SOCIAL FACTORS THAT IMPACT HEALTH: IMPROVING HEALTH OUTCOMES IN RHODE ISLAND
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Economic Stability
Slow economic growth after the Great Recession led to cost-related barriers that left many Rhode Islanders unable to properly access healthcare services. Ultimately, this economic instability continues to negatively impact health outcomes for Rhode Island’s poorest residents. Homelessness, mental healthcare, and missed appointments undoubtedly make the experiences of low-income residents far different from better-resourced communities. Economic stability is a complex, and exceedingly important social determinant of health in the State of Rhode Island. This section targets labor shortage in the social worker pool, problems identified by the State Legislature with Medicaid’s LogistiCare partnership, and lack of interagency coordination as key policy areas where the State of Rhode Island can make meaningful changes for its most vulnerable populations. Addressing economic instability means giving low-income residents a stable footing during these difficult times, and is exceedingly necessary in a multifaceted approach to increasing health outcomes.

Neighborhood and Built Environment
A person’s neighborhood and built environment is important in determining the health outcomes of a population. This domain includes the availability of healthy food, the quality of housing, the safety of the neighborhood, and clean environmental surroundings. Among these issues, Rhode Island should examine its low-quality housing stock and the barriers that exist in accessing healthy foods. To improve its quality of housing, Rhode Island’s Medicaid program should follow the model of Massachusetts’ Pediatric Asthma Pilot Program, which uses preventive health services and supplies focused on reducing asthma triggers in patient’s homes. To promote access to healthy foods, Rhode Island should work with accountable entities to implement a farmer’s market similar to Kaiser Permanente, a multi-state nonprofit that sells locally grown, healthy food at hospitals and medical facilities in areas that lack healthy food options.
Education
Educational attainment is key to improving health outcomes and reducing health disparities. To promote long term health outcomes, focus must be shifted to several key educational outcome measures, including increasing graduation rates, increasing attendance rates, and decreasing suspension rates for Medicaid populations. Rhode Island can achieve these goals through four key recommendations: improving the EPSDT program, engaging pediatricians in HeadStart classrooms, introducing pediatricians to IEP decisions, and creating nontraditional educational programs at facilities that serve a high number of Medicaid children.

Social and Community Context
Encompassing many of the other social determinants, the domain of social and community context focuses on the elements around social cohesion as it relates to a community’s health, networks, and interactions with institutions, among other components. More specific issues within the domain include access to health services and resources networks, family structure, perception and impact of discrimination, and incarceration. Rhode Island can focus on addressing social cohesion as it relates to social and community context through our proposal of “Pathways to Health” which include a network of healthcare providers that utilize our proposed assessment to identify gaps in accessibility and community-specific needs, partnering first responders with social and community health workers, and creating health-focused events to address chronic illness.
BACKGROUND

Rhode Island, the smallest state in the United States, has a population of just over one million residents. The racial and ethnic demographics of Rhode Island consist of 81.4% identifying as white, 5.7% as Black or African-American, 2.9% as Asian, and 12.4% Hispanic or Latino. The median household income is $56,852 per year, and 13.9% of the population live under the poverty line. Nationally, 14.5% of the population is under the poverty line.¹

In a report released by the Kaiser Family Foundation in June 2017, an estimated 29% of the population was considered low-income. Medicaid covered one in seven adults under the age of 65, and one in four children. In Rhode Island, Medicaid plays a huge role in the healthcare system.²

In 2010, former President Barack Obama signed the Affordable Care Act (ACA) into law. The ACA provided subsidies to consumers that lowered the costs of healthcare, expanded the medicaid program, and promoted innovative medical care practices.³ Under the ACA, an extra 93,000 Rhode Islanders became eligible for Medicaid. The ACA expanded Medicaid to the following:⁴

- Childless adults who earned up to 138% of the federal poverty level (FPL),
- Pregnant women with household incomes up to 253% of poverty,
- Children with household incomes up to 261% of poverty.

Once Rhode Island expanded Medicaid, the uninsured rate dropped to 5.7% in 2015, which represented one of the lowest rates in the country. The low uninsured rate is illustrative of Rhode Island’s efforts in ensuring that its population has access to quality healthcare.

Over the last few years, Medicaid in Rhode Island has shifted its approach to health and has begun using Accountable Care Organizations, which are organizations of stakeholders who aim to improve the quality of healthcare to their beneficiaries. One focus on their work includes the social determinants of health. ACO’s believe that a focus on the social determinants of health can improve the population’s overall health outcomes.

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³ HealthCare.gov Glossary.
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ECONOMIC STABILITY

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3. Create a Governor’s Council on Interagency Cooperation

INTRODUCTION
Economic stability can be defined by the absence of fluctuations in personal income and employment and the effects of this on access to resources. The Office of Disease Prevention’s Healthy People 2020 initiative identified “economic stability” as a social determinant of health. Research suggests that economic stability and health benefits are strongly associated. Addressing economic stability is one of four overarching goals for the Office intended to “create social and physical environments that promote good health for all.” This domain was shown to enhance quality of life and have a “significant influence on population health outcomes.” This paper found that missed appointments, physical and mental health problems, and lack of proper knowledge of health-improving social services were heavily correlated with economic instability.

To address these issues, the State of Rhode Island should focus on three policy areas: access to transportation, housing, and creating a more interconnected network of social services. By enacting policies that address these issues, low-income residents of the State of Rhode Island will benefit from increased economic stability and improved health outcomes, while eliminating unnecessary Medicaid expenditures.

First, missed appointments caused by lack of access to transportation and their associated costs are obstacles to healthcare access. According to the 2015 Behavioral Risk Factor Surveillance System survey, conducted by the Rhode Island Department of Health, 10.9% of men and 9.7% of women cited facing cost barriers, such as transportation costs, to

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8 RHODE ISLAND DEPARTMENT OF HEALTH 2015 STATEWIDE HEALTH INVENTORY
seeing a doctor. A 2013 study found that individuals without access to a car were 3.23 times more likely to miss an appointment relative to those who had access to a car. Because Medicaid enrollees are less likely to have a car, they are likelier to miss appointments. Ultimately, transportation obstacles lead to missed appointments which negatively impact health outcomes for those affected.

Second, the effects of economic instability directly translate into health outcomes for individuals who lack the resources to pay for safe and affordable housing. High-quality housing improves physical health by reducing exposure to extreme weather, pollution, and the spread of disease. In addition, housing conditions impact mental health. For example, according to a 2007 study by the Canadian Institute for Health Information, individuals with unstable housing conditions often suffer from increased anxiety and mental disorders, and local reports suggest that homeless 20% - 30% of homeless individuals in Rhode Island experience mental health disorders. These studies highlight the need to address housing as a social determinant of health.

Finally, the State of Rhode Island currently offers robust public services that aim to support the health outcomes of its population, but the agencies that operate them do not work together; limiting their ability to effectively serve the people of Rhode Island. The Rhode Island Office of the Governor estimates spending on health and human services to reach almost four billion dollars, amounting to over 40% of the state budget for fiscal 2017. Promoting interagency cooperation and the use of a shared database to identify individuals who may benefit from existing programs improves health outcomes and saves money.

RECOMMENDATIONS

1. Replace LogistiCare with Uber to improve access to transportation.

Many residents of the State of Rhode Island currently face transportation barriers to accessing healthcare, and current transportation resources, such as LogistiCare, are not fully meeting residents’ needs. Using Uber instead of LogistiCare will better meet the needs of residents and increase transportation reliability.

Background

Rhode Island’s current resources for healthcare transportation are unreliable. The state of Rhode Island

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provides Non-Emergency Medical Transportation (NEMT) for Medicaid recipients and other qualifying residents through LogistiCare, a transport company. However, services provided are oftentimes unreliable.

A 2016 report from the Rhode Island State Legislature identified problems of reliability in LogistiCare. These included buses not picking up patients, arriving late and/or at inconvenient places, and using different vehicles (taxis, ambulances, vans) creating confusion for patients and ultimately leading to missed appointments for patients. Furthermore, LogistiCare requires individuals to schedule transportation services at least two days in advance, and scheduling services are limited from 8 am to 5 pm on weekday working hours for many low-income people.

