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Housing, Poverty, and Health Outcomes

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Abstract

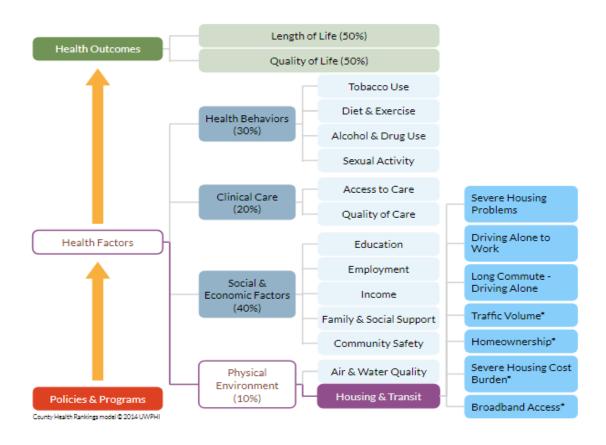
Poverty and homelessness have significant impacts on the health outcomes of individuals and communities. Lack of safe, healthy, affordable housing in Sussex County requires attention and action to move the needle on the health of our impoverished and housing insecure populations. Health concerns descend on the scale of importance when an individual's housing and financial circumstances are unstable. Employment opportunities exist, however, housing costs in the area are prohibitive resulting in negative impacts on an individual's potential for social mobility as well as on local businesses and organizations seeking employees. Social determinants of health are indicated as prominent factors affecting health outcomes, even more so than access to and the delivery of healthcare. Findings from several reports highlight the correlation between financial insecurity, housing insecurity, and health. Innovative and collaborative solutions are necessary to create and hardwire health equity, housing stability, and social mobility within our county and state.

Poverty, as defined by Merriam-Webster Dictionary, is "the state of one who lacks a usual or socially acceptable amount of money or material possessions." Poverty is also one of the leading factors contributing to homelessness, with additional factors including, but not limited to, the lack of affordable housing, mental illness, and substance use disorder. All of which are very present concerns in Sussex County and the state of Delaware as a whole. Due to Beebe Healthcare's newly launched Community Mobile Health Clinic (MHC), funded through Delaware's Division of Substance Abuse and Mental Health (DSAMH), we have the ability and commitment to take care to the communities most in need, several of which are in impoverished and unincorporated areas, where our neighbors who are experiencing homelessness are among the individuals presenting to the mobile health clinic in need of care. Most are presenting without a primary care provider or are unable to recall the last time they had an appointment with a provider. Typically, these discussions around healthcare access include visits to a local emergency department or walk-in clinic, which may have occurred due to a need for immediate care and/or the lack of connection to a primary care provider. And the same medical and social complexity healthcare systems are seeing in patients within their brick-and-mortar facilities exists outside those walls in many communities throughout our county. However, this is not unique to Sussex County or Beebe Healthcare. This reality is statewide.

In the current state and national healthcare landscape, increased awareness and effort are being directed toward identifying social determinants of health (SDOH) with a secondary focus on mitigating their potentially negative impact on patient health outcomes and preventable healthcare utilization. Poverty, housing instability, access to primary care, and access to health services are just four of the nineteen SDOH that the U.S. Department of Health and Human Services lists in its Healthy People 2030 campaign. Secondly the Joint Commission on Accreditation of Healthcare Organizations' new requirements for providers include having designated leadership to reduce health disparities, assess patients' health-related social needs,

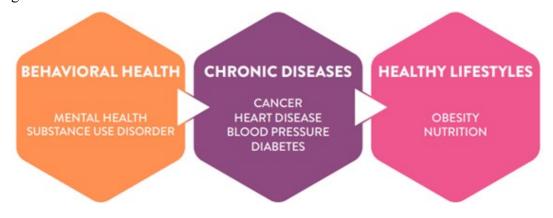
provide information on available resources and services, and demonstrate identification of healthcare disparities through quality and safety data stratification using socio-demographic characteristics.² And lastly, the Centers for Medicare and Medicaid Services (CMS) released the CMS Framework for Health Equity 2022-2023,³ which details five health equity priorities for reducing health disparities and informs efforts with CMS stakeholders from underserved and disadvantaged areas for the next ten-year period. These recently declared foci of three significant entities in the public health and healthcare system arenas underscore the Robert Wood Johnson Foundation's County Health Rankings model,⁴ which depicts the measured influence of clinical care as it correlates to health outcomes is 20%, leaving 80% to other health factors, policies, and programs. This category includes access to care, as it pertains to insurance - or lack thereof - in addition to the accessibility of primary, mental, and dental care as well as the quality of care, which encompasses preventable hospital stays, mammography screenings, and influenza vaccinations. Although the physical environment in this model holds a weight of 10% with severe housing problems as a subcategory, it does not include severe housing cost burden, homeownership, or air & water quality in its calculations. Additionally, the category of social and economic factors weighted at 40% includes community safety, which encompasses injury deaths, homicides, suicides, firearm fatalities, motor vehicle crash deaths, and juvenile arrests And yes, it still does not include the effects of residential segregation, median household income, living wage, and several other highly influential aspects existing in many of our communities that are now well-recognized contributors to health outcomes. Figure 1 shows the County Health Rankings model demonstrating these percentages as they pertain to health outcomes with an equally divided categorization of the length of life and quality of life.

