INCREASING ECONOMIC STABILITY IN FAYETTEVILLE, NC, THROUGH THE CREATION OF AN ACCOUNTABLE CARE COMMUNITY TO IMPROVE THE HEALTH OF CUMBERLAND COUNTY RESIDENTS

D
H V
\mathbf{p}

Joshua Babb, Khadijia Tribié Reid, Kenneth Sutton

A Capstone Project submitted to the faculty at the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Master of Public Health in the Public Health Leadership Program.

Chapel Hill 2020

Approved by:

Dana K. Rice

Seema Agrawal

© 2020 Joshua Babb, Khadijia Tribié Reid, Kenneth Sutton ALL RIGHTS RESERVED

ABSTRACT

Joshua Babb, Khadijia Tribié Reid, Kenneth Sutton: INCREASING ECONOMIC STABILITY IN FAYETTEVILLE, NC, THROUGH THE CREATION OF AN ACCOUNTABLE CARE COMMUNITY TO IMPROVE THE HEALTH OF CUMBERLAND COUNTY RESIDENTS (Under the direction of Dana K. Rice and Seema Agrawal)

This proposal describes an Accountable Care Community (ACC) that will increase economic stability in Fayetteville, North Carolina (NC) to improve the health of Cumberland County (CC) residents. Economic stability is an important social determinant of health. Fayetteville has a poverty prevalence of 19.2% compared to 17% and 13% in CC and NC, respectively. Poverty has a negative impact on citizens' health contributing to CC ranking 73rd among NC counties in health outcomes. This proposal describes a multigenerational approach to decrease poverty by providing workforce development opportunities and increased funding to expand Early Head Start (EHS) for families in Fayetteville. Both Workforce development and EHS correlate to improved health outcomes by enabling parents to increase their incomes and allowing children to build strong socioemotional skills and improve academic achievement, respectively. This ACC entails an interdisciplinary partnership with the CC Health Department acting as the backbone organization.

Keywords: Accountable Care Community, North Carolina, Cumberland County, Fayetteville, Economic Stability, poverty, social determinants of health, multigenerational, early childhood education, workforce development, disparities, health

TABLE OF CONTENTS

LIST OF TABLES	vi
LIST OF FIGURES	vii
LIST OF ABBREVIATIONS	viii
COMMON PROPOSAL	1
ACC Project Aims and Goals	1
Proposed Innovation/Transformation	2
Potential Public Health Impacts	3
Outcomes, Milestones, and Deliverables	5
ACC Team	5
References	6
APPENDIX A: GROUP DELIVERABLES	8
Common Proposal Figures and Tables	8
Cumberland Thrives Team Charter	12
Cumberland Thrives Policy and Program Recommendations	17
Cumberland Thrives Persuasive Pitch Presentation	21
References	25
APPENDIX B: JOSHUA BABB'S INDIVIDUAL WORK	28
Individual Problem Statement	28
Program and Policy Analysis	31
Stakeholder Analysis_	35
Accountability Plan/MOU	40
Persuasive Pitch Presentation	46

References	49
Appendix C: Tables and Figures	52
APPENDIX D: KHADIJIA TRIBIÉ REID'S INDIVIDUAL WORK	58
Individual Problem Statement	58
Program and Policy Analysis	61
Stakeholder Analysis	65
Accountability Plan/MOU	70
Persuasive Pitch Presentation	79
References	80
Appendix E: Tables and Figures	84
APPENDIX F: KENNETH SUTTON'S INDIVIDUAL WORK	88
Individual Problem Statement	88
Program and Policy Analysis	91
Stakeholder Analysis	95
Accountability Plan/MOU	100
Persuasive Pitch Presentation	106
References	108
Appendix G: Tables and Figures	112

LIST OF TABLES

Table 1 – Logic Model for ACC to Improve Health of Cumberland County by Increasing Economic Stability	9
Table 2 – RASCI Stakeholder Matrix for Program Intervention	10
Table 3 – RASCI Stakeholder Matrix for Policy Intervention	11
Table 4 – Demographic Distribution of Cumberland County	52
Table 5 – Socioeconomic Profile of North Carolina and Cumberland County	53
Table 6 – Demographic Data for Cumberland County and Fayetteville (2019)	_84
Table 7 – Stakeholders for Increasing ECE Capacity in Fayetteville	85
Table 8 – Demographics of Cumberland County and Fayetteville, NC	112

LIST OF FIGURES

Figure 1 – Rich Picture of the Economy of Health in Fayetteville, NC	8
Figure 2 – Joshua Babb's Power/Interest Grid of Program Stakeholders	54
Figure 3 – Joshua Babb's Power/Interest Grid of Policy Stakeholders	56
Figure 4 – Khadijia Tribié Reid's Power/Interest Grid of Early Head Start Capacity Building Stakeholders	86
Figure 5 – Multiple Generations Affected by Recommended Program/Policy	113
Figure 6 – Kenneth Sutton's Power/Interest Grid of Policy and Program Stakeholders	114

LIST OF ABBREVIATIONS

ACC Accountable Care Community

ACE Adverse Childhood Experience

CC Cumberland County

CCHD Cumberland County Health Department

CCPHD Cumberland County Public Health Department

CFVHS Cape Fear Valley Health System

CHA Community Health Assessment

ECE Early Childhood Education

EHS Early Head Start

EHS-CCP Early Head Start-Child Care Partnership

EOG End of Grade (tests)

FTCC Fayetteville Technical Community College

HD Health Department

HS Head Start

IGP Intergenerational Poverty

IQ Intellectual Quotient

LE Life Expectancy

MOU Memorandum of Understanding

NC North Carolina

NCPC North Carolina Partnership for Children

PCCC Partnership for Children of Cumberland County

QI Quality Improvement

ROI Return on Investment

SDOH Social Determinants of Health

SES Socioeconomic Status

STEM Science, Technology, Engineering, and Mathematics

US United States

WIC Women Infant and Children's Services

COMMON PROPOSAL

ACC Project Aims and Goals

Economic stability is a social determinant of health. Economic stability is defined by the prevalence of unemployment, housing insecurity, food insecurity and poverty (HealthyPeople.gov, n.d.). Seventeen percent of Cumberland County (CC) residents live in poverty compared to 13% of North Carolina's residents (US Census, 2018). This poverty corresponds to the poor health of county residents; in 2019, CC ranked 73rd in the state for Health Outcomes (County Health Rankings and Roadmaps, 2020). Poverty is even more profound in Fayetteville, with a poverty prevalence of 19.2% (US Census, 2018). This proposal addresses the goal of economic stability in CC by focusing on reducing the proportion of persons living in poverty (SDOH-3.1) (HealthyPeople.gov, n.d.) in order to allow everyone the opportunity to achieve their highest attainable level of health.

Economic factors affect a person's ability to make healthy choices, afford medical care and housing, and manage stress. Low socioeconomic status (SES) in CC correlates with an increased prevalence of chronic conditions such as diabetes, obesity, and cancer. In addition, children in poverty are more likely to have physical health problems, behavioral problems, and emotional problems (Cumberland County HNA, 2019).

This ACC aims to improve the health of CC residents by increasing economic stability in the region. Addressing economic stability will entail creating a more skilled workforce for the immediate and distant future. Short term goals include achieving a 20% increase in the number of workforce development opportunities and a 20% increase in Early Head Start (EHS) sites by the end of year two. Long term goals include decreasing the percentage of people living in poverty in Fayetteville from 19.2% to 16%, and decreasing the overall prevalence of chronic

diseases such as obesity, cancer, and diabetes in Fayetteville by 10% by the end of year five. See Logic Model. Appendix A)

Proposed Innovation/Transformation

Several communities in the United States have implemented programs and policies to address intergenerational poverty (NCSL, 2018). Their successes and failures are used to inform addressing economic stability within our priority population.

CAP-Tulsa's Career Advance® program recruits parents from Head Start (HS) programs for post-secondary education and health care workforce training opportunities (CAP Tulsa, n.d.). This program provides beneficial information to the ACC and serves as the foundation for the proposed program innovation. A 2017 report shows 61% of Career Advance® participants attained a career certificate, compared to 3% of the comparison group. Additionally, 49% of program participants found employment in the health care sector by the end of the program's first year of operation (Chase-Lansdale et al., 2017). As a result, attendance in HS increased and chronic absenteeism (both for the child at school and the parent at work) decreased.

Stable funding for Early Head Start (EHS)/Head Start (HS) will support the success of the proposed innovation. EHS/HS is one of the most effective ways to address intergenerational poverty (IGP) as it provides early childhood education (ECE) to children from birth to 3 years old and enables parents to work and gain additional skills (Action Pathways, n.d., Action Pathways Annual Report, 2018). Further, children who participate in high quality ECE have demonstrated superior Math achievement scores, greater grade retention, and less school absenteeism when compared to children of the same socioeconomic status that do not attend high quality ECE (Phillips, Gormley & Anderson, 2016). Although funding for EHS/HS are provided through federal grants, some states and counties have expanded EHS through county level

matching funds and increased childcare subsidy state budget appropriations (Morrow, 2020). Currently, Action Pathways lists only 5 EHS Centers within 10 miles of the most impoverished zip code in the county, 28301 (Action Pathways, n.d., Action Pathways Annual Report, 2018).

The program proposed for CC is a workforce development program and increased EHS/HS funding. The program will recruit parents of children enrolled in EHS/HS programs for adult basic education courses, bridge classes, and career development. A novel feature of this program will be the opportunity for parents who need remediation to accomplish this by adding a skill building course for remedial training in math, reading and writing, and/or GED completion at Fayetteville Technical Community College (FTCC). Another key feature of this program is the commitment to providing quality ECE by funding EHS/HS programs. Partnership for Children of Cumberland County (PCCC) is the primary county advocate for ECE and receives a state subsidy to support families and ECE centers. The program will seek to increase ECE centers by partnering with current child care providers to help them meet the requirements set forth by EHS/HS programs. Securing quality ECE and services will be key to the future of maintaining fidelity to the multigenerational approach.

Potential Public Health Impact

The proposed program aims to address IGP in Fayetteville to improve the health of the community. To address this public health challenge, the program employs a multigenerational approach designed to address IGP. IGP is defined as "poverty in which two or more successive generations of a family continue in the cycle of poverty" (Utah State Legislature, 2018) and is a well noted problem in the poorest regions of Fayetteville (Barnes, 2015).

According to law maker and executive director of the NC Justice Center, Rick Glazier, addressing "[IGP] doesn't just affect the neighborhood it is in, it also affects the whole dynamic

of that city, and that county, and that community" (Barnes, 2015). This ACC will decrease barriers to health associated with poverty in order to improve the health of the community. It will do so by improving economic stability among Fayetteville's most disenfranchised families to help ensure everyone can achieve their highest attainable standard of health. Positive impacts for Fayetteville and CC at-large include increased availability of early childhood education, increased average annual wage, decreased poverty, and decreased prevalence of chronic diseases. If successful, the project can serve as a model for achieving positive economic and health goals that can be replicated throughout the state and the country, further validating the creation of ACCs.

It is important to consider potential challenges associated with this type of intervention. The multisystem nature of this challenge will require strong interagency communication and professional humility. To help address these issues, modes of communication and specific tasks should be established in the memorandums of understanding (MOUs) between the members of the ACC. One potential equity related challenge will be ensuring that the program reaches the most disenfranchised families of Fayetteville. Addressing this problem requires that these disenfranchised families are instrumental to the creation, implementation, and evaluation of this program and also that partner agency MOUs stipulate inclusion of residents from high poverty zip codes in workforce development and EHS programs. Lastly, the creation of more EHS centers depends greatly on government funding. To garner the political support needed for increased EHS funding allocations, it is essential ensure that political stakeholders understand the substantial return on investment associated with high quality ECE.

Outcomes, Milestones and Deliverables

The quality improvement (QI) measurements that will be utilized for this policy intervention are the county and state allocation amounts for EHS in CC, the number of EHS slots available in Fayetteville, number of children attending EHS in Fayetteville, kindergarten school readiness, and end of grade (EOG) test pass rates. Additional quality metrics include measures of regional average median income and annual poverty prevalence comparisons.

The following health-specific QI metrics will be observed: infant mortality, percentage of residents with access to healthy foods, percentage of children with an age appropriate body mass index), and chronic illness prevalence. Chronic illnesses to be assessed include diabetes, cancer, and asthma. While these metrics assess the program's effect on health, qualitative assessments through surveys and focus groups will inform future decisions.

Sustainability is essential to realizing long term goals. The ACC will continue to apply for public health funding, available block grants, private and non-profit organization grants beyond the \$500,000 being initially allotted. The Return on Investment calculation will consider increased tax revenue, savings from decreased academic interventions needed for school children, decreased SNAP costs, and decreased Medicaid costs.

ACC Team

Partners for this ACC include Cumberland County Public Health Department, Cape Fear Valley Hospital System, Cumberland County Partnership for Children, Fayetteville Technical Community College, Head Start/Early Head Start, Action Pathways, Fayetteville Families, County Commissioners, Fayetteville City Council, Business Owners, Fort Bragg, and Child Care Providers. See Tables 2 and 3 in Appendix A for more detailed information on the roles of these stakeholders.

References

- Action Pathways (n.d.), Find a Head Start Center Near You. Retrieved on November 1, 2020 from https://actionpathways.ngo/our-programs/head-start/find-head-start-near-you/
- Action Pathways Annual Report (2018). Retrieved from https://actionpathways.ngo/wp-content/uploads/2019/09/2018-Annual-Report-D2.pdf
- Barnes, G. (2015). Poverty in Fayetteville: Why are we among the worst in America? Retrieved from https://www.fayobserver.com/news/20151213/poverty-in-fayetteville-why-are-we-among-worst-in-america
- CAP Tulsa. (n.d.). *CareerAdvance*®. Retrieved from https://captulsa.org/what-we-offer/careeradvance/
- Chase-Lansdale PL, Sommer TE, Sabol TJ, Chor E, Brooks-Gunn J, Yoshikawa H, King C,

 Morris A. (2017). What are the Effects of Pairing Head Start Services for Children with

 Career Pathway Training for Parents? Retrieved from

 https://www.captulsa.org/uploaded_assets/pdf/CAP-Tulsa-impact-analysis_March-2017.pdf
- County Health Rankings & Roadmaps. (2019). North Carolina, Cumberland County. Retrieved

 September 14, 2020 from

 https://www.countyhealthrankings.org/app/northcarolina/2019/rankings/cumberland/county/outcomes/overall/snapshot
- Cumberland County 2019 Community Health Needs Assessment. (2019).

https://ares.lib.unc.edu/ares.dll?SessionID=F225047176O&Action=10&Type=10&Value=109132846

- Freudenberg N, Ruglis J. 2007. *Reframing School Dropout as a Public Health Issue*. Preventing Chronic Disease. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2099272/
- HealthyPeople.gov. (n.d.). Economic Stability. Retrieved November 22, 2020 from https://health.gov/healthypeople/objectives-and-data/browse-objectives/economic-stability
- HealthyPeople.gov. (n.d.). Social Determinants of Health. Retrieved November 21, 2020, from https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health
- Morrow, J. November 1, 2020. Interview with Executive Director of Smart Start of New Hanover County, NC.
- Partnership for Children of Cumberland County, (n.d.), Retrieved November 1, 2020 from https://ccpfc.org/business-directory/5995/head-start/
- Phillips, D., Gormley, W., & Anderson, S., (2016). "The Effects of Tulsa's CAP Head Start

 Program on Middle-School Academic Outcomes." *Developmental Psychology* Vol. 52,

 No. 8. Retrieved from

 https://georgetown.app.box.com/s/q43pgptmzzm6h3zjcosk93ucnh1k4o9e
- U.S. Census Bureau QuickFacts: Cumberland County, North Carolina; Fayetteville city, North Carolina. (n.d.). Retrieved October 18, 2020, from https://www.census.gov/quickfacts/fact/dashboard/cumberlandcountynorthcarolina,fayettevillecitynorthcarolina/RHI125219
- Utah State Legislature. (2018). Evidence-Based Interventions To Address Intergenerational Poverty. *Appropriations Subcommittee*.

APPENDIX A: GROUP DELIVERABLES

Common Proposal Figures and Tables

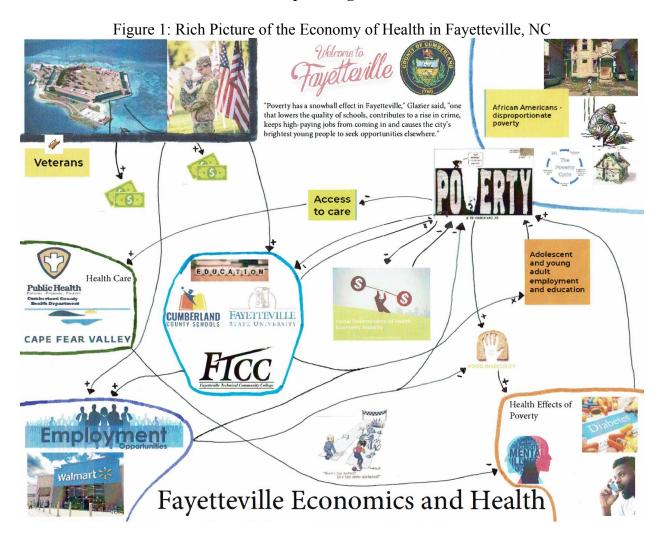


Table 1: Logic Model – ACC to Improve Health of Cumberland County by Increasing Economic Stability

Stability					
Poverty in Fayette health outcomes a Fayetteville reside	among	Priorities Increase economic stability in Fayetteville through workforce development and expanded early head start capacity.			
Inputs	Out	itputs		Outcomes	
Resources	Activities	Participation	Short-term	Mid-term	Impact/Long- term
In order to accomplish our set of activities we will need the following: 1. Meeting	In order to address our problem, we will accomplish the following activities:	We must clearly identify the groups we are serving. 1.Fayetteville	If accomplished, we expect these activities will lead to the following changes in 2 years. 1, 20% increase	If accomplished, we expect these activities will lead to the following changes in 3-4 years. 1, 10% increase	If accomplished, we expect these activities will lead to long-term societal changes. 1. Percentage of
Space 2. Establish entity MOU's 3. Community liaisons 4. Social Media Presence 5. Established ACC partner liaison(s)	apprenticeship spaces with businesses 2.Building relationships with politicians 3. Political advocacy for increased EHS	working age adults 2.Fayetteville children birth to 3 years	in workforce development opportunities 2. 15% increase in Fayetteville residents participating in workforce development 3. 20% increase in EHS sites in Fayetteville	in average annual income for Fayetteville residents 2. 10% decrease in food insecurity in Fayetteville 3. 5% decrease in chronic disease prevalence among Fayetteville residents 3. 5% decrease in children who are overweight or obese	people living in poverty in Fayetteville comparable to state levels. 2. Prevalence of chronic disease for Fayetteville residents comparable to NC state residents 3. Eliminate infant mortality racial disparities in Cumberland County 4. Eliminate racial disparities in EOG pass rates
Assumptions 1. Fayetteville employers will engage and create apprenticeship opportunities. These opportunities are shown to have a high yield. 2. Fayetteville families will engage in EHS if capacity is increased. This may require increased community engagement to achieve buy-in.		pandemic may im 2. The recent pan businesses engage	nvironment in the finpact implementation demic may also implements with the community economic shifts.	on. pact how	

Table 2: RASCI Stakeholder Matrix for Program Intervention

RASCI Levels		
Who is	<u>Program</u> Transformation	Rationale For Partner Participation
Responsible=owns the problem / project	CCPHD, FTCC	CCHD – has a broad range of connection among the various stakeholders necessary for this programmatic intervention. Further they can represent a source of funding and avenue for funds to be channeled through. Also their knowledge of data collection and analysis will be important during evaluation. FTCC has a broad range of career connections and are already suited for training and developing a workforce. Further they already have an established early childhood education center.
Accountable=ultimately answerable for the correct and thorough completion of the deliverable or task, and the one who delegates the work to those responsible	CCHD, CFVHS, FTCC	CCHD can represent a source of funding and avenue for funds to be channeled through. Also their knowledge of data collection and analysis will be important during evaluation. CFVHS represents a source of funding as well as a partner during impact evaluations. Further, they are one of the largest employers in Fayetteville, so they can host career days as well as develop more internships/apprenticeships for the program. FTCC has a comprehensive resource and knowledge base to understand who should be involved and how to delegate tasks moving forward. Further, they already have a continuing education infrastructure in place.
Supportive=can provide resources or can play a supporting role in implementation	Fayetteville Families, Fort Bragg, Cape Fear Valley Hospital, FTCC, County Commissioners, Fayetteville City Council, Partnership for Children, Business Owners	Each of these entities have knowledge and resources that can expand the program's reach. These resources include information, financing, human resources, and political influence.
Consulted=has information and/or capability necessary to complete the work	Fayetteville Families, Cumberland County Health Dept., Child Care Providers	These entities have the insight needed to understand the needs of the target population and the potential unintended consequences of action.
Informed=must be notified of results, process, and methods, but need not be consulted	County commissioners, Fayetteville City Council, Business owners	These entities could create a political environment supportive or damaging to this effort. They must remain informed to know how to take action and educate the public.

