TITLE V Maternal and Child Health Block Grant QUALITATIVE NEEDS ASSESSMENT

VIRGINIA
MATERNAL & CHILD HEALTH

2020

Every five years, the Virginia Department of Health (VDH) seeks to assess the needs of women, infants, children, and men across the reproductive lifecycle for strategic planning, decision-making and resource allocation. This is required by Title V legislation and provides for the benchmarking of programs and the assessment of progress.

VIRGINIA DEPARTMENT OF HEALTH

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A Qualitative Assessment of Maternal and Child Health in Virginia

A Summary of Purpose, Methods, Findings, and Recommendations

Purpose

Every five years, the Virginia Department of Health (VDH) seeks to assess the needs of women, infants, children, and men across the reproductive lifecycle for strategic planning, decision-making and resource allocation. This is required by Title V legislation and provides for the benchmarking of programs and the assessment of progress. In a mixed methods approach, the Virginia Department of Health began conceptualizing the Maternal and Child Health (MCH) assessment design in January 2019 as a shared effort between the Division of Child and Family Health and the Division of Population Health Data in the Office of Family Health Services.

Traditional needs assessments collect and analyze quantitative data and make assertions based on trends and other inferences. While this approach is adequate for understanding the needs of a community or state, it eclipses the whole story. The intention to use mixed methods to theorize qualitative themes is aimed to position the quantitative data in a real-world assessment by exploring motives, opinions, feelings, and relationships. Too often, needs assessment processes do not clearly lead to actionable items for policy and program planning. Using qualitative assessment methods is crucial to understanding the complexity of issues and needs affecting key maternal and child health populations.

Design

The needs assessment was population-based and action-focused using a grounded theory approach. VDH hired three contract staff to support the management, coordination, and completion of the assessment recruitment, transcription, document formatting, and analysis. The qualitative assessment mirrored the quantitative data analysis based on six key populations.

- Women of Reproductive Age (15-45 years)
- Pregnant Women and Mothers of Young Children (Birth to 9 years)
- Adolescents (10-17 years)
- Parents of Children and Youth with Special Health Care Needs (CYSHCN)
- Men
- Maternal and Child Health Providers and Systems

Three qualitative methods were used to collect data: key informant interviews (KIIs), focus groups (FGs), and open-ended questions in an online survey. Using the quantitative data to influence development, structured interview questions and protocols, focus group questions and guidelines, and open-ended survey questions were created for the population group between February and May 2019. Questions, protocols and guidelines were also validated with non-affiliated VDH staff for clarity in understanding and cultural appropriateness.

Recruitment for participants in five population domains for KIIs and FGs began in May 2019 through events organized by VDH and community-based events that the needs assessment team was invited to participate and engage attendees. A $25 gift card to Walmart was offered to each participant, and disseminated at the completion of the interview or focus group or mailed later to their homes. For the adolescent population, we utilized social media promotion of a 10-question open-ended survey, whereby partners such as the Virginia Foundation for Healthy Youth and YMCA of Virginia assisted us in

disseminating the survey link on their social media channels. No incentives were offered to adolescent survey respondents due to the anonymous nature of the survey.

To determine where to focus assessment efforts and resources, the Health Opportunity Index (HOI) was used to identify areas of the state with low or very low health opportunity. HOI was developed by the Office of Health Equity at VDH, and is a composite measure of social influences of health – the social, economic, educational, demographic, and environmental factors that relate to a community's well-being. This led to the selection of these prioritized health districts: Southside, Roanoke, Mount Rogers, Alexandria, Richmond-Henrico, and Eastern Shore. KIIs and FGs were also organized and conducted by phone when in-person assessment was not available.

There were 178 KIIs and 18 FGs conducted across five population domains. Gender distribution of KIIs was 91 females, 40 males, and 47 not recorded, and for FGs was 12 female, 2 male, 2 coed, and 2 not recorded. VDH organized nine events in South Hill, Roanoke City, Accomack County, Northampton County, Alexandria City, Washington County, Wythe County, VDH Central Office, and Henrico County. Through various partner providers and collaborators, we conducted interviews and focus groups at health fairs, prayer breakfasts, a Virginia Premier Baby Shower, faith and community engagement day, and AfroFest event in South Boston, Petersburg City, Emporia City, and Richmond City. All qualitative data collection concluded in September 2019.

The distribution of KIIs and FGs by population had strong representation across the six population domains. We sought inclusion and diversity within the population domains with certain lived experiences. KIIs and FGs with residents who speak Spanish (10), are within the refugee/immigrant community (8), have been incarcerated (3) or were in foster care (2), are women of color (2), identify as LGBTQ+ (1), and women who have experienced infertility (1).

MCH Population Domain	Number of FGs	Number of KIIs	Total
Women of reproductive age	7	37	44
Men	2	40	42
Pregnant women (or new mothers) & Mothers of young children	4	42	46
Parents of CYSHCN	2	12	14
MCH Providers/Stakeholder Meeting	3	47	50
Total	18	178	196

KIIs and FGs were recorded and all audio files were labeled by date, location, and population. Audio files were organized into four batches and submitted to an approved vendor for translation and transcription. Upon return of the batch files between September and December 2019, VDH staff, contract staff, and academic partner volunteers formatted and prepared the transcribed interviews and focus groups for analysis in NVivo 11, the qualitative data analysis software used for this assessment.

The adolescent online survey launched, using the SurveyGizmo platform, in August 2019 and yielded 403 respondents (N=213 survey completions). Facebook and Instagram reach hit 172,501 impressions and Twitter impressions totaled 147,843. All five health regions were represented in the survey: Eastern Region (30%), Northern Region (22%), Central Region (21%), Northwest Region (16%), Southwest Region (10%), and other (1%). All responses to the adolescent online survey were downloaded from

SurveyGizmo and formatted for analysis using NVivo 11 software along with the transcribed interviews and focus groups.

The procedure for coding in NVivo 11 focused on question by question analysis using autocode of paragraphs. Pattern-based autocoding sped up the coding process due to large volumes of textual content. Parent nodes were created and child nodes were aggregated to reduce redundancy in the node hierarchy. For each population domain, a node matrix was reviewed to identify cross-tabulations of the coded content and the cells displaying a higher number of coding references based on the coding queries for each KII, FG, and survey question. Nodes for each population domain question from each data collection method were finalized into specific thematic nodes. A thorough check of the relevance of coding references was conducted to ensure the meaning of words satisfied the context in which they were coded. Within intersecting matrix cells of higher shade, nodes were opened to review the quality of the responses for use as illustrative quotes on the key themes. Extracts of the matrices, autocode hierarchy lists, and thematic quotes were performed to enable report writing for each population domain summary of the analysis results. A powerpoint slide deck was developed for presentations to stakeholders and leaders to highlight the key themes and recommendations for action. Reporting concluded in June 2020.

Findings

Key themes were developed using a grounded theory approach to a population-based needs assessment of maternal and child health in Virginia. Collecting codes of similar content into concepts and categories led to a theoretical understanding of the needs and gaps to be addressed by population domain. These findings are induced through an active role of the Virginians who shared their lives and stories so we can fully understand and know socially-shared meaning that forms maternal and child health-related risk and protective factors and actions for implementation.

Women of Reproductive Age

Reproductive health needs for Virginia's women include pregnancy prevention and family planning, preventive screenings, disease testing, and barriers related to infertility, abortions, and sterilization. Women report the need for more awareness and promotion in situations of intimate partner violence or domestic violence. Women see that resolving food deserts and improving healthy eating is essential to manage chronic disease. Mental health is a primary need, and common complaints relate to finding a mental health provider, long wait times to schedule an appointment, large gaps between appointments, and long-distance travel to see providers or access services. Lack of transportation, living in a rural area, being a woman of color, economic and insurance discrimination, and language and cultural barriers are health disparities experienced by women of reproductive age. Women of reproductive age believe that by having adequate resources and educational opportunities in their communities, they can live healthier lives.

Pregnant Women and Mothers of Young Children

Childcare is unachievable for some families because it is too expensive or hard to find. Parenting needs include affirmation and reassurance that they are doing the right thing. Support system and service needs include financial stress and issues, access to and navigation within housing and transportation, lack of community, essential supplies for infants like diapers, breastfeeding, and mental health counseling. Pregnant women want their entire medical and mental health needs met. Infant and child health is very important to expectant and new mothers. Health Insurance for children is necessary to have.

Adolescents

Health issues that impact youth include mental health and substance abuse, nutrition and food security, vaping and smoking, physical fitness and recreation, chronic diseases like obesity and cancer, community and social issues, and discrimination of the LGBTQ+ population. Services and investments to improve adolescent health should focus on mental health services in schools, healthy eating and recreation opportunities, teen-centered medical and dental care, and equitable investments in Internet access and social cohesion. Methods for addressing physical and mental trauma in youth should center on finding the right care, having someone to talk to and outlets for relaxation, and acknowledging a sense of persistent desperation. Barriers to appropriate mental health care relate to lack of responsive and cooperative mental health services, stigma and parental denial, lack of understanding within the school and community, and feeling trapped in their situations. Reproductive and sexual health care education provided by public schools is inadequate and fails to include LGBTQ education, among other limited topics, so information is gained from Planned Parenthood, family, the Internet, peers, and social media. Recommendations for improving adolescent health comprises expanding the mental health system and services, offering comprehensive sexual health education, addressing substance use, and including youth in planning.

Parents of CYSHCN

Health insurance for health care services is an asset and a frustration. Care coordination involves knowledge of the services, where they exist, and how to access them. Community-based resources promote inclusive recreation and acceptance in social settings. Dental care is a long-standing issue for children with special health care needs. Therapies and support services are challenging to access but effective when secured. Afterschool, summer, and respite (temporary relief) care are inconsistent across localities and expected level of support is lacking.

Men

Men's health is described by diseases and conditions that range from chronic diseases to social health influences that perpetuate poor health behaviors. Mental health issues are common among men, including those that lead to diagnosis and substance abuse based on reasons associated with social factors and cultural issues. Services relate to general health care, resolving issues with health care, and needed specialty care access.

MCH Providers and Systems

Many gaps and unmet needs exist among the current maternal and child health (MCH) providers and systems in which they function, from the individual to policy levels. Focusing MCH interventions on the individual patient is a common approach but too narrow to be effective. Relationships within families are known sources of influences to improved health but providers and systems do not readily provide support at this level. MCH providers describe system gaps related to capacity, coordination and availability of services, including specialists, itinerant care, medical homes, mental health, dental health, and hemophilia care. Community-level health influence is based on the relationships between organizations and the connection with social determinants and factors such as transportation, housing, food security, childcare, and employment. National, state, local laws and regulations governs health care access, including Medicaid expansion.

MCH providers demonstrate implicit bias in their practice and systems of healthcare have chronically oppressed and disenfranchised people of color, immigrants and non-native English speakers, persons of low socioeconomic status, incarcerated persons, people with disabilities, and those who identify as LGBTQ+. Many MCH providers in Virginia offer education, advocacy, health promotion, chronic disease

management, preventive screenings, case management and care coordination, developmental evaluations, leadership and systems development, and general health care. Resolving the gaps may include more transparency on health care costs, culturally-responsive services, supporting the family unit in care settings, integration of medical-mental-dental care, employ telemedicine and satellite clinics, and move MCHBG funds to greatest needs in locality.

Recommendations

1. Expand the MCH infrastructure and network to integrate essential medical, reproductive, mental, and dental health services in every locality
2. Normalize health-seeking behaviors and promote and advertise accessible services
3. Incentivize health care providers to localities of low health opportunity and/or rural areas
4. Address childcare, transportation, and general financial well-being with key stakeholders in all population domains
5. Collaborate with key stakeholders on policies and programs that improve employment and job acquisition
6. Address health disparities such as racism, health insurance bias and discrimination, language and culture responsiveness, and regional funding inequities
7. Implement comprehensive reproductive and sexual health education in schools
8. Integrate school-based mental health services in all divisions

Summary

A thorough and calculated application of qualitative methodology illuminated needs, gaps, and assets that quantitative assessment could not have done alone. VDH is prepared to take these findings and recommendations and apply them to strategic planning, decision-making and resource allocation. With a focus on outcomes, we aim to improve the health and well-being of maternal and child health populations in Virginia.

Women of Reproductive Age

Thematic Analysis Summary of Key Informant Interviews

Key Themes

- Reproductive health needs for Virginia's women include pregnancy prevention and family planning, preventive screenings, disease testing, and barriers related to infertility, abortions, and sterilization.
- Women report needing more awareness and promotion in situations of intimate partner violence or domestic violence.
- Women see that resolving food deserts and improving healthy eating is essential to manage chronic disease.
- Mental health is a primary need, and common complaints relate to finding a mental health provider, long wait times to schedule an appointment, large gaps between appointments, and long-distance travel to see providers or access services.
- Lack of transportation, living in a rural area, being a woman of color, economic and insurance discrimination, and language and cultural barriers are health disparities experienced by women of reproductive age.
- Women of reproductive age believe that by having adequate resources and educational opportunities in their communities, they can live healthier lives.

Reproductive Health Needs

Women of reproductive age know that their health and well-being is critically important. Women shared in multiple ways, like this woman in Emporia, that *"so much of what we go through day to day is associated with reproductive health."* For many women, the focus is on pregnancy, preventive screenings, and routine annual check-ups with the primary care provider or gynecologist. In South Boston, one woman said, *"I would say hopefully they're getting their yearly gynecology exam. You know, I think in general, that's usually why women go to the doctor unless there's something specific. Obviously, mammograms, things like that. So, I would say yearly maintenance."* To easily access all reproductive health services in the Commonwealth, women generally have to seek care at multiple providers. *"Mammograms can still be done at the hospital in the neighboring locality, but I believe you have to have a referral after that, then you're going to be traveling another 30 miles. [I usually go to] the City of Franklin. And if it's not available in Franklin, then it's the next locality, which is Suffolk."*

Concerns about unintended pregnancy, contraception, and testing for sexually-transmitted diseases are common among women of reproductive age. A woman in Arlington said, *"Because there's a lot of, even me personally, people I know, being pregnant without -- unintentionally being pregnant. That will force them to live a lifestyle that they weren't ready for. So, if they're pregnant, then they have to -- there's extra stress factors that will lead them to lifestyles they weren't ready for. So that's the main thing."* Family planning is a high priority. One woman in Emporia disclosed when she asked her doctor *"about the issues to prevent pregnancy, she said it might be unethical for some people to do the morning after pill"* – an indication of bias. Another woman in Emporia said, *"The GYNs here, we don't offer that service at the hospital…Some services are not offered here, so the people have to go somewhere else out in the community*." Similar experiences are noted by women on the Eastern Shore. *"People go to clinic for testings and stuff. Just to check on that."* And still, there are some women who are not aware of what services are available, or even what the issues are. *"I'm not sure. Yeah. I'm only nineteen, so I don't*

know" (Mecklenburg County). "I think there's still the assumption in our county that people are reproductively healthy if they are of child-bearing age, and people are still unaware of reproductive health issues" (South Boston).

Most women shared the perspective that there are barriers and needs in reproductive health around infertility, abortions, and sterilization. *"There's no IVF clinic or anything like that."* It is common *"when it gets extensive, they send you somewhere else. They refer you out."* Small towns, like South Boston and Emporia specifically, lack these needed services because *"providers don't want to come here."* One woman stated, *"It ain't nothing in this area for abortions that I know of and see, it still come down to cost because I don't think Medicaid and stuff going to pay for abortion unless it's incest or something like that."* Another woman said, *"I know that the family planning is done here. But if you wanted to terminate your child at an abortion clinic or something like that, we don't have that in our area. You would have to travel outside of Mecklenburg County."* One woman reported her desire for sterilization and this was her story: *"…After I had my daughter, I had told them I wanted my tubes tied. So, I didn't want no more kids. We discussed it before I gave birth to her, and I signed the paperwork. Yet, they forgot to tie my tubes. I was the only one working at the time in my family. But the doctor said, "Well, you can come back for outpatient surgery." I said to him, "So you want me to wait the six weeks, heal, then come back for another surgery?" I said, "No, you were supposed to do all this at one time." So, I ended up having to get the Mirena -- the IUD. That was the most horrible decision I ever made. I feel like I shouldn't have had to get that Mirena if they would have done their job."*

Intimate partner violence or domestic violence is an identified theme. Healthcare providers are increasingly screening women to ascertain if they are in any danger. *"If anybody's been to Carilion [in Roanoke] in the past year at least, they now ask you a set of questions every time you go to the doctor now for any kind of appointment or visit. Do you feel safe at home? That's one of the main questions."* Women report the need for increased awareness and support related to leaving violent and toxic relationships and homes. One woman on the Eastern Shore said, *"I don't know what their funding status is, but I feel like they could probably use more. Because they always could use more. So, I feel like helping women escape whatever -- there's not enough upward mobility, for people here, for women. If you're born into a certain situation, it's really hard to get out of it unless you have some superhuman willpower."* Some women disclosed personal stories of domestic violence, and confirmed that support exists. *"Domestic violence was an issue for me. When I had my hand smashed in a door a couple months ago, it sucked. There was permanent damage, I think. But I went to the domestic violence coordinator or the advocate of Franklin County, she works for the Sheriff's Department. She was there with me when I got my protective order. I currently have an assault and battery case against him for it. And that's obviously going through the Commonwealth. So, I think that as far as domestic assault, if you go and actually go and press the charges, if you go and actually file, they will help you. Like, you will have an advocate. But you have to take that first step in reaching out for someone to know that you need that help."*

Healthy Living, Chronic Disease Management, and Dental Health

Nutrition and healthy eating are necessary for good health. Being educated *"how to cook food that tastes good but is healthy"* and having access to a nutritionist would be helpful in many communities. Many women across all regions interviewed know they live in a food desert *"because of the lack of grocery stores"* and *"there's not a lot of grocery stores that serve out in the city."* Many recommendations to resolving food deserts were made including the use of online ordering, farmers markets with fresh vegetables, community gardens, greenhouses, partnering with the agricultural

program at Virginia State University, and food trucks with cooking demonstrations. One woman said, *"It's a lot easier for me to go back to add healthy food to my online cart from my house than it is for me to go into a grocery store with my kids and pick healthy options."* A woman from Petersburg shared, *"We really need some type of setup for fresh vegetables to be available to every part of the city,"* and *"a community garden would be good, too."* The reason why healthy eating is a theme is due to observed high rates of obesity and lack of self-care among women. One Richmond woman stated, *"I feel like obesity is the number one problem that I do not see any action being taken in my community to help assist women with becoming better, healthier. Well, getting their health together."* Women see that healthy living is a solution for chronic diseases like diabetes and obesity, *"…I think those issues are more probably related to access to food, food deserts. I don't know that they're directly correlated, but I think they're compounded by that."*

Chronic disease is experienced by many women of reproductive age. Noted conditions and diseases are high blood pressure, cancer, diabetes, obesity, cardiovascular disease, arthritis, and allergies. One woman from Roanoke shared, *"But I've been fighting diabetes for the last several years. And I'm down at the clinic, they put me on the medicine that does type 2 diabetes. When I first got here, I was about 200 and some odd pounds. And I'm down to about 180, 170, somewhere in that area."* Another woman from South Boston reported that *"in my family, breast cancer was the biggest thing."* Women connect chronic disease to eating healthy and being physical active and see the need to focus on it. *"A lot of things are associated with diet and exercise and so I see in the community a lot of cases of diabetes and obesity."* Whereas being able to access specialists for chronic disease management is a recommended focus area; *"I'm trying to think of what I go out of town for like, what I can't do here. Neurologist. Even allergists. A lot of families and kids have allergies and they don't have any access to do the allergy testing or anything like that."*

Dental health is a valued part of women's health care and not as accessible or affordable as desired. One woman said, *"They have the dental clinic that's grant-funded in South Boston. I think that was a huge asset. I know this is a town over, but Boydton has Paths with their dental clinic. I think they're making the effort. And, you know, I don't know how many patients they have but I think that they're able to handle the need."* Another woman stated, *"Well, dental health is actually because a lot of people can't afford to go certain places and the places that you can afford, they either aren't taking anyone in -- it's hard to get in -- or you don't get an appointment for months at a time. That's why I always try to get my appointment."*

Mental Health

"Mental health, I would say, is extremely lacking. And I understand that's a country-wide constraint right now." Women of reproductive age from every region that were interviewed agree that mental health is a primary need to be addressed. Stress from being a woman, jobs, family, children and other responsibilities weight heavily in this population. *"Mental health is probably one of the top most under-served things in our community."* Common complaints relate to finding a mental health provider, long wait times to schedule an appointment, large gaps between appointments, long-distance travel to see providers or access services. *"It's so much to try to get to a psychologist or to even speak to somebody. You can go in there and tell them that you feeling a certain type of way. And then it'll be three months before you even see anybody. It's not very quick getting your services provided."* This also relates to maternal mental health and postpartum mental health. *"I think six weeks is too long to have your first check-in…I guess that's a policy change or a procedure change. Six weeks is too long for the first one and then, if you go at six weeks and you say, "Okay, I'm fine right now," then, you're not going to see your*

doctor again usually for another year. That's too long between that time and the next one." Stigma in seeking mental health care affects women of reproductive age. *"So, there's a big thing about mental health issues. I think that's important. But around here, the older generations don't think it's a big deal."* Eating disorder clinics and outpatient psychiatric services for women are *"so bare-bones minimal"* and *"there's not really any…places that you can just go in and be able to talk to without being over eighteen."* Telemedicine is used because there is not enough mental health providers and facilities. *"Maintaining good health, reducing stress, eating well, exercising. I think that impacts every other aspect of women's health."*

Health Disparities

Lack of transportation, living in a rural area, being a woman of color, economic and insurance discrimination, and language and cultural barriers are health disparities experienced by women of reproductive age. *"I think anything that would be aimed at just making it more accessible. Whether that's just by location or transportation issue of funding issue, accessibility is probably the most difficult. If you put it right where people are and make it easy for them, they will do it."* Living in rural areas makes everything more time-consuming and challenging. *"Being able to go to these places, you have to drive at least 20 minutes or more just to get to places. It's in one centralized location of the county." "So, you have people in the far reaches of the county that whether it be their age and their health or their financial means, they're not able to get to an appointment or to pick up a prescription or things like that."* It is observed by many women across multiple regions that there needs to be *"more locations to serve the rural areas."*

Racism is a disparity theme and impacts the quality of care for women of reproductive age. One Richmond, immigrant woman said, *"One thing that sticks out to me is the higher rate of women of color having complications or deaths when it's time for them to deliver their child. That seems to be a big issue."* A woman from Petersburg stated, *"We as a race, black race, seem to have lack of stuff getting to us than, the other races. I don't know if it's because we just don't go out as much or travel compared to the other races."* Many women are not heard or feel valued in the health care setting. A Virginia Premier beneficiary shared, *"I personally feel as though African-American women are not heard when they go to the doctors with concerns regarding their health…I think they look as, hey, we don't have the educational level or know what we're talking about. So yes, I do feel like we are treated differently. A lot of times, they do hear but they just don't act on or take their time to go further, to look into the concerns that we're giving them."* Similarly, a woman in South Boston explained, *"I think it's been unequal, unfair, yes…So immediately they start to judge. And then that can affect care. Whether it be, "I don't want to touch you. I want to look at you and diagnose you." Or, "I want to talk down to you." Or, "I want to be short with you." Or, "I want to guess what I think you're here for." Or put me in a box. That makes me shut down. It makes me not want to come back to you at all. Because what care -- am I getting the care that I need, or are you just putting me in this box of what you think is wrong? And that's just for this community. I've seen it, and it's sad."* What compounds this is the fact that *"certain illnesses and diseases that are not affected by other races as much. And so, the information is not geared towards, per se, African-Americans…if we were provided basic information on that, it would help us. At least we can be more aware so we can act accordingly."*

These observations are made by others as well in Alexandria, South Hill, Eastern Shore and Mount Rogers. *"But I have witnessed and I have heard of people not being treated equally. Because of skin color and because of language barrier. Care providers -- unfortunately, some of them will overlook -- if they can't communicate, they just kind of be dismissive. And then as far as skin color -- kind of just come off*

judgmental or, like, one person will wait longer or it'll seem like their need is not as significant." Even white women acknowledge this disparity. *"Absolutely, 100 percent. I believe that I have received better care, better quality of care, because of my race." "Oh, I feel like I'm probably given better treatment because I'm a well-educated, middle-class, Caucasian woman. Also, because I have been in the community so long, I have been patients of these doctors for a long time; so, I feel like that relationship piece is important."* Being able to build relationships mediates sufficient treatment for white women, but not for women of color.

