Community Health Needs Assessment
Community Service Plan
2019-2021

Kaleida Health
1. Counties covered in this assessment and plan
   Erie County, Niagara County

2. Participating Local Health Department(s)
   Erie County Department of Health:
   Kelly Asher, Community Coalition Coordinator - 716-858-7685 Kelly.Asher@Erie.gov
   Niagara County Department of Health:
   Dan Stapleton, Public Health Director – 716-439-7435 dan.stapleton@niagaracounty.gov

3. Participating Hospital/Hospital System(s) and contact information
   Kaleida Health including its four hospitals:
   Erie County
     Buffalo General Medical Center/Gates Vascular Institute
     Millard Fillmore Suburban Hospital
     John R. Oishei Children’s Hospital
   Niagara County
     DeGraff Memorial Hospital

   Contact:
   Kathleen Tompkins
   Kaleida Health
   726 Exchange St. Ste. 225
   Buffalo, NY 14210
   716-859-8728
   ktompkins@kaleidahealth.org

4. Name of coalition/entity, if any, completing assessment and plan on behalf of participating counties/hospitals

   Kaleida Health is completing its own assessment and plan in collaboration the with Erie County Department of Health and Niagara County Department of Health and partner organizations.
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Executive Summary

Kaleida Health is a not-for-profit, Article 28, New York State licensed, healthcare delivery system located in Buffalo, New York and serving the 1.5 million residents of the western region of New York State (NYS), known as Western New York (WNY).

Kaleida Health serves WNY’s eight counties of Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Niagara, Orleans and Wyoming. Erie County and Niagara County comprise an estimated 1.1 million of the WNY total population. This Kaleida Health 2019-2021 Community Health Needs Assessment-Community Service Plan (CHNA-CSP) focuses on Kaleida Health’s four hospitals and primary service areas:

Erie County – Hospital Location and Primary Service Area

- Buffalo General Medical Center/Gates Vascular Institute
- Millard Fillmore Suburban Hospital
- John R. Oishei Children’s Hospital

Niagara County – Hospital Location and Primary Service Area

- DeGraff Memorial Hospital

Kaleida Health participated in collaborative efforts to develop the 2019-2021 Community Health Assessment-Community Health Improvement Plan for Erie County and Niagara County as led by the Erie County Department of Health and the Niagara County Department of Health and other hospital and community partners. Other Erie County partners included Catholic Health System, Bertrand Chaffee Hospital, United Way of Buffalo & Erie County, Buffalo State College, D’Youville College, State University of New York at Buffalo, American Heart Association, United Way of Buffalo and Erie County, and the Population Health Collaborative. Other Niagara County partners included Niagara Falls Memorial Medical Center, Mount Saint Mary’s Hospital and Health Center, Catholic Health System, Eastern
Niagara Hospital System, Niagara County Department of Mental Health and the Population Health Collaborative.

The collaborative work groups met for several months in 2018 and 2019 to determine community health needs and priorities. They considered data from the County Health Rankings, NYS Prevention Agenda Dashboard, NYS Vital Records, NYS Statewide Planning and Research Cooperative system (SPARCS), NYS Expanded Behavioral Risk Factor Surveillance Survey (eBRFSS), Centers for Disease Control and Prevention (CDC), among others. Community and stakeholder input was obtained through consumer surveys and focus group sessions. The needs of low income and underserved populations was prioritized throughout the process. Based on analysis and discussion of community need, the county work groups determined the NYS Prevention Agenda Priority Areas to address for 2019-2021. Kaleida Health was an active participant in both county work groups.

<table>
<thead>
<tr>
<th>Erie County and Kaleida Health</th>
<th>Health Issues of Concern</th>
<th>2019-2024 NYS Prevention Agenda Priority Area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High rates of cardiovascular disease and high incidence of risk factors including high blood pressure, diabetes, obesity and smoking</td>
<td>Prevent Chronic Diseases</td>
</tr>
<tr>
<td></td>
<td>Increasing rise of opioid addiction and fatal overdoses</td>
<td>Promote Well-Being and Prevent Mental and Substance Use Disorders</td>
</tr>
<tr>
<td></td>
<td>Poor outcomes in maternal and infant health, particularly among underserved populations</td>
<td>Promote Healthy Women, Infants and Children</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Niagara County and Kaleida Health</th>
<th>Health Issues of Concern</th>
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<td>Increasing rise of opioid addiction and fatal overdoses</td>
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</tr>
</tbody>
</table>

Additionally, a Kaleida Health CHNA-CSP Steering Committee and work groups comprised of multidisciplinary staff and physicians met from May through October 2019 to discuss the selected county Priority Areas, community need, and the interventions that would best meet those needs. The
Kaleida Health work groups selected focus areas and interventions including disparities for its 2019-2021 CHNA-CSP, as aligned with the county-focused Priority Areas.

**Prevent Chronic Disease – Erie County and Niagara County Priority Area**

**Erie County – Kaleida Health Focus Areas and Interventions**

- Healthy Eating and Food Security – Community Diabetes and Pre-Diabetes Nutrition Education and Mobile Food Market (Disparity – low income population), Worksite Nutrition and Physical Activity Programs

- Preventive Care and Management – Cardiovascular Education and Screening Program in OB-GYN Centers (Disparity – female, Medicaid population), Chronic Disease Education and Screening Programs for the Community, Health Literacy Task Force (collaborative county project)

**Niagara County – Kaleida Health Focus Areas and Interventions**

- Healthy Eating and Food Security – Health Education for Children, Little Free Pantry (Disparity – food insecure population), Nutrition and Healthy Cooking Education

- Preventive Care and Management – Chronic Disease Education and Screening Programs for the Community

**Prevent Mental and Substance Use Disorders – Erie County and Niagara County Priority Area**

**Erie County and Niagara County – Kaleida Health Focus Area and Interventions**

- Prevent Opioid and Other Substance Misuse and Deaths – Buffalo Matters Buprenorphine and Treatment Referral Program, Availability and Access and Linkage to Opioid Overdose Reversal Medications, Medication and Syringe Drop Boxes in Hospital Emergency Departments and Drug Take-Back Days (Disparity – substance use population)

**Promote Health Women, Infants, and Children – Erie County Priority Area**

**Erie County – Kaleida Health Focus Areas and Interventions**

- Maternal and Women’s Health – Centering Pregnancy Program (Disparity – Medicaid population)
Perinatal and Infant Health – Safe Sleep Initiative, Yomingo® Online Parent Education, Breastfeeding Promotion and Education Program

Kaleida Health is responsible for implementing the interventions identified in this 2019-2021 plan, tracking progress, making any mid-course corrections, and reporting progress and results in annual plan updates. Kaleida Health will continue to partner with the Erie County and Niagara County work groups to assess progress. This Kaleida Health 2019-2021 Community Health Needs Assessment-Community Service Plan is available to the public at http://www.kaleidahealth.org/community/publications.asp.
We are Kaleida Health

Kaleida Health’s mission is to “advance the health of its community” and its vision is to “provide compassionate, high-value, quality care, improving health in Western New York and beyond, educating future healthcare leaders and discovering innovative ways to advance medicine.”

Kaleida Health is a not-for-profit, Article 28 New York State (NYS) licensed, healthcare delivery system formed in 1998 with corporate offices located in Buffalo, NY and serving the Western New York (WNY) region of New York State. The system serves over one million patients annually and leads the region with 32.8% market share.¹ Kaleida Health has close to 10,000 employees, 1,700 affiliated physicians, and its economic impact on the region exceeds $2.7 billion. It is affiliated with Great Lakes Health System of WNY, the entity integrating Kaleida Health, Erie County Medical Center (ECMC) and the University at Buffalo. Leading Kaleida Health is Jody L. Lomeo, president and CEO, and a 16-member board of directors.

Kaleida Health hospitals include Buffalo General Medical Center/Gates Vascular Institute in Buffalo, NY; Millard Fillmore Suburban Hospital in Williamsville, NY; John R. Oishei Children’s Hospital in Buffalo, NY; and DeGraff Memorial Hospital in North Tonawanda, NY. The system provides long-term care at HighPointe on Michigan in Buffalo, NY, and the DeGraff Rehabilitation & Skilled Nursing Facility in Tonawanda, NY. Kaleida Health also operates the Visiting Nursing Association of WNY, a major laboratory division, 79 clinics and healthcare centers, and multiple ambulatory surgery centers operated as physician-hospital joint ventures. In 2017, Kaleida Health became the active parent of Upper Allegheny Health System, which includes Olean General Hospital of Olean, NY, Bradford Regional Medical Center (BRMC) and The Pavilion at BRMC skilled nursing facility of Bradford, PA. Kaleida Health is moving toward active parent status with Eastern Niagara Hospital of Lockport, NY. These affiliations are part of a transformative initiative to cost effectively preserve essential healthcare services in largely rural WNY communities while assuring linkage to Kaleida Health’s specialty and tertiary healthcare services.

Kaleida Health further serves as a major clinical teaching affiliate of the University at Buffalo’s (UB) Jacobs School of Medicine and Biomedical Sciences, providing clinical training to approximately 700 UB medical students and post-graduate students each year. Through affiliations with a number of educational institutions, the system also provides a clinical experience for healthcare professionals training in the fields of pharmacy, nursing, physician assistant, social work and rehabilitation services. Kaleida Health is committed to providing healthcare for the uninsured and underinsured, offers programs and services in community-based settings and in its campuses and facilities, and works with partnering organizations to further meet the community’s health and social needs. The system is a member of the ECMC Millennium PPS to advance the goals of DSRIP and works actively with NYS Medicaid Health Homes while also operating Oishei Healthy Kids, a NYS Medicaid Health Home for Children.

Kaleida Health does not discriminate on the basis of race, color, religion, sex, national origin, disability, sexual orientation, gender identity or expression, physical appearance, source of payment, or age.

¹ IBM Market Expert (NYS SPARCS) 1st qtr. 2018
Kaleida Health Hospitals

Buffalo General Medical Center/Gates Vascular Institute

Founded as Buffalo General Hospital in 1855 with 100 beds, Kaleida Health’s Buffalo General Medical Center (BGMC) at 100 High Street and the adjoining Gates Vascular Institute (GVI) at 875 Ellicott Street are now a 484-bed acute care hospital with over 3,300 employees located on the Buffalo Niagara Medical Campus (BNMC) in the heart of Buffalo, NY. The BNMC is a 120-acre downtown hub for the region’s leading healthcare, life sciences, research, and educational institutions. BGMC/GVI is a teaching affiliate of the University at Buffalo’s Jacobs School of Medicine and Biomedical Sciences and offers a wide range of clinical inpatient and outpatient care to the residents of Western New York and beyond.

In 2018, BGMC/GVI had 25,222 inpatient discharges and 73,437 outpatient visits. The hospital’s state-of-the-art emergency department is the largest in the region with 53,530 patient visits recorded in 2018. The emergency department features large private rooms in four separate pods including critical care, sub-acute care, vascular care, and urgent care. Additionally, BGMC/GVI has a helipad to accommodate transport of critically ill patients via medical helicopter, providing 24/7 immediate access to a life-saving intervention or surgery. Specialized programs include cardiac, neurology and vascular services, general surgery (including robotics), bariatrics, orthopedics, urology, pulmonary, colorectal, allergy and immunology, otolaryngology, gynecologic surgery, gastroenterology, rehabilitation medicine, imaging, labs, pathology, mammography screening, among others.

A collaboration between Kaleida Health and the University at Buffalo, the GVI opened in 2012 and brings clinicians and researchers together under one roof. The results have been major breakthroughs in the causes and treatment of cardiac, stroke, and vascular disease, while utilizing state-of-the-art technology and innovative diagnostic treatment options in the care of patients.

Millard Fillmore Suburban Hospital

Kaleida Health’s Millard Fillmore Suburban Hospital (MFSH) opened its doors in 1974 at 1540 Maple Road in the Town of Amherst, one of Western New York’s (WNY) fastest growing suburbs. Today, the facility is a full service, 265-bed acute care hospital with over 1,800 employees providing a wide array of medical and surgical services, both inpatient and outpatient. In 2018, the hospital had 18,080 inpatient discharges, 59,598 outpatient visits, and 49,845 emergency department visits. Additionally, the hospital serves as a major clinical teaching affiliate of the University at Buffalo School of Medicine and Biomedical Science.

Services at MFSH include acute care nursing units, ambulatory surgery, cardiology, cardiac non-invasive procedures, GI lab, imaging with 3D Tomsynthesis mammography, interventional radiology, laboratory, obstetrics and gynecology, neonatal care, oncology, palliative care, pulmonary function lab, respiratory therapy, urology suite and vascular lab, women’s services, and specialty surgical services including hand surgery, minimally invasive robotic surgery, neurosurgery and orthopedics.

Launched in 2014, the hospital’s Survivor Steps program is a supportive cancer rehabilitation and recovery program for survivors of any type of cancer diagnosis with the focus on improving an individual’s physical and emotional functioning as well as their quality of life. Survivor Steps is unique in that it can help those throughout their battle with cancer from diagnosis to remission. A 10-bed Level II Neonatal Intensive Care Unit (NICU) specializing in the care of ill or premature newborn infants opened at MFSH in October 2015.
John R. Oishei Children’s Hospital

Kaleida Health’s John R. Oishei Children’s Hospital (OCH) is a new, state-of-the-art, freestanding children’s hospital located at 818 Ellicott Street on the Buffalo Niagara Medical Campus and connected to Buffalo General Medical Center and the Gates Vascular Institute. The hospital dates back to 1892 and was previously located at 219 Bryant Street as Women & Children’s Hospital of Buffalo. A 185-bed facility with over 1,600 employees, OCH is a regional center for comprehensive pediatric, neonatal, surgical, perinatal and obstetric services as well as a teaching hospital for the University at Buffalo’s Jacobs School of Medicine and Biomedical Science. In 2018, OCH had 12,815 inpatient discharges, 115,259 outpatient visits, and 53,530 emergency department visits. Approximately 65% of OCH patients are Medicaid beneficiaries.

OCH services include emergency, inpatient, outpatient, and surgical services in the areas of pediatric, neonatal, surgical, perinatal, and obstetrical. Specialty areas include general and thoracic surgery, adolescent medicine, allergy/immunology, dermatology, ear/nose/throat, endocrinology/diabetes, epilepsy, gastroenterology, genetics, hematology/oncology, infectious diseases, labor and delivery, neonatology, nephrology, neurology, ophthalmology, orthopedics, pulmonology, rheumatology, urology, trauma, sexual assault treatment, among others.

OCH has the only NYS Regional Perinatal Center for WNY, the only Level IV Neonatal Intensive Care Unit and the only Level I Pediatric Trauma Unit serving the region, and a Pediatric Intensive Care Unit. The hospital has a helipad for emergency transport of sick or injured children. Its outpatient specialty care clinics in the new Oishei Children’s Outpatient Center provide services to children with special healthcare needs through the hospital’s Robert Warner Rehabilitation Center and the Children’s Guild Foundation Autism Spectrum Disorder Center. Additionally, OCH operates a child psychiatry clinic, two pediatric primary care clinics and two OB-GYN clinics, and is home to Oishei Healthy Kids, a NYS Medicaid Health Home Serving Children, Children’s Healthy Weigh of Buffalo, Craniofacial Center of WNY, Early Childhood Direction Center, Lead Poisoning Prevention Resource Center, Safe Babies New York, Sickle Cell & Hemoglobinopathy Center of WNY, and the Youth Link Program addressing pediatric HIV.

DeGraff Memorial Hospital

Kaleida Health’s DeGraff Memorial Hospital (DeGraff), located at 445 Tremont Street, North Tonawanda, NY, was established in 1914 to serve the healthcare needs of WNY’s Northtown communities. DeGraff, a community hospital with approximately 300 full-time and part-time employees, provides a wide array of medical services with a focus on emergency and outpatient care. In 2018, the hospital had 324 inpatient admissions, 26,963 outpatient visits, and 11,944 emergency visits. DeGraff services include emergency care, case management/patient management, cancer rehabilitation and recovery, cardiac-non-invasive testing, cardiac rehabilitation, imaging, blood draw, laboratory and pathology, occupational therapy, physical therapy, speech language therapy, sub-acute rehabilitation, and pharmacy. The facility also includes Buffalo Therapy Services.

Due to declining inpatient admissions, inpatient and outpatient surgery over the last few years, DeGraff experienced declining revenue and operational challenges. In 2017, the hospital announced its DeGraff 2020 plan to right size inpatient care with a strengthened focus on emergency department access and outpatient services. In 2018, in response to community need, DeGraff expanded and renovated its emergency department from 4,800 square feet to approximately 10,000 square feet. The new, modern, technology-based emergency department has a physical layout that maximizes the delivery of patient-focused care and allows for better access, parking and visibility for patients, families and visitors.
DeGraff serves as an urgent care gateway for patients requiring more specialized tertiary care at Kaleida Health’s Buffalo General Medical Center/Gates Vascular Institute, the new John R. Oishei Children’s Hospital and Millard Fillmore Suburban Hospital.

**Caring for the Underserved**

Kaleida Health has initiatives in place to assist individuals to access affordable health care. Through its Financial Counseling program, counselors are available at Kaleida Health facilities to support patients who are uninsured/underinsured and in need of financial assistance. The counselors assist and advocate for the patient to enroll them in appropriate medical coverage including Medicaid and Child Health Plus. Charity care is also available to those patients who have incurred a financial hardship and do not have the resources to reimburse Kaleida Health for services rendered. These programs are based on income and asset verification.

Medicaid provides health insurance for low-income individuals and a high percentage of Medicaid patients are provided health care services at Kaleida Health hospitals. In 2018, of the total inpatient discharges, emergency department visits, and outpatient visits for all four hospitals, 35.8% were Medicaid.

<table>
<thead>
<tr>
<th>Kaleida Health Hospitals - YTD 2018 Total Inpatient Discharges, Emergency Department Visits, Outpatient Visits (Kaleida Health – EPSI FY2018) *Does not include other Kaleida Health non-hospital services.</th>
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</thead>
<tbody>
<tr>
<td><strong>Kaleida Health Hospitals</strong></td>
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<tr>
<td><strong>BGM</strong></td>
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<tr>
<td><strong>John R. Oishei Children’s Hospital</strong></td>
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<tr>
<td><strong>Millard Fillmore Suburban Hospital</strong></td>
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<tr>
<td><strong>DeGraff Memorial Hospital</strong></td>
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<tr>
<td><strong>Total Kaleida Health Hospitals</strong></td>
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<tr>
<td><strong>Medicaid</strong></td>
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<tr>
<td><strong>All Payers</strong></td>
</tr>
<tr>
<td><strong>% Medicaid</strong></td>
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Kaleida Health has supported the NYS DSRIP (Delivery System Reform Incentive Payment) program in WNY as a partner in the Millennium Collaborative Care (MCC) PPS to assure access to affordable, preventive, and quality care for the Medicaid population and to meet the statewide DSRIP goal of reducing avoidable hospital admissions by 25% over five years.

In 2016, John R. Oishei Children’s Hospital (OCH) established a NYS Medicaid Health Home Serving Children named Oishei Healthy Kids to provide care management to Western New York children with Medicaid who have complex physical and/or behavioral health conditions. Currently, 1,293 children are enrolled in the program and 38 children are in the outreach phase. Primary health home partners include Child and Family Services, Endeavor, Gustavus Family Services, Jewish Family Services, Native American Community Services, People, Inc., Say YES, Summit and the ARC. OCH also provides healthcare services to medically underserved children in Buffalo Public Schools through its seven School Based Health Centers.

