The health of a region, and disparities within regions, drive social, economic, and political well-being. Despite broad agreement about the importance of health to individuals and communities, we are a long way from realizing the health outcomes that most would like to see. Clinical health issues, and health disparities, persist at troubling rates across the country and across our state.

In this report, grounded in data collected while conducting comprehensive community health needs assessments for five hospital networks in collaboration with health departments across five South Jersey counties, we present an important finding about the health of South Jersey residents: residents’ physical and mental health are surprisingly strongly predicted by their connections to the people and places surrounding them.

In the following report, we describe briefly the partners and methods that led to this conclusion, and then we explain the data in more detail. This report focuses on the finding of connection; for more comprehensive information about health needs in the region, see the full community health needs assessments at rand.camden.rutgers.edu.
To address the prevalence of chronic health conditions, it is important to change the landscape in which these conditions develop as well as treating the conditions directly. This landscape is referred to as the social determinants of health, defined by the World Health Organization (WHO) as the "conditions in which people are born, grow, live, work and age". Importantly, the WHO and others have argued that the social determinants of health are responsible for the health disparities—the differences in health outcomes—that continue to plague our most vulnerable populations.

This report focuses on how one set of social determinants—connections to people and places—relates to physical and mental health. Humans are a social species. Many scientists, including biologists and psychologists, believe that the quality that most sets humans apart from other animals is our ability to cooperate with members of our species that we are not related to. Civilization emerged because humans developed the ability to share food and depend on each other for things like child care and tools. Although the importance of social connection in our species has been studied by scientists for nearly two hundred years, it is only more recently that researchers have begun to understand the importance of social connection for the health of individuals.

Here we applied this general question to the South Jersey region. We asked thousands of residents in Burlington, Camden, Cumberland, Gloucester, and Salem Counties to tell us about their physical and mental health, and we also asked them about different aspects of their connections to the people and places in their lives. We found a surprisingly strong link between these connections and physical and mental health. First, we describe the data on physical and mental health, and next we describe how these vary with connection.
To assess health, we asked participants to rate their overall physical and mental health from poor to excellent. This subjective measure of health compares in accuracy to more objective measures of individuals’ overall health. In addition to this subjective measure, participants selected the chronic health conditions of which they had been diagnosed or were at risk from a list that included asthma, diabetes, mental health conditions, cancer, heart disease, hypertension, high cholesterol, obesity, alcohol misuse and drug misuse.

Broadly, South Jersey residents reported a range of physical and mental health. Overall, 48% reported Very Good or Excellent physical health, while 16.5% reported Fair or Poor physical health. Findings about mental health among respondents were similar, with 57% reporting Very Good or Excellent mental health and 16% reporting Fair or Poor mental health. The percentage of individuals reporting Fair or Poor health is an indicator used to assess the overall health of a region. This percentage varied among the five counties, with Cumberland having the highest percentage reporting Fair or Poor health (21%) and Gloucester having the lowest percentage reporting Fair or Poor health.

Next we examined whether connections between people and places could explain some of the variation between good and poor health seen in South Jersey residents.

FAIR OR POOR HEALTH

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The percentage of individuals reporting Fair or Poor health is an indicator used to assess the overall health of a region.

To show this, we first asked people how often they feel socially isolated. Encouragingly, most (75%) said that they rarely felt socially isolated, and only 9% often felt socially isolated.

Across South Jersey, however, those who report social isolation have much worse overall physical and mental health, and live with more chronic health conditions than those who are rarely socially isolated. Those who often felt socially isolated had 25% worse physical health than those who rarely felt socially isolated. Findings about mental health showed similar patterns, with those who often felt socially isolated reporting 32% worse mental health than those who were rarely socially isolated.

Overall, social isolation also predicted a higher number of chronic health conditions. Those who were often isolated reported living with 59% more chronic health conditions than the average respondent. The prevalence was especially striking for certain conditions. Compared to those who are rarely socially isolated, those who often felt socially isolated were four times as likely to report misusing drugs, three times as likely to report a mental health issue, two and a half times as likely to report having heart disease, and about 50% more likely to be overweight or obese, have diabetes, and suffer from asthma.

The relationship between social isolation and health appeared across the entire surveyed population. Next we present data on two populations at special risk for social isolation.

AGE

Our study revealed a strong and surprising relationship between age and social isolation. Although research from previous decades has focused on the problem of social isolation in older adults, we found that younger adults are more socially isolated than older adults. Millennials and younger (38 years old and younger) are 50% more likely to be socially isolated often than Baby Boomers and older (55 years old and older).

These differences in social isolation are reflected in average mental health: 25% in the Millennial generation or younger report fair or poor mental health, compared to only 11% of those in the Baby Boomer generation or older. This means that younger adults are more than twice as likely to report fair or poor mental health as older adults.

The stories we heard from college students in focus groups support the data from the survey. These students told us they had a difficult time talking with and connecting to their peers.
Younger adults are more socially isolated than older adults, and younger adults are more than twice as likely to report fair or poor mental health as older adults.

Residents with childhood traumatic experiences are 2.7 times as likely to have poor physical health, 3.2 times as likely to have poor mental health, and live with 32% more chronic health conditions.

Adults who had childhood traumatic experiences were 3.6 times more likely to report being socially isolated.

Interestedly, these students blamed social media for this difficulty. Because social media makes superficial relationships easier, they said, it prevents the development of meaningful connections. One college student said, “You can communicate with so many people right away ... You might not actually MEET your friends. There isn’t physical contact which doesn’t seem right. People lack social skills in person. The highlight of your day is getting 5 likes so you don’t go outside, you don’t develop yourself.”