Table 3: RASCI Stakeholder Matrix for Policy Intervention

RASCI Levels		
Who is	<u>Policy</u> Transformation	Rationale For Partner Participation
Responsible=owns the problem / project	Partnership of Children Cumberland County	This agency's mission is to be a driving force to engage partners to achieve lasting positive outcomes for all children, beginning at birth. The Partnership receives state funds and private matching dollars to subsidize high quality early childhood education.
Accountable=ultimately answerable for the correct and thorough completion of the deliverable or task, and the one who delegates the work to those <i>responsible</i>	Partnership for Children of Cumberland County	Partnership for Children has the infrastructure in place to coordinate with multiple entities and assess outcomes data as is mandated by the state overseeing body.
Supportive=can provide resources or can play a supporting role in implementation	Cumberland County Board of Education, Fayetteville Families, Childcare centers, County Commissioners, Fayetteville City Council, Action Pathways	Each of these entities have knowledge and resources that can expand the program's reach. These resources include information, financing, human resources, and political influence.
Consulted=has information and/or capability necessary to complete the work	Cumberland County Board of Education, Fayetteville Families, Child Care providers, Action Pathways	These entities have the expertise and involvement in Early Childhood Education. Their insight is essential to successful policy development and implementation.
Informed=must be notified of results, process, and methods, but need not be consulted	Fayetteville families, County Commissioners, Fayetteville City Council, Childcare providers, Federal DHHS, Cumberland County Health Department	These entities could create a political environment supportive or damaging to this effort. They must remain informed to know how to take action and educate the public.

Cumberland Thrives SPHG 992 Team Charter

Team Name: Cumberland Thrives

Objective:

This team has been formed to create an Accountable Care Community (ACC) focused on

addressing the economic stability social determinant of health (SDOH) as per Healthy People

2030 goals. We will complete this ACC as part of UNC Culminating Experience, SPHG 992.

Our overall objectives are the mastery of the course material related to this project and to

demonstrate mastery through our final individual and team papers and presentation.

Goals/Values:

Our goal is to utilize our individual strengths to collaborate well as a cohesive team. We

want to gain a deeper understanding of the complexities involved in creating an ACC in

Cumberland County, NC. The ACC will focus on improving economic stability by addressing

Cumberland County's Healthy People 2030 Economic Stability Goal to "Decrease the number of

people living in poverty from 17% to 10%." By addressing economic stability, we aim to

improve Cumberland County health outcomes. This will be accomplished through community

collaboration with traditional and nontraditional public health partners in an effort to produce a

multifaceted intervention/policy approach to address several inequities surrounding this issue. As

a team, we value integrity of resources, respect for one another's ideas, communication among

team members, and accountability.

Team Strengths:

Overall, the team values communication and we strive to respond to one another in a

timely manner. As a team we have a diverse work background and have participated in teams

previously. We prefer consensus and unity when working in teams. Kenneth has experience in

12

research and matrix team leadership (working well with others with various backgrounds and competencies), Josh has a background in analysis and mathematics. Khadijia is an experienced clinician who enjoys editing, efficiency and making sure that everyone has a chance to voice their opinions.

Topic:

The group is going to focus on research and interventions to address economic stability in Cumberland County, NC, among low SES individuals.

Deliverables: (Dates are subject to change):

- Team Charter: Due Sunday after 3rd sync session by 11:55 pm EST (9/27/2020)
- Individual Problem Statement: Sunday after 6th sync session by 11:55 pm EST (10/18/2020)
- Aim for Group Proposal: Due Sunday after 7th sync session by 11:55 pm EST (10/25/2020)
- Individual System, Stakeholder, and Transformation Options: Due Sunday after 8th sync session by 11:55 pm EST (11/01/2020)
- Individual Accountability Plan: Due Sunday after 10th sync session by 11:55 pm EST (11/15/2020)
- Individual Persuasive Pitch Presentation: Due Sunday after 12th sync session by 11:55 pm
 EST (11/29/2020)
- Final Team Capstone Proposal: Due Sunday after 13th sync session by 11:55 pm EST (12/06/2020)

Milestones:

Weekly team meetings over Zoom will be conducted on Saturday mornings at 9:30 am EST to review progress on outstanding tasks, review upcoming deadlines, discuss requirements, and assign tasks as required. Team members will ensure that their individual contributions to

each milestone will be submitted in a timely manner that does not delay submission of assignments.

Roles/Responsibilities:

- Khadija Tribie Reid: Writing. Editing. Collaborate on research, assignment creation, submissions, and peer review.
- Kenneth Sutton: Writing, editing, collaboration, research, data analysis, and peer review
- Joshua Babb: Writing, collaborating, editing, any group analysis, research, and peer review

Expectations:

- Ground rules Group members will be understanding if another team member needs help on their assigned work. If a team member is feeling overwhelmed, they will let the group know, and provide sufficient time for others to help. Team members will have completed individual assignments (barring any unforeseen circumstances) prior to synchronous class due date in order to contribute to meaningful class discussions. Further, all team work will be completed no later than two days before a given due date.
- Participation- Group members will participate in team meetings and contribute to all projects.
- Decision making processes Decisions will be made as a group where we are open to
 respectful discourse among group members. If the group is divided over two possible
 decisions, we will put the issue to a vote and go with the majority (There are an odd number
 of group members, so this is feasible). If this method still yields discontent among group
 members we will exercise the mediator option defined below under conflict resolution.
- Conduct Group members will behave in a respectful manner that is consistent with the UNC Honor Code.

Conflict and resolution - Team members are expected to be courteous, respectful, and professional at all times. This project is designed to enhance the learning and professional development of all members. Conflicts will be handled by civil discourse and consensus. All team members agree to be open to constructive criticism and to ask for help if needed.

Further, the team will open all meetings on Saturdays (9:30 am EST) with an open floor to discuss any problems or conflicts they are experiencing. This will allow problems to be addressed every week so that small issues do not compound into larger issues throughout the course of a semester. If a resolution is unable to be reached by group consensus a third party mediator will be used. Considering that this is a class, Dr. Rice, Dr. Agrawal, or Dr. McGee will act as the mediator.

Communication:

Team members will communicate through email and text and will monitor these in order to respond within 24 hours.

Meetings:

Our group is going to meet weekly on Saturday at 9:30 am EST. We will take minutes during the meetings and send them out to all team members for documentation.

Limitations/Constraints:

We all have other responsibilities (family, work, etc.) that may cause some interference throughout the semester. We will be mindful of each other's responsibilities and do our best to give at least 24 hours of notice should any scheduling conflicts occur.

Team Member's Name	Team Member's Signature
Khadijia Tribie Reid	Khadijia Tribie Reid
Kenneth Sutton	Kenneth C. Sutton
Joshua Babb	Joshua 2 Babb

Cumberland Thrives Policy and Program Analysis

Introduction: Value Prioritization

Intergenerational poverty (IGP) is a well-recognized problem in Fayetteville, NC. City

Councilman Larry Wright claims poverty within the poorest areas of Fayetteville has been

handed down through generations (Barnes, 2015). IGP is defined as "poverty in which two or

more successive generations of a family continue in the cycle of poverty" (Utah State

Legislature, 2018). This type of poverty has deleterious effects including poor health outcomes

such as increased obesity, diabetes, and cancer on individuals living within the cycle (CC CHA,

2019) and also negative economic effects on the community at large (USL, 2018); therefore, IGP

must be addressed through program and policy interventions.

Recommended Program Intervention: Workforce Training with a Multigenerational approach

Community Action Agency (CAP)-Tulsa's Career Advance® program recruits parents from Head Start programs for post-secondary education and health care workforce training opportunities (CAP Tulsa, n.d.). The goal of this program is to provide workforce development through continuing education and career training for families that qualify for EHS/HS programs. The program's results are striking. A 2017 report shows 61% of Career Advance® participants attained a career certificate, compared to 3% of the comparison group. In addition, 49% of program participants found employment in the health care sector by the end of the program's first year of operation (Chase-Lansdale et al., 2017). Reflecting the program's two-generation approach, attendance in Head Start increased and chronic absenteeism decreased for both the parents at work and children in school. Despite these many advantages, the program fails to address the root causes of participants' poverty. Also, this approach does not address the needs of parents who may have dropped out of school to obtain a GED.

Recommended Policy Intervention: Increased Early Head Start Funding

EHS are two of most effective ways to address IGP. EHS provides high quality childcare to children from birth to 3 years old (Action Pathways, n.d.). More globally, Head Start (HS) provides high quality early childhood education (ECE) to children from birth to age 5 years while also providing social and educational opportunities to low-income families (Action Pathways Annual Report, 2018). HS also enables parents to work and participate in workforce development or educational programs. Although funding for HS and EHS are provided through federal grants, some states and counties have expanded EHS through county level matching funds and increased childcare subsidy appropriations in the state budget (Morrow, 2020). Currently, Action Pathways, the non-profit organization that administers HS in Cumberland County lists 17 HS Centers within 10 miles of the most impoverished zip code in the county, 28301 (Action Pathways, n.d.). Only 5 of those are EHS Centers. In 2018, Action Pathways served 922 HS participants and 147 EHS participants in all of Cumberland County (Action Pathways Annual Report, 2018).

The most enduring benefits of ECE result from high quality infant care. The Carolina Abecedarian Project paper describes a 1972 study comparing outcomes for children who began ECE in infancy to children who began ECE at 3 or 4 years old (Campbell & Ramey, 1991). Children who began the ECE program as infants demonstrated decreased developmental delays and decreased academic failure when compared to children who started preschool at 3-4 years old (Campbell & Ramey, 1991). At 12-year follow-up, students who were engaged in the infant program continued to demonstrate academic achievement and success at a higher level than children who began ECE at 3-4 years old (Campbell & Frances, 1991). Academic success or failure is a strong predictor of health outcomes (Freudenberg & Ruglis, 2007).

Trade-offs and Stakeholder Concerns

There are few foreseeable tradeoffs with the recommended program and policy as both can be used in combination to address shortcomings and can be individually modified to expand and ensure that no person in the family unit is left behind. ECE traditionally has bipartisan support and also supports businesses by meeting employee childcare needs. Stakeholders will come from the health sector, human services, educational sector, and workforce sectors. Parents are also critical stakeholders and can provide important insights into barriers to family economic stability. Given the multisystem nature of this intervention, strong interagency coordination will be essential. One of the most important equity components is reaching the target audience of impoverished families in Fayetteville. Implementers and funders must ensure that information about these opportunities reach the most disenfranchised members of the Fayetteville community, otherwise these interventions could deepen educational and economic disparities.

Quality Improvement Metrics

The economic measurements that will be utilized for these recommended interventions are the growth rate of local income; growth rate of per capita income; and return on investment. Additional quality metrics include measures of percent salary increase, number of residents of each zip code enrolled in the intervention, regional average median income comparisons and annual poverty prevalence comparisons. These measurements will help assess the programs efficacy for reducing poverty.

The health specific QI metrics that will be observed are the following: mortality rate, infant mortality, suicide rate, use of prenatal care, child nutrition, medical conditions, and chronic disease occurrence. Physical Quality Life Index (PQLI is the overall welfare of the people in life expectancy, infant mortality rate, and standard of living) and Human Development

Index (HDI measures life expectancy, education and standard of living) will be examined as well (Ray, 2008). A rise in PQLI and HDI shows an improvement in quality of life. These metrics will allow the efficacy of the program and policy to be understood.

Cumberland Thrives Persuasive Pitch Presentation

INCREASING ECONOMIC STABILITY IN FAYETTEVILLE, NC, THROUGH THE CREATION OF AN ACCOUNTABLE CARE COMMUNITY TO IMPROVE THE HEALTH OF CUMBERLAND COUNTY RESIDENTS

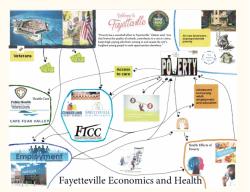
Presented by Cumberland Thrives

- Joshua Babb
- Kenneth Sutton
- Khadijia Tribié Reid

December 3, 2020

Group Problem and Priority Population

- Economic Stability¹
 - Reduce the proportion of people living in poverty¹
- Low SES correlates with an increased prevalence of chronic conditions²
- Children in poverty are more likely to have developmental problems²
- Fayetteville, NC
 - o 19.2 % Poverty Rate³
 - Intergenerational Poverty^{4,5}
- Addressing poverty in Fayetteville benefits all of Cumberland County⁵





The Multigenerational Approach

The 2-Generation Continuum

The 2-Generation Continuum

And ChildBocused ChildBocused SchuldBocused Schu

Group Goals

Mission



Improve the health of Cumberland County residents by increasing workforce development and high quality early childhood education opportunities in Fayetteville, North Carolina.

Short term goals

- \bullet $\,$ Achieve 20% increase in the number of workforce development opportunities
- $\bullet~$ Achieve 20% increase in Early Head Start sites

Long term goals

- \bullet $\,$ Decrease the percentage of people living in poverty in Fayetteville from 19.2% to 10%
- Decrease the prevalence of chronic disease among Fayetteville residents by 20%

Key Partners for the Accountable Care Community

- Cumberland County Health Department -Chief Health Strategist
- Partnership for Children of Cumberland County
- Cape Fear Valley Hospital
- Fayetteville Technical Community College
- Head Start/ Early Head Start
- Action Pathways

- Fayetteville Childcare Providers
- Fayetteville Families
- Cumberland County Commissioners
- Fayetteville City Council Members
 Fayetteville Business Owners
- Fort Bragg



Partnership for Children of Cumberland County

- Why PCCC is an important stakeholder?
 - Promotes high quality early childhood education (ECE)⁷
 - Supports positive academic, career, and health outcomes⁶
 - $\begin{array}{ll} \circ & \text{Enables parents to work, supporting local economy} \\ \circ & \text{Advocates politically for high quality ECE}^7 \end{array}$
- How we want you to be involved?
 - o Political advocacy for increased local ECE funding
 - o Tech support for ECE providers
 - Outcomes measurement
- What we can accomplish together?
 - o Increase academic success in Fayetteville children
 - o Improve short and long term health outcomes



Cape Fear Valley Health Systems (CFVHS)

- Why CFVHS is an important stakeholder?
 - Second largest employer in Cumberland County²
 - $\circ \quad \text{Largest provider of healthcare in Cumberland County and Fayetteville}^2$
 - o Supports positive health outcomes and academic/professional development
- How we want you to be involved?
 - o Program funding
 - o Workforce development
 - Internships/apprenticeships
 - Conduct a career day at FTCC
 - o Program evaluation
 - CHA and information sharing with CCHD
- What we can accomplish together?
 - $\circ \quad \text{Increase Cumberland County's healthcare workforce} \\$
 - $\circ \quad \text{Decrease the prevalence of intergenerational poverty}$
 - Improve short and long term health outcomes



Fayetteville Technical Community College (FTCC)

- Why FTCC is important to this ACC?
 - o Our families have immediate job needs and businesses have immediate hiring needs.
 - A great place to get skills training that will allow students to get good paying jobs⁸.
 - Flexible/nimble and can quickly provide specialized training⁹.
- How we want FTCC to be involved?
 - o Provide opportunity for upward economic mobility
 - Create and host a customized workforce training program
 - $\circ \quad \text{Provide the physical location and support staff}$
- What can we accomplish together?
 - Provide a means to improve the economic stability in the county by creating a more prepared workforce
 - o Attract more high paying jobs and industries
 - Help our families obtain access to healthcare, nutritious, wholesome foods, provide improved living conditions and live less stressful lives

Thank You



References

- HealthyPeople gov (n.d.), Social Determinants of Health, Retrieved November 21, 2020, from <a href="https://www.healthypeople.gov/2020/topics-objectives/topics-objective

- thips://likes.crie.ed.gov/fulletast/ED333973 pdf

 1. Parturship for Children of Cumberland County, (n.d.), Retrieved November 1, 2020 from https://icere.ed.gov/fulletast/ED333973 pdf

 1. Parturship for Children of Cumberland County, (n.d.), Retrieved November 1, 2020 from https://icere.eds.gov/fulletast/ED33973 pdf

 1. Sanchez NJ. (2019). Community Colleges and The Future Of Workforce Development Forbes. Retrieved from https://www.forbes.com/sites/mancyleesanchez/2019/10/24/community-colleges-and-the-future-of-workforce-development/7sh=e426dc6819. Retrieved November 11, 2020

References

- Action Pathways (n.d.), Find a Head Start Center Near You. Retrieved on November 1, 2020 from https://actionpathways.ngo/our-programs/head-start/find-head-start-near-you/
- Action Pathways Annual Report (2018). Retrieved from https://actionpathways.ngo/wp-content/uploads/2019/09/2018-Annual-Report-D2.pdf
- American Psychological Association (APA), Presidential Task Force on Educational Disparities.