Buffalo General Medical Center/Gates Vascular Institute (BGMC/GVI) is home to the MedLaw Partnership of WNY offering patients legal expertise and services at no charge to address patients’ health-related social needs. The service offers a range of advice and counsel in matters such as income maintenance, health insurance, housing and utilities, employment issues, legal status, health care proxy, power of attorney, simple wills family issues, consumer issues, and mortgage foreclosure. BGMC/GVI doctors, nurses and care providers are encouraged to refer patients in need of legal assistance to the MedLaw Partnership. Since opening on January 2, 2019, the MedLaw Partnership of WNY have assisted...
with 171 referrals. The hospital joins a growing list of over 300 hospitals and healthcare centers in 46 states to implement a medical-legal partnership.

Through its Language Assistance Service program, Kaleida Health provides interpreting and translation services to Limited English Proficient (LEP) patients. Every patient or patient representative with a communication barrier who enters a Kaleida Health facility is advised of her or her right to Language Assistance Services, and the service is provided free of charge.

The Visiting Nursing Association of WNY, Inc., Kaleida Health’s home care affiliate, also works to promote the health of the community. This includes educating chronic care patients on self-management and personal care in areas such as rehabilitation services, nutrition education and therapy, infection control, falls risk assessment and intervention, depression risk assessment and intervention and health education related to improved lifestyle choices for individuals and families in their homes and the community.

Kaleida Health’s Community Health Services provide outreach and health education programs, speakers on health-related topics, and community referrals to people of all ages. Programs and events promote the reduction of health disparities, effective use of health services, and promote overall community health and wellness. Topics range from health insurance enrollment to diabetes, stroke, heart disease, maternal and child health, and health career exploration. In 2018, 46,483 people were reached through community service programming. All outreach programs are free and reach a cross section of cultures, ethnicities, languages, religions and genders, including the LGBTQ community. Throughout 2019-2021, Kaleida Health will continue to participate in multiple events in various communities across Western New York, including Buffalo, a city with a poverty rate of 30.9% and several census tracts federally designated as Medically Underserved Areas.

Community Served

Kaleida Health serves Western New York’s (WNY) eight counties of Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Niagara, Orleans and Wyoming. The population for the region is approximately 1.5 million with Erie County and Niagara County comprising an estimated 1.1 million of this total. Kaleida Health has three hospitals located in Erie County and one hospital located in Niagara County. In 1st quarter 2018, overall Kaleida Health market share was 40.7% for Erie County and 31.31% for Niagara County.² Erie County and Niagara County are the focus of this Kaleida Health 2019-2021 Community Health Needs Assessment-Community Service Plan (CHNA-CSP) as they are the WNY counties identified as primary service areas for Kaleida Health hospitals. Each hospital’s primary service area is defined in the following tables as the county with the highest percentage of all WNY counties for 2018 inpatient discharges, emergency department visits and outpatient visits.

² IBM Market Expert (NYS SPARCS) 1st qtr. 2018
Erie County - Hospital Location and Primary Service Area

- **Buffalo General Medical Center/Gates Vascular Institute – 100 High St. Buffalo, NY 14203**

  **Buffalo General Medical Center – 2018 Inpatient Discharges, ED Visits, Outpatient Visits (Kaleida Health, EPSI, FY2018)**

<table>
<thead>
<tr>
<th>2018</th>
<th>WNY 8 County Total No.</th>
<th>Erie County No./% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Discharges</td>
<td>25,222</td>
<td>18,283/72.4%</td>
</tr>
<tr>
<td>Emergency Department Visits</td>
<td>59,797</td>
<td>52,114/87.1%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>73,437</td>
<td>61,190/83.3%</td>
</tr>
</tbody>
</table>

- **Millard Fillmore Suburban Hospital – 1540 Maple Rd., Williamsville, NY 14221**

  **Millard Fillmore Suburban Hospital – 2018 Inpatient Discharges, ED Visits, Outpatient Visits (Kaleida Health, EPSI, FY2018)**

<table>
<thead>
<tr>
<th>2018</th>
<th>WNY 8 County Total No.</th>
<th>Erie County No./% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Discharges</td>
<td>18,080</td>
<td>13,459/74.4%</td>
</tr>
<tr>
<td>Emergency Department Visits</td>
<td>49,845</td>
<td>39,605/79.4%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>59,598</td>
<td>48,303/81.0%</td>
</tr>
</tbody>
</table>

- **John R. Oishei Children’s Hospital – 818 Ellicott St., Buffalo, NY 14203**

  **John R. Oishei Children’s Hospital – 2018 Inpatient Discharges, ED Visits, Outpatient Visits (Kaleida Health, EPSI, FY2018)**

<table>
<thead>
<tr>
<th>2018</th>
<th>WNY 8 County Total No.</th>
<th>Erie County No./% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Discharges</td>
<td>12,815</td>
<td>9,869/77.0%</td>
</tr>
<tr>
<td>Emergency Department Visits</td>
<td>53,530</td>
<td>45,559/85.1%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>115,259</td>
<td>92,954/80.6%</td>
</tr>
</tbody>
</table>

Niagara County – Hospital Location and Primary Service Area

- **DeGraff Memorial Hospital – 445 Tremont St., North Tonawanda, NY 14120**

  **DeGraff Memorial Hospital – 2018 Inpatient Discharges, ED Visits, Outpatient Visits (Kaleida Health, EPSI, FY2018)**

<table>
<thead>
<tr>
<th>2018</th>
<th>WNY 8 County Total No.</th>
<th>Niagara County No./% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Discharges</td>
<td>324</td>
<td>214/66.0%</td>
</tr>
<tr>
<td>Emergency Department Visits</td>
<td>11,944</td>
<td>7,253/60.7%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>26,963</td>
<td>*11,948/44.3%</td>
</tr>
</tbody>
</table>

*DeGraff Memorial Hospital is located on the border of Niagara County and therefore serves a high number of Erie County residents. 14,771/54.8% of outpatient visits at DeGraff represent Erie County residents.*
Demographics and Population – Erie County

Erie County is located in the western portion of New York State bordering Lake Erie, and lies on the international border between the United States and Canada. It includes a total area of 1,227 square miles, of which 1,043 square miles is land and 184 square miles is water. Erie County is largely an urban county with the majority of the population living within its cities and surrounding suburban communities. There is also a significant rural population that resides outside of the first and second ring suburban areas of the county’s largest city of Buffalo.

Erie County’s total 2018 population is 919,719. There are three cities in Erie County including Buffalo, population 256,304; Lackawanna, population 17,768; and Tonawanda, population, 14,798. Buffalo is the second largest city in the state and the largest city in the region and serves as the county seat. In addition, there are 16 villages, 25 towns, and two Native American Indian reservations within the county, including the Tonawanda Reservation in the northeastern part of the county in the town of Akron and the Cattaraugus Reservation in the southwestern part of the county bordering Cattaraugus County. The town of Amherst is one of the county’s largest towns with a population of 125,659.

3 Wikipedia, Erie County
4 US Census, 2018 Population Estimates
Buffalo is home to Kaleida Health’s Buffalo General Medical Center/Gates Vascular Institute and John R. Oishei Children’s Hospital and Amherst is home to Kaleida Health’s Millard Fillmore Suburban Hospital.

The table below identifies key population characteristics of the City of Buffalo, Town of Amherst, Erie County and all of New York State.

<table>
<thead>
<tr>
<th>Population Demographics for Buffalo, Amherst, Erie County, New York State (US Census, Quick Facts, Population Estimates, July 1, 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Descriptive</strong></td>
</tr>
<tr>
<td><strong>Population Total</strong></td>
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<tr>
<td>Population Estimates</td>
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<td>With a disability, under age 65 years, 2013-2017</td>
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Disparities exist throughout Erie County and particularly in the city of Buffalo. While 79.4% of the population of Erie County is white, 69.5% of the total New York State population is white, and 47.6% of the population of Buffalo is white. Buffalo has a high minority population with 37.1% of its residents being African American and 11.3% Hispanic as compared to all of Erie County with 14.0% being African American and 5.5% Hispanic or Latino. New York State’s African American population is 17.7% and its Hispanic population is 19.2%. The Town of Amherst has a significant Asian population of 8.9% while the Asian population in Erie County is just 3.8%.  

Erie County has had an influx of foreign-born and refugees settling in the area throughout the last 10 years. From 2000 to 2010, the Buffalo-Niagara Metropolitan Area saw a 33% rise in its foreign-born population, growing from 4.4% of the total population in 2000 to 6.0% in 2010. From 2003 to 2013, Erie County resettled 9,723 refugees. In 2016, of the 5,028 refugees resettled in New York State, 1,361 or 34% resettled in Erie County. Buffalo is home to a majority of these refugees. The top 14 countries of

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5 US Census, 2018 Population Estimates
origin for immigrants and refugees in Erie County from 2008 to 2016 include Afghanistan, Burma, Bhutan, Burundi, Congo, Democratic Republic of Congo, Cuba, Ethiopia, Eritrea, Iraq, Iran, Somalia, Sudan, and Syria.6 (Buffalo Brief, February 2018, Immigrants, Refugees, and Languages Spoken in Buffalo)

The 2018 Population Estimates indicate that 10.3% of Erie County residents speak a language other than English at home, age 5+ years, 2013-2017, as compared to 17.6% in Buffalo.7 Among Buffalo Public School students, English as a New Language (ELL) students comprise 15% of the district’s total enrollment. While Spanish is the primary language of Buffalo’s ELL students, in 2016-2017, the district had 5,668 ELL students with 83 different languages spoken. In addition to language barriers, it is important to note that many of the refugees have societal and cultural differences, and several have experienced trauma and other hardships.8 Lackawanna, just south of Buffalo, is home to a large Yemen community, many of whom do not speak English. 19.0% of Lackawanna residents speak a language other than English at home (age 5+ years), 2013-2017.9

While Erie County’s poverty rate is 14.5%, Lackawanna’s poverty rate is 25.4%, and Buffalo’s poverty rate is 30.9%.10 Furthermore, Buffalo has the fourth highest youth poverty rate in the country. Of the 58,618 Buffalo residents under 18 years of age, 27,678 or 47% of those children live below the federal poverty level. The Erie County rate is 19.8% and the NYS rate at 20.8%. Only Detroit, Rochester and Cleveland have worse youth poverty rates.11 The median household income in Buffalo is $34,268 while the median household income in Erie County is $54,006 and in New York State, it is $62,765.12

There are other economic variances throughout the county. The median value of owner-occupied housing units (2013-2017) is $77,800 in Buffalo, $186,600 in Amherst and $139,900 in Erie County as compared to $293,000 in New York State. The owner-occupied housing unit rate in the city of Buffalo is 41.0% while the rate in Erie County is 65.0%, and the rate in Amherst is 70.6%.13 The 2018 average unemployment rate is 4.4% for Erie County, 5.7% for Buffalo and 3.5% for Amherst.14 Educational attainment in the high-poverty communities such as Buffalo and Lackawanna is also a challenge. In Erie County, 91.1% of persons age 25+ are high school graduates or higher while the rate is 83.9% in Buffalo and 80.4% in Lackawanna. In Erie County, 32.9% of persons age 25+ have a bachelor’s degree or higher while the rate is 25.8% in Buffalo and 13.7% in Lackawanna. Furthermore, the Buffalo Public School District’s 2018 four-year high school graduation rate is 63.9%. Poverty and racial disparities are evident throughout its 31,203 students with 79% eligible for the federal free lunch program and 80% representing a minority population. In Lackawanna, 82% of its 1,900 students are eligible for the federal free lunch program and 37% represent a minority population.15

In light of the success of the Affordable Care Act and New York State of Health to increase the number of individuals with health insurance, the rate of persons under 65 years without health insurance in the City of Buffalo is 7.1% while the Erie County rate is 4.5%, and the Amherst rate is 2.9%.16 The percentage of individuals with public coverage is 54.1% in Buffalo, 30.2% in Amherst, and 38.5% in Erie County.17

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6 Buffalo Brief, February 2018; Immigrants, Refugees and Languages Spoken in Buffalo
7 US Census, 2018 Population Estimates
8 Buffalo Brief, February 2019; Immigrants, Refugees and Languages Spoken in Buffalo
9 US Census, 2018 Population Estimates
10 US Census, 2018 Population Estimates
11 Buffalo Business First, Buffalo Post the Nation’s Fourth Worst Poverty Rate for Children, G. Scott Thomas, January 15, 2019
12 US Census, 2018 Population Estimates
14 2018, NYS Department of Labor
15 https://data.nysed.gov/
16 US Census, 2018 Population Estimates
17 US Census, 2017 American Community Survey
Access to a regular source of care is a concern among the uninsured and underinsured as well as the general population given provider shortages throughout the region. In Erie County, the primary care provider rate is 1,230:1 and the Niagara County rate of 2,300:1 as compared the New York State (NYS) rate of 1,200:1. The mental health provider rate for Erie County is 360:1 while the rate for Niagara County is 960:1 and the rate for NYS is 370:1. Mobility and transportation issues may further contribute to lack of access to healthcare services. The rate of individuals with a disability (under age 65 years) in the City of Buffalo, a city of significant poverty, is 12.7% while the rate throughout Erie County is 9.2%, and the rate in the more affluent Town of Amherst is 5.7%, while the NYS rate is 7.5%. The rate of persons with an ambulatory difficulty in Erie County is 7.5% and the NYS rate is 6.7%. Persons with an ambulatory difficulty, such as serious difficulty walking or climbing stairs, may be limited in their physical activity and may have unique requirements for accessibility, such as ramps or elevators. Individuals in urban areas may have access to public transportation options, but mobility issues may still be a challenge. Lack of a privately owned vehicle challenges all populations in accessing healthcare services. The rate of occupied housing units with no vehicles is 12.99% in Erie County and 9.86% in Niagara County.

In Erie County, 88.4% of adults 18 years and over, age-adjusted, have a usual source of health care while 11.6% do not have a usual source of health care. The percentage of Erie County adults aged 18 to 64 years that report having visited a doctor for a routine checkup within the past year (2014) is 78.1% and the NYS rate is 70.9%. The age-adjusted rate of adults in Erie County who were unable to afford to see a doctor in the past 12 months is 6.2% while the NYS rate is 11.5%. The percentage of children who have had the recommended number of well child visits in government sponsored insurance programs in Erie County is 71.6% while the NYS rate is 74.0%.

**Demographics and Population – Niagara County**

Niagara County is located in the western portion of New York State (NYS), just north of Buffalo (Erie County) and adjacent to Lake Ontario on its northern border and the Niagara River and Canada on its western border. The county has a total area of 1,140 square miles, of which 522 square miles is land and 617 square miles is water. The county’s total population is 210,443 and is comprised of urban, suburban, and a significant rural population. Its cities include Niagara Falls with a population of 48,144, North Tonawanda with a population of 30,372, and its county seat of Lockport with a population of 20,434. North Tonawanda is home to Kaleida Health’s DeGraff Memorial Hospital.

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18 2019 County Health Rankings  
20 2016, NYS Expanded Behavioral Risk Factor Surveillance Survey  
21 2014, NYS Behavioral Risk Factor Surveillance Survey  
22 2016, NYS Expanded Behavioral Risk Factor Surveillance Survey  
23 2016, NYS Department of Health, Prevention Agenda Dashboard, Office of Quality and Patient Safety data as of February 2018  
24 Wikipedia, Niagara County
The table below identifies key population characteristics of Niagara County and the cities of Niagara Falls, North Tonawanda, Lockport and for all of NYS.

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<thead>
<tr>
<th>Population Demographics for Niagara Falls, North Tonawanda, Lockport, Niagara County, New York State (US Census, Quick Facts, Population Estimates, July 1, 2018)</th>
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Disparities exist throughout Niagara County including its small cities and rural areas. While most of Niagara County is white (87.8%), a high percentage of historically, underserved minority populations reside in Niagara Falls given that 22.6% of residents are black-African American. 4.1% of Niagara County households speak a language other than English at home (5+ years) and the rate is 5.0% in Niagara Falls. While Niagara County’s poverty rate is 12.4%, poverty is significant in Niagara Falls with a 27.5% poverty rate, Lockport at 15.4% and North Tonawanda at 8.8%. The poverty rate for children under 18 years of age in Niagara County is 18.4% and the NYS rate is 20.8%.25

The median household income (2013-2017 in 2017 dollars) in Niagara County is $51,656 as compared to $62,765 in NYS. Income disparities are further evidenced in the cities of Niagara County with a median household income of $33,965 in Niagara Falls and $41,477 in Lockport. (US Census, 2018 Population Estimates)

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Estimates) The Tuscarora Reservation with a population of 1,288 has a poverty rate of 13% and a median income of $32,500, much lower than that of Niagara County.26

There are other economic variances throughout the county. The median value of owner-occupied housing units (2013-2017) is $114,800 in Niagara County with a low of $69,900 in Niagara Falls as compared to $293,000 in NYS. The owner-occupied housing unit rate in Niagara County is 71.5% while the rate in Niagara Falls is 57.2%.27 The 2018 average unemployment rate is 5.2% for Niagara County and 6.7% for Niagara Falls, 6.0% for Lockport and 4.4% for North Tonawanda.28

Educational attainment in the high poverty communities such as Niagara Falls and Lockport is also a challenge. In Niagara County 91.0% of persons age 25+ are high school graduates or higher while the rate is 87.8% in Niagara Falls and 87.5% in Lockport. In Niagara County, 23.5% of persons age 25+ have a bachelor’s degree or higher as compared to the NYS rate of 35.3%. This rate is even lower in Niagara Falls with 17.5% of persons age 25+ with bachelor’s degree or higher.29 The four-year graduation rate for students of the Niagara Falls City School District is 63%. Poverty and racial disparities are evident throughout its 6,648-student base as 63% of students are eligible for the federal free lunch program and 59% of students represent a minority population. The graduation rate in Lockport is 87%, and in North Tonawanda, the rate is 75%. Lockport and North Tonawanda also have a significant percentage of students eligible for the federal free lunch program with 47% of Lockport students and 40% of North Tonawanda students.30

In light of the success of the Affordable Care Act and New York State of Health to increase the number of individuals with health insurance, the rate of persons without health insurance is still high in some cities and rural areas. Lockport has a rate of 8.8% for uninsured persons under 65 year while Niagara Falls and North Tonawanda both have a 5 to 6% rate and Niagara County has a rate of 5.1% of uninsured persons under 65 years. The NYS rate of uninsured under 65 years is 6.6%.31 The percentage of individuals with public coverage is 56.2% in Niagara County and 72.4% in Niagara Falls.32

Access to a regular source of care is a concern among the uninsured and underinsured as well as the general population. In Niagara County, the primary care provider rate (2016) is 2,300:1 as compared to neighboring Erie County with the provider rate at 1,230:1 and the NYS rate at 1,200:1. The mental health provider rate (2018) for Niagara County is 960:1 while the rate in Erie County is 360:1 and in NYS is 370:1.33

Mobility issues may further contribute to inaccessibility to healthcare services. The rate of individuals with a disability (under age 65 years) in the city of Niagara Falls, a city of significant poverty, is 12.9% while the rate throughout Niagara County is 10.0%. The rate of persons with an ambulatory difficulty in Niagara County is 7.7% and the NYS rate is 6.7%. Persons with an ambulatory difficulty may be limited in physical activity leading to a further decline in health and may have unique requirements for accessibility, such as ramps or elevators. Individuals in urban areas may have access to public transportation options, but mobility issues may still be a challenge. Lack of a privately owned vehicle challenges all populations in accessing healthcare services. The rate of occupied housing units with no vehicles is 12.99% in Erie County and 9.86% in Niagara County.34

26 Wikipedia, Niagara County, US Census 2000
28 2018, NYS Department of Labor
29 US Census, 2018 Population Estimates
30 https://data.nysed.gov
31 US Census, 2018 Population Estimates
32 US Census, 2017 American Community Survey
33 2019 County Health Rankings
34 US Census, 2013-2017 American Community Survey
In Niagara County, 85.9% of adults 18 years and over (age-adjusted), have a usual source of health care while 11.6% do not have a usual source of health care.\textsuperscript{35} The percentage of Niagara County adults aged 18 to 64 years that report having visited a doctor for a routine checkup within the past year (2014) is 75.3% and the NYS rate is 70.9%.\textsuperscript{36} The age-adjusted rate of adults in Niagara County who were unable to afford to see a doctor in the past 12 months is 10.0% while the NYS rate is 11.5%. \textsuperscript{37} The percentage of children who have had the recommended number of well child visits in government sponsored insurance programs in Niagara County is 78.5% while the NYS rate is 74.0%.\textsuperscript{38}

**Health Status of the Community**

This assessment of the health of Erie County and Niagara County was conducted by Kaleida Health using data from multiple sources including the County Health Rankings, New York State Department of Health (NYSDOH), NYS Prevention Agenda Dashboard, NYS Vital Records, NYS Statewide Planning and Research Cooperative system (SPARCS), NYS Expanded Behavioral Risk Factor Surveillance Survey (eBRFSS), Centers for Disease Control and Prevention (CDC), among others. Kaleida Health further engaged the Erie County Department of Health, the Niagara County Department of Health, and other partners in the development of the complete assessment including surveys and focus group sessions with input from the underserved as described in the Community Engagement section of this report.