In addition to the impact of social media on loneliness, college students also believed that social media was impacting their mental health. They said that social media increased the pressure to “look perfect” and to acquire more things, and this in turn led to wasteful spending of time and money.

Given the strength of the relationship between social isolation and overall physical health, this result is important. What are the health implications of younger generations feeling increasingly socially isolated?

**CHILDHOOD TRAUMA**

There is a growing recognition that traumatic experiences in childhood have effects that linger in adulthood. New Jersey has recognized the importance of these Adverse Childhood Experiences (ACEs) on health, and a major report calls for a statewide plan to address these health challenges.

Consistent with national research, our data show that South Jersey residents with childhood traumatic experiences report poorer overall health; in our study they are 2.7 times as likely to have poor physical health, 3.2 times as likely to have poor mental health, and live with 32% more chronic health conditions than those without child trauma.

Trauma in childhood also predicts social isolation as an adult; adults who had childhood traumatic experiences were 3.6 times more likely to report being socially isolated often than those who did not have childhood traumatic experiences (14% vs. 4% respectively).

In addition to the importance of connections between individuals, we examined the relationship between neighborhood quality and health. Not surprisingly, we found wide variety in neighborhood quality and satisfaction. Broadly, about 60% of South Jerseyans reported that their neighborhoods were excellent or very good places to live, to buy fruits and vegetables, and to walk and exercise. Fewer South Jerseyans felt their neighborhoods had good social connections, with only 42% reporting that their neighborhoods were excellent or very good places to connect with others.

Consistent with the findings on social isolation, neighborhood quality predicts mental and physical health. South Jerseyans who think their neighborhood is a poor or fair place to connect with others are 3.5 times as likely to have poor or fair overall health, 2.7 times as likely to have poor or fair mental health, and 50% more likely to be overweight as those who think their neighborhood is a very good or excellent place to connect with others. The patterns are similar for responses about neighborhood as a place to live, as a place to walk and exercise as and as a place to buy fruits and vegetables.

Importantly, both social and physical aspects of neighborhoods predict physical and mental health. Physical infrastructure, such as whether a neighborhood is a good place to exercise or buy healthful food, predict obesity, but so does social infrastructure, such as whether your neighborhood is good place to connect with others.
South Jerseyans’ ability to travel from place to place is also related to physical and mental health. Our research demonstrates that physical connections between geographic locations are important for health.

Overall, 40% of study respondents said that lack of transportation is a barrier to health care in their communities, and 29% said that public transportation is a health-related resource missing from their communities. This may at first seem surprising, because many people who are reasonably healthy and own reliable cars are not often confronted with the crucial role that transportation can play in health. Indeed, 88% of South Jerseyans we surveyed drove themselves to health care, while 12% relied on other forms of transportation, including friends and family, medical transportation services, and public transportation. But for some of our South Jersey residents, transportation is critical. This is demonstrated by the high percentages of vulnerable South Jerseyans who rely on others for transportation: 44% of those who are housing insecure; 28% of those with household incomes less than $50,000 per year (compared to only 2% of those with household incomes greater than $100,000 per year); 23% of those with poor or fair mental health (compared to 8% of those with excellent or very good mental health); 26% of those with poor or fair physical health (compared to 7% of those with excellent or very good physical health), and 19% of those who say their neighborhood is a fair or poor place to live (as compared to 6% who say their neighborhood is an excellent or very good place to live).

The stories from focus groups and interviews support these data. We heard many stories from residents who missed medical appointments and even surgery because medical transportation services showed up late or not at all. In addition to the importance of medical transport for clinical care, public transportation is important for many of the upstream determinants of health that lead to chronic health conditions. For example, participants in focus groups complained that unreliable or non-existent public transportation limited their ability to get to work and easily access healthy foods.

The objective data on public transportation back up South Jerseyans’ perceptions. As we described in a previous report, South Jersey has poor transportation infrastructure, and that infrastructure falls off dramatically outside of Camden County. As described in that report, South Jersey counties have less than half the number of bus stops as North Jersey counties.

The more socially connected, on average, the healthier people are, and the less socially connected they are, the less healthy.

This is true not only for mental health, but also for conditions such as heart disease, obesity, diabetes, and asthma. Connections to neighborhood parallel these findings, predicting a broad range of health outcomes. Connections to places via transportation also matter, providing opportunity but also presenting barriers to those least able to overcome them, limiting access to health care as well as to healthy food and social engagement.

This work has inspired us to consider a host of new questions and potential next steps. For example, if further research confirms the apparent increasing social isolation of younger people, what are the health implications and what steps, if any, might we take to reverse this trend? How can we better understand the impact of social isolation and connection on those that experience childhood trauma; might social connections protect people that experienced trauma from the associated health risks? How might improvements to the transportation infrastructure in target communities impact health and wellbeing? And are there efficient efforts that might increase social connection in communities across the region, improving health in South Jersey and beyond?
RESEARCH
In partnership with Rutgers faculty across disciplines, we conduct research, collect and analyze data, and translate the findings for use by a broad range of stakeholders. We then apply this knowledge toward policy development and program implementation and evaluation, as well as help build capacity among partners.

ENGAGE
We collaborate across sectors to bring diverse expertise and an interdisciplinary approach to policy research. As a sought-after backbone organization, we have a successful history of facilitating collaborative community efforts that have sustained, positive results.

BUILD
Our work connects those who need it with the objective research and guidance necessary to make informed decisions and build sound strategies and operations. WRI’s technical assistance focuses on developing strategic approaches and building capacity for long-term sustainability.