Replacing LogistiCare with Uber presents a more effective alternative. Such a partnership would benefit the existing NEMT system by creating more flexible scheduling and providing more reliable transport services.

A partnership with Uber can increase NEMT effectiveness by allowing patients to request/schedule services on-demand, increasing reliability by sharing patient location to a network of drivers in real-time and allowing the patient and driver to communicate via phone, and reducing reliability on public transit, which is subject to long wait times and scheduling irregularities.

Evidence-based examples and implementation considerations

Such partnerships have proven to be reliable for hospitals around the country. A pilot program for patients receiving Intensive Outpatient Treatment at St. Vincent Charity Medical Center in Cleveland, Ohio saw no missed appointments for those who received free Uber rides. Furthermore, Medstar, a healthcare company, partnered with Uber to provide free rides to low-income individuals in the Washington D.C. area, which average a cost of $18 per one-way trip.

A 2008 study found that the average costs of a missed appointment was $196, a figure that is far more than the average costs of a transportation service. Assuming a roundtrip cost of $36, each missed appointment prevented by an Uber ride leads to savings of roughly $160 per ride. If this service prevents just 10,000 missed appointments annually, the State of Rhode Island is looking at annual savings of $1,600,000.

Additionally, to prevent fraud and abuse, each Uber ride should be matched with a specific appointment.

Furthermore, Uber features patient-centered transportation.

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loads/LogistiCare%20One%20Pager%2005_2
1, 2017, from
UberASSIST, for example, uses drivers “trained on the needs of the riders they are likely to pick up, including seniors”. And UberCENTRAL allows the healthcare provider to message drivers—giving them simple instructions such as “Please help the patient up to the steps of their house.” UberWAV utilizes specialized vehicles for wheelchair-bound individuals.

Next Steps

First, implementing such a program would first require identifying the terms of Rhode Island’s contract with LogistiCare. If a multi-year contract exists with LogistiCare, there may be legal challenges or fees incurred if the contract is to be terminated early. Second, the Executive Office of Health and Human Services should create a pilot program with Uber for current LogistiCare-eligible residents. Depending on the remaining duration of the contract with LogistiCare, the pilot program can be expanded as LogistiCare is phased out, eventually fully replacing it.

2. Hire more mental health peer providers

We recommend increasing the number of mental health peer providers in order to improve the health outcomes for homeless persons and those at-risk of losing their housing. Peer mentoring may assist vulnerable populations with life coaching.

Social factors strongly impact health outcomes. Medicaid may be able to address these social determinants of health through non-traditional methods.

This section outlines how the Accountable Entities Program can increase the quality of Medicaid services for homeless persons and those at risk of losing their housing. Our recommendation focuses on supporting homeless and at-risk populations by increasing mental health services.

Background

Rhode Island may be able to reduce health disparities and long term health care costs by improving social services. However, Rhode Island faces challenges in providing services to mental health and homeless populations. Rhode Island suffers from a labor shortage in their social service sector. These shortages limit the ability to serve mental health patients and the homeless. A 2015 report to the Executive Office of Health and Human Services Department of Health found:

- Three out of five counties have at least one community health center lacking mental health caseworkers;
- Rhode Island mental health system provided housing assistance to only 2.6 percent of individuals with serious mental illness; and
- Rhode Island mental health system serviced just 5 percent of the homeless population

In order to address this shortage and increase service to homeless


18 Ibid
19 Ibid
populations, the state must implement social service systems in order to address the health consequences of economic instability.

*Rhode Island’s homeless and at-risk populations*

According to United States Department of Housing and Urban Development, homelessness includes “individuals and families who lack a fixed, regular, and adequate nighttime residence,” or “individuals and families who will imminently lose their primary nighttime residence.”²¹ It is estimated that 4,400 people in Rhode Island are homeless and that 1,100 individuals sleep on the streets per night.²²

At-risk refers to individuals who may be at-risk of losing stable housing. These individuals often include those with a history of homelessness, those with severe mental health challenges, and those spending more than 30% of their income on rent. 49.2% of all Rhode Islanders pay more than 30% of their income on housing. This percentage places them at-risk for housing instability. Medicaid can address these social determinants through instituting better social service systems.

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²³ Enhancing the Utilization of Peer Providers in California. (n.d.). Retrieved August 01, 2017, from
A peer provider pilot program currently operates in California. The University of California San Francisco Medical Center (UCSF) operates a mentorships program in order to better meet the needs of their community. One report by UCSF noted that, “peer-delivered services resulted in measured outcomes equal or better than the same services provided by professionals without lived experience.” However, the same study suggested the need for more data to support these findings.

Peer provider programs often resemble 12 step peer-to-peer mentoring programs. 12 step programs provide both counseling and emotional support for mentor and mentee. According to a five-year study on peer counseling and substance abuse, research showed that individuals with both mental health and substance abuse issues were more likely to relapse in year 5 than patients who only experienced substance abuse. The study examined two groups: patients with substance abuse and mental health conditions and patients with only substance abuse issues. The study further suggested that peer mentorship “substantially improved the chances of substance use remission at Year 5 for” both groups.

Health outcomes improved for both groups. These reports acknowledge the benefit of peer providers in addressing health outcomes for vulnerable populations suffering from behavioral and mental health conditions.

Implementation/ Next steps

In order to create the necessary infrastructure for social workers and peer providers to collaborate, Rhode Island should partner with local hospitals, medical schools, and clinics. Clinics may be ideal locations for hosting pilot programs geared towards homeless populations.

Under this pilot program, peer providers would receive compensation ranging from hourly pay, fixed stipends, guaranteed transitional housing, or housing vouchers. Rhode Island may partner with Medicaid in determining appropriate pay rates or compensation. Medicaid may be able to use funds from the Health System Transformation Fund in order to pay for mental health peer providers.

Although studies highlight the positive effects of peer mentor pilot programs, UCSF reports the need for future research into the long term and large scale adoption of a peer provider program. UCSF reports that, “a lack of consensus on core components of the role in mental health and substance use disorder settings” and the “lack of clarity about the role may hinder widespread adoption.”

Concerns focusing on adaptation may be addressed by implementing the peer provider program on a small scale.

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3. Create a Governor's Council on Interagency Cooperation

Rhode Island’s multiple agencies, each with their own programs and areas of expertise, create functioning but siloed programs. Addressing economic stability requires an integrated approach in which agencies work together to more effectively use their limited resources, reduce fragmentation in services, and improve the health outcomes of Rhode Islanders.

We are recommending that the Governor of Rhode Island create a Governor’s Council on Interagency Cooperation to identify opportunities for agencies to integrate and improve their services through data sharing.

**Governor’s Council on Interagency Cooperation**:

Research shows that teams of people with diverse perspectives are more innovative problem solvers.\(^\text{27}\) Bringing together a council composed of agencies and community care providers will allow them to identify opportunities for cross agency cooperation.

Including officials from the Rhode Island Department of Human Services, Rhode Island Housing, the Division of Higher Education Assistance, and SNAP, provides a group of agencies that have a direct impact on economic stability and other health outcomes. Together, they can identify areas where their programs overlap and can be used in conjunction to promote economic stability, amongst other positive health outcomes.

By making local community partners and care providers part of the council as well, they can provide unique perspectives, bringing their experience of operating innovative community focused programs. Through the council, they can also identify how the agencies can improve how they provide social services, while supporting community programs.

This connected approach will create a legitimate safety net, with agencies communicating with the individuals receiving care, community partners, and one another. Together, they can enhance the process of finding and accessing services, ensuring that no one falls through the safety net.

*Sharing data to improve agency services and create a more effective tool to address economic stability*

Rhode Island’s state agencies currently offer a robust set of social services, but these agencies are operating as silos of excellence, walled off from one another. Each agency individually collects data on the people that are accessing their services, but this data is not shared. By creating the Rhode Island Database for Interagency Services (RIDIS), agencies will be able to integrate their services, while cutting down on bureaucracy.

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When people choose to enter RIDIS through one of the member agencies, the system will collect information that can help identify them as someone who may benefit from program provided by another agency. It will collect their age, their income, whether they have access to housing, food, transportation, and a host of other data.

By entering RIDIS, people are allowing their information to be shared with member agencies. This approach eliminates the need for people to fill out similar, or even the same form, multiple times across agencies. Breaking down another barrier for people to access services, while also saving government money by cutting work hours spent on filling out and searching for forms.