**County Health Rankings and Leading Causes of Death**

The County Health Rankings & Roadmaps program, a collaboration of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, provide annual actionable data to identify health issues of concern to a community and to plan strategies for health intervention throughout the counties of the United States. The 2019 County Health Rankings has ranked Erie County and Niagara County as follows:

- **Health Outcomes** - Erie County is ranked 56 out of 62 counties in New York State (NYS) for length of life and 51 out of 62 counties for pre-mature death. Niagara County is ranked 56 out of 62 counties and Niagara County is ranked 58 out of 62 counties in NYS for length of life and 61 out of 62 counties for pre-mature death. Health outcomes as based on equal weighting of length and quality of life.
- **Erie County** is ranked 32 out of 62 counties and Niagara County is ranked 52 out of 62 counties in NYS for health factors, based on weighted scores for health behaviors, clinical care, social and economic factors, and the physical environment.

Leading causes of all deaths in Erie County and Niagara County are indicated below:

- Heart disease is the number one cause of death in the counties and accounts for 183.2 per 100,000 population of all deaths in Erie County and 232.4 per 100,000 in Niagara County. Cancer is the next leading cause of death in the counties at 166.0 per 100,000 population in Erie County and 175.0 per 100,000 in Niagara County. It is important to note that cancer is the number one cause of premature (<75 years) death in both counties with the Erie County rate at 90.7 per 100,000 and Niagara County at 99.7 per 100,000.
- The next three leading causes of death in Erie County is unintentional death at 53.3 per 100,000 population, chronic lower respiratory disease at 41.0 per 100,000, and stroke at 36.2 per 100,000. The next three leading causes of death in Niagara County is chronic lower respiratory

\textsuperscript{35} 2016, NYS Expanded Behavioral Risk Factor Surveillance System  
\textsuperscript{36} 2014, NYS Behavioral Risk Factor Surveillance System  
\textsuperscript{37} 2016, NYS Expanded Behavioral Risk Factor Surveillance System  
\textsuperscript{38} 2016 NYS Prevention Agenda Dashboard, NYS Department of Health, Office of Quality and Patient Safety data as of February 2018
disease at 50.9 per 100,000 population, unintentional injury at 49.0 per 100,000 and stroke at 28.4 per 100,000. 39

**Chronic Disease**

**Cardiovascular Disease**

The CDC states that about 610,000 people die of heart disease in the United States every year – that is one in every four deaths. ([https://www.cdc.gov/heartdisease/facts.htm](https://www.cdc.gov/heartdisease/facts.htm))

A number of health descriptors indicate that both Erie County and Niagara County have a higher percentage of its population suffering from cardiovascular disease than all of New York State (NYS), and Niagara County rates fare worse than Erie County rates.

- The cardiovascular disease premature death rates (ages 35-64) per 100,000 is 132.6 in Erie County and much higher at 152.9 in Niagara County while the NYS rate is 102.4. 40
- The cardiovascular disease hospitalization rates per 10,000 is 163.8 for Erie County and significantly higher in Niagara County with a rate of 197.9 while the NYS rate is 149.9. 41
- The age-adjusted heart attack hospitalization rates per 10,000 (2014-2016) is 16.65% in Erie County and even higher in Niagara County with a rate of 23.6% while the NYS rate is 13.8%. 42

Racial and ethnic disparities exacerbate the cardiovascular disease rates in Erie and Niagara counties.

- The mortality rate for diseases of the heart per 100,000 population (age-adjusted) for Erie County is 217.5 for Non-Hispanic, African Americans, 174.5 for whites, and 135.2 for Hispanics.
- The mortality rate for diseases of the heart per 100,000 population (age-adjusted) for Niagara County is 293.4 for Non-Hispanic, African Americans, 220.9 for whites, and 197.7 for Hispanics. 43

Disparities further exist among women. According to the American Heart Association, cardiovascular disease is the number one cause of death in American women and claims over 400,000 lives each year equating to one death every 80 seconds. Unfortunately, the statistics are worse for women of color. The prevalence of cardiovascular disease among African-American women is nearly 48% versus 35% among Caucasian women. 44 Erie County and Niagara County rates demonstrate the disparities:

- The Erie County emergency department visit rate due to hypertension per 10,000, 18+ years at over in Erie County is 26.3 for women and 23.0 for men. In Niagara County, the rate for women is 27.0 and 23.5 for men. 45

Heart disease is largely preventable and knowledge is key. In a 2012 survey conducted by the American Heart Association, 56% of women were unaware that heart disease is the leading cause of death among women. Additionally, only 36% of black women and 34% of Hispanic women knew that heart disease is their leading cause of death, compared to 65% of white women. 46

**High Blood Pressure**

High blood pressure (also referred to as HBP or hypertension) is when an individual’s blood pressure, the force of blood flowing through your blood vessels, is consistently too high. Nearly half of American adults have high blood pressure. Many don’t even know they have it. (American Heart Association,

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39 2016, NYS Vital Statistics data as of May 2018
40 2014-2016, NYS Vital Statistics data as of May 2018
41 2016, NYS SPARCS data as of December 2017
42 2016, NYS SPARCS data as of August 2016
43 2014-2016, Erie County and Niagara County Health Indicators by Race/Ethnicity, NYS Department of Health
44 American Heart Association, [www.heart.org](http://www.heart.org)
45 2014-2016, NYS SPARCS data
46 American Heart Association, [www.heart.org](http://www.heart.org)
According to the CDC, high blood pressure increases the risk of dangerous health conditions including heart attack, stroke, and kidney disease.

The impact of high blood pressure among Erie County and Niagara County residents is exemplified by below statistics:

- The age-adjusted percentage of adults with physician-diagnosed high blood pressure (2016) is 26.7% in Erie County, and the rate is 29.5% in Niagara County while the NYS rate is 28.39%.  
- The age-adjusted hypertension emergency department visit rate per 10,000, age 18 year and older is 25.0 in Erie County and 25.5 in Niagara County and the NYS rate of 28.4.

Hypertension rates are significantly higher among minority populations in Erie and Niagara counties.

- The age adjusted Erie County emergency department visit rate due to hypertension per 10,000 18+ years is 96.5 for African Americans and 34.3 for Hispanics versus 14.2 for the white population.
- The age-adjusted Niagara County emergency department visit rate due to hypertension per 10,000 18+ years is 118.5 for African Americans and 32.7 for Hispanics versus 19.1 for the white population. Niagara County is home to the Tuscarora Indian Reservation, and the emergency department visit rate for this American Indian population is extremely high at 54.4.

Stroke

According to the CDC, a stroke causes brain tissue to die, which can lead to brain damage, disability and death. Stroke is the fifth leading cause of death in the United States and the leading cause of serious long-term disability. This is disturbing because about 80% of strokes are preventable. Individuals can greatly reduce their risk for stroke by making lifestyle changes to help control your blood pressure and cholesterol levels and, in some cases, by taking medication. The CDC states that about 140,000 Americans each year – that is one out of every 20 deaths and costs the United States an estimated $34 billion each year in healthcare services, medicine to treat stroke and missed days of work.

Stroke rates in Erie County and Niagara County are significantly higher than for New York State (NYS) as evidenced by below 2014-2016 statistics.

- The age-adjusted cerebrovascular disease (stroke) mortality rate per 100,000 is 36.8 for Erie County and 30.6 for Erie County while the NYS rate is 25.6.
- The age-adjusted cerebrovascular disease (stroke) hospitalization rate per 10,000 is 27.2 in Erie County and 27.1 in Niagara County while the NYS rates is much lower at 21.2.

Disparities exist for stroke among the minority populations of Erie County and Niagara County as evidenced by below data.

- The Erie County age-adjusted cerebrovascular disease (stroke) mortality rate per 100,000 population (2012-2014), is 35.0 for the white population while it is 52.1 for African Americans and 24.9 for Hispanics.
- The Niagara County age-adjusted cerebrovascular disease (stroke) mortality rate per 100,000 population (2012-2014), is 29.6 for the white population while it is 43.5 for African Americans and 19.0 for Hispanics.

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47 2016, NYS Expanded Behavioral Risk Factor Surveillance System
48 2016, NYS SPARCS data as of December 2017
49 2014-2016, NYS SPARCS data
50 2014-2016, NYS Vital Statistics as of May 2018
51 2016, NYS SPARCS data as of December 2017
52 2014-2016, Erie County and Niagara County Health Indicators by Race/Ethnicity, NYS Department of Health
Diabetes

Diabetes, also called diabetes mellitus, is a condition that causes blood sugar to rise. A fasting blood glucose (sugar) level of 126 milligrams per deciliter (mg/dL) or higher is dangerous. Untreated diabetes can lead to many serious medical problems, including cardiovascular disease. Type 2 diabetes primarily affects adults and may be delayed or controlled with diet and exercise. Type 1 diabetes is more likely to develop in children, teens and young adults and account for 5% of all cases of diabetes. Diabetes is the seventh leading cause of death in the United States and can cause serious health problems called complications, including heart disease, blindness, kidney failure, and lower-extremity amputations.

Diabetes is highly prevalent in Erie County and more so in Niagara County.

- The percentage of adults with physician-diagnosed diabetes (2016) is 9.47% in Erie County and 11.7% in Niagara County and the NYS rate is 9.5%.
- Rate of hospitalizations for short-term complications of diabetes per 10,000, aged 18+ is 8.16 in both Erie County and Niagara County while the NYS rate is 6.56.
- Rate of hospitalizations for short-term complications of diabetes per 10,000, children aged 6-17 is 4.81 in Erie County and significantly higher in Niagara County with a rate of 9.22 while the NYS rate is 3.04.

The rate of diabetes mortality among African-Americans is almost double the rate of the white population of Erie and Niagara counties.

- The age-adjusted diabetes mortality rate per 100,000 population in Erie County is 45.3 for African Americans, 34.1 for Hispanics, and 28.3 for whites.
- The age-adjusted diabetes mortality rate per 100,000 population in Niagara County is 48.1 for Non-Hispanic African Americans, 49.1 (unstable rate) for Hispanics, and 23.0 for whites.

Chronic Kidney Disease

According to the CDC, Chronic Kidney Disease (CKD) is a condition in which the kidneys are damaged and cannot filter blood as well as they should. Because of this, excess fluid and waste from blood remain in the body and may cause other health problems, such as heart disease and stroke. The CDC reports that kidney diseases are the ninth leading cause of death in the United States.

Erie County and Niagara County rates are as follows:

- The age-adjusted CKD emergency department visit rate per 10,000 (any diagnosis) is 137.5 in Erie County, 109.1 in Niagara County, and the NYS rate is 123.8.
- The age-adjusted CKD hospitalization rate per 10,000 (any diagnosis) is 119.7 for Erie County, 101.1 for Niagara County and 114.8 for NYS.

Obesity

According to the CDC, in 2015-2016, the prevalence of obesity was 39.8% and affected about 93.3 million of US adults. Obesity-related conditions include heart disease, stroke, type 2 diabetes and certain types of cancer that are some of the leading causes of preventable, premature death. The Keys to Health database of the Population Health Collaborative of WNY states the following: “The percentage of overweight and obese adults is an indicator of the overall health and lifestyle of a community. Being

53 American Heart Association, [www.heart.org](http://www.heart.org)
54 Centers for Disease Control and Prevention
55 2016, NYS Expanded Behavioral Risk Factor Surveillance System
56 2012-2014, NYS SPARCS data as of August 2016
57 2014-2016, Erie County and Niagara County Health Indicators by Race/Ethnicity, NYS Department of Health
58 2016, NYS SPARCS data as of December 2017
59 2016, NYS SPARCS data as of December 2017
overweight or obese affects quality of life and puts individuals at risk for developing many diseases, especially heart disease, stroke, diabetes, and cancer. Losing weight helps to prevent and control these diseases. Being overweight or obese also carries significant economic costs due to increased healthcare spending and lost earnings."

Obesity rates in Erie County and Niagara County are as follows:

- The 2016 percentage of adults, 18 years and over, who are obese (BMI ≥ 30) or overweight (BMI 25-29.9) is 65.0 in Erie County, 66.8 in Niagara County, and 60.5 in NYS.  

- The 2016 percentage of adults, 18 years and over, who are obese (BMI ≥ 30) is 25.2% in Erie County, 31.3% in Niagara County, and 25.5% in NYS.

Individuals of lower income have a higher incidence of being obese.

- In Erie County, the 2013-2014 adult obesity rate (BMI ≥ 30) is 29.8%, and the rate for adults with an annual income of less than $25,000 is 31.9%.

- In Niagara County, the 2013-2014 obesity rate (BMI ≥ 30) for adults is 31.3% and 48.1% for adults with an annual income less than $25,000.

- In the City of Buffalo, a city with a 30.9% poverty rate, 36.4% of adults are obese versus the Erie County rate of 25.5% and the Niagara County rate of 31.3%.

Good nutrition is key to lowering obesity rates. However, access to healthy foods is a challenge for many low-income individuals living in urban, underserved neighborhoods and for those in rural areas with limited transportation options. The U.S. Department of Agriculture (USDA) defines food insecurity as limited or uncertain availability of nutritionally adequate foods or uncertain ability to acquire these foods in socially acceptable ways. The following data exemplify food insecurity and poor nutrition in Erie and Niagara counties:

- The percentage of the population that experienced food insecurity at some point during the year is 12.7% in Erie County, 12.0% in Niagara County and 11.4% in NYS.

- The percentage of households receiving Food Stamp/SNAP benefits in the past 12 months (2012-2016) is 16.3% in Erie County, 13.1% in Niagara County and 15.4% in NYS. The age-adjusted percentage of adults who report consuming less than one fruit or vegetable daily (no fruits and vegetables) is 27.8% in Erie County, 30.0% in Niagara County.

A lack of physical activity is another contributing factor to obesity.

- The age-adjusted percentage of adults who participated in leisure time physical activity in the past 30 days is 74.4% in Erie County and 70.7% in Niagara County. The concern is the 25% to 30% who did not.

Smoking and E-Cigarettes

According to the CDC, smoking leads to disease and disability and harms nearly every organ of the body. It is the leading cause of preventable death, and it leads to disease and disability, harming nearly every organ of the body. Nationally, the CDC reports that 14.0% of all adults (34.3 million people) were current cigarette smokers in 2017. The American Heart Association reports that almost one third of deaths from coronary heart disease are due to smoking and secondhand smoke, and smoking is linked to about 90%
of lung cancer cases in the United States. Smoking rates overall are down, but too many adults still smoke, vape and use other forms of tobacco, especially between the ages of 21 and 34.

- The age-adjusted percentage of adults who are current smokers in Erie County is 18.3% and even higher in Niagara County at 25.5%, while the NYS rate is 14.5%.
- In NYS, an estimated 589,000 adults, or 4.1% of the state’s adult population aged 18 years and older, currently use e-cigarettes every day or some days, and among current smokers, 14.0% currently use e-cigarettes every day or some days.68

Cancer

According to the American Cancer Society, “Cancer is a major public health problem worldwide and is the second leading cause of death in the United States. In 2019, 1,762,450 new cancer cases and 606,880 cancer deaths are projected to occur in the United States. However, the overall cancer death rate dropped continuously from 1991 to 2016 by a total of 27%, translating into approximately 2,629,200 fewer cancer deaths than would have been expected if death rates had remained at their peak.”

- In Erie and Niagara counties and NYS, cancer is the leading cause of premature death, less than 75 years.69 (NYS Vital Statistics data as of May 2018)
- The all cancer incidence rate in 2015 per 100,000 population is significantly higher in Erie County with a rate of 685.9 and in Niagara County with a rate of 730.9, as compared to a rate of 566.9 in NYS.70

Disparities exist in the incidence of certain cancers.

- In Erie County, the lung cancer incidence rate per 100,000 population (age-adjusted) among whites is 72.5 while the rate among African Americans is much higher at 83.6.
- In Niagara County, the lung cancer incidence rate per 100,000 population (age-adjusted, 2013-2015) among whites is 85.7 and the rate among African Americans is 105.8.
- In Erie County, the female late stage breast cancer incidence rate per 100,000 population, age-adjusted (2013-2015) is 44.9 for whites and 54.1 for African Americans.
- In Niagara County, the female late stage breast cancer incidence rate per 100,000 population, age-adjusted (2013-2015), is 46.4 for whites and 52.1 for African Americans.71

The east side of Buffalo and parts of the Town of Cheektowaga in Erie County was recently determined by the NYS Department of Health to be a cancer cluster for lung, prostate, esophageal, colorectal, oral and kidney cancers.72 Buffalo is a city with a 37.1% African American population and a poverty rate of 30.9%.73 The New York State Department of Health is conducting more research to determine the causes and risk factors for the high incidence of certain types of cancer in this area.

Child Health

Child Mortality Rates

- The child mortality rate for Erie County per 100,000 population among children age 1 to 4 years is 26.6, significantly higher than the NYS rate of 16.5. In Niagara County, the rate is 7.5% for children 1-4 (unstable or unreliable rate).

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68 2016, NYS Expanded Behavioral Risk Factor Surveillance System
69 NYS Vital Statistics Data as of May 2018
70 2015, NYS Community Health Indicator Reports, NYS Department of Health
71 2013-2015 Erie County and Niagara County Health Indicators by Race/Ethnicity, NYS Department of Health
73 US Census, 2018 Population Estimates
• The child mortality rates per 100,000 for children 5 to 14 years in Erie County is 13.7, and Niagara County is much higher at 16.6 while the NYS rate is 10.7.\textsuperscript{74}

While the causes of childhood mortality vary, children are especially vulnerable to poor health due to illness and unintentional injury. In addition, inaccessibility to care, low rates of child wellness visits and immunizations, lack of insurance, lack of developmental screens, lack of care coordination, and the lack of family and social supports are all contributing factors. Some of the risk factors affecting child health are explored below.