Language, cultural, economic and insurance barriers exacerbate health disparities in all regions in Virginia. *"I see, like, people that speak Spanish that go to the hospital, and they don't have a translator. A lot of hospitals have those translator lines where you call in and remotely talk to someone, and they can translate through the phone. I think something like that could be really beneficial. I think people that don't have insurance get treated much differently. Yeah, I see it all the time."* Health literacy and lower reading levels *"could benefit all cultures…Sometimes people read things they don't understand and they are afraid to ask."*

There is a perception that insurance type biases patients to a lower level of care. *"They're very close-minded. They're really not open to religious differences or cultural differences when it comes to medicine. Your income status definitely changes the treatment that you get, but I wouldn't say your education status." "Women, regardless of race, who have Medicaid insurance are going to be treated to a lower level of care. Because Medicaid does not pay as much as a private insurance would."* One woman said that Medicaid expansion was very helpful but there are still access issues *"for our more vulnerable populations…they're unable to access the care that they need."* Insurance disparity is personally felt. "*Sometimes I feel my insurance allows me a certain amount of treatment, just to be honest. If I'm not Blue Cross Blue Shield or some higher end premium insurance, for instance, Aetna or United Healthcare, I believe that the services are offered differently based on your insurance status."* And, some women describe it as discrimination, *"…people who don't have insurance are the last resort. And they don't get the proper care that they should. I don't think that's fair -- just because they can't afford it. But they need to be looked after. They need help. That's something that is always going on. They don't get the quality of care that other people get."*

In addition to biased treatment, women observe the general disparity in funding and resources in different regions of the Commonwealth. Like in Petersburg, a woman shared, *"I see how unfairly funds are allocated to the southern part of the state versus the northern part. And I understand it's more populated, but that doesn't change the need of the people here. And I just think, you know, in general on the state level we're overlooked down here a lot. Yes, we have issues that we obviously want to get help fixing those. And I just don't think we get a lot of that."* Directing more funding to areas of low health opportunity improves awareness of programs and services. An immigrant woman in Richmond said, *"Lack of funding usually makes things harder. So, if we have funding, then it will help to improve the awareness where we can have TV ads and other radio ads. Even face-to-face by knowing on doors and letting people know there is something going on in the community."* Using funding to put *"resources that are closer…certain things just aren't in our area…a lot of people don't know how or can't get to it."* This leads to poor health outcomes, as one woman in Petersburg described: *"By the time they find out about it, it's real late. People underestimate the importance of accessing services."*

Community Resources and Education

Women of reproductive age believe that by having adequate resources and educational opportunities in their communities, they can live healthier lives. Planned Parenthood and the Health Department are well-liked and women reports a high level of satisfaction with the services they can obtain at these two organizations. *"Planned Parenthood has always been a really good resource for me. Especially when I did not have insurance. You just fill out their income form, and they use the honor code, and they make it very easy." "Actually, the Health Department, I think, has done a really good job to provide awareness to women's health. They have very good resources in this area."* Other assets include having *"a community center where we can exercise and walk the fields,"* hospital workshops on breastfeeding and birthing, *"collaborative efforts among cities to look at health practices, health lifestyles," and "the little clinics around, sometimes Community Day, they come and talk to people about health, and free diabetes screening, stuff like that."*

Women of reproductive age need strong outreach to build awareness and want various means of communication to receive health information. *"I'm starting to hear a lot of conversation on the local radio shows. Having discussions about health and raising problems in our community. So, I've been getting a lot of awareness through that, but that's really it."* In South Hill, the hospital does most of the programming, and the community college on the Eastern Shore offers classes and promotes them within the community-at-large. *"Pretty much a lot more outreach that would help as far as being able to know exactly where to go, who to go to, stuff like that."* The majority of women interviewed said they used the Internet or Google to find health information or to learn about what services were in their communities. *"I go online and I do a lot of reading."* Social media, talking to friends who are nurses, asking doctors, and following the hospital and health department are other common, viable options for finding health information.

Appendix A. Autocoded Themes Matrix

The autocoded themes are an output of the special categories (case nodes) that reveal themes based on built-in classification of references in the raw data. Themes are derived and attributed in a process that follows a framework to understand strength and corroboration.

A : accessing	B : care	C : family	D : health	E : health services	F : issues	G : mental health	H : services
1	0	0	6	0	1	1	1
1	2	2	7	2	1	2	2
0	0	0	3	2	1	2	2
0	1	0	5	3	2	2	5
1	0	0	5	3	1	2	3
0	0	0	4	4	0	2	4
1	2	1	4	2	3	3	4
1	2	1	7	4	2	4	8
1	0	0	4	1	0	1	3
2	3	4	13	3	7	3	9
3	4	2	5	3	1	2	8
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2	0	1	7	1	2	3	5
5	0	2	9	6	1	2	12
1	1	0	6	1	1	3	5
1	6	2	11	1	4	2	7
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3	1	1	5	5	0	2	8
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5	1	0	8	1	2	2	2
2	0	3	6	4	4	2	10
3	4	4	7	3	4	2	8
3	2	2	3	3	2	1	8
0	0	1	7	0	3	4	1
5	1	2	8	1	0	3	3
1	1	1	3	2	0	1	3
1	1	2	6	1	3	1	5
3	2	1	5	5	0	2	8
3	6	5	13	3	7	10	9
2	1	2	7	2	1	4	5

Appendix B. Nodes Compared to References

The nodes identified show a hierarchy of reference frequency in the autocode process. Mentions of specific nodes are categorized and allow for comparative responses in the thematic analysis.

Nodes	Number of coding references
Nodes\\Autocoded Themes\\accessing\access healthcare	2
Nodes\\Autocoded Themes\\accessing\access issues	2
Nodes\\Autocoded Themes\\accessing\accessing family planning	45
Nodes\\Autocoded Themes\\accessing\accessing health services	44
Nodes\\Autocoded Themes\\accessing\accessing services	46
Nodes\\Autocoded Themes\\accessing\easy access	5
Nodes\\Autocoded Themes\\accessing\moms access	2
	146
Nodes\\Autocoded Themes\\care\better care	1
Nodes\\Autocoded Themes\\care\compassionate care	1
Nodes\\Autocoded Themes\\care\dental care	19
Nodes\\Autocoded Themes\\care\dental care services	4
Nodes\\Autocoded Themes\\care\foster care	1
Nodes\\Autocoded Themes\\care\great care	1
Nodes\\Autocoded Themes\\care\health care facilities	4
Nodes\\Autocoded Themes\\care\maternity care	1
Nodes\\Autocoded Themes\\care\midwifery care	1
Nodes\\Autocoded Themes\\care\pediatric care	1
Nodes\\Autocoded Themes\\care\postpartum care	1
Nodes\\Autocoded Themes\\care\prenatal care	1
Nodes\\Autocoded Themes\\care\primary care doctor	4
Nodes\\Autocoded Themes\\care\primary care offices	2
Nodes\\Autocoded Themes\\care\primary care physician	12
Nodes\\Autocoded Themes\\care\primary care provider	26
Nodes\\Autocoded Themes\\care\taking care	3
Nodes\\Autocoded Themes\\care\universal care	1
Nodes\\Autocoded Themes\\care\urgent care center	2
	86
Nodes\\Autocoded Themes\\family\abusive family members	1
Nodes\\Autocoded Themes\\family\accessing family planning	45
Nodes\\Autocoded Themes\\family\family connection	1
Nodes\\Autocoded Themes\\family\family danger	1
Nodes\\Autocoded Themes\\family\family health type services	4
Nodes\\Autocoded Themes\\family\family history	2
Nodes\\Autocoded Themes\\family\family life	1
Nodes\\Autocoded Themes\\family\family planning	22
Nodes\\Autocoded Themes\\family\family planning agencies	2

Nodes\\Autocoded Themes\\family\family planning services	20
Nodes\\Autocoded Themes\\family\family problems	4
Nodes\\Autocoded Themes\\family\family programs	1
Nodes\\Autocoded Themes\\family\family support	3
Nodes\\Autocoded Themes\\family\juggling family	1
Nodes\\Autocoded Themes\\family\local family businesses	1
Nodes\\Autocoded Themes\\family\probably family	1
	110
Nodes\\Autocoded Themes\\health services\accessing health services	44
Nodes\\Autocoded Themes\\health services\general health services	6
Nodes\\Autocoded Themes\\health services\main health services	75
Nodes\\Autocoded Themes\\health services\mental health services	162
Nodes\\Autocoded Themes\\health services\reproductive health services	28
	315
Nodes\\Autocoded Themes\\health\accessing health services	44
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Nodes\\Autocoded Themes\\health\behavioral health	1
Nodes\\Autocoded Themes\\health\cardiovascular health	1
Nodes\\Autocoded Themes\\health\child health	1
Nodes\\Autocoded Themes\\health\common health coordinator	1
Nodes\\Autocoded Themes\\health\community health problems	10
Nodes\\Autocoded Themes\\health\dental health	16
Nodes\\Autocoded Themes\\health\dental health issues	2
Nodes\\Autocoded Themes\\health\emotional health	7
Nodes\\Autocoded Themes\\health\family health type services	4
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Nodes\\Autocoded Themes\\health\health issues	2
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Nodes\\Autocoded Themes\\health\home health	1

Nodes\\Autocoded Themes\\health\ideal health	2
Nodes\\Autocoded Themes\\health\important health issues	2
Nodes\\Autocoded Themes\\health\local health departments	1
Nodes\\Autocoded Themes\\health\main health services	75
Nodes\\Autocoded Themes\\health\major health issues	2
Nodes\\Autocoded Themes\\health\maternal health	3
Nodes\\Autocoded Themes\\health\mental health	22
Nodes\\Autocoded Themes\\health\mental health awareness	2
Nodes\\Autocoded Themes\\health\mental health clinic	2
Nodes\\Autocoded Themes\\health\mental health counseling place	4
Nodes\\Autocoded Themes\\health\mental health facilities	2
Nodes\\Autocoded Themes\\health\mental health issues	57
Nodes\\Autocoded Themes\\health\mental health needs	6
Nodes\\Autocoded Themes\\health\mental health patients	5
Nodes\\Autocoded Themes\\health\mental health problems	12
Nodes\\Autocoded Themes\\health\mental health providers	10
Nodes\\Autocoded Themes\\health\mental health services	162
Nodes\\Autocoded Themes\\health\much health insurance coverage	1
Nodes\\Autocoded Themes\\health\oral health	3
Nodes\\Autocoded Themes\\health\overall health	3
Nodes\\Autocoded Themes\\health\physical health	6
Nodes\\Autocoded Themes\\health\physical health issues	4
Nodes\\Autocoded Themes\\health\pretty health	1
Nodes\\Autocoded Themes\\health\primary health issues	2
Nodes\\Autocoded Themes\\health\public health nurse	1
Nodes\\Autocoded Themes\\health\regular health	1
Nodes\\Autocoded Themes\\health\reproductive health	4
Nodes\\Autocoded Themes\\health\reproductive health services	28
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Nodes\\Autocoded Themes\\issues\concerning issue	1
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Nodes\\Autocoded Themes\\issues\growing issue	1
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Nodes\\Autocoded Themes\\issues\skeletal issues	1
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Nodes\\Autocoded Themes\\issues\top health issues	6
Nodes\\Autocoded Themes\\issues\transportation issue	5
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Nodes\\Autocoded Themes\\mental health\mental health	22
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Nodes\\Autocoded Themes\\mental health\mental health counseling place	4
Nodes\\Autocoded Themes\\mental health\mental health facilities	2
Nodes\\Autocoded Themes\\mental health\mental health issues	57
Nodes\\Autocoded Themes\\mental health\mental health needs	6
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Nodes\\Autocoded Themes\\mental health\mental health services	162
	284
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Nodes\\Autocoded Themes\\services\accessing services	46
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Nodes\\Autocoded Themes\\services\brain injury services	1

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Nodes\\Autocoded Themes\\services\specialist services	1
Nodes\\Autocoded Themes\\services\transportation services	3
Nodes\\Autocoded Themes\\services\unfair service	1
	532

Pregnant Women and Mothers of Young Children

Thematic Analysis Summary of Key Informant Interviews

Key Themes

- Childcare is unachievable for some families because it is too expensive or hard to find.
- Parenting needs include affirmation and reassurance that they are doing the right thing
- Support system and service needs include financial stress and issues, access to and navigation within housing and transportation, lack of community, essential supplies for infants like diapers, breastfeeding, and mental health counseling.
- Pregnant women want their entire medical and mental health needs met.
- Infant and child health is very important to expectant and new mothers.
- Health Insurance for children is necessary to have.

Family Support and Services

Families across the Commonwealth of Virginia have identified the needed supports and services to ensure a healthy, productive life. Themes relate to childcare, parenting, and support systems and services.

Childcare

Childcare is unachievable for some families because it is too expensive or hard to find. There is a strong need for childcare, before- and after-school care, after-work/early evening hours, summertime, which includes the ability to integrate services for speech and language, occupational and physical therapies. Families often bear the brunt of providing childcare for relatives, and one Petersburg woman said, "*My cousin was trying to find daycare because her job is all at night and I have been seeing a lot of people lately, on Facebook, they need more help with daycare.*" Even when support for childcare exists, a Richmond mom shares, "*I know Social Services has a voucher for daycare but there's a waiting list, because I looked into it myself when my daughter was first born because my mom owns a childcare facility.*" In the regions that interviews were conducted, it was very clear that the lack of childcare availability was a contributor to limited mobility and moms entering the workforce. For two Eastern Shore women, they supported this sentiment, "*Oh, well, I would provide more help with childcare, you know, for moms that work or moms that are trying to go to school and stuff like that,*" and "*There is nothing around here for kids and they wonder why so many kids are on drugs.*" Many women expressed discontent with not having enough childcare, including one Alexandria mother, "*I am very disappointed, like, why I don't have childcare services program.*" Mothers advocated if anything were to change about available childcare services that it would be "*better childcare that was also affordable*."

Parenting

Parenting needs include affirmation and reassurance that they are doing the right thing for their children, parental leave, classes and training on developmental milestones, help with the school system, and how to access counseling or other services. Several mothers' explanation of what inhibited their parenting included thoughts that "*I feel inadequate as a parent*," and needing "*the confirmation that I'm doing okay*." One mother who was interviewed by phone described feeling judged which promoted feelings of inadequacy, "*I think there's this culture of judgement once you become a parent, too...I feel like being a parent is – it's hard to seek help around people in a healthy system who are quick to judge your actions."* Mothers were quick to note what could make life better, saying "*I think it would be nice if*

there as maternal leave but even for people like contract workers," and "*Making the insurance and SNAP benefits available to the parents that really need it.*" Others were concerned with the basics like potty-training and weaning, as one RIchmond woman emotionally stated, "*I breastfeed, and so I'm kind of having trouble with weaning. The older moms say just give them milk, but it's not that easy.*"

Regarding parenting skills, there was strong agreement on needing parenting classes and training. One woman from the Eastern Shore said, "*I think it would be helpful, before becoming a first-time mother, if there was a class where it teaches you, "Oh, your kid is this age. What do you do when you have tantrums? What do you do if he chokes?" Because there's mothers out there that don't get help at all and they don't know what to do.*" Another mother stated, "*For me, it's nutrition and development. Kind of reaching the milestones. Their speech and their physical development. Are they at the right height? Are they growing? And then speech. Oh, and then also, yeah, behavioral. Why can't they play nice with other kids?*" Mothers observed comparisons in development and wondered if it was their parenting, "*There's a baby that's two days younger than her, and she can already talk and run and knows what things are. So we were concerned about a learning curve. That's a big issue. Other than that, she's on track. Her learning. She's definitely a late bloomer. Right on track, as they say.*" Even into teenage years, mothers expressed a desire to learn, specifically about preventing bullying and violence in their community: "*Teenager years. Attitudes, behavior, just transitioning, growth. All of it. Safety, safety from bullies, violence outside and inside the school;" "I guess, it'd have to be, her behavior or discipline. I mean, I know it's not on there, but could I say education? Yes. Even though I know she's way too young. But it's like, I'm thinking about it super early;*" "*Probably behavior, protection from bullying. That's a big thing around here.*"

Support Systems and Services

Encouraging thematic factors also related to counseling, policy changes, collaboration, and providing the best they can as mothers to their children. One South Hill woman noted, "*I guess the biggest thing would be the counseling or at least knowledge of where counseling is*," while another Petersburg mother wanted, "*There has to be some type of policy changes that deals with the collaboration between the school system and the parent.*" Parenting involves the whole child and mothers acknowledged wanting their child to be healthy, including one Eastern Shore mother who shared, "*I want to provide the best care that I can, make sure that they're healthy, take them to the doctor, and just to teach them all the core values and morals that I think that every human should be raised with – they should have a value system.*"

Support system and service needs focused on financial stress and issues, access to and navigation within housing and transportation, lack of community, essential supplies for infants like diapers, breastfeeding, and mental health counseling. Income and finances were a key theme, as several women with young children remarked that they wanted "*help with managing financial stress right now*," and "*yeah, I'd say financial issues*." Related to income, housing was a common concern as well. Two women stated, "*I would say if there was more help with, like, single mothers and housing and stuff like that -- you know, helping to find somewhere to stay -- I feel like that would be good;*" and "*There is a lot of people that don't have enough housing when they have a baby.*" Mothers from Marion shared, "*Well, it's hard to find housing,"* and "*Being a single mom and doing both pregnancies by myself, I would probably want to get the housing and get all the help that I could possibly get."* "*Just transportation is the only thing I can think of,*" and "*More buses,*" was also a noted theme regarding support and service needs.

Mothers were articulated a need for community mental health supports and social interaction. Feelings of being alone with no support is a real lived experience as mothers said, "*I feel like every person worries in the U.S., because our health system is not a universal system;" "I guess, more support systems for people, for parents – young parents especially;" "Just someone that can talk to me, tell me it's going to be okay;" "I want actual people to interact [with];" and, "…how to develop good support systems, how to tell if you're in an abusive relationship, how to cope with anxiety or depression or developing coping mechanisms."* It is clear that mothers have some connection to resources like "*Sometimes insurance companies, they offer a hotline to call if you're in need of assistance,"* and "*I feel like our WIC program -- like, the WIC office, they give a lot of information out about that and Social Services, too."* This has helped mothers prepare for the tangible needs of their infants: "*Well, I was really in need of diapers and clothing at one time and [there are] a couple places that help with clothing and diapers and stuff,"* and "*Diapers, wipes, butt paste or diaper cream, Tylenol, Ibuprofen formula, and clothing."* Additional support and services were requested for nutrition and healthy eating, and breastfeeding: "*To offer more services, especially about healthy eating and how to prepare vegetables because a lot of people my age and everything, we use prepared foods;" and, "I extended breast-feed. There's not enough outreach for breast-feeding in here. There's almost no support. You do have a peer lactation consultant, but you only have one and you don't have any of them who do any kind of outreach. Outreach is so big, and that needs to happen.*"

Pregnancy Health and Children's Health

Women who become pregnant have many needs for good health and prenatal care including adequate health care providers and access to mental health services.

Pregnancy Health

As it relates to pregnancy health, mothers want to have all of their medical and mental health needs met. They don't want to worry about receiving adequate care and getting necessary support. One Richmond mother commented that her goal was "*To have a healthier pregnancy, and to make sure my baby is healthy."* Moms want less stress and an easy navigation into prenatal care. Another woman from Roanoke said, "*I moved two years ago during my last pregnancy and I had to find a doctor;" and, "My last pregnancy, I had an abnormal pap smear."* Some mothers expressed improvement since a prior pregnancy including: "*…I think this was a much smoother pregnancy and prenatal care than my first;"* and, "*I had the access to care portion, but I was very stressed out my entire pregnancy."*

Infant and Child Health

Children's health is very important to expectant and new mothers: "*The children, should get more help than anyone else because they can't help themselves*." They are very clear in what they perceive they need to have a healthy child in today's world—a trusting healthcare provider, good nutrition and healthy eating, a place to exercise and be active, receiving vaccinations, and supporting healthy weight management.