Another benefit of this method for sharing interagency data is that it allows agencies to be notified when people enter and leave programs across multiple agencies. For example, a downturn in the economy could be analyzed from the lens of how many people started signing up for programs, and which agencies people went to first. This information can help Rhode Island shift resources to those programs.

**Identify opportunities for agencies to work together**

In order to integrate services, improve economic stability, positively impact health outcomes, and save money; the silos of excellence must be opened up, allowing them to share data through RIDIS and identify at risk individuals and which services they can benefit from.

Using the data inside of RIDIS, an algorithm will notify the appropriate agency if someone is identified as a person who may be in need of a service offered at another agency. Then, this agency will be able to reach out to this person, letting them know that services are available that can positively impact them. For example, if someone signs up for SNAP, they may be asked if they have signed up for Medicaid, a program that directly impacts health outcomes.

The way that the current system operates also fails those who need it the most, hurting health outcomes and costing Rhode Island hundreds of millions of dollars every year. RIDIS and its ability to integrate services, provides a solution. For example, a homeless individual going into shock due to their diabetes enters the emergency room of a hospital, they will receive excellent care and a supply of insulin. In a few weeks, they will return to the emergency room with the same condition, this cycle will continue, damaging health outcomes and racking up an exuberant amount of expenses.

This approach to helping this individual, and those like him, is flawed in that it does not address the other issues surrounding their health. The questions of how they will avoid going into diabetic shock when they do not have access to healthy food, or a safe place to store their insulin are not being
addressed. Rhode Island has programs that provide access to housing and stable food, but they are not aware of this person who need them most.

By allowing agencies to work together and share data, the outcomes may be very different. The moment that this same person is stabilized and given their insulin, their doctor asks them if they have a safe place to stay and if they have access to a stable food supply. If they do not, RIDIS will identify specific programs or agencies that can help them. This approach to care allows multiple agencies to come together to support the economic stability of an individual, centering the care around them. This approach leads not only to greater health outcomes, but to huge savings for Rhode Island.

By coming together to support the economic stability of an individual, agencies can identify and assist the most at risk people in a combined approach. Effectively breaking the cycle of repeated ER visits, saving the state hundreds of millions of dollars.

Implementation considerations

Data sharing between agencies will undoubtedly have a positive impact economic stability and health outcomes of those receiving services. With this in mind, it is important to recognize that some information must be kept private, by will of the individual, or federal statute. Protecting private and protected information is a key concern, which is why making it clear to individuals what information will and will not be shared is important.

For example, if an individual has HIV, this information will be in the Medicaid database, as they will be receiving care for their condition. If they sign up for and affordable housing program, the agency overseeing this program should not be able to see that they have HIV in the Medicaid database. The line between being able to identify someone who may be in need of a service and being able to pull information on an individual from another agency, is a fine one, but not the less an important one.

The cost to benefit ratio of the program is also important. The benefit of RIDIS is twofold, it will not be as expensive as other programs being undertaken by the state, and its potential for savings are huge. According to the Rhode Island Office of The Governor, the state is projected to spend 2 billion dollars on medicaid during fiscal 2017. According to the Department of Health and Human Services, the top 5% of health care spenders make up 50% of all healthcare spending, a large part of this spending due to repeated ER visits. By using RIDIC to target these extremely high cost spenders and addressing their health outcomes with multiple programs, the state has the potential to save a billion dollars every year.
Recommendations
1. Implement Home-Oriented Asthma Prevention Services
2. Accountable Entities Host On-Site Farmers’ Markets

INTRODUCTION
This section presents policy recommendations that relate to the “neighborhood and built environment” social determinant of health. It is essential to examine health through the lens of this social determinant, as individuals’ health outcomes are often tied precisely to where they live. The category of “neighborhood and built environment” encompasses the following elements: access to healthy food, quality of housing, crime and violence, and environmental conditions. All of these elements influence the health outcomes of Medicaid beneficiaries in the state of Rhode Island. In particular, without easy access to nutritious foods or healthy housing free of environmental hazards, Rhode Islanders face health consequences that range from obesity to lead poisoning. This section focuses on the current conditions and policy recommendations associated with two key issue areas: quality of housing and access to healthy food in Rhode Island.

RECOMMENDATIONS
1. Implement Home-Oriented Asthma Prevention Services

Background
Rhode Island is home to the nation’s fourth oldest housing stock, with 43% of homes constructed before 1940 and over 75% constructed prior to 1970. As a result, nearly 300,000 housing units in the state are likely to contain lead-based paint or have lead-contaminated yards. Lead poisoning can contribute to anemia, kidney damage, muscle weakness, elevated blood pressure, and brain damage.

In addition to lead poisoning, unhealthy housing conditions cause or intensify several other negative health

29 Ibid
30 ProvPlan, (n.d.). Rhode Island’s lead hazard mitigation act.
outcomes. Numerous studies have connected poor quality construction, pests, radon, and other utility deficiencies to respiratory illnesses, unintentional injuries, asthma, and cancer.\(^{31}\) In particular, there were 1,579 hospitalizations of Rhode Island children with primary asthma diagnoses between 2011 and 2015.\(^{32}\) Studies show that 21% of all asthma cases are connected to mold in housing,\(^{33}\) and can also be traced to the presence of rodents, cockroaches, and dust mites associated with poor quality housing.

Because Rhode Island already has a robust Medicaid-supported reimbursement system for lead follow-up services,\(^{34}\) the state should direct its attention to the growing body of evidence pointing to the efficacy of a home visit strategy for asthma patients.\(^{35}\) Community health workers’ tasks during these visits can include evaluating the home’s environmental conditions, assisting with cockroach and rodent pest management, providing the client with trigger reduction resources such as vacuums or bedding encasement, and offering social support.\(^{36}\)

**Designing a Home-Oriented Asthma Care Program in Rhode Island**

Rhode Island should expand its pediatric asthma program to include home-oriented prevention services. Currently, Rhode Island only offers direct care services for asthma, such as inpatient visits and medication prescriptions. This type of care is insufficient for addressing pediatric asthma. Instead, the care should be preventive and focused on reducing triggers in the patient’s home. A model for this type of program is Massachusetts’ Pediatric Asthma Pilot Program (PAPP).\(^{37}\) The next sections use this model program to outline how Rhode Island should expand its pediatric asthma care program using Medicaid.

**Whom Would the Program Serve?**

The program would offer a range of asthma care and prevention services for any child between 2 and 18 who is enrolled in RIte Care and has a diagnosis of asthma.\(^{38}\) The child must also be considered high-risk, with a low score on the asthma control test. To enroll eligible patients, RIte Care should set up a data sharing system. Primary


\(^{32}\) Ibid


\(^{34}\) National Center for Healthy Housing. (2015). *Case studies in healthcare financing of healthy homes services: Medicaid reimbursement for lead follow-up services in Rhode Island.* Retrieved from

\(^{35}\) Krieger, J. (2010). Home is where the triggers are: Increasing asthma control by improving the home environment. *Pediatric Allergy, Immunology, and Pulmonology, 23*(2), 139-145.

\(^{36}\) Ibid

\(^{37}\) Tsai, D. (2016). *Pediatric asthma pilot program phase 1 protocol.* Retrieved from

\(^{38}\) Ibid
care physicians, who diagnose asthma patients, should enter their information into the Rtte Care patient database. Employees can then look over this list every 3 months to flag and sign up new eligible patients.\textsuperscript{39}

What Would the Program Do?

This section will focus on activities modeled after PAPP services that move beyond direct care, such as medications and frequent testing, to services that address quality of housing improvements as a pathway to better pediatric asthma health outcomes.