**Immunizations**

The CDC reports that immunization is one of the most successful and safest public health strategies for preventing communicable diseases. High immunization rates have reduced vaccine-preventable disease to extremely low levels in the United States.

• According to the CDC, 72.2\% of U.S. children, 19 to 35 months, received the recommended seven vaccine series in 2016.

In New York State (NYS), high immunization levels are achieved by the time children reach school age and are supported by school entry laws. However, the immunization rates of very young children, 19-35 months of age, are still below the Healthy People 2020 goal of 80 percent.

• The percentage of children with 4:3:1:3:1:4 immunization series, aged 19-35 months, is much the same in Erie and Niagara counties. The Erie County rate is 73.4\% and it is 73.5\% in Niagara County while the NYS rate is 72.3\%.\textsuperscript{75}

**Asthma**

Asthma is highly prevalent throughout the United States as 6.2 million (8.4\%) children under age 18 currently have asthma (CDC), and it is prevalent in Erie and Niagara counties.

• The asthma emergency department visit rate per 10,000 among Erie County children 0-4 years is 141.4, 82.5 in Niagara County, and the NYS rate is 186.4.\textsuperscript{76}

Asthma has been a challenge in the City of Buffalo given its urban environment, high poverty rate and minority population.

• The asthma emergency department visit rate (2011-2013) per 10,000 population for children 0-4 in Buffalo is 269.8, much higher than Erie County with a rate of 139.8 during the same time period.\textsuperscript{77}

• In Erie County, the asthma hospitalization rate per 10,000 population, aged 0-17 years, is 40.6 for African Americans, 25.4 for Hispanics, and 9.0 for the white population. In Niagara County, the asthma hospitalization rate per 10,000, aged 0-17, is 23.7 for African Americans, 14.9 for Hispanics (unstable rate), and 8.3 for the white population.\textsuperscript{78}

Medication management and environmental improvements are helping to improve asthma among children and adults. However, more work needs to be done.

• Asthma medication management (aged 5-64) for the Medicaid Managed Care and Child Health Plus populations is 55.7\% in Erie County, 51.7\% in Niagara County as compared to 60.2\% for NYS.\textsuperscript{79}

\textsuperscript{74} 2014-2016, NYS Vital Statistics data as of May 2018
\textsuperscript{75} 2016, NYS Department of Health, Prevention Agenda Dashboard, National Immunization Survey data as of November 2017
\textsuperscript{76} 2016, NYS SPARCS data as of December 2017
\textsuperscript{77} 2011-2013, NYS Department of Health, City of Buffalo Health Equity Report 2017
\textsuperscript{78} 2012-2014, Erie County and Niagara County Health Indicators by Race/Ethnicity, NYS Department of Health
\textsuperscript{79} 2015, Medicaid Managed Care and Child Health Plus , NYS Department of Health Asthma Dashboard
The percentage of homes in the Healthy Neighborhoods program that have fewer asthma triggers during home revisits is 12.4% in Erie County and 27.1% in Niagara County.80

**Obesity in Children**

Obesity is a serious health problem across the United States. As reported by the CDC, in 2011-2014, among children and adolescents aged 2-19 years, the prevalence of obesity remained stable at about 17%, yet it affects about 12.7 million children and adolescents across the nation.

Poverty and low access to healthy foods in communities and schools are contributing factors to obesity in adults with children affected as well. The U.S. Department of Agriculture (USDA) defines food insecurity as limited or uncertain availability of nutritionally adequate foods or uncertain ability to acquire these foods in socially acceptable ways. Additionally, the USDA reports that children who are food insecure are more likely to be hospitalized and may be at higher risk for developing chronic diseases such as obesity as a result in lower quality diet, anemia and asthma. In addition, food-insecure children may also be at higher risk for behavioral and social issues including fighting, hyperactivity, anxiety and bullying.

The following data exemplify poor nutrition and food insecurity among children in Erie and Niagara counties:

- The percentage of elementary students who are overweight or obese (85 percentile or higher) in Erie County is 30.1%, and the rate in Niagara County is 30.7% with the NYS rate at 32.2%.81
- The percent of children under 18 years living in households that experienced food insecurity at some point during the year in Erie County is 18.6% and 19.4% in Niagara County.82

**Oral Health**

Oral health among children in Erie County and Niagara County is an ongoing concern and one that is impacted by income and access to a dental provider.

- The percentage of Medicaid enrollees (age 2-20 years) who had at least one preventive dental visit within the past year was just 31.6% in Erie County and 29.8% in Niagara County83
- The percentage of 3rd grade children with untreated cavities (2015-2017) was 48.6% in Erie County and 45.6% in Niagara County. Access to a dentist remains a challenge throughout the counties with the dentist provider ratio for Erie County at 1,210:1, and 1,940:1 for Niagara County and 1,230:1 for all of New York State.84

**Lead Poisoning**

The CDC reports that at least four million U.S. households have children living in them that are being exposed to high levels of lead. There are approximately half a million U.S. children ages 1-5 with blood lead levels above 5 micrograms per deciliter, the reference level at which CDC recommends public health actions be initiated. Blood lead level rates for Erie and Niagara counties are as follows:

- The incidence of confirmed high blood lead level (10 micrograms or higher per deciliter) rate per 1,000 children tested aged <72 months is 18.1% in Erie County and 10.3% in Niagara County.

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80 NYS Department of Health, Healthy Neighborhoods, program tracking data as of April 2018
81 2014-2016, NYS Department of Health, Community Health Indicator Reports, Student Weight Status Category Reporting System (SWSCRS) Data as of May, 2017
82 2017, Feeding America, Keys to Health-Population Health Collaborative
83 2015-2017, NYS Department of Health Medicaid Program Data as of June 2018
84 2019 County Health Rankings, 2017 data
both counties have much higher rates than the 3.7% per 1,000 children tested in New York State (NYS).\textsuperscript{85}

The Erie County Department of Health website cites that “despite significant progress, childhood lead poisoning remains a serious problem in Erie County. The same is true for Niagara County and throughout NYS. Every year thousands of children under the age of six are diagnosed with elevated blood lead levels. Thousands more are exposed to lead hazards in their homes every day. Up until 1978, lead was used in many house paints. Even today, deteriorating lead-based paint in homes can lead to high (and unsafe) concentrations of lead in house dust. Conditions that give rise to lead poisoning can be found anywhere in Erie County, however they are especially prevalent in neighborhoods that have a high amount of older housing. Nine of the county’s zip codes which lie within the City of Buffalo - 14201, 14207, 14208, 14209, 14210, 14211, 14212, 14213, and 14215 - have been designated by the Department of Health as “Communities of Concern,” where children are at exceptionally high risk for lead poisoning.”\textsuperscript{86}

Environmental remediation and lead screening programs for children are helping to combat the problem.

- Of children born in 2013, the percentage of children with at least two lead screenings by 36 months is 72.6% in Erie County and 71.4% in Niagara County, and the NYS rate is 62.8%.\textsuperscript{87}

**Diabetes in Children**

According to the CDC, children, teens and young adults are more likely to develop Type 1 diabetes, and accounts for 5% of all cases of diabetes. This type of diabetes is also referred to as insulin-dependent diabetes. Those with Type 1 diabetes must take insulin or other medications daily. This compensates for insufficient amounts of insulin, a hormone required to translate blood glucose into energy for the body. Type 1 diabetes was previously known as juvenile diabetes because it is usually diagnosed in children and young adults. However, this chronic, lifelong disease can strike at any age. Those with a family history of Type 1 diabetes have a greater risk. (American Heart Association, www.heart.org)

- The Erie County rate of hospitalization for short-term complications of diabetes per 10,000, aged 6-17, was 4.5 from 2011-2013 and worsened in 2012-2014 to 4.80, and in Niagara County, the rate is 4.80 as compared to the NYS rate of 3.04.\textsuperscript{88}
- In Buffalo, a city with a 30.9% poverty rate, the 2011-2013 diabetes hospitalization rate for youth, 6-17, is even higher at 7.1.\textsuperscript{89}

**Disability and Children**

Children with a disability have difficulties performing activities due to a physical, mental, or emotional condition. The extent to which a child is limited by a disability is heavily dependent on the social and physical environment in which he or she lives. According to the U.S. Department of Education, more than six million children with disabilities receive special education and related services annually through their school system. As children with disabilities approach adulthood, they may have difficulties living independently or fulfilling work responsibilities without sufficient accommodations.\textsuperscript{90}

- The percentage of children less than 18 years old with a disability in Erie County is 4.9% and 4.5% in Niagara County versus the NYS rate of 3.9%.\textsuperscript{91}

\textsuperscript{85} 2014-2016 NYS Department of Health, Child Health Lead Poisoning Prevention Program Data as of June, 2018
\textsuperscript{86} Erie County Department of Health – http://www2.erie.gov/health/index.php?q=lead-poisoning-prevention
\textsuperscript{87} 2013-2016 NYS Department of Health, Child Health Lead Poisoning Prevention Program data as of June 2018
\textsuperscript{88} NYS Department of Health, Prevention Agenda Dashboard
\textsuperscript{89} NYS Department of Health, City of Buffalo Health Equity Report 2017
\textsuperscript{90} Keys to Health-Population Health Collaborative
\textsuperscript{91} 2013-2017, US Census, American Community Survey Supplemental Estimates
The New York State Early Intervention Program (EIP) is part of the national Early Intervention Program for infants and toddlers with disabilities and their families. Children must be under 3 years of age and have a confirmed disability or established developmental delay, as defined by the State, in one or more of the following areas of development: physical, cognitive, communication, social-emotional, and/or adaptive. offers a variety of therapeutic and support services to eligible infants and toddlers with disabilities and their families.\textsuperscript{92}

- The percentage of children birth to 3 years provided services by the Early Intervention Program in 2017 is 4.6% in Erie County, 5.8% in Niagara County and 4.0% for NYS. This is the number of children served in the Early Intervention Program compared to all children ages birth to three in the municipality.\textsuperscript{93}

**Child Abuse, Neglect, Trauma**

The CDC defines child maltreatment to include all types of abuse and neglect of a child under the age of 18 by a parent, caregiver, or another person in a custodial role (e.g., clergy, coach, teacher). There are four common types of maltreatment: Physical Abuse, Sexual Abuse, Emotional Abuse, and Neglect. In 2015, there were 683,000 victims of child abuse and neglect reported to Child Protective Services (CPS), and the youngest children are the most vulnerable with about 24% of children in their first year of life experiencing victimization. Child abuse affects the overall health and wellness of children as a social determinant of health. Western New York has a high incidence of child abuse and neglect rates as compared to all of NYS.

- The NYS rate of child abuse/maltreatment of youth 0-17 years in 2015 was 13.8% while the Erie County rate is 23.9% and the Niagara County rate is 23.0%.\textsuperscript{94}

**Maternal and Infant Health**

"Improving the well-being of mothers, infants, and children is an important public health goal for the United States. Their well-being determines the health of the next generation and can help predict future public health challenges for families, communities, and the health care system." - Healthy People 2020

The health of women, infants, children and their families is fundamental to population health and is a priority area for the 2019-2024 NYS Prevention Agenda. Erie County and Niagara County both have high rates of infant and maternal mortality, premature birth, low birthweight babies, and teen pregnancy rates. These rates are affected by multiple disparities including race, poverty, and lack of access to quality prenatal care, as well as other social determinants of health such as obesity, smoking, substance use, and mental health disorders. Erie County and Niagara County infant mortality rates are significantly higher than NYS rates:

- The infant mortality rate per 1,000 live births (<1 year) for Erie County is 7.3, and the rate for Niagara County is 6.8 while the NYS rate is 4.5.\textsuperscript{95}

About 1,200 NYS infants under one year of age die each year. Most of these deaths are attributed to congenital abnormalities and birth defects, multiple births, prematurity and low birth weight, infections and diseases. About 7.5% of NYS infant deaths are referred to as sudden unexpected infant deaths (SUID) and are attributed to unsafe sleep practices or, because no cause can be identified, labeled as SUID. Through education and promotion, SUID is an avoidable cause of death among infants.

\textsuperscript{92} NYS Department of Health  
\textsuperscript{93} NYS Department of Health, 2017 Early Intervention Program data  
\textsuperscript{94} Kids Well Being Indicators Clearinghouse with data from the NYS Office of Child and Family Services/National Child Abuse and Neglect Data System  
\textsuperscript{95} 2014-2016, NYS Vital Statistics as of October 2018
Birth rates for Erie County and Niagara County and maternal mortality rates:
- The 2014-2016 birth rate for Erie County is 17.1%, and the Niagara County birth rate is 17.2%.  
- The Erie County maternal mortality rate per 100,000 live births is 33.2 while the Niagara County rate is even higher at 92.9. The NYS rate is 20.4. 

Low Birthweight, Premature Birth and Lack of Prenatal Care

Poor maternal and infant health outcomes, including low birthweight births and premature births, are evident throughout Erie and Niagara counties.
- The percentage of low birthweight births (<2.5 kg) is 8.6% in Erie County, 7.5% in Niagara County versus the NYS rate of 7.8%.
- Premature births (<37 weeks gestation) account for 11.2% of all Erie County births and 11.5% of all Niagara County births versus the NYS rate of 10.5%.

Low birthweight and premature birth rates are even higher in the City of Buffalo, a city with a 30.9% poverty rate and among minority populations.
- In Buffalo, the rate of low birthweight births (<2.5 kg) is 10.1% with rates in the city’s designated “high risk” zip codes ranging from 18.5 in 14203, 14.4 in 14204, 14.0 in 14211, 13.2 in 14212, and 13.0 in 14215. These rates have increased since last reported in 2012-2014 when rates in these high-risk zip codes ranged from a high of 13.6 in 14204 to a low of 11.9 in 14215.
- The rates of premature birth are highest in the City of Buffalo, especially within the city’s designated high-risk zip codes. Premature birth rates range from 18.0% in zip code 14203, 17.8% in 14204, 17.8% in 14211, 15.5% in 14212, 15.2% in 14213, 14.7% in 14207 and 13.7% in 14214.
- The percentage of low birthweight babies in Erie County is 7.0% among the white population and 13.7% among the African American/black population, and the percentage of premature births (<37 weeks) is 8.6% among the white population and 13.4% among the African American/black population.

Poverty and behavioral and socio-economic factors such as poor nutrition, smoking, obesity, substance abuse, mental health status, as well as teen pregnancy, and a lack of adequate prenatal care and education are all contributing factors for poor infant and child health outcomes.
- Teen pregnancy rates, ages 15-19, per 1,000 females is 27.7% for Erie County and 26.4% for Niagara County while the NYS rate excluding NYC is 29.8%. However, rates in the City of Buffalo’s high-risk zip codes range as high as 111.1% in zip code 14203, 100.3% in 14211, 91.5% in 14212, 78.5% in 14215, 73.0% in 14207, 69.8% in 14202, and 62.3% in 14204.

A lack of prenatal care puts all pregnant women at risk of poor maternal and infant health outcomes.
- The percentage of Erie County births with late (3rd trimester) or no prenatal care is 4.8% and much higher in Niagara County with a rate of 6.0%. The NYS rate is 5.4%. Rates are significantly higher in Buffalo’s high-risk zip codes with 8.3% in 14218, 8.1% in 14214, 8.1% in 14204, 7.8% in 14212, and 73% in 14215.

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96 2014-2016 NYS Vital Statistics data as of June 2018
97 2014-2016, NYS Vital Statistics data as of October 2018
98 2014-2016, NYS Vital Statistics data as of June 2018
99 2014-2016, NYS Vital Statistics data as of June 2018
100 NYS Department of Health, 2014-2016 Erie County Health Indicators by Race/Ethnicity
101 https://www.healthypeople.gov/2020/topics-objectives/topic/family-planning
102 2014-2016, NYS Vital Statistics data as of June 2018
103 2014-2016, NYS Vital Statistics data as of June 2018
Obesity is a serious problem for all Erie County and Niagara County residents. However, the risk to pregnant women and their newborns is of particular concern as poor nutrition is a risk factor for preterm birth.

- The percentage of pregnant women in WIC who were pre-pregnancy obese (BMI ≥ 30) was 30.1% for Erie County, 29.5% for Niagara County, and 24.2% for NYS.\(^{104}\)

The current opiate addiction crisis in Erie and Niagara counties along with other substance abuse issues has impacted maternal and infant health outcomes.

- The newborn drug-related diagnosis rate per 10,000 newborn discharges is 245.6 for Erie County and a much higher rate of 341.3 for Niagara County as compared to the NYS rate of 104.8.\(^{105}\)
- Additionally, the neonatal abstinence syndrome rate per 1,000 newborn discharges (any diagnosis) is 14.3 for Erie County and significantly higher in Niagara County with a rate of 24.7, while both counties are significantly higher than the NYS rate of 4.6.\(^{106}\)

Breastfeeding

Breastfeeding among new mothers and their infants has significant health benefits as outlined in the 2011 US Surgeon General’s Call to Action to Support Breastfeeding:

- Breastfeeding protects babies from infections and illnesses that include diarrhea, ear infections and pneumonia.
- Breastfed babies are less likely to develop asthma.
- Children who are breastfed for six months are less likely to become obese.
- Breastfeeding also reduces the risk of sudden infant death syndrome (SIDS).
- Mothers who breastfeed have a decreased risk of breast and ovarian cancers.

While the benefits of breastfeeding are promoted among new mothers, there is more work to be done to increase rates throughout Erie and Niagara counties.

- The percentage of infants fed any breast milk in a delivery hospital for 75.2% in Erie County, 69.3% for Niagara County, much lower than the NYS rate of 87.3%.
- The percentage of infants fed exclusively breast milk in a delivery hospital is 52.0% for Erie County, 52.4% for Niagara County and the NYS rate is 45.2%.\(^{107}\)

Disparities exist for breastfeeding among low income and minority populations as evidenced by the following data for the City of Buffalo, a city with a 30.9% poverty rate and a 52.4% minority rate.\(^{108}\)

- The percentage of infants exclusively breastfed in a hospital, 2011-2013, was 38.2% in the City of Buffalo versus the Erie County rate of 50.6%.\(^{109}\)

Sexually Transmitted Diseases /HIV

Sexually transmitted diseases are highly prevalent among Erie County and Niagara County youth as evidenced by the following data:

- The newly diagnosed HIV case rate per 100,000 population is 10.7 for Erie County and 3.4 for Niagara County versus the New York State (NYS) rate of 16.0.\(^{110}\)

\(^{105}\) 2012-2014, NYS SPARCS Data as of September 2016
\(^{106}\) 2012-2014, NYS SPARCS Data as of September 2016
\(^{107}\) 2016, NYS Vital Statistics Data as of October 2018
\(^{108}\) US Census, 2018 Population Estimates
\(^{109}\) NYS Department of Health, Buffalo Health Equity Report 2017
\(^{110}\) 2014-2016, NYS Department of Health, NYS HIV Surveillance System data as of September 2017
• The early syphilis case rate per 100,000 population is 9.8 for Erie County and 2.7 for Niagara County, while the NYS rate is much higher at 25.1.
• The gonorrhea case rate per 100,000 population, 15 to 19 years, is 646.7 for Erie County and 333.4 for Niagara County, and the rate is 305.8 for NYS.
• The chlamydia case rate per 100,000 females, 15 to 19 years, is 4132.3 for Erie County, 3621.1 for Niagara County and 3424.6 for NYS.
• The chlamydia case rate per 100,000 males, 15 to 19 years, is 1328.7 for Erie County, 715.5 for Niagara County and 922.5 for NYS.