A key theme is the relationship with the child's healthcare provider, "*Most definitely going to the scheduled appointments with the doctors. Expressing, to the doctor if you're unsure of what to feed the baby. Feeling comfortable to ask the doctor questions.*" Two mothers interviewed by phone assure their child's health through "*visit [to the] doctor's office and annual checkups often,"* and being able "*to discuss if they see anything that I'm not seeing in development regarding my child.*" Maintaining a good relationship helped mothers to know more about their child's health: "*Knowing how much my baby weighs, height, basically their basic measurements and physical health.*" Two barriers emerged related

to having to drive long distances to receive healthcare or not having healthcare proximate to their community, and being able to afford healthcare. "*One thing that would make healthcare more ideal for children…is not having to travel these long distances to get specific medical services. Tolls are extremely expensive, and the time of travel is also very long,"* said one mother. A Richmond woman relayed, *"I just feel like it should be easier to get access to it, especially for low-income families to be able to afford to have healthcare for their kids."*

Healthy eating and physical activity are a concern across the state. Several mothers explain the importance "*to eat healthy*" saying, "*There needs to be a community-wide explanation of what healthy eating is. It's very frustrating, especially when you're impoverished*;" "*Making sure they are eating right, that there are healthy food options available;*" and that "*some people, they let their babies have juices and stuff when it's hot outside."* They want a place to meet and learn about good examples of healthy food and healthy eating. One mother stated, "*I believe all children should have the opportunity to be active."* Another interviewee shared, "*When I asked her [doctor] when can I start putting her in a walker, and I put her in the walker*." Underlying these themes was an interest to prevent overweight and obesity in their children and exposure to environmental hazards, as two women observed, "…*there's a lot of overweight children and just trying to stay healthy in general is important*," and *"my kids have allergies"* due to living near a concrete company that produces a lot of dust into their neighborhood. One Richmond mother summarized these needs, "*Access to grocery stores, healthcare, and doctor's appointments. More education in school about health.*"

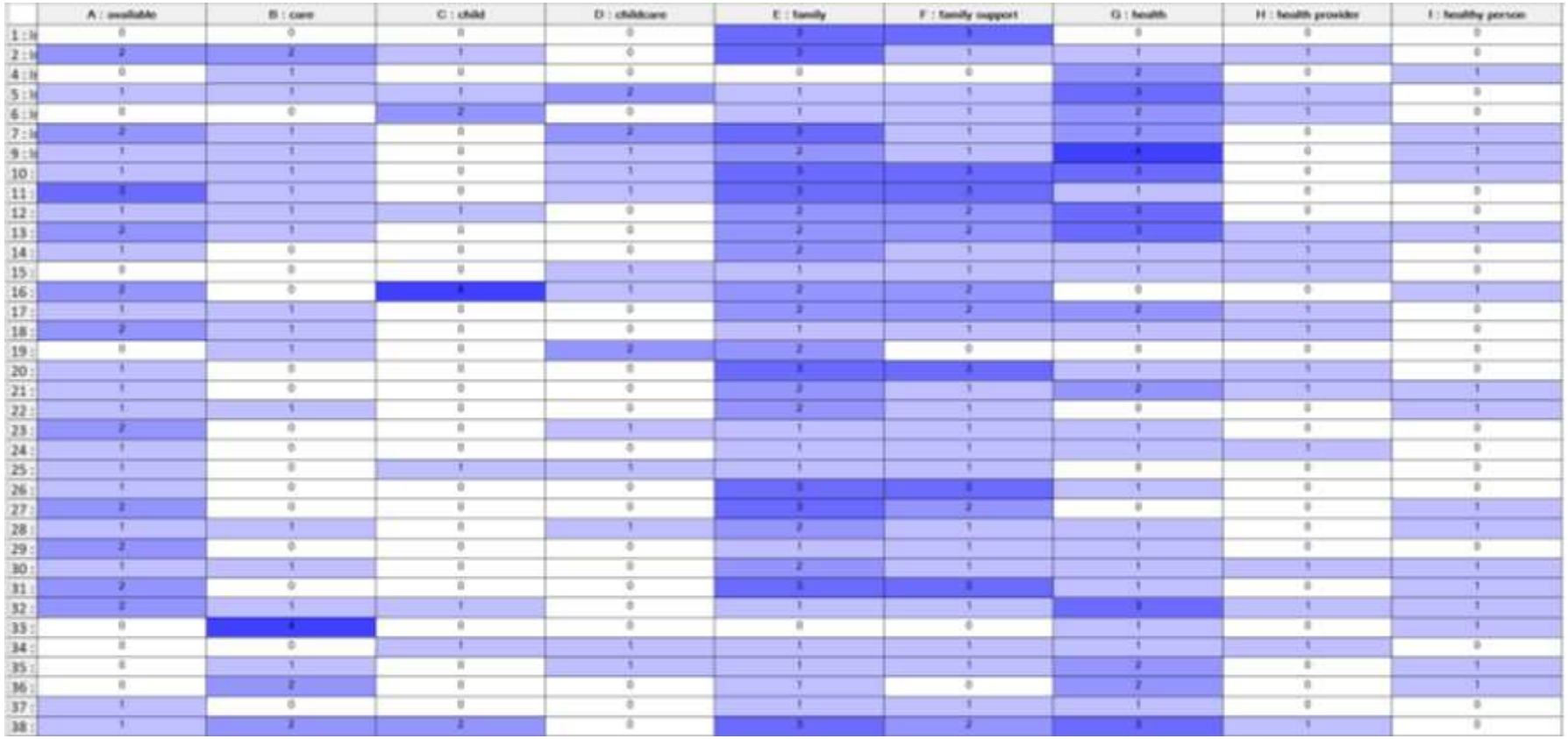
Keeping children healthy also revealed the need for vaccinations and a caring community. Two mothers from the Eastern Shore advocated, "*Well, everybody should vaccinate their kid*," and "*I believe that every child needs to be vaccinated.*" Seeing children happy – "*He's always laughing"* – and that "…*health in the community should look like people with compassion…especially when they can't afford transportation*" is the ideal.

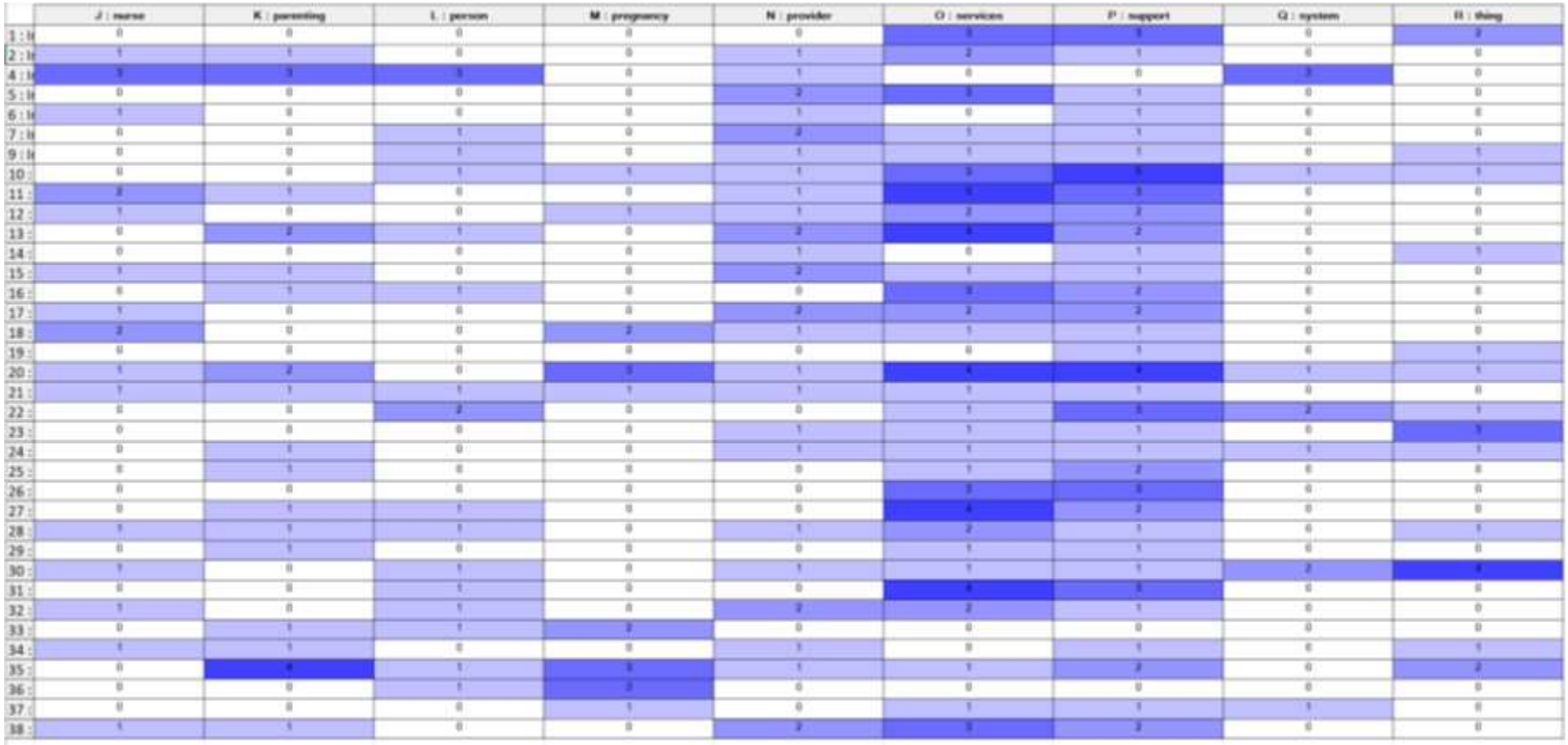
Health Insurance for Children

The majority of mothers interviewed confirmed that they did have health insurance for their children, and that it was very important to do so. One women said, "*I feel that everyone should have the option to receive proper access to care if their child gets sick or hurt.*" And another stated, "*I just feel like it should be easier to get access to it, especially for the low-income families to be able to afford to have healthcare for their kids.*" This support was met with hesitation to access medical care. One mother explained, "*…I pay $500 each month [for health insurance], and then his bills were over $300 each…I'm kind of hesitant about taking them—for the stuff that they really need, like the dental care."* There is overall satisfaction with the type of health insurance that mothers have for their children, "*There's nothing better they could do for me,"* and "*It's been really good*." Some mothers expressed frustration, "*I do feel like it's a little inadequate. Sometimes I wonder if I'm just not understanding it*," especially with regard to prescriptions, "*Other than fighting them for the medications [we] need sometimes,*" and "The pharmacy drops the ball sometimes." And two women from Marion said, "*I wish they would pay for everything," and "They don't' cover the whole amount.*" Still, mothers of young children accept the limitations and appreciate the health insurance they have.

Appendix A. Autocoded Themes Matrix

The autocoded themes are an output of the special categories (case nodes) that reveal themes based on built-in classification of references in the raw data. Themes are derived and attributed in a process that follows a framework to understand strength and corroboration.





Appendix B. Nodes Compared to References

The nodes identified show a hierarchy of reference frequency in the autocode process. Mentions of specific nodes are categorized and allow for comparative responses in the thematic analysis.

Nodes	Number of coding references
Nodes\\Autocoded Themes\\available\available services	24
Nodes\\Autocoded Themes\\available\counseling availability	1
Nodes\\Autocoded Themes\\available\currently available	43
Nodes\\Autocoded Themes\\available\good availability	1
	69
Nodes\\Autocoded Themes\\care\after-school care	4
Nodes\\Autocoded Themes\\care\child care programs	2
Nodes\\Autocoded Themes\\care\exact care	1
Nodes\\Autocoded Themes\\care\health care provider	31
Nodes\\Autocoded Themes\\care\infant care	1
Nodes\\Autocoded Themes\\care\night care	1
Nodes\\Autocoded Themes\\care\postpartum care	1
Nodes\\Autocoded Themes\\care\prenatal care	6
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Nodes\\Autocoded Themes\\care\prenatal care visit	2
Nodes\\Autocoded Themes\\care\proper care	1
Nodes\\Autocoded Themes\\care\taking care	3
Nodes\\Autocoded Themes\\care\urgent care center	3
	60
Nodes\\Autocoded Themes\\child\behavioral child	1
Nodes\\Autocoded Themes\\child\child care programs	2
Nodes\\Autocoded Themes\\child\child checks	1
Nodes\\Autocoded Themes\\child\child development	4
Nodes\\Autocoded Themes\\child\child reinforcement	3
Nodes\\Autocoded Themes\\child\child support	2
Nodes\\Autocoded Themes\\child\clean child	2
Nodes\\Autocoded Themes\\child\dirty child	4
Nodes\\Autocoded Themes\\child\healthy child	7
Nodes\\Autocoded Themes\\child\last child	1
Nodes\\Autocoded Themes\\child\middle child	2
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Nodes\\Autocoded Themes\\childcare\childcare assistance	1
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Nodes\\Autocoded Themes\\family support\family support services	128
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	27

Adolescents

Thematic Analysis Summary of Open-Ended Survey Questions

Key Themes

- Health issues that impact youth include mental health and substance abuse, nutrition and food security, vaping and smoking, physical fitness and recreation, chronic diseases like obesity and cancer, community and social issues, and discrimination of the LGBTQ+ population.
- Services and investments to improve adolescent health should focus on mental health services in schools, healthy eating and recreation opportunities, teen-centered medical and dental care, and equitable investments in Internet access and social cohesion.
- Methods for addressing physical and mental trauma in youth should center on finding the right care, having someone to talk to and outlets for relaxation, and acknowledging a sense of persistent desperation.
- Barriers to appropriate mental health care relate to lack of responsive and cooperative mental health services, stigma and parental denial, lack of understanding within the school and community, and feeling trapped in their situations.
- Reproductive and sexual health care education provided by public schools is inadequate and fails to include LGBTQ education, among other limited topics, so information is gained from Planned Parenthood, family, the Internet, peers, and social media.
- Recommendations for improving adolescent health comprises expanding the mental health system and services, offering comprehensive sexual health education, addressing substance use, and including youth in planning.

Health Issues Impacting Youth

Overwhelmingly, the primary health issue impacting Virginia's youth are mental, emotional, and behavioral health issues, including alcohol and substance use. One youth said, *"I would solve the mental health issues of the area. I know I myself am depressed as well as so many other young people here."* Wait times, lack of licensed and qualified mental health and addiction providers, and travel time to reach necessary services continue to limit adolescent's ability to manage depression, anxiety, stress, loneliness, and use of alcohol and drugs to cope. *"Mental health issues closely followed by issues related to substance abuse which often go hand in hand." "…The amount of children [and] teens in my area that can't get any mental health treatment is horrific. I know more than 40 kids that have depression and have made some attempt at their life but still get no help."* Management of ADHD, autism spectrum disorder and other developmental disabilities are a noted concern, especially in schools. Suicidal ideation, self-harm, and attempts are common, and knowing *"what steps to take and what to say when friends reach out for advice"* when a serious situation with a friend is happening in real-time. Bullying and peer pressure are still big concerns, especially with the use of texting, social media apps, and other online games. There is a desire for *"building a sense of belonging [for] mental health and social emotional development,"* and *"find a way to make sure children are growing up without depression, anxiety, and all other health problems." "Many teenagers struggle from eating disorders."* Also, the opioid crisis and prescription drug abuse, along with alcohol and marijuana use, among teens are perceived as increasing.

Many teens acknowledge that they live in a known food desert and have inadequate access to healthy food. School lunches were said to be *"healthier"* and more *"appetizing to the kids who eat it."* Teens

questions why *"doughnuts are cheaper and easier to get than fresh fruit."* Eating a well-balanced diet is important to adolescents, and *"access to less expensive and healthier foods"* is a priority. *"A lot of kids don't get proper nutrition. They have food to eat but they can't always afford to eat healthy foods."* It is not lost on this generation of youth that food insecurity and food-related issues are a common health issue.

Teens desire to be active and have safe places for recreation. There is a noted *"lack of opportunities…literally nowhere for them to go to do things…even banned from walking in the mall without a parent [t]here."* One teen shared that he *"live[s] about half-mile from a nice park…no sidewalks to get there and they would have to cross a highway."* Youth understand that being physically fit and active is important for health, and it would make sense to *"promote more non-sports team activities like bike riding/bike lanes or path, walking clubs, hiking and access to free exercising…[so the] lifestyle would become a culture."* Better infrastructure and improved mobility are health issues to Virginia's youth.

It was very clear that youth are significantly impacted by vaping and smoking saying it *"is out of control"* at school and that *"the Juul addiction [is] taking over teens."* Vaping or juuling comments were frequently mentioned as a health issue that should be confronted more directly through education in schools.

Chronic diseases like cancer, allergies, heart disease, migraines, Lyme disease, and asthmas were frequently mentioned. Obesity was noted as *"a significant health condition among youth"* as well as *"injuries such as sprains, pulled muscles, and concussions."* Sleep-related issues like insomnia, sleep apnea, and getting enough sleep were noted. Prevention of sexually transmitted diseases and ensuring proper vaccination against seasonal influenza are important medical issues as well.

Common community and social issues mentioned as relevant to health issues impacting youth include poverty, health insurance, pollution, safety and gun violence, and child abuse and neglect. More importantly, issues of underfunded schools, *"lack of health education in schools,"* and needing to provide *"sex education in public schools"* were well stated. *"The lack of improper distribution of funds to minorities…the quality of neighborhoods that give youth no hope"* keep kids in poverty; there is no job training or help with college tuition for youth in more disadvantaged areas of the state.

Gender dysphoria and discrimination against lesbian, gay, bisexual, transgender and queer youth are health issues impacting today's youth. *"I would classify stigma against the LGBTQ community to be a health issue as it directly impacts the mental health of youth or anyone else involved. If I could, I'd destroy the stereotypes and stigmatization."* It was a theme that stress and depression were caused by *"the community's reaction to those who are…those who are guilty of doing so have such a severe negative impact on these kids' mental health. Some of my friends have been driven to attempt suicide because of how their lives have been impacted by this issue."*

Services to Improve Health and Well-Being

There is a distinct connection between mental health and psychiatric well-being and schools. Many adolescents stated a desire for mental health supports co-located inside of a school building; services that could start *"at an early age before…it's too late for help."* Including providers who serve youth *"with developmental disorders and psychiatric conditions"* as well as having *"more school counselors, trauma-informed training and support for teachers"* could ensure better access and availability of mental health

resources. Therapy and counseling services to address depression, anxiety, anger management, substance abuse, vaping and alcohol use are strongly requested, more than any other service. Education in schools *"about the reality of vaping and drug use"* and *"mental health awareness programs"* would be supported, as a means *"to improve the quality of life"* among adolescents. Open, non-discriminatory therapists are *"people who understand and try to help [and] someplace I can go and talk with other people about stuff." "Support groups for members of the LGBT community,"* and more effective counseling by LGBTQ representatives and therapists would lead some youth to be healthier. School-based mental health services are critically needed.

Adolescents care about their physical wellness and want *"more recreational opportunities"* with *"walkable and bikeable communities"* for *"safe running and walking options."* Some communities are not safe, but teens believe that *"more community recreation centers,"* and *"places like community pools, skateparks, etc., to encourage people to get active"* are important services and resources. There is strong interest in *"gym memberships for teens"* or *"nearby gyms" "close to the area that is free or somewhat cheap to access for younger kids who don't make money."*

The youth of today are mindful of what they want to be healthy. *"Healthy food choices that are easy to prepare," "expanded access to cooking or food prep classes,"* and *"affordable and accessible healthy eating"* is a key theme. Service to address thing include *"expand[ing] food distribution programs," "better foods at school," and encouraging "fresh foods and farmers markets"* in town.

Having access to *"dentists and orthodontists with later afternoon/evening or weekend hours"* and *"medical resources for LGBT youth"* are key themes. Teen-centered care is important and *"more doctors"* and *"better physicians in the area"* who understand adolescent health and can provide *"easer access to medical care without parents"* is desired. A strong sentiment among teens is that they want to be more in charge of their health and well-being, and believe in *"free universal healthcare," "more available aid insurance to everyone who can't afford it,"* and *"easier access with shorter wait times."*

Teens are open to what would improve their quality of life. Strategies like *"later school times for high schoolers," "more structured support to get kids to mix and make friends,"* and community-based opportunities for youth development. Many relate social and economic factors that are priorities to resolve and improve: *"poor Wifi connectivity," "better funded schools," "more neighborhood security," and "things like festivals in our community to bring people together."*

Methods for Addressing Physical and Mental Trauma in Youth

A theme for addressing trauma in youth was *"finding the right care."* Many stories were shared of both positive and negative experiences in therapy or counseling. One teen reported, *"Luckily, there was a rare opening at a desirable facility as opposed to some others with availability but much lower standards of care. Not every [one] is lucky enough to have…needs met."* It is clear that investment into more facilities addressing physical and mental trauma and staff trained in all youth-centered settings on trauma-informed care is a valued service.