Figure 1. County Health Rankings Model



As a community-based healthcare system, Beebe Healthcare has been expanding its awareness and committing resources to identify the social determinants of health of its patient population and support connection to appropriate resources through specific initiatives. In addition to existing programs, Beebe is actively developing and implementing innovative programs to not only meet the needs of one of the fastest growing counties east of the Mississippi River but also to focus efforts on the health inequities and disparities that were spotlighted by the pandemic. Our triennial Community Health Needs Assessment⁵ (CHNA) conducted in 2022 resulted in three areas of prioritized need: Behavioral Health, Chronic Disease, and Healthy Lifestyles (figure 2). Each of these prioritized areas is being addressed through both a health equity and SDOH lens.

Figure 2. Beebe Healthcare's FY2022 CHNA Needs



Throughout the CHNA primary data collection process that included a community member survey, key stakeholder interviews, and two focus groups, homelessness and lack of affordable housing were on the list of top concerns. Data from Dignity Health and Truven Health Analytics were obtained to quantify the severity of health disparities in our county and the subsequent Community Need Index (CNI) data source was used in the health assessment. CNI considers multiple factors that are known to limit healthcare access, and the tool is useful in identifying and addressing the disproportionate and unmet health-related needs of neighborhoods (figure 3). The five prominent socioeconomic barriers to community health quantified in the CNI are income barriers, cultural/language barriers, educational barriers, insurance barriers, and housing barriers. A score of 5.0 represents a ZIP code area with the most socioeconomic barriers (high need), while a score of 1.0 indicates a ZIP code area with the lowest socioeconomic barriers (low need). A low score is the ultimate goal; however, ZIP codes with a low score should not be overlooked. Rather, communities should identify what specific entities are succeeding, such as accessibility to care that results in effective mitigation of preventable hospitalizations as well as effective health policy and local health planning, which ensures a low score.⁵

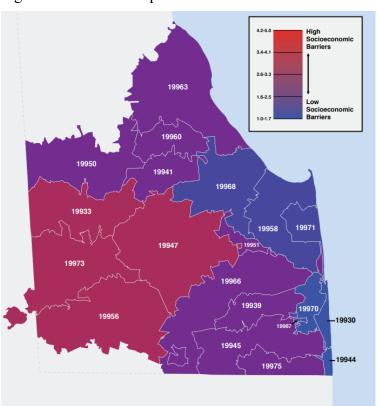
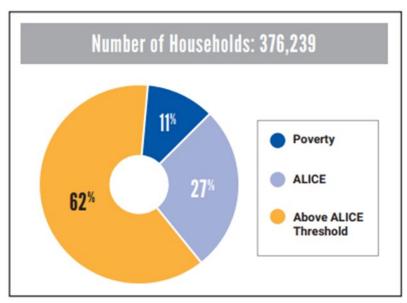


Figure 3. ZIP Code Map of CNI Scores

As the previous map indicates, most zip codes in Sussex fall within the moderate and high need levels. Combining a 2017-2021 poverty rate of 11.5% per the U.S. Census⁶ with the rates of homelessness and lack of affordable housing in Sussex County, it is worth exploring the potential correlation between poverty and housing insecurity. Additionally, ALICE in Delaware – A Financial Hardship Study⁷ published in 2021 reveals critical information about our statewide neighbors. In 2019, 38% of the 376, 239 households in Delaware struggled to make ends meet;

11% were living below the Federal Poverty Level, and the other 27% fell into the ALICE category: Asset Limited, Income Constrained, Employed (figure 4).

Figure 4. Households in Delaware Requiring Assistance⁷



Sources: ALICE Threshold, 2019; American Community Survey, 2019

According to the report, ALICE households were at 21% in 2007, which further proves that more Delaware households have moved toward the ALICE threshold over the last decade, and families already in the ALICE percentile were unable to rebuild or replenish their savings.

