to firearms per 100,000 population in Ohio
- **B2.5.8.** High school graduation 87 percent in Guernsey County; 96 percent in Noble County; 85 percent in Ohio
- **B2.5.9. Percent unemployment** 6.1 percent in Guernsey County; 7.2 percent in Noble County; 5 percent in Ohio
- B2.5.10. Children in poverty 27 percent in Guernsey County; 20 percent in Noble County; 20 percent in Ohio
- **B2.5.11.** Children in single-parent households 35 percent in Guernsey County; 25 percent in Noble County; 36 percent in Ohio

#### **B2.6.** Physical Environment

- B2.6.1. Homeownership 72 percent in Guernsey County; 84 percent in Noble County; 66 percent in Ohio
- **B2.6.2.** Percent of households that spend 50 percent or more of their household income on housing—12 percent in Guernsey County; 8 percent in Noble County; 13 percent in Ohio
- B2.7. Demographics
- B2.7.1. Population 39,093 people in Guernsey County; 14,406 in Noble County; 11.66 million in Ohio
- **B2.7.2.** Population below 18 years of age 22.2 percent in Guernsey County; 18.5 percent in Noble County; 22.3 percent in Ohio
- **B2.7.3.** Population age 65 and older 19.1 percent in Guernsey County; 26.5 percent in Noble County; 16.7 percent on Ohio
- **B2.7.4.** Population of Non-Hispanic African American 1.5 percent in Guernsey County; 2.7 percent in Noble County; 12.5 percent in Ohio
- **B2.7.5.** Population of American Indian and Alaska Native 0.3 percent in Guernsey County; 0.4 percent in Noble County; 0.3 percent in Ohio
- **B2.7.6.** Population of Asian 0.4 percent in Guernsey County; 0.3 percent in Noble County; 2.3 percent in Ohio
- **B2.7.7.** Population of Native Hawaiian/Other Pacific islander 0 percent in Guernsey County; 0 percent in Noble County; 0.1 percent in Ohio
- **B2.7.8.** Population of Hispanics 1.1 percent in Guernsey County; 0.6 percent in Noble County; 3.8 percent in Ohio

- **B2.7.9. Population of non-Hispanic White** 94.8 percent in Guernsey County; 95.2 percent in Noble County; 79.1 percent in Ohio
- B2.7.10. Percent females 50.2 percent in Guernsey County; 41.8 percent in Noble County; 51 percent in Ohio
- B2.7.11. Percent rural 61.4 percent in Guernsey County; 62.5 percent Noble County; 22.1 percent in Ohio

# Appendix C

## Summary of Southeastern Ohio Regional Medical Center Community Health Needs Assessment (CHNA) Community Stakeholders

- 1. AllWell Behavioral Health Services Guernsey Center
  - Representative: Maggie Ault, Director (Has knowledge and skills in public health)
  - Description of the medical underserved, low-income, or minority populations served by the organization: Provides behavioral health services to residents of Guernsey County and neighboring communities regardless of ability to pay
  - **Input:** Participated in the community meeting held at SEORMC on July 24, 2019 to identify priority health needs in Guernsey and Noble Counties.
  - Time frame of input: July 24, 2019
  - Website: http://allw ell.org/
  - **Mission of organization:** "We integrate mental and physical care to offer the hope of wellbeing for you and every member of your family."
  - Examples of programs and services (AllWell Behavioral Health Services, 2016-2019):
    - Adult services includes emergency service, counseling and therapy, psychiatry and medications, programs for personal growth, intervention and stabilization during crisis, housing support, employment support, support groups, access to peer support, and health and wellness.
    - Children and teen services includes diagnostic services, counseling and therapy, linkage to community resources, psychiatry and management of medications, group homes for boys and girls aged 12 to 18, and community education to promote awareness of mental health services and reduce the stigma of mental illness
    - + Services for employers managed care services, education, prevention and early intervention through Employee Assistance Programs
    - Assistance to healthcare providers coordinates patient's health care services for mental health, primary care and community linkages

#### 2. Area Agency on Aging Region 9

- Representative: Carol Baker, Outreach and Communications Officer (Has knowledge and skills in public health)
- Description of the medically underserved, low-income or minority populations served by the organization: Serves Ohioans residing in the nine-county area, including Belmont, Carroll, Coshocton, Guernsey, Harrison, Holmes, Jefferson, Muskingum and Tuscaraw as Counties
- Input: Participated in the community meeting held at SEORMC on July 24, 2019 to identify priority health needs in Guernsey and Noble Counties.
- Time frame of input: July 24, 2019
- Website: aaa9.org
- **Mission of organization:** "We work with people, communities and organizations to help older adults and people with disabilities live independently and enjoy the highest quality of life possible."
- Examples of programs and services (Area Agency on Aging Region 9, Inc., 2019):
  - + Quality and planning monitoring of grants and contracts.
  - + Screening and assessment conducted in the homes of older adults as an initial step in developing care plans to promote health and safety.
  - Case management performed by social workers and nurses as part of the PASSPORT program.

#### 3. Cedar Ridge Behavioral Health Solutions

- **Representative:** Alicia Beynon, owner and chief executive officer; Troy Beynon, owner, chief operating officer and general counsel; Debra Brown, director of marketing and community engagement
- Description of the medically underserved, low-income or minority populations represented by organization: Provides outpatient behavioral health services throughout central and southeastern Ohio regardless of ability to pay.
- Input: Participated in the community meeting held at SEORMC on July 24, 2019 to identify priority health needs in Guernsey and Noble Counties.
- Time frame of input: July 24, 2019
- Website: https://www.crbhs.org/about-us
- **Mission of organization:** "Here at Cedar Ridge Behavioral Health Solutions (CRBHS), we are committed to enriching the lives of individuals and families throughout Central and Southeastern Ohio. Our highly-qualified and caring therapists are dedicated to providing each individual we serve with the best possible opportunity to reach his or her full potential."
- Examples of programs and services (Cedar Ridge Behavioral Health, 2019)
  - Residential services
  - + Outpatient services program
  - + Medication-Assisted treatment
  - Psychiatric services
  - + Recovery housing
  - + Intensive outpatient program
  - + Employment services
  - + Group services
  - Driver intervention services