Most adolescents report having a trusted adult to talk with including parents, friends, other relatives and mentors at school and in the community. *"Support systems and people encouraging me to do my best"* and *"realizing you're not alone and knowing it wasn't your fault"* were leading sentiments for those expressing treatment and healing of their trauma. *"Talking to people who actually understand me and my situation and have an open mind"* is very important to adolescents. One teen shared that having

a support system save lives: *"People around me pointing it out and asking if I needed help with my issues and when it got bad enough they forced me to get help."*

Having outlets for self-expression and relaxation are meaningful in addressing trauma. *"Painting, cooking,…art," "listening to music," "writing it down," "going for walks and spending time outside," and "playing sports"* were highly noted activities and distractions for emotional self-management. But it has not always been productive and therapeutic for everyone. Some teens report that they did not have support or coping methods available to them, or they frankly *"don't address it…just pushed it down."* One youth shared, *"It's just something I carry along with me and it's something that makes me who I am."* A sense of desperation exists among these adolescents. *"I have received no help; knowing that while I'm going through a hard time, my mom is going through an even harder time, and she couldn't be there to support me, [which] only made things worse." "There's not that much I can do about it. It's always going to be there, sitting in my room at night crying."*

Barriers to Appropriate Mental Health Care

It is easy to understand that a lack of mental health services for children and youth is a significant barrier to treatment in most localities in Virginia. *"Because it seems like there is nowhere to go for mental health."* Having to travel long distances, long wait times for appointments upwards of nine months, appointment times limited to Monday through Friday from 9am to 5pm, and therapists unable to help are the most common barriers. *"When you try to make an appointment, and they tell you that they can't help you."* Counseling and treatment are perceived as expensive and unaffordable. *"Because it's so expensive"* and *"providers not accepting [my] insurance"* are frequent barriers. *"My family struggles financially so getting meds and a therapist is hard ot juggle and pay for with our insurance."* Transportation to attend appointments is often lacking due to *"not being able to drive"* or *"relying on a parent's schedule." "Having such a busy schedule makes it hard to take time…[for] help with mental health."*

Stigma is a significant barrier and parental denial that mental health care is needed is alarming. *"The stigma on mental health creates a barrier, if even imaginary, between youth and adults. I've never directly told my parents if I was having trouble with my mental health, and I have no ability to find help on my own. We must remove that barrier and also make help readily accessible under any circumstance for any age."* Other teens said, *"My dad won't let me go on medicine for my anxiety, depression, or ADHD,"* and *"My parents won't acknowledge my problems." "Being young and not taken seriously by parents"* and knowing *"my family doesn't really believe in getting help for mental health issues*" prohibits healing. Youth are directly told that mental health is not real, that is *"has been 'made up' for attention when they cannot see the invisible illness in [the] outward appearance."* This leads to concerns with privacy and confidentiality. *"My mother works as a nurse. What would be helpful is knowing that I could go to VDH without one of her former coworkers telling her I stopped by."*

School-related issues are cited as a barrier due to the volume of homework and inability to accommodate appointments for mental health therapy. One teen shared they *"can't miss school…my teachers get upset [and] say things like, 'that's why you don't miss school,' or 'it's not my fault you weren't here.'"* This causes teens to feel a lack of social cohesion and connection with persons and settings they expect support and understanding. *"Doctors, therapists, and medicines are not enough when other needs are not being met and support are not being addressed."* One adolescent stated, *"We aren't taught as a society to ban together and to help our own unless there is a local, regional, or national catastrophe."* A sense of enduring mental or emotional pain is accepted. *"My mental and*

physical health is all over the place. It's hard when you're unhappy with life and your living situation. Especially when you live with 6 people in the house and there are only 3 bedrooms."
In many areas of chronic disadvantage, youth express feeling trapped; there is a *"lack of good places to go in the community to hang out or be active that can be accessed on foot. Parents [are] not always home to take [me] to places..."*

Reproductive and Sexual Health Care Education

School-led education and instruction on reproductive and sexual health is wholly inadequate. There is substantial discontent as teens state, *"not good instruction at all," "school only teaches abstinence only which is ridiculous," "very little information from school,"* and *"there's nothing new—it's the same thing ever year."* There is no lack of ideas to improve what is provided. *"At school we need our sex ed updated because all we learned…was abstinence, like half of our school has already had sex, and quarter are lgbtq so I feel as though we should integrate lgbtq sex ed into it and how to keep ourselves safe cause we are going to do it but I would like to know how to stay safe."* Another teen said, *"What I remember is that we've talked about birth control and how the different types affect you and also talking about STDs and STIs. I can tell you we probably don't learn much about the actual...system, like we don't learn about the parts and talk and learn about it."* The variation in what is taught is also apparent: *"school focuses mostly on drugs," "they taught the boys how to put on condoms and they taught girls how to abstain from sex," "we only learned about the sperm and egg,"* and *"the School doesn't offer anything except abstinence-only education."* The Family Life Education standards of learning are antiquated and limited in scope; many teens expressed a specific concern *"that [it] is not LGBTQ friendly"* curriculum. *"I'm gay, so I had to learn everything from Planned Parenthood. The schools don't do anything for lgbt reproductive health education."* Another youth said, *"As a lesbian, I learned all of what is applicable to me through youtuber…I didn't learn anything other than heterosexual cisgender sexual education at school and I don't know how my gay male friends and transgender friends are able to learn about safe sex."*

Comprehensive reproductive and sexual health information is provided by Planned Parenthood, parents and family, the Internet, peers and other kids at school, and social media. *"For our family, it starts with a honest and scientifically informed conversation at home along with a discussion of our personal values and beliefs."* One adolescent shared, *"I learn about sexual health education from Google or Instagram pages."* Google searches are the primary means for obtaining health information by Virginia's teens. Many teens cited parents, doctors, friends, and person in the health care field as credible sources on health.

Recommendations for Health Improvement for Virginia's Youth

The leading recommendation by adolescents to improve their health is building and expanding a mental health system that knows *"what they are doing to address the mental health concerns of our adolescent populations, how they plan on supporting professionals in this field, and what do they anticipate as future needs (more facilities for hospitalization, more support in our schools, etc.)."* Unequivocally, the elimination of the *"shortage of professionals in this field who primarily focus on the adolescent population"* and that *"we should have school-based health and mental health services"* are commanding themes. One adolescent offered, *"We need a class similar to study hall even if as an elective, and we need to find ways to lower teen anxiety and depression." "Make children's mental health a priority,"* and recognize that for some youth, *"we don't want our parents to know who we talk to because they don't approve or support us. I think that services should be provided for 16 and up without a parent or*

guardian. If we are responsible enough to drive, we should be able to talk to someone without a parent giving consent."

Schools clearly have a distinct role in providing comprehensive reproductive and sexual health education to adolescents. They want curriculum that empower youth to *"have their own voice in their healthcare…to make their own educated decisions,"* and *"access to safe abortions, female reproductive freedom."* Teens want inclusion of all students *"to talk more about certain topics and not learn how to just say no, also…we should talk about lgbt sex education."*

Adolescents recognize the danger of vaping and tobacco use, drinking and drug use. *"We need regulation of tobacco and vape products through licensing."* They want action on this because it is so prevalent in their schools, questioning *"why aren't you doing anything about vaping,"* and begging *"please do something about the vaping epidemic."* Underage drinking and drug use should be met with treatment and counseling. As one teen described it, *"the majority of my peers are alcoholics with nicotine addictions and crippling depression/anxiety."*

It is important for youth to be included and engaged in the development of solutions and interventions. *"Directly engage [us] in developing your health programming."* They want to be involved in prevention and building a community of support, understanding and compassion with *"access to healthy foods, high quality healthcare for all, access to early education programs, mental health care.*" Youth see systemic and chronic problems in recreational and nutritional security in their communities. *"We need more free community activities, a community rec center, community pools, etc. You could employ people to work there creating more jobs…to give the youth something to do." "My community is in a food desert and needs help;" "We need to work on ensuring nutritional needs are met. There are many middle-class families living paycheck to paycheck."* Disparities in rural areas of the state are also observed: *"Don't forget us out in the rural areas!"* The lack of resources for teens is a great concern and priority should be on equalizing this across the Commonwealth.

Appendix A. Top 12 Word Count Frequency

Word	Count	Percentage (%)
1. health	48	3.42
2. mental	45	3.21
3. depression	33	2.35
4. anxiety	20	1.43
5. addiction	15	1.07
6. issues	15	1.07
7. food	13	0.93
8. get	13	0.93
9. obesity	13	0.93
10. cancer	12	0.86
11. school	11	0.78
12. drugs	10	0.71

Parents of Children and Youth with Special Health Care Needs

Thematic Analysis Summary of Key Informant Interviews

Key Themes

- Health insurance for health care services is an asset and a frustration.
- Care coordination involves knowledge of the services, where they exist, and how to access them.
- Community-based resources promote inclusive recreation and acceptance in social settings.
- Dental care is a long-standing issue for children with special health care needs.
- Therapies and support services are challenging to access but effective when secured.
- Afterschool, summer, and respite (temporary relief) care are inconsistent across localities and expected level of support is lacking.

The needs of families of children and youth with special health care are well-defined. Common concerns relate to health insurance for accessing adequate health care services with care coordination, more inclusive community-based resources, dental care, therapies and support, and care outside of school hours.

Health Insurance for Health Care Services

Having health insurance to access health care services is both an asset and a frustration. Several parents from Alexandria said "*it was challenging to get started,*" "*difficult to understand what insurance can provide,*" and "*there should be more information provided*." One mother (by phone interview) identified that her health insurance company "*just suddenly change[d] it in the middle of the year and it doesn't feel like there's any retribution*." From the point in which a child is diagnosed with a disability or special health care needs, insurance options should be promoted and provided, as one mother asked, "*help us to get information about health insurance for medications*." Another participant on the Eastern Shore wants "*somebody to help you with the paperwork…there's nobody really you can talk to on how to fill out some of this paperwork for insurance*." However, it was mentioned often that some "*no insurance, and no access to doctors or medications*," mostly due to barriers of language, no transportation, and immigration status.

One mother in Alexandria shared her story about the difference between having Medicaid and private insurance.

> "*I would definitely say for someone who does not have Medicaid: insurance not covering services, or insurance being too confusing to figure out. My private insurance did shady things. Changed my plan in the middle of my plan year to take away my daughter's nursing, because they had messed something up and now refuses to pay for it, saying it's not an eligible service for her. Even though her Medicaid, which is under the same umbrella company, pays for those services and she is eligible. So, they have found a way to get around doing something they don't want to do. I'm a single parent of a kid with special needs, I'm trying to work a job, and help her and all of this -- after a while, you give up. Because you just don't have any fight left in you, or time, or whatever. I feel like insurance has made that really hard. Having Medicaid has been, a life-saver. I would be on Medicaid if I had to pay for everything for my daughter's needs. So, I would say insurance is a huge, huge thing.*"

Health care cost is an issue as families review their explanation of insurance benefits and see "*how much they bill for the things, and then what they actually pay*." Several parents, interviewed by phone, agreed

that they need health care "*to be cost-effective*," because sometimes "*it's not covered and…doctors do not work with Medicaid.*" It was noted several times that many health care providers, especially specialists, do not accept Medicaid, "*which would definitely help the services to be much more affordable.*" One mother shared that "*it costs a lot of money*" to see specialists; "*If you're traveling three and a half hours each way, you obviously have to stay there if you have a very long appointment. So, we pay a lot in just staying places to go see doctors.*"

There are other costs to the family including "*time away from work and other children*" to travel long distances for health care, "*long wait lists*" for appointments, time lost because "*the taxi drivers are not on time*," and "*having good specialists available in the area*" like "*pediatric mental health providers*." Certain regions like Eastern Shore and Southwest Virginia have a critical lack of services for children with special needs where one mother was told by a doctor's office, "*Well, if she's special needs, you better look elsewhere.*" "*We wait sometimes more than two months to see providers. And we drive over an hour to all of our providers. Because there just aren't the specialists that we would need in this area. And so, a lot of our providers are very far away*." The need for local, available doctors to serve this population is greatly needed and wanted, especially on the Eastern Shore: "*The ideal situation is that there should be adequate services to meet all their needs.*"

Care Coordination

When children with special health care needs have multiple health care providers, it becomes a significant challenge for parents "*to understand more about how to navigate on the health system*." It becomes a burden: "*And families are frequently the care coordinator for their child, but they're not trained in that. They kind of become the experts over time. Some do. But it's confusing. It's complex*." For all children there is a continuum of care and one mother expressed "*a barrier for families is understanding how everything is connected or could be connected*." Care coordination involves knowledge of the services, where they exist, and how to access them. Even when parents have adequate health insurance, it "*doesn't really help because there's so much lost in communication.*"

One mother, interviewed by phone, tells her story from the perspective of all care providers having access to all of the information about her son:

> "*I think it should be collaborative, in that all the doctors that I'm seeing for my son would know all the information from the others. And it seems like common sense that they'd all have access to the information. But I don't know that it's shared in a way that they can get it easily. And I don't know why not. But it seems that every single time I go to a doctor, I have to tell them the entire history of my child and start over from the beginning. And then they still don't get the information from all the other doctors that he's seeing. And so, with behavioral concerns, I might go to a psychiatrist who doesn't know anything that the developmental pediatrician covered. And then they don't have any information from the background from the developmental pediatrician. Or, our counseling services are in-home counseling services. They don't work with the prescriber of [T]'s medication, who is a psychiatrist. And so, we're seeing changes in the behavioral therapy and changes from the medication, but the two don't talk to each other. So, there's no good sharing of information as to what this is due to. Is it due to the therapy, or is it due to the medicine? And as a parent, we can guess. But we have no medical training. And we don't know what the medicine should be doing. Because we've only seen it with our child, not with a child where it necessarily has been proven to be successful. And so, I think one of the big things is it should be collaborative. And it should be easy to access."*

Some participants expressed concern and "*pity [for] the parents who don't have the knowledge to advocate*" and those "*who are desperate to get services, [and] understand situations*." One mother expressed that "*it truly is terrible*" when parents do not understand what their child's needs are: "*I see people whose child has a special need but they don't know what to do*." Even parents from the more rural regions, who have learned over time, share doubts about what is available: "*I don't even think some of the resources we do have available to us, we don't know. Because we're so much, oftentimes, on our own to figure it out. So, this lack of awareness about resources could also be a barrier*." Care coordination is a dire need.

Community-Based Resources

Inclusive recreation and acceptance in social settings is strongly desired for families with children with special health care needs. Some regions in Virginia are doing more to provide "*the opportunity for inclusive education, inclusive recreation, and greater access to services*," according to one participant. The need is "*to really be a part of the community and not be segregated*." Most parents agree that having sufficient access to services will promote more inclusion and visibility in recreational activities and peer groups. Even when there is a program for community-based recreation, "*things are limited*" and "*there are no summer programs*."

The struggle is real for most parents, including this mother from Alexandria:

> "*I think sometimes it's hard to get access to places. Typical kids like to enjoy, but kids with special needs sometimes have a lot of sensory issues and it's hard to find a place. Or you can go to specific hours where it's no other kids, but to be fair with other kids and don't bother other kids too. So, sometimes we still go to the park or different places and sometimes because my son have some self-injury behavior or he makes some noises, people stare at you. I want little bit more understanding -- people understanding that everybody's different.*"

Related to care coordination, parents believe if healthcare providers knew what resources were available, this could help many families. One mother shared, "*I think access to information should be easier to find. And I think providers need to be more educated on what resources are available. Not just within the immediate community, but now that we're connected to the world, also resources outside of the area.*"

Dental Care

Dental care is a long-standing issue for children with special health care needs, mostly because "*dental coverage is not available*" and there "*confusion on coverage because people don't know what it is going to cover*." And often, "*there are no dentists that want to work with them because they sometimes need sedation and it's hard to find a dentist that will want to do that*." Travel for dentists who do provide care is an ongoing challenge: "*We have to go across the bay. Nothing is here*."
One mother from the Eastern Shore discussed her experience trying to secure dental care for her daughter:

> "*Like, [retracted child's name] does have some dental work she needs. But the closest she can get that set is not until November. So, she got her teeth cleaned -- barely, because she didn't want to hold still. And that was early -- the first of this month. But then to actually -- they'll put her to sleep to clean them good. And she has a baby tooth that won't come out. But yeah,*

we've got to wait until November. And even to get that appointment, it took three months to get that appointment. So, they're very good, but they're really it in this region."

Therapy and Support

Therapies and supportive services are critical and essential needs for families, including speech and language therapy, physical therapy, occupational therapy, music therapy, behavioral modification and training like Applied Behavioral Analysis (ABA), and support groups for emotional support. One mother said, "*Speech therapy was very helpful for us because kids with Down Syndrome has a lot of troubles vocalizing, so getting that therapy was very good,"* yet another mom shared, "*For my child especially, when you're getting older, speech therapy is hard or you cannot even find where to take your child. When they get older, it gets harder.*"

Locating, waiting and securing services cannot be understated. One mother said, *"…they all have long wait lists. What tends to be the biggest early intervention challenge is to get children into these type of therapies, but when you're on a two-year wait list, you're passing up opportunities*." This sentiment was shared as another mother stated, "*Trying to get ABA therapy. I know people are on wait lists for six, nine, twelve months trying to get those services…*" This is tiring for the family to constantly wait for services, which led one mother to say, "*…emotional support is needed. Maybe there are, I don't know."* The sentiment was shared by another mom who stated, *"I would say more of a support where we could sort of share our struggles maybe. And just all-around -- just some family support."* Families with children and youth with special medical needs feel lonely and want support.

Services and support groups are beneficial, as one mother stated, "*Also, the behavioral therapy helped us a lot to manage his behavior. A support group is good because you can find other families that are having the same problem that I have. Sometimes they know more than me, and sometimes I know more than them. So together, we help each other.*" The concern for one another in this close-knit community is the realization that some families cannot afford what they need, as one mom indicated, *"These families don't have the resources or money to pay specialists if they need occupational therapy or physical therapy, equipment, wheelchairs, they're not able to afford those things."*

Afterschool, Summer, and Respite Care

Flexibility in care for children and youth with special health care needs is also essential. It does require skilled persons to provide care in the absence of family. Even a short respite is welcome, as one mother shared, "*Respite care is number one. Most of the people that I know have stopped working or work from home because they can't get that."* Another mother noted that *"respite care is crucial to survival for families. I need it to survive."*

Providing adequate care during recreational, afterschool or summer programs is also a significant challenge: "*My son has behavioral challenges. So, it's very difficult to get him into programs for the summer…especially when your child is non-verbal.*" There are observed differences in what families can access, *"the same family could be rejected in one county and have services in another county,"* and *"the pay rate [for respite care] is not competitive with just paying out of pocket for regular childcare, when you have children that have all these medical needs."*

Appendix A. Autocoded Themes Matrix

The autocoded themes are an output of the special categories (case nodes) that reveal themes based on built-in classification of references in the raw data. Themes are derived and attributed in a process that follows a framework to understand strength and corroboration.

	A : appointments	B : barriers	C : care	D : case management	E : coordination	F : education	G : health	H : healthcare
1 :	1	2	2	2	2	2	4	0
2 :	1	0	5	1	1	2	2	0
3 :	1	0	2	1	1	2	2	0
4 :	1	2	4	1	1	1	1	0
5 :	2	3	6	2	2	1	2	2
6 :	2	0	3	2	3	3	4	3
7 :	1	1	1	1	1	1	2	0
8 :	0	0	4	1	2	0	4	1
9 :	1	1	1	1	2	1	4	3
10 :	1	2	5	1	2	1	2	3
11 :	2	2	4	1	1	2	1	1

	J : hearing screening	K : programs	L : school	M : screening	N : services	O : speech	P : therapy	Q : wait
1 :	2	3	1	5	8	1	6	3
2 :	1	0	3	3	4	1	3	0
3 :	1	2	1	4	3	2	4	0
4 :	1	0	1	3	4	1	4	1
5 :	1	1	2	2	7	1	2	0
6 :	2	3	3	5	8	2	1	5
7 :	1	3	1	2	4	2	7	2
8 :	1	0	3	3	5	1	3	0
9 :	1	1	2	3	7	1	3	1
10 :	1	4	2	3	8	0	1	1
11 :	1	2	4	3	5	1	3	0

Appendix B. Nodes Compared to References

The nodes identified show a hierarchy of reference frequency in the autocode process. Mentions of specific nodes are categorized and allow for comparative responses in the thematic analysis.

Nodes	Number of coding references
Nodes\\Autocoded Themes\\appointments\appointment time	1
Nodes\\Autocoded Themes\\appointments\dental appointments	23
Nodes\\Autocoded Themes\\appointments\quick appointment	1
Nodes\\Autocoded Themes\\appointments\specialty appointments	3
	28
Nodes\\Autocoded Themes\\barriers\administrative barriers	5
Nodes\\Autocoded Themes\\barriers\cultural barriers	6
Nodes\\Autocoded Themes\\barriers\definite barrier	1
Nodes\\Autocoded Themes\\barriers\difficult barriers	2
Nodes\\Autocoded Themes\\barriers\identifying barriers	6
Nodes\\Autocoded Themes\\barriers\overcoming barriers program	2
	22
Nodes\\Autocoded Themes\\care\adult care	15
Nodes\\Autocoded Themes\\care\after-school care	15
Nodes\\Autocoded Themes\\care\care coordination	35
Nodes\\Autocoded Themes\\care\dental care	17
Nodes\\Autocoded Themes\\care\out-of-school care	8
Nodes\\Autocoded Themes\\care\primary care score	2
Nodes\\Autocoded Themes\\care\primary health care	6
Nodes\\Autocoded Themes\\care\regarding care coordination	10
Nodes\\Autocoded Themes\\care\respite care	9
Nodes\\Autocoded Themes\\care\school care	14
Nodes\\Autocoded Themes\\care\specialty care	2
Nodes\\Autocoded Themes\\care\summer school care	5
Nodes\\Autocoded Themes\\care\taking care	1
	139
Nodes\\Autocoded Themes\\case management\case management	53
Nodes\\Autocoded Themes\\case management\case management services	10
	63
Nodes\\Autocoded Themes\\coordination\care coordination	35
Nodes\\Autocoded Themes\\coordination\regarding care coordination	10
Nodes\\Autocoded Themes\\coordination\service coordination	45
Nodes\\Autocoded Themes\\coordination\service coordination services	6
	96
Nodes\\Autocoded Themes\\health\accessing health services	3
Nodes\\Autocoded Themes\\health\behavioral health	2

Nodes\\Autocoded Themes\\health\behavioral health services	3
Nodes\\Autocoded Themes\\health\bio-pharmacy health	1
Nodes\\Autocoded Themes\\health\congenital health condition	3
Nodes\\Autocoded Themes\\health\health system	2
Nodes\\Autocoded Themes\\health\ideal health	2
Nodes\\Autocoded Themes\\health\mediocre health	3
Nodes\\Autocoded Themes\\health\mental health	16
Nodes\\Autocoded Themes\\health\mental health access	1
Nodes\\Autocoded Themes\\health\mental health professionals	3
Nodes\\Autocoded Themes\\health\optimal health	3
Nodes\\Autocoded Themes\\health\primary health care	6
Nodes\\Autocoded Themes\\health\ranking health	5
	53
Nodes\\Autocoded Themes\\healthcare\adult healthcare	2
Nodes\\Autocoded Themes\\healthcare\emergency healthcare	1
Nodes\\Autocoded Themes\\healthcare\healthcare coverage	1
Nodes\\Autocoded Themes\\healthcare\healthcare people	1
Nodes\\Autocoded Themes\\healthcare\healthcare plan	1
Nodes\\Autocoded Themes\\healthcare\primary healthcare	13
Nodes\\Autocoded Themes\\healthcare\specialty healthcare	16
	35
Nodes\\Autocoded Themes\\hearing screening\hearing screening	41
Nodes\\Autocoded Themes\\hearing screening\regarding hearing screening	8
Nodes\\Autocoded Themes\\hearing\hearing aids	1
Nodes\\Autocoded Themes\\hearing\hearing problems	1
Nodes\\Autocoded Themes\\hearing\hearing screening	41
Nodes\\Autocoded Themes\\hearing\regarding hearing screening	8
Nodes\\Autocoded Themes\\hearing\wearing hearing aids	1
	101
Nodes\\Autocoded Themes\\programs\actually community programs	2
Nodes\\Autocoded Themes\\programs\after-school programs	3
Nodes\\Autocoded Themes\\programs\challenger baseball league program	1
Nodes\\Autocoded Themes\\programs\day support program	1
Nodes\\Autocoded Themes\\programs\daycare programs	2
Nodes\\Autocoded Themes\\programs\early intervention programs	28
Nodes\\Autocoded Themes\\programs\overcoming barriers program	2
Nodes\\Autocoded Themes\\programs\special olympics program	1
Nodes\\Autocoded Themes\\programs\summer programs	3
Nodes\\Autocoded Themes\\programs\transition programs	1
Nodes\\Autocoded Themes\\programs\waiver programs	1
	45
Nodes\\Autocoded Themes\\school\elementary school	1
Nodes\\Autocoded Themes\\school\extended school year	3