Mental Health and Substance Use

High rates of poor mental health, drug addiction, binge drinking, and suicide deaths in Erie County and Niagara County indicate a dire need to address mental health and substance use issues. Below statistics document the need to address mental health and substance use issues in the counties.

• Age-adjusted percentage of adults with poor mental health for 14 or more days in the last month is 13.5% in Erie County and 11.2% in Niagara County versus NYS rate of 10.1%.112
• Age-adjusted suicide death rate per 100,000 is 10.9% in Erie County and 15.3 in Niagara County versus the NYS rate of 8.0%.113
• Age-adjusted percentage of adult binge drinking during the past month is 23.1% in Erie County and 12.7% in Niagara County versus the NYS rate of 18.3%.114
• Drug-related hospitalization rate per 10,000 in Erie County is 19.0, and the rate is 28.8 for Niagara County versus the NYS rate of 23.7.115

Access to mental health care and services is a challenge for residents in both Erie and Niagara counties. The region has a severe shortage of psychiatrists and psychologists.

• The mental health provider rate for Erie County is 360:1 and the rate for Niagara County is significantly worse at 960:1. The rate for NYS is 370:1.116

In 2015 and 2016, opioid use increased dramatically in NYS, and the counties of Erie and Niagara were largely impacted.

• In 2016, the opioid burden (crude rate per 100,000 population) was 352.2 in Erie County and 416.5 in Niagara County, some of the highest rates in NYS.117

Since that time, NYS and both Erie County and Niagara County have put together task forces comprised of varied community stakeholders to combat the problem. While the problem is still significant, the following data demonstrates the success the NYS and the counties have had in decreasing opioid overdoses between 2017 and 2018.

111 2014-2016, NYS Department of Health, Bureau of Sexual Health and Epidemiology data as of June 2018
112 2016, NYS Expanded Behavioral Risk Factor Surveillance System as of February 2018
113 2014-2016, NYS Vital Statistics data as of May 2018
114 2016, NYS Expanded Behavioral Risk Factor Surveillance System as of February 2018
115 2012-2014, NYS SPARCS data as of August 2016
116 2019, County Health Rankings, 2018 data
117 NYS Vital Statistics data as of May 2018; NYS SPARCS data as of December 2017
Opioid use includes both synthetics and heroin, and the problem has become exacerbated by the lacing of opioids with deadly additives such as fentanyl. Increased use of naloxone has helped to decrease the number of fatalities from overdoses and medication assisted treatment programs are expanding throughout the counties. The opioid problem is further compounded by opioid addiction among pregnant women.

- The newborn drug-related diagnosis rate per 10,000 newborn discharges is 245.6 for Erie County and a much higher rate of 341.3 for Niagara County as compared to the NYS rate of 104.8.\textsuperscript{118}

Unintentional Injury and Falls

Unintentional injury and falls affects the health and quality of life of a community.

- The unintentional injury hospitalization rate per 10,000 is 63.0 for Erie County, 62.5 for Niagara County and 63.3 for NYS.
- The falls hospitalization rate per 10,000 is 41.6% in Erie County, 36.6% in Niagara County and 38.2% for all of NYS.\textsuperscript{119}

Rates of unintentional injury and falls increases among the older population, a growing population nationally and in Erie and Niagara Counties. In Erie County, the population 65 years and older is 17.5% of the general population and in Niagara County the percentage is 18.5% while the NYS percentage is 15.9%.\textsuperscript{120}

- The rate of unintentional injury hospitalizations per 10,000 among those 65 years and over is 223.1 in Erie County and 194.2 in Niagara County while the NYS rate is 227.9.\textsuperscript{121}
- The rate of hospitalizations due to falls per 10,000 population, aged 65+ years is 194.7 in Erie County, 135.2 in Niagara County as compared to the NYS rate of 183.6.\textsuperscript{122}

The Niagara County rate is much lower than Erie County and NYS indicating a decline in recent years which may be attributed to falls prevention programs implemented through Niagara County hospitals, agencies, and the Niagara County Departments of Health and Senior Services.

\textsuperscript{118} 2012-2014, NYS SPARCS data as of September 2016
\textsuperscript{119} 2016, NYS SPARCS data as of December 2017
\textsuperscript{120} US Census, Population Estimates as of July 2018
\textsuperscript{121} 2016, NYS SPARCS data as of September 2017
\textsuperscript{122} 2016, NYS SPARCS data as of September 2017
Environment

A community’s physical environment influences the health and wellness of its residents. The 2019 County Health Rankings on physical environment rank Erie County at 56 and Niagara County at 46 out of 62 NYS counties. This ranking is based on a summary composite score calculated from the following measures: daily fine particulate matter, drinking water violations, severe housing problems, driving alone to work, and long commute while driving alone.

- The percentage of households with at least one out of four housing problems including overcrowding, high housing costs, lack of kitchen facilities, or lack of plumbing is 15% in Erie County and 13% in Niagara County.123

The physical environment includes all of the parts of where individuals live and work (e.g., homes, buildings, streets and parks). The environment influences a person’s level of physical activity and ability to have healthy lifestyle behaviors. For example, inaccessible or nonexistent sidewalks or walking paths increase sedentary habits. These habits contribute to obesity, cardiovascular disease and diabetes. Other factors that contribute to healthy lifestyle behaviors are access to grocery stores and farmer’s markets, recreation facilities, and the presence of a clean and safe physical environment.124

Violence and Crime

A violent crime is a crime in which the offender uses or threatens to use violent force upon the victim. According to the FBI’S Uniform Crime Reporting Program, violent crime includes four offenses: murder and non-negligent manslaughter, rape, robbery, and aggravated assault. Violence negatively impacts communities by reducing productivity, decreasing property values, and disrupting social services.125 Violence and crime in a community further the health and well-being of its residents and children. Below statistics exemplify the high rates of crime and violence in Erie and Niagara counties.

- The violent crime rate per 100,000 population is 388.2 in Erie County, 291.8 in Niagara County, and 350.6 for NYS.126
- The age-adjusted assault hospitalization rate per 10,000 is 2.9 in Erie County, 2.2 in Niagara County and 3.2 for NYS.127

Community Engagement

Kaleida Health participated in collaborative efforts to develop the 2019-2021 Community Health Assessment – Community Health Improvement Plan (CHA-CHIP) for both Erie County and Niagara County. The goal of each county Department of Health and its partners, as required by the New York State Department of Health, was to identify two priority areas from the 2019-2024 NYS Prevention Agenda based on data and health areas of concern among county residents along with one disparity. Kaleida Health is supporting the development of the Erie County CHA-CHIP and the Niagara CHA-CHIP and is incorporating the county priority areas into its own Community Health Needs Assessment-Community Service Plan (CHNA-CSP) for its primary service areas of Erie County and Niagara County, in compliance with New York State Department of Health and IRS 501(r) (3) requirements. Additionally, Kaleida Health engaged its own staff and physicians in the process through a CHNA-CSP Steering Committee and work groups.

123 2019 County Health Rankings
124 2019 County Health Rankings
125 Keys to Health-Population Health Collaborative
126 2018, NYS Division of Criminal Justice Services
127 2016, NYS SPARCS data as of December 2017
As a part of the engagement process, the county work groups and Kaleida Health reviewed health data from the County Health Rankings, New York State Department of Health (NYSDOH), NYS Prevention Agenda Dashboard, Keys to Health of the Population Health Collaborative, NYS Vital Records, NYS Statewide Planning and Research Cooperative system (SPARCS), NYS Expanded Behavioral Risk Factor Surveillance Survey (eBRFSS) and other sources as well as information gathered from community input through consumer health surveys and focus group sessions.

**Erie County**

Kaleida Health participated in the collaborative planning and community engagement process of a work group led by the Erie County Department of Health to identify NYS Prevention Agenda priorities to address in 2019-2021. Kaleida Health hospitals located in Erie County are Millard Fillmore Suburban Hospital in Williamsville, NY; Buffalo General Medical Center/Gates Vascular Institute in Buffalo, NY; and John R. Oishei Children’s Hospital in Buffalo, NY. Other partners include Catholic Health System, Bertrand Chaffee Hospital, United Way of Buffalo & Erie County, Buffalo State College, D’Youville College, State University of New York at Buffalo, American Heart Association and the Population Health Collaborative.

The Erie County work group launched their efforts on May 17, 2018 and held regular meetings throughout 2018-2019 held at the Erie County Department of Health Offices. All meetings were held at the Erie County Department of Health offices. The Erie County work group collaborated to conduct a Consumer Health Survey, Community Conversation Focus Group Sessions, and Professional Stakeholder Focus Group Sessions to solicit input from the community, including the underserved, on the health status and health challenges of Erie County residents.

**Erie County Consumer Survey**

The Erie County work group developed an Erie County Consumer Survey and disseminated the survey both in electronic and print formats throughout the county beginning December 2018 through April 15, 2019. A representative sample of Erie County residents were surveyed to determine health status and community health needs, health behaviors, barriers to health, healthcare access and utilization, and demographic information. Prior to survey distribution, the Erie County Department of Health and the hospital partners reviewed the survey questions and made any changes as needed. There were several distribution sites, and efforts were made to target the low income and underserved population at sites including the office of the Erie County Department of Social Services, Eden-North Collins Food Pantry, Faith Community Nurse Group, Hispanics United, Independent Health Medicaid Member Engagement, Native American Community Services, LK Painter Community Center, Main Place Mall, Springville/Concord Food Pantry, St. Luke’s Mission of Mercy, and St. Paul AME Zion Church, among others. Additionally, local hospitals including Kaleida Health participated in survey distribution, as well as area malls, businesses, community-based organizations and government agencies. Kaleida Health posted the surveys on the Kaleida Health public website, Kaleida Health employee website, and on Facebook and Twitter. Completed surveys were received from 1,725 individuals.

Of the 1,725 respondents to the 2019 Erie County Consumer Survey, the top ten health issues by percentage of respondents include:

Erie County Community Conversation Focus Group Sessions

Throughout March to May 2019, the Erie County Department of Health in collaboration with its partners conducted six focus group sessions entitled Erie County Community Conversations to capture the local community voice on the status of health care and healthcare needs. The sessions were held at a geographic cross-section of sites and the targeted participants including the Marilla Free Library, Marilla; St. Luke’s Mission of Mercy, Buffalo; Independent Health, Depew; Café Taza, Buffalo; and the Legacy Restaurant, Springville. The sessions included minority and underserved representation and a wide cross-section of ages.

The top five health concerns that emerged in the Erie County Community Conversations were:

- Obesity (related to this was nutrition and lack of physical activity)
- Drug/substance abuse
- Affordability of and access to medical care (i.e. transportation, ability to get an appointment for a specialist, lack of primary care physicians, long waits for appointments)
- Safety related to crime
- Safety and health risks related to poor environmental conditions (crumbling infrastructure, brownfields, poor air and water quality)

Erie County Professional Stakeholder Focus Group Sessions

In February and March 2019, Kaleida Health collaborated with Catholic Health System and hosted three community stakeholder focus group sessions as a part of its collaborative efforts with the Erie County Department of Health and other organizations to gather information for the 2019-2021 Erie County Community Health Assessment and the hospitals’ Community Health Needs Assessments. Professionals from health, mental health and social services organizations provided input on the community’s current health status, needs and issues. A representative from the Population Health Collaborative facilitated the sessions. The sessions were held at Kaleida Health’s Millard Fillmore Suburban Hospital, Population Health Collaborative, and the Catholic Health Administrative and Regional Training Center. Participants indicated access to adequate and cost-effective care and care coordination and patient navigation as the top healthcare concerns in Erie County.

Niagara County

Kaleida Health’s DeGraff Memorial Hospital, located in North Tonawanda, NY, Niagara County participated in the collaborative planning and community engagement process of a work group led by the Niagara County Department of Health to identify NYS Prevention Agenda priorities to address in 2019-2021. Other partners include Niagara Falls Memorial Medical Center, Mount Saint Mary’s Hospital and Health Center, Eastern Niagara Hospital and Niagara County Department of Mental Health. The Population Health Collaborative facilitated the process and meetings on behalf of the group.

The Niagara County work group launched their efforts on September 17, 2018 and held regularly scheduled meetings throughout 2018-2019 at various partner locations. The Niagara County work group collaborated to conduct a Consumer Health Survey, Focus Group Sessions, and a countywide Community Stakeholder Event to solicit input from the community, including the underserved on the health status and challenges of Niagara County residents.

Niagara County Consumer Health Survey

The Niagara County work group developed a Niagara County Consumer Survey that was disseminated both in electronic and print formats throughout the county beginning October 2018 through March 2019. The Population Health Collaborative facilitated the process. A representative sample of Niagara County residents were surveyed to determine health status and community health needs, health
behaviors, barriers to health, healthcare access and utilization and demographic information. Survey links were provided on the Niagara County Department of Health’s website and Facebook page and shared with the partnering hospitals for additional electronic and print dissemination. In-person survey distribution was also conducted by various Niagara County public agencies and organizations. Kaleida Health and DeGraff Memorial Hospital posted the surveys on the Kaleida Health public website, Kaleida Health employee website, and on Facebook and Twitter. DeGraff also distributed paper copies throughout its facilities and at various community locations. Completed surveys were received from 1,492 individuals.

Of the 1,492 respondents to the 2019 Niagara County Consumer Survey, the following top community health concerns by percentage of respondents include:

Top Community Health Concerns/Conditions (respondents could select three)- access to affordable health care – 46.2%, physical fitness and exercise - 43.61%, ever told to have high blood pressure, or hypertension by a doctor/nurse – 39.1%, ever told to have high cholesterol – 32.3%, cancer – 37.1%, couldn’t get care because of cost (with health insurance, too expensive) – 31.6%, don’t eat fruits or vegetables because of cost – 32.8%, overweight/obesity/weight management – 22.03%, currently smoke most days/all days – 17.5%, ever told to have blood sugar problems, or diabetes by doctor/nurse – 16.2%

Niagara County Focus Group Sessions

Six focus groups were conducted in February and March of 2019 at five Niagara County locations including hospitals, subsidized housing facilities and community/senior centers. The focus groups were facilitated by Eastern Niagara Hospital, DeGraff Memorial Hospital, Mount St. Mary’s Hospital and the Niagara County Department of Health. The focus group questions were created by the Population Health Collaborative and used at all focus groups to maintain consistency. The majority of the respondents were female and older adults. When asked, “what health problems are the biggest concern to you and your community?” Responses included obesity, heart disease, loss of health insurance, diabetes, mental health, cancer, too many fast food places, chemical plans, and lifestyle choices.

Niagara County Community Stakeholder Meeting

A countywide key stakeholder meeting was convened on August 6, 2019 at the Niagara County Public Safety Training Center in Lockport, NY. The work group partners including the Niagara County Department of Health, Eastern Niagara Hospital, DeGraff Memorial Hospital, Mount St. Mary’s Hospital and Niagara Falls Memorial Medical Center developed the session agenda and logistics in coordination with the Population Health Collaborative serving as facilitator. Participating organizations included Cornell Cooperative Extension, Niagara Falls Central School District, Lake Plains Community Care, Niagara County Department of Health, Niagara County OEM, Roswell Park Comprehensive Cancer Center, March of Dimes, 2-1-1 WNY, Population Health Collaborative, Niagara County Sheriff’s Office, Cazenovia Recovery Systems, Pinnacle Community Services, Mount St. Mary’s Hospital, WNY Integrated Care, Niagara County Department of Mental Health & Substance Abuse Services, Independent Living Center of Niagara, American Heart Association, Kaleida Health, Niagara County Community College, Oishei Foundation’s Mobile Safety-Net Team, Western New York Prevention Resource Center, American Diabetes Association, and the Western New York Integrated Care Collaborative.

During this meeting, information and data was shared from the consumer health surveys and community focus group sessions. Participants were apprised of the new 2019-2024 NYS Prevention Agenda and Niagara County’s plans to focus on the following Prevention Agenda priority areas: Prevent Chronic Disease and Promote Well-being and Prevent Mental and Substance Use Disorders. Breakout sessions were held, and each organization had the opportunity to share their experiences and their
objectives under these priorities. This information was collected and used in the development of focus areas and interventions activities as a part of the 2019-2021 Niagara County CHA-CHIP and the CHNA-CSPs.

Health Issues of Concern and NYS Prevention Agenda Priorities

The Erie County and Niagara County collaborative county work groups considered collected health data from sources and community input through surveys and focus groups including the underserved to determine health issues of concern for each of the counties.

The healthcare needs of Erie County and Niagara County are significant, and there were several identified areas of concern. The work groups considered the prevalence of the disease or healthcare need, the needs of disparate populations, the resources required to combat the disease including any existing programs and funding capabilities, the identification of evidence-based practices, impact of social determinants of health, and whether the programs could be evaluated for quantifiable measures and program sustainability.

The top health issues of concern and the aligning NYS Prevention Agenda Priority Areas for Erie County were selected by the collaborative work group including Kaleida Health and are identified in the table below.

<table>
<thead>
<tr>
<th>Erie County and Kaleida Health</th>
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<tbody>
<tr>
<td>High rates of cardiovascular disease and high incidence of risk factors including high blood pressure, diabetes, obesity and smoking</td>
<td>Prevent Chronic Diseases</td>
</tr>
<tr>
<td>Increasing rise of opioid addiction and fatal overdoses</td>
<td>Promote Well-Being and Prevent Mental and Substance Use Disorders</td>
</tr>
<tr>
<td>Poor outcomes in maternal and infant health, particularly among underserved populations</td>
<td>*Promote Healthy Women, Infants and Children</td>
</tr>
</tbody>
</table>

*While only two Priority Areas are required per county, based on community need, the Erie County Department of Health added this third Priority Area.*

The top health issues of concern and the aligning NYS Prevention Agenda Priority Areas for Niagara County were selected by the collaborative work group including Kaleida Health and are identified in the table below.

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The low ranking of both Erie County and Niagara County among New York State (NYS) counties per the County Health Rankings and the chronic disease, substance use, and maternal, infant, and child health statistics identified in the Health Status of the Population section of this report and community input included in the Community Engagement Section of this report confirmed the need to prioritize these healthcare needs.
In May 2019, Kaleida Health convened a steering committee with the task of reviewing community health needs and identifying the focus areas, goals and interventions to include in this 2019-2021 Community Health Needs Assessment-Community Service Plan. Work groups consisting of clinical staff, administrative staff, and physicians were established to focus on the NYS Prevention Agenda Priority Areas identified by the counties including chronic disease, substance use, and maternal, infant and child health. The steering committee and work groups then identified the focus areas, interventions and disparities for Kaleida Health to address in this 2019-2021 Community Health Needs Assessment-Community Service Plan.

**Prevent Chronic Disease**

Cardiac care is a major service line at Kaleida Health hospitals, and more specifically at Buffalo General Medical Center/Gates Vascular Institute. As previously identified in the Health Status of the Population section of this report, cardiovascular disease is the number one cause of death in both Erie County and Niagara County. It also encompasses other areas of concern including high blood pressure, diabetes, obesity, lack of physical activity, smoking, access to care, poverty and many of the other social determinants of health. Additionally, the medically underserved and those of low income and minority populations are at greater risk of cardiovascular disease and its risk factors. See the Health Status of the Population and Community Engagement sections of this report for additional data.