#### 4. Guernsey County Department of Job & Family Services

- Representative: Kathy Jamiel, director (Has knowledge and skills in public health)
- Description of the medically underserved, low-income or minority populations served by organization: Serves Guernsey County residents who need public assistance, collection of child support, employment, training, and social services
- Input: Participated in the community meeting held at SEORMC on July 24, 2019 to identify priority health needs in Guernsey and Noble Counties.
- Time frame of input: July 24, 2019
- Website: www.guernseycountyjfs.org/
- **Mission of organization:** "Guernsey County Job & Family Services (GCJFS) is a county, state and federally supported triple-combined agency that develops and oversees programs and services designed to strengthen families and protect the elderly."
- Examples of programs and services (Guernsey County Jobs & Family Services, 2019):
  - + **Financial and food assistance** helps provide food benefits and financial assistance for those in need of financial assistance in Guernsey County.
  - Paternity and child support services Helps provide support services and establish paternity for children
  - + **Employment services** Assists individuals with serious barriers to employment through education and job placement, as well as workforce development and veteran placement for employers.
  - Social services provides transportation and protective services as well as childcare for eligible Ohioans

#### 5. Guernsey County Senior Citizens Center, Inc.

- Representatives: Kylee Quinn, Wellness Coordinator, Billi Pierce, Outreach Coordinator (Has knowledge and skills in public health)
- Description of the medically underserved, low-income or minority populations represented by organization: Serves senior citizens in Guernsey County
- **Input:** Participated in the community meeting held at SEORMC on July 24, 2019 to identify priority health needs in Guernsey and Noble Counties.
- Time frame of input: July 24, 2019
- Website: www.guernseysenior.org/
- Mission of organization: "To promote the nutritional, physical, emotional, social, and economic well-being of older adults, and to promote their participation in all aspects of community life"
- Examples of programs and services (Guernsey County Senior Citizens Center, n.d.):
  - + Homemaking and Personal Care Provide services for seniors to stay in-home such as cleaning, laundry, shopping and meal preparation, as well as personal hygiene
  - + **Information and Outreach**—Inform the public through release of a monthly "Senior Times" new sletter, speaking engagements, and information by the local media.
  - Nutrition Works to provide hot, nutritious meals Monday through Friday at various senior centers and churches across the county, as well as a home-delivery service to provide nutritious meals seven days a week.
  - + **Telephone reassurance and visiting** Provides regular interpersonal contact with seniors through the telephone or by volunteers visiting senior centers or the homes of seniors
  - + **Transportation** Allows seniors to navigate to various places around the community including places of employment and medical appointments in center-provided vans.

#### 6. Muskingum Valley Health Centers

- Representatives: Kylie Emmert, quality analyst (Has know ledge and skills in public health)
- Description of the medically underserved, low-income or minority populations served by organization: Serves all persons regardless of ability to pay
- Input: Participated in the community meeting held at SEORMC on July 24, 2019 to identify priority health needs in Guernsey and Noble Counties.
- Time frame of input: July 24, 2019
- Website: https://www.mvhccares.org/
- Examples of programs and services (Muskingum Valley Health Centers, 2019):
  - + Adult health
  - + Women's health
  - + Child health
  - Podiatry
  - + Dental care
  - + Behavioral health
  - + Pharmacy services
  - + School-linked health center

#### 7. Noble County Commissioners Office

- Representative: Brad Peoples
- Description of the medically underserved, low-income or minority populations represented by organization: Serves all residents of Noble County.
- **Input:** Participated in the community meeting held at SEORMC on July 24, 2019 to identify priority health needs in Guernsey and Noble Counties.
- Time frame of input: July 24, 2019
- Website: <a href="https://noblecountyohio.gov/commissioners/">https://noblecountyohio.gov/commissioners/</a>
- Mission of organization: Not available
- Examples of programs and services (Noble County, Ohio, 2019)
  - + Projects related to fair housing
  - Community programs that support the Southeast Ohio Area Transit
  - + Economic development
  - Tourism

#### 8. Noble County Health Department

- Representatives: Shaw n Ray, health commissioner, Shari Rayner, director of nursing (Has knowledge and skills in public health)
- Description of the medically underserved, low-income or minority populations served by organization: Serves all residents of Noble County regardless of ability to pay
- **Input:** Participated in the community meeting held at SEORMC on July 24, 2019 to identify priority health needs in Guernsey and Noble Counties.
- Time frame of input: July 24, 2019
- Website: https://noblecohd.org/
- **Mission of organization:** "To provide quality services that promote wellness, prevent disease and plan a healthy future for our community"
- Examples of programs and services (Noble County Health Department, n.d.):
  - + Environmental health
  - Birth/death records
  - Community health programs (Breast and Cervical Cancer Project, car seats, Children with Medical Handicaps, child safety, early head start, early intervention, environmental health, epidemiology, Help Me Grow Home Visiting, personal responsibility education, reproductive health and wellness, responsible social values, Women, Infant and Children (WIC)
  - Health services (allergy shots, birth control, child health, hemoglobin testing, immunizations, communicable disease tracking and reporting, laboratory services, men's health, w omen's health, physical examinations, pregnancy testing, speech therapy, testing for sexually transmitted infections, testing for tuberculosis
  - + Emergency preparedness

#### 9. OhioHealth Community Health Partnerships

- Representative: Mary Ann G. Abiado, Data Management and Evaluation Specialist, Rebecca Barbeau, operations director
- Description of the medically underserved, low-income or minority populations represented by organization: Serves all persons residing in central Ohio with women's health care, primary care and health education programs.
- Inputs: (a) Facilitated the community meeting at the Southeastern Ohio Regional Medical Center (SEORMC) on July 24, 2019; (b) Led the writing of the SEORMC 2019 Community Health Needs Assessment and 2020-2022 Community Health Improvement Plan
- Time frame of input: May September 2019; July 24, 2019
- Website: www.ohiohealth.com
- Mission of organization: "To improve the health of those we serve"
- Examples of programs and services (OhioHealth, 2015-2019):
  - + Wellness on Wheels Women's Health
  - + Wellness on Wheels Primary Care
  - + ENGAGE Health Literacy Programs
  - + Community-based research
  - + Home visiting and care coordination programs