Nodes\\Autocoded Themes\\school\middle school	3
Nodes\\Autocoded Themes\\school\missed school days	6
Nodes\\Autocoded Themes\\school\public schools	4
Nodes\\Autocoded Themes\\school\school care	14
Nodes\\Autocoded Themes\\school\school days	4
Nodes\\Autocoded Themes\\school\school system	7
Nodes\\Autocoded Themes\\school\school walls	1
Nodes\\Autocoded Themes\\school\summer school	4
Nodes\\Autocoded Themes\\school\summer school care	5
	52
Nodes\\Autocoded Themes\\education\inclusive education	1
Nodes\\Autocoded Themes\\education\special education services	43
	44
Nodes\\Autocoded Themes\\screening\developmental screening	7
Nodes\\Autocoded Themes\\screening\hearing screening	41
Nodes\\Autocoded Themes\\screening\regarding hearing screening	8
Nodes\\Autocoded Themes\\screening\scoliosis screening	23
Nodes\\Autocoded Themes\\screening\vision screening	5
	84
Nodes\\Autocoded Themes\\services\accessing health services	3
Nodes\\Autocoded Themes\\services\adequate services	1
Nodes\\Autocoded Themes\\services\behavioral health services	3
Nodes\\Autocoded Themes\\services\behavioral services	23
Nodes\\Autocoded Themes\\services\case management services	10
Nodes\\Autocoded Themes\\services\certain services	2
Nodes\\Autocoded Themes\\services\community-based services	28
Nodes\\Autocoded Themes\\services\dental services	1
Nodes\\Autocoded Themes\\services\early intervention services	1
Nodes\\Autocoded Themes\\services\eligible service	1
Nodes\\Autocoded Themes\\services\enough services	5
Nodes\\Autocoded Themes\\services\in-home counseling services	1
Nodes\\Autocoded Themes\\services\occupational therapy services	6
Nodes\\Autocoded Themes\\services\private services	1
Nodes\\Autocoded Themes\\services\service coordination	45
Nodes\\Autocoded Themes\\services\service coordination services	6
Nodes\\Autocoded Themes\\services\special education services	43
Nodes\\Autocoded Themes\\services\support services	2
Nodes\\Autocoded Themes\\services\violence prevention services	12
Nodes\\Autocoded Themes\\services\volunteer services	2
Nodes\\Autocoded Themes\\services\waiver services	2
	198
Nodes\\Autocoded Themes\\speech\regarding speech therapy	3
Nodes\\Autocoded Themes\\speech\speech therapists	3

Nodes\\Autocoded Themes\\speech\speech therapy	36
	42
Nodes\\Autocoded Themes\\therapy\behavioral therapy	7
Nodes\\Autocoded Themes\\therapy\music therapy	2
Nodes\\Autocoded Themes\\therapy\occupational therapy	6
Nodes\\Autocoded Themes\\therapy\occupational therapy center	7
Nodes\\Autocoded Themes\\therapy\occupational therapy services	6
Nodes\\Autocoded Themes\\therapy\physical therapy	12
Nodes\\Autocoded Themes\\therapy\regarding speech therapy	3
Nodes\\Autocoded Themes\\therapy\speech therapy	36
	79
Nodes\\Autocoded Themes\\wait\month wait	1
Nodes\\Autocoded Themes\\wait\quick wait list	4
Nodes\\Autocoded Themes\\wait\wait time	8
Nodes\\Autocoded Themes\\wait\waiting list	7
Nodes\\Autocoded Themes\\wait\waiting period	1
Nodes\\Autocoded Themes\\wait\waiver wait list	2
	23

Men in Virginia

Thematic Analysis Summary of Key Informant Interviews

Key Themes

- Men's health is described by diseases and conditions that range from chronic diseases to social health influences that perpetuate poor health behaviors.
- Mental health issues are common among men, including those that lead to diagnosis and substance abuse based on reasons associated with social factors and cultural issues.
- Services relate to general health care, resolving issues with health care, and needed specialty care access.

Men's Health

There is a disconnect in awareness and behavior in preventing and managing chronic diseases and poor health outcomes. Most men in Virginia know what they need to be doing to be healthier but the social health influences are barriers and protect the status quo.

Diseases and Conditions

Men in Virginia expressed large consensus in the diseases and health conditions that affect men. They are concerned with diabetes, high blood pressure, cardiovascular and lung diseases, back and joint problems, and cancer. One man from Emporia said, *"I think one of the biggest is blood pressure. I think we have a lot of cases of blood pressure problems around here. Then, diabetes. Heart problems, heart failure. And I see a lot of people with physical problems -- lot of people with canes and walkers and stuff. So, they have a lot of joint problems and bone problems."* Chronic disease was a strong theme and sharing of their personal health status was common. *"Strokes. Heart attack. High blood pressure, which I suffer with myself. High blood pressure is mainly the most thing, and kidney failure. I guess that come with the blood pressure and stuff,"* said another Emporia man. It was clear that men know what is affecting them and within their communities. *"Well, I think cancer, mental health of men, and their total lack of knowledge. I believe that most men have this inherent fear of going to doctors,"* said one man, and another man from Alexandria stated, *"Most of my friends [are] sick, they got cancer. Under 50 years old, so my friend got prostate cancer. Oh, diabetes. The blood pressure. Yeah, hypertension."* Most men across all regions indicated that heart disease and cancer were significant diseases.

One man from the Eastern Shore shared about the impact of having diabetes, *"I know for myself, I'm diabetic. I'm 34 and I still feel like I'm 24, but at the same time, when I read my sugar levels, it doesn't say that and it affect my body. I actually have kind of slowed down. I do things with my children. We do martial arts, but I see how my body is not how it used to be, and I think a lot of times that's kind of hard to deal with, I guess, and having pride. I think that's one thing that affects me."* Another man from the Eastern Shore noted that *"…there's a lot of smokers around here. Lung disease, cancer in your lungs."* Obesity was also mentioned and its relationship to high blood pressure and diabetes by a man in Richmond, *"I think we see more and more high blood pressure in my community at a young age. As early as 40, people are having those kind of issues and having some prostate issues at an early age."*

Health Behaviors

Specific behaviors were identified that influenced a man's health status. Men in South Boston and Emporia said that managing mental health was a serious issue in their population and community saying, *"The most important would be mental health…,"* and *"I think that it should be discussed more. Because it's just a topic that really is overlooked until there is an emergency that causes, you know, potential loss or alters the path of life for not only them, but their families."* Other health behaviors focused on exercise or eating well, said an Eastern Shore man, *"I think dieting here would be helpful. That way we could prevent some heart attacks, high blood pressure, and stuff like that,"* and, as Richmond man explained, *"We should be healthy enough to be able to be mobile, be more active in the community. Have more spaces for people to exercise, so people get physically involved, not as much as we see people now. They have tendency of sitting and driving more, and not be active. So, days there's no working, no physical exercise and my perspective, I think that men in my community should be more physically active."* Two other health behaviors that were noted was smoking cigarettes and vaping and the need to get regular check-ups and take your medication, as it was shared by a South Boston man, *"…there's a lot of smoking cigarettes. Also, the younger people that are vaping cigarettes and using you know, vaping liquids and things like that." "Basically, go to the doctor on your regular checkups. Make sure you meet all your appointments and not miss any. Take your medications as prescribed. Make sure you keep up with your medication"* (Emporia).

Social Health Influences

Influences of social factors are a concern for men across all regions in Virginia. Issues like being able to find recreational facilities in their area to crime and safety in their community. Stress is constant in most men's lives and having competitive employment that offers them the ability to live well and to care for their families. Several men from Alexandria, South Boston, and Richmond were honest, *"Yeah, mostly stress from the family members or a job condition. Yeah, maybe economic." "We need jobs that will pay, you know, a living wage. You know, nothing out of the ordinary." "A man is healthy when he can get up every morning and go to work. He can get involved in sports. He's seeing a doctor maybe once a year for some basic medical checkup. He can go about his work throughout the day. If you're healthy, you also speak to people about good health as well."* One South Hill man's connection with the community is through food; *"The only thing I have with the community, and that's the food bank. Food banks. And there's three of them I go to. And there's no limit on the money that you get -- your income. I got three neighbors, and all of them are on food stamps. And I don't qualify food stamps, because they say I make too much money. And that's why I say, I go to the food banks."*

In a disadvantaged area of the Commonwealth, one man from South Boston stated that *"the best thing you could do to improve men's health is revitalize the community."* There's lack of opportunity when men want to *"just eat right, stay active, just interact socially with people,"* like through *"trails or programs to get people together."* Another man from Emporia shared, *"The community's pretty much laid back. And everybody's comfortable with being laid back and just sitting and eating and growing, and not actually going out and burning those calories that they're taking in with their food. So, it's a lack of physical activity. And it's not a big focus on health around here."* This premise was common; that things are hard to change in areas that are systematically oppressed: *"In this community, I guess you could say it's a lot of heart issues. So, like, blood pressure, and heart disease, and stuff -- there's a lot of that in this community. So, I think we need to have more focus on heart issues and blood pressure and stuff like that -- blood issues. That's for most instances in this community. We also have a little bit of cancer. Cancer -- people dying from that. But most of the stuff that we have in this community is hereditary diseases that we have problems with. And nobody's breaking the cycle. I mean, health-wise, we eat like our parents ate. And our kids eat like we eat. So, we just continuing the cycle."*

Other men shared about the influence and importance of being involved in the community to reduce crime and violence. An Emporia participant said, *"Being active, you know. Being involved in the community. Specifically, where I live, just being involved in that small community. Because it's real tight-knit, and everybody knows everybody."* An Eastern Shore man proposed that men should be doing more for their health, *"…sometimes you just get discouraged. I guess we don't really put our health as such a high standard for us,"* which it easy to mistreat one another "*because it's a lot of robbing going on nowadays, and people getting killed and stuff."*

Mental Health

Men acknowledge that mental health issues, diagnosis and substance abuse are common problems that arise from social factors and cultural issues. Stress is a daily experience and feelings of self-worth are based in the ability to have meaningful employment and income.

Reasons for Mental Health Issues

"If you want to improve people's health, they need to have some sense of self-worth. They need to have a job to go to. They need to be able to afford the things that they need in order to live healthily." This was a key theme throughout this population domain across all regions. *"Mental health is important, because it helps you take care of everything else, really."* Stress is overwhelming for men and finding relief is often a challenge. *"The pressure of it all. Not necessarily one thing, but the pressure of everything altogether. Like, everything builds up after time, having to do it for so long. Environment. Peer pressure."*

Access to facilities to find treatment is an observed gap. *"…we certainly don't have any here. We need treatment centers, addiction treatment centers, closer. I've got treatment a whole lot closer across the border, but you can't go there. There are a lot of people that would love to go down to Duke that live in this area, or did under prior insurances that they had before we had the exchanges and all that."* And even when services exist, some men from Emporia, Petersburg and Eastern Shore report, *"Just not wanting to go -- to go get that checked out. Or denial, because…mental health issues." "Guys just be mad at the world. I mean, they got a lot of activities going on, but people don't go." "A lot of times with mental health, too, with men -- we don't want nobody to say that we have a problem. We don't feel comfortable sitting down, talking, and sharing our feelings. Again, I think it's a lot of pride issues. Men are very prideful."*

Stress is a chronic issue and finding relief is a needed service for men in Virginia. *"Stress relief. They need some of that. I guess, job like, mental health, decompress from work. Everyday stresses of providing for families."* Uncertainty and fear of the unknown prevent men from knowing how to proceed in life. *"A lot of not knowing what to do next type stuff. Stress involving the future or choices they made, having kids earlier, things like that."* Stigma and shame also play heavily into stress management and the development of mental health issues, as a man from Roanoke explained, *"…being classified as drunks or addicts of any kind. And not all of us are. Because of low income situations, just some of us are -- come from just different backgrounds and everything or just have other mental issues that led them to go down different paths and everything. It's a major factor in men in my community. People that are depressed will start drinking which will amplify the depression to the point where they want to commit suicide. Or they'll start using more drugs, which there, again, will amplify the depression, which leads back to suicide."* Other men in Roanoke explain why mental health issues are so prevalent and the spiraling that so easily happens. *"I mean, some of it could be just years of abuse as a*

kid, or just some of it's just from being in the military service and just being in, I guess, active edge, doing the military thing. And them seeing, like, the war, fighting and everything, and just bottling it up, and then just -- it causes them to fight with themselves, just bringing up old memories that they thought they had forgotten about. I mean, some of it can causes them to where they can't take care of themselves at home, or they can't take care of themselves. So, they want to drink instead of paying for bills to stay at home and end up homeless and whatnot. Or they get kicked out because they're abusive to a partner or a child or a relative. And they have nowhere else to go but the homeless situation. And -- which ends up leading them to do something dangerous to themselves and/or others."

One man from South Boston suggested support through his employer's employee assistance program, *"we get a couple of mental health visits with, a counselor for individuals on the plan, for the family. We've used those sessions before. My wife has gone and talked about raising your kids and dealing with stressful kids and stuff like that. And so if more people had that, that would make a positive impact, I'm sure."*

Mental Health Diagnosis and Substance Abuse

Men interviewed all regions struggle with how to handle a mental health diagnosis. *"Mental health is really swept underneath the rug. A lot of individuals in my area suffer from [poor] mental health."* It is observed in every age group in the Commonwealth. *"Because there's men out here that's doing bad things, because something happened in they past life. And I think they get the right mental help, they probably can change it and make them go for the best." "I think that the downfall of most of my peer group has been, like, substance abuse or maybe depression, stuff like that. There are couple people I can think of that got involved with either, pain pills, or cigarettes and drinking, and all kind of other stuff."*

Suicide and depression, stress related to employment and opportunities to self-medicate, which is *"over the top,"* and using substances are easy. Most men agree that often men deal with depression *"and don't know it." "Again, someone could be depressed and might not even know. They might be dealing with anxiety or just dealing with something that has happened in their life that they've never addressed."* One Eastern Shore man said anger was *"a mental issue where we want to fight…mental issues deal with depression. Mostly depression, yes."* A continuous pulse of stress leads to more significant concerns. *"Injury and violence prevention services because men just flip out. Because of possibly not working. And I mean, I see a lot. I pay attention. I've been out of a job. I try to stay focused on what I need to do. And when I go over to the next man, he is flipping out. Same thing -- it probably goes back to mental health. You know? That's the main thing -- mental health."* It is a lot to keep up with and burnout is real for most men. *"Multiple jobs, stress at school, things like that. Substance abuse, nobody that I know personally, but I do know it's an issue. I've heard, stories and all sorts of stuff like that."*

Coping and managing mental health diagnosis, stress and anger often lead to the use of alcohol and other drugs. In all regions of Virginia, *"substance abuse is obvious"* especially *"It's an economically depressed area. And with substance abuse just comes other types of mental illness, …depression which leads to abuse of drugs."* Addiction is common in many communities and *"it is a very negative aspect of the community, health-wise."* Alcoholism is widely observed, *"there's a lot of people here that drink a lot all the time."* But there is also hope too. *"I been looking at a lot of peer recovery specialists that are coming out, and I think it's a big movement. It's really going to help a lot of men so to say because there are addictions. Alcohol, whatever it may be -- I think that really kind of plays for men a lot and we are hesitant to get that help."*

Contributing Social Factors

Most men connect feelings of self-worth and value to having a job, being able to manage their finances, and provide for their families. When there are deficits in these factors, like *"being unable to find work, living environments"* because *"the economy has been slow…historically."* On the Eastern Shore, it was the same story told by several men. *"We've had plants close and things like that. So, there's people that don't have something to keep their hands busy. There needs to be more opportunity for real employment opportunities, for good jobs, so that people can support themselves and lift themselves up out of this depression. Because a lot of people get good jobs, they leave here and then go to a bigger city. Another stressor is financial. They bring that home, that can lead to all kind of problems. It can lead to your home being broken or end up being divorced. I know that the divorce rate is high generally. So, we probably could use some improvement in that area around here, too. And I guess that would be counseling services or I guess, lack of counseling services could also be a contributing factor. Maybe people don't want to go because of the cost of it with insurance being a factor."* Not being able to secure a job is disruptive to a man's ability to cope and function. *"A factor that contributes to mental health issues among men in my community is the lack of work. No jobs and a lot of people just can't cope, they have been in trouble before. They convicted felons and they can't get a job."*

Living environments and family dynamics play a strong role as societal factors of mental health. One man from Emporia spoke about *"stressors at home and work, or peer pressure contribute as well. I have this theory about a lot of things go back to just simply money which can increase the stress, which can be depressing. We talk about a lack of education and then we say, 'Well, why does an individual lack the education?' It's because of the money, because he didn't have enough money."* An employed man on the Eastern Shore shared, *"You work all the time, and there's nothing to do around here and I think it gets to people."* It's clear when someone is experiencing stress and anxiety. Men observed that it is often *"Problems with work. Problems with other people. Self-doubt. Not taking care of yourself correctly or properly."* Additionally, *"…stressors from home, work, peer pressure. All three of those is pretty good. Because you get stress from home. You get your peer pressure. You get it from work, friends, spouses, family members."* Bullying is also a contributing factor. *"To the point some people try to bully me, …and it wasn't as bad as it is now. Because they got the internet now, and they can hide behind the screen. If you're that big and bad, show yourself. Don't hide behind a screen."*

Cultural Issues around Men's Mental Health

Poverty and racism were the most frequent cultural issues conveyed. Segregation is clearly observed in parts of the state that are known low health opportunity. Private schools serve white children, *"while black students generally all attend public schools and such."* Poverty culturally clouds the ability to provide adequate supports for families as well. *"So cultural here in mental health, you're really only exposed to one end of the spectrum. And that's whatever culture that you belong to. And specifically here, a big part of the culture is, you know, mental health is soft, and depression is a weakness, and, you know, things like that. It's all a negative perspective about mental health, or it's a myth. So I think that it keeps it as a very high issue here, but it's very under-developed and not dealt with at all."* Making the most of what you have is an element of pride and motivation despite chronic poverty in a region. *"If you look at it right now, either you work on the water, you work in a chicken plant, you're a farmer, or you have a professional job, but even the professional jobs that are here, there's not that many. It's very rare you have a lot of openings for professional jobs, but it's real easy to go out here on the water. Being a farmer, too. When I came to the Eastern Shore, we were migrant workers. My mom and dad, we worked in the fields and that's been a big change that I've seen, opposed to coming here in 1999 to where it's at now. The only, I guess, tomato factory or company that's really going is still Del Monte, and they're in Northampton County. I look at majority of the other ones, like in Accomack County. Like…they're all*

closing down. Less farming. I guess the chicken house is kind of taking over -- Tyson. Purdue and Tyson. If you really look at it, if that was taken away from the Eastern Shore, what would happen? Chaos, but again, there hasn't been that much change. Kids that come here and they're growing up, they don't want to stay on the Eastern Shore. They want to get off the Eastern Shore and that's kind of bad because you're not really building your community up. There's no change coming."

Services

Men are still hesitant to seek medical care even though they know they should. It is a need for men to have annual check-ups inclusive of reproductive health screenings or tests. Health care can be expensive, absent, or distant in communities causing issues for men to fully engage control of their well-being.

General Health Care

General medical and mental health care is important to men, despite not taking advantage of the access that does exist. One Emporia man said, *"I think everyone should have access to healthcare. The public should be better informed about exactly and specifically what's going on in the area of health."* This was supported by another man from Richmond, who shared, *"I believe if folks have access to healthcare, basic healthcare, that they can go in and get checked out. Having a man in the house that is healthy definitely has very many benefits." "That if you got a regular doctor's appointment, you go to,"* a sentiment echoed frequently by most men, *"I would say primary care because I think everything starts from there. You get a whole, general ideal...Every single person should get at least one physical done at least once a year, and that's where it starts and other things kind of come out from there."*

While men agreed that general primary care is important and should be done, there were consistent complaints. *"We have a lack of doctors and hospital facilities. We have a hospital, but the doctors are not there to mandate facilities. So, we have a big lack of manpower, I guess you could put it, in our hospitals."* Another man reported, *"Well, I think we need more clinical healthcare around here. You got a lot of guys that are sick, and they need more benefits. Just pure health services all above. But we got a lot of guys that's, you know, sick and can't afford to go to doctors and stuff."* Finding a doctor they felt comfortable with, *"I am not happy with my primary care doctor,"* and being able to be seen at alternate times were affirmed, "*…being able to access affordable healthcare and having open times and being able to get in to see a doctor fairly quickly."* And having to drive long distances was a barrier. *"I drive 70 miles. Like I said, I go see the doctor every three months, and I have other health problems."*

Issues with Health Care for Men

Men tend to wait or can be reluctant to get regular physical check-ups, and often for financial reasons which results in overuse of the hospital emergency department. *"And most men don't get regular physicals like they should, especially in this community. Unless something is wrong, they not going to the doctor. And most of the time when they go, somebody makes them go -- their wife or their child or somebody makes them go. So, it's not really a big focus on healthcare for men in this community." "They're using a lot of the Emergency Room services. Because they've been trained to understand that if they walk in there and if they don't have any money, they still have to treat them. Co-pays are an issue for a lot of those people."* There is a strong belief that health care is expensive, as a Richmond man explained, *"Access to healthcare is expensive. So, that prevents them from maybe going. I know a lot of people that don't have insurance. Even though the issue is you have all these thresholds that people can have access to insurance. Sometimes when you fall right under, below, you do not get access to those*

free services. So, that becomes a challenge. I know people that are struggling and they put off going to the doctor because of some of these things."

Specialty Care

Dental care and reproductive health are noted specialty services of great interest among rural men in Virginia. Having access to dentists is socially important and responsible. "*We do our checkups as far as yearly cleaning for dentist or like, just a yearly checkup." "If your dental is bad, your dental can affect you in ways that will you into terrible surgeries. Let's face it, if you don't have a very attractive mouth, it can affect you socially. It can take you into depression."* Sometimes it's a challenge, *"…they complain of lack of being able to get any kind of dental work done."* Similarly, with reproductive health for men, *"there's a lot of men out here that's engaging in relationship. And they're not protected,"* and men should have *"a test every couple years or whatever"* for sexually transmitted diseases.

Appendix A. Autocoded Themes Matrix

The autocoded themes are an output of the special categories (case nodes) that reveal themes based on built-in classification of references in the raw data. Themes are derived and attributed in a process that follows a framework to understand strength and corroboration.