 (2012). Ethnic and racial disparities in education: Psychology's contributions to understanding and reducing disparities. Retrieved from

 http://www.apa.org/ed/resources/racial-disparities.aspx
- Annie E. Casey Foundation (AECF). A Kids Count Special Report from the Annie E. Casey

 Foundation. *Early Warning! Learning to Read. "Why Reading by the End of Third Grade Matters."* 2010. AECFReportReadingGrade3.pdf
- Barnes, G. (2015, December 13). *Poverty in Fayetteville: Why are we among the worst in America?* https://www.fayobserver.com/news/20151213/poverty-in-fayetteville-why-are-we-among-worst-in-america
- Campbell, FA,Ramey, CT. 1991. The Carolina Abecedarian Project. 1. Presented at Biennial Meeting of the Society for Research in Child Development. Retrieved from https://files.eric.ed.gov/fulltext/ED333973.pdf
- CAP Tulsa. (n.d.). *CareerAdvance*®. Retrieved from https://captulsa.org/what-weoffer/careeradvance/
- Carolina Gateway Partnership. (2020). Workforce. Retrieved Novermeber 12,2020, from https://www.econdev.org/doing-business/workforce-demographics/#:~:text=The%20North%20Carolina%20Community%20College,assist%2">https://www.econdev.org/doing-business/workforce-demographics/#:~:text=The%20North%20Carolina%20Community%20College,assist%2">https://www.econdev.org/doing-business/workforce-demographics/#:~:text=The%20North%20Carolina%20Community%20College,assist%2">https://www.econdev.org/doing-business/workforce-demographics/#:~:text=The%20North%20Carolina%20Community%20College,assist%2">https://www.econdev.org/doing-business/workforce-demographics/#:~:text=The%20North%20Carolina%20Community%20College,assist%2">https://www.econdev.org/doing-business/workforce-demographics/#:~:text=The%20North%20Carolina%20Community%20College,assist%2">https://www.econdev.org/doing-business/workforce-demographics/#:~:text=The%20North%20Carolina%20Community%20College,assist%2">https://www.econdev.org/doing-business/workforce-demographics/#:~:text=The%20North%20Carolina%20Community%20College,assist%2">https://www.econdev.org/doing-business/workforce-demographics/#:~:text=The%20North%20Carolina%20Community%20Community%20College,assist%2">https://www.econdev.org/doing-business/workforce/doing-b

- <u>0industries%20in%20workforce%20training.&text=Flexible%20and%20custom%2Ddesigned%20training,a%20manufacturing%20or%20service%20company</u>
- Chase-Lansdale PL, Sommer TE, Sabol TJ, Chor E, Brooks-Gunn J, Yoshikawa H, King C,

 Morris A. (2017). What are the Effects of Pairing Head Start Services for Children with

 Career Pathway Training for Parents? Retrieved from

 https://www.captulsa.org/uploaded_assets/pdf/CAP-Tulsa-impact-analysis_March-2017.pdf
- Cumberland County 2019 Community Health Needs Assessment. (2019).

 https://ares.lib.unc.edu/ares.dll?SessionID=F225047176O&Action=10&Type=10&Value=109132846
- Freudenberg N, Ruglis J. 2007. *Reframing School Dropout as a Public Health Issue*. Preventing Chronic Disease. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2099272/
- HealthyPeople.gov. (n.d.). Social Determinants of Health. Retrieved November 21, 2020, from https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health
- Morrow, J. November 1, 2020. Interview with Executive Director of Smart Start of

 New Hanover County, NC. Partnership for Children of Cumberland County (n.d.).

 Retrieved November 1, 2020 from https://ccpfc.org/business-directory/5989/early-head-start/
- NCSL. (2018). Two-generation approaches to addressing poverty: A toolkit for state legislators.

 Retrieved October 9, 2020, from

 https://www.ncsl.org/Portals/1/Documents/cyf/2Gen toolkit f04 1.pdfPartnership for

- Children of Cumberland County, (n.d.), Retrieved November 1, 2020 from https://ccpfc.org/business-directory/5995/head-start/
- Ray AK. (2008). *Measurement of Social Development: An International Comparison*. Social Indicators Research. v86, n1. p1-46.
- Sanchez NL. (2019). Community Colleges And The Future Of Workforce Development. Forbes.

 Retrieved November 11, 2020, from

 https://www.forbes.com/sites/nancyleesanchez/2019/10/24/community-colleges-and-the-future-of-workforce-development/?sh=e42e6dc681f9
- The Aspen Institute. The two generation approach. What is the two generation approach? 2012.

 Retreived September 13, 2020, from http://ascend.aspeninstitute.org/pages/the-two-generation-approach
- Tribie Reid, K. (2019). The Health Equity Impact of Universal Childhood Education. SPHG721.

 Gillings School of Public Health at the University of North Carolina at Chapel Hill
- U.S. Census Bureau QuickFacts: Cumberland County, North Carolina; Fayetteville city, North Carolina. (n.d.). Retrieved October 18, 2020, from https://www.census.gov/quickfacts/fact/dashboard/cumberlandcountynorthcarolina,fayett evillecitynorthcarolina/RHI125219
- Utah State Legislature. (2018). Evidence-Based Interventions To Address Intergenerational Poverty. *Appropriations Subcommittee*.

APPENDIX B: JOSHUA BABB'S INDIVIDUAL WORK

Individual Problem Statement

Social Determinant of Health

The social determinants of health (SDOH) make up the conditions where individuals live, learn, work, play, and pray (Healthy People 2030, n.d.), and affect a wide range of both physical and mental health issues and must be addressed for everyone to have the opportunity to achieve the highest attainable standard of health (Colbert & Harrison, 2011). In the United States, 1 out of 10 people currently live in poverty (Semega et al., 2019). Poverty decreases a person's access to health care, healthy foods, adequate living conditions, etc., which results in a higher prevalence of preventable disease and death within this population (Healthy People 2030, n.d.). To that end, the Healthy People 2030 goals list "Economic Stability" as a major SDOH and is defined by the prevalence of unemployment, housing insecurity, food insecurity, and poverty (Healthy People 2030, n.d.). The ultimate goal of Economic Stability is ensuring that people earn steady incomes so they meet their health needs with the sub-goal SDOH-01: "reduce the number of persons living in poverty" (HealthPeople.gov, n.d.).

Geographic and Historical Context

Cumberland County (CC) is located in the southeastern section of North Carolina (NC) and has roughly 327,000 residents (CC HNA, 2019). CC has a racial/ethnic distribution of 51.8% White, 38.7% Black or African American, and 9.5% other (CC HNA, 2019). Table 4 in Appendix C contains a demographic breakdown of CC. The major city in CC is Fayetteville, home to Fort Bragg, one of the United States' largest military installations. Military service members made up approximately 10.1% of the total population in CC between 2012 and 2016

(CC HNA, 2019). The presence of Fort Bragg contributes to the patriotic culture within Fayetteville and CC at large as well as the economic landscape.

There are a range of employment opportunities in CC with the top four employers being the U.S. Department of Defense (civilians), Cape Fear Valley Health Systems (CFVHS), CC Schools, and Wal-Mart Associates (CC HNA, 2019). CC offers tax incentives for new business expansion in an effort to further increase the employment opportunities of its residents (FCEDD, n.d.). Despite this effort, CC has an unemployment rate of 5.6% and a poverty rate of 17.6% (CC HNA, 2019). Poverty is also not equitably distributed in CC with 43.5% of those living in poverty being Black or African American (Data USA, n.d.). Table 5 in Appendix C contains a comparison of CC's and NC's economic profiles.

Priority Population

Fayetteville is a large driver of the poor economic indicators within CC. Fayetteville contains almost two thirds of the county's population with a population density of 1,440 persons per square mile (Open Data Network, 2018). Fayetteville also has 6 census tracts where the unemployment and poverty rates are at least 5.9% and 25.2%, respectively (Barnes, 2015). Fayetteville also contains the 28301 zip code which was found to have the greatest SociNeeds Index, a composite measure used to compare multiple socioeconomic factors, within CC (CC HNA, 2019). Poverty in Fayetteville is related to poorer health outcomes as low socioeconomic status (SES) in CC correlates with increased prevalence of chronic conditions such as diabetes, obesity, and cancer as well as behavioral and emotional problems in children (CC HNA, 2019).

According to Fayetteville City Councilman Larry Wright, poverty within these areas of Fayetteville has been handed down throughout the generations creating a sense of hopelessness (Barnes, 2015). One resident stated "[y]ou go there and talk to people and you'd be amazed at

what they simply don't know..." (Barnes, 2015). Given the population density of Fayetteville, the presence of generational poverty, and its connection to health, the population of persons living below the federal poverty guideline in Fayetteville are the priority population.

Measures of Problem Scope

According to the U.S. Census Bureau, the poverty rate in Fayetteville is 19.2% with 50.9% of all individuals living in poverty being Black or African American despite only representing 41.2% of the population in Fayetteville (Data USA, n.d.). Unemployment and median household income will also be important to track as they can serve as indicators of the economic growth in Fayetteville. Another important measure that will have to be developed is the SociNeeds index of Fayetteville and the 6 individual census tracts defined above. Lastly, survey data on the perceived challenges facing this community and available opportunities should be ascertained to help ensure the community's concerns are being met. These impact measures will allow for tracking the progress towards eliminating the generational poverty that plagues Fayetteville.

Rationale/Importance

Poverty is a serious issue givens its relationship to physical, behavioral, and emotional health consequences (CC Health Dept., 2019). Addressing poverty is therefore essential in ensuring that everyone can exercise the human right to health. Fayetteville struggles with both an increased poverty rate and with generational poverty, which has led to equity issues. The extreme population density of Fayetteville also means that addressing its poverty could have a significant impact in decreasing the magnitude of poverty in CC. Addressing poverty will benefit all of CC according to law maker Rick Glazier as "[p]overty doesn't just affect the neighborhood it is in, it also affects the whole dynamic of that city and that county and that community" (Barnes, 2015).

Policy and Program Analysis

Introduction

Intergenerational poverty (IGP) is a well-recognized problem in Fayetteville, NC. City Councilman Larry Wright claims poverty within the poorest areas of Fayetteville has been handed down throughout the generations (Barnes, 2015). IGP may be defined as "poverty in which two or more successive generations of a family continue in the cycle of poverty" (Utah State Legislature, 2018). This type of poverty has deleterious effects on not only the individuals living within the cycle but also the community at large.

Children who grow up in IGP have increased rates of poor academic achievement, drug/alcohol use, and poor health outcomes, and are at elevated risk of poverty in adulthood (USL, 2018). Further, IGP has an enormous fiscal impact on communities. It is estimated that IGP costs the United States \$170 billion per year in lost productivity and earnings, \$170 billion per year in increased cost of crime, and \$149 billion per year in increased health care expenditures or roughly 3.8% of the country's total GDP (USL, 2018). Therefore, addressing IGP through policy and program interventions will positively affect the individuals living in poverty and the community at large.

Two-Generation Approach

In order to address IGP it is imperative that a two-generation approach be employed. A two-generation approach is defined as a program that simultaneously addresses the needs of parents and children (Office of Family Assistance, 2016). In a two-generation approach, the services aimed at addressing the parents' needs and the children's needs are linked and aligned in an effort to bring about greater and more sustainable outcomes for the entire family. This approach demands that different service providers work together to offer a cohesive program. A

co-design process where the children-centered service providers and the parent-centered service providers work as a team in program development is necessary (Office of Family Assistance, 2016).

Program Option

Program options that have become increasingly popular for addressing IGP are those that pair higher education and/or workforce development for parents with child care or early education programs for children. An example of this is the Jeremiah Program, which combined early childhood education with life-skill training for single mothers and showed a \$4 return on investment (USL, 2018). This type of approach is well suited for Fayetteville given the presence of both Fayetteville Technical Community College (FTCC) and the Early Head Start (EHS) and traditional Head Start (HS) programs.

FTCC already offers a wide variety of Curriculum and Corporate & Continuing Education opportunities to approximately 37,000 students and is designated as a science, technology, engineering, and math (STEM) jobs approved college by Victory Media (FTCC, 2020). The mission of FTCC is to "[s]erve [their] community as a learning-centered institution to build a globally competitive workforce that supports economic development" with the purpose of "providing affordable vocational-technical, business and industry, general education, college transfer, and continuing education programs" in order to meet the needs and desires of their students and the economic stability needs of the community (FTCC, 2020).

EHS and HS are federal grant programs. The mission of these programs are to "promote school readiness by enhancing the social and cognitive development of children through the provision of educational, health, nutritional, social and other services to enrolled children and families" (Head Start, 2020). These programs represent both a form of childcare and early

childhood education (ECE) while also providing family advocacy and referral to other community services and are provided for free to eligible low-income families (Head Start, 2020).

The proposed program then is a combination of a higher education and workforce development offered through FTCC and childcare and early education offered through the EHS/HS programs. While both of these organization already offer these services as stand-alone entities, the two-generation approach will bring these service providers together to collaborate on how to offer these programs in concert to ensure that families can simultaneously utilize both programs. This will include, but is not limited to, special class times that coincide with the EHS/HS program pick up and drop off times, alternative times for EHS/HS childcare to accommodate for clinical or practicum work, and a EHS/HS location on the FTCC campus.

This type of program requires that several specific measures be tracked to illuminate areas for improvement in future iterations. Participant satisfaction and feedback will be one of these key measures. This qualitative data will be captured through the development of a validated survey for all participants and through focus groups that will be offered quarterly throughout the duration of the program. Further, process data will have to be collected in order to understand service delivery. Process data will include service provider satisfaction and feedback, number of participants served, and cost of providing the service. Further, a return on investment (ROI) for this program will be calculated to help justify the program to possible funders.

Policy Option

A policy option for Fayetteville and CC at large would be to increase the minimum wage of CC to \$15.00 per hour. Increasing the minimum wage has been long noted as means of increasing economic stability and reducing individuals impacted by poverty (Cooper, 2017). Further, increasing minimum wage has been cited as a way of reducing obesity and related

chronic disorders, depression, and anxiety as well as increasing access to healthcare (Leigh, 2016). This increase is long overdue as the federal minimum wage has not increased since July 24, 2009, even though the cost of housing, education, food, transportations, and living in general has steadily increased (Cooper, 2017). This policy will require that the poverty rate, employment rate (by racial demographic), and employment opportunities (by type) be tracked to ensure that it does not have unintended consequences.

Policy Concerns

Raising the minimum wage in CC does bring about several concerns. These concerns will mainly be from employers that oppose such a policy. It is important to recognize these concerns as the employers in CC and specifically within Fayetteville are key stakeholders, and their help is necessary in addressing IGP and economic stability. A Give-Get model can be used to address these concerns. Economic forecast on minimum wage increase show that raising the minimum wage will have a positive effect on individuals living in poverty throughout the country and zero net impact on companies overall profits and growth (Reich, Allegretto, & Montialoux, 2017). This is mainly due to a balancing effect between the salary costs a company incurs that are directly balanced by a decrease in worker turnover and an increase in employee purchasing power stimulating product demand (Reich et al., 2017). Addressing minimum wage is not only feasible but necessary to accomplish the goal of President Franklin D. Roosevelt when he enacted the federal minimum wage. President Roosevelt said, "[i]t seems to me to be equally plain that no business which depends for existence on paying less than living wages to its workers has any right to continue in this country... [and] by living wages I mean more than a bare subsistence level—I mean the wages of decent living."

Stakeholder Analysis

The System of Health in Fayetteville, NC

The system of health in Fayetteville, NC, is comprised of several major subsystems that interact with one another. These systems include the health, educational, business (private and public), and military sectors as well as neighborhoods of varying SES. The actions of any one of these subsystems influences the actions of the other subsystems and effects the distribution of the SDOH in Fayetteville (Figure 1 in Appendix A). Currently, the system of Health in Fayetteville is a system that aligns the health of populations with income by limiting the opportunities for poor residents to attain optimal health in order to maintain the status quo and propagates a cycle of generational poverty.

Economic Health Reform in Fayetteville, NC

The system of Economic Health Reform in Fayetteville, NC, includes stakeholders from all the major subsystems mentioned above but is primarily focused on the educational sector and business sector. The interplay between these two systems must be addressed if intergenerational poverty is to be dealt with in Fayetteville. Poor childhood education and lack of continuing education or higher education in adults leads to decreased employment opportunities (Giovetti, 2019). This lack of employment opportunity leads to underemployment and propagates the cycle of generational poverty. To that end, the system of Economic Health Reform in Fayetteville, NC, is a system that provides ECE and workforce development to low-income individuals through policy and program interventions. These interventions are designed break the cycle of generational poverty and give all residents the opportunity to attain their optimal health.

Program Stakeholder Analysis

To help with stakeholder analysis for the proposed two generational program, a RASCI matrix was used to help generate a list of stakeholders and then a power-interest grid was used to analyze this list of stakeholders. A RASCI matrix allows one to think about who is responsible, accountable, supportive, consulted, and informed for a program. The power-interest grid helps prioritize the level of management necessary for stakeholders based off their power or influence and interest in a program or policy. This grid is broken into four quadrants, low power/low interest stakeholders should be monitored, high power/low interest stakeholders should be kept satisfied, low power/high interest stakeholders should be kept informed, and high power/high interest stakeholders should be managed closely (Bdaiwi, 2017).

Cumberland County Health Department (CCHD) was determined to be one of the stakeholders both responsible and accountable for the proposed program. CCHD will serve as the backbone organization for the accountable care community (ACC). CCHD is well suited to be the backbone agency for convening the diverse group of stakeholders that will be responsible and accountable for the program because they already have a relationship with all the necessary stakeholders. Further, the CCHD has expertise in addressing SDOH, data collection, and program/policy evaluation. Since the CCHD will be serving as the backbone organization for the program, the chief health strategist and staff will be in charge of stakeholder management moving forward.

FTCC was determined to be the other stakeholder suited to be both responsible and accountable for the ECE/workforce development program. There were several reasons for this determination. FTCC has a broad range of career connection and well developed continuing education/workforce development programs. Further, FTCC has an already established ECE

center and is committed to workforce development in Fayetteville (FTCC, 2020). Given the level of involvement that will be necessary from FTCC and their commitment to workforce development, it was determined that they have high power and high interest in this program and should be managed closely.

CFVHS will also be accountable for the program. CFVHS can represent a source of funding and provide help with program impact evaluation. Further, they can help in workforce development through a partnership with FTCC and CCHD. Since, CFVHS will help fund the program and play an integral role in healthcare workforce development, it was determined that they should be managed closely by the chief health strategist at CCHD.

Low-income Fayetteville families will be involved at two different levels in the program. First, they will play a supportive role. This will be done by including members from these disenfranchised family in the accountable care community's advisory committee. More large scale involvement of these individuals will be at the level of consultation where families will be consulted through surveys and focus groups to determine needs, wants, and potential program issues. Low income families' interest in this program was determined to be high as well as their power. This level of power comes from their ability to simply use or not use the program. It is for this reason that the chief health strategist should manage this stakeholder group closely.

Other stakeholders generated using the RASCI matrix questions include Fort Bragg,
County Commissioners/City Council, Partnership for Children of Cumberland County (PCCC),
Business Owners, and childcare providers. Fort Bragg plays a large role in the community of
Fayetteville and has spent considerable money in the development of Fayetteville (Brooks, 2018)
and may provide a source of program funding. While Fort Bragg would have little power to stop
this program, their interest in Fayetteville's development means they should be kept informed.

The County Commission/City Council can help with funding and also provide political influence. The ability to provide funding and political influence means that the County Commissioners/City Council does hold some power; although, their interest may be lower than other stakeholders given their broad range of county/city concerns. Therefore, they should be kept satisfied throughout the design and implementation of the program. The PCCC currently provides resources and support for ECE (CCPFC, n.d.). Therefore, they have considerable ability to help with funding, which gives them power, and a high interest given the programs commitment to ECE. This means they should be managed closely by the chief health strategist.

Business Owners will play a role in supporting new internships and apprenticeships for the workforce development portion of the program, which is necessary, and can possibly provide some program funding. However, their day to day interest will be fairly low, so they should be kept satisfied. Lastly, childcare providers will have insight into current issues in the delivery of childcare and can be potential partners for ECE moving forward. This partner should be kept informed given their interest but lack of power. See program RASCI matrix and power-interest grid (Table 2 and Figure 2) in Appendix C.

Policy Stakeholders

A RASCI matrix and power-interest grid was also used for stakeholder analysis of the proposed policy intervention. The policy is aimed at increasing funding from the county commission or from the City of Fayetteville for ECE.

The PCCC was determined to be the stakeholder organization best suited to be responsible and accountable for this policy. The agency's mission is to be a "driving force to engage partners to achieve lasting positive outcomes for all children, beginning at birth" (CCPFC, n.d.). The Partnership receives state funds and private matching fund dollars to

subsidize high quality ECE (CCPFC, n.d.). Therefore, the chief health strategist should manage them closely.

Fayetteville Families will have a wide spectrum of involvement. They will play a supportive role by having representation in the ACC to determine how the funding received can be allocated to further ECE. These disenfranchised families will be consulted to determine what concerns exist with respect to ECE and informed so they know exactly how the increased funding is being utilized. Their insight into funding issues and needs and level of interest means they should be managed closely.