- Home Visits – Education and Assessment: The program should assign each patient a community health worker (CHW) that visits the patient at their home to provide the patient and their family with education on controlling asthma. This education will include a discussion of allergen controls, the creation and review of an asthma action plan, and training on managing attacks. The CHW will tailor the education to the patient’s care needs and to the culture, language, and literacy of the family. The CHW will also assess the home and look for environmental asthma triggers such as cockroaches, dust mites, and mold. After the inspection, the CHW will talk with the family to create a list of needed supplies that can mitigate these triggers.\textsuperscript{40}

- Provision of Asthma Trigger Reduction Supplies: This program should provide home supplies to families in need, based on the CHW home assessment. The required list of supplies should include a vacuum, mattress cover, pillows, and an air conditioner. Supplies may also include pest management supplies or extermination services if needed by the family.\textsuperscript{41}

Evidence of Program Success

Due to its recent implementation, PAPP has yet to be analyzed for its effect on pediatric asthma health outcomes. However, as previously mentioned, research finds that programs that target asthma care from a variety of areas, including in the home, are most effective at improving health outcomes for children with asthma.\textsuperscript{42} Preliminary cost estimates of PAPP indicate that the average cost per patient per month will be $54.02.\textsuperscript{43} Boston’s Community Asthma Initiative (CAI), which is a local pilot of PAPP and uses the same innovative care services, offers an example of success for home-oriented asthma care programs. Studies of CAI

\textsuperscript{39} Ibid
\textsuperscript{40} Ibid
\textsuperscript{41} Ibid
\textsuperscript{42} Tsai, D. (2016). Pediatric asthma pilot program phase 1 protocol.
\textsuperscript{43} Ibid
have found savings of $3,827 per patient enrolled in the program. For every dollar invested in CAI, $2.04 was saved in hospital and emergency department costs. CAI has also led to improvements in other outcomes, including a 79% reduction in hospitalizations and a 41% reduction in missed days of school for the patients. These outcomes make it clear that Rhode Island will save money and improve patient outcomes by implementing a home-oriented preventive asthma care program.

**Implementation Considerations**

**Rhode Island should look to expand its Asthma Control Program to include the home-oriented preventive services and supplies in PAPP.** Rhode Island is currently experimenting with the Home Asthma Response Program (HARP), which uses the types of home-oriented care with community health workers mentioned above. This pilot is being tested at Hasbro Children’s Hospital, with a current patient sample of 209. This program should be incorporated at the state level, becoming available to all eligible children enrolled in Rite Care.

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**Next Steps**

Rhode Island can begin the process of using home-oriented interventions to care for pediatric asthma patients through Medicaid through the following steps:

- **Create a taskforce to examine asthma prevention and mitigation policies.** Rhode Island’s Medicaid program, especially Rite Care, a managed care program that provides Medicaid to children, should take the lead in creating the task force. The state should convene stakeholders that care for Medicaid patients such as hospital physicians, nurses, and executives. Rhode Island should also look to include issue experts in the area of pediatric asthma, such as professors or directors of asthma prevention organizations. The taskforce, which will represent a diverse set of stakeholders, should examine PAPP’s policies and determine which home intervention strategies best align with the needs of the state.

- **Start aligning agency and organizational goals around improving asthma health outcomes.** Part of the success of PAPP in Massachusetts is due to the amount of communication and cross-agency partnerships involved with addressing the

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needs of pediatric asthma patients. Rhode Island should look to follow these steps by creating and updating enrollment and utilization reports for Medicaid patients at risk of or diagnosed with asthma. The Asthma Control Program and RItte Care should coordinate services to provide a central program office that patients and their families can access and use.

2. Accountable Entities Host On-Site Farmers' Markets

Background

In addition to housing quality, the lack of access to healthy food is another barrier for Rhode Islanders. With a population of a little over a million residents, almost five percent of Rhode Islanders from low-income backgrounds have low access to a grocery store based on their residence. It may seem like a low percentage of Rhode Islanders who are affected, but that is still one of twenty Rhode Islanders who do not have access to a grocery store within their proximity. The lack of healthy food will affect the daily lives of almost 60,000 Rhode Islanders who are at risk of developing health issues or an illness.46

These 60,000 Rhode Islanders have bad health outcomes waiting to happen because of their dietary behaviors. The dietary behaviors from adults in Rhode Island consist of 63.3% not meeting the required fruit consumption. Also, 74.1% did not meet the required vegetable consumption.47 The continuous lack of nutrition will have both short-term and long-term effects. In short-term, the lack of nutrition will contribute to stress, tiredness and capacity to work. In long-term, there is a high risk of health complications rising from the lack of nutrition. Some of the health problems that may develop include: obesity, high blood pressure, high cholesterol, heart disease, type-2 diabetes, and depression.48

Farm Fresh Rhode Island, a nonprofit organization, serves to improve access to healthy food through community-supported agriculture, farmers' markets, and farm stands. They provide the location of local farmers and markets, what they sell, and their hours. The initiative improves access to nutritious food, however those in towns such as Charlestown, West Greenwich, and Woonsocket still have to travel often more than five miles to obtain vegetable and fruit variety. The seasonality and limited hours for the farm stands and farmers markets worsens the already limited number of suppliers in these

46 Ver Ploeg, M., & Breneman, V. (2017). Low-income and low access to a grocery store.

47 Rhode Island State Nutrition, Physical Activity, and Obesity Profile (Rep.). (2016, September 7). Retrieved August 1, 2017, from National Center for Chronic Disease Prevention and Health Promotion website

48 Rhode Island State Nutrition, Physical Activity, and Obesity Profile (Rep.). (2016, September 7). Retrieved August 1, 2017, from National Center for Chronic Disease Prevention and Health Promotion website
areas. Farm Fresh Rhode Island represents an important to improve accessibility of healthy food to all Rhode Islanders, however it’s important for accountable entities to ensure their populations have access to healthy food.

Accountable entities can address the issue of grocery store proximity in neighborhoods by having its accountable entities facilitate farmers’ markets.

**What would the program involve and how would AEs implement it?**

Accountable entities can target the issue of low access to healthy food by having farmers’ markets. This program addresses the needs of the community by increasing the availability of fresh food. The program would involve multiple vendors to provide an array of fruits, vegetable, and local items. The selection of vendors will depend on the cultural and health needs of the community. As discussed above, the seasonality and business hours of the farmers’ markets can serve as a barrier to access healthy fruit and vegetables. Therefore, the farmers’ markets will have year-round availability with different vendors as needed to ensure this practice. The accountable entities will offer the farmers’ markets at least one weekday and weekend day, with hours during the day and at night. Cooking demonstrations have been found to have a positive impact on fruit and vegetable intake,⁴⁹ therefore this component will also be included as part of the farmers’ markets.

The accountable entities will serve as the main administrators of this program. This setup allows local control and for accountable entities to establish partnerships with community farmers, farmers’ organizations, and nonprofit organizations to administer farmers’ markets. The state’s Medicaid system will act as the main funders of the program. The state Medicaid system will also have one or multiple staff members whose duties include overseeing the program and dealing with general regulations and issues that occur at the local level.

**What evidence-based models can we look to?**

Kaiser Permanente, the largest private, nonprofit healthcare system in the country, hosts over 55 farmers’ markets at its hospitals and medical facilities. Their on-site markets serve employees, patients, and community members across California, Colorado, Georgia, Hawaii, Washington, and Maryland. The markets range in number of vendors, but they typically supply locally grown produce, flowers, baked goods, and locally produced specialty items. They often operate on a weekly basis.

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basis year-round. Crompt et al (2012) have studied the farmers’ markets’ impacts through surveys given to market attendees. They discovered that 74% of attendees increased their consumption of fruits and vegetables from shopping at the market, and 71% of those surveyed reported eating a greater variety of fruits and vegetables. These results indicate the benefit of following a hospital-based farmers market to rectify low access to fresh produce for low-income groups.

**Implementation Considerations**

Kaiser Permanente’s Farmers’ Markets offers a useful model to understand the implementation of farmers’ markets through a health entity. However, as a non-profit, the organization has less funding implications. Rhode Island’s Medicaid system doesn’t allow for payment towards nutrition services, except for those under Managed Care plans, such as RIte Care for families with children, pregnant women, and children under age 19. Since the farmer’s markets will benefit these populations, this program has the possibility of being funded through Rhode Island’s Medicaid system.

The program may come with opposition due to issues of funding and cost, however careful planning can prevent these issues. The issue of funding may create opposition to the hosting of a farmers’ market, as the accountable entity must pay for factors such as advertisement, wages for staff who coordinate the program, and food stands. The vendors’ space rental costs will slightly offset these fees. If the farmers’ markets remain at the site of the accountable entity, providing space for the program will not cost any money. To improve cost accessibility for market patrons, accountable entities can partner with MarketLink. This federal initiative provides free or low-cost electronic benefits transfer (EBT) card reader equipment to farmers and farmers markets. This improves cost accessibility and allows those on the Supplemental Nutrition Assistance Program (SNAP) to afford healthy fruits and vegetables offered at the accountable entities’ farmers’ markets.