	A : accessing	B : health	C : health services	D : mental health	E : services
1 : I	1	1	1	0	2
2 : I	0	2	0	2	0
3 : I	1	4	0	2	3
4 : I	3	2	1	0	3
5 : I	0	1	0	1	0
6 : I	1	2	0	1	1
7 : I	3	5	0	2	3
8 : I	2	7	5	4	7
9 : I	4	6	2	3	7
10 :	0	4	0	2	0
11 :	1	3	0	0	1
12 :	2	3	1	3	3
13 :	2	13	3	4	6
14 :	2	7	2	1	3
15 :	1	5	1	2	1
16 :	1	6	2	3	3
19 :	1	4	0	2	3
20 :	1	6	3	2	5
21 :	2	4	2	1	7
22 :	1	3	0	1	1
23 :	0	3	1	2	2
24 :	0	4	1	0	3
25 :	3	11	3	6	5
26 :	2	6	2	0	4
27 :	0	4	2	2	3
28 :	2	3	2	1	3
29 :	0	3	1	1	1
30 :	1	4	1	2	4
31 :	2	6	2	1	4
32 :	1	3	1	2	3
33 :	1	4	3	1	3
34 :	0	4	1	1	1
35 :	1	2	1	0	3
36 :	3	9	5	2	12
37 :	0	5	1	2	1
38 :	1	8	2	2	4
39 :	2	4	1	0	2
40 :	1	4	1	2	1
41 :	2	4	1	0	2

Appendix B. Nodes Compared to References

The nodes identified show a hierarchy of reference frequency in the autocode process. Mentions of specific nodes are categorized and allow for comparative responses in the thematic analysis.

Nodes	Number of coding references
Nodes\\Autocoded Themes\\accessing\accessing health services	71
Nodes\\Autocoded Themes\\accessing\accessing services	64
Nodes\\Autocoded Themes\\accessing\emergency access	1
Nodes\\Autocoded Themes\\accessing\great access	1
Nodes\\Autocoded Themes\\accessing\language access	1
	138
Nodes\\Autocoded Themes\\health services\accessing health services	71
Nodes\\Autocoded Themes\\health services\dental health services	8
Nodes\\Autocoded Themes\\health services\general health service	4
Nodes\\Autocoded Themes\\health services\main health services	60
Nodes\\Autocoded Themes\\health services\mental health services	89
	232
Nodes\\Autocoded Themes\\health\accessing health services	71
Nodes\\Autocoded Themes\\health\dental health	5
Nodes\\Autocoded Themes\\health\dental health services	8
Nodes\\Autocoded Themes\\health\emotional health	2
Nodes\\Autocoded Themes\\health\general health service	4
Nodes\\Autocoded Themes\\health\goo health	1
Nodes\\Autocoded Themes\\health\good health	2
Nodes\\Autocoded Themes\\health\good health insurance	1
Nodes\\Autocoded Themes\\health\good health insurance program	1
Nodes\\Autocoded Themes\\health\good health providers	2
Nodes\\Autocoded Themes\\health\health care provider	2
Nodes\\Autocoded Themes\\health\health care providers	2
Nodes\\Autocoded Themes\\health\health center	1
Nodes\\Autocoded Themes\\health\health conditions	1
Nodes\\Autocoded Themes\\health\health department	3
Nodes\\Autocoded Themes\\health\health disparities	1
Nodes\\Autocoded Themes\\health\health fairs	5
Nodes\\Autocoded Themes\\health\health information	17
Nodes\\Autocoded Themes\\health\health insurance coverage	13
Nodes\\Autocoded Themes\\health\health issues	6
Nodes\\Autocoded Themes\\health\health male	10
Nodes\\Autocoded Themes\\health\health problem	2
Nodes\\Autocoded Themes\\health\health provider	1
Nodes\\Autocoded Themes\\health\health sessions	5

Nodes\\Autocoded Themes\\health\health situation	2
Nodes\\Autocoded Themes\\health\health system	2
Nodes\\Autocoded Themes\\health\health thing	1
Nodes\\Autocoded Themes\\health\ideal health	1
Nodes\\Autocoded Themes\\health\important health	1
Nodes\\Autocoded Themes\\health\live health online	5
Nodes\\Autocoded Themes\\health\local health agencies	2
Nodes\\Autocoded Themes\\health\main health services	60
Nodes\\Autocoded Themes\\health\mental health	22
Nodes\\Autocoded Themes\\health\mental health area	2
Nodes\\Autocoded Themes\\health\mental health diagnosis	2
Nodes\\Autocoded Themes\\health\mental health facility	7
Nodes\\Autocoded Themes\\health\mental health field	2
Nodes\\Autocoded Themes\\health\mental health hospital	6
Nodes\\Autocoded Themes\\health\mental health industry	4
Nodes\\Autocoded Themes\\health\mental health issues	10
Nodes\\Autocoded Themes\\health\mental health male	32
Nodes\\Autocoded Themes\\health\mental health needs	8
Nodes\\Autocoded Themes\\health\mental health provider	4
Nodes\\Autocoded Themes\\health\mental health services	89
Nodes\\Autocoded Themes\\health\mental health stigma	6
Nodes\\Autocoded Themes\\health\mental health visits	4
Nodes\\Autocoded Themes\\health\much health coverage	1
Nodes\\Autocoded Themes\\health\physical health	11
Nodes\\Autocoded Themes\\health\physical health needs	1
Nodes\\Autocoded Themes\\health\reproductive health	9
Nodes\\Autocoded Themes\\health\reproductive health issues	1
Nodes\\Autocoded Themes\\health\rural health system	1
Nodes\\Autocoded Themes\\health\sexual health awareness	1
Nodes\\Autocoded Themes\\health\unexpected health issues	4
Nodes\\Autocoded Themes\\health\varied health issues	2
	469
Nodes\\Autocoded Themes\\mental health\mental health	22
Nodes\\Autocoded Themes\\mental health\mental health area	2
Nodes\\Autocoded Themes\\mental health\mental health diagnosis	2
Nodes\\Autocoded Themes\\mental health\mental health facility	7
Nodes\\Autocoded Themes\\mental health\mental health field	2
Nodes\\Autocoded Themes\\mental health\mental health hospital	6
Nodes\\Autocoded Themes\\mental health\mental health industry	4
Nodes\\Autocoded Themes\\mental health\mental health issues	10
Nodes\\Autocoded Themes\\mental health\mental health male	32
Nodes\\Autocoded Themes\\mental health\mental health needs	8
Nodes\\Autocoded Themes\\mental health\mental health provider	4

Nodes\\Autocoded Themes\\mental health\mental health services	89
Nodes\\Autocoded Themes\\mental health\mental health stigma	6
Nodes\\Autocoded Themes\\mental health\mental health visits	4
	198
Nodes\\Autocoded Themes\\services\accessing health services	71
Nodes\\Autocoded Themes\\services\accessing services	64
Nodes\\Autocoded Themes\\services\babysitting services	1
Nodes\\Autocoded Themes\\services\certain services	1
Nodes\\Autocoded Themes\\services\community service agencies	1
Nodes\\Autocoded Themes\\services\counseling services	2
Nodes\\Autocoded Themes\\services\dental health services	8
Nodes\\Autocoded Themes\\services\dental service	7
Nodes\\Autocoded Themes\\services\family support services	7
Nodes\\Autocoded Themes\\services\free service	2
Nodes\\Autocoded Themes\\services\free services	2
Nodes\\Autocoded Themes\\services\general health service	4
Nodes\\Autocoded Themes\\services\important services	21
Nodes\\Autocoded Themes\\services\injury prevention services	8
Nodes\\Autocoded Themes\\services\main health services	60
Nodes\\Autocoded Themes\\services\men services	1
Nodes\\Autocoded Themes\\services\mental health services	89
Nodes\\Autocoded Themes\\services\military service	3
Nodes\\Autocoded Themes\\services\parenting services	1
Nodes\\Autocoded Themes\\services\violence prevention services	1
	354

Maternal and Child Health Providers and Systems

Thematic Analysis Summary of Key Informant Interviews and Partner Survey

Key Themes

- Many gaps and unmet needs exist among the current maternal and child health (MCH) providers and systems in which they function, from the individual to policy levels.
  - Focusing MCH interventions on the individual patient is a common approach but too narrow to be effective.
  - Relationships within families are known sources of influences to improved health but providers and systems do not readily provide support at this level.
  - MCH providers describe system gaps related to capacity, coordination and availability of services, including specialists, itinerant care, medical homes, mental health, dental health, and hemophilia care.
  - Community-level health influence is based on the relationships between organizations and connect with social determinants and factors such as transportation, housing, food security, childcare, and employment.
  - National, state, local laws and regulations governs health care access, including Medicaid expansion.
- MCH providers demonstrate implicit bias in their practice and systems of healthcare have chronically oppressed and disenfranchised people of color, immigrants and non-native English speakers, persons of low socioeconomic status, incarcerated persons, people with disabilities, and those who identify as LGBTQ+.
- Many MCH providers in Virginia offer education, advocacy, health promotion, chronic disease management, preventive screenings, case management and care coordination, developmental evaluations, leadership and systems development, and general health care.
- Resolving the gaps may include more transparency on health care costs, culturally-responsive services, supporting the family unit in care settings, integration of medical-mental-dental care, employ telemedicine and satellite clinics, and move MCHBG funds to greatest needs in locality.

Gaps and Unmet Needs in the MCH System

Contextualizing the needs that maternal and child health (MCH) providers have in working the identified populations of this assessment can be done using the social ecological model (Bronfenbrenner, 1977). The model organizes levels of influence (such as individual, interpersonal, organizational, community, and public policy) and the idea that behaviors both shape and are shaped by the overall social environment. Creating communities conducive to change makes it easier to adopt healthy behaviors and prevent unnecessary disease and disability. Needs identified through key informant interviews and a partner-provider survey are organized by these levels.

Individual

Individual knowledge, attitude, and behavior are a significant influence on public health outcomes. Focusing MCH interventions on the individual patient is a common approach. *"It's a lack of understanding about self-care during pregnancy."* Throughout every population domain, MCH providers and systems seek to impact the individual first. *"I think that there is a lot of need for our kids to have an understanding of foods that help them feel better. And, also for parents to understand nutritional needs for their children. We see a lot of children that have weight-related issues and also dental-related issues*

and psychiatric-related issues that I do believe have contribution by food that are being consumed." Patients and clients want *"to be able to have access to seeing the providers who know what they're doing. To have access to the medicines that are going to work. Whether they have access to healthcare insurance that will help cover those costs."* Supporting individuals is not where it should be. *"You know, and having support for parents that do struggle in those areas to be able to get access to [mental health] services that can help them not bring that into the home for their children."* This generally extends to individuals' access to health care, long wait lists, being uninsured, services operating at capacity, and at times, underutilization of existing education and outreach programs (i.e., WIC, home visiting).

Interpersonal

Families, friends, and social networks influence health at the interpersonal level. *"I think what initially comes to mind is mental health services. They're getting better. I think engaging the family to go is a big step. And that's hard sometimes. Because they don't want to have to go to any kind of counseling or anything like that. Some families do. Some families don't. But I think that - I just think there's a little bit more we can do."* Familial or generational influence of behavior is common but not always treated in context to the relationships involved. *"A lot of kids that have behavioral problems, there's not been mental health care given to the parents, who have also suffered a lot of trauma as children. Then [indiscernible], and they didn't have access to services. So, it's kind of a difficult thing. I would say there's a lot of fallout from all that. So, it affects the parents, and then it affects the children."* Providing services to families as a unit is not customary, *"I think trauma-informed cognitive behavioral therapy, for the parents, in-home parent skill training. I do know we have a higher -- we have a lot of teens in foster care who become pregnant." "Grandparents or the relatives that are trying to raise the children when the parents are incarcerated or whatever. To support them and their efforts and to reunite them with their parents, just increased support could help them have that stable family life. And it's kind of a huge issue."* Relationships within families are known sources of influences to improved health but providers and systems do not readily provide support at this level.

Organizational

The influence of health through organizations, institutions, and agencies is the primary venue for medical, dental and mental health care in Virginia. MCH providers describe system gaps related to capacity, coordination and availability of services at this level. There is a huge lack of specialty care in key regions of low health opportunity. *"The lack of high-risk maternal/fetal medicine types are – the complete absence of that – is a problem." "Management of high-risk pregnancies, dental health, and the difficulty of accessing contraception"* are clear gaps in these areas of Virginia. *"Things like – there's not a neurosurgeon." "There is no available provider performing vasectomy services for men on the Eastern Shore…and that's a barrier." "We do have a doctor who comes down about every quarter, maybe four times a year from UVA and does vasectomies…and only four men each time." "I think the only people…that do pregnancy termination are private provider in Bristol, which is probably an hour or two hours for most of our population."* Doctors are commonly pulled from other areas to offer satellite or single-day care in areas of greatest need. *"But then it puts a strain on having access for appointments and doctors here locally in this area."* And the tremendous needs of families of children with special health care needs. *"…They have so many appointments that it's overwhelming to the families. You know, one…may have five different doctors…so we try to coordinate the care…appointments that would be all on the same day, to minimize stress on the family."* Linking with a medical home early on and at any point in care is available, but *"somehow we fall short somewhere."* Providers comment that *"having the right mix of physicians"* to work with the family is a need.

Connecting providers with patients for dental care is another organizational gap. *"Dental is really hard…the wait list is up to, like, six months." "There's not a lot of access to affordable dental care until Medicaid includes adult dental." "Dental health is only available if you have the money to pay for it." "For our adult population, there is very little dental access, and that's getting worse. A lot of our private practice dentists are in the process of retiring or have retired. And a lot of my patients just can't afford dental care…it's horrible."* Developmental pediatricians, child psychiatrists, and licensed psychologists and counselors are in short supply for a high demand, and almost always in large metro health systems. Even when positions are open, they are hard to fill in the rural and outlying areas. *"So, some of those are just incredibly difficult positions to fill. And nationally, we're filling with nurse practitioners who don't have a specialty, which is very costly from a training perspective. We need to be careful that we're not watering down the services that we offer." "We do not have licensed mental health. There's plenty of mental health, but very, very few licensed people. And definitely not a child psychiatrist. And child psychiatrists in our area -- you know, the Community Service Board could say, "Oh, we have a child psychiatrist that supervises all of our nurse practitioners." Well, if that child psychiatrist is supervising the nurse practitioners for, like, 30 counties, how much supervision are they really getting? So, the child psychiatrist would be huge. Reasonable driving distance for families."*

A special acknowledgement of the hemophilia treatment centers and the limited capacity that the three sites offer to such a large state. *"Sometimes people have to come a pretty significant distance to access that care. Some of the folks that live in the Chesapeake, Virginia Beach area don't want to go through the tunnel or drive through here."* As patients with hemophilia age, there is considerable concern about skilled nursing care. *"Finding skilled nursing placements for people with hemophilia is almost impossible, due to reimbursement issues with the way the Medicare reimburses for the medication that their patients take."* Overuse of the emergency department is a problem, which is exacerbated by EMS and providers who do not know the course of treatment, and because *"some of those medical providers don't realize you're supposed to give the medicine first. Or some of the doctors ask, "When did you get hemophilia?" Well, you're born with it."* Testing should be covered by insurance, but it is not in all cases. *"There is genetic testing for the carriers but sometimes insurances do not pay for that and so when you look at genetic testing for the carrier, you have to do genetic testing on the patient with hemophilia."* Education of providers in facilities and systems is critical to help this population receive appropriate care in Virginia, including reproductive health care managing adolescents with menstruation, patients with pain, and the mental health impact of having hemophilia.

Community

Community-level health influence is based on the relationships between organizations and connect with social determinants and factors such as transportation, housing, food security, childcare, and employment. *"A lot of my clients rely primarily on their Emergency Department for healthcare because they have to take two or three buses to get to their primary care provider." "We partner with UVA, which is a two-hour car ride. So, it's really hard for our patients who don't have cars to go to UVA for an EGD or some basic procedure. We partner with UVA's Charity Care. The fact that we don't have any local partners to provide charity care is a large health -- makes it hard for people to take care of their health needs."* Sometimes relatives or friends provide transportation which can be disruptive to scheduling appointments. Not all cities and towns have public transportation available, or the buses run limited hours and long waits in between pick-up and drop-offs, or they don't run close to needed resources like pharmacies or grocery stores. *"Then, the Medicaid transportation can be unreliable, hard to schedule -- often late." "Again, a challenge to get to the ones that are open at varying times at the day and that don't work either with a working schedule or lack of transportation or being able to afford public*

transportation to get there." "We're very rural, so we don't have a lot of public transportation. We see a lot of parents that are economically challenged and so they may not have a vehicle, or they may have one vehicle per family." Transportation issues coincide with safe housing conditions. *"Proper housing because we've seen so many kids with asthma that are in these moldy Section 8 homes and housing units that are privately owned. Nobody cares about eradicating the mold or the cockroaches and that's terrible conditions for children to have to grow up in. It just causes so many health issues."* And with housing, comes food security. *"Our local food bank is a mile away from the closest bus stop. So, you can only go to the food bank if you have a car or if you walk to churches nearby." "Fresh food being available in close proximity, fresh fruits and vegetables, is also a challenge. We might have a farmer's market on the weekend, but not someplace nearby where it's affordable and can necessarily be accessed with WIC dollars."* Childcare is also scarce. Families often find *"it's hard to get to a provider because of lack of childcare resources here."* In many cases, both parents are working which creates *"a huge need for quality childcare."* Workplaces and employers may not *"facilitate for sick leave or sick time off. A lot of our clients work in cleaning or day labor. So, the day-to-day jobs vary. When it comes to coming into the clinic for routine appointments versus making money for that day, they'd rather take a job, like, sporadically. It's really hard to keep up with their routine appointments."*

Public Policy

National, state, local laws and regulations govern the sustainability in health care access, including Medicaid expansion. Each year, limited funds are made available through state waiver programs for persons with disabilities. But these funds are quickly allocated usually to most severe and fragile in the Commonwealth, *"but anything that would improve the quality of a special healthcare needs child"* should be done. *"For children and adolescents, I think that sexual health is something that's severely lacking and needs to be improved."* The Virginia Department of Education provides a limited-scope family life education curriculum that is not funded yet mandated for implementation. An additional gap at the policy level include *"some insurance carriers see [dental care] as not really essential medical care and therefore, they don't pay for it."*

Health Equity and Underserved Populations

The nature in which maternal and child health providers and systems meet the needs of all Virginians is affected by bias, racism, discrimination, and injustice. Research confirms that individual providers demonstrate implicit bias in their practice and systems of healthcare have chronically oppressed and disenfranchised people of color, immigrants and non-native English speakers, persons of low socioeconomic status, incarcerated persons, and persons who are lesbian, gay, bisexual, transgender, queer, etc. (LGBTQ+).

People of Color

"Communities of color are also underserved. I think we're trying to do a better job with that, but we're still not there yet." One noted disparity is among *"children of color who are living in group homes. And therefore, there are often higher diagnoses of mental health diagnoses, behavioral, oppositional defiance, lots of that."* Another provider shared, *"I find that black and brown kids are still being diagnosed much later with autism."* It is common to find mistrust between the African-American community and health care providers, "*that unfortunately has spilled over into our current time. And then just a general lack of resources in more heavily African-American communities." "I think there's a lot of health issues that affect African-Americans that I don't think our practitioners focus enough on. Blood pressure, smoking, all those kinds of things. They're more at risk in pregnancy, also." "African-American women, for example, being at a higher risk for infant or maternal mortality."* Providers are

often not representative of the patient population. Even in Western Tidewater, the Hispanic population *"don't have the same access and ease to care."* It is clear that a need is to *"help them overcome their bias in serving special populations."*

Immigrants and Non-Native English Speakers

MCH providers and systems agree that *"there are issues in our minority population who are not predominantly English-speaking and don't have documentation here in the U.S."* Significant barriers exist in language and required paperwork. In one region, there is *"a large Haitian-Creole speaking population, and very limited translation services for them. There's some very limited literacy within the community, both with our English-speakers as well as with our Haitians and our Latinos."* Health care offices do not have materials written for low-literacy in various languages. *"Just very simply, fundamental things about healthcare that people don't understand. Even things like educating people about how you get your refill of your medicine at the pharmacy. It's very confusing to a lot of our patients. And so, it's very time-consuming because of the teaching that's required just to get through very basic things."* Providers have the perception that people who are Hispanic *"are not interested in birth control"* because of their religious beliefs. Children are often put in the position to serve as translators for their parents. *"Their mother and father might have spoken Spanish, but they speak partial Spanish, partial English." "There's still not enough trained, certified interpreters for the Hispanic population."* Those who are undocumented *"don't access care and services in a regular and routine manner"* often *"out of fear of tapping into the system that is not being very friendly to them right now."* Immigrants are typically uninsured because they *"aren't able to get insurance. And they then have emergencies and are not able to pay their hospital bills." "And with migrant care, the Eastern Shore Rural Health has kind of taken the charge of providing migrant care to -- just general healthcare for those patients. But it's still lacking because of both lack of resources, but also inability for those people to actually get to us for their healthcare, because they're working all the time." "There are a lot of cultural issues that keep families from utilizing the healthcare that's available to them."*

Persons of Low Socioeconomic Status

"We serve everybody but we definitely see disparity, certainly economic disparity is probably one of the biggest." Living in poverty may lead to poor health outcomes. One Southwest provider said, *"A lot of my clients are white, but they are really poor and they have the same kinds of negative health outcomes that you come to find among other minority populations."* Another provider stated, *"The lower socioeconomic poverty-related healthcare issues, as well as, going along with access to care, which worries me a lot with even our special healthcare needs children."* A Richmond-based provider shared, "*I see a disproportionate number of children in poverty suffering from respiratory illnesses because of where they have to live."* Poverty is associated with disease and disability. *"And hand-in-hand with poverty goes obesity, and all the issues that comes along with that…it's much easier and much cheaper to go to a fast food restaurant and feed four of your kids than it is to buy fresh fruits and vegetables in the grocery store."*

Lesbian, Gay, Bisexual, Transgender, Queer (LGBTQ+)

Failure to provide culturally-inclusive health care for the LGBTQ population is evidenced in all regions of the Commonwealth. *"We do not have any specifically-identified services for children and youth that experience that."* Many providers in more rural areas of the state are often not willing to provide care for persons who are LGBTQ+, or simply have little to no experience knowing or working with someone before. *"The barriers that we see are lack of education, lack of knowledge." "My whole time that I've been working…I think I've only worked with maybe one or two families who identify as LGBTQ."* Discrimination is observed but some providers do their best to connect with patients. *"They sometimes*

feel very discriminated against and marginalized in this area because overall a very conservative area. As far as discrimination, I think that's something that they suffer from greatly." This does not seem to be limited to one age group. *"As for age, we see all ages, so just getting the word out to young teens to know about our services is probably the age that we need to make sure that they're aware of what we offer and what services we have."* More serious concern was demonstrated for transgendered youth and men. "*And teens are left out. A lot of times, teens don't know that they can go to Health Departments."* They tend to have *"much higher rates of mental health disorders, definitely."* And how are their reproductive needs being met is of concern. *"I think [of] transgender men is that they don't end up getting pap smears because they don't know which providers to go to who are going to be able to deal with that appropriately."*

People with Disabilities

Despite federal laws that protect accessibility, we know that equity and resources are not adequate. Children and adults diagnosed with physical, intellectual or developmental disabilities have many challenges on a daily basis. Transitioning out of the school system, *"there's nothing for them…there are no services, nothing in place for them."* Misdiagnosis is also an issue. *"But a lot of times, they are being diagnosed with an intellectual disability and not getting the educational services that they need. I would just say, too, a lot of black and brown kids are diagnosed with having ADHD and behavior issues. But a lot of times, behavior issues are related to -- could mean that a child may have autism. I'm seeing a lot of little, bitty, young children -- I mean, two-year-olds -- that are being diagnosed with ADHD. Two-year-olds in general are -- they're busy. They're learning. They're exploring. So, a lot of times, I see a lot of black and brown kids being diagnosed with behavioral disorders. When a lot of times, that's just not the case."*

MCH Provider and System Capacity and Strengths

A comprehensive needs assessment not only identifies gaps but assets and strengths as well. Many MCH providers in Virginia offer education, advocacy, health promotion, chronic disease management, preventive screenings, case management and care coordination, developmental evaluations, leadership and systems development, and general health care. This capacity ensures infants, children, youth, and adults have access to the services and care they need. One organization shared, *"Our job is to convene the providers and the organizations that are serving this population to look at systems change. So, we're really not providing services or creating new programs, but rather looking at existing programs and services to see how we can align and coordinate across the five cities. To sort of look at where there's duplication or maybe gaps, and trying to fill the gaps or eliminate duplication. Strengthening the systems overall around children and pregnant mothers."* This type of coordination and collaboration demonstrates strong influence at the community-level. Another provider said, *"I will do the case management for our Empowered Options program. It's a program that goes into regional jails and educates women of reproductive age on healthy pregnancy and then different family planning options. So we also provide, like, family planning clinics to them and there are choices for birth control sources. Once they've gone through the program, so if I have their case management, then we'll help connect them to resources after they're released."* Being cognizant of the continuum of care is a critical strength.