Figure 5. Delaware Average Annual Household Survival Budget, 2019⁷

Household Survival Budget, Delaware Average, 2019			
	SINGLE ADULT	SENIOR (1 ADULT)	2 ADULTS, 1 INFANT, 1 preschooler
Monthly Costs			
Housing	\$840	\$840	\$1,152
Child Care	-	-	\$1,356
Food	\$291	\$250	\$883
Transportation	\$388	\$337	\$860
Health Care	\$222	\$490	\$910
Technology	\$55	\$55	\$75
Miscellaneous	\$220	\$238	\$624
Taxes	\$400	\$409	\$1,006
Monthly Total	\$2,416	\$2,619	\$6,866
ANNUAL TOTAL	\$28,992	\$31,428	\$82,392
Hourly Wage*	\$14.50	\$15.71	\$41.20

*Full-time wage required to support this budget. More detailed information on budgets is available at UnitedForALICE.org/household-budgets/Delaware

As figure 5 from the ALICE report demonstrates, these are undeniable challenges that demand consideration and clearly outline the potential negative impact these circumstances could have on the health outcomes of an individual or a population. How does any one individual who is struggling to make ends meet, or who is not even close to doing so, focus on their physical health

needs - until it reaches a level of severity that inhibits their ability to work, care for their loved ones, or put food on the table.

To further emphasize the SDOH and associated challenges present in Delaware's southernmost county, the Impacted Communities Study, completed by Sussex County Community Development and Housing Department in 2016, found that 14 areas of concentrated poverty around Sussex County are known as impacted communities. All 14 communities report issues of water quality, vacant and abandoned housing, animal control issues, trash issues, and traffic and safety concerns. This study reports that 32% of homes in impacted communities need minor repairs, and 37% need major repairs.

Additionally, the Housing Opportunities and Market Evaluation report was completed by LSA Planning for Sussex County Council in 2019, with the following findings⁸:

- More than 24,000 households living in Sussex County spend more than 30% of their income on housing costs.
- A full-time, year-round minimum wage worker has an income of about 30% of area's median income, which allows them to afford housing that costs no more than about \$380 per month. No housing in the county is available at this rent level.
- Between 2020 and 2050, the county needs to produce 17,597 new housing units to meet the needs of the growing county. Approximately 22% of these homes need to be for households earning less than 50% of the Area Median Income (this equates to households of 4 making \$42,000 or below per year).
- Health Care and Social Assistance is another large and growing industry in Sussex County, with higher wages (\$50,000s) on average than jobs in the tourism industry. While wages are slightly higher, a range of lower-wage occupations (e.g., home health aides, administrative) suggest a growing need for lower-priced homes to accommodate growth in this sector.
- On average, households spend 53% of their income on housing and transportation costs. This is before taxes are taken out.

The need for stable, safe, affordable housing is paramount. Taking into account the numerous circumstances that can be present for families and individuals such as lack of a livable wage, lack of ability to properly care for children and/or aging parents, the heightened levels of stress, and worst of all, substandard housing or lack thereof, healthcare is highly likely to descend even further on the list of daily priorities. This is where our state agencies, public health division, and healthcare systems have an opportunity to collaborate and create accessible and convenient avenues to high-quality, safe, and affordable healthcare with a comprehensive array of social service resources. However, it does not stop there. Social mobility is necessary to effect lasting change. Social mobility and equality of opportunity can be measured in terms of earnings, income, or social class. Still, they can also be understood to encompass other well-being dimensions, such as health and education. Beebe's Community Mobile Health Clinic was invited to an apartment complex in Seaford in recent months and had the opportunity to offer preventative health screenings and mental health services to the residents and adjacent neighborhoods. Understanding that the mobile clinic moves at the speed of trust, and it was our first time on site, we did not anticipate a high level of interest but were available to be of service

to anyone interested. What ended up happening was an impromptu career day. Over twenty children of elementary and middle school ages eagerly boarded the mobile clinic and began asking questions about what we do, listening to each other's heartbeats and lung sounds with assistance from our staff, and telling us which healthcare professional they wanted to be when they grew up. All these conversations were provoked by what they experienced in those few hours.