#### 10. Southeastern Ohio Regional Medical Center (SEORMC)

- Representatives: Steven Brooks, vice president; Human Resources; Lindsey Kulpa, director, Emergency Services; Thomasina Crock, board member, SEORMC, and Noble County resident; Denise Stephens, director of case management, Dominic Crock, director of cancer services; Gina Woods, chief nursing officer and vice president, patient care services; Marjorie Clayman, manager of communications (Has knowledge and skills in public health)
- Description of the medically underserved, low-income or minority populations served by the organization: Serves all persons needing health care services regardless of ability to pay.
- **Input:** Participated in the community meeting held at SEORMC on July 24, 2019 to identify priority health needs in Guernsey and Noble Counties.
- Time frame of input: July 24, 2019
- Website: https://www.seormc.org/
- **Mission of organization:** "To provide high quality, comprehensive, affordable, patient-centered health care in a caring and safe environment while addressing community needs."
- Examples of programs and services (Southeastern Med Hospital, 2019):
  - Inpatient and outpatient services such as audiology, cancer services, critical care, emergency and trauma, endoscopy, ear-nose-throat (ENT), heart and vascular services, home care services, hospitalists, imaging services, laboratory, maternity care, neurology, nursing services, occupational health, ophthalmology, orthopedics, outpatient services, palliative care, pastoral care, pediatrics, podiatry, quality care management, sleep medicine, sports medicine and rehabilitation, multi-specialty physician group, surgery and anesthesia, thoracic, urology, wellness, wound care.
  - Community education such as cardiopulmonary resuscitation (CPR) and Heartsaver Automated External Defibrillator (AED)
  - Continuing education for healthcare professionals such as (but not limited to) Basic Life Support (BLS), Pediatric Advanced Life Support (PALS) and Advanced Cardiac Life Support (ACLS)
  - + Health screenings for early diagnosis and referral
  - + Preventive health education

#### 11. The Ohio State University Extension-Noble County

- Representative: Gw ynn Stew art, community development educator (Has knowledge and skills in public health)
- Description of the medically underserved, low-income or minority populations served by the organization: Serves all residents of Noble County, Ohio regardless of ability to pay
- Input: Participated in the community meeting held at SEORMC on July 24, 2019 to identify priority health needs in Guernsey and Noble Counties.
- Time frame of input: July 24, 2019
- Website: noble.osu.edu
- Mission of organization: Engaging people to strengthen their lives and communities through researchbased educational programming
- Examples of programs and services (The Ohio State University, 2019):
  - + 4-H development
  - + Agriculture and natural resources
  - + Community development
  - + Family and consumer sciences
  - Master gardener program
  - + Supplemental Nutrition Assistance Program education

## Appendix D

Documentation of Program Impacts from the Community Health Needs Assessment and Implementation Strategy Adopted in 2016 by Southeastern Ohio Regional Medical Center Hospital

#### Priority Health Need 1. Access to Health Services

**Goal.** Southeastern Med will support and promote policies, systems, and actions to reduce barriers that prevent access to appropriate health care for Guernsey County residents.

#### Objective 1.1. Increase the number of practicing primary care providers.

### Activity 1.1.1. Support growth of Federally Qualified Health Centers (FQHCs) through joint recruiting efforts.

<u>Calendar Year 2017.</u> No assisted placements with FQHC, Muskingum Valley Health Center, due to assistance not being requested. We conducted a physician needs assessment in 2017 that revealed a need for 26.5 Primary Care providers. At this time, we had 31 primary care providers in the community. Data did not support the need.

<u>Calendar Year 2018.</u> Worked with the local FQHC, Muskingum Valley Health Center, on OBGYN Employment and coordination of on-call coverage for the hospital. Two physicians, Joseph Binkiew icz, MD and Paul Wright, MD currently provide coverage. These physicians supported over 450 childbirths in 2018.

#### Activity 1.1.2. Explore opportunities for primary care extenders in physician practices

<u>Calendar Year 2017.</u> No recruitment for nurse practitioner or physician assistant during this time due to primary care practice (PCP) office turnover and ongoing recruitment. We conducted a physician needs assessment in 2017 that revealed a need for 26.5 primary care providers. At this time, we had 31 primary care providers in the community. Assessment data did not support the need for primary care extenders.

<u>Calendar Year 2018.</u> Two PCP extenders were recruited to work with Mary Lilko, M.D. These extenders were Mary Tilton, NP and Christine Milburn, NP. These extenders served an additional 1,500 patients in Guernsey and Noble counties.

### Activity 1.1.3. Evaluate recruitment needs and continue to recruit additional primary care providers accordingly

<u>Calendar Year 2017.</u> Recruited Christopher Forbush, D.O. for Family Practice and Ellen Kumler, M.D. for Pediatrics. These physicians served 1,600 new patients.

<u>Calendar Year 2018.</u> Recruited Mary Lilko, M.D. for Family Practice and Suresh Thakker, M.D. for Pediatrics. These physicians 1,700 new patients.

### <u>Activity 1.1.4.</u> Support efforts by and collaborate with other private practices to recruit primary care providers

<u>Calendar Year 2017.</u> No assistance to recruit primary care providers was requested in calendar year 2017. The physician recruitment team within SEORMC would share resumes and curriculum vitae of interested providers with local healthcare organizations. Physician recruitment shared more than 12 resumes in calendar year 2017 to encourage expanding access to care throughout the Guernsey and Noble communities.

<u>Calendar Year 2018.</u> No assistance to recruit primary care providers was requested in calendar 2018. Physician recruitment within SEORMC would share resumes and curriculum vitae of interested providers with local healthcare organizations. Physician recruitment shared more than 12 resumes in 2018 to encourage expanding access to care throughout the Guernsey and Noble communities.

#### Objective 1.2. Increase the number of practicing orthopedic surgeons and access to providers

### Activity 1.2.1. Evaluate feasibility of recruiting another orthopedic surgeon and review business plan

<u>Calendar Year 2017.</u> Recruited orthopedic surgeon, William Kumler, MD and collaborated with Orthopedic Associates of Zanesville (OAZ). OAZ now has a local office and supplies a physician Vanessa Falk, MD, three days a week in Cambridge (Guernsey County) to help with providing care for orthopedic patients. Her office is located at 2854 Bell Street, Zanesville, Ohio, 43701. In Calendar Year 2017, Dr. Falk served 374 patients and Dr. Kumler served 480 patients.