The County Commissioners/City Council will play a large supportive role, and need to be kept informed throughout this policy. The policy is aimed at increasing ECE funding through county and/or city re-allocation of funds. Therefore, both parties have power over the policy and interest as it concerns budgets. The chief health strategist should manage these parties closely.

Other stakeholders will have a range of involvement. The Cumberland County Board of Education can help support by advocating for the policy. Their interest means they should be kept informed. Childcare centers can provide information on the cost of ECE and become qualified (if not already) to meet the standards for high quality ECE subsidies set by HS and EHS. Their interest in the policy means they should be kept informed by the chief health strategist. Action Pathways is a non-profit that currently runs the HS and EHS programs in CC and can help in policy advocacy and provide information on how federal funding is garnered, which can help the policy efforts. Therefore, they should be managed closely. RASCI matrix and power-interest grid (Table 3 and Figure 3) in Appendix C.

Accountability Plan/MOU

1. Overview

Fayetteville, NC suffers from generational poverty according to City Councilman Larry Wright (Barnes, 2015). This poverty has been handed down throughout the generations creating a sense of hopelessness while also negatively affecting the health of these disenfranchised families. In CC, growing up and living in poverty is associated with an increased risk of many chronic diseases such as diabetes, obesity, and cancer as well as behavioral and emotional problems in children (CC HNA, 2019).

In order to address generational poverty in Fayetteville, an ACC will be established with the overall aim of increasing economic stability through the reduction of poverty in Fayetteville in order to improve the health and well-being of CC residents. The CCHD will serve as the backbone organization for the ACC. CCHD is well suited to be the backbone agency for convening the diverse group of stakeholders that will be responsible and accountable for the program because they already have a relationship with all the necessary stakeholders. Further, the CCHD already has expertise in addressing SDOH, data collection, and program/policy evaluation. The broad stakeholder group includes the CFVHS, FTCC, and PCCC. These partners will play a unique role in the ACC and proposed program (see Table 2 in Appendix C).

2. Purpose

The purpose of this Memorandum of Understanding (MOU) is to develop a framework for cooperation on the basis of health equity in order to promote a sustainable partnership between the CCHD and CFVHS to decrease poverty in Fayetteville and ultimately improve economic stability in CC. Leaning on the shared values of integrity, accountability, diversity, and inclusion (CFVHS, 2020), this mutually beneficial partnership is designed to enhance the

development of an ACC and the delivery, evaluation, and sustainability of the two-generational program in an effort to improve community health in Fayetteville. Improving community health includes but is not limited to a reduction of generational poverty, an increase in average income, a decrease in reported childhood adverse childhood events (ACEs), and a decrease in chronic morbidities such as asthma, diabetes, and heart disease.

3. Scope of Activities

There are several areas in which CCHD and CFVHS will contribute and/or collaborate to enhance the ACC and the workforce development/ECE program. These areas include but are not limited to all the activities mentioned in this section (3.1 - 3.6). Prior to any activity being implemented, the ACC shall discuss relevant factors and/or issues with each party to determine the necessity and best way to employ each idea.

3.1. Opportunities for Information Sharing

- 3.1.1. CFVHS will share relevant de-identified information on patient health, place of residence, insurance type (private, public, or uninsured), and self-reported ethnicity to the extent legally allowed in order to help CCHD with the evaluation component of the program. Note, all data shared will be securely stored.
- 3.1.2. CCHD and the CFVHS will continue to collaborate with one another sharing information for future community health assessment (CHA).
- 3.1.3. CCHD will register with NCCARE 360. NCCARE360 is the first statewide coordinated care network containing a digital repository of shared resources to better connect individuals to local services and resources.

3.2. Program Funding

- 3.2.1. CCHD will contribute funding to this program on a yearly basis. This amount of funding will be determined by the steering committee. This will ensure that all stakeholders, which includes CCHD, agree to the proposed dollar amount.
- 3.2.2. CFVHS will also contribute funding. This funding will be used specifically for workforce development. This funding will help lead to program and CFVHS workforce sustainability.
- 3.2.3. CCHD will manage all of the funding for the program. Therefore, all funding will be channeled through the CCHD to help ensure funding fidelity. It also easily allows for all stakeholders year end contribution to be more easily analyzed during evaluation.

3.3. Workforce Development

- 3.3.1. CFVHS and CCHD will develop internships/apprenticeships specifically for the workforce development program.
- 3.3.2. CFVHS and CCHD will coordinate with each other and FTCC to conduct a career day on the college campus. This will include a special meet and greet time for program users to meet with CFVHS and CCHD employees so that they can ask any question they may have about prospective healthcare or public health careers.

3.4. Program Evaluation

3.4.1. CCHD and FTCC will share responsibility for program process evaluation. This includes the number of users, user demographic information, cost of program, return on investment, user satisfaction, provider satisfaction, etc. This evaluation will be conducted in a continuous process using small PDSA cycles. (See 5 for Impact Evaluation)

3.5. Timely Communication

- 3.5.1. Both parties will attend regularly scheduled steering committee meetings.
- 3.5.2. Both parties will identify their preferred means of communication to ensure that information is shared effectively on a timely basis.

3.6. Shared Resources

3.6.1. When appropriate, both parties will identify areas where resources can be leveraged or shared to enhance their potential; for example, in the CHA.

4. Terms and Conditions

4.1. Effective dates and Renewal of Agreement

4.1.1. This MOU will go into effect as of January 4, 2021 and will remain in effect for 5 years unless notice of termination is given by either party. This MOU may be renewed/extended by the written consent of both parties.

4.2. Termination of Agreement

4.2.1. This MOU may be terminated by either party. The terminating party must provide written notice of termination at least 180 days prior to the termination date. The termination of this MOU does not cancel out any prior activity agreements or promised funds within the same fiscal year.

4.3. Amendment of Agreement

4.3.1. This MOU may only be amended with the written consent of both parties, and any amendments must be agreed up in writing by both parties.

5. ACC Milestones, Evaluation, Metrics and Goals

5.1. Milestones (in chronological order with the exception of 5.1.6 and 5.1.7)

5.1.1. Establishment of ACC partners by the CCHD's Chief Health Strategist.

- 5.1.2. Creation of the steering committee.
- 5.1.3. Community gathering to introduce and celebrate creation of ACC.
- 5.1.4. Workforce development/early childhood education program creation and delivery.
- 5.1.5. Community gathering to introduce and celebrate program introduction.
- 5.1.6. Program process evaluations (see 3.5)
- 5.1.7. Program impact evaluation (see 5.2)

5.2. Evaluation

- 5.2.1. The program impact evaluation will require the help of all ACC stakeholders but will be primarily the responsibility of the CCHD and CFVHS. This evaluation will mainly consist of the community health assessment (CHA), which is preformed every 4 years through the partnership of CCHD and CFVHS.
- 5.2.2. The next CHA is planned for 2023.
- 5.2.3. Both CCHD and CFVHS agree to do another CHA of only Fayetteville in 2025 prior to the end of the original effective date of this MOU. This will allow for data from the mid-way point in 2023 to be compared to data at the end of the initial five year agreement to help assess the program's impact on poverty in Fayetteville over the duration of the first five years.

5.3. Metrics not Currently Captured in CHA and Associated Goals

5.3.1. SociNeeds index of Fayetteville at large. This is relative measure used to compare multiple socioeconomic factors across a region and incorporates income, poverty, unemployment, occupation, educational attainment, and linguistics barriers measures (CC Health Dept., 2019).

- 5.3.1.1. Goal: Decrease the SociNeeds index to the county average by the end of the first five years.
- 5.3.2. SociNeeds index of the census tracts where poverty and/or unemployment is at least 50% greater than the state average. Fayetteville currently has 6 of these census tracts (Barnes, 2015).
 - 5.3.2.1. Goal: Reduce the number of census tracts meeting the above criteria by at least half by the end of the first five years.
- 5.3.3. Early childhood education rates stratified by family income.
 - 5.3.3.1. Goal: Increase early childhood education among Fayetteville's impoverished families (living at or below the federal poverty guideline) by 15% over the first five years of the ACC.

Persuasive Pitch Presentation

Cape Fear Valley Health Systems (CFVHS)

- Why CFVHS is an important stakeholder?
 - Second largest employer in Cumberland County²
 - Largest provider of healthcare in Cumberland County and Fayetteville²
 - Supports positive health outcomes and academic/professional development
- How we want you to be involved?
 - o Workforce development
 - Program funding
 - Internships/apprenticeships
 - Conduct a career day at FTCC
 - o Program evaluation
 - CHA and information sharing with CCHD
- What we can accomplish together?
 - o Increase Cumberland County's healthcare workforce
 - Decrease the prevalence of intergenerational poverty
 - Improve short and long term health outcomes



Script

Hello and thank you all for coming. My name is Joshua Babb and with my partners from Cumberland Thrives, Kenneth Sutton, and Dr. Khadijia Tribié Reid, we will take the next few minutes to talk about increasing economic stability in Fayetteville, NC, through the Creation of an ACC to improve the health of Cumberland County residents.

Healthy People 2030 has recognized "Economic Stability" as a major social determinant of health and it is characterized by the prevalence of unemployment, housing insecurity, food insecurity, and poverty (HealthyPeople.gov, n.d.). A sub-goal of economic stability is to reduce the proportion of people living in poverty (HealthyPeople.gov, n.d.). In Cumberland County, low SES is correlated with an increased prevalence of diabetes, obesity, and cancer as well as physical, behavioral, and emotional problems in children (CC CHA, 2019). CC has a poverty rate of 17% which is substantially higher than the state average of 13% (CC CHA, 2019).

A large driver of this high poverty rate is the city of Fayetteville, which has a poverty rate of 19.2% (CC CHA, 2019). Further, intergenerational poverty is a problem in poorest areas of Fayetteville according to City Councilman Larry Wright (Barnes, 2015). Currently, the system of health in Fayetteville aligns the health of populations with income by limiting the opportunities for poor residents to attain optimal health in order to maintain the status quo and propagate a cycle of generational poverty. According to law maker and executive director of the NC Justice Center Rick Glazier, "[IGP] doesn't just affect the neighborhood it is in, it also affects the whole dynamic of that city, and that county, and that community;" therefore, addressing IGP in Fayetteville will benefit CC as a whole (Barnes, 2015).

CFVHS, you are an important stakeholder for the ACC and the two generational program aimed at providing workforce development and ECE for many reasons. You are currently the second largest employer and the largest provider of health care in CC (CC CHA, 2019). You also supports positive health outcomes through your commitment to providing high quality medical care as well as providing academic and professional development through internships and apprenticeships for student CNAs, nurses, doctors, and other medical professionals to be. Your involvement would come at a variety of levels. As a funder you could help support the workforce development side of the two generational program being proposed. Further, you could develop internships and apprenticeships specifically for the participants of the program as well as conduct a career day on FTCC's campus, which would include a special meet and greet time for program users to meet with CFVHS employees. You will also play an integral role in program evaluation through continuous information sharing with the CCHD and through your continued commitment to work with the CCHD to perform a CHA every 4 years.

With your help we can increase Cumberland County's healthcare workforce helping to promote a more sustainable workforce for CFVHS while also decreasing the prevalence of IGP in Fayetteville. Ultimately, together we can improve both short and long term health outcomes of the population; which includes increasing disease management and reducing the overall prevalence of chronic disorders. On behalf of the entire Cumberland Thrives Team, I would like to say thank you very much for your time and that through hard work and collaboration, we can come together to further improve the health and well-being of our community far beyond what is possible when working alone. Thank you.

References

- Action Pathways. (n.d.). *Head Start Action Pathways*. Retrieved November 8, 2020, from https://actionpathways.ngo/our-programs/head-start/
- Barnes, G. (2015, December 13). *Poverty in Fayetteville: Why are we among the worst in America?* https://www.fayobserver.com/news/20151213/poverty-in-fayetteville-why-arewe-among-worst-in-america
- Bdaiwi, Y. (2017, March 24). Stakeholder Analysis using the Power Interest Grid.

 https://www.projectmanagement.com/wikis/368897/Stakeholder-Analysis--using-the-Power-Interest-Grid
- Brooks, D. (2018, November 29). \$699 million Fort Bragg construction planned over 6 years
 News The Fayetteville Observer Fayetteville, NC.

 https://www.fayobserver.com/news/20181115/699-million-fort-bragg-construction-planned-over-6-years
- Cape Fear Valley Health System. (2020). *About Us* | *Cape Fear Valley Health* | *Fayetteville, NC*& Ft. Bragg. https://www.capefearvalley.com/about/index.html
- CCPFC. (n.d.). *Partnership for Children of Cumberland County Childcare*. Retrieved November 8, 2020, from https://ccpfc.org/
- Colbert, S. J. J., & Harrison, K. M. (2011). Reflections from the CDC 2010 health equity symposium. *Public Health Reports (Washington, D.C.: 1974)*, *126 Suppl 3*, 38–40. https://doi.org/10.1177/00333549111260S308
- Conway, C. (2016, January 6). *Poor Health: When Poverty Becomes Disease* | *UC San Francisco*. https://www.ucsf.edu/news/2016/01/401251/poor-health-when-poverty-becomes-disease

- Cooper, D. (2017, April 26). Raising the minimum wage to \$15 by 2024 would lift wages for 41 million American workers. https://www.epi.org/publication/15-by-2024-would-lift-wages-for-41-million/
- Cumberland County 2019 Community Health Needs Assessment. (2019).

 https://ares.lib.unc.edu/ares.dll?SessionID=F225047176O&Action=10&Type=10&Value

 =109132846
- Data USA. (n.d.). *Cumberland County, NC*. Retrieved October 14, 2020, from https://datausa.io/profile/geo/cumberland-county-nc/
- Data USA. (n.d.). *Fayetteville, NC*. Retrieved October 14, 2020, from https://datausa.io/profile/geo/fayetteville-nc/
- FCEDC. (n.d.). *Economic Development Incentives*. Retrieved October 18, 2020, from https://www.fayedc.com/incentives-taxes/
- FTCC. (2020). More About FTCC. https://www.faytechcc.edu/about-ftcc/more-about-ftcc/
- Giovetti, O. (2019, August 27). *How does education affect poverty? It can help end it.*https://www.concernusa.org/story/how-education-affects-poverty/
- Head Start. (2020). *Head Start Partnership for Children of Cumberland County*. https://ccpfc.org/business-directory/5995/head-start/
- HealthyPeople.gov 2030. (n.d.). *Economic Stability*. Retrieved October 15, 2020, from https://health.gov/healthypeople/objectives-and-data/browse-objectives/economic-stability
- Leigh, J. P. (2016, July 28). Raising the minimum wage could improve public health | Economic Policy Institue. https://www.epi.org/

- NC Dept. of Commerce. (2020, September 2). NC Commerce: North Carolina's July County and Area Employment Figures Released. https://www.nccommerce.com/news/press-released-0
- Office of Family Assistance. (2016, April 12). Strengthening TANF Outcomes By Developing

 Two-Generation Approaches To Build Economic Security.

 https://www.acf.hhs.gov/ofa/resource/tanf-acf-im-2016-03
- Open Data Network. (2018). *Population Density Data for Fayetteville, NC*.

 https://www.opendatanetwork.com/entity/1600000US3722920/Fayetteville_NC/geograp-hic.population.density?year=2018
- Reich, M., Allegretto, S. A., & Montialoux, C. (2017, January 11). Effects of a \$15 Minimum Wage in California and Fresno Institute for Research on Labor and Employment.

 https://irle.berkeley.edu/effects-of-a-15-minimum-wage-in-california-and-fresno/
- Semega, J., Kollar, M., Shrider, E. A., & Creamer, J. (2019). *Income and Poverty in the United States: 2019*. https://www.census.gov/library/publications/2020/demo/p60-270.html
- U.S. Census Bureau. (n.d.). U.S. Census Bureau QuickFacts: Fayetteville city, North Carolina.
 Retrieved October 10, 2020, from
 https://www.census.gov/quickfacts/fact/table/fayettevillecitynorthcarolina/RHI125219
- Utah State Legislature. (2018). Evidence-Based Interventions To Address Intergenerational Poverty. *Appropriations Subcommittee*.

Appendix C: Tables and Figures

(Note: Tables and Figures appear in the order that they are referenced in Appendix B)

Table 4: Demographic Distribution of Cumberland County¹

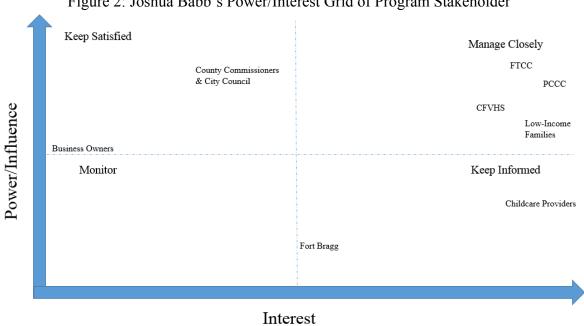
Demographic	Categories	Frequency	Percent
Population	Total	327,127 (2016)	N/A
	Per Square Mile	489.7	N/A
Gender	Male	160,292	49.0%
	Female	166,835	51.0%
Age	Under 20	93,231	28.5%
	20-24	30,750	9.4%
	25-34	55,612	17.0%
	35-44	38,601	11.8%
	55-59	18,973	5.8%
	60-64	16,029	4.9%
	65+	37,947	11.6%
Ethnicity	White	169,452	51.8%
	Black or African	126,598	38.7%
	American		
	Other	31,077	9.5%

¹All data from Cumberland County 2019 Health Needs Assessment

Table 5: Socioeconomic Profile of North Carolina and Cumberland County¹

Table 5: Socioeconomic Profile of North Carolina and Cumberland County Indicator North Carolina (NC) or Measurement				
inuicatui	North Caronna (NC) of	wicasui ement		
	Cumberland County			
	, and the second			
	(CC)			
n ,	NC	17.007		
Poverty	NC	16.8%		
	CC	17.6%		
Unemployment Rate	NC	3.9%		
	CC	5.6%		
	CC	3.076		
Median Household Income	NC	\$48,256		
	CC	\$44,810		
Children Living in Poverty	NC	23.9%		
Children Living in 1 overty	NC	23.970		
	CC	25.7%		
65+ Living in Poverty	NC	9.7%		
	CC	10.2%		
	CC	10.270		
Average Mortgage Costs	NC	\$1,213 ²		
	~~			
	CC	\$1,175		
High School Diploma or	NC	86.3%		
Tigh sensor Diproma of	1,0	00.370		
Higher				
	00	00.207		
	CC	90.3%		
Bachelor's Degree or Higher	NC	29.0%		
2 - 3. 00 0. 11.3/10/		=2.1070		
	CC	24.1%		

¹Data from Cumberland County 2019 Health Needs Assessment ²Data from U.S. Census Bureau

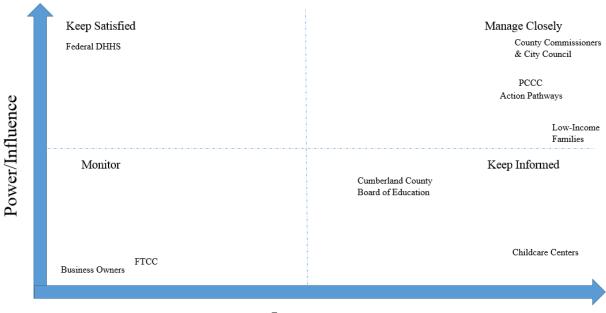


54

Table 2: RASCI Stakeholder Matrix for Program Intervention

RASCI Levels		
Who is	<u>Program</u> Transformation	Rationale For Partner Participation
Responsible=owns the problem / project	CCPHD, FTCC	CCHD – has a broad range of connection among the various stakeholders necessary for this programmatic intervention. Further they can represent a source of funding and avenue for funds to be channeled through. Also their knowledge of data collection and analysis will be important during evaluation. FTCC has a broad range of career connections and are already suited for training and developing a workforce. Further they already have an established early childhood education center.
Accountable=ultimately answerable for the correct and thorough completion of the deliverable or task, and the one who delegates the work to those responsible	CCHD, CFVHS, FTCC	CCHD can represent a source of funding and avenue for funds to be channeled through. Also their knowledge of data collection and analysis will be important during evaluation. CFVHS represents a source of funding as well as a partner during impact evaluations. Further, they are one of the largest employers in Fayetteville, so they can host career days as well as develop more internships/apprenticeships for the program. FTCC has a comprehensive resource and knowledge base to understand who should be involved and how to delegate tasks moving forward. Further, they already have a continuing education infrastructure in place.
Supportive=can provide resources or can play a supporting role in implementation	Fayetteville Families, Fort Bragg, Cape Fear Valley Hospital, FTCC, County Commissioners, Fayetteville City Council, Partnership for Children, Business Owners	Each of these entities have knowledge and resources that can expand the program's reach. These resources include information, financing, human resources, and political influence.
Consulted=has information and/or capability necessary to complete the work	Fayetteville Families, Cumberland County Health Dept., Child Care Providers	These entities have the insight needed to understand the needs of the target population and the potential unintended consequences of action.
Informed=must be notified of results, process, and methods, but need not be consulted	County commissioners, Fayetteville City Council, Business owners	These entities could create a political environment supportive or damaging to this effort. They must remain informed to know how to take action and educate the public.