**Next Steps**

The following steps serve as recommendations to begin the process of ensuring accessibility of healthy food to all Rhode Islanders, especially Medicaid beneficiaries:

- **Establish specific access and food needs by community, based on previous research and community surveys.** Rhode Island already has community
health needs assessments for its four urban core cities. The inclusion of more detailed information on the food patterns of the individuals and possible barriers to healthy food will help construct more targeted and effective farmers’ markets.

- **Hold meetings between accountable entity officials and farming organizations to establish regulations and coordination of farmers’ markets.** This meeting between accountable entities, farmers, and farming organizations will provide all parties a better understanding on the community needs, funding, and expectations for the program. The accountable entities at the statewide or local level will likely initiate this meeting to host on-site neighborhood farmers’ markets.
EDUCATION

Recommendations

1. Create educational programs for children during waiting times at facilities that see a high number of Medicaid beneficiaries.
2. Reevaluate the Early and Periodic Screening, Diagnostic and Treatment program (EPSDT). The state must create a partnership between public schools and the EPSDT mental health providers.
3. Incentivize pediatricians to perform direct consultations with HeadStart coordinators to ensure educational settings accommodate specific student medical needs.
4. Incentivize pediatricians to participate in IEP Teams for Students with Disabilities.

INTRODUCTION

Research suggests that educational outcomes and health benefits are strongly correlated. In addressing health disparities, it is crucial to understand the factors that are negatively correlated with poor health outcomes. Research suggests that lower educational attainment is correlated with poor health decisions. Likewise, poor health conditions are correlated with poor performance in schools. In tackling poor health outcomes, health professionals must be willing and able to bridge these two domains.

Rhode Island’s healthcare system is taking an interdisciplinary approach to how it deals with health. Over the last decade, billions of dollars have gone towards treatment, but investment in prevention has lagged behind. Therefore, we must focus on preventive measures. Given the state’s history of Medicaid program innovation, Rhode Island is poised to make advances in addressing the educational determinants of their clients’ health. Accountable Entities, and their recently released Roadmap, is a unique opportunity to address and connect Medicaid stakeholders with their education counterparts.

Education, as a social determinant of health, must be considered when shaping health policy. Specifically, Rhode Island must find a way to create a partnership between medical professionals and education. Through this connection, medicaid professionals could inform their patients, specifically Medicaid beneficiaries, on good practices for better health. The role of education is crucial in not only communicating issues of health, but

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also in preventing illnesses and diseases.

Rhode Island should focus their health services dollars into programs that address social determinants. Research says that social services lead to better health comes, especially at a state level. Our process measures are increased graduation rates, increased attendance rates, and decreased suspension rates for Medicaid populations. Our recommendations support Medicaid beneficiaries in attaining long-term health and educational outcomes and remove education-related barriers to positive health.

RECOMMENDATIONS

1. Create educational programs for children during waiting times at facilities that serve a high number of Medicaid beneficiaries.

Background

Research suggests that people experience dissatisfaction when they wait longer than fifteen minutes to see their doctors and extreme dissatisfaction when they wait longer than thirty minutes. With the ACA and the expansion of Medicaid, research is suggesting that waiting time has the largest influence on how one feels about the service they receive.

Policy Proposal

During these waiting times, education for Medicaid beneficiaries can be provided. While this practice has not been directly implemented to health, it has worked in other forms. For example, in Washington D.C, as part of the My Brother’s Keeper initiative, barber shops serving low-income and children of color, are providing books for children to use during their waiting times. More than twenty barbershops across the state are stepping in to create educational opportunities for children.

Additionally, economists argue about the importance of early educational attainment. School should not have to be the sole place where a student receives education. There is an opportunity to expand and go beyond that, and doctor’s offices can be settings for expansion. This investment in early childhood education does not only lead to positive health outcomes, but also increases overall productivity and decreases the social cost by generating positive externalities.

Opportunities to Create Partnerships with the Community

These centers can contain educational resources, such as books, tablets, and other educational enriching services. Non-profit communities can also partner with hospitals to provide these services. For example, accountable entities can distribute funding to Providence Talks, an intervention program for low-income children. Providence Talks seeks to work with child development, specifically

53 “Mental Health in America—Access to Care Data.” Mental Health America.


55 https://groundswell.org/eddie-s-hair-creations-dc-feature/

56 Heckman, James J. "Invest in early childhood development: Reduce deficits, strengthen the economy." The Heckman Equation 7 (2012).
language acquisition. They seek to reduce the word gap that exists among children from affluent families and low-income children, many of which are medicaid beneficiaries. Providence Talks bridges the domain of education and health by using early education as a means of reducing cognitive development.

Using programs like Providence Talks in medical facilities expands educational access and ensures that health is looked at from other domains. Other community organizations and programs could use this opportunity to increase access for students, and use healthcare facilities as methods of increasing their audience and creating a greater impact.

Implementation/ Next Steps

Convene educational experts and accountable entities to understand best practices in providing materials and understanding the needs of the communities that are served. These discussions must be inclusive of medicaid beneficiaries to ensure proper agency. Once communication is established, there will be clear understanding of each medical facilities' needs. Funding can be allocated based on the number of medicaid beneficiaries per medical facility. Educational experts and accountable entities should consult with nonprofit organizations, intervention programs that focus on educational attainment, and universities. Programs like Providence Talks and Health Leads have the capacity and expertise to provide education. Academic enrichment programs can also be used as a form of education. However, these will generate higher costs.

2. Leverage the Early and Periodic Screening, Diagnostic and Treatment program (EPSDT). The state must create a partnership between public schools and the EPSDT mental health providers.

Background

Mental health data in adolescents shows a need for increased mental health services in Rhode Island. According to the Behavioral Health Barometer in 2011, Rhode Island exceeded the national average for major depressive episodes in adolescents. More than half of Rhode Island adolescents do not receive treatment for their depressive episodes. These numbers continued to exceed the national average in the 2012-2013 year. Nationally, less than one-third of children with serious mental health services receive treatment. Rhode Island is ranked 33 in the nation with 67.1% of youth not receiving mental health services. The number of children needing mental services is growing. In a 2005 study by Wagner and

60 Mental Health in America - Access to Care Data. (2017).
colleagues, they found that the school system has identified 16% more students with mental health problems every year. In addition to the serious need of mental health services, mental health affects the ability of a child to function in a school setting. Students with disabilities are suspended nearly twice as much as students without disabilities.

Problems with mental health care have been caused by lack of access to appropriate services. Children simply do not have the ability to receive the care they need to lead productive lives. The few children’s mental health outpatient services available have struggled with client attendance, parent’s mental health impact, and child problem severity. These problems, coupled with increasing population need and lack of money, have made substantial barriers to care. These boundaries are reflected in the poor mental health statistics of youth.

**Policy Proposal**

The state should create a partnership between public schools and the EPSDT mental health providers. By having mental health professionals in school, we can address client attendance, which is one of the main problems with children mental health care services. Through this partnership network between teachers, guidance counselors, and mental health professionals, student’s needs can be effectively diagnosed, addressed, and treated.

By improving the mental health service network for children, Rhode Island can improve poor educational outcomes due to insubordination and behavioral problems. Research has shown that attention to educational needs has lead to better health outcomes. Using mental health services, the program will target suspension rates, graduation rates, and performance rates. By meeting mental health needs, Rhode Island will create a population of students that are more successful in school. As students succeed in school, their long term health outcomes will increase.

**Implementation/ Next Steps**

This recommendation would create a task force to bring public school professionals and mental health professionals together. The task force would include the mental health providers serving Medicaid students and public school district administration. The partners would need to create a plan that created guidelines for acceptance into the program as well as an interagency data sharing among the stakeholders. The task force would define the relationship between the program stakeholders and focus on meeting the specific needs of EPSDT students. It would be important to focus

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62 Office for Civil Rights. 2013-2014 Data Collection A First Look: Key Data Highlights On Equity And Opportunity Gaps In Our Nation’s Public Schools 2013-2014 Data Collection A First Look: Key Data Highlights On Equity And Opportunity Gaps In Our Nation’s Public Schools
on the school as the site for the mental health services because of the security and stability public schools provide children. Mental Health offices will be matched to public schools by region according to the location of EPSDT students.