The Erie County Department of Health, Niagara County Department of Health, area hospital and community partners are well positioned to address the region’s high incidence of cardiovascular disease and its risk factors. They have been providing community-wide programs including nutrition education, cardiovascular and diabetes self-management programs, smoking cessation programs, obesity prevention programs, and programs to increase physical activity, among others.

In response to community need, cardiac and stroke care is a major service line at Kaleida Health hospitals, and more specifically at Buffalo General Medical Center/Gates Vascular Institute. The hospital serves as a regional specialty care facility for the care and treatment of patients suffering from cardiovascular disease, stroke and other neurological conditions. Both Millard Fillmore Suburban Hospital and DeGraff Memorial Hospital serve as an urgent care gateway for patients requiring more specialized tertiary care at Buffalo General Medical Center/Gates Vascular Institute. John R. Oishei Children’s Hospital provides pediatric care.

See below cardiac and neuro discharge data for Kaleida Health hospitals.

| 2017 Kaleida Health Inpatient Discharges – Cardiac and Neuro/Stroke (SPARCs Data - IBM Market Expert, 2017) |
|-------------------------------------------------|---------|----------|----------|
| Kaleida Health Hospital                        | Cardiac | Neuro/Stroke | Combined |
| Buffalo General Medical Center/Gates Vascular Institute | 6,338    | 3,144     | 9,482    |
| Millard Fillmore Suburban Hospital             | 1,340    | 264       | 1,604    |
| DeGraff Memorial Hospital                     | 215      | 27        | 242      |
| John R. Oishei Children’s Hospital             | 102      | 229       | 331      |
| Totals                                         | 7,995    | 3,664     | 11,659   |

Kaleida Health’s cardiac and stroke services are utilized by all populations, including many who are medically underserved. 28.9% of 2018 total inpatient discharges, emergency department visits, outpatient visits at Buffalo General Medical Center/Gates Vascular Institute were reimbursed by
Medicaid. The hospital is located in the City of Buffalo, a city with a 30.9% poverty rate and where 37.1% of the city’s population is African American and 11.3% are Hispanic.128

Prevent Chronic Disease - Focus Areas, Goals and Interventions

Through this 2019-2021 CHNA-CSP, Kaleida Health will focus on cardiovascular disease and its risk factors through below NYS Prevention Agenda Focus Areas, Goals and Interventions. A 2018 update is provided for the interventions that were included in the 2016-2018 CHNA-CSP.

The selected Chronic Disease interventions and applicable disparities for Erie County and Niagara County are described more fully in the Kaleida Health Work Plan section of this report.

Focus Area: Healthy Eating and Food Security

Goals: Increase skills and knowledge to support healthy food and beverage options; Increase food security

This is a new CHNA-CSP focus area for Kaleida Health based on input from its CHNA-CSP steering committee and chronic disease work group. The work group overwhelmingly decided that it was important for Kaleida Health hospitals to reach out to surrounding low income and underserved neighborhoods and respond to identified community needs of improved nutrition and food security. The work group further identified a need for improved health among hospital employees. The following interventions were selected:

• Erie County – Diabetes and Pre-Diabetes Nutrition Education and Mobile Food Market on Buffalo General Medical Center Campus
• Erie County – Worksite Nutrition and Physical Activity Program for Kaleida Health Employees
• Niagara County – Health Education for Children through DeGraff Memorial Hospital
• Niagara County – Nutrition and Healthy Cooking Education Program at DeGraff Community Center
• Niagara County – “Little Free Pantry” at DeGraff Memorial Hospital

Focus Area: Preventive Care and Management

Goal: Increase early detection of cardiovascular disease, diabetes, pre-diabetes and obesity

The Kaleida Health Chronic Disease work group selected the following interventions:

• Erie County – Cardiovascular Screening and Risk Factor Education Program in OB-GYN Centers of John R. Oishei Children’s Hospital
• Erie County and Niagara County – Chronic Disease Education and Screening Programs through Kaleida Health Hospitals
• Erie County – Health Literacy Task Force Collaborative

2018 Update for Interventions included in Kaleida Health’s 2016-2018 CHNA-CSP

Cardiovascular Screening and Risk Factor Education Program in the OB-GYN Centers

Since 2014, Kaleida Health successfully implemented a Cardiovascular Screening and Risk Factor Education Program targeting underserved females in the OB/GYN Centers of John R. Oishei Children’s Hospital (OCH). Through an evidence-based self-assessment and clinical assessment tools, OB-GYN providers screen women for cardiovascular disease and its risk factors at their annual gynecological exam. Education and primary care referrals are also provided. The strength of this program is that it targets a low income, underserved, and high-risk female population and provides needed cardiovascular

screening and education on the preventive risk factors for heart disease. Approximately 81.5% of patients of the OB-GYN Centers are insured through Medicaid.

In 2018, the Kensington and Niagara Street clinics participated in the program. Of the 531 women offered the program at their OB/GYN visit, 497 (93.5%) were screened and risk stratified for cardiovascular disease. Of the 497 patients, 95 were determined at “high risk” for cardiovascular disease, 215 were determined “at risk,” and 187 were determined as having “no risk.” From January 1, 2019 through October 31, 2019, of the 402 patients offered the program, 366 participated. Of this total, 200 patients were determined “at risk” for cardiovascular disease, 46 were “high risk,” and 120 were “no risk.” The “at risk” and “high risk” patients were provided more targeted cardiovascular counseling and education from their provider, and all patients were referred to a primary care provider as needed.

Chronic Disease Education and Screening Programs through Kaleida Health Hospitals.

Increasing chronic disease education and screening programs for the public will lead to improved rates of cardiovascular disease, diabetes and other chronic diseases in Erie County.

In 2018, 22 chronic disease and risk factor education and/or screening events reaching approximately 4,000 individuals were held in Erie County and Niagara County as hosted by community organizations and Kaleida Health hospitals including Buffalo General Medical Center/Gates Vascular Institute, Millard Fillmore Suburban Hospital, John R. Oishei Children’s Hospital and DeGraff Memorial Hospital. Events focused on cardiovascular disease and risk factors, blood pressure screenings and cholesterol testing, nutrition for health, stroke, diabetes, women’s health, cancer, chronic pain, asthma in children, among others. An additional 17 Stroke Community Education Programs were held reaching over 3,000 individuals. Additionally, DeGraff Memorial Hospital hosted a six-week Chronic Disease self-management program through a partnership with the Niagara County Department of Health.

Promote Well-Being and Prevent Mental and Substance Use Disorders

The Erie County Department of Health and the Niagara County Department of Health work groups have identified the rising opioid addiction problem as a dire area of concern for their communities. The problem has been on the rise nationally and both Erie County and Niagara County have been significantly affected. See the Health Status of the Population and Community Engagement sections of this report for additional data.

In 2015 and 2016, opioid use increased dramatically in New York State (NYS) and the counties of Erie and Niagara were largely impacted. In 2016, the opioid burden (crude rate per 100,000 population) was 352.2 in Erie County and 416.5 in Niagara County, some of the highest rates in NYS. In addition to statistical data on opioid use, results from Erie County and Niagara County consumer surveys and focus group sessions indicated a dire need to address the problem in each of the counties.

In 2016, NYS and both Erie County and Niagara County put together task forces comprised of varied stakeholders to combat the problem. While rates have been decreasing in the last few years due to the work of the counties, law enforcement, hospitals, and community-based health, mental health and social service providers, the problem is still a major multi-faceted health concern exacerbated by lethal drug additives such as fentanyl. Use of Naloxone, Buprenorphine, Medication Assisted Treatment programs in each of the counties has provided more promising treatment for addictions. Kaleida Health emergency departments have the resources to combat opioid overdoses from a medical perspective and will continue to partner with the local health departments and others to assure treatment referral and life-saving medications for individuals who have overdosed or are at risk of overdose.

Through the 2019-2021 CHNA-CSP, Kaleida Health will focus on below NYS Prevention Agenda Focus Areas, Goals and Interventions. A 2018 update is provided for the interventions that were included in
the 2016-2018 CHNA-CSP. The selected interventions and applicable disparities for Erie County and Niagara County are described more fully in the Kaleida Health Work Plan section of this report.

Focus Area: Prevent Mental and Substance User Disorders
Goal: Prevent opioid and other substance misuse and deaths

This is a new CHNA-CSP focus area for Kaleida Health based on input from its CHNA-CSP steering committee and opioid work group. Kaleida Health interventions include the following:

- Erie County, Niagara County – Buprenorphine and Treatment Referral Program for Patients with Opiate Use Disorders in Kaleida Health Emergency Departments
- Erie County, Niagara County – Availability and Access to Opioid Overdose Reversal Medications in Kaleida Health Emergency Departments
- Erie County, Niagara County – Medication and Syringe Drop Boxes and Drug Take Back Days at Kaleida Health Hospitals

2018 Update for Intervention included in Kaleida Health’s 2016-2018 CHNA-CSP

Provider Awareness and Knowledge of Mental Health Conditions and Substance Use

While the opioid focus is new, Kaleida Health’s 2016-2018 CHNA-CSP for Niagara County included an intervention by DeGraff Memorial Hospital to provide employee awareness and education of mental health and substance use conditions and the available community referral resources. In 2018, a mental health and substance abuse database was created for emergency department staff to use as a referral resource for patients in need. Nearly 100% of DeGraff Emergency Department employees were educated in the use of the database. Additionally, DeGraff employees participated in two mini workshops by the Dale Association, a Niagara County mental health and substance abuse agency. The hospital was also a partner in an Opioid Conversation event at Tonawanda High School. DeGraff also provided information on mental health and substance abuse to participants at various community events in 2018 and hosted two Drug Take Back Days. Also in 2018, an Addiction Clinic Network of 20 WNY clinic location was established at all Kaleida Health hospital emergency departments including DeGraff.

Healthy Women, Infants and Children (Erie County only)

Erie County has some of the highest rates in the state for infant and maternal mortality, premature birth, low birthweight babies, and teen pregnancy and has therefore identified Maternal, Infant, and Child Health as a priority area. Poverty and behavioral and socio-economic factors such as poor nutrition, smoking, obesity, substance abuse, mental health status, as well as teen pregnancy, and a lack of adequate prenatal care and education are all contributing factors for poor infant and child health outcomes. Statistical data, consumer surveys and focus group sessions all indicate a need to address this health area of concern in Erie County and particularly in the high-risk zip codes in the City of Buffalo. See the Health Status of the Population and Community Engagement sections of this report for additional data.

A primary focus of Kaleida Health’s John R. Oishei Children’s Hospital (OCH) is maternal, infant and child health. Designated by New York State (NYS) as the only Regional Perinatal Center for Western New York (WNY), the hospital delivers the highest level of medical care available for critically ill infants and high-risk expectant mothers as well as for “normal” or low-risk deliveries. The hospital has the only Level IV Neonatal Intensive Care Unit in WNY staffed by pediatric subspecialists and surgeons supporting the healthcare needs of neonates and the only Level I Pediatric Trauma Unit serving the region, and has a Pediatric Intensive Care Unit. Approximately 65% of hospital patients are insured through Medicaid, and the hospital is home to Oishei Healthy Kids, a NYS Medicaid Health Home for Children.
Cancer – While cancer is the number two cause of death in Erie County and in Niagara County, it is not addressed in this Kaleida Health hospital plan and the counties’ 2019-2021 plans. The county work groups agreed to instead prioritize cardiovascular disease, the number one cause of death. The impact of cancer on the health of residents is well recognized and addressed with several ongoing cancer prevention, education, screening and treatment initiatives in place in the region. Roswell Park Comprehensive Cancer Center, located in Buffalo, holds the National Cancer Institute designation as a comprehensive cancer center and has a proven multidisciplinary approach. John R. Oishei Children’s Hospital partners with Roswell on the Roswell Park Oishei Children’s Cancer and Blood Disorders Program for children and adolescents with cancer and hematologic disorders. Millard Fillmore Suburban Hospital has a Survivor Steps cancer rehabilitation program for cancer survivors. In 2015, Kaleida Health acquired Cancer Care of Western New York, an oncology treatment practice. In 2018, Kaleida Health partnered with seven other healthcare providers to launch Great Lakes Health Cancer Care. This collaborative initiative is a comprehensive and integrated approach to cancer care for diagnosis and treatment, and includes research to find cures for cancer. In 2018 and 2019, Kaleida Health held two men’s prostate cancer outreach and screening events targeting Buffalo’s African American and Hispanic populations in collaboration with Western New York Urology and Cancer Care of Western New York.

Tobacco – Tobacco cessation programs are provided throughout Erie County and Niagara County, and Kaleida Health inpatient and outpatient programs continue to provide patient education on the health benefits of not smoking and will continue to refer patients to these programs. Erie County has elected to include tobacco cessation including vaping as one of its focus areas in its 2019-2021 CHA-CHIP. Kaleida Health supports both county Departments of Health in their tobacco cessation efforts.

Environment – Air and water quality, food safety, built environments to promote physical health, sustainability, healthy home and school environments are addressed through federal, state and local governments as well as neighborhood and community-based organizations. Kaleida Health’s John R. Oishei Children’s Hospital partners with the WNY Asthma Coalition to improve air quality in the home to improve adult and childhood asthma rates. The hospital further addresses home safety through its Lead Poisoning Prevention program.

Mental Health – Kaleida Health provides inpatient and outpatient behavioral health services for children through the Children’s Psychiatry Center of John R. Oishei Children’s Hospital. The Center also partners with other community-based providers to assure improved access to the most appropriate care for children with mental health conditions. Kaleida Health is a Great Lakes Health partner with Erie County Medical Center, home of the Regional Center of Excellence for Behavioral Health offering mental health and psychiatry services, as well as alcohol and drug addiction detoxification and rehab.

Communicable Diseases – Both Erie County and Niagara County provide public awareness and education on communicable diseases including HIV, sexually transmitted diseases, Hepatitis C virus as well as the importance of vaccines, and the improvement of infection control in healthcare facilities. All of these areas are priorities for Kaleida Health and its hospitals adhere to all New York State requirements for communicable diseases including infection control and flu vaccines for employees. John R. Oishei Children’s Hospital provides the following:

- **Youth Link and Be PrEPared Program** – supportive services to youth and young adults, ages 13-24, who identify as LGBTQ+, are living with or are at risk for HIV and STIs, are experiencing homelessness, sexual abuse, substance use and/or mental health related issues.
- The Family Planning Clinic and the Women’s Health Centers address STIs, HIV and HCV.
Given the resources, expertise and innovative programs of OCH, Kaleida Health selected Healthy Women, Infants and Children as a collaborative priority area with Erie County in this 2019-2021 CHNA-CSP. Kaleida Health’s CHNA-CSP steering committee and maternal, infant and child health work group further identified below NYS Prevention Agenda Focus Areas, Goals and Interventions. A 2018 update is provided below for the interventions that were included in the 2016-2018 CHNA-CSP. The selected Maternal, Infant, and Child interventions and applicable disparities for Erie County are described more fully in the Kaleida Health Work Plan section of this report.

Focus Area: Maternal and Women’s Health
Goals: Reduce maternal mortality and morbidity
• Erie County – Centering Pregnancy Program at Kensington OB-GYN Center

Focus Area: Perinatal and Infant Health
Goals: Reduce infant mortality and morbidity; Increase breastfeeding
• Erie County – Safe Sleep Initiative at John R. Oishei Children’s Hospital (OCH) and Millard Fillmore Suburban Hospital (MFSH)
• Erie County – Online Parent Education Program through Millard Fillmore Suburban Hospital (MFSH)
• Erie County – Breastfeeding Promotion and Education Program at John R. Oishei Children’s Hospital (OCH) and Millard Fillmore Suburban Hospital (MFSH)

2018 Update for Intervention Included in Kaleida Health’s 2016-2018 CHNA-CSP
Breastfeeding Promotion and Education Program
Since 2014, breastfeeding has been a key initiative of John R. Oishei Children’s Hospital (OCH) and Millard Fillmore Suburban Hospital (MFSH) with the goal of improving its “initiation” and “exclusive” breastfeeding rates to improve the health of both mothers and children. While much progress has been made, the hospitals continue their efforts to provide promotion and education initiatives to increase breastfeeding rates. Both OCH and MFSH follow the guidelines of the World Health Organization (1998) – Evidence for the Ten Steps to Successful Breastfeeding. The labor and delivery, neonatal intensive care units (NICU), nursery, and postpartum units of OCH and MFSH will continue to provide the Breastfeeding Bill of Rights for inpatients to foster skin-to-skin contact within the golden hour, offer rooming in, limit access to formula, and have trained lactation support to foster successful breastfeeding.

At OCH, the average exclusive breastfeeding rate for 2018 was 36.5%, and the rate for initiation breastfeeding was 70.9%. At MFSH, the average exclusive breastfeeding rate for 2018 was 54.8%, and the rate for initiation breastfeeding rate was 85.5%.

While exclusive rates have been lower than anticipated, the hospitals have been implementing evidence-based policy and education initiatives to increase breastfeeding rates in alignment with the Healthy People 2020 Goals and NYS Prevention Agenda. Exclusive breastfeeding rates at OCH are lower than rates at MFSH and lower than the NYS rate of 41.8%. This may be attributed to the hospital’s Buffalo location where 30.9% of the city’s population live in poverty and 65.3% of OCH patients are insured through Medicaid.

Areas of Concern Not Addressed in this 2019-2021 CHNA-CSP
Erie County and Niagara County Departments of Health and local hospitals provide a wide spectrum of healthcare services to address many of the healthcare needs identified in the this Community Health Needs Assessment-Community Service Plan and include those not identified in the Erie County CHA-CHIP, Niagara County CHA-CHIP. See below and refer to the We Are Kaleida Health and Care for the
Underserved sections of this report for information on other areas that Kaleida Health is responding to community need.

Cancer – While cancer is the number two cause of death in Erie County and in Niagara County, it is not addressed in this Kaleida Health hospital plan and the counties’ 2019-2021 plans. The county work groups agreed to instead prioritize cardiovascular disease, the number one cause of death. The impact of cancer on the health of residents is well recognized and addressed with several ongoing cancer prevention, education, screening and treatment initiatives in place in the region. Roswell Park Comprehensive Cancer Center, located in Buffalo, holds the National Cancer Institute designation as a comprehensive cancer center and has a proven multidisciplinary approach. John R. Oishei Children’s Hospital partners with Roswell on the Roswell Park Oishei Children’s Cancer and Blood Disorders Program for children and adolescents with cancer and hematologic disorders. Millard Fillmore Suburban Hospital has a Survivor Steps cancer rehabilitation program for cancer survivors. In 2015, Kaleida Health acquired Cancer Care of Western New York, an oncology treatment practice. In 2018, Kaleida Health partnered with seven other healthcare providers to launch Great Lakes Health Cancer Care. This collaborative initiative is a comprehensive and integrated approach to cancer care for diagnosis and treatment, and includes research to find cures for cancer. In 2018 and 2019, Kaleida Health held two men’s prostate cancer outreach and screening events targeting Buffalo’s African American and Hispanic populations in collaboration with Western New York Urology and Cancer Care of Western New York.

Tobacco – Tobacco cessation programs are provided throughout Erie County and Niagara County, and Kaleida Health inpatient and outpatient programs continue to provide patient education on the health benefits of not smoking and will continue to refer patients to these programs. Erie County has elected to include tobacco cessation including vaping as one of its focus areas in its 2019-2021 CHA-CHIP. Kaleida Health supports both county Departments of Health in their tobacco cessation efforts.