Figure 3: Joshua Babb's Power/Interest Grid of Policy Stakeholders



Interest

Table 3: RASCI Matrix for Proposed Policy Intervention

RASCI Levels		
Who is	<u>Policy</u> Transformation	Rationale For Partner Participation
Responsible=owns the problem / project	Partnership of Children Cumberland County	This agency's mission is to be a driving force to engage partners to achieve lasting positive outcomes for all children, beginning at birth. The Partnership receives state funds and private matching dollars to subsidize high quality early childhood education.
Accountable=ultimately answerable for the correct and thorough completion of the deliverable or task, and the one who delegates the work to those <i>responsible</i>	Partnership for Children of Cumberland County	Partnership for Children has the infrastructure in place to coordinate with multiple entities and assess outcomes data as is mandated by the state overseeing body.
Supportive=can provide resources or can play a supporting role in implementation	Cumberland County Board of Education, Fayetteville Families, Childcare centers, County Commissioners, Fayetteville City Council, Action Pathways	Each of these entities have knowledge and resources that can expand the program's reach. These resources include information, financing, human resources, and political influence.
Consulted=has information and/or capability necessary to complete the work	Cumberland County Board of Education, Fayetteville Families, Child Care providers, Action Pathways	These entities have the expertise and involvement in Early Childhood Education. Their insight is essential to successful policy development and implementation.
Informed=must be notified of results, process, and methods, but need not be consulted	Fayetteville families, County Commissioners, Fayetteville City Council, Childcare providers, Federal DHHS, Cumberland County Health Department	These entities could create a political environment supportive or damaging to this effort. They must remain informed to know how to take action and educate the public.

APPENDIX D: KHADIJIA TRIBIÉ REID'S INDIVIDUAL WORK

Individual Problem Statement

Economic Stability: A Social Determinant of Health

The Healthy People 2030 (HP 2030) goals stress the importance of social determinants of health (SDOH). Economic stability is one of five SDOH described by HealthyPeople.gov. Economic stability is defined by employment, food insecurity, housing instability, and poverty (SDOH, n.d.). Low socioeconomic status correlates with an increased prevalence of chronic conditions such as diabetes, obesity, and cancer (CC Community HNA, 2019). Children in poverty are more likely to have physical health problems, behavioral problems, and emotional problems (CC HNA, 2019). Due to this strong correlation between a community's economic stability and the health of its residents, this report will focus on the HP 2030 SDOH goal 3.1 - the proportion of people living in poverty.

Geography and History of Cumberland County

Cumberland County (CC) is in Southeastern North Carolina. In 2019, the population was just over 332,000 people (County Health Rankings, 2019). It is a racially and ethnically diverse county (CC HNA, 2019). (Table 6 in Appendix E)

CC is home to Fort Bragg, one of the largest Army installations in the world (CC HNA, 2019). The US Department of Defense – Civilian is the major employer in the region, employing over 14,000 residents. Other major employers include Cape Fear Valley Health System, Cumberland County Schools, and Wal-Mart Association. (CC HNA, 2019).

The Priority Population

In 2019, CC was ranked 73rd in the state for Health Outcomes (County Health Rankings and Roadmaps, 2020). The county's key health indicators are often are worse than statewide

health indicators. For example, at 76.4 years, Cumberland County's life expectancy (LE) is 1 ½ years shorter than North Carolina's LE (County Health Rankings, 2019).

CC is also defined by significant poverty. Seventeen percent of CC residents live in poverty compared to 13% of NC residents (US Census, 2018). Poverty is even more profound in the county's most populous city, Fayetteville, with a poverty prevalence of 19.2% (US Census, 2018). One Harvard study ranked Fayetteville last out of 100 of the United States' largest economic centers in earning potential for children growing up in poverty (Barnes, 2015). Fayetteville's 28301-zip code has been defined as the area with the greatest socioeconomic need (CC HNA, 2019). On a scale of 0 to 100 with 100 representing the greatest need, the 28301-zip code has a socioneeds value of 96.8. High values are associated with a high prevalence of poor health outcomes including preventable hospitalizations and premature death (CC HNA, 2019). Many Fayetteville citizens experience concentrated poverty, disproportionate rates of incarceration, community violence, food insecurity, and poor academic performance among students (Barnes, 2015). Such environmental adversity strongly correlates with poor health outcomes (Felitti, Anda, & Nordenberg, 2019).

The Scope of the Problem

Between 2012 and 2016, Cumberland County's median income was \$44,810 compared to \$48,256 in the state (CC HNA, 2019). Residents of Fayetteville's poorest zip code, 28301 had a median income of \$28,409 in that time frame (CC HNA, 2019). Poverty in Fayetteville affects the whole city with crime, stress on public service, lost tax revenue, and poor perception of the community (Barnes, 2015).

African Americans in Fayetteville are disproportionately impacted by poverty. One in eight of Fayetteville's African American residents live in the city's most poverty-stricken census

tracts (Barnes, 2015). Historically, the African American Fayetteville community grew out of a mixture of freeman and enslaved people. After the civil war, African Americans built thriving communities – founding churches, occupying political positions, and founding Fayetteville Normal School (now Fayetteville State University) (Whitted, 2000). In the post-Reconstruction era, practices such as mandated housing segregation and redlining created favorable conditions for Whites to amass significantly more property wealth than African Americans (McHale, 2020; Rothstein, 2018).

The Importance of Economic Stability

According to Rick Glazier of The NC Justice Center, "Poverty doesn't just affect the neighborhood it is in, it also affects the whole dynamic of that city and that county and that community (Barnes, 2015)." Furthermore, high poverty deprives affected citizens of the opportunity for optimal health. Unfortunately, much of Fayetteville's poverty was born out of structural injustices that negatively impact the wealth and health of African American residents. Therefore, targeting Fayetteville's economic development by focusing on the city's most disenfranchised members will not only be just, but it will improve health outcomes for the entire county.

Policy and Program Analysis

Cultural Considerations

Fayetteville residents experience significant negative health implications of poverty. This section includes a discussion of one program and one policy that would bolster economic development in Cumberland County.

Successful implementation of any policy or program requires consideration of community stakeholders' interests and power. Stakeholders include Fayetteville residents, business owners, politicians, community organizers, government representatives, and many others. Fayetteville has many assets including one of the largest military installations in the world, Cape Fear Valley Hospital, and several colleges (CC HNA, 2019).

There are some baseline considerations for choosing programs and policies that will advance economic stability in Fayetteville. While Fayetteville's high school graduation rate (91.5%) exceeds the NC graduation rate (87%), the median income for Fayetteville residents is lower than the state median income (County Health Rankings and Roadmaps, 2019). Therefore, failure to complete high school is not a major factor driving relatively low median incomes in Fayetteville. Yet, unemployment and underemployment in CC and Fayetteville are significant contributors to economic instability. According to Health Rankings, the unemployment rate in Cumberland County is 5.8% compared to a 4.6% statewide unemployment rate (County Health Rankings and Roadmaps, 2019). At \$28,000, the median income in Fayetteville's poorest community is \$15,000 less than CC's median income (CC HNA, 2019). Low median incomes may reflect residents' occupancy of low wage-earning jobs or underemployment. Finally, the persistence of intergenerational poverty (IGP) is a relevant cultural factor when considering economic solutions. IGP persists in Fayetteville due to factors such as the predominance of

single parent households, the disproportionate impact on families of criminal justice system involvement, and occupancy of low wage-earning jobs (Barnes, 2015). Although 91.5% of Fayetteville citizens complete high school, many residents do not have the skills needed to occupy high wage-earning jobs (Barnes, 2015). Hence, education and job training is an important lever that can enhance economic stability in Fayetteville.

Program Option: Project Quest

Project Quest provides a successful model for workforce development training. This program targets low income workers and trains them for well-paying careers in high growth sectors of the local economy (Social Programs that Work, 2020). This particular model is applied to the healthcare sector in San Antonio, Texas with jobs in nursing, medical records, medical coding, and other health related training (Social Programs that Work, 2020). Project Quest gets over 50% of its funding from the City of San Antonio's budget with the remainder of funds from a mix of governmental, business, and philanthropic entities (Rademacher, Bear, & Conway, 2001).

A randomized controlled trial of 410 participants provides convincing evidence of this program's effectiveness (Social Programs that Work, 2020). For 2 years, participants were required to enroll full time in college occupational training and attend weekly group or individual counseling sessions (Schwartz, 2019). Participants received need based financial assistance for tuition and school related expenses (Schwartz, 2019). In addition, individual counseling focused on optimizing available resources such as public assistance and childcare subsidies. The Social Programs that Work website postulates that this strong resource support system is one reason that 84% of program participants completed the program (2020).

On cost versus benefit analysis, the program shows substantial financial benefit. The cost of the program was \$11,500 per participant (Social Programs that Work, 2020). At the 9-year follow-up point, program participants had average earnings gains of \$6,869 per year which exceeds the average cost of services and college enrollment (Social Programs that Work, 2020).

Project Quest provides a model of workforce development that could be customized and applied to Fayetteville. This program is a potential long-term solution to underemployment among many Fayetteville citizens. Fayetteville is home to several industries that could benefit from a skilled workforce including the military complex and a vibrant medical industry. In addition, Fayetteville is home to both Fayetteville Technical Community College (FTCC) and Fayetteville State University, both of which would be viable partners in workforce development training. Job training industry options could be customized to meet Fayetteville's specific needs.

Policy Option: Expanding Apprenticeship Opportunities

The Expanding Apprenticeship Opportunities intervention is defined by a series of federal and state level initiatives to expand access to regional apprenticeships by creating market incentives and federal subsidies (Lerman, 2014). This has been levied as a youth apprenticeship program (Lerman, 2014).

There are many advantages to this intervention. One significant advantage is that participants experienced sizable improvements in their earnings. In addition, this intervention can be implemented at a low cost to the government due to the engagement of private industry (Lerman, 2014). Business owners and companies serve as training sites for these apprenticeships (Lerman, 2014). Companies offering training often report a high degree of satisfaction with their apprentices and sometimes hire these apprentices as employees (Lerman, 2014). Apprenticeships are often used as a bridge between high school and career which decreases youth unemployment

(Lerman, 2014). Apprenticeships also decrease the amount of money businesses spend on recruitment and training (Lerman, 2014).

Expanding Apprenticeship Opportunities did have some implementation challenges.

During previous trials of such apprenticeships, information did not get out to participants: better recruitment of businesses would have yielded stronger results (Lerman, 2014). In addition, subsidies for businesses must be robust enough to motivate businesses to engage with the program (Lerman, 2014).

Equity Analysis

Both Project Quest and Expanding Apprenticeship Opportunities can improve the economic outlook in Fayetteville, NC. The City of Fayetteville and surrounding CC have the resources needed to implement these interventions.

One of the most important equity pieces is reaching the target audience. Implementers and funders must ensure that information about these opportunities reach the most disenfranchised members of the Fayetteville community, otherwise these interventions could deepen disparities.

There are several quality metrics that could be employed to assure the precision and effectiveness of this intervention. These quality metrics include measures of participant retention, average percent salary increase, number of residents of each zip code enrolled in the intervention, regional average median income comparisons and annual poverty prevalence comparisons. These metrics will provide data on the intervention's effectiveness and impact on the target population.

Stakeholder Analysis

The System: The Effect of the Economy on Health

The target system of this intervention is the effect of the economy on the health of Fayetteville, NC citizens. This system aligns the health of populations with income by limiting the opportunities for poor residents to attain optimal health in order to maintain the status quo and propagates a cycle of generational poverty (Figure 1: Rich Picture of the Economy of Health in Fayetteville in Appendix A).

There is a strong correlation between the economic stability of a region and the health of that region's residents. On a scale of 0 to 100, with 100 representing the greatest need, the poorest Fayetteville zip code has a socioneeds value of 96.8 (Cumberland County HNA, 2019). High values are associated with a high prevalence of poor health outcomes including preventable hospitalizations and premature death (Cumberland County HNA, 2019). This health effect of poverty is not isolated to this single zip code, but rather, affects all of CC. In 2019, the county ranked 73rd in the state for health outcomes (County Health Rankings and Roadmaps, 2020). In 2018, 17% of the county's residents lived in poverty compared to 13% of the entire state's residents (US Census, 2018).

The Rich Picture (Appendix A) depicts a system that decreases citizens' capacity to achieve optimal health in many ways. Poverty leads to housing insecurity, food insecurity and limits access to healthcare. Poverty is passed from one generation to the next due to persistently low educational outcomes. Despite relatively high graduation rates in Fayetteville, in some areas of Fayetteville, less than 50% of students pass EOG tests (Barnes, 2015). Lack of academic proficiency often leads to low earning potential (Hahn, Barnett, & Knopf, 2016). In addition, despite the correlation with improved Intellectual Quotient (IQ) scores (Cambell & Ramey,

1991) and standardized test scores (Phillips, Gormley, & Anderson, 2016) in ECE participants versus non-participants, many Fayetteville families opt out of ECE. All of these subsystems work together to adversely impact the wealth and health of many Fayetteville residents.

The Target Subsystem: Intergenerational Poverty

Specific Fayetteville subsystems that drive this correlation between poverty and health include IGP, limited access to health needs and health care, low educational attainment, and occupancy of low wage-earning jobs by many Fayetteville residents (Barnes, 2015). A recent study ranked Fayetteville last out of 100 of the United States' largest economic centers in earning potential for children growing up in poverty (Barnes, 2015). This intervention aims to decrease IGP within families and communities with a multigenerational approach.

The proposed intervention has a programmatic and policy component. The programmatic intervention increases workforce development opportunities in Fayetteville while providing high quality ECE to program participants. The policy intervention aims to facilitate EHS availability and EHS participation in Fayetteville by increasing local or state government budget allocations for Fayetteville EHS funding. High quality ECE improves intellectual development of children and ultimately increases educational attainment and earning potential (Campbell & Ramey, 1991). Despite these benefits, ECE is underutilized in Fayetteville (Barnes, 2015). In 2013, only 25 of the 223 children under age 5 attended a nursery or preschool in Fayetteville's poorest census tract (Barnes, 2015). Although improved in 2014, with 116 of 302 children under age 5 enrolled, participation remained low (Barnes, 2015). Many families choose to keep their children with family or friend caretakers due to economic and safety concerns, citing a lack of trust for daycare centers as a deterrent (Barnes, 2015). Yet, underutilization of early childhood education contributes to educational under-achievement in the poorest districts where only 50% of third

graders pass their EOG tests (Barnes, 2015). This subsystem of low educational achievement stifles population economic mobility by limiting population capacity and knowledge to attain high wage earning jobs.

Expanding the availability and improving utilization of ECE will be an essential component of lifting children out of poverty. This stakeholder analysis focuses on a policy that aims to expand EHS utilization and availability in Fayetteville, NC.

Stakeholders

A Power Interest Grid was used as a Stakeholder Analysis Tool (Figure 4 in Appendix E). The grid provides insight on how each stakeholder should be involved moving forward. This tool allows intervention implementers to strategically align themselves with stakeholders for maximum impact. The Power Interest Grid was used to complete an accountability tool called the RASCI (Responsible, Accountability, Supportive, Consulted, and Informed) (Table 3). RASCI will provide structure for stakeholder engagement.

The rich picture of the effect of the economy on health in Fayetteville provides insight on stakeholders essential to expanding EHS utilization and availability. Stakeholders include potential EHS participants, entities that provide childcare, entities that coordinate ECE services, local politicians, and local business owners. (Table 7 in Appendix E)

There are several ECE partners. Action Pathways is a non-profit agency responsible for creating and regulating EHS spaces in Fayetteville, while the Partnership for Children of Cumberland County (PCCC) is an umbrella agency that implements and evaluates multiple evidence based ECE programs throughout CC (Action Pathways, 2018; PCCC, n.d.). While PCCC does not directly provide nor implement EHS services, the Partnership is mandated to use one third of its state budget allocation for childcare subsidy (PCCC, n.d.). The Partnership also is

a powerful ECE advocate whose parent organization North Carolina Partnership for Children (NCPC) operates at the state level (PCCC, n.d.). As a result of PCCC's role as the region's premier agency for ECE, involvement in networks at the local and state level, and significant administrative capacity to track outcomes, PCCC is an important partner for this policy implementation. Other ECE partners include local childcare providers and HS. Although HS is implemented in local communities, it is funded by the federal government (Morrow, 2020). Therefore, HS is a funding and regulating stakeholder.

While HS funding allocations are determined at the federal level, state and local governments have the power to allocate additional funds for HS programs (Morrow, 2020). This is why local political stakeholders are essential components of the policy intervention. CC Commissioners and Fayetteville City Council members have the capacity to increase local budget allocations for EHS (Morrow, 2020). Once these political stakeholders understand the value of high quality ECE for CC, they could be potent allies.

As previously mentioned, existing ECE is underutilized in Fayetteville. Fayetteville families can help ACC members understand why families are not utilizing available childcare. Without the perspective of Fayetteville families, precious resources could be wasted if the ACC creates an intervention that families do not use. Fayetteville families provide the insight needed to maximize the potential impact and effectiveness of this policy intervention.

Children who participate in high quality ECE demonstrate superior standardized test scores (Phillips, et.al., 2016) and IQ scores (Campbell and Ramey, 1991) when compared to children of the same socioeconomic status that do not attend high quality ECE. Increased standardized test achievement and intellectual development translate into higher wage-earning jobs and improved health compared to individuals who do not demonstrate these academic and

intellectual proficiencies (Hahn, et.al., 2016). Academic outcomes can be tracked with kindergarten assessments, EOG tests, 3rd grade reading proficiency assessments and high school graduation rates. The Board of Education has the capacity to provide this data.

While high quality ECE has positive long-term impacts on the future workforce, the immediate impact on the economy is clear. Childcare allows parents to work (PCCC, n.d.). This is why business stakeholders are important potential allies to increase high quality ECE.

Fayetteville Technical Community College (FTCC) educates early childhood educators. It is also the home of an early childhood education center (Fayetteville Technical Community College, n.d.). FTCC can provide insight about the needs of budding educators, link students to potential employment opportunities at EHS sites, and build pipeline programs that will encourage students to explore careers in early childhood education. Their partnership will support the infrastructure for a more robust local ECE capacity.