Under the current administrative climate, it is unsure how Medicaid will be affected by emerging health care policy. However, it is important to emphasize how detrimental loss of Medicaid funded mental health services would be, especially in Rhode Island. Rhode Island is the third worst state in prevalence of mental illness in children. It’s important to remember that EPSDT is an investment into the children of Rhode Island and consequently, and investment into Rhode Island’s future. Moving forward, it is now more critical than ever to focus on the mental health of youth and create programs that are impactful.

3. Incentivize pediatricians to perform direct consultations with HeadStart coordinators to ensure educational settings accommodate specific student medical needs.

Background
Targeting HeadStart allows for Medicaid to engage in the educational settings of Medicaid eligible families at the earliest points of their engagement with state programs. This model serves as a direct link to Medicaid services for enrolled students, but as indirect support for families with barriers to enter the Medicaid system. The populations overlap significantly as Head Start is only open to children with incomes up to 138% FPL, compared to Medicaid eligibility for children up to 261% FPL. Incentivizing time spent on interaction between pediatricians and HeadStart coordinators will lead to hours saved on information lost in translation during standard doctor’s visits.

Programs that start early and follow students until high school completion produce better educational and health outcomes. A State of Rhode Island program, College Bound Baby, invests early in the college savings plans of newborn babies. Despite its focus on early intervention, the program has struggled to focus on the demand for immediate health and educational services. The proposed partnership between pediatricians and HeadStart programs addresses the immediate health and educational needs of low-income children and families.

Policy Proposal
We propose a two-pronged approach to empowering the relationship between pediatricians and HeadStart coordinators:

1. Connect pediatricians in Four Core Cities with HeadStart sites
2. Create shared portfolios to follow individual students’ health and educational attainment from HeadStart to high school matriculation

Pediatricians and HeadStart coordinators should meet semi-annually to create early, healthy educational environments for Medicaid-eligible

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The first priority for policy implementation would be establishing points of contact with HeadStart coordinators and pediatricians alike in the Four Core Cities. Initial stakeholder engagement is key to establish connections and determine best practices for communication between the two stakeholders. Second, an integrated data infrastructure for creating and sharing portfolios between school districts, HeadStart providers, and pediatricians would need to be built.

4. Incentivize pediatricians to participate in IEP Teams for Students with Disabilities.

Background

Given current federal and state laws, school districts have the discretion to add pediatricians to IEP teams. Federal legislation requires that biological parents/guardians and district representatives come together to craft individualized education plans (IEPs) for special needs students. Special education teachers, guidance counselors, and students are not federally mandated to participate in these planning meetings, but the precedent in Rhode Island is that all of these parties are present. We believe that an optimal individualized education plan requires contributions from medical professionals as well. Although

Implementation/ Next Steps

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67 Ibid, 128-129.

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69 Individuals with Disabilities Education Act (2004)  
http://journals.sagepub.com/doi/full/10.1177/0885728811423653#  
pediatricians are not legally required, all it takes is parent consent for pediatricians to be part of the process.\textsuperscript{71} If given the opportunity, pediatricians can help IEP teams to meet the needs of students.

\textit{Policy Proposal}

Pediatricians can help IEP teams to evaluate students’ behavioral/psychological challenges and the impacts that those challenges might have on students’ academic progress. Pediatricians’ insights should be used to tailor developmental goals, academic benchmarks, and education services for students with disabilities. Historically, wealthy have already sought out the necessary supports to guide them through IEP processes\textsuperscript{72}; now it’s time to encourage similar practices for our Medicaid population.

\textit{Pediatricians Can Be Direct Sources of Information}

The best way to connect IEP Teams to medical insights is to include pediatricians on those teams. Parents across the state of Rhode Island have found this to be true. The Rhode Island Parent Information Network is a statewide advisory council of informed parents who train other parents to advocate for their students throughout the IEP process. The Network has served 60,000 students since its inception in 1991. The biggest issue with these parent advisory councils is that they require parents to accrue massive amounts of medical insights which may not even be relevant for other people’s children. Rite Care can incentivize its pediatricians to be direct sources of information, ensuring that nothing gets lost in translation from one parent to the next.

Over the last two decades, pediatricians in the Netherlands have become active participants in identifying children’s psychosocial problems in schools.\textsuperscript{73} They also play a pivotal role when students with psychosocial problems are struggling in school. When a child is often ill/absent from school, or when a child is not performing well, educators contact the student’s pediatrician. Today, 2.5 million children (95% of children in the country) are covered in this integrated school-health system - 100,000 of which are in schools for special needs students. Funding comes from local authorities, which may function similarly to Rhode Island’s accountable entities. Dutch researchers suggest that it would be feasible for other countries to infuse medical insights into school processes. This invitation has caught the eye of many prominent American doctors, including Dr. Paul Lipkin - the head of the American Academy of Pediatricians.

\textit{Medicaid Can Equip Pediatricians to Contribute to IEP’s}

According to a representative study of all licensed physicians in the U.S., only 18% of pediatricians feel confident counseling families regarding


the IEP process. Yet, 85% of all physicians agreed that pediatricians should assist patients in obtaining special education services. Pediatricians seem to be a captive audience for additional training - 90% of physicians asked for internet based programs and office-based seminars to equip them with information regarding the IEP process. Pediatricians are constantly looking to meet state requirements for professional development, known as continuing medical education. These opportunities for professional development should include training for IEP processes. We know that pediatricians can bill for their consultations with Rhode Island’s Rite Care and CHIP programs. The goal of training our pediatricians is to equip them with the necessary tools to address their patients’ academic needs.

**Implementation/ Next Steps**

To get pediatricians active in IEP teams, accountable entities’ first steps should be to develop relationships with parents, pediatricians, and educators that agree with this initiative. First, accountable entities should identify parents who are willing to include their children’s pediatricians in the IEP process. This initiative does require parental consent, so understanding parents’ perspectives is key. Second, accountable entities should identify pediatricians who feel comfortable in contributing to IEP teams. These are the folks who will contribute to our online trainings and office-based seminars. Lastly, accountable entities should be working to connect district representatives with members of the American Academy of Pediatricians, since doctors like Dr. Paul Lipkin can attest to the benefits of including physicians in IEP teams.

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COMMUNITY AND SOCIAL CONTEXT

Recommendations
1. Establish a standardized screening process to identify and respond to health-related social needs
2. Partner first responders with social and community partners
3. Facilitate cohesion in communities through health focused events to address chronic illnesses.

INTRODUCTION
When addressing social and community context, we can see clearly how health, factors affected by social capital, cohesiveness, and the social gradient complicate access to treatment for communities, such as low income and vulnerable populations. Pathways to health outcomes are affected by social capital. The most common definition of social capital in health sciences encompasses five principles of community networks, civic engagement, local civic identity, reciprocity and norms of cooperation and obligation, and trust in community (McKenzie, 2006). One example of a community with good social capital is Jamestown, Rhode Island as a result of socioeconomic status.75

To take one example highlighting the effect of social and community context in small-scale, local level we see what would happen if a low-income individual without a car falls and breaks their arm. They can call a community member who has a car to take them hospital if they are unable to afford a trip to the emergency department or are unable to get their transportation. Social capital in communities provide individuals with a sense of belonging and wellbeing as well as support through resources that directory and indirectly impact health. The following three recommendations touch on what encompasses our “Pathways to Health,” a response to the need for centralized information and data-sharing by creating a network of partnerships with the shared purpose of addressing social needs as it relates to health.

RECOMMENDATIONS
1. Establish a standardized screening process to identify and respond to health-related social needs.

