

Community Health Needs Assessment of Northeast Georgia

District 2 Public Health
Habersham Medical Center
Northeast Georgia Medical Center Gainesville
Northeast Georgia Medical Center Braselton
Northeast Georgia Medical Center Barrow
Northeast Georgia Medical Center Lumpkin
Stephens County Hospital

Approved by:

The Hospital Authority of Habersham County, Georgia, September 17th, 2019, posted to www.habershammedical.com Northeast Georgia Medical Center Board of Directors, August 27, 2019, posted to www.nghs.com Northeast Georgia Health System Board of Directors, September 24, 2019, posted to www.nghs.com Stephens County Hospital Authority Board, September 16, 2019, posted to stephenscountyhospital.com

Table of Contents

Executive Summary	7
Community Health Needs Assessment Requirement	10
CHNA Overview, Methodology, and Approach	11
Consultant Qualifications & Collaboration	11
Community Served Definition	11
Assessment of Health Needs	13
Quantitative Assessment of Health Needs – Methodology and Data Sources	13
Qualitative Assessment of Health Needs and Community Input – Approach	14
Methodology for Defining Community Need	16
Information Gaps	16
Approach to Identify and Prioritize Significant Health Needs	17
Recommended Health Needs to be Addressed by the CHNA Partners	18
Existing Resources to Address Health Needs	18
Community Health Data	18
Community Health Needs Assessment – District 2 Public Health	19
Community Served Definition	19
Demographic and Socioeconomic Summary	20
Watson Health Community Data	30
Public Health Indicators	36
Focus Groups & Interviews	36
Prioritized Significant Health Needs for District 2 Public Health	37
Community Health Needs Assessment – Habersham Medical Center	40
Community Served Definition	40
Demographic and Socioeconomic Summary	41
Watson Health Community Data	51
Public Health Indicators	57
Focus Groups & Interviews	57
Prioritized Significant Health Needs for Habersham Medical Center	58
CHNA Implementation Strategy	59
Community Health Needs Assessment – NGHS Greater Braselton Service Area	a. 60
Community Served Definition	60
Demographic and Socioeconomic Summary	61
Watson Health Community Data	72

Focus Groups & Interviews		Public Health Indicators	78
CHNA Implementation Strategy		Focus Groups & Interviews	78
Community Health Needs Assessment – NGHS Primary Service Area		Prioritized Significant Health Needs for NGHS – GBSA	79
Community Served Definition 81 Demographic and Socioeconomic Summary 83 Watson Health Community Data 93 Public Health Indicators 99 Focus Groups & Interviews 99 