Finally, the CC Health Department will be the backbone agency. EHS participation improves health outcomes. EHS provides balanced nutritious meals which decreases food insecurity and helps children build healthy eating habits (Lee, Zhai, Han, et.al., 2013). In addition, EHS participants have increased prevalence of dental care when compared to non-Head Start participants of similar socioeconomic status (Lee, Zhai, Han, et.al, 2013). The health department will serve as a strategic health ally and potential funding source.

Accountability Plan/MOU

Cumberland County Health Department and the Partnership for Children of Cumberland County

The Current State of the Problem

There is a strong correlation between the economic stability of a region and the health of that region's residents. In 2019, CC ranked 73rd in the state for health outcomes (County Health Rankings and Roadmaps, 2020). The county's poor health outcomes aligned with significant poverty in the region. In 2018, 17% of the county's residents lived in poverty compared to 13% of the entire state's residents (US Census, 2018).

Specific characteristics of Fayetteville drive this correlation between poverty and health including IGP, limited access to health needs, limited access to health care, low educational attainment, and occupancy of low wage-earning jobs by many Fayetteville residents. Despite the presence of many colleges in Fayetteville, many Fayetteville children fail to demonstrate academic proficiency on standardized assessments (County Health Rankings and Roadmaps, 2019). In addition, families often opt out of early childhood education (ECE) programs for which participants consistently outperform non ECE participants on standardized academic assessments (Freudenberg & Ruglis, 2007; Phillips, Gormley, Anderson, 2016).

This Memorandum of Understanding (MOU) seeks to build a collaborative partnership that will address social determinants of health (SODH) that adversely impact population health. This partnership will decrease IGP within families and communities with a multigenerational approach. While the programmatic intervention focuses on workforce development, the policy intervention aims to facilitate greater EHS availability and participation in Fayetteville with the ultimate goal of increasing local or state government budget allocations to Fayetteville EHS funding. EHS is one of the most effective ways to address IGP (Hahn, Barnett, & Knopf, 2016).

EHS provides high quality childcare to children from birth to 3 years old (Action Pathways, n.d.). HS also enables parents to work and participate in workforce development or educational programs. Although funding for HS and EHS are provided through federal grants, CC has the ability to expand EHS through county level matching funds and increased childcare subsidy appropriations in the state budget (Morrow, 2020). Currently, there are only 5 EHS centers within 10 miles of the most impoverished CC zip code, 28301 (Action Pathways, n.d.).

The most enduring benefits of ECE result from high quality infant care. Several studies have linked high quality infant care to decreased developmental delays and decreased academic failure when compared to programs that start pre-k later, 3 - 4 years old (Campbell & Ramey, 1991). In the most highly regarded study, the Abecedarian Project, students who had engaged in the infant program continued to demonstrate IQ scores and standardized test scores superior to children who began ECE at 3-4 years old, even at the 12 year follow-up (Campbell & Frances, 1991). In 2016, Phillips, Gormley, and Anderson, demonstrated a statistically significant increase in math assessment scores in middle schoolers who had attended EHS when compared to middle schoolers of the same socioeconomic level who had not attended EHS. Academic success or failure is a strong predictor of health outcomes (Freudenberg & Ruglis, 2007). Low educational achievement also stifles economic mobility by limiting the affected population's capacity to attain high income earning jobs (Hahn, et, al., 2016).

Responsible and Accountable Partners

Stakeholders for this policy intervention include Cumberland County Health Department (CCHD), Partnership for Children of Cumberland County (PCCC), EHS participant families, entities that provide childcare, entities that coordinate ECE services, local politicians, and local employers. CCHD will serve as the backbone agency responsible for the problem and

intervention (Appendix E Table 3. RASCI). As the county's mandated health supervisor, CCHD aims to "Promote economic and social well-being for individuals, families and communities (Cumberland County HNA, 2019)." Economically, CCHD endeavors to decrease the number of people living in poverty in CC from 17% to 10% (CC HNA, 2019). More specific CCHD health goals include reducing infant mortality (death of an infant in the first year of life), improving the health status of children ages 0-5 years, improving birth outcomes, improving access to healthy foods, and achieving a healthy weight in Women, Infant and Children'(WIC) participants ages 2-4 years old (CC HNA, 2019).

PCCC shares many of the CCHD's goals. PCCC is an umbrella agency that implements and evaluates multiple evidence based ECE programs throughout CC (PCCC, n.d.). While PCCC does not directly provide EHS services, the Partnership is mandated to use one third of its state budget allocation for childcare subsidy (PCCC, n.d.). The Partnership also is a powerful ECE advocate with state level oversight. As a result of PCCC's role as the region's premier ECE advocacy agency, significant networks at the local and state level, and significant administrative capacity to track outcomes, PCCC will play a significant role in policy implementation and serve as an accountable partner (PCCC, n.d.).

PCCC has the administrative capacity to track outcomes. Key outcome measures tracked include the number of children in high quality childcare, the number of children receiving developmental screening, and the number of children achieving established academic milestones at third grade as assessed by End of Grade Tests (PCCCC, n.d.). Children in high quality childcare receive nutritious meals which impacts food insecurity. In addition, PCCC's collaborations with other agencies further underscore the organization's alignment with CCHD goals. PCCC works with a Child Abuse Prevention Agency and Family Connects, an agency that

supports families after the birth of their newborn (PCCC, n.d.). These agencies can have a direct impact on infant mortality. Another example of the Partnership's alignment with CCHD goals is its involvement in Shape NC, the childhood obesity prevention program launched by Blue Cross and Blue Shield (PCCC, n.d.).

The shared mission of this collaboration is to improve the health of Cumberland County residents. The shared vision is to have healthy families living in a county that promotes optimal health. Shared values include collaboration, innovation, quality, family focused, education, and inclusion.

Quality Improvement Metrics

The quality improvement (QI) metrics that will be utilized for this policy intervention are dollar amount of county and state allocations for EHS in Cumberland County, the number of EHS slots available in Fayetteville, the number of children attending EHS in Fayetteville, kindergarten school readiness, and 3rd grade End of Grade test pass rates. Additional quality metrics include measures of workforce training participant retention, regional average median income comparisons and annual poverty prevalence comparisons.

The health-specific QI metrics include infant mortality, food insecurity prevalence, and child overweight and obesity prevalence. These metrics assess the program's efficacy and reach.

Memorandum of Understanding: Cumberland Thrives Partnership Between

Cumberland County Health Department

And

Partnership for Children of Cumberland County

This Memorandum of Understanding (MOU) sets forth the terms and understanding between the Cumberland County Health Department (CCHD) and the Partnership for Children of Cumberland County (PCCC) to increase Fayetteville, NC's access to Early Head Start (EHS).

Background

This partnership will improve the health of Cumberland County (CC) residents by increasing available high-quality childcare for children less than 3 years old, allowing their parents to increase their earning potential by participating in workforce development programs and by providing enriching, healthy environments for children less than 3 years old. The problem being addressed is that poor economic stability in CC, and more specifically in the City of Fayetteville, jeopardizes the health of county residents. The shared mission of the partnership is to improve the health of CC residents. The shared vision of this partnership is to have healthy families living in a county that promotes optimal health. Shared values are family focused, collaboration, education, accountability, equity, and quality. As the agency mandated to assure and assess the health of the county, the CCHD will serve as the backbone agency responsible for this problem and proposed policy intervention. While PCCC will be the entity responsible for implementing the specific policy agenda to increase the capacity of high-quality early childhood education, specifically EHS in Fayetteville, NC. Fayetteville is the target of this partnership

because poor access to health care and economic disparities demonstrate profound negative impacts on Fayetteville's residents.

Purpose

This MOU will outline the activities to be delivered, partner specific responsibilities, mutual responsibilities, effective dates of agreement, terms and conditions of the agreement, assessment metrics and evaluation methods.

The above goals will be accomplished by undertaking the following activities:

Cumberland County Health Department (CCHD)

- CCHD will serve as the backbone agency responsible for the problem and intervention.
 CCHD will communicate quarterly with PCCC to ensure alignment of goals, timelines and to provide on-going evaluation.
- 2) CCHD will consider allocating funds to PCCC to promote the advocacy for and support for increased EHS in Fayetteville, NC. (Quarterly, and as funds become available)
- 3) CCHD will continue to assess metrics such as infant mortality, childhood obesity and food insecurity annually and publish findings in biannual County Needs Assessments.
- 4) CCHD will collaborate with PCCC, meeting quarterly to integrate CCHD programs that align with the mission to improve the health of children and families. Such CCHD programs include Care Coordination for Children (CC4C), Improving Child Outcomes for Maternal and Child Health (ICO4MCH), Newborn Home Visiting Program, Breastfeeding Support, WIC (Women, Infants, and Children Program), Children's Health Clinic, and School Health.

5) CCHD will be responsible for program evaluation intended to assess the effectiveness of PCCC's policy intervention.

Partnership for Children of Cumberland County (PCCC)

- PCCC will engage government entities at the local, county and state level in Early Childhood Education (ECE) policy advocacy to benefit the children of Cumberland County. (Immediate and on-going)
- 2) PCCC will link community partners to Fayetteville families to provide information about the availability and benefits of ECE. (Immediate and weekly)
- 3) PCCC will provide childcare providers with technical assistance and continuing education to improve their capacity to provide high quality ECE. PCCC will initiate engagement with childcare providers every other week. (Every other week, and as requested)
- 4) PCCC will integrate ECE funding received from the North Carolina (NC) state budget, local partners, and private funders into PCCC's budget to provide technical assistance and continuing education to childcare providers, to subsidize childcare for families in need, to provide community collaboration/ education activities and to cover PCCC's administrative expenses. (Budget assessed monthly. New allocations made annually.)
- 5) PCCC will employ its own staff and identify evidence-based programs and trained staff to accomplish shared mission of this partnership (At onset of agreement and quarterly).
- 6) PCCC will track changes in ECE related funds allocated to Cumberland County, changes in EHS capacity, and third grade reading proficiency (Annually).

7) PCCC will maintain separate MOU's with partner organizations including Child Abuse Prevention group, Family Connect (newborn family support), and Shape NC (Blue Cross Blue Shield Childhood Obesity Prevention Program).

Both Agencies

CCHD and PCCC will each maintain separate staff and separate budgets with possible
 CCHD budget allotments or grants allocated to PCCC specifically for the purposes of
 ECE advocacy and operations.

Reporting

CCHD will assess metrics such as changes in county ECE funding, available EHS capacity in Fayetteville, parental workforce development retention rates, annual zip code specific household incomes, county poverty rate, prevalence of obesity and overweight in the county, and infant mortality rates. Most of these metrics will be assessed annually. Quarterly evaluation will also be managed by the health department using more fluid data including ECE legislative updates, quarterly EHS enrollment numbers, and parental engagement in PCCC and CCHD 0-5-year-old child health related programs.

Funding

This MOU is not a commitment to funds.

Duration

This MOU is at-will and may be modified by mutual consent of authorized officials from Cumberland County Health Department or Partnership for Children of Cumberland County.

This MOU shall become effective upon signature by the authorized officials from the CCHD and PCCC and will remain in effect until modified or terminated by any one of the partners by mutual consent. In the absence of mutual agreement by the authorized officials from

(CCHD or PCCC) this MOU shall end on December 31, 2023. The MOU can be renewed at that time if both CCHD and PCCC feel continued collaboration has mutual benefit.

Contact Information Cumberland County Health Department Dr. Jennifer Greene Director 1235 Ramsey St Fayetteville, NC 28301 910-433-3600 (ph) 910-433-3659 (fax) jgreen@co.cumberland.nc.ud

Partnership for Children Ayesha Neal Board Chair 351 Wagoner Drive Fayetteville, NC 28303 910-867-9700 Fax E-mail

	_Date: 11/15/2020
(Partner signature)	_
(Partner name, organization,	position)
	_Date: 11/15/2020
(Partner signature)	
(Partner name, organization,	position)

Persuasive Pitch Presentation

Partnership for Children of Cumberland County

- Why PCCC is an important stakeholder?
 - o Promotes high quality early childhood education (ECE)?
 - \circ Supports positive academic, career, and health outcomes 6
 - Enables parents to work, supporting local economy?
 - o Advocates politically for high quality ECE7
- How we want you to be involved?
 - o Political advocacy for increased local ECE funding
 - o Tech support for ECE providers
 - o Outcomes measurement
- What we can accomplish together?
 - o Increase academic success in Fayetteville children
 - o Improve short and long term health outcomes



Speaker's Notes

Why is PCCC an important stakeholder?

- Promotes high quality ECE PCCC receives substantial state subsidy to increase ECE capacity and access⁷
 - High quality ECE is an important predictor of academic, career, and health outcomes⁶
 - High quality ECE allows parents to work, thus supporting the local economy⁷
 - PCCC has strong political advocacy capacity⁷
- How we want you to be involved?
 - Advocate for increase local funding for EHS
 - Assess outcomes of interest to both CCHD and PCCC
 - Outcomes to be assessed infant mortality, available EHS spots, kindergarten readiness, percent of children experiencing food insecurity, percent of children under 5 years old who are obese.
- What we can accomplish together?
 - Increase academic success in Fayetteville children
 - Improve short- and long-term health outcomes in Fayetteville children

References

- Action Pathways Annual Report (2018). Retrieved from https://actionpathways.ngo/wp-content/uploads/2019/09/2018-Annual-Report-D2.pdf
- Barnes, G. (2014, December 14). Poverty in Fayetteville: The neighborhood that puts its kids on a path to prison. https://www.fayobserver.com/article/20151214/NEWS/312149871
- Barnes, G. (2015, December 13). Poverty in Fayetteville: Why are we among the worst in America. *Fayetteville Observer*. https://www.fayobserver.com/news/20151213/poverty-infayetteville-why-are-we-among-worst-in-america
- Campbell, F. A., & Ramey, C. T. (1991). The Abecedarian Project. Research Paper presented at Society for Research on Child Development. Retrieved from https://files.eric.ed.gov/fulltext/ED333973.pdf
- Colbert, S. J. J., & Harrison, K. M. (2011). Reflections from the CDC 2010 health equity symposium. Public Health Reports (Washington, D.C.: 1974), 126 Suppl 3, 38–40. https://doi.org/10.1177/00333549111260S308
- County Health Rankings & Roadmaps. (2019). North Carolina, Cumberland County.

 Retrieved September 14, 2020 from https://www.countyhealthrankings.org/app/north-carolina/2019/rankings/cumberland/county/outcomes/overall/snapshot
- Cumberland County 2019 Community Health Needs Assessment. (2019).

 https://ares.lib.unc.edu/ares.dll?SessionID=F225047176O&Action=10&Type=10&Value

 =109132846
- Data USA. (n.d.). Cumberland County, NC. Retrieved October 14, 2020, from https://datausa.io/profile/geo/cumberland-county-nc/

- Fayetteville Technical Community College (n.d.). Academic Programs: Public Service.

 Retrieved from https://www.faytechcc.edu/academics/public-service-programs/
- FCEDC. (n.d.). Economic Development Incentives. Retrieved October 18, 2020, from https://www.fayedc.com/incentives-taxes/
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., et. al. (2019). REPRINT OF: Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study. American Journal of Preventive Medicine, 56(6), 774-786.
 https://pubmed.ncbi.nlm.nih.gov/31104722/
- Hahn RA, Barnett WS, Knopf, JA, et.al. 2016. Early Childhood Education to Promote Health Equity: A Community Guide Systemic Review. Journal of Public Health Management and Practice. Sept/Oct 2016. Vol 22(5): E1-E8. https://oce-ovid-com.libproxy.lib.unc.edu/article/00124784-201609000-00016/HTML
- Healthy People 2020 (2020). Retrieved October 15, 2020. https://www.healthypeople.gov/2020/topics-objectives
- Healthy People 2030. (2030). Economic Stability. Retrieved October 15, 2020, from https://health.gov/healthypeople/objectives-and-data/browse-objectives/economic-stability
- Lee, R., Zhai, F., Han, W. J., Brooks-Gunn, J., & Waldfogel, J. (2013). "Head Start and Children's Nutrition, Weight, and Health Care Receipt". *Early childhood research quarterly*, 28(4), 10.1016/j.ecresq.2013.06.003. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3810984/

McHale, A. (2020). Policy for Social Transformation. PUBH 748. MPH@UNC. Gilling's

- School of Public Health at the University of North Carolina at Chapel Hill.
- NC Dept. of Commerce. (2020, September 2). NC Commerce: North Carolina's July County and Area Employment Figures Released. https://www.nccommerce.com/news/press-releases/north-carolina%E2%80%99s-july-county-and-area-employment-figures-released-0
- Open Data Network. (2018). Population Density Data for Fayetteville, NC.

 https://www.opendatanetwork.com/entity/1600000US3722920/Fayetteville_NC/geograp

 hic.population.density?year=2018
- Partnership for Children of Cumberland County, (n.d.), Retrieved November 1, 2020 from https://ccpfc.org/business-directory/5995/head-start/
- Phillips, D., Gormley, W., & Anderson, S., (2016). "The Effects of Tulsa's CAP Head Start

 Program on Middle-School Academic Outcomes." *Developmental Psychology* Vol. 52,

 No. 8. Retrieved from

 https://georgetown.app.box.com/s/q43pgptmzzm6h3zjcosk93ucnh1k4o9e
- Rademacher, I., Bear, M., & Conway, M. (August 2001), Project Quest. A Case Study of a

 Sectoral Employment Development Approach. Aspen Institute. Retrieved from

 https://assets.aspeninstitute.org/content/uploads/files/content/docs/PQCASESTUDY.PDF
- Rothstein, R. (2018). The color of law: A forgotten history of how our government segregated America. New York: Liveright Publishing Corporation, a division of W.W. Norton & Company.
- Schwartz, N. (2019, August 19). Job Training Can Change Lives. See How San Antonio Does It.

 New York Times. https://www.nytimes.com/2019/08/19/business/economy/worker-training-project.html

Semega, J., Kollar, M., Shrider, E. A., & Creamer, J. (2019). Income and Poverty in the United States: 2019. https://www.census.gov/library/publications/2020/demo/p60-270.html

Social Determinants of Health. (n.d.)

https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health.