Care coordination and case management are services that are commonly provided, and includes early intervention and *"some school support services as well through the Department of Education."* This often incorporates *"transportation to doctor's appointments and education around parenting and guiding to community resources through home visits."* For special populations, *"Our role is really to try to keep our patients healthy and at home and out of the healthcare system. We do provide direct clinic care*

for the treatment of hemophilia." Within the MCH system, there are organizations that focus on professional development with providers in direct service with families. *"For example, we're trying to promote a statewide system of infant developmental health and mental health consultation. We have very little in our state available to families."* Other organization provide *"information and resource linkage, such as financial literacy, budgeting, life skills, educational resources and support."* This service helps the state and regions to prevent unnecessary visits to the hospital, because home visits educate the family, *"informing them of things that can happen."* The Baby Care Home Visiting Model employs nurses *"who are equipped to support pregnant moms and their infants with medical questions and with the education component."*

Mental health capacity and strength are described as comprehensive evaluations, psychological testing, and diagnosis. One provider has *"professionals from different disciplines, specifically, we have psychologists, education consultants, a social worker, a nurse, and a nurse practitioner. We provide evaluation services for children and adolescents that look at their medical needs, their psychological needs, their school and educational needs, and then the family needs."* Another provider looks "*at genetic components and also physical health components for our children."* The goal of these providers is to give families *"recommendations for resources, connection to school services, things like that."*

General health care through primary care is an asset. In one area, there are *"specialty providers that includes cardiology, pulmonology, allergy, neurology, gynecology, and endocrinology. We work with children for transportation services. We offer interpret services. We also have a special fund set up at our hospital that allows patients to come spend the night overnight if they have to travel great distances, so that they don't have to make that trip back in the same day. We work with people with special needs or disabilities, with housing developments, to make sure they have adequate ramps and everything in place."* In low health opportunity areas, providers become a one-stop shop. "*We're a community health center. That is like a medical home. So, we have kinds of all primary care physician services…we have outreach workers who kind of arrange to help people with insurance and kind of helping with different things and kind of being aware of the services of the county. There is x-rays at some of the facilities. There are laboratory services in-house -- some basic labs. I would say it's the primary source of medical care on the Eastern Shore of Virginia. For dental care, the dentists see both kids and pregnant women, and they do have critical patients -- a critical patient target population in terms of pediatrics, pregnant women, diabetics."* Basic needs can be met *"like vaccines, and caring for them when they're sick, and managing diabetes and high blood pressure – all of that kind of things. So, we prescribe contraceptives and we do perform LARC insertions. We also perform pregnancy testing and STI testing."*

In Southwest, there is strong capacity to manage women of child-bearing age to prevent neonatal abstinence syndrome (NAS) or who are in Medication Assisted Treatment (MAT) programs. *"We also do case management with all the pregnant women on stuff that's exposed to infants and children. We also take on foster parents and foster babies and counseling them on how to take care of a NAS baby. We provide transportation for the mothers and babies to any appointments that they have. We work directly with their doctors, Social Services, MAT providers, the hospitals, and other agencies, such as Frontier Health or Early Intervention. We develop plans of safe care with all clients during the pregnancy for the mothers and for their babies."* This is a critical asset in the MCH system.

Insurance coverage has expanded in the past year, specifically Medicaid who prioritizes foster children, children in families that meet low income thresholds, pregnant women and infants, and those with other qualifying experiences or waivers. *"That access, automatic enrollment into that service, and the*

coverage that they have. Especially for the foster parents. They don't have to worry about the child not seeing a doctor or not having access to health insurance." "These families could not afford healthcare for children. Because children with special needs have so many needs." The young adult population (19- to 26-year-olds) has extended coverage under parent's insurance plans, *"so that's definitely helped that underserved population,"* especially with family planning, contraception, and STI testing. Medicaid expansion *"massively improved access to care for pregnant women in particular. And actually, even though most of our kids already qualified for Medicaid, but it improved the kids, because their parents can now get healthcare. So, kids having healthy parents helps kids. So, by far, Medicaid is the best thing that ever happened to the Commonwealth of Virginia's state of health."*

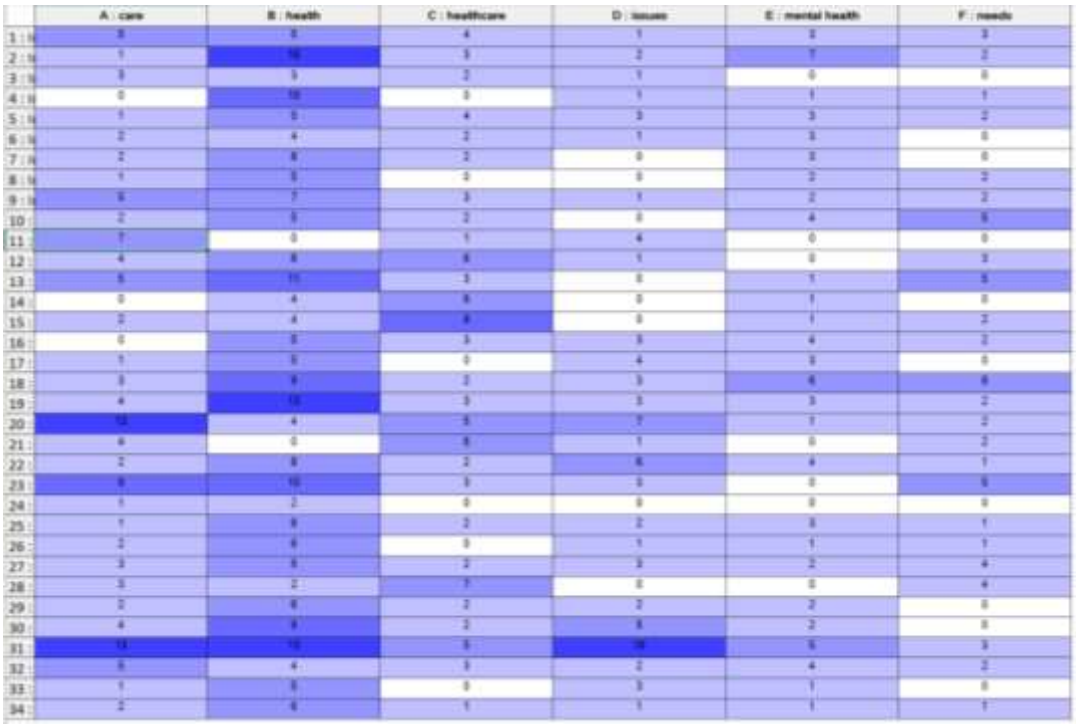
Resolving the Gaps: Recommendations for Improvement

While it is not feasible to address every gap that is identified in this scan and assessment, these recommendations may be considered.

- Insurance companies and health care providers should help patients understand the costs of care. *"A lot of our patients will tend just not – they'll opt not to buy that medication because it's too expensive and there's no time in a 15-minute appointment to explore the options."*
- Providing culturally-responsive education and services to populations of higher risk and disparity. *"They need to work with people with disabilities as well as families who have young people, loved ones with disabilities"*
- Support the family unit in health care, mental health treatment, and school advocacy. *"I know every state has an advocacy agency for children who have special needs. And I think we need those people to come to these counties and do programs for parents or guardians. You know, to help them understand their rights." "But we know from studies that so much of long-term health and outcomes come from your environment early on. So, looking at how we can truly engage families more and empower them through parenting classes and just teaching families how to engage with their kids, how to play with their kids, and how to identify issues."*
- Bring greater connection and integration between the network of health care providers and the case managers. *"I think we should allow the healthcare providers who are seeing the patient and the case managers that work with those healthcare providers – I think they should have a stronger link into the services and programs for the kids, versus the Medicaid managed care organizations deciding that from the telephone."*
- Use MCH block grants to local health districts to focus on the biggest needs in the locality. *"I would like to see more psychiatric services provided for moms during their pregnancy and immediately after, so that they don't spiral out of control after they delivery their kids."*
- Offer telemedicine or satellite clinic care. *"I think satellite clinics would be a help. I think tapping into some of those satellite clinics and working with the primary care doctors down there I think would be helpful but that takes resources." "But being able to access more resources through telemedicine or in their community would certainly be helpful."*

Appendix A. Autocoded Themes Matrix

The autocoded themes are an output of the special categories (case nodes) that reveal themes based on built-in classification of references in the raw data. Themes are derived and attributed in a process that follows a framework to understand strength and corroboration.



	A : care	B : health	C : healthcare	D : issues	E : mental health	F : needs
1 : N	8	8	4	1	3	3
2 : N	1	10	3	2	7	2
3 : N	3	3	2	1	0	0
4 : N	0	10	3	1	1	1
5 : N	1	5	4	3	3	2
6 : N	2	4	2	1	3	0
7 : N	2	8	2	0	3	0
8 : N	1	5	3	0	2	2
9 : N	8	7	3	1	2	2
10 :	2	5	2	0	4	5
11 :	7	0	1	4	0	0
12 :	4	8	6	1	0	3
13 :	5	11	3	0	1	5
14 :	0	4	5	0	1	0
15 :	2	4	8	0	1	2
16 :	0	5	3	3	4	2
17 :	1	5	0	4	3	0
18 :	3	8	2	3	6	6
19 :	4	12	3	3	3	2
20 :	12	4	5	7	1	2
21 :	4	0	5	1	0	2
22 :	2	8	2	6	4	1
23 :	8	10	3	3	0	5
24 :	1	2	0	0	0	0
25 :	1	8	2	2	3	1
26 :	2	8	0	1	1	1
27 :	3	8	2	3	2	4
28 :	3	2	7	0	0	4
29 :	2	8	2	2	2	0
30 :	4	8	2	6	2	0
31 :	13	12	5	12	5	3
32 :	6	4	3	2	4	2
33 :	1	5	0	3	1	0
34 :	2	6	1	1	1	1

	G : population	H : program	I : providers	J : school	K : services	L : system
1 : N	2	0	1	0	4	2
2 : N	0	0	1	0	4	2
3 : N	0	1	1	0	3	0
4 : N	2	2	1	0	3	0
5 : N	0	5	1	1	3	2
6 : N	0	3	4	1	1	0
7 : N	0	2	2	1	8	0
8 : N	1	1	3	0	3	1
9 : N	1	1	1	1	9	9
10 :	0	1	0	1	3	0
11 :	2	0	4	4	8	1
12 :	1	1	3	1	8	3
13 :	3	3	0	0	11	2
14 :	2	0	3	2	1	4
15 :	0	0	4	2	3	3
16 :	2	1	2	3	7	4
17 :	0	4	2	3	4	3
18 :	2	2	5	1	11	0
19 :	1	2	0	0	1	1
20 :	9	3	9	1	6	2
21 :	1	1	5	0	7	3
22 :	1	1	0	2	6	4
23 :	3	1	4	1	8	1
24 :	0	1	1	1	2	1
25 :	1	0	3	0	4	1
26 :	1	0	1	5	4	1
27 :	0	1	0	0	4	0
28 :	3	0	3	2	0	2
29 :	0	1	3	0	3	2
30 :	3	2	2	1	4	2
31 :	5	5	3	2	2	4
32 :	2	0	0	1	4	1
33 :	0	3	0	2	5	3
34 :	2	2	4	2	11	2

Appendix B. Nodes Compared to References

The nodes identified show a hierarchy of reference frequency in the autocode process. Mentions of specific nodes are categorized and allow for comparative responses in the thematic analysis.

Nodes	Number of coding references
Nodes\\Autocoded Themes\\care\accessing care	1
Nodes\\Autocoded Themes\\care\adult care	10
Nodes\\Autocoded Themes\\care\baby care	3
Nodes\\Autocoded Themes\\care\baby care classes	1
Nodes\\Autocoded Themes\\care\baby care home	1
Nodes\\Autocoded Themes\\care\cancer care	1
Nodes\\Autocoded Themes\\care\care connection	1
Nodes\\Autocoded Themes\\care\care connection team	5
Nodes\\Autocoded Themes\\care\care coordination	9
Nodes\\Autocoded Themes\\care\care coordination linkage	2
Nodes\\Autocoded Themes\\care\care issue	2
Nodes\\Autocoded Themes\\care\care organizations	5
Nodes\\Autocoded Themes\\care\certain care	2
Nodes\\Autocoded Themes\\care\chronic care	1
Nodes\\Autocoded Themes\\care\comprehensive care	1
Nodes\\Autocoded Themes\\care\dental care	11
Nodes\\Autocoded Themes\\care\direct care	1
Nodes\\Autocoded Themes\\care\emergent care	1
Nodes\\Autocoded Themes\\care\episodic care	2
Nodes\\Autocoded Themes\\care\extensive care	2
Nodes\\Autocoded Themes\\care\foster care	9
Nodes\\Autocoded Themes\\care\foster care system	2
Nodes\\Autocoded Themes\\care\fund care coordination	3
Nodes\\Autocoded Themes\\care\health care field	3
Nodes\\Autocoded Themes\\care\health care insurance	3
Nodes\\Autocoded Themes\\care\higher-level specialty care	4
Nodes\\Autocoded Themes\\care\intensive care units	1
Nodes\\Autocoded Themes\\care\little care coordination	1
Nodes\\Autocoded Themes\\care\local care	1
Nodes\\Autocoded Themes\\care\pediatric care	4
Nodes\\Autocoded Themes\\care\pediatric specialty care	1
Nodes\\Autocoded Themes\\care\personal care	2
Nodes\\Autocoded Themes\\care\pregnancy care	1
Nodes\\Autocoded Themes\\care\prenatal care	13
Nodes\\Autocoded Themes\\care\preventative care	4
Nodes\\Autocoded Themes\\care\primary care	8
Nodes\\Autocoded Themes\\care\primary care doctors	2

Nodes\\Autocoded Themes\\care\primary care pediatricians	2
Nodes\\Autocoded Themes\\care\primary care physician	11
Nodes\\Autocoded Themes\\care\primary care physician services	2
Nodes\\Autocoded Themes\\care\primary care prevention	2
Nodes\\Autocoded Themes\\care\primary care provider	24
Nodes\\Autocoded Themes\\care\primary care types	1
Nodes\\Autocoded Themes\\care\providing care	5
Nodes\\Autocoded Themes\\care\psychiatric care	2
Nodes\\Autocoded Themes\\care\regarding specialty care	3
Nodes\\Autocoded Themes\\care\safe care	1
Nodes\\Autocoded Themes\\care\service care	2
Nodes\\Autocoded Themes\\care\skilled nursing care	2
Nodes\\Autocoded Themes\\care\special health care	2
Nodes\\Autocoded Themes\\care\special health care needs	7
Nodes\\Autocoded Themes\\care\specialty care	2
Nodes\\Autocoded Themes\\care\subspecialty care	1
Nodes\\Autocoded Themes\\care\vision care	1
	194
Nodes\\Autocoded Themes\\health\accessing health services	17
Nodes\\Autocoded Themes\\health\automatic health coverage	3
Nodes\\Autocoded Themes\\health\behavioral health	2
Nodes\\Autocoded Themes\\health\behavioral health concerns	1
Nodes\\Autocoded Themes\\health\behavioral health person	1
Nodes\\Autocoded Themes\\health\behavioral health services	11
Nodes\\Autocoded Themes\\health\child health population groups	2
Nodes\\Autocoded Themes\\health\child health populations	4
Nodes\\Autocoded Themes\\health\chronic health issues	13
Nodes\\Autocoded Themes\\health\complex health needs	6
Nodes\\Autocoded Themes\\health\dental health	7
Nodes\\Autocoded Themes\\health\developmental health	4
Nodes\\Autocoded Themes\\health\electronic health	2
Nodes\\Autocoded Themes\\health\emotional health issues	5
Nodes\\Autocoded Themes\\health\federally-qualified health centers	2
Nodes\\Autocoded Themes\\health\good health maintenance	2
Nodes\\Autocoded Themes\\health\health assessment	3
Nodes\\Autocoded Themes\\health\health care field	3
Nodes\\Autocoded Themes\\health\health care insurance	3
Nodes\\Autocoded Themes\\health\health centers	1
Nodes\\Autocoded Themes\\health\health department	4
Nodes\\Autocoded Themes\\health\health directors	1
Nodes\\Autocoded Themes\\health\health disparity	3
Nodes\\Autocoded Themes\\health\health educators	3
Nodes\\Autocoded Themes\\health\health equity	17

Nodes\\Autocoded Themes\\health\health equity male	1
Nodes\\Autocoded Themes\\health\health equity overall	3
Nodes\\Autocoded Themes\\health\health fairs	2
Nodes\\Autocoded Themes\\health\health illiteracy	1
Nodes\\Autocoded Themes\\health\health impacts	3
Nodes\\Autocoded Themes\\health\health inequity	22
Nodes\\Autocoded Themes\\health\health issues	2
Nodes\\Autocoded Themes\\health\health means	2
Nodes\\Autocoded Themes\\health\health needs	4
Nodes\\Autocoded Themes\\health\health outcomes	3
Nodes\\Autocoded Themes\\health\health people	1
Nodes\\Autocoded Themes\\health\health portion	1
Nodes\\Autocoded Themes\\health\health practitioner	1
Nodes\\Autocoded Themes\\health\health providers	3
Nodes\\Autocoded Themes\\health\health system	2
Nodes\\Autocoded Themes\\health\home health	1
Nodes\\Autocoded Themes\\health\home health nurse	1
Nodes\\Autocoded Themes\\health\ideal health	1
Nodes\\Autocoded Themes\\health\important health issue	2
Nodes\\Autocoded Themes\\health\important health needs	6
Nodes\\Autocoded Themes\\health\interconception health	12
Nodes\\Autocoded Themes\\health\inter-conception health	1
Nodes\\Autocoded Themes\\health\lenowisco health district	4
Nodes\\Autocoded Themes\\health\local health district	3
Nodes\\Autocoded Themes\\health\major health	1
Nodes\\Autocoded Themes\\health\medical health field	1
Nodes\\Autocoded Themes\\health\medical health needs	2
Nodes\\Autocoded Themes\\health\mental health	16
Nodes\\Autocoded Themes\\health\mental health access	2
Nodes\\Autocoded Themes\\health\mental health clinicians	11
Nodes\\Autocoded Themes\\health\mental health concerns	2
Nodes\\Autocoded Themes\\health\mental health consultation	6
Nodes\\Autocoded Themes\\health\mental health counseling	11
Nodes\\Autocoded Themes\\health\mental health counseling perspective	4
Nodes\\Autocoded Themes\\health\mental health crisis	5
Nodes\\Autocoded Themes\\health\mental health diagnoses	3
Nodes\\Autocoded Themes\\health\mental health issues	26
Nodes\\Autocoded Themes\\health\mental health kind	4
Nodes\\Autocoded Themes\\health\mental health needs	10
Nodes\\Autocoded Themes\\health\mental health person	5
Nodes\\Autocoded Themes\\health\mental health perspective	2
Nodes\\Autocoded Themes\\health\mental health piece	4
Nodes\\Autocoded Themes\\health\mental health providers	32

Nodes\\Autocoded Themes\\health\mental health resources	13
Nodes\\Autocoded Themes\\health\mental health services	50
Nodes\\Autocoded Themes\\health\mental health substance abuse	9
Nodes\\Autocoded Themes\\health\mental health support	12
Nodes\\Autocoded Themes\\health\mental health support services	3
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Nodes\\Autocoded Themes\\health\mental health treatment	2
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Nodes\\Autocoded Themes\\health\particular health	1
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Nodes\\Autocoded Themes\\health\physical health components	1
Nodes\\Autocoded Themes\\health\public health surveillance	1
Nodes\\Autocoded Themes\\health\reproductive health	2
Nodes\\Autocoded Themes\\health\reproductive health education	1
Nodes\\Autocoded Themes\\health\reproductive health needs	4
Nodes\\Autocoded Themes\\health\reproductive health outcomes	3
Nodes\\Autocoded Themes\\health\school health coordinator	2
Nodes\\Autocoded Themes\\health\special health care	2
Nodes\\Autocoded Themes\\health\special health care needs	7
Nodes\\Autocoded Themes\\health\top health	31
Nodes\\Autocoded Themes\\health\various health problems	2
	509
Nodes\\Autocoded Themes\\healthcare\accessing healthcare	1
Nodes\\Autocoded Themes\\healthcare\acute healthcare	2
Nodes\\Autocoded Themes\\healthcare\affordable healthcare	1
Nodes\\Autocoded Themes\\healthcare\affording healthcare coverage	1
Nodes\\Autocoded Themes\\healthcare\delivery healthcare	1
Nodes\\Autocoded Themes\\healthcare\direct healthcare	2
Nodes\\Autocoded Themes\\healthcare\enough healthcare providers	2
Nodes\\Autocoded Themes\\healthcare\good healthcare	1
Nodes\\Autocoded Themes\\healthcare\healthcare coaching	2
Nodes\\Autocoded Themes\\healthcare\healthcare cost	3
Nodes\\Autocoded Themes\\healthcare\healthcare coverage	1
Nodes\\Autocoded Themes\\healthcare\healthcare delivery system	71
Nodes\\Autocoded Themes\\healthcare\healthcare facility	1
Nodes\\Autocoded Themes\\healthcare\healthcare field	1
Nodes\\Autocoded Themes\\healthcare\healthcare practice	2
Nodes\\Autocoded Themes\\healthcare\healthcare problems	3
Nodes\\Autocoded Themes\\healthcare\healthcare professionals	1
Nodes\\Autocoded Themes\\healthcare\healthcare providers	14
Nodes\\Autocoded Themes\\healthcare\healthcare providers struggle	5
Nodes\\Autocoded Themes\\healthcare\healthcare services	4