<u>Calendar Year 2018.</u> SEORMC continued to collaborate with Orthopedic Associates of Zanesville (OAZ). OAZ now has a local office served by physician Vanessa Falk, MD three days a week in Cambridge, Ohio to help with providing care for increasing number of orthopedic patients. Her office is located at 2854 Bell Street, Zanesville, Ohio, 43701. In Calendar Year 2018, Dr. Falk attended to 1,408 completed patient visits and Dr. Kumler attended to 3,837 completed patient visits.

### Activity 1.2.2. Evaluate feasibility of recruiting physician assistant to orthopedic office and review business plan

<u>Calendar Year 2017.</u> SEORMC actively recruited physician assistants but no hires were made due to enough providers available.

<u>Calendar Year 2018.</u> Orthopedic nurse practitioner, Amanda Sealock, NP-C, was hired and started working in 2018 with Bill Kumler, MD. Amanda Sealock, NP-C saw 170 patients in her office in 2018.

### <u>Objective 1.3.</u> Increase education and support by associates to improve access to health services across the broad community

### Activity 1.3.1. Provide monthly updates to department directors regarding legislative issues impacting access to health services

<u>Calendar Year 2017.</u> Legislative issues impacting access to health services were reviewed during monthly director meetings and monthly department meetings. The Chief Executive Officer of SEORMC also conducts quarterly town hall meetings and discuss topics with associates. Topics that were discussed include (a) pricing transparency, (b) Medicaid Disproportionate Share Hospital (DSH) payments and (c) Affordable Care Act (ACA).

<u>Calendar Year 2018.</u> Similar to calendar Year 2017, discussion of legislative issues impacting access to health services continued.

### Activity 1.3.2. Review annual comprehensive health screenings and evaluate need for expansion or relocation to accommodate higher risk populations

Calendar Year 2017. SEORMC's "Cardiac Health Screening" in 2017 served 55 persons. SEORMC continued the "Older Adult Health Fair" held at the Guernsey County Senior Citizens Center each year. SEORMC hosts two "Volunteer Health Fairs" each year. SEORMC hosted the "Byesville Rotary's Health Fair", which served up to 100 persons. SEORMC hosted the "New comerstown Rotary's Health Fair", which served 90 persons. SEORMC also hosted various health screenings at local businesses (a) Quanex Building Products, located at 800 Cochran Ave, Cambridge, Ohio 43725, (b) Colgate-Palmolive, Co., located at 8800 Guernsey Industrial Blvd, Cambridge, Ohio 43725, (c) Ridge Tool located at 9877 Brick Church Rd, Cambridge, Ohio 43725 and (d) Ascent Resources, located at 61034 Gander Rd, Cambridge, Ohio 43725. Health screenings consisted of basic laboratory work such as hemoglobin A1C, blood pressure, and lipid profile. Approximately 5% of those screened had abnormal findings and were referred to their primary care provider for follow up. SEORMC's health screenings served approximately 1,000 persons in Calendar Year 2017.

Calendar Year 2018. The "Cardiac Health Screening" was expanded in 2018 to include OhioHealth cardiology and provide onsite electrocardiogram. In 2018, 58 individuals participated in the cardiac health screening. SEORMC continued the Older Adult Health Fair held at the Guernsey County Senior Citizens Center each year. SEORMC hosts two Volunteer Health Fairs each year. SEORMC hosted the Byesville Rotary's Health Fair seeing close to 100 individuals. SEORMC hosted the New comerstown Rotary's Health Fair seeing close to 90 individuals. SEORMC also hosted various health screenings at the following local businesses: (a) Quanex Building Products, located at 800 Cochran Ave, Cambridge, Ohio 43725, (b) Colgate-Palmolive, Co. located at 8800 Guernsey Industrial Blvd, Cambridge, Ohio 43725, (c) Ridge Tool, located at 9877 Brick Church Rd, Cambridge, Ohio 43725 and Ascent Resources located at 61034 Gander Rd, Cambridge, Ohio 43725. Health screenings consisted of basic laboratory work such as hemoglobin A1C, blood pressure, and a lipid profile. Approximately 5% of those screened had abnormal findings and were referred to their primary care provider for follow up. SEORMC's health screenings served approximately 1,000 persons in Calendar Year 2018.

### Activity 1.3.3. Review annual comprehensive health screenings for associates and children within the community and evaluate need for expansion

**Calendar Year 2017.** SEORMC sponsored "Fun 2B Fit." This program focuses on children's health, exercise and eating habits and open to the local community. The programs are reviewed annually for attendance and outcomes. In 2017, as part of "Fun 2B Fit", 22 youth were educated on healthy food options, healthy cooking options and physical activity.

Calendar Year 2018. The "Fun 2B Fit" provided 24 youth with health education on healthy foods, cooking and physical activity.

#### Objective 1.4. Increase access to local cancer screening, diagnosis and treatment services

#### Activity 1.4.1. Provide routine cancer screenings for lung, skin and colon cancers.

<u>Calendar Year 2017.</u> Eyad Mahayri, MD, FCCP, FAASM (pulmonologist) conducted lung cancer screenings seven times this year. Each event was held for five hours. Lung cancer screening events were held on the following dates: (a) February 16, March 23, April 20, June 23, August 24, October 26, and December 12, 2019, at the Community HealthLink located at 1205 Clark St, Cambridge, Ohio 43725. Total of 32 persons were screened for lung cancer in Calendar Year 2017. Skin and colon cancer screenings were hosted by SEORMC in 2017. Michael Sarap, MD, Joseph O'Hanlon, MD and Clark Leslie, MD provided skin and colon cancer screenings at SEORMC on June 14, June 21, November 15 and December 6. Total of 59 persons were screened in 2017.