Environment – Air and water quality, food safety, built environments to promote physical health, sustainability, healthy home and school environments are addressed through federal, state and local governments as well as neighborhood and community-based organizations. Kaleida Health’s John R. Oishei Children’s Hospital partners with the WNY Asthma Coalition to improve air quality in the home to improve adult and childhood asthma rates. The hospital further addresses home safety through its Lead Poisoning Prevention program.

Mental Health – Kaleida Health provides inpatient and outpatient behavioral health services for children through the Children’s Psychiatry Center of John R. Oishei Children’s Hospital. The Center also partners with other community-based providers to assure improved access to the most appropriate care for children with mental health conditions. Kaleida Health is a Great Lakes Health partner with Erie County Medical Center, home of the Regional Center of Excellence for Behavioral Health offering mental health and psychiatry services, as well as alcohol and drug addiction detoxification and rehab.

Communicable Diseases – Both Erie County and Niagara County provide public awareness and education on communicable diseases including HIV, sexually transmitted diseases, Hepatitis C virus as well as the importance of vaccines, and the improvement of infection control in healthcare facilities. All of these areas are priorities for Kaleida Health and its hospitals adhere to all New York State requirements for communicable diseases including infection control and flu vaccines for employees. John R. Oishei Children’s Hospital provides the following:

- **Youth Link and Be PrEPared Program** – supportive services to youth and young adults, ages 13-24, who identify as LGBTQ+, are living with or are at risk for HIV and STIs, are experiencing homelessness, sexual abuse, substance use and/or mental health related issues.
- **The Family Planning Clinic and the Women’s Health Centers** address STIs, HIV and HCV.
Kaleida Health Work Plan – Focus Areas, Goals, and Interventions

Kaleida Health, with hospitals located in Erie County and Niagara County, collaborated with the Erie County Department of Health, Niagara County Department of Health, and other hospital and community partners to select the NYS Prevention Agenda Priority Areas to address in each county’s 2019-2021 Community Health Assessment-Community Health Improvement Plan (CHA-CHIP). Need data, consumer surveys, and focus group sessions, with input from the medically underserved, were all considered in the determination of each county’s priorities. The New York State Department of Health asked each county to select two Priority Areas and one Disparity. Both Erie County and Niagara County selected Prevent Chronic Disease and Prevent Mental and Substance Use Disorders. Erie County added a third priority to Promote Health Women, Infants and Children. Disparities were selected by each entity based on selected interventions.

Kaleida Health work groups comprised of clinical staff and physicians were further enlisted to determine the hospital focus areas, goals and interventions for each Priority Area for Erie County and Niagara County. Disparities were also selected as applicable. The selected interventions are included below in this Work Plan of the 2019-2021 Kaleida Health Community Health Needs Assessment-Community Service Plan (CHNA-CSP). Kaleida Health submitted its Work Plan to each of the county Departments of Health for inclusion in respective county 2019-2021 CHA-CHIP documents.

Prevent Chronic Disease

Erie County

1. Erie County Intervention: Community Diabetes and Pre-diabetes Nutrition Education and Mobile Food Market on Buffalo General Medical Center (BGMC) Campus

Focus Area: Healthy Eating and Food Security
Goals: Increase skills and knowledge to support healthy food and beverage options; Increase food security
Disparity Population: low income, minorities at high risk for diabetes
Objectives:
- Nutrition education focusing on chronic disease including diabetes and pre-diabetes is provided to community members to increase skills and knowledge for healthy eating and decrease high rates of chronic disease among high-risk populations.
- A mobile food market with low-cost fresh produce to be set up weekly at Buffalo General Medical Center (BGMC) to provide a source for food security for the residents of the hospital’s surrounding underserved neighborhoods.

Description:
- Nutrition Education Sessions to be provided by Kaleida Health registered dieticians to underserved individuals at high risk for diabetes and pre-diabetes at local churches, community centers, and employers. Committed 2019 education locations include US Army Corps. of Engineers, William Emslie YMCA, Richmond Summer Senior Center. Additional sites will be added for 2020 and 2021.
- A partnership was developed in 2019 with the African Heritage Food Co-Op for a mobile food market to be set up at an outdoor site, one day per week at BGMC, 100 High Street in Buffalo from May through October in 2020 and 2021. Fresh fruits and produce at low prices will be available to residents of the hospital’s low-income neighborhoods as well as patients and employees. Kaleida Health will provide nutrition education information to the mobile food
market to distribute to customers. The mobile food market will set up a tent and at least three tables with fruits and vegetables, adjacent to the hospital’s east entrance. Kaleida Health will promote the mobile food market to the hospital’s surrounding low-income neighborhoods, patients and employees. It will be a source for food security for many of the underserved.

- Evidence-based sources: Community Strategies and measurements to prevent Obesity in the United States; The Community Guide – Obesity Work site programs; US.Gov Taking action on social determinates of health in clinical practice, CMAJ- JAMC.

Outcomes:
- 2019 – Program planning and development; and program implementation with three nutrition education sessions provided in 2019
- 2020, 2021 – Program implementation with six nutrition education sessions to be provided annually, Mobile Food Market on site weekly at Buffalo General Medical Center from May-October, and nutrition education flyers to be provided to customers

Person(s) Responsible:
- Clinical Dietician
- Senior Marketing Associate – Community Relations
- Director, Ambulatory Clinics

Partner(s):
- Community Organizations – to host the nutrition education sessions
- Alex Wright African Heritage Food Co-Op – to set up the Mobile Food Market at Buffalo General Medical Center

2. Erie County Intervention: Worksite Nutrition and Physical Activity Programs for Kaleida Health Employees

Focus Areas: Healthy Eating and Food Security, Physical Activity

Goals: Increase skills and knowledge to support health food and beverage options; Increase food security; Physical activity – reduce obesity and risk of chronic disease

Disparity Population: open to all employees

Objectives:
- Nutrition education focusing on chronic disease including diabetes and pre-diabetes is offered to Kaleida Health employees to increase skills and knowledge for healthy eating and decrease high rates of chronic disease among high-risk populations. Exercise programs are also offered to employees to encourage physical activity and a healthy lifestyle.

Description:
- Kaleida Health dieticians to provide Nutrition Tune Up Days in which employees sign up to receive a 20-minute one-on-one nutrition education session with a registered dietician. Sessions to be scheduled at Buffalo General Medical Center (BGMC), John R. Oishei Children’s Hospital (OCH), Millard Fillmore Suburban Hospital (MFSH), and Larkin administrative offices.
- BGMC and OCH to promote employee/community participation in campus wellness events in partnership with the Buffalo Niagara Medical Campus (BNMC) including Walks on Wednesday, Group Bike Ride, Zumba, Yoga, Market in the Park, among others. Kaleida Health will further work to develop new worksite wellness initiatives in collaboration with Metz, its hospital food vendor and with the BNMC.
- Evidence-based sources: Community Strategies and measurements to prevent Obesity in the United States; The Community Guide – Obesity Work site programs; US.Gov Taking action on social determinates of health in clinical practice, CMAJ- JAMC
Outcomes:

- 2019 – Program planning and implementation with two Nutrition Tune Up Days to be provided. A Nutrition Tune Up Day was held October 22, 2019 at Buffalo General Medical Center and November 19, 2019 at John R. Oishei Children’s Hospital
- 2020 – Implementation with two Nutrition Tune Up Days to be provided. A Nutrition Tune Up Day is scheduled at Kaleida Health’s corporate offices located at Larkin on January 20, 2020.
- 2021 – Implementation with four Nutrition Tune Up Days to be provided

Person(s) Responsible:
- Clinical Dietician
- Senior Marketing Associates

Partner(s):
- Buffalo Niagara Medical Campus – sponsor campus-wide wellness activities

3. Erie County Intervention: Cardiovascular Education & Screening Program in OB-GYN Centers of John R. Oishei Children’s Hospital (OCH)

Focus Area: Preventive Care and Management

Goal: Increase early detection of cardiovascular disease, diabetes, pre-diabetes and obesity

Disparity Population: women including low income, medically underserved – 81.5% of clinic patients are insured by Medicaid

Objectives:

- Using evidence-based cardiovascular self-assessment and clinical assessment tools, OB-GYN providers screen women for cardiovascular disease and its risk factors at their annual gynecological exam at the Kensington and Niagara Street OB-GYN Centers of OCH. Education and primary care referrals are also provided.
- Increasing cardiovascular screening and risk factor identification, education and referral for this female and primarily low-income population will lead to improved rates of cardiovascular disease in the community.

Description:

- Patients presenting for their annual gynecological exam at the OCH Kensington and Niagara Street OB-GYN Centers will complete an evidence-based cardiovascular risk factor self-assessment and then provide the assessment to their provider in the exam room. Self-assessment updated in 2019 and approved by clinic providers. Evidence-based source: National Heart, Lung and Blood Institute U.S. Department of Health and Human Services (December 1, 2017). Who is at Risk for Heart Disease as Retrieved from https://www.nhlbi.nih.gov/health/health-topics/topics/hdw/at risk
- Providers review the patient’s self-assessment, and based on evidence-based criteria, conduct a clinical assessment to determine if the patient is at risk for cardiovascular disease. The provider documents risk and advisement data in the EMR for tracking and outcome purposes.
- Evidence-based educational materials on cardiovascular disease and its risk factors are provided to patients in English and Spanish including (1) “The 2020 Impact Goal Including Life’s Simple 7” and (2) Change Your Salty Ways in Only 21 Days” (American Heart Association).
- Primary care physician (PCP) referral information is provided as needed.

Outcomes:

- 2019 –
  - This program was included in the 2016-2018 CHNA-CSP and continued throughout 2019. Program planning for 2020-2021 also occurred in 2019. From January 4, 2019 through September 30, 2019, the total patient offered the program at their annual OB-GYN exam
was 402 with 36 declining the program. Of the 366 patients participating, 46 were determined “high risk,” 46 were “at risk” and 120 were “no risk.”

- 2019 – The OB-GYN providers and clinic staff in collaboration with primary care reviewed the existing program and are making changes to better meet the needs of providers and patients. The patient self-assessment was revised and EMR will be modified to offer only an “at risk” option with all “at risk” patients will receive education, advisement and PCP referral as needed.
- 2020, 2021 – Program Implementation with an annual goal to provide cardiovascular screening and risk factor education to 60% of patients presenting at the OB-GYN Centers for their annual gynecological exam.

**Person(s) Responsible:**
- Clinic Manager
- OB-GYN Physician

**Partner(s):**
- OB-GYN providers – provide patient screening, education, and referral

4. Erie County Intervention – Health Literacy Task Force Collaborative

**Focus Area:** Preventive Care and Management

**Goal:** Increase early detection of cardiovascular disease, diabetes, pre-diabetes, obesity and other chronic disease

**Disparity Population:** low literacy

**Objectives:**
- To improve health education materials for those with limited language and literacy skills to improve patient understanding of chronic disease including its risk factors and disease management.

**Description:**
The Health Literacy Task Force is a collaborative initiative of the Erie County Department of Health and includes representatives from Kaleida Health, Catholic Health System and other organizations. The task force will work to improve health education materials for those with limited language and literacy skills in Erie County to revise materials to be more patient/user friendly. Initially, the focus will be on heart disease/diabetes and targeting the City of Buffalo where the literacy rate for many is at the 3rd grade level. The objective is to improve patient understanding and management of chronic disease and its risk factors. A dietician from Buffalo General Medical Center’s Nutrition and Wellness Center will represent Kaleida Health on the Task Force. Evidence-based sources include Centers for Disease Control and Prevention, [https://www.cdc.gov/healthliteracy/index.html](https://www.cdc.gov/healthliteracy/index.html).

**Outcomes:**
- 2019 – Program Planning in collaboration with Erie County Department of Health and partners. A dietician was recruited to represent Kaleida Health on the task force
- 2020, 2021 – Implementation – Participation in task force meetings and provide input on the development of patient/user friendly health education materials

**Person Responsible:**
- Clinical Dietician

**Partner(s):**
- Erie County Department of Health (lead)
- Catholic Health System
- Community-Based Organizations
Prevent Chronic Disease
Niagara County

1. Niagara County Intervention – Health Education for Children through DeGraff Memorial Hospital

Focus Area: Healthy Eating and Food Security
Goals: Increase skills and knowledge to support healthy food and beverage options
Disparity Population: open to all
Objectives:
- Teddy Bear Clinics to be offered to children ages 3-8 through partnerships with local schools. Students will receive an educational program designed to incorporate fun activities while learning about hand hygiene, medical care, nutrition and exercise.

Description:
- Through the Teddy Bear Clinics, DeGraff clinical staff will provide health education to children ages 3-8 years in local schools. Children will visit four health education stations during the one-hour program. Take home educational materials will be provided to the participating students. Stations include:
  - Hand Hygiene – proper handwashing techniques and information about germs
  - Triage – bandaging of a bear will be demonstrated and information about care in an ED or other clinical setting
  - Exercise – health activities and importance of exercise as it related to chronic disease; i.e. heart disease, diabetes. Evidence-based sources: Zulke, L.J. & Engel, M.E. (2013), Global Heart, 8(3): 235-239

Outcomes:
- 2019 – Program planning and implementation of a “Teddy Bear Clinic” for 60 student participants on October 30, 2019, at St. John’s Lutheran School
- 2020, 2021 – Implementation of one Teddy Bear Clinic each year

Person Responsible:
- ED Manager

Partner(s):
- Schools – host the sessions

2. Niagara County Intervention - Nutrition and Healthy Cooking Education Program at DeGraff Community Center

Focus Area: Healthy Eating and Food Security
Goals: Increase skills and knowledge to support healthy food and beverage options.
Disparity Population: open to all
Objectives:
- Nutrition and Healthy Cooking Education will be offered to the community to increase awareness and knowledge of the importance of healthy nutrition and its impact on chronic disease.

Description:
- A nutritionist from the Cornell Cooperative Extension Niagara County will present nutrition education and healthy cooking demonstrations to community members through Eat Smart NY.
The program is a statewide, USDA funded Supplemental Nutrition Assistance Education program (SNAP-ED). It helps families with limited incomes to eat more fruits and vegetables, drink fewer sweetened beverages and practice healthy lifestyles. The programs will be held at the DeGraff Community Center and will be promoted throughout the community. Evidence-based source: USDA and NYS approved. Evidence-based source: USDA and New York State approved.

Outcomes:
- 2019 – Program planning and partnership developed with Cornell Cooperative Extension
- 2020, 2021– One Nutrition and Healthy Cooking Education Program provided each year.
- An anonymous and voluntary post presentation survey is offered after each session regarding use of SNAP, WIC – results will be available

Person Responsible:
- ED Manager

Partner:
- Cornell Cooperative Extension – host of nutrition education program

3. Niagara County Intervention: Little Free Pantry at DeGraff Memorial Hospital

Focus Area: Healthy Eating and Food Security
Goal: Increase food security
Disparity Population: low income and food insecure

Objectives:
- The Little Free Pantry program will provide community access to a free source of food at a self-contained pantry to promote food security among underserved populations.

Description:
- The Little Free Pantry is a 4’ x 4’ standing display crate to be located outside on the campus of DeGraff Memorial Hospital that will serve as a food pantry for those who are food insecure. Hospital staff will monitor the pantry, keep the pantry filled and maintained, and members of the community are welcome to access the food in the pantry 24/7 as needed to meet their needs. Community members may also help to stock the pantry. Take-home nutrition education materials will be made available at the pantry. Evidence-based source: The Little Free Pantry is an international initiative that utilizes a familiar, compelling concept to pique local interest in and action against local food insecurity - http://www.littlefreepantry.org/. North Tonawanda has set up Little Food Pantries through the community with more information accessed on Facebook - https://www.facebook.com/pg/TLFP.NT/about/?ref=page_internal

Outcomes:
- 2019 - Partnership developed with “Little Free Pantry” of North Tonawanda and a pantry is set up at DeGraff Memorial Hospital
- 2020, 2021 - “Little Free Pantry” is operational. The number of nutrition education materials added to the pantry and then removed from the pantry will be tracked.

Person Responsible:
- ED Manager

Partner:
- Little Free Pantry of North Tonawanda – provide program information and support through its social media pages
Prevent Chronic Disease
Erie County and Niagara County

1. Erie County and Niagara County Intervention: Chronic Disease Education and Screening Programs through Kaleida Health Hospitals

Focus Area: Preventive Care and Management
Goals: Increase early detection of cardiovascular disease, diabetes, pre-diabetes, obesity and other chronic disease
Disparity Population: open to all
Objectives:
- Through community outreach, evidence-based chronic disease education and/or screening programs are provided to the community to increase knowledge of chronic diseases and risk factors, and thereby decrease chronic disease prevalence.

Description:
- Provide community outreach and conduct evidence-based chronic disease education and/or screening to increase knowledge of chronic diseases and risk factors at various community events in partnership with local organizations and at hospital-based public events. Providers and clinicians are presenters. Participating hospitals include Buffalo General Medical Center/Gates Vascular Institute and Millard Fillmore Suburban Hospital in Erie County and DeGraff Memorial Hospital in Niagara County.
- Provide the Medically Speaking Program through Kaleida Health social media. Videos of physicians and other clinicians presenting on various health topics are shared on social media platforms. Promote programs/events both internally throughout Kaleida Health and externally to the community.

Outcomes:
- 2019 – The health education and screening program was included in the 2016-2018 CHNA-CSP and continued in 2019 with 14 educational and screening programs conducted from January 1, 2019 through October 31, 2019 reaching an estimated 4,500 individuals in Erie and Niagara counties. The social media views of each Medically Speaking program ranged from 193 to 781 views. Planning took place in 2019 for all of the interventions.
- 2020, 2021 – Educate Erie County and Niagara County residents in chronic disease and risk factor identification at approximately 8 to 10 community-based and hospital-based public events annually in Erie County and 3 to 5 in Niagara County. Place Medically Speaking videos on social media approximately one time per month. Obtain updated flyers on self-management programs through list serve of WNY Integrated Care Collaborative.

Person(s) Responsible:
- Senior Marketing Associates – event planning, promotion

Partner(s):
- Community Organizations – outreach and hosting of programs
Prevent Mental and Substance Use Disorders
Erie County and Niagara County

1. Erie County and Niagara County Intervention: Buprenorphine and Treatment Referral Program for Patients with Opiate Use Disorders in Kaleida Health Emergency Departments (Also in Niagara County)

Focus Area: Prevent mental and other substance use disorders
Goal: Prevent opioid and other substance misuse and deaths
Disparity Population: substance users
Objectives:
• Increase availability of/access and linkages to medication-assisted treatment (MAT) including Buprenorphine with opioid use disorders in Kaleida Health emergency departments.

Description:
• Kaleida Health emergency departments of Buffalo General Medical Center/Gates Vascular Institute and Millard Fillmore Suburban Hospital in Erie County and DeGraff Memorial Hospital in Niagara County to participate in Buffalo MATTERS, a Hospital-Initiated Buprenorphine and Treatment Referral Program. Buffalo MATTERS is a program developed by Joshua Lynch, MD, and others in the Department of Emergency Medicine at the UB Jacobs School of Medicine and Biomedical Science. Dr. Lynch is a UBMD physician affiliated with Kaleida Health. The program is open to all hospitals throughout Western New York, and other partners include John R. Oishei Foundation, Erie County and NYS Departments of Health and is expanding throughout New York State. The program’s purpose is to increase access to the Buprenorphine-based opiate use disorder treatment and to immediately refer patients to treatment. An online, real-time referral program directly in the emergency department connects patients with a network of 20 Western New York treatment agencies. There are currently 120 weekly treatment appointments available to Western New York patients. Evidence-based source: Larochelle, M. R., et al. (2018). "Medication for Opioid Use Disorder After Nonfatal Opioid Overdose and Association with Mortality: A Cohort Study." Ann Intern Med, 169(3): 137-145.
• Kaleida Health adult primary care clinics are working to have providers trained and certified in Medication Assisted Treatment.