Social Programs that Work (June 2020). Evidence Summary for Project Quest- A Workforce

Development Program for Low Income Individuals.

https://evidencebasedprograms.org/document/project-quest-evidence-summary/

State of the County Health Report (2019). Cumberland County Department of Health.

http://www.co.cumberland.nc.us/docs/default-source/health-documents/annual-reports-chs-sotch/cumberland-county-sotch-2019-final.pdf?sfvrsn=ad3d4777_4

U.S. Census Bureau Quick Facts. (n.d.) Retrieved October 28, 2020 from https://www.census.gov/quickfacts/fact/table/NC,cumberlandcountynorthcarolina,fayett <a href="https://www.census.gov/quickfacts/fact/table/NC,cumberlandcountynorthcarolina,fayett]

Zipdata maps (n.d.). Retrieved 10/18/2020 from https://www.zipdatamaps.com/28301

Appendix E: Tables and Figures

(Note: Tables and Figures appear in the order that they are referenced in Appendix D)

Table 6 – Demographic Data for Cumberland County and Fayetteville (2019)

<u> </u>	Cumberland County	City of Fayetteville
	·	
Population	335,509	211,657
Age of residents		
<5 years	7.5%	7.6%
<18 years	24.7%	23.3%
>/= 65 years	12.2%	11.4%
Race		
White	51.1%	45.1%
African American	39.1%	42.3%
American Indians & Alaskan	1.9%	1%
Native		
Asian	2.7%	2.9%
Native Hawaiian or Pacific	0.4%	0.3%
Islander		
Hispanic/ Latino	12.1%	12%
Median Income	\$45,716	\$44,057
(2014-2018)		
Percent Living in Poverty	17%	19%

Data from US Census.gov

Table 7: Stakeholders for Increasing ECE Capacity in Fayetteville

Stakeholder	Definition	Power/
		Interest
Potential EHS	Families who may place their children in available	Low Power,
Families	EHS slots	High Interest
Action Pathways	Agency that executes EHS	High Power,
		High Interest
Federal Department	Funds Head Start Programs	High Power,
of Health and Human		Low Interest
Services (DHHS)		
Partnership for	ECE advocacy agency that receives childcare subsidy	High Power,
Children of	funding from the state and executes other ECE	High Interest
Cumberland	activities	
Childcare providers	Provide direct service for providers. Increased EHS	Low Power,
	may decrease business or potentially increase business	High Interest
	if providers follow regulations needed to become an	
	EHS provider	
CC Board of	Provides free public education to citizens of	High Power,
Education	Fayetteville from pre-K to 12 th grade and measures	High Interest
	outcomes	
County	Elected officials providing governance at the county	High Power,
Commissioners	level. Votes on county budget line items and	Low Interest
	determines policy agenda for the county.	
Fayetteville City	Elected officials providing governance at the city	High Power,
Council	level. Vote on city budget line items and determines	Low Interest
	policy agenda for the city.	
Business owners	Anyone who owns a business in Fayetteville	Low Power,
		Low Interest
Fayetteville	Educates early childhood educators and provides ECE	Low Power,
Technical	through their onsite childcare facility	Low Interest
Community College		
(FTCC)		
Cumberland County	Routinely assesses the health of the county	Low Power,
Health Department		Low Interest

Figure 4: Khadijia Tribié Reid's Power/Interest Grid of Early Head Start Capacity Building Stakeholders

н	4	1	α	h
1	1	1	∠,	ш
			\sim	

High	KEEP SATISFIED	MANAGE CLOSELY
POWER	Federal DHHSCC County CommissionersFayetteville City Council	 Action Pathways CC Partnership for Children CC Board of Education
	MONITOR	KEEP INFORMED
	Business ownersFTCCCC Health Department	Potential EHS FamiliesChildcare providers
Low		

Low

INTEREST

Table 3: RASCI Matrix for Proposed Policy Intervention

RASCI Levels		
Who is	Policy Transformation	Rationale For Partner Participation
Responsible=owns the problem / project	Partnership of Children Cumberland County	This agency's mission is to be a driving force to engage partners to achieve lasting positive outcomes for all children, beginning at birth. The Partnership receives state funds and private matching dollars to subsidize high quality early childhood education.
Accountable =ultimately answerable for the correct and thorough completion of the deliverable or task, and the one who delegates the work to those <i>responsible</i>	Partnership for Children of Cumberland County	Partnership for Children has the infrastructure in place to coordinate with multiple entities and assess outcomes data as is mandated by the state overseeing body.
Supportive=can provide resources or can play a supporting role in implementation	Cumberland County Board of Education, Fayetteville Families, Childcare centers, County Commissioners, Fayetteville City Council, Action Pathways	Each of these entities have knowledge and resources that can expand the program's reach. These resources include information, financing, human resources, and political influence.
Consulted=has information and/or capability necessary to complete the work	Cumberland County Board of Education, Fayetteville Families, Child Care providers, Action Pathways	These entities have the expertise and involvement in Early Childhood Education. Their insight is essential to successful policy development and implementation.
Informed=must be notified of results, process, and methods, but need not be consulted	Fayetteville families, County Commissioners, Fayetteville City Council, Childcare providers, Federal DHHS, Cumberland County Health Department	These entities could create a political environment supportive or damaging to this effort. They must remain informed to know how to take action and educate the public.

APPENDIX F: KENNETH SUTTON'S INDIVIDUAL WORK

Individual Problem Statement

Social Determinant of Health (SDOH)

Economic stability is an important contextual aspect of the SDOH framework (health.gov, n.d.). Unemployment, housing insecurity, food insecurity and poverty are the key indicators of economic stability (health.gov, n.d.). In the US, 1 in 10 people live in poverty, and many people cannot afford basic necessities such as healthy foods, health care, and housing (Semega, Kollar, Creamer, & Mohant, 2019). Healthy People 2030 goals focus on helping more people achieve economic stability and we will help meet the goal in Cumberland County by focusing on reducing the proportion of persons living in poverty towards the baseline poverty rate of 11.8% (SDOH-01) (Health.gov, n.d.).

Strategies to improve economic stability can have a great impact on health outcomes over time (Shih, 2013). These strategies can embed healthy diets and encourage exercise into daily routines. These strategies can also reduce substance use, reduce the rate of chronic and preventable diseases and improve mental health (Shih, 2013). Improving the overall social and economic status of Cumberland County residents could have a substantial payoff in improved health and longevity, while also increasing economic productivity (Shih, 2013).

Geographic and Historical Context

Cumberland County is in the southeastern section of North Carolina. The current land area of Cumberland County is 652.32 square miles. Fayetteville is the county's seat and its largest municipality. Cumberland County functions under a Board of Commissioners, which is a County Manager form of government. Fort Bragg, one of the largest military installations in the world, is located here, with approximately 57,000 military personnel, 11,000 civilian employees

and 23,000 family members. The installation is 251 square miles, stretching into six counties, most of which is in Cumberland County (Cumberland County, 2019).

According to the U.S. Census Bureau's 2019 population estimates (Table 8 in Appendix G), Cumberland County has a population of 335,509. The county has a population density of 489.7 persons per square mile. Just over 10% of the population is military and roughly 20% of the residents are veterans. The residents of this county are young as individuals within the 25-34 age group make up the highest percentage of the population. Just over half of the residents are White with almost 40% of residents being Black or African American. The median household income in Cumberland County is \$45,716 (U.S. Census Bureau, n.d.).

Cumberland County has implemented several economic and community development programs. The programs range from small business loan programs and resources for entrepreneurs, programs to reduce the homeless population in the county, and programs to improve or remove dilapidated homes to make the communities more appealing, healthier and safer (City of Fayetteville, n.d.).

Priority Population

A report released by the University of North Carolina's Center for Urban & Regional Studies classified six census tracts in Cumberland County as economically distressed where poverty and unemployment rates are at least 50% higher than the state average: Massey Hill, Bonnie Doone, Old Wilmington Road/B Street, both sides of Murchison Road and Hillsboro Street (High & Owen, 2014). Of these, Old Wilmington Road/B Street is the city's poorest, and 13th poorest in North Carolina. In this community, one family in 3 does not own a car or earn more than \$10,000 a year (The Fayetteville Observer, n.d.). The priority population will be the families of Fayetteville and the businesses within the county.

Measures of the Problem Scope

The poverty rate in Fayetteville is 19.3%. One out of every 5.2 residents of Fayetteville live in poverty (U.S Census Bureau, n.d.). The unemployment rate is 9.10% (Bureau of Labor Statistics, n.d.). In the area where the poverty is the worst (Old Wilmington Road/B street), almost all the residents are black and young. A high poverty rate is both a cause and a consequence of poor economic conditions (CCPHD, 2019). Children in poverty are more likely to have physical health problems, behavioral problems and emotional problems (CCPHD, 2019). Seniors who live in poverty are an especially vulnerable group due to increased physical limitations, medical needs, and social isolation (CCPHD, 2019). Persons with a disability are more likely to live in poverty compared to the rest of the population (CCPHD, 2019). Without adequate income, individuals with disabilities may not be able to afford necessary expenses, such as rent or mortgage, utility bills, medical and dental care, and food (CCPHD, 2019).

Rationale/Importance

Improving the overall social and economic status of Cumberland County residents could have a substantial payoff in improved health and longevity, while also increasing economic productivity (Shih, 2013). Economic Stability creates the right environment for job creation and confidence in Cumberland County (Economics Online, 2020). This encourages investment in the county's workforce and industry, which can lead to more resources for education, training, and health, critical to the success of any economy. By improving the economic mobility of the at-risk population, it will enable the generation of better paying jobs and other positive effects such as better healthcare, healthier food sources/options and less poverty.

Policy and Program Analysis

Introduction

In order to identify the appropriate program or policy to reduce poverty in Cumberland County, an exploration of evidence-based solutions is needed.

Program solution and example

Work force training program that reflects a multigeneration approach: CAP-Tulsa's Career Advance® program recruits parents from Head Start programs for post-secondary education and health care workforce training opportunities (Chase-Lansdale, 2017). The program's results are striking. A 2017 report shows 61% of Career Advance® participants attained a career certificate, compared to 3% of the comparison group (Chase-Lansdale, 2017). In addition, 49% of program participants found employment in the health care sector by the end of the program's first year of operation (Chase-Lansdale, 2017). Reflecting the program's two-generation approach, attendance in Head Start increased and chronic absenteeism decreased. This example shows many advantages but has a disadvantage in that it does not address the reasons the parent/family is in the generational cycle of poverty. Also, this approach does not address the potential need for remedial classes for parents who may have dropped out of school and did not obtain a high school diploma.

The group acknowledges that the program would not be sustainable if all their participants exhibited the highest levels of need. They have implemented a dynamic process of adjusting the services available to families, both directly and through partner providers, while also better understanding each family being served, and perfecting the match between the two (CAP Tulsa, n.d.). Ultimately, the program sought to determine, along with families, which interventions were worthwhile—for whom and at what cost, to remove barriers, to counteract the

impacts of systemic and structural inequities, and to support each child and family's journey toward success (CAP Tulsa, n.d.). The program team and partners also mapped out and agreed to each program component, identifying contributions and made agreements that ensured each partner's commitment to the program (Juniper, 2019). If the program remained within the guardrails of the agreement, the partners would continue to support the program (Juniper, 2019).

Policy solution and example

Early Head Start-Child care partnership: Head Start and Early Head Start, which funds and delivers services through 1,700 local agencies in every U.S. state and territory, is often heralded as the original two-generation program (ECKLC, 2019). Head Start and Early Head Start services include early learning and child development; school readiness; and health care services, such as child screenings, nutritious meals, oral health and mental health support (Office of Head Start, n.d.). Head Start and Early Head Start also make referrals to medical, dental and mental health services for parents and children (Office of Head Start, n.d.). Because overall family well-being is a high priority, programs also support parents in achieving housing stability, continued education and financial security (Office of Head Start, n.d.).

One strategy that states have used to increase and enhance services to infants and toddlers in low-income households is the Early Head Start—Child Care Partnership (EHS-CCP) (ACF, n.d.). This partnership "brings together the best of Early Head Start and childcare through layering of funding to provide comprehensive and continuous services to low-income infants, toddlers, and their families (ACF, n.d.). The disadvantage of the partnership is that resources are finite and could potentially leave childcare centers with EHS/HS without the means to maintain their optimal services or remain at capacity due to staff layoffs. EHS/HS has shown to be a

robust program that has funding from multiple levels of government and a well engrained support system.

Recommendation

The program and policy examples acknowledge the role of disadvantage in shaping health and well-being, not just in families, but across generations and should be a priority for the suggested program. The recommended approach must be proactive in anticipating and improving the impact of family circumstances, experiences, and behaviors on the health, well-being, and capacities of future generations.

The program innovation proposed for Cumberland County is a workforce training program that recruits parents of children enrolled in EHS/HS programs for adult basic education courses, bridge classes, and career development. A novel feature of this program will be the opportunity for parents who need remediation to accomplish this by adding a skill building course for remedial training in math, reading and writing, and/or GED completion. Another key feature of this program is the commitment to providing quality ECE by funding EHS/HS programs. A multigenerational approach should focus on helping parents as workers and caretakers, improve child and adolescent health and well-being, development, education, and social circumstances for successful and productive adulthood, and optimizing adolescents' and young adults capacity for planning and parenting families of their own (Figure 5 in Appendix G).

The tradeoffs considered for this program recommendation were cost of implementation, the limited availability of the program to families who may benefit the most, the potential for inconvenient program hours, childcare challenges (inconvenience of the location of EHS/HS location, having to move from one child care center to another, emotional impact on the child of

leaving connections made at previous child care center and, for children who may not have been at a child care center before entering program, adjustment to not being with their parent).

Stakeholders who engage in the recommended strategies will come from the health, human services, education, criminal justice, financial and various other workforce sectors. They exist in the problem itself, not just in the intervention. Stakeholders from the various industries that will be involved in the program will benefit from the improved and motivated workforce that will be a product of this program. They have employment needs and have pressures to produce. Parents are a critical stakeholder and can provide important insights into barriers to family economic stability and the often-confounding reality of engaging with multiple public systems as well as be the future employees of some stakeholders. These barriers will be decreased by key stakeholders improving access, processes and systems. The coordination of multiple programs will require goal setting, organization and communication. Periodic meetings will be used to align stakeholders and address issues before and as they arise.

Quality Improvement metrics

- A participant satisfaction score (are families' expectations of the program being met).
- Percent increase in workforce development opportunities.
- % increase in early head start sites
- Number of SNAP participants. As families can obtain employment, become financially stable and max gross incomes meet the income test, the number of SNAP participants should be reduced.
- Reduced/ free lunch for students being utilized
- Chronic disease metrics: ex. The incidence rate of asthma exacerbations
- Percent increase in use of local health care services

Stakeholder Analysis

Introduction

Poverty and poor health are inextricably linked. The causes of poor health for many are rooted in political, social and economic injustices (Roberts, 2018). Poverty is both a cause and consequence of poor health, which traps communities in Cumberland County in a perpetual cycle of lack and lost opportunities (Roberts, 2018). The stakeholders for our chosen intervention will be instrumental in breaking this cycle of poverty and increasing economic stability.

Economic Stability Rich Picture and Root Definition for the Whole System

The economic system in Fayetteville, NC is a system that aligns the health of populations with income. It does this by limiting the opportunities for poor residents to attain optimal health in order to maintain the status quo and propagates a cycle of generational poverty (Figure 1 in Appendix A). The economic and political structures which sustain poverty and discrimination need to be transformed for poverty and poor health to be tackled (Roberts, 2018). Vulnerable individuals are affected negatively, deprived of the information, money or access to health services that would help them prevent and treat disease (Wrigley, 2016). The cultural and social barriers faced by vulnerable individuals potentially means they use health services less, leading to serious physical consequences (Roberts, 2018). The burden of caring is often taken on by a member of the family, who may give up their education or take on low paying waged work to help meet the household's costs (Roberts, 2018). Missing out on education has long-term implications for a caregiver's opportunities later in life and for their own health (Roberts, 2018). Additionally, poor living conditions, a lack of nutrient dense food and other necessities can contribute to the spread of respiratory infections such as pneumonia and exacerbate chronic conditions such as asthma and diabetes (Wrigley, 2016).

Selected Subsystem and Root Definition

In order to reduce poverty and improve the health of people and the economy, an approach to break the intergenerational cycle of poverty is needed. The cycle of intergenerational poverty is the vicious trap that occurs when a parent's poverty permanently affects the lives of his/her children (Corak, 2006). Growing-up in poverty hinders a child's emotional, cognitive, and behavioral development, and children raised in poverty have lower lifelong educational and professional attainment compared with children raised out of poverty (Corak, 2006). Lowincome children typically live in underserved, disadvantaged neighborhoods. These neighborhoods are marked by overcrowded and underfunded schools, by a lack of healthy food sources, by higher pollution and crime rates, and by fewer parks and recreational opportunities (Wagmiller, 2009). Poverty affects more than just children's surroundings; it permeates their home-life. Their parents pass down their own disadvantages as learned behavior, including poor health and nutrition habits, limited reading skills, and a lack of optimism, self-confidence, and ambition (Fischer, 2017). Poor families often move more often, which is shown to increase stress and feelings of insecurity for children (Ratcliffe, 2015). Adults raised in poverty exhibit significant difficulties with stress, memory, and emotional processing (Bidwell, 2013). The effects of being raised in poverty reverberate throughout every aspect of a child's life, making them as much as 72% more likely to raise their own children in poverty. Those children, then, are likely to raise their children in poverty (Casselman, 2016). Thus, the rate of poverty increases with each subsequent generation.

To address this chosen subsystem, a multigenerational approach to reducing poverty in Cumberland County has been proposed. It is a transformation that acknowledges the importance of the family and shapes the health and developmental outcomes for children and parents. The

transformation does this by improving families' circumstances by supporting parents in their roles as parents and as workers and providing optimal childcare, safety and education in order to help multiple generations improve their overall well-being by escaping poverty and improving health. A multigenerational approach recognizes the intergenerational transmission of health, well-being, wealth and social status. It emphasizes the need to support children's development, health and functioning to facilitate a productive adulthood and to ensure that parents can parent to their fullest potential. A program focused on workforce training for parents with a multigenerational approach and a policy focused on increasing early head start funding will be implemented. The program and the policy have a symbiotic relationship with the intention of creating a scenario that provides the best chance for success.

Stakeholder Analysis

A stakeholder analysis was conducted to identify interest and support level. A power and influence grid was used to better characterize the power and interest level of the different stakeholders within the complexity of the intervention (See Figure 6 in Appendix G). It is a tool that can be used to help make decisions and understand the needs of our stakeholders. It can also track the movement (changes in power and influence) as new information, challenges or needs are discovered. For the chosen program and policy intervention, the following stakeholders will be involved with the following roles and responsibilities:

• Fayetteville Technical Community College (FTCC): FTCC is a high power and high influence stakeholder and are considered a backbone agency. The college has a broad range of career connections and is already suited for training and developing a workforce. They have the resources, knowledge and accreditation needed to provide such a program as they have a continuing education infrastructure already in place.

- Families: Families in Fayetteville may not have the power but have high influence and will be instrumental in creating a transformation that will reduce poverty. The insight they have with their lived experience will be integral and will allow the program to be targeted appropriately to them. They will also be the source of future employees for the businesses that will be a part of this transformation.
- Fort Bragg, Cape Fear Valley Hospital and other Business owners: These stakeholders have a high level of power, but medium influence for this effort as they provide knowledge and resources that can expand the program's reach. They can provide training and internships that can turn into permanent employment. They can provide financial, human resources and political influence. Business owners will also be informed so that they know how to act and inform of open roles within their organizations.
- County Commissioners/City Council members: These stakeholders have a high level of power, but the influence/interest has been classified as low due to their political influence. They can influence the initiation of the program and associated policy, provide additional funding if needed and provide insight into the political landscape on a state level. They can educate the public and other officials regarding the program and can help bolster our program related efforts. If they become unsatisfied, they can interrupt the progress of the project.
- Partnership for Children Cumberland County: They have high power and high influence provide resources, support, and programs that empower families, advances the well-being of children and strengthens the early care and education system within the communities they operate in (Partnership for Children, n.d.). They receive state funds and private matching dollars to subsidize high quality early education. They have the infrastructure in place to coordinate the distribution of funds to suitable childcare institutions and have connections

with key funding sources. On the program level they will serve in a supportive role as their knowledge will be key in setting up and choosing the right childcare centers to institute a Head Start program.

- Childcare providers: Childcare providers may not have high power but has high influence.

 They will be consulted on program but will play a bigger role (support, consultation and information) regarding the policy. They have insight into the needs and potential unintended consequences of any interventions within childcare centers in Fayetteville. They can inform families of their services and provide updates regarding care for children.
- Action Pathways: They ensure that people within Southeastern NC have a pathway to self-sufficiency with programs designed to help others help themselves (Action Pathways, n.d.). This stakeholder will be classified as low power and low interest. With this information, they will serve in a supportive and consultative role for both the program and policy initiatives. They will be able to inform the team of what has worked/not worked within the city and be an additional guide on implementation.
- Cumberland County Board of Education: The Board of Education can provide insight into the policies in place to effectively implement a Head Start program within the guard rails of such policies and standard operating procedures. This stakeholder has high influence and low power. They have access to resources (financial, human) that could be particularly useful in quickly starting any head start program. They will be consulted and informed regarding the program and supportive, consulted and informed as it relates to the policy.