<u>Calendar Year 2018.</u> Dr. Mahayri, MD, FCCP, FAASM (Pulmonologist) conducted lung cancer screenings seven times this year. Each event is five hours in length. Events were held February 22, April 19, June 14, August 16, September 20, and December 6 at the Community HealthLink located at 1205 Clark St, Cambridge, Ohio 43725. Total of 40 people were screened for lung cancer in Calendar Year 2018. Skin and colon cancer screenings were hosted by SEORMC in 2017. Michael Sarap, MD, Joseph O'Hanlon, MD and Clark Leslie, MD provided skin and colon cancer screenings at SEORMC on November 21 and December 5, 2019. Total of 21 persons were screened for skin and colon cancer in Calendar Year 2018.

#### Activity 1.4.2. Employ full-time radiation oncologist

<u>Calendar Year 2017.</u> Dr. Carl Jueng was recruited and has worked at the Cambridge Cancer Center. Dr. Jueng attended to 1,236 clinic visits in Calendar Year 2017.

Calendar Year 2018. Dr. Jueng attended to 1,838 clinic visits in Calendar Year 2018.

#### Objective 1.5. Increase access to local mental health resources

Activity 1.5.1. Work with local mental health agency to provide assessments of patients needing mental health evaluation and finding them the resources they need for treatment

<u>Calendar Year 2017.</u> Our onsite case management team worked closely with AllWell Behavioral Health Services to refer patients with mental health needs and initiate mental health evaluations. In Calendar Year 2017, SEORMC referred 34 patients to AllWell Behavioral Health Services.

Calendar Year 2018. SEORMC referred 68 patients to AllWell Behavioral Health Services.

#### Priority Health Need 2. Cancer

Goal: To implement or promote policies, programs, screenings, and services that support Guernsey County residents in prevention, detection, and/or treatment of cancer.

#### Objective 2.1. To increase access for local cancer treatment and support services

#### Activity 2.1.1. Explore the option to provide high dose rate brachytherapy

<u>Calendar Year 2017.</u> Our local radiation oncologist screens patients for these types of therapies and determines the best course of treatment. For treatments that cannot be done locally, we refer cases to other specialists to develop the best individualized plan of care for that patient. In 2017, one patient needing brachytherapy was identified.

Calendar Year 2018. No patient needing brachytherapy was identified.

Activity 2.1.2. Increase awareness of resources to the community available in the form of treatment, prevention and support groups through social media, hospital website, and navigation nurse. This will include monthly tips on social media corresponding to "Cancer of the Month".

<u>Calendar Year 2017.</u> In 2017, we revised our marketing plan and started utilizing social media for outreach related to Cancer Services and other programs. We had monthly advertisements running for cancer services and prevention programs. Baine Beed, MD joined our team as a medical oncologist with hematology background and training. We actively had advertisements through our local new spaper, local billboards and Facebook to inform the community of her services. We also advertised our breast, skin and lung cancer screening events in Facebook.

<u>Calendar Year 2018</u>. SEORMC started to transition to utilize OhioHealth marketing to market service lines.

In 2018, we revised our marketing plan and started utilizing social media for outreach related to Cancer Services and programs. We had monthly advertisements running for cancer services and prevention programs. Facebook was also used to advertise our breast, skin and lung cancer screening events.

### Activity 2.1.3. Explore offering complementary or alternative medicine treatment options for cancer patients at the Cancer Center

<u>Calendar Year 2017.</u> This intervention was reviewed and determined to not be a best practice to help cancer patients. After meetings with the oncology physicians, it was determined that they could not recommend alternative medicine programs that are not authorized by the Food and Drug Administration. Hence, this intervention was not implemented.

Calendar Year 2018. This intervention was not implemented.

### Activity 2.1.4. Update the hospital website to improve ease of finding cancer resources available from SEORMC and local providers in the community.

Calendar Year 2017. Several links to cancers services and oncology providers were added to the SEORMC website. Services provided by the Cambridge Regional Cancer Center include treatment, surgery, radiation therapy and chemotherapy for breast cancer, prostate cancer, colorectal cancer, leukemia and lung cancer. The SEORMC website also discusses prevention education, cancer screenings, and cancer support groups. SEORMC's cancer program and services are accredited by the Commission on Cancer and the National Accreditation Program for Breast Centers (Southeastern Med Hospital, 2019). The SEORMC website provides comprehensive information related to the following: (a) cancer program, (b) breast cancer services, (c) chemotherapy, (d) genetic counseling, (e) hematology, (f) management of blood disorders, (g) nutrition counseling, (h) radiation oncology, (i) cancer registry and resource center, (j) colorectal cancer, (k) Breast Center, (I) Community Colorectal Cancer Screening Initiative, and (m) skin cancer.

<u>Calendar Year 2018.</u> SEORMC's affiliation with OhioHealth improved its credibility in the community as an expert in cancer services. OhioHealth is a certified member of MD Anderson Cancer Network<sup>®</sup>, where patients have access to nationally recognized cancer care protocols and best practices while receiving care locally.

# <u>Activity 2.1.5.</u> Provide cancer-related education at all general community-wides creenings and encourage community works ite wellness partners to include cancer education and/or screenings for their employee events.

<u>Calendar Year 2017.</u> The SEORMC Wellness Department worked collaboratively with Cancer Services to provide health education on these topics at local health fairs. Cancer-related health education took place on the following dates and locations: (a) June 1·2017 – Colgate-Palmolive; (b) June 17, 2017 – Relay for Life; (c) July 29, 2017 – Armed Forces Poker Run; (d) October 27·2017 – Riesbecks Grocery Store.

<u>Calendar Year 2018.</u> Cancer-related education was held on the following: (a) July 28, 2018 – Armed Forces Poker Run; and (b) October 5, 2018 – Riesbecks Grocery Store.

#### Objective 2.2. Increase the number and type of cancer screenings

#### Activity 2.2.1. Continue to offer low cost lung cancer screenings to high risk persons.

<u>Calendar Year 2017.</u> Eyad Mahayri, MD, FCCP, FAASM (Pulmonologist) conducted lung cancer screenings seven times this year. Each event is 5 hours in length. Events were held February 16, March 23, April 20, June 23, August 24, October 26, and December 12, 2017 at the Community HealthLink located at 1205 Clark St, Cambridge, Ohio 43725. Total of 32 persons were screened in Calendar Year2017.