Outcomes:
• 2019 – Program implementation – From January 1, 2019 through September 30, 2019, 22 referrals to Buffalo MATTERS were made for patients in Kaleida Health emergency departments including Buffalo General Medical Center (six referrals), DeGraff Memorial Hospital (13 referrals), and Millard Fillmore Suburban Hospital (three referrals). 25 referrals estimated for 2019.
• 2020, 2021 – Program implementation with 25 referrals estimated each year

Person(s) Responsible:
• Buffalo MATTERS physician liaison
• ED Managers

Partner:
• Buffalo MATTERS – to provide referral data

2. Erie County and Niagara County Intervention: Availability and Access to Opioid Overdose Reversal Medications in Kaleida Health Emergency Departments (also in Niagara County)

Focus Area: Prevent mental and other substance use disorders
Goal: Prevent opioid and other substance misuse and deaths
Disparity Population: substance users
Objectives:
- Provide for availability, access, and linkages to overdose reversal medications including naloxone.

Description:
- Kaleida Health emergency departments at Buffalo General Medical Center and Millard Fillmore Suburban Hospital in Erie County and DeGraff Memorial Hospital in Niagara County continue to provide patient access to overdose reversal medication include Naloxone. Kaleida Health emergency department staff are trained in dispensing of Naloxone. Evidence-based source: Oregon Health and Science University. Best Practices in Naloxone Treatment Programs for Opioid Overdose.

Outcomes:
- 2019 – In January 2019 through August 2019, 9 Nalaxone Kits were provided to patients/families in Kaleida Health emergency departments through the Kaleida Health Pharmacy.
- 2020, 2021 – It is anticipated the 12 kits will be distributed each year. More to be made available as needed.

Person(s) Responsible:
- Pharmacy Director
- ED Managers

Partner:
- Erie County Department of Health – Erie County Opiate Epidemic Task Force – provide partnership and support

3. Erie County and Niagara County Intervention: Medication and Syringe Drop Boxes and Drug Take Back Days at Kaleida Health Hospitals (also in Niagara County)

Focus Area: Prevent mental and other substance use disorders
Goal: Prevent opioid and other substance misuse and deaths
Disparity Population: open to all

Objectives:
- Provide for permanent, safe disposal sites for prescription drugs and syringes and participation in organized take-back days to decrease the availability of these drugs in the community.

Description:
- In partnership with the Erie County Department of Health, Medication and Syringe Drop Boxes are provided at the emergency departments of Buffalo General Medical Center/Gates Vascular Institute, John R. Oishei Children’s Hospital, and Millard Fillmore Suburban Hospital in Erie County and DeGraff Memorial Hospital in Niagara County. Erie County and Niagara County Sheriff’s Offices pick up and transport contents of drop boxes on a regular basis to Covanta Energy for incineration.
- Drug Take Back Days are held at Millard Fillmore Suburban Hospital and DeGraff Memorial Hospital.
- Evidence-based source: FDA, Safe Disposal of Medicines

Outcomes:
- 2019 - Medication and syringe drop boxes placed on-site in emergency departments of all four Kaleida Health hospitals. Two Drug Take Back Days held in 2019 at Millard Fillmore Suburban Hospital in Erie County and two held in 2019 at DeGraff Memorial Hospital in Niagara County.
• 2020, 2021 - Medication and syringe drop boxes continue to be available on-site in emergency departments of all four Kaleida Health hospitals. Two Drug Take Back Days to be held at Millard Fillmore Suburban Hospital in Erie County and two to be held at DeGraff Memorial Hospital in Niagara County.

**Person(s) Responsible:**
- ED Managers – drop boxes
- Pharmacy Director – Drug Take Back Days

**Partner(s):**
- Erie County Department of Health – Erie County Opiate Epidemic Task Force, Erie County Sheriff’s Office, Niagara County Sheriff’s Office, [www.thepointny.org](http://www.thepointny.org) for location information - Medication and Syringe Drop Boxes
- DEA (Drug Enforcement Administration) National Prescription Drug Take Back Days – program sponsor

**Promote Healthy Women, Infants, and Children**

**Erie County (only)**

1. **Erie County Intervention: Centering Pregnancy Program at Kensington OB-GYN Center**

**Focus Area:** Maternal and women’s health  
**Goal:** Reduce maternal mortality and morbidity  
**Disparity Population:** low income, Medicaid  
**Objectives:**
- To provide the evidence-based Centering Pregnancy Program to patients at the Kensington OB-GYN Center of John R. Oishei Children’s Hospital (OCH) per the guidelines of the Centering Healthcare Institute.

**Description:**
- The Kensington OB-GYN Center will expand its Centering Pregnancy Program through a grant and partnership with the New York State Department of Health’s First 1000 Day’s on Medicaid Centering Pregnancy Expansion Project.
- Centering Pregnancy is group prenatal care bringing women due at the same time out of exam rooms and into a comfortable group setting. Centering group prenatal care follows the recommended schedule of 10 prenatal visits, but each visit is 90 minutes to two hours long - giving women 10 times more time with their provider than women in traditional care. The same medical provider and a trained facilitator lead a group of 8-10 patients at each visit. Group prenatal care begins around 14-16 weeks after the patients has had a normal nuchal screen. Group care for Centering patients follow the normal prenatal guidelines for being seen: every four weeks until 28 weeks, every two weeks until 36 weeks, and then weekly until delivery. There are the same number of ultrasounds and the same blood work as received by patients under non-centering prenatal care. The facilitator along with the medical provider provide support and education in what is pertinent to that week's gestational age.
- Facilitators and providers lead facilitative discussion and interactive activities designed to address important and timely health topics while leaving room to discuss what is important to the group. Centering materials help moms and providers ensure that everything from nutrition, common discomforts, stress management, labor and delivery, breastfeeding and infant care are covered in-group.
- Evidence-based source: Centering Health Care Institute [https://www.centeringhealthcare.org/what-we-do/centering-pregnancy](https://www.centeringhealthcare.org/what-we-do/centering-pregnancy) - Centering Pregnancy is proven to result in the following:
Better Health Outcomes - Numerous published studies show that Centering moms have healthier babies and that Centering nearly eliminates racial disparities in preterm birth. Centering Pregnancy has been shown to increase patient compliance with prenatal care and to increase patient satisfaction; and decrease pre-term birth rates and increase breastfeeding rates.

Self-Care - Moms are actively engaged in their own health care and own their health information

Self-Confidence - Centering moms are better prepared for labor, delivery and to care for their infant. Practices report fewer after-hours calls and emergency visits from Centering moms because they better understand what is normal during pregnancy and what may be cause for concern.

Support & Friendship - Women enjoy being with other women who are going through a similar experience, giving them an opportunity to support each other. Centering moms create lasting friendships and are wonderful resources to one another during a very exciting but also stressful time in their lives.

Learning & Fun - The most common word used to describe Centering is fun! Centering is based on the proven principle that when people are actively engaged and involved in a discussion with their peers, rather than being lectured or given a pamphlet, they will have greater understanding and are more likely to change their behavior.

Outcomes:

- 2019 – Program planning and implementation. Centering Pregnancy will be provided to three groups of Medicaid patients at Kensington OB-GYN.
- 2020, 2021 – Program implementation. Centering Pregnancy will be provided to four groups of Medicaid patients at Kensington OB-GYN each year.

Person(s) Responsible:

- Clinic Manager
- OB/GYN Physician

Partner(s):

- New York State Department of Health – First 1000 Days on Medicaid Centering Pregnancy Program

2. Erie County Intervention: Safe Sleep Initiative at John R. Oishei Children’s Hospital (OCH) and Millard Fillmore Suburban Hospital (MFSH)

Focus Area: Perinatal and infant health
Goal: Reduce infant mortality and morbidity
Disparity Population: open to all

Objectives:

- Using evidence-based safe sleep educational materials, OCH and MFSH will educate parents of newborns and pediatric patients admitted up to one year on the practices of safe sleep to reduce the incidence of SUID (Sudden Unexpected Infant Death).
- Newborns at OCH and MFSH will receive a HALO® Sleep Sack® to take home to replace the use of loose bedding, a risk factor for SUID. At OCH infants under one year will also receive the sleep sack.

Description:

- Sudden Unexpected Infant Deaths or SUID is accidental suffocation and strangulation in bed, and sleep-related deaths of an unknown cause; it is the leading cause of infant death after the first month of life and one of the leading causes of death overall. The American Academy of Pediatrics have long recommended that infants be placed to sleep on their backs, and in 2011...
recommendations were expanded to address other risk factors by promoting safe sleep environments, breastfeeding and avoiding smoke exposure. In 2018, 90 infants died of SUID in New York State.

- Through the Safe Sleep Initiative, OCH and MFSH will provide safe sleep education and the HALO® Sleep Sack® for all newborns; and OCH will provide for pediatric patients admitted up to one year of age. The HALO® Sleep Sacks® will be provided by corporate partners: Pegula Sports + Entertainment, The Buffalo Bills and The Children’s Hospital of Buffalo Foundation.

- Safe sleep, including the NYS Department of Health brochure, “Follow the ABCs of Safe Sleep ,” will continue to be included in all new mom packets. An educational video will be shown to all new moms via TVR in patient rooms at OCH and via pCare TV. Public awareness and education will be developed in coordination with Pegula Sports + Entertainment, The Buffalo Bills and The Children’s Hospital of Buffalo Foundation.

- The HALO® Sleep Sack® is a wearable blanket that is intended to eliminate the likelihood that a baby can get entangled with clothing and loose bedding during sleep. It is sleeveless and can be worn over pajamas or a bodysuit to take the place of loose blankets. Bedding can accidentally cover a baby’s face and interfere with breathing. The SUID education and the distribution of HALO® Sleep Sacks® will provide a safe sleep environment for infants and help to alleviate the risk of SUID.


- Additionally, all parents of newborns are educated on the dangers of shaking a baby to reduce the incidence of Shaken Baby Syndrome.

Outcomes:

- 2019 – Program planning and launch on October 1, 2019 with education provided and sleep sacks distributed.

- 2020, 2021 – Program implementation with education provided and sleep sacks distributed.
  o OCH - All parents of newborns delivered at OCH and parents of children up to age one will be educated on SUID and will receive the HALO® Sleep Sack®. At OCH, approximately 3,100 newborns are delivered annually at the hospital.
  o MFSH - All parents of newborns delivered at MFSH will be educated on SUID and will receive the HALO® Sleep Sack®. At MFSH, approximately 3,000 newborns are delivered annually at the hospital.

Person(s) Responsible:

- OCH – Chief Nursing and Clinical Operations Officer
- MFSH – Director Women’s Services

Partner(s):

- Pegula Sports + Entertainment, The Buffalo Bills and The Children’s Hospital of Buffalo Foundation – program sponsors

- Safe sleep education is also a priority of the Erie County Department of Health

3. Erie County Intervention: Online Parent Education Program through Millard Fillmore Suburban Hospital (MFSH)

Focus Area: Perinatal and infant health
Goal: Reduce infant mortality and morbidity
Disparity Population: open to all
Objectives:
• Increase the knowledge of pregnant women/parents on prenatal, perinatal, infant and child care through the use of the YoMingo® app as offered by MFSH to provide childbirth education to improve maternal and infant health outcomes.

Description:
• MFSH is offering anytime, anywhere parent education (at no charge) to new moms/parents through the online YoMingo® program. It is available on any device with an internet connection and also as a mobile app called YoMingo®. YoMingo® provides access to evidence-based information on prenatal care, labor and birth, postpartum, breastfeeding, and newborn care including detailed videos, kick counter, contraction timer, person journal, feeding log, immunization log and other tools.
• MFSH provides YoMingo® informational brochures to physician offices to promote the availability of the program.
• Evidence-based source: www.myyomingo.com

Outcomes:
• 2019 – Planning and launch of YoMingo® to the community
• 2020, 2021 – Continued offering of YoMingo® to the community. An estimated 150 participants annually will access the YoMingo® childbirth education app – MFSH will track. YoMingo® tracks the number of hits, and MFSH will also track number of brochures distributed to physician offices.

Person Responsible:
• Director Women’s Services

Partner:
• Physicians – will promote YoMingo® to patients

4. Erie County Intervention: Breastfeeding Promotion and Education Program at John R. Oishei Children’s Hospital (OCH) and Millard Fillmore Suburban Hospital (MFSH)

Focus Area: Perinatal and infant health
Goal: Increase breastfeeding
Disparity Population: Medicaid

Objectives:
• Implement evidence-based breastfeeding promotion and education initiatives at OCH and MFSH to increase “initiation” and “exclusive” breastfeeding rates to improve the health of both mothers and children. The 2011 US Surgeon General’s Call to Action to Support Breastfeeding outlines the following health benefits of breastfeeding:
  o Breastfeeding protects babies from infections and illnesses that include diarrhea, ear infections and pneumonia.
  o Breastfed babies are less likely to develop asthma.
  o Children who are breastfed for six months are less likely to become obese.
  o Breastfeeding also reduces the risk of Sudden Unexpected Infant Death (SUID).
  o Mothers who breastfeed have a decreased risk of breast and ovarian cancers.
  o Breastfeeding also has economic advantages. Breastfeeding reduces or eliminates the cost of formula for families; and because breastfed babies and their mothers tend to be healthier, savings are further realized in the overall cost of health care.

Description:
• OCH and MFSH labor and delivery, neonatal intensive care unit (NICU), nursery, and postpartum units will continue to provide its evidence-based breastfeeding promotion and education

- OCH and MFSH will continue to provide the Breastfeeding Bill of Rights for inpatients, foster skin-to-skin contact within the golden hour, offer rooming in, limit access to formula, and have trained lactation support to foster successful breastfeeding. OCH is on path to achieve Baby Friendly© USA designation (https://www.babyfriendlyusa.org/) per hospital audit in October 2019.
- OCH and MFSH will continue its policy to provide formula only upon request, and to not provide free formula or giveaways from formula vendors. Breast milk warmers and individualized breast milk refrigerators are provided in patient rooms in the NICU at both hospitals.
- OCH and MFSH will increase collaboration and the sharing of resources with regular meetings of key staff and leadership. Their role is to evaluate, identify, implement and monitor breastfeeding initiatives and to track data to assure improvements in breastfeeding rates.
- Evidenced-based patient education materials in English and Spanish will continue to be provided for labor and delivery patients at OCH and MFSH, and for OB patients at OCH’s two OB-GYN Centers. OCH uses “Your Birth Experience” (UNC Chapel Hill). MFSH uses New Beginnings (Customized Communications).
- Clinical educators at OCH will provide the remaining three modules of a 20 hour/5 module course in breastfeeding practice and promotion to newly hired staff (all current staff have been trained). The training is modeled after The 10 Steps Curriculum – 4th Edition as provided by the Healthy Children Network. MFSH will incorporate breastfeeding education in its maternity orientation for newly hired staff.
- Clinical educators at OCH will offer an online provider education module on breastfeeding practice and promote it to OB and pediatric providers.
- “Rooming in” will become a part of practice at both OCH and MFSH with the goal to increase skin-to-skin contact and interaction between mother and baby to promote breastfeeding. It will be supported by nurse education and increased nurse to patient ratios.
- OCH will continue to operate its hospital-based Baby Café that was established in 2019 and has also set up a lactation suite that is open to visitors at Sahlen Field, home of Buffalo Bisons baseball team. Baby Cafés offer support on all aspects of breastfeeding and its impact on daily life – from prenatal to weaning, as well as assistance with pumping and maintaining supply if moms return to work outside the home. http://www.babycafeusa.org/
- Continue to identify and refer at risk moms at OCH for home case management and breastfeeding support through Buffalo Prenatal and Perinatal Network and Maternal Infant Community Health Collaborative

Outcomes:

- 2019 – Continue to implement breastfeeding promotion activities.
  - From January 1, 2019 through August 31, 2019, the exclusive breastfeeding rate at OCH was 39.1% and the initiation breastfeeding rate was 71.1%.
  - From January 1, 2019 through August 31, 2019, the exclusive breastfeeding rate at MFSH was 54.1% and the initiation rate was 82.4%.
  - OCH is on the path to achieve Baby Friendly© USA designation per a hospital audit in October 2019. The hospital opened a Baby Café on January 9, 2019. The Baby Café is open to pregnant and breastfeeding mothers from the community and serves as a gathering place for advice and social support from certified lactation specialists and other mothers who are going through similar experiences. Both OCH and MFSH are on track in 2019 through 2021.
to continue their education and policy efforts to increase exclusive and initiation breastfeeding rates among new mothers.

- 2020, 2021 – Continue to implement breastfeeding promotion activities.
  - The 2019-2021 three-year goal for *OCH for exclusive breastfeeding rates is 38% and the initiation rate is 70.9%. Estimated annual births at OCH is 3,100. Goal is based on 2018 baseline rates 36.5% exclusive and 70.9% initiation.
  - The 2019-2021 three-year goal for MFSH for exclusive breastfeeding rates is 60% and the initiation rate is 85.0%. Estimated annual births at MFSH is 3,000. Goal is based on 2018 baseline rates of 54.8% exclusive and 85.5% initiation.

*65.3% of OCH patients are insured by Medicaid. The NYS Prevention Agenda exclusive breastfeeding goal for 2024 among infants insured by Medicaid is 38.2%.

**Person(s) Responsible:**
- OCH – Quality & Patient Safety Specialist
- MFSH – Clinical Nurse Educators

**Partners**
- Increasing breastfeeding rates is also a priority of the Erie County Department of Health.

**Monitoring Plan and Partner Engagement**

Implementation of each of the Erie County and Niagara County goals, objectives, activities and outcomes identified in the above work plan as well as tracking progress and making any mid-course corrections is the responsibility of specific Kaleida Health clinical and site leaders. Community Service Plan staff will be responsible for reporting progress and results in annual Community Health Needs Assessment-Community Service Plan updates.

Kaleida Health will continue to participate as a partner in both the Erie County and Niagara County work groups to assess progress of the goals, objectives, activities and outcomes included in the Erie County and Niagara County plans, and make mid-course corrections as necessary. Both the Erie County and Niagara County work groups plan to meet quarterly throughout 2020 and 2021.

**Dissemination to the Public**

This Kaleida Health 2019-2021 Community Health Needs Assessment-Community Service Plan (CHNA-CSP) is available to the public in the Community Health section of the Kaleida Health website \[www.kaleidahealth.org\] and specifically at the following link: \[http://www.kaleidahealth.org/community/publications.asp\]. A paper version of this plan is available upon request.

Written comments on the 2019-2021 CHNA-CSP are invited and a “comment link” is provided next to the plan found on the Kaleida Health website. Kaleida Health did not receive any comments on its 2016-2018 CHNA-CSP.

**Board Approval**

The Kaleida Health Board of Directors approved this document on December 2, 2019.
ATTENTION: If you speak a language other than English, language assistance services, free of charge, are available to you. Please ask your care team.

Spanish
ATENCION: Si habla español, los servicios de asistencia lingüística están disponibles, de forma gratuita, para usted. Por favor, pregunte a su equipo de atención.

Arabic/Sudanese
تنبيه: إذا كنت تتحدث العربية، فسوف نوفر لك خدمات مساعدة لغوية مجانيًا. يرجى أن تسأل فريق العناية الخاص بك.

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