Accountability Plan/MOU

Why Action is Needed

In Fayetteville, the poverty rate is 19.3%. One out of every 5.2 residents live in poverty and the unemployment rate is 9.10% (U.S Census Bureau, n.d., Bureau of Labor Statistics, n.d.). In the areas where the poverty is the worst, almost all the residents are black and young (U.S Census Bureau, n.d.). A high poverty rate is both a cause and a consequence of poor economic conditions (CCPHD, 2019). Children in poverty are more likely to have physical health problems, behavioral problems and emotional problems (CCPHD, 2019). Seniors who live in poverty are an especially vulnerable group due to increased physical limitations, medical needs, and social isolation (CCPHD, 2019). Persons with a disability are more likely to live in poverty compared to the rest of the population (CCPHD, 2019). Without adequate income, individuals with disabilities may not be able to afford necessary expenses, such as rent or mortgage, utility bills, medical and dental care, and food (CCPHD, 2019).

Strategies to improve economic stability can have a great impact on health outcomes over time (Shih, 2013). These strategies can embed healthy diets and encourage exercise into daily routines. These strategies can also reduce substance use, reduce the rate of chronic and preventable diseases and improve mental health (Shih, 2013). Improving the overall social and economic status of Cumberland County residents will have a substantial payoff in improved health and longevity, while also increasing economic productivity.

Responsible and Accountable Program Partner

It is important to have partnerships that will help Cumberland County meet the Healthy People 2030 goal improving economic stability by reducing the proportions of people living in poverty (SDOH-01) (Health.gov, 2020). The ACC membership for this program includes

Cumberland County Public Health Department (CCPHD), Fayetteville Technical Community College (FTCC), local families, Fort Bragg, Cape Fear Valley Hospital, County Commissioners, Fayetteville City Council, business owners, Cumberland County Board of Education, and Action Pathways.

CCPHD will serve as the backbone agency for the ACC and will work with Fayetteville Technical Community College to create a robust workforce training program. CCPHD understands that addressing the socioeconomic need of Cumberland County is critical to reduce poverty and improve health (CCPHD, 2019). The Public Health Department understands what the key economic stressors are and how they affect health (CCPHD, 2019). As the backbone agency, they are best positioned to ensure the resources are directed to the right place and that all partners are providing needed services.

Community colleges, like FTCC, serve multiple missions—from workforce training, to remediating students in preparation for higher education, to community enrichment (CCRC, 2020). The North Carolina Community College System has a Customized Training Program that is designed specifically to assist industries in workforce training and will be useful for the purposes of this ACC (CGP, 2020). Within this program, all training programs are administered by the community college serving the area in which a company is located (CGP, 2020). FTCC, being a part of this college system, can tailor a program that serves the families of Fayetteville and the companies within and around Cumberland County.

The local one-on-one connection should guarantee constant attention and prompt response. Experienced and project-tested professionals will be able to help FTCC design and operate customized training programs. Edgecombe Community College (ECC) and Nash Community College (NCC) showcased the versatility of the workforce training service (ECC,

2020; NCC, 2020). Their flexible and custom-designed training programs were able to accommodate almost any job found in a manufacturing or service company (CGP, 2020).

Memorandum of Understanding Between Fayetteville Technical Community College ("FTCC") And Cumberland County Public Health Department ("CCPHD")

1. Purpose

The purpose of this Memorandum of Understanding (MOU) is to establish a mutually beneficial partnership designed to enhance economic stability, enhance opportunities for Fayetteville families, implement workforce development, reduce poverty and improve community and human health in Fayetteville, North Carolina. This partnership will address the high poverty rate which is both a cause and a consequence of poor economic conditions and puts the health of the residents of Cumberland county at risk. The vision of this partnership is to promote health by encouraging upward economic mobility while providing a highly trained work force for the employers of Cumberland County. CCPHD will serve as the backbone agency responsible for addressing the overall problem and the proposed program transformation. FTCC will be responsible for the creation and implementation of a workforce training program geared toward the work industry of Cumberland County. The target of this partnership is Fayetteville, NC, as the city contains the population that will benefit most from an economic and health standpoint.

2. Scope of Activities

CCPHD and FTCC aim to cooperate in areas that may include, but not restricted to, all those activities mentioned in this section (2.1-2.4).

2.1 Opportunities for Workforce Development

- 2.1.1 FTCC will plan and implement workforce development training based on current needs and industry located in Cumberland County in order to reduce the proportions of individuals in poverty within the county.
- 2.1.2 CCPHD will facilitate the working relationship of FTCC and business partners and provide the needed resources to implement this training.

2.2 Opportunities for Enhanced Collaboration

- 2.2.1 CCPHD will provide analysis results to FTCC regarding the performance and effectiveness of the workforce training program.
- 2.2.2 CCPHD and FTCC may participate on joint community health initiatives
- 2.2.3 FTCC will provide technical assistance and consultation to CCPHD as requested and when appropriate.
- 2.2.4 FTCC will CCPHD of potential apprenticeships and employment that can provide families within the program the connection to potential apprenticeships and employment.

2.3 Shared Resources

- 2.3.1 FTCC will provide faculty, classrooms, office space, access to technology, established connections with the community and industry and funding.
- 2.3.2 CCPHD will provide expertise on needs of at-risk community, employees, funding, technology, data analysis and reporting capabilities.

2.4 Communication

2.4.1 CCPHD and FTCC will mutually agree to a monthly meeting schedule to discuss the progress of the workforce training program and to address issues that may arise.

2.4.2 CCPHD and FTCC will identify and establish a specific mechanism for communicating and sharing information on a timely basis. The two parties and recommend appropriate modifications when necessary.

3. Payment

3.1 This agreement does not involve the exchange of money between parties, except where agreed upon by mutual consent for specific activities. Funds that are generated for the program will flow through CCPHD to the relative functions for the program.

4. Renewal, Evaluation, Termination and Amendment

- 4.1 This MOU shall remain in force for a period of five years from the date of last signature.

 This MOU may be extended by the written consent of both parties.
- 4.2 A joint evaluation of the MOU will be initiated by both parties at the end of each year until the expiration date. The following metrics will be assessed:
- Number of businesses/industries partnered with.
- Interests in target population.,
- Number of families successfully completed and currently active.
- Outcomes vs. costs.
- Employee/faculty engagement.
- Ability to create flexible funding sources for continued success.
- Ability to minimize discovered inefficiencies.
- Improvement of precision of assessments used with families, staff and systems.
- Creation of a data governance system to improve data quality, integrity, usability, privacy and security.
- Ability to establish a culture of excellence.

- Innovation across all functions of CT.
- 4.3 This MOU may be terminated by either party giving written notice to the other party at least 180 days in advance of the stated termination date. Termination of the MOU shall not affect activities in progress pursuant to specific activity agreement, which shall continue until concluded by the parties in accordance with their terms or as otherwise agreed to by the parties in writing.
- 4.4 This MOU may be amended only by the written consent of the parties.

5. Contact Information and Signature

Contact Information Cumberland County Public Health Department Dr. Jennifer Greene Director 1235 Ramsey St Fayetteville, NC 28301 (910) 433-3600 (ph) (910) 433-3659 (fax)

Fayetteville Technical Community College Dr. Linwood Powell Board Chair 2201 Hull Rd Fayetteville, NC 28303 (910) 678-8400 (ph) (910) 486-3600 (fax)

Date:

(Partner signature) (Partner name, organization, position)

Date:

(Partner signature) (Partner name, organization, position)

Persuasive Pitch Presentation

Fayetteville Technical Community College (FTCC)

- Why FTCC is important to this ACC?
 - o Our families have immediate job needs and businesses have immediate hiring needs.
 - A great place to get skills training that will allow students to get good paying jobs⁸.
 - Flexible/nimble and can quickly provide specialized training⁹.
- How we want FTCC to be involved?
 - o Provide opportunity for upward economic mobility
 - o Create and host a customized workforce training program
 - $\circ \quad \text{Provide the physical location and support staff}$
- What can we accomplish together?
 - Provide a means to improve the economic stability in the county by creating a more prepared workforce
 - o Attract more high paying jobs and industries
 - Help our families obtain access to healthcare, nutritious, wholesome foods, provide improved living conditions and live less stressful lives

FTCC, you are important for many reasons. Businesses have immediate hiring needs and the parents within this program have immediate job needs. Both companies and the parents also have longer-term needs. Companies want skilled employees who can manage change and reinvent themselves to accommodate ebbs and flows in their business. Our parents want security, financial stability and an opportunity to grow in their chosen careers. We believe that FTCC is the institution to spearhead this work as we have seen other community colleges within North Carolina demonstrate the flexibility and nimbleness to support the training needs of industry in their respective areas.

We want you to be tip of the spear in getting our parents to the next level by providing opportunities for upward economic mobility. With your expertise we would like for you to create and host a customized workforce training program, working with industry experts to provide the most comprehensive experience composed of classroom instruction, remedial training, and internships/apprenticeships. We would like for this workforce training program to take place on the FTCC campus to take advantage of the established staff and great location. Out of our partnership we can:

- Provide a means to improve the economic stability in the county by creating a more prepared workforce
- Attract more high paying jobs and industries, providing additional opportunities
 Help our families obtain access to healthcare, access to nutritious, wholesome foods, obtain
 improved living conditions and live less stressful lives, breaking the multigenerational cycle of poverty.

References

- Action Pathways. (n.d.). Retrieved from https://actionpathways.ngo/
- Administration for Children and Families (ACF). (n.d.). Early Head Start Child Care partnerships. Retreived from https://www.acf.hhs.gov/ecd/early-learning/ehs-cc-partnerships
- Bidwell A. (2013). Early Childhood Poverty Damages Brain Development, Study Finds. US.

 News. Retrieved from https://www.usnews.com/news/articles/2013/10/28/early-childhood-poverty-damages-brain-development-study-finds.
- Bureau of Labor Statistics. Fayetteville, NC Unemployment Rate. (n.d.). Retrieved October 18, 2020, from https://ycharts.com/indicators/fayetteville_nc_unemployment_rate_msa
- CAP Tulsa. (n.d.). Strategic Framework 2016-2025. Retrieved from Strategic-Framework-CAP-Tulsa_2016-2025.pdf
- Carolina Gateway Partnership (CGP). (2020). Workforce. Retrieved from <a href="https://www.econdev.org/doing-business/workforce-demographics/#:~:text=The%20North%20Carolina%20Community%20College,assist%20industries%20in%20workforce%20training.&text=Flexible%20and%20custom%2Ddesigned%20training.a%20manufacturing%20or%20service%20company.
- Casselman B, Flowers A. (2016). Rich Kids Stay Rich, Poor Kids Stay Poor. FiveThirtyEight.

 Retrieved from https://fivethirtyeight.com/features/rich-kids-stay-rich-poor-kids-stay-poor/.
- Chase-Lansdale PL, Sommer TE, Sabol TJ, Chor E, Brooks-Gunn J, Yoshikawa H, King C,
 Morris A. (2017). What are the Effects of Pairing Head Start Services for Children with
 Career Pathway Training for Parents? Retrieved from

- https://www.captulsa.org/uploaded_assets/pdf/CAP-Tulsa-impact-analysis_March-2017.pdf
- Community College Research Center (CCRC). (2020). Community college, history, mission and challenges. Retrieved from https://ccrc.tc.columbia.edu/community-college-history-mission-and-challenges.html
- Corak, M. (2006). Do poor children become poor adults? Lessons from a cross-country comparison of generational earnings mobility. In Dynamics of Inequality and Poverty (pp. 143-188). Emerald Group Publishing Limited.
- Cumberland County Public Health Dept (CCPHD). (2019). 2019 Community Needs Assessment.

 Retrieved from http://www.co.cumberland.nc.us/departments/public-health-group/public-health/community-resources/reports
- Cumberland County. (2019). 2019 Community Health Needs' 'Assessment. N/A.
- Early Childhood Learning and Knowledge Center (ECLKC). (2019). About Head Start: Head Start Program Facts. Retrieved from https://eclkc.ohs.acf.hhs.gov/about-us/article/head-start-program-facts-fiscal-year-2019
- Economics Online. (2020). Policies for stabilization and growth. Retrieved from https://www.economicsonline.co.uk/Global_economics/Policies_for_stability_and_growt h.html.
- Edgecombe Community College (ECC). (2020). Customized training courses for individual businesses. Retrieved from https://www.edgecombe.edu/continuing-education/business-and-industry/customized-training/
- Fayetteville, NC. (n.d.). Economic & Community Development | Retrieved October 18, 2020, from https://www.fayettevillenc.gov/city-services/economic-community-development

- Fischer CS. (2017). Growing up Poor Has Effects On Your Children Even If You Escape

 Poverty. Pacific Standard. Retrieved from https://psmag.com/economics/growing-uppoor-has-effects-on-your-children-even-if-you-escape-poverty
- Health.gov. (n.d.). Economic Stability Healthy People 2030. Retrieved from https://health.gov/healthypeople/objectives-and-data/browse-objectives/economic-stability
- High, W., & Owen, T. (2014). North Carolina's Distressed Urban Tracts: A View of the State's Economically Disadvantaged Communities. *n/a*.
- Juniper C, King CT, Anderson A. (2019). CareerAdvance® implementation study findings through FY2018. Retrieved from http://captulsa.org/our-programs/family-advancement/careeradvance/
- Nash Community College (NCC). (2020). Continuing education courses. Retrieved from https://www.nashcc.edu/courses-programs/continuing-education-courses
- Office of Head Start. (n.d.). Head Start Services. Retrieved from https://www.acf.hhs.gov/ohs/about/head-start

Partnership For Children of Cumberland County. (n.d.). Retrieved from https://ccpfc.org/

- Ratcliffe C. (2015). What Affects the Future Success of Poor Children? Urban Institute.

 Retrieved from https://www.urban.org/urban-wire/what-affects-future-success-poor-children.
- Roberts S. (2018), Key facts: Poverty and poor health. Health Poverty Action. Retrieved from https://www.healthpovertyaction.org/news-events/key-facts-poverty-and-poor-health/

- Semega, J., Kollar, M., Creamer, J., & Mohant, A. (2019). *Income and Poverty in the United States: 2018*. US Census Bureau.
- Shih M, Teutsch SM. (2013). How social and economic factors affect health. Social

 Determinants of Health, Issue no. 1. Los Angeles County Department of Public Health.
- U.S. Census Bureau QuickFacts: Cumberland County, North Carolina; Fayetteville city, North Carolina. (n.d.). Retrieved from https://www.census.gov/quickfacts/fact/dashboard/cumberlandcountynorthcarolina,fayett evillecitynorthcarolina/RHI125219
- Wagmiller RL, Adelman RM. (2009). Childhood and Intergenerational Poverty: The Long-Term Consequences of Growing Up Poor. National Center for Children in Poverty. Retrieved from http://www.nccp.org/publication/childhood-and-intergenerational-poverty/
- Wrigley A, Dawson A. (2016). Public health ethics: Cases spanning the globe. Vulnerability and marginalized populations. PMID: 28590696

Appendix G: Tables and Figures

(Note: Tables and Figures appear in the order that they are referenced in Appendix F)

Table 8: Demographics of Cumberland County and Fayetteville, NC

Twere et a emegra	Cumberland County, NC	Fayetteville, NC	
Population, n			
Population estimates, July 1,	335,509	211,657	
2019	,	,	
Race and Hispanic Origin, percent			
White	51.1%	45.1%	
Black or African American	39.1%	42.3%	
American Indian and Alaska	1.9%	1.0%	
native			
Asian	2.7%	2.9%	
Native Hawaiian and other	0.4%	0.3%	
Pacific Islander			
Two or More Races	4.8%	5.7%	
Hispanic or Latino	12.1%	12.0%	
White alone, not Hispanic or	42.4%	38.1%	
Latino			
Age and Gender, percent			
Persons <5 years	7.5%	7.6%	
Persons <18 years	24.7%	23.3%	
Persons >=65 years	12.2%	11.4%	
Female	50.4%	49.9%	
Education, percent of persons age 2			
High school graduate or higher	90.7%	91.5%	
Bachelor's degree or higher	25.0%	26.8%	
Income and Poverty			
Median household income (in	\$45,716	\$44,057	
2018 dollars), 2014-2018			
Per capita income in past 12	\$24,301	\$24,336	
months (in 2018 dollars), 2014-			
2018			
Persons in poverty, percent	17.0%	19.2%	

Figure 5: Multiple Generations Affected by Recommended Program/Policy

The 3-Generation Continuum

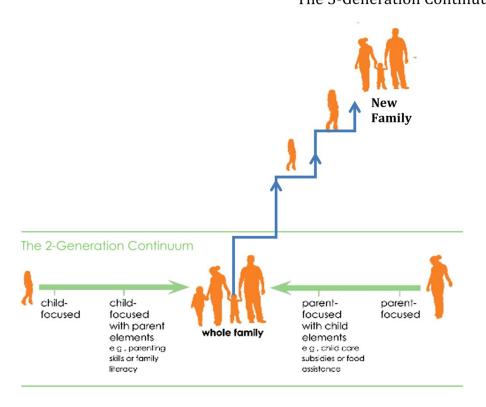


Figure 6: Kenneth Sutton's Power/Interest Grid of Policy and Program Stakeholders **Keep Satisfied** Manage closely County Fayetteville Tech CC Commissioners PCCC Fayetteville City Council Fort Bragg Business owners Level of Power Cape Fear Valley Hosp **Keep Informed** Monitor **Action Pathways** Fayetteville Families **Board of Education** Childcare providers Level of Influence

Table 2: RASCI Stakeholder Matrix for Program Intervention

RASCI Levels		
Who is	<u>Program</u> Transformation	Rationale For Partner Participation
Responsible=owns the problem / project	CCPHD, FTCC	CCHD – has a broad range of connection among the various stakeholders necessary for this programmatic intervention. Further they can represent a source of funding and avenue for funds to be channeled through. Also their knowledge of data collection and analysis will be important during evaluation. FTCC has a broad range of career connections and are already suited for training and developing a workforce. Further they already have an established early childhood education center.
Accountable=ultimately answerable for the correct and thorough completion of the deliverable or task, and the one who delegates the work to those responsible	CCHD, CFVHS, FTCC	CCHD can represent a source of funding and avenue for funds to be channeled through. Also their knowledge of data collection and analysis will be important during evaluation. CFVHS represents a source of funding as well as a partner during impact evaluations. Further, they are one of the largest employers in Fayetteville, so they can host career days as well as develop more internships/apprenticeships for the program. FTCC has a comprehensive resource and knowledge base to understand who should be involved and how to delegate tasks moving forward. Further, they already have a continuing education infrastructure in place.
Supportive=can provide resources or can play a supporting role in implementation	Fayetteville Families, Fort Bragg, Cape Fear Valley Hospital, FTCC, County Commissioners, Fayetteville City Council, Partnership for Children, Business Owners	Each of these entities have knowledge and resources that can expand the program's reach. These resources include information, financing, human resources, and political influence.
Consulted=has information and/or capability necessary to complete the work	Fayetteville Families, Cumberland County Health Dept., Child Care Providers	These entities have the insight needed to understand the needs of the target population and the potential unintended consequences of action.
Informed=must be notified of results, process, and methods, but need not be consulted	County commissioners, Fayetteville City Council, Business owners	These entities could create a political environment supportive or damaging to this effort. They must remain informed to know how to take action and educate the public.