<u>Calendar Year 2018.</u> Dr. Mahayri conducted lung cancer screenings seven times this year. Each event is 5 hours in length. Events were held February 22, April 19, June 14, August 16, September 20, and December 6, 2018 at the Community HealthLink located at 1205 Clark St, Cambridge, Ohio 43725. Total of 40 people were screened in Calendar Year 2018.

#### Activity 2.2.2. Continue clinical breast exam and breast screenings at least twice annually for women.

<u>Calendar Year 2017.</u> Michael Sarap, MD, FACS (general surgeon) conducts breast cancer screenings once a year. SEORMC also had a public breast cancer awareness event at Riesbecks grocery store located at 55 S 23rd St, Cambridge, Ohio 43725 on October 28, 2017. SEORMC brought an inflatable breast as an aid for health education. Dr. Sarap answered questions and educated at least 100 persons on breast cancer. At least 100 persons visited the inflatable breast display.

<u>Calendar Year 2018.</u> Dr. Sarap (General Surgeon) conducts breast cancer screenings once a year. We also had a public breast cancer awareness event at Riesbecks grocery store located at 55 S 23rd St, Cambridge, OH 43725 on October 5, 2018. SEORMC brought an inflatable breast as an aid for health education. Dr. Sarap answered questions and educated at least 100 persons on breast cancer. At least 100 persons visited the inflatable breast display.

Activity 2.2.3. Enhance promotion of screenings. Provide information and updates to local physicians and community agencies such as the Health Departments, Job and Family Services, and Salvation Army on the availability of low-cost cancer screens such as mammograms and colonoscopy.

Calendar Year 2017. In Calendar Year 2017, SEORMC initiated outreach to the Amish community. A breast cancer screening was conducted at an Amish church located in Salesville, Ohio. SEORMC hired a physician liaison in 2017. The physician liaison provided education and awareness on upcoming screenings. The physician liaison visited over 30 physician offices in the community and provided information and updates to local physicians and community agencies such as (but not limited to) Cambridge-Guernsey County Health Department, Noble County Department of Job and Family Services, Guernsey County Department of Job and Family Services, and Salvation Army on the availability of low-cost cancer screenings such as mammograms and colonoscopy.

<u>Calendar Year 2018.</u> Efforts to promote cancer screenings in physician offices and in the community were continued in Calendar Year 2018.

Activity 2.2.4. Initiate worksite cancer prevention program for SEORMC associates. Improve preventative screening rates for mammography and colonoscopy by 10 percent.

<u>Calendar Year 2017</u>. The Human Resources department at SEORMC actively educated its associates (employees) on health benefit coverage through a bi-w eekly new sletter. Human Resources focused its efforts on preventative treatments covered by the Affordable Care Act at zero copay for associates. In Calendar Year 2017, SEORMC saw a 5 percent increase in compliance for mammography screening among its associates. In Calendar Year 2017, 72.5 percent of its female associates received their mammograms. In Calendar Year 2017, we saw a 3.7 percent increase in compliance for colonoscopy from associates. In Calendar Year 2017, 56.7 percent of associates received their colonoscopy.

<u>Calendar Year 2018.</u> In Calendar Year 2018, SEORMC reported a 0.8 percent increase in compliance for mammography screenings among its associates. Total of 73.3 percent of associates received their mammogram in Calendar Year 2018. In Calendar Year 2018, we saw a 1.4 percent increase in compliance for colonoscopy from associates. Total of 58.1 percent of associates received their colonoscopy in Calendar Year 2018.

## <u>Objective 2.3. Increase education and support services provided to patients receiving treatment at the SEORM C Cancer Center to decrease complications, improve access to necessary resources and customer satisfaction</u>

### Activity 2.3.1. Increase the number of cancer patients screened for malnutrition, with referrals to the dietitian by 25 percent.

<u>Calendar Year 2017.</u> Dietitians attended the Tumor Registry meetings regularly. Consults were handled by SEORMC's Cambridge Regional Cancer Center. Fifty-one cancer patients received nutritional counseling in Calendar Year 2017.

<u>Calendar Year 2018.</u> Dietitians attended the Tumor Registry Meetings. Consults were handled by the Cancer Center on a case-to-case basis. Total of 71 oncology patients received nutritional counseling in Calendar Year 2018.

### Activity 2.3.2. Automatic referral of patients with head and neck, gastrointestinal and lung cancer to see the dietitian to prevent complications occurring during treatment

<u>Calendar Year 2017.</u> Dietitian referrals for head and neck cancer were accomplished. In Calendar Year 2017, there were eight patients with head and neck cancers who were referred to the nutrition department Fifty-one cancer patients received nutritional counseling in Calendar Year 2017.

<u>Calendar Year 2018.</u> There were 10 patients with head and neck cancers who were referred to the nutrition department. Seventy-one cancer patients received nutritional counseling in Calendar Year 2018.

## Activity 2.3.3. Increase the number of patients counseled by the Cambridge Regional Cancer Center social worker by 25 percent and look at the feasibility of adding a cancer navigator for all patients.

<u>Calendar Year 2017.</u> SEORMC's Cambridge Regional Cancer Center's social worker counseled 150 cancer patients in Calendar Year 2017.

<u>Calendar Year 2018.</u> SEORMC's Cambridge Regional Cancer Center's social worker counseled 416 patients in Calendar Year 2018.

### Activity 2.3.4. Increase the number of patients referred to palliative care earlier in treatment as appropriate.

<u>Calendar Year 2017.</u> Candy Crister, NP, nurse practitioner from SEORMC specializes in palliative care. In Calendar Year 2017, there were 316 palliative care consults that were ordered. The nurse practitioner attended to 276 palliative care consults.

<u>Calendar Year 2018.</u> Candy Crister, NP, nurse practitioner from SEORMC specializes in palliative care. In Calendar Year 2018, there were 351 palliative care consults that were ordered. The nurse practitioner attended to 300 palliative care consults.

### Activity 2.3.5. Determine the feasibility of having a separate pharmacist that will review patient's medication with them before and during treatment

<u>Calendar Year 2017.</u> This intervention was reviewed and determined to not be financially feasible. The hospital could not afford a full-time pharmacist to provide medication review for cancer patients. Instead, SEORMC educated the nurses to provide education about medications as part of patient education.