Background

Although Rhode Island is a leader in quality health services, low-income communities and people of color face significant barriers to accessing and receiving these services. Statewide, only 13% of adults in Rhode Island report fair or poor health. However, in neighborhoods such as Constitution Hill in Woonsocket, 24% of adults report fair or poor health. This percentage is even higher in lower-income communities of color like Southside Providence and Central Falls, where 30% of adults report fair or poor health. A high prevalence of social needs contributes to the poor health of at-risk communities. Improving healthcare providers' ability to connect patients with social services and community health organizations can reduce these health disparities.76

Policy Proposal: An Integrated Care Approach To Identify and Respond to Social Needs

We propose creating a “Pathways Social Needs Screening Program” that would be a statewide screening process to identify and respond to health-related social needs of at-risk individuals. The program is a 5-step approach to help healthcare providers identify social determinants of health and connect individuals with social service agencies and community organizations most capable of addressing their needs (See Appendix). The first and most important step is assessing a patient’s social needs using a 10-question survey administered by a healthcare provider. The survey is based on the Centers for Medicare and Medicaid Services (CMS) Accountable Health Communities social needs screening tool which assesses the patient’s housing, food security, transportation, and mental health needs. The second step involves healthcare providers evaluating the respondent’s most significant social needs and developing recommended action steps to address them. Based on the recommended action steps, Pathways Health Workers refer patients to the most appropriate Accountable Entity, community-based organization, or social service agency. Next, Accountable Entities, community-based organizations, social service agencies, and Pathways Health Workers coordinate to provide recommended treatment or services. As action steps are undertaken, they are indicated as “completed” “in process” or “pending” on a shared database. The final step is a follow-up visit with the healthcare provider to evaluate how well the health and social services provided are meeting the patient’s needs.

Evidence-Based Examples: Collecting Critical Data on Social Needs in Rhode Island

The Pathways Social Needs Assessment will gather information on the social needs of Rhode Island communities. The data collected from the surveys will allow Rhode Island’s Medicaid Program, health care providers, policy makers, social workers, and community-based organizations to better understand social disparities in access to and use of health services. This data will enable these health and

social services to more effectively and efficiently respond to social needs. A *JAMA Pediatrics* study found that there is a statistically significant association between social needs screening and reduced social needs at follow-up ($\beta = 0.61$). Similar screening intervention programs have successfully connected low-income patients with social services and improved health outcomes. In the *Health Leads* program, 90 percent of patients resolved at least one of their social needs using the program’s resources. Between 2013 and 2015, *Michigan Pathways to Better Health* connected over 7,470 clients to health and social services. *Camden Coalition for Health Care Providers* has decreased its patients' number of emergency department and hospital visits per month by 40 percent and decreased hospital charges per month by over 56 percent.

**Implementation/Next Steps**

In the area after the implementation of the Affordable Care Act, Rhode Island’s uninsured rate went down to less than 4.5% and our proposed assessment would play an integral role in identifying the gaps in accessibility for more vulnerable communities that are majority people of color, low-income, and non-English speaking individuals, specifically as it relates to health outcomes. The implementation process will serve as an entry point into the healthcare system of resources and services based on social needs once a beneficiary. In order to implement, Rhode Island should adapt the Community Health Needs Assessment based on the information gathered from research and our proposed Local Community Health Forums and create a statewide "Pathways Social Needs Screening Program." Once created, implement training for conducting assessment for healthcare providers. This will be an integral part of collecting data to create a database focused on information identifying social needs of Rhode Island residents that can be used by Medicaid in implementing new programs or partnerships. The information gathered will be directly sent in to be retained by Medicaid and back out to the partners in the local community to demonstrate needs.

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The Pathways to Health framework can expand to the creation of a larger “Pathways Hub,” which would be a structured network that would work as both an entry point into the healthcare system by being accessible and multifaceted and a form of retention by centralizing health resources and services, as well as for data-sharing. The network would serve as a resource for agencies at the local and state level to tap into when recommending next steps to individuals, whether it be a firefighter recommending resources in an non-emergency situations or a community organization to recommend accessing health services. The “Pathways Hub” would include clinical delivery sites, social service agencies, and community-based organizations. Recruit community health workers called “Pathways Health Workers” to connect patients with community resources and social services based of healthcare provider’s recommended action plans.

We recommend training providers gather information from beneficiaries to open the integration of data into the Medicaid system. This would be achieved when providers conduct the assessment and include data in their claims. These claims would be collected by Medicaid and once they have the information, I recommend Medicaid build partnerships or tap into partnerships through the Pathways to Health to address the social need expressed in the assessment findings.

Next Steps

- **Identify potential community partners:** Network can include not only healthcare providers, accountable entities, and social workers, but also community organizations.

- **Create “Pathways Social Needs Assessment Program”:** Host Regional Community Health Forums and conduct research to best adapt the CMS model.

- **Train providers to conduct assessments.**

- **Create channel for data sharing with Medicaid.**

- **Begin building a centralized “Pathways Hub.”** This would be a network of clinical delivery sites, social service agencies, and community-based organizations. Recruit community health workers.

2. Partner First Responders with Social and Community Partners

**Background**

**A Small Number of Medicaid Users Make Up Most of the Spending**

Six percent of Rhode Island Medicaid users spend at least $25,000 a year, and they make up sixty-two percent of Medicaid Spending in 2016.82

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24% of this spending is attributed to hospital usage. The recent Medicaid expansion in the state increased Medicaid enrollment by 9.9% and demonstrates the rapidly rising costs of this entitlement program. In order to ensure Medicaid’s future, the state needs to implement cost-saving measures. A practical area to reduce costs is to focus on the health needs of top Medicaid spenders.

*Increased Emergency Room Use is the Result of Less Urgent Patients.*

Between 1995 and 2010 ER visits nationwide have increased by 34%. As of 2010 50% of ERs are operating above capacity, however 30% of ER patients are considered “less urgent” or “non-urgent.” Homeless, uninsured, and low-income populations rely on emergency rooms for basic health needs and primary care. A recent study in the Houston-metropolitan area illustrated that nearly 54% of ER visits could have been performed in the primary care setting, and 33% of these patients were uninsured. Given no other options, uninsured, homeless, and low-income populations turn to ER to obtain medical care they would otherwise not receive. However, the ER is not the optimal place to receive primary care, and these visits increase Medicaid costs, with a typical ambulance transport costing $1,200, and a typical emergency room visit costing $2,100.

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85 Kushel, M. B., Perry, S., Bangsberg, D., Clark, R., & Moss, A. R. (2002, May). Emergency Department Use Among the Homeless and Marginally Housed: Results From a Community-Based Study.

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87 McDonough, S. (2016, October 10). Can metro fire departments afford community health programs?


individuals prior to emergency room admittance and to save Medicaid costs.

Policy Proposal: Partner First Responders with Social and Community Health Workers

First responders meet patients in their homes and have a large community presence. The first responder infrastructure has great potential in delivering targeted health services given their unique nature and their ability to respond anywhere at a moment’s notice. However, police and fire personnel are trained to respond to immediate and emergent health and safety needs. These responses alone are insufficient to address underlying social determinants of health that contribute to poor health, high emergency room usage, and rising Medicaid costs. Social and community health workers on the other hand approach social and health needs holistically. They possess the specialized training, access to adequate resources, and appropriate experience to appropriately handle the social determinants of health.

Social workers, community health workers, and first responders all handle drug use, homelessness, mental health, and elderly wellness checks as part of their duties. However, the expertise of social workers and community health workers will cause improved long-term outcomes when complemented with the work of first responders. Past efforts to partner first responders with social/

community health workers have used two main models:

1. Fire departments in Phoenix, Arizona and Glendale, Arizona have adopted the “ACT intervention model: assessment and appraisal, connecting to support and services and crisis intervention, and trauma and stress management”\(^9\). To accomplish this, these fire departments trained firefighters to appropriately assess and appraise situations and patients that could benefit from social and community health workers. These first responders were then able to connect patients to the appropriate social services to improve health outcomes by addressing the social determinants of health.

2. “FD Cares” is a program in Kent Washington that dispatches a firefighter and a community health worker in a specialized unit to predetermined individuals. The fire department administers a short survey the first time personnel encounter patients that could benefit from social and

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community health workers. If the patient falls into a specified tier, a specialized unit will respond to the patient in the future instead of a full fire crew. They determine an individual’s tier based on questions that look into the amount of responses, emergency visits, and referrals an individual has had from the department in the past 12 months, 6 months, and thirty days. The specialized unit sent out to respond will take necessary time on scene to deliver services that best address social determinants of health. “FD Cares” has saved over 70,000 a month in healthcare costs and diverts 30% of its patients to more appropriate social or health settings\(^9\). These efforts improve population health.