Nodes\\Autocoded Themes\\healthcare\healthcare system	12
Nodes\\Autocoded Themes\\healthcare\healthcare thing	1
Nodes\\Autocoded Themes\\healthcare\mental healthcare	3
Nodes\\Autocoded Themes\\healthcare\overall healthcare	2
Nodes\\Autocoded Themes\\healthcare\preventative healthcare	3
Nodes\\Autocoded Themes\\healthcare\providing healthcare services	3
Nodes\\Autocoded Themes\\healthcare\quality healthcare providers	3
Nodes\\Autocoded Themes\\healthcare\regular healthcare visits	1
Nodes\\Autocoded Themes\\healthcare\special healthcare	1
Nodes\\Autocoded Themes\\healthcare\special healthcare needs	56
Nodes\\Autocoded Themes\\healthcare\state healthcare	1
	205
Nodes\\Autocoded Themes\\issues\abuse issues	1
Nodes\\Autocoded Themes\\issues\acute issue	1
Nodes\\Autocoded Themes\\issues\addiction issues	3
Nodes\\Autocoded Themes\\issues\addressing pain management issues	5
Nodes\\Autocoded Themes\\issues\awareness issue	2
Nodes\\Autocoded Themes\\issues\behavior issues	3
Nodes\\Autocoded Themes\\issues\behavioral issues	1
Nodes\\Autocoded Themes\\issues\big issue	10
Nodes\\Autocoded Themes\\issues\care issue	2
Nodes\\Autocoded Themes\\issues\chronic health issues	13
Nodes\\Autocoded Themes\\issues\cultural issues	8
Nodes\\Autocoded Themes\\issues\dental-related issues	2
Nodes\\Autocoded Themes\\issues\discrimination issues	3
Nodes\\Autocoded Themes\\issues\domestic violence issues	1
Nodes\\Autocoded Themes\\issues\emotional health issues	5
Nodes\\Autocoded Themes\\issues\equity issues	16
Nodes\\Autocoded Themes\\issues\family issues	4
Nodes\\Autocoded Themes\\issues\funding issue	2
Nodes\\Autocoded Themes\\issues\health issues	2
Nodes\\Autocoded Themes\\issues\huge issue	4
Nodes\\Autocoded Themes\\issues\important health issue	2
Nodes\\Autocoded Themes\\issues\infertility issues	1
Nodes\\Autocoded Themes\\issues\issue years	1
Nodes\\Autocoded Themes\\issues\key issue	2
Nodes\\Autocoded Themes\\issues\language issue	6
Nodes\\Autocoded Themes\\issues\layered issues	1
Nodes\\Autocoded Themes\\issues\major issue	4
Nodes\\Autocoded Themes\\issues\medical issues	2
Nodes\\Autocoded Themes\\issues\mental health issues	26
Nodes\\Autocoded Themes\\issues\mortality issues	1
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Population Domain Focus Groups Summary

Thematic Analysis Summary of Population Domain Focus Groups

Key Themes

- Women of reproductive age need mental health and substance abuse services and support, and socially-appropriate reproductive health screenings and services regardless of health insurance.
- Pregnant women and mothers of young children strongly value prenatal care relationships and communication with providers, and their vital needs or services are having adequate and available community resources, social support and family leave policy.
- Parent of children and youth with special health care needs desire more availability of specialists and therapists, home health care services, streamlined insurance preauthorization for medication and equipment, and maintaining income.
- Men need job security and stable income, medical insurance and access to clinical care, and acceptance and non-discrimination in health care.
- MCH providers and systems have to contend with challenging needs around social issues and influences, inadequate reproductive health education in schools, and limitations on accessing health care due to lack of state line reciprocity and referral resources.

Women of Reproductive Age

Three focus groups were held with women of reproductive age in Petersburg, Roanoke and by phone with those who were incarcerated. Key themes were mental health and substance abuse support, and reproductive health screenings and services.

Conditions that contribute to mental health and substance abuse problems include living environments, conditions at work, lack of income and economic instability. *"So much stigma in seeking care and affordability is a problem. In certain places if you didn't have insurance, you can't be seen. And that's really hard. That's really frustrating."* One participant shared, *"Because in the African-American community, mental health is viewed as crazy. And a lot of it -- you know, we just need support, need help. It's a stigma. And then cycles keep going and happening. And patterns in families keep occurring. Because no one has addressed the issues."* The issue is more serious for recently incarcerated women. *"So if I just get out of jail, then I have nothing, you know. The jail might give me a week or two worth of medication until I can get in to see a psychiatrist. But once I make the appointment with the CSB, they going to tell me -- they tell me that they don't have -- the earliest appointment that I can get is at least a month and a half out since then. You know what I'm saying? And that's just not for me. That's just for everybody. So my medicine is going to run out in a month and a half."* Mothers who were incarcerated are scared to say they need help for mental health because they believe they will lose custody of their children. *"And then my fear is because I'm telling this lady I'm having these mental health problems that she's going to take my kids away."*

Reproductive health screening and services are critically important to this population. *"There should just be, like, this sort of seamless experience from, like, young adult into, like, reproductive health, into child-bearing."* Another woman shared, *"Ideally you would have birth control and education starting early adolescence so that it would delay the first baby more, when people are usually a little more able to – they're just more mature and able to care for them."* From how to take care of infants, managing sexually-transmitted diseases, teaching kids about how to recognize trauma across the lifespan, to more

funding for family planning and abortion services, women shared their needs for access and affordability of socially appropriate health services with extended hours or integrated care. *"Also, it would be nice for the health facility to have an area where they care for children. Hence, while women are getting their health needs met, their children can also be taken care of. A lot of women neglect their own health care because they don't have childcare, nowhere to put their children, while they're trying to get their health needs met."* Another participant echoed, *"The services should also be dual. Because a lot of times, we especially as women, neglect ourselves for our families. So if the mother knows that her child maybe could be seen by pediatric care and she could be seen, too, at the same time, it will be much more convenient to access the health care facility."* A woman recently incarcerated said, *"they're quick to give you birth control or a depo shot. But there's nothing for people that want to get pregnant that would be able to help."*

Pregnant Women and Mothers of Young Children

Four focus groups were held with pregnant women and mothers of young children in Petersburg, Roanoke, Richmond (through a partnership with Virginia Premier, a Medicaid/Medicare/ACA Exchange health insurance company), and Eastern Shore (with women and mothers who speak Spanish). Key themes were prenatal care relationships and communication with obstetricians, midwives and other providers, and vital needs or services are having adequate and available community resources, social support and family leave policy.

Prenatal care not only serves the purpose of ensuring the pregnancy is going well and the baby is developing appropriately; it offers the opportunity to build rapport and relationship with the obstetrician or midwife who will deliver the baby. One Eastern Shore mother said, *"I want them to check the baby, how it is, if it is healthy or not. They gave me information on how to take care of the baby. They also gave me information about pediatricians."* A Richmond pregnant woman shared that her *"doctors stay on it (prenatal care); they make sure you are on top of tests. Nurses are on top of it. The doctors cover most of the questions."* Sometimes doctors are assigned, which can influence what level and type of education is provided: *"I didn't choose my doctor. They gave me a doctor."*

The strength of the patient-provider relationship associates with the confidence that the pregnant woman has in her care. *"I feel if you know more, then you can probably get better care, if that makes sense. I think most people kind of go to the first place they think of or know, and they probably don't get the best care, because they don't shop around."* This can influence the onset of complications too. *"They sent me home even though I knew I was in labor and my water broke, so I had to go to another hospital. I think they need to listen more to you because you know your body and you know what's going on. They think because they're professionals, they can tell you about it instead of listening to what you're saying."* Doctors and providers "sometimes…seem like they don't be as thorough as they supposed to. You're in and out." One Petersburg pregnant woman shared, *"I would say probably just having a doctor that is listening and focuses on making sure that you're receiving the best treatment for whatever situations come up. In my experience, I had -- I would complain in my first pregnancy about signs of preeclampsia. And it wasn't until after I had the baby that I had to get admitted for it. And I was constantly telling him that had these signs. So I felt like if he had just listened to me before the baby came, I wouldn't have had to be admitted after. And I think just focusing on paying more attention to signs that are -- signs that you have things wrong."*

A theme of being heard in prenatal care was very strong among pregnant women. *"So I think that being listening, communicating, and letting the doctor know what's up -- because I've had a lot of history with*

miscarriages. So I know, it is very stressful when you don't have a doctor that actually listen to you, and you telling them things that's going on, but yet they're disregarding it, when you could prevent the situation before it happened." Another pregnant mom from Roanoke stated, *"I've never had any problems with the insurance. But it's the healthcare providers. They really just don't want to listen. And when I -- I went to another doctor in his same practice, and it was the same thing. So I don't know if it's just their training, or they're just like, "Oh, whatever, we'll wait it out until it gets to be a big problem." But I just feel like if they would listen and try to do more preventatives instead of waiting until there's a major issue to treat it, then we could have better healthcare outcomes, instead of just always treating a problem and throwing money at it."* In some cases, the lack of effective communication and education with providers is scary. One pregnant mother from Richmond relayed her experience.

> *"Because she was checking for the baby's heartbeat, and she couldn't find it for a minute. So she said she heard it. I never heard his heartbeat. And the way that she let me leave her office was horrible. And she sent me for a sonogram. And it took them three days to hold me for a sonogram. So I went all of those days just to get the sonogram. And then days later, the next week – so I went about a week not knowing if my baby was okay. So when I took the sonogram, he was healthy. Everything was fine. And the doctor at the sonogram office was like, "Well, I have information that you want to switch over your doctor. Because that is not how we do things here. And that wasn't right for your doctor to do that to you." Who would want to leave the doctor not knowing if their baby is okay?"*

Pregnant women want to have a good working relationship with their provider. *"Because I want a doctor that will listen, be attentive, and, you know, listen to find out what's wrong with the problem or something like that. But if I got to keep asking you…it show me that you're not really interested."* Many mothers expressed discontent with their provider experiences. One woman reported, *"I had to ask a doctor to write me a prescription for the breast pump. So he never mentioned it. I had to, like, ask him for it. I mean, I'm sure he would have asked me. But I was just like, "Hey, can you" -- I didn't know I needed a prescription for it. So I had to ask him for it."* Frustration continued to be shared, *"If you have multiple doctors, each one comes in the room, and they ask the same questions that you just answered one week, four weeks ago. If you don't understand me, how are you going to give me the care that I need when I go into labor?"* This often led to misunderstandings and not being heard completely. *"Apparently if you called and said you had an issue, they automatically thought it was postpartum depression. And you're thinking, "No, I just need you to hear me out. Give me advice, and tell me what to do next." But then it wasn't there. You know, just like, you were right in front of your doctor – he didn't offer anything. And you're like, "I'm not depressed. I just don't know what to do."*

Themes related to vital needs or services to help new mothers and mothers of young children included adequate and available community resources, social support and family leave policy. *"Finding quality daycare"* is a huge challenge. *"I think the resources are horrible. Like she said, childcare -- I think they need to have more things for these kids to do productively, to get them out. Because we moved down here, and they were gamers, but they weren't like that -- they still would go outside and play. These kids today do not go outside and play at all, like how we grew up. Everything is in the house and wanting to play the game and that's what I have a problem with -- that they don't have a lot of resources out here for the children. It's just depending on what neighborhood and it's sad. I'm in Chesterfield neighborhood around the corner in Richmond -- but still, again, I don't have those resources. And if you have more than one kid, it's expensive. I can't deal with paying $200, $100 for them just to all play ball. Like, my oldest as well -- he likes to play ball. But I couldn't afford it."* Awareness of community resources may be

sufficient but distribution across the Commonwealth is not equitable. A mom from Petersburg advocated that *"we need the state to invest their resources where the need is greatest. We're not talking about equal, equal doesn't mean much, but equity does. Some of the needs in some areas are much greater than in others. The biggest problem that we have is communication. You can't do what you don't know. We need them to be more open about the truth about what the state actually can do for areas that have greater needs. This area here is a huge and we're at the bottom for every health need. I don't care what age you're talking about, we're at the bottom. Our children are at the poverty level and there just has to be a greater effort and some resources in the area, with communication about how to use the resources."*

Social support to confront feelings of isolation and insufficiency are needs for pregnant women and new mothers. *"I hear a lot of need for self-care. Or we can just come together and teach each other on how to parent."* Feeling stuck at home, one woman described it as *"…I never did find where that group was meeting, or I was stuck at home all day and couldn't get out to stuff. But, like, the social support for all of that that we were facing was -- I felt kind of alone in it."* Mothers really question whether they are enough to handle motherhood. *"Am I going to be enough... [I'm] trying to juggle everything I want to juggle -- you know, you have your job. You have your spouse or boyfriend or significant other, whatever. You know, your children. And then if you've got several, like I do, you know, you've got to have some in school, some at home, whatever. And you've got to figure out how to balance it all."* Family leave policies are widely seen as effective in providing support. *"Whereas for me, my husband got eight weeks off for paternity leave, which is, like -- they don't really do that. And just with his job, he got eight weeks off. And so that really, really helped me to not be, like, so depressed. Because I had somebody else to, like, wash dishes and do laundry for eight weeks. Paternity leave, I think, is really important."*

Parents of Children and Youth with Special Health Care Needs

Three focus groups were held in Alexandria (with families who speak Spanish), in Marion, and by phone. Key themes relate to availability of specialists and therapists, home health care services, streamlined insurance preauthorization for medication and equipment, and maintaining income.

Concerns about long drives and wait times to see specialists and therapists (i.e., physical, occupational, speech, feeding, Applied Behavior Analysis) in the rural areas puts a strain on parents of CYSHCN. *"For me to take my youngest to the dentist in Bristol, Tennessee, by the time I get there, you know, school is getting ready to end. So how am I going to get my middle [child] off the bus?"* For some parents who need home health care support for their children, the *"biggest issue are…a huge nursing shortage…and they don't pay enough. Hospitals pay more."* Or, some providers are *"not familiar with disabilities or dealing with people who have specific needs."* Preauthorization is a barrier. *"You have to not only have to have it preauthorized, but then the doctor will have to say that it's a medical necessity. So when you're talking about an infection and, you know, there's a weekend, and it's a Friday, it's going to be Monday before you can get it preauthorized. It doesn't make sense."* Other themes include most families are not fully prepared for an emergency but have places where they keep important information, supplies, and equipment; local churches and ministries have become more inclusive and support groups are growing; and, maintaining employment in the family is a challenge as a parent of a CYSHCN. One woman shared, *"I mean, my husband's right now -- we're looking at job loss within the next week because of this."*

Men

Two focus groups were held with men in Roanoke and Eastern Shore (with men who speak Spanish). Key themes for men were having job security and stable income, medical insurance and access to clinical

care, and acceptance and non-discrimination in health care. One Roanoke man stated, *"Money is needed to improve help men in our community. From my perspective it's like, unless you have a job that provides you with health insurance, you not going to the doctor. Or, unless you have Medicaid. Some people can get free healthcare if you're homeless through the Rescue Mission. They have, like, a clinic. If you're homeless and have no income, then they allow you to see a doctor."* On the Shore, one man said, *"…in my case, I go to the clinic and there they give me, the doctors tell me that if I have sexual relations, they tell us that we need to take care of ourselves, to protect ourselves from AIDS and HIV."* Having and being educated about medical insurance is important for men. *"The medical insurance, we have to pay a little but honestly it isn't a lot, we won't exaggerate because of the payment and you pay when you get there. It's as much as $100, $200; they give you like, pay by payments."* Another man in Roanoke shared, *"People aren't educated on health insurance, how it works, the healthcare marketplace, Affordable Care Act -- all those things that were attempted to make healthcare available to people who couldn't afford it. Even things like Charity Care through hospitals where -- I mean, I tell people about that all the time. Even if you don't have health insurance, fill out a Charity Care form. And they'll probably just -- it'll probably just all go away. But even being -- going to the hospital and filling out a form like that can feel, I guess, daunting to a person who knows that they can't afford to pay for this and that has to ask for this Charity Care form."* Men on the Eastern Shore report being accepted within health care and public health environments. *"Even if you are undocumented, they don't ask that while you're sick. They accept you and they honestly give us medicine and treat us…we feel welcome. They treat us as equals. I don't feel discriminated against. Maybe at other places, like work."*

Maternal and Child Health Care Providers and Systems

Two focus group stakeholder meetings were held in two health districts, Eastern Shore and Mount Rogers. Providers represented in the focus groups were from health departments, school divisions, local clinics, and community-based health care organizations. Many have been in their roles for over 20 years. Key themes from the providers are social issues and influences, improved reproductive health education in schools, and limitations on accessing health care due to lack of state line reciprocity and referral resources.

Social issues and influences like generational poverty, culture and language differences, internet/broadband capacity, and transportation are major barriers to health care providers. *"I think there's a lot of frustration around issues with generational poverty and repeat pregnancies and, you know, repeat STDs,"* said one clinician. Another stakeholder shared, *"And you can see it from generation to generation. Like, I've had their mother, and I can see them. And I see the same exact -- our case management is getting really hard for our community."* From birth, there is *"a significant amount of newborns coming into a pretty tough situation, socioeconomically."* On the Eastern Shore, the Haitian/Creole-speaking population is growing and culture and language barriers exist in translation and printed materials. One provider in Mount Rogers noted that *"of all the different languages that were spoken…there was, like 15 to 20 of them…and only have resources in two."* Transportation is a critical need for providers and referral systems to be effective. *"Closer needs and transportation to be able to get in and find those appointments. And then specialty services -- everybody has to travel to Johnson City, which is outside of the state."* One provider said, *"Transportation is one of the challenges we have. Getting families here. Just getting them to the clinic."* Internet and broadband access is poor in rural communities and limits the use of technology for scheduling transportation for appointments. *"Because every time they try – the parents try to set up that trip, it's automatically knocked out. Because, they're traveling more than 50 miles to see a doctor. That's not allowed."*

School divisions desperately need updated family life education curriculum. Stakeholders and providers see that the lack of age-appropriate reproductive and sexual health education in schools has consequences. *"I was about to say, our school systems don't allow us to talk about birth control or family planning, you know, in general. I think we just need to continue to build community partnerships."* Another clinician amplified the need, *"It's not an option. This has to be taught, and that's just the way it is. You know, I find our middle schoolers -- you know, in fourth and fifth grade, we taught the menstrual cycle. We taught the reproductive system. We talked about -- those girls are not getting any of that. And that's who we need on board about doing this family life education, is the grassroots, too. Along with state-level policy change."* LGBTQ+ students do not have a lot of resources on the Eastern Shore. One nurse stated, *"I'm still thinking about those transgender kids in the school system. I don't know if there's some kind of module that's an evidence-based module involving -- the whole thing about educating the public about sexuality. I will say that the state had added mental health, I think the LGBT community, and something else that they were going to add to health. But who is overseeing that? I mean, there's so many questions."* Teachers do not want to teach sensitive materials and the health education curricula are out of date. *"No one's doing that anymore. Because the state specifically states there will be training. And if the state is saying there's going to be training, then there probably should be, before people start teaching sensitive areas. We have the old health books. They're not really up-to-date. "*

Reproductive health care is limited in rural areas due to state line access limitations and lack of partnerships and referral resources. Maryland and Tennessee have available health care services in closer proximity than other Virginia services for families on the Eastern Shore and in Mount Rogers Health District. *"We only have one obstetrician and one nurse midwife full-time on the whole Shore. So we're already -- we're always in a precarious situation about OB/GYN care. I think we all have some health disparities to geography. See, we're close to -- many of our folks live in the northern part of the Shore, and they're relatively close to Maryland. Because they're Medicaid, they're not going to be able to go to Maryland for services. And then, as you say, if you have the Medicaid, you can't go into Maryland. That would be ideal. Because people don't have to pay the bridge tunnel. They don't have to pay -- you know, it's easier access."* Similarly in Southwest Virginia, *"And, you know, sometimes, honestly, we just feel disconnected. Because we are so far -- you know, people think Southwest Virginia kind of stops at Roanoke. So you think, "Oh, well, Roanoke has it." But there's, like, four more hours of Virginia that doesn't have access to that care or that service that needs to be thought about. You know, that's part of -- that's something I get dinged on almost every audit, is because we don't -- it's like, we try and try, but we can't come up with this comprehensive list of referrals."* There is no access to abortion services in either rural region assessed; women must travel across the Chesapeake Bay to Virginia Beach or Norfolk, or to travel to North Carolina or Tennessee. In high-risk situations, *"they can travel two hours plus in either direction to get to a physician just for a regular high-risk prenatal checkup. That's either in Johnson City, Tennessee, which can cut them off with their Medicaid possibly, or they can travel to Roanoke for a prenatal visit. And so it can be fragmented because of the support services from other agencies that they need, because they're traveling so far. They want face-to-face, one-on-one, hands-on. And many times, that's necessary."* Preconception health care access is very important to providers, and they recognize the impacts of risk behaviors. *"The women are coming in with comorbidities that is very concerning. Mental health is a huge one. Many smoke marijuana, even when pregnant. Tobacco use and vaping is widespread too. Obesity among pregnant women is a concern."*

A solution that both regions identified related to partnerships and wider referral resources and networks. *"Because I think if our providers knew, then I think we would see more referrals,"* said one

clinician. Another nurse stated, *"A well-connected medical home, between providers, specialties, schools, CSBs, and all of the community providers. To get community providers to talk to each other is difficult."* This has impact on funding and system improvement in both regions. *"And everybody's funding is based off of numbers. Because we can't get an outcome accurately. So we're looking at numbers. And everybody's competitive. So it's just, you know, the system. The disconnect in the lack of partnership or collaboration between the provider entities from the various fields. It's such a turnover. By the time you learn the resources, you got a new person in that place."*