<u>Calendar Year 2018.</u> As part of patient education, the bedside nurses provided education about medications.

#### Priority Health Need 3: Lifestyle-Related Diseases and Risk Factors

Goal: SEORMC will provide health education, awareness and support groups that will be focused on lifestyle-related diseases and risk factors.

Objective 3.1. Increase awareness and action for risk factors related to chronic disease

<u>Activity 3.1.1.</u> Form a Community Lifestyle-Related Disorders Action Team, which will include community representatives along with internal stakeholders.

Calendar Year 2017. The proposed "Community Lifestyle-Related Disorders Action Team" was reviewed and determined to not be feasible. SEORMC decided to expand its "Group Lifestyle Balance™" classes that focus on diabetes prevention and lifestyle management. The classes were modified to occur throughout the year. The goals of the Group Lifestyle Balance Program were (a) lose 7 percent of weight through healthy eating, (b) do 150 minutes of brisk, physical activity per week. Participants attend sessions, monitor their own weight, learn and track healthy eating and physical activity, and development of problem-solving skills and keep motivated (University of Pittsburgh, 2019). In Calendar Year 2017, 78 persons participated in SEORMC's "Group Lifestyle Balance Program."

Calendar Year 2018. Total of 18 persons participated in SEORMC's "Group Lifestyle Balance Program."

#### Activity 3.1.2. Explore the feasibility of sponsoring a community-wide physical activity campaign.

Calendar Year 2017. SEORMC sponsors "Healthy Guernsey", which aims to improve health and wellness of Guernsey residents. "Healthy Guernsey" activities include (a) providing residents with easy access to health education materials, (b) leading and initiating a health and fitness campaign, (c) fostering community-wide partnerships and (d) supportive interactions that engages Guernsey residents to live healthy lives. SEORMC focused on evidence-based health education related to smoking cessation, lack of exercise, and overweight and obesity. The "Healthy Guernsey" team was comprised of the following: (a) SEORMC director of wellness resources, (b) SEORMC dietitian, (c) SEORMC community health educator, (d) SEORMC wellness resources coordinator, (e) Cambridge YMCA, (f) Muskingum Valley Health Center, (g) Cambridge school nurse, (h) Guernsey County Job and Family Services, (i) United Way Guernsey and Noble Counties, (j) Cambridge-Guernsey County Health Department and (k) Guernsey County Senior Citizens Center. During calendar Year 2017, less than 20 persons participated in "Healthy Guernsey".

<u>Calendar Year 2018.</u> "Healthy Guernsey" was discontinued in Calendar Year 2018 due to lack of community participation. During Calendar Year 2018, SEORMC engaged OhioHealth in a management agreement to bring in expertise in this area to Guernsey and Noble Counties.

### Activity 3.1.3. Continue to work with and expand health education programs with the local schools for programs that emphasize healthy nutrition and physical activity

<u>Calendar Year 2017.</u> SEORMC provides financial assistance and leadership to the program "Crunch for Health", located within a local school in Guernsey County. SEORMC collaborated with United Way of Guernsey County to support and coordinate these programs. The "Crunch For Health" program is a sixweek exercise and nutrition program that incorporates an evidence-based approach of physical activity and healthy lifestyle behaviors into a child's everyday life. The program operates on the "5, 2, 1, 0" concept described as follows:

- (a) Eat five or more servings of fruits and vegetables a day (5).
- (b) Limit recreational computer or television use to two hours or less every day (2).
- (c) Get one hour or more of physical activity every day (1)
- (d) Drink less sugary beverages (0).

The six-week "Crunch For Health" program is introduced to the students in their physical education class where they receive all needed materials (including a balance ball, 24-page "Get Healthy Guernsey and Noble Counties "Get On The Ball" nutrition and exercise booklet, exercise and nutrition journal, and "Crunch For Health" t-shirts). The exercises are incorporated into the physical education curriculum and students are asked to continue their physical activity at home with an activity of their choice. Students, with engagement of their families, also set goals for increased intake of fruits and vegetables and decreased amounts of sugar and screen time that are tracked in their nutrition journals. At the end of the program, students are asked to write about their experience with the "Crunch For Health" program and have the opportunity to win prizes. Awards, magnets and prizes are given to the students completing the program at an awards ceremony in front of the entire school where parents were also invited. Through the "Crunch for Health" program, SEORMC served 120 students in Cambridge City School District and 118 students in Rolling Hills School District in Calendar Year 2017.

**Calendar Year 2018.** SEORMC served 155 students in Cambridge City School District and 148 students in Rolling Hills School District in 2018.

#### Activity 3.1.4. Investigate feasibility of offering a family-friendly 5K or obstacle course type race.

<u>Calendar Year 2017.</u> This action was not implemented in Calendar Year 2017. In place of this event, SEORMC hosted a "Kid's Health Fair." Over 50 local healthcare providers sponsored health education booths to discuss their services to families. Over 350 children attended the event.

<u>Calendar Year 2018</u>. This action was not implemented in Calendar Year 2018 due to hospital reorganization and leadership change.

### Activity 3.1.5. Evaluate the demand and feasibility of offering a weight loss support group open to all interested community members

**Calendar Year 2017.** This action was reviewed by hospital leadership and determined to not be feasible for implementation in the community. Instead, we started an internal program for the "Biggest Loser." This program focused on percent of body weight lost. This was a pilot program to see if this could work within the community. Twenty SEORMC employees participated in the "Biggest Loser" in Calendar Year 2017.

Calendar Year 2018. Total of 22 SEORMC employees participated in the "Biggest Loser" program.

#### Priority Health Need 4: Substance Abuse

Goal: Decrease incidence of substance abuse and accidental overdose in the county.

Objective 4.1. Increase awareness about the substance abuse problem

### Activity 4.1.1. Present "Parents 360 Rx", an instructional program to raise awareness for parents, family members, and guardians regarding preventing drug abuse and overdose.

<u>Calendar Year 2017.</u> SEORMC health educators presented "Parents360 Rx" to 637 adults. Parents360 Rx is a program developed by the Partnership for Drug-Free Kids to increase parents' knowledge of substance use and improve a parent's confidence in their ability to speak with youth about substance use, particularly prescription drugs (State of Ohio, 2019). Parents360 Rx is available for any school, community group or individual interested in hosting an informational session to educate adults about the dangers of substance use, with an emphasis on prescription drugs.

