Background & Methodology:
As part of the Patient Protection and Affordable Care Act, all non-profit hospitals are required to conduct a Community Health Needs Assessment (CHNA) every three years in order to remain a tax-exempt organization under section 501(c)(3) of the Internal Revenue Code. The goal of the assessment is to identify critical health disparities faced among residents within the community. The needs assessment states health priorities addressed by community stakeholders, hospital professionals, or public health experts. Additionally, campus specific implementation plans have been crafted for each of the St. Luke’s University Health Network (SLUHN) campuses in order to determine how resources will be allocated to address the specified health needs. Our CHNA is comprised of both primary and secondary data. The primary data was collected through our community health surveys, where approximately 10,000 surveys were conducted in our eleven campus geographic region. Primary data was also collected through 11 campus specific key stakeholder focus groups. Secondary data included hospital network, county, state, and national level data.

Description of Service Area:

<table>
<thead>
<tr>
<th>Income *Bucks County</th>
<th>Education *Bucks County</th>
<th>Age</th>
<th>Ethnicity</th>
<th>Race</th>
</tr>
</thead>
<tbody>
<tr>
<td>$14,999</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>$15,000-24,999</td>
<td>High School or Less</td>
<td>&lt;18</td>
<td>Non-Hispanic</td>
<td>White</td>
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<tr>
<td>$25,000-49,999</td>
<td>Some or Completed 4-Year College</td>
<td>18-24</td>
<td>Hispanic</td>
<td>Black</td>
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<tr>
<td>$50,000-74,999</td>
<td>Post-Baccalaureate</td>
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<td>Latino</td>
<td>Asian</td>
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<td>$75,000-99,999</td>
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<td>45-64</td>
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</tr>
<tr>
<td>$100,000 +</td>
<td></td>
<td>65+</td>
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</tbody>
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Key Findings:
The three main priorities identified include: improving access to care; preventing chronic disease; and improving mental and behavioral health. The upstream factors related to the social determinants of health and individual lifestyle behaviors contribute to the poor health status of our communities. These three health priorities will be addressed using the social determinants of health framework in conjunction with using the Lifestyle Medicine interventions in order to influence the overall health of our communities. The following data is reflective of the Quakertown service area.

Area: 373.18 square miles
Population: 197,514 people
Population Density: 529.28 persons per square mile

Social Determinants of Health:

Income
- 22% of residents live below 200% of the Federal Poverty Level ($24,600 for a family of four in 2017).
- 25% of children in the Quakertown service area are eligible for free or reduced-price lunch programs.

Education
- Bucks County’s high school graduation rate was 92% and Quakertown Community High School’s graduation rate was 93% for the 2016-2017 school year.

Health Insurance
- 7.4% of residents are without health insurance.
- According to the 2019 community survey, the top reason that Quakertown respondents cited for postponing medical care was that their share of the cost was too high (11%).

Transportation
- 42% of workers in Bucks County commute solo more than 30 minutes to work each day.
- Transportation issues were identified as a significant challenge for the Upper Bucks County region.
To explore some of the most vulnerable neighborhoods we serve, we examined resources in the ten lowest income census-tracts that send patients to our Quakertown campus.

**Access to Food**
- 23% of families use SNAP (Supplemental Nutrition Assistance Program).
- The average rate of residents living more than half a mile from a supermarket and without a vehicle is 8% with some neighborhoods up to 20%.

**Housing**
- 42% of households are cost-burdened, and 15% of all households in Bucks County have at least one severe housing problem.
- Homelessness is a concern for the area; there were 160 referrals to homeless shelters in fiscal year 2018.

**Lifestyle Behaviors:**

**Diet**
- Only 12% of survey respondents consumed the recommended amount of 5 or more servings of fruits and vegetables per day.
- A healthy diet is linked to income; 12% of respondents with over $60,000 income consumed 5 or more servings of fruits and vegetables per day compared to 6% of those with less than $15,000 income.

**Exercise**
- Only 15% of respondents reported regularly exercising 5 or more days per week.
- 29% of respondents reported no days of exercise per week.

**Obesity**
- 73% of survey respondents were overweight or obese according to BMI calculations (33% overweight and 40% obese).
- The highest rate of obesity (48%) was found for lower-income people earning less than $25,000 while the lowest rate of obesity (38%) was found for those earning more than $60,000 annually.

**Diabetes**
- Nationwide, diabetes rates are predicted to increase 34% by 2030.
- Respondents with less than $25,000 income had significantly higher reported diabetes diagnosis rates (40%) than those with more than $60,000 income (12%).

**Smoking**
- 12% of Bucks County adult residents use tobacco products.
- According to survey data, smoking is linked to income; 27% of respondents with less than $15,000 income reported smoking, compared to 7% of respondents with incomes of $60,000 or more.

**Adolescent Electronic Vapor Product Use**
- Over 19% of 12th graders in Bucks County reported using a vapor product at least once a week in the past month.
- The highest rate of electronic vapor product usage (8%) was found for the young adult 18-24 age group.
- The Surgeon General declared youth usage of vapor products to be a significant public health concern.

**Substance Abuse**
- There has been a 600% increase in synthetic opioid (fentanyl) deaths in the U.S. since 2013.
- Pennsylvania ranked 3rd for highest number of opioid deaths in the U.S. in 2017.
- There was an increase in opioid overdose death rates from 3.3 (2007-2011) to 8.1 (2012-2016) per 100,000 residents in Bucks County.
- 25% of Quakertown service area survey respondents reported at least one episode of binge drinking behavior in the past month.
- 21% of all 12th graders and 10% of all 10th graders in Bucks County reported consuming alcohol at least 3 times in the past month.
- Survey data indicated that the highest rate of binge drinking (18%) occurs in the 18-24 age group.