As importantly, the pandemic highlighted the need to meet people where they are. As an example, Beebe Healthcare stood up numerous sites in Lewes, Georgetown, and Millsboro that offered community-based testing and vaccination opportunities. An offshoot of those efforts was a partnership between Beebe, Sussex County Libraries, and Sussex County Emergency Management Systems that involved deploying the Bookmobile as a low-barrier, low-tech, easyaccess point with a walkability factor for COVID-19 vaccinations. Leaning into a longstanding relationship with First State Community Action Agency, we were introduced to community champions and respected leaders in underserved and marginalized neighborhoods in Sussex County. This endeavor allowed us to meet people where they were and foster connections through conversations that included, but were not limited to the vaccines. The Bookmobile staff were asked questions about conditions other than COVID, such as how safe hospitals and doctors' offices were for their loved ones needing care, could they schedule a same day procedure, should they schedule that imaging they were supposed to have done months ago; could we help them get food for their family; and numerous other topics. This place-based presence afforded us many opportunities to discuss the delay of care and its potential repercussions. By bringing care to people where they live, work, worship, and play, it was not only an integral component in the provision and accessibility of care, but it played a valuable role in reinforcing the importance of health and wellness - particularly at a time when distrust of public health and healthcare, in general, was exacerbated by fear and misinformation.

As Beebe Healthcare moves forward in our efforts to recognize and mitigate the social barriers our patients face, we acknowledge the work of many of our Beebe teams and programs. To highlight a few, our environmental services team recently onboarded several individuals into full-time positions who are currently residing at the pallet village, a transitional housing community consisting of 40 cabins in a supportive village setting with shared common areas. This opportunity has the potential to change the trajectory of those new Beebe team members, and it can open cabins in the pallet village to other individuals experiencing homelessness as the newly employed community members have the potential to transition to more permanent housing. Our home health agency has served the community for many years with a multidisciplinary approach that includes social work visits and collaboration with other teams and agencies to best connect patients to needed support services. Our transitional care programs support patients who are high utilizers of the healthcare system and/or are diagnosed with significant chronic conditions as they return to their places of residence, some of which are in marked states of disrepair and may have contributed to their frequent visits to the acute care setting. One such example involved a patient who was admitted just two months after her first admission. The patient fell twice within a short timeframe due to sheets of plywood haphazardly placed over their disintegrating floor. The initial fall resulted in a fractured femur and a subsequent fall upon the return home resulted in a fractured clavicle which required a second admission. A circumstance such as that one has the potential to be avoided, at least prior to the second admission, through a soon-to-launch collaboration with Milford Housing Development Corp. (MHDC) with funding from Energize Delaware. The Ecosystem Empowerment Grant

allows Beebe Healthcare staff to identify patients who are income-eligible homeowners and in need of minor and major repairs, safety-related modifications, and/or energy efficiency interventions. Upon determination of eligibility through designated staff at Beebe and MHDC, subject matter experts will assess these patients' homes, and a remediation plan will be developed. Funding could support improvements in up to twenty-five homes depending upon the needs addressed. And it's quite possible, given the lack of affordable housing in Sussex County and the prevalence of both homeowner-occupied and renter-occupied substandard housing, healthcare systems participating in this grant opportunity may have employees who could potentially qualify for the program. Beebe Healthcare is very aware of the housing needs in our area as recruitment efforts offer ongoing insights into the lack of affordable and conveniently located housing at all position levels. Basic economics underscore the supply and demand realities of housing in Sussex County. Recent research sheds light on the precariousness of people's housing situations as we find ourselves in the midst of historically high rent prices and inflation. The estimated increase in homelessness is projected to be 9% for every \$100 increase in median rent. Market adjustments in payrates certainly help organizations remain competitive on a local and regional level. Unfortunately, the gap not only exists but continues to widen between median household incomes and local housing costs. Ancillary staff for new practices and locations encounter difficulties when seeking housing options closer to their workplace, and they are not alone. Other industries speak to these same challenges as do businesses that rely heavily on international students seeking seasonal employment in our coastal region as a means of increasing staff to meet the demands of high tourism-related volumes.

In summary, poverty is just one piece of the proverbial puzzle. Employment opportunities in Sussex County are abundant year-round, not just in seasonal stretches, as many businesses demonstrate through a reduction in operational hours with explicit statements pertaining to lack of staff posted on their doors. However, understanding that the move from homelessness to housed for any individual may require more than a job, consensus from a county-wide, crosssector collective is necessary to affect change and commit to making safe, affordable, and healthy housing opportunities available to all in order for individuals, communities, local economies, and systems to thrive. Innovation and collaboration are necessities when considering ways to collectively mitigate poverty, homelessness, substandard housing, and poor health outcomes in our communities. Social determinants of health strongly contribute to the disparities and inequities we see daily in our state and throughout our country. There is a great focus from diverse organizations on health equity, affordable housing, and social mobility. And there may be copious ideas on tackling any or all of them. However, none of us can do this alone. It will take a collective impact approach to affect profound and lasting change. Collaborative, datadriven decision-making coupled with the amount of determination and commitment I, for one, witness in our community partners is present up and down our state. A unified commitment to do what is best for our fellow residents is worth exploring.

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