<u>Calendar Year 2018.</u> SEORMC's health educators were not able to implement "Parents360 Rx in schools during Calendar Year 2018 due to a lack of staff and inability to coordinate schedules with local schools. The Wellness Department at SEORMC was restructured, hence programming was discontinued. SEORMC continued to be engaged in community-wide efforts to address drug abuse and overdose in Guernsey and Noble Counties.

## Activity 4.1.2. Support the local substance abuse educational trailer that raise awareness and provides education to parents on signs to look for in their children's environment that indicate they may be using drugs.

<u>Calendar Year 2017</u>. SEORMC sponsored the production of a trailer (short video) that was shown at our annual Kid's Health Fair. The Kid's Health Fair was held on the 2<sup>nd</sup> Thursday in June at the Cambridge City Park Pavilion. The "Kid's Health Fair" focused on targeting kids aged 3 to 11 and their families to learn about important health and safety practices. More than 30 local organizations and businesses had interactive exhibits promoting health and safety topics. Kids played fun games and enjoyed healthy snacks that highlighted the importance of exercise and making smart food choices. Participation in the "Kids Health Fair" was free. More than 300 kids and families attended the event.

The program that comes with the trailer explains the following: (a) what drugs were popular in Southeast Ohio, (b) how people are abusing them and (c) how to detect substance abuse early. The program attendees received a two-part education, starting with a presentation about different drugs and their effects and ending with the opportunity to view the "Be Aware" trailer. The trailer is modeled to resemble the typical bedroom of a teen and how they attempt to disguise drug abuse instruments.

Calendar Year 2018. More than 350 kids and their families attended in Calendar Year 2018.

#### Objective 4.2. Decrease incidence of infants born to mothers addicted to drugs

## Activity 4.2.1. Provide hospital resources and collaborate with the County Health Department, Children's Services and local obstetricians to offer the "Clean Start" prenatal drug addiction education and resources program to pregnant women.

Calendar Year 2017. SEORMC's Childbirth Center director represented SEORMC in Guernsey County's Community Health Improvement Plan (CHIP) Committee. The CHIP group has identified three countywide priorities: a) drug dependency and abuse b) chronic disease c) mental health. SEORMC's Childbirth Center director was a team leader in the county-wide action plan for reducing the number of babies born in Guernsey County to drug dependent mothers. SEORMC's director was in charge of two specific activities: (a) collaborate with "Clean Start" members to engage OB/GYN physicians to increase the number of prenatal drug tests, in order identify abuse early in pregnancy, (b) collaborate with pediatricians to increase neonatal umbilical cord testing after delivery to identify maternal drug abuse in order to refer mother/new born couplets and families to the appropriate resources and services needed to address drug use prenatally and reduce ongoing untoward effects of drugs on new borns and post-partum mothers. SEORMC collaborated with the Muskingum Valley Health Centers in implementing these projects.

The Childbirth Center's nurses and social workers worked closely with the Guernsey County Children Services to provide social support system to mothers and new borns who were drug affected at the time of delivery/birth.

The Childbirth Center also collaborated with the Guernsey County Health Department pregnancy navigator to address systematically prenatal and postpartum drug addiction and to provide individualized education. This program has been extremely successful in increasing the number of women who receive support, education and referrals related to drug use.

The Childbirth Center director is also a member of the local interagency collaboration, "Clean Start". This is a group of medical and social services w orkers/agencies w ho meet several times a year to network and collaborate in promoting the health of mothers and new born. Members of "Clean Start" w ork w ith pregnant or new ly delivered mothers and their new borns in order to provide support, education and referrals to reduce the impact of substance abuse. Apart from SEORMC, other members of "Clean Start" include (a) Guernsey County Help Me Grow, (b) Early Intervention, Guernsey County Developmental Disabilities, (c) Early Head Start and Head Start, (d) Guernsey County Children Services Board, (e) Cambridge-Guernsey County Health Department, and (f) Guernsey Health Choices, Inc., n.d.).

In Calendar Year 2017, SEORMC delivered 392 babies. Ten babies manifested the neonatal abstinence syndrome.

<u>Calendar Year 2018.</u> SEORMC continued its community engagement and collaboration to improve the health of mothers and babies and provide comprehensive services for pregnant women who are addicted to drugs or alcohol. There were 400 births in Calendar Year 2018. Ten babies showed signs of neonatal abstinence syndrome.

Activity 4.2.2. Partner with the local substance abuse coalition to provide education to parents and students in local schools to decrease incidence of drug abuse.

<u>Calendar Year 2017.</u> SEORMC health educators presented "Parents360 Rx" to 637 adults. Parents360 Rx is a program developed by the Partnership for Drug-Free Kids to increase parents' knowledge of substance use and improve a parent's confidence in their ability to speak with youth about substance use, particularly prescription drugs (State of Ohio, 2019). Parents360 Rx is available for any school, community group or individual interested in hosting an informational session to educate adults about the dangers of substance use, with an emphasis on prescription drugs.

<u>Calendar Year 2018.</u> SEORMC's health educators were not able to implement "Parents360 Rx in schools during Calendar Year 2018 due to a lack of staff and inability to coordinate schedules with local schools. The Wellness Department at SEORMC was restructured, hence programming was discontinued. SEORMC continued to be engaged in community-wide efforts to address drug abuse and overdose in Guernsey and Noble Counties.

- Objective 4.3. Collaborate with local agencies and government to develop and distribute both electronic and paper version of all available resources for those affected by substance abuse.
  - Activity 4.5. Provide the resource guide to patients and families in their discharge binder and make available in our waiting rooms and on patient television channel.

<u>Calendar Year 2017.</u> Feedback from patients and healthcare professionals from SEORMC's Child Birth Center indicated that the patient discharge binder should not include a resource guide for substance abuse but patients could request substance abuse information. Case managers were available to assist patients in finding the most appropriate substance use facilities and treatment after discharge.

<u>Calendar Year 2018.</u> Substance use resources were available for patients upon request. Case managers assist patients in navigating through these resources.