The collaboration of first responders with existing social and community health workers in Rhode Island, as informed by the results of the case studies, could allow targeted health and social service delivery. By adapting these services to the specific needs of Rhode Island’s Health Equity Zones, more targeted health and social service delivery can occur\(^9\).

**Implementation Considerations**

Patient health data is strictly protected under law, and this is a barrier to collaboration with first responder and social/community workers. Patient privacy is important to obtaining the trust and confidence of an individual, so it is necessary to obtain informed consent before bringing in additional workers. By educating patients on the benefits of social and community health workers, first responder can help patients decide whether or not they will pursue additional support.

Fire and police departments in metropolitan areas have high call volume and struggle to meet the demand for emergency services. It will be critical to frame this program as an investment to improve a healthier community, as that correlates with the public safety officers’ mission. Utilize the “FD Cares” example to highlight the decrease in less emergent calls after the introduction of the program.

**Next Steps:**

- **Train first responders in recognizing situations where social and community health workers could be useful.** Educate first responders on how

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social determinants of health affects overall individual health.

- **Improve collaboration with social work.** Clearly define the role first responders and social/community health workers play in patient interaction. Increase agency interaction and coordination to streamline health and social service delivery.

- **Centralize data sharing.** Share data between social/community health workers and first responders. Allow open communication between these various agencies to most effectively address the needs of an individual and communities.

3. **Facilitate cohesion in communities through health focused events to address chronic illnesses.**

*Background*

To address breakdowns in social cohesion, we recommend implementing the Healthy Community Fair (HCF) Program. This program brings together professionals across sectors to facilitate social cohesion through intentional gatherings and awareness of resources. HCF programs would be hosted in accessible community spaces to bring in individuals affected by chronic illness to facilitate social cohesion and reintegrating individuals with chronic illness.

*HCF will help low-income and other vulnerable populations the most.* The low-income Latino community in Providence and Central Falls as well as the low income White community in Westwarly, Pawtucket, Woonsocket, and West Westwick will have greater access to resources. HCF is especially important for rural areas where access to health related services are limited.

*Policy Proposal*

HCF will be hosted once a month in an accessible location (near main public transportation areas) to maintain a consistent relationship with community members and thus, build a program that communities can depend on. The program will rotate different themes every month to address new issue areas within a community. For example, one theme can focus on fostering positive relationships or stress reduction in the workplace. The duration of events should be open to best accommodate schedules of local community, such as from 9 am to 12 pm. They should provide a healthy lunch or breakfast, or a brunch for cost efficiency. Maintain a consistent date, time, and location so individuals can plan in advance to attend the event. This will build trust between community members and HCF organizers. More details are outlined in the implementations portion.

*Evidence-based examples/justification*

Chronic illness is defined by the US National Center as illness lasting 3 months or more. By 2020, the number of Americans with chronic illness is projected to grow to 157 million, with 81 million comorbid conditions.93 People with chronic conditions are sicker than the general population and use costly

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healthcare services at higher rates.\textsuperscript{94} The following table displays the most common and expensive illness in Rhode Island:

<table>
<thead>
<tr>
<th>Most Costly Chronic Illness</th>
<th>Most Common Chronic Illness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypertension (High blood Pressure)</td>
<td>High Blood Pressure</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Diabetes</td>
</tr>
<tr>
<td>Depression</td>
<td>Depression</td>
</tr>
</tbody>
</table>

The top 20 chronic conditions in total cost $271,338/year in Medicare expenses.\textsuperscript{95} Depression is the third highest recurring chronic condition among insured Rhode Island residents, with approximately 66,000 residents diagnosed, and many undiagnosed.\textsuperscript{96} Roughly one in three adults in low incomes areas like Southside Providence and Central Falls, and one in four adults in Constitution Hill, report fair or poor health. This is a higher rate of poor health than that reported statewide and in Rhode Island’s core cities.\textsuperscript{97} Some patients experience comorbidity of chronic conditions. In Rhode Island the most common comorbid diagnoses are diabetes, hypertension, asthma, and COPD.

Efforts in San Diego, California within the Latino community resulted in reduced disparities, especially for low income women of color. Lead by Mexican American Women’s National Association (MANA), this program was made possible through extensive and intentional strategic planning and partnerships.\textsuperscript{98} One key to their success was implementing recommendations based on input by the community the organization was seeking to address. Implementations of this program modeled in Rhode Island will be a success.

Patients with chronic illnesses’ activities of daily living (ADL) are negatively impacted at the psychological, social and physical level. The significance of these impacts varies based on when the diagnosis occurred.\textsuperscript{99} Age, sex, marital status, developmental stage, education, occupation, duration of disease and the primary caregiver all influence severity of outcomes. For example, if a college student is diagnosed with chronic depression, is low income, and works part time, chronic illness will have a significant impact on the ADL\textsuperscript{100} and other social factors like their employment. It may lead to social isolation which can worsen health outcomes due to lack of communication with the community, healthcare providers, and prolonged symptoms.

Individuals respond differently to social interactions. They may hold cultural significance and symbolic meaning. Social ties can incentivize individuals to maintain healthy lifestyles.

\textsuperscript{94} Chronic Conditions in Rhode Island. (2014). Retrieved July 30, 2017, from \url{http://www.health.ri.gov/data/chronicconditions/}
\textsuperscript{95} Ibid.
\textsuperscript{96} Ibid.
\textsuperscript{97} Community Health Assessment Data. (2011).
\textsuperscript{100} Chronic Conditions in Rhode Island. (2014). Retrieved July 30, 2017, from \url{http://www.health.ri.gov/data/chronicconditions/}
and avoid unhealthy habits like smoking. There is a protective effect of social relationships on health and well-being, while social isolation is a known predictor of morbidity and mortality.

Implementation Considerations

Cost and knowledge of location are cited as two common barriers to preventative healthcare. HCF addresses this through free or affordable health screenings and community specific advertising. For those who are uninsured or on Medicare, which may be costly and involve legal contacts. Finding a private and confidential space for such screenings may be a hurdle but, health screenings overall result in a proactive treatment and prevention of illness - thus worth the investment. Screenings should target common chronic illnesses in Rhode Island like diabetes, hypertension, and depression. Following screenings, connect patients with the appropriate resources to create a direct pathway to health care and improvements to quality of life.

Within these intentional gatherings, provide free or low co-pay vaccines to address contagious illnesses like the flu. Implementations of health screenings and vaccines at community health fairs show positive outcomes in other states. Blood pressure booths will also help in early detection of hypertension. Tailor activities to local communities, such as self-care activities, to address the root cause of health disparities and improve health outcomes. For example, incorporate intentional programming for individuals with different employment, such as those who work in construction or a desk job for long hours to engage on a social and physical level.

To ensure that communities feel welcome to attend these events, hire and train community members as regional program directors. They have a greater understanding the community and have social capital, allowing the program to be more accessible and bring in a greater crowd. Maintain the same HCF workers at the events and as coordinators so community members can foster meaningful long lasting relationships, making the process interactive. Target communities identified by the health equity zone program. For more considerations, see the Moda Health Fair Planning Checklist.

Next Steps
Assign the Division of Community,

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102 Ibid.
104 Ibid.
Family Health, and Equity in the Rhode Island Department of Health to lead this program.

- Departments like the LGBTTQQ Equity Work Group, Office of Minority Health, Refugee Health Program, Office of Special Needs, and Culturally and Linguistically Appropriate Services (CLAS) Initiative should be involved in this process. Each program can address different accessibility needs of communities to include in the implementation of HCF.

Create a task force team with all parties involved to coordinate this event.

- Local regional directors should run programs in each area. Directors should be members of the community since they know how to best serve the community.

Partner with organizations in the private, non profit, and public sector for diversity of resources and multiple entryways.

- Ensure diversity in resources and professionals. Diversity in professionals by field and personal identity is key to inclusion of all community members.
  - Everything from financial support to access to affordable healthy food should be represented.
  - Include educational information specific to vulnerable populations.
- Include first responder presence at HCF to tie back in with earlier recommendation.

Collect feedback to improve. Community members should feel empowered to make changes to the HCF program, if needed.

- Have feedback forms in multiple languages both in person and online.
- Integrate the Pathways Social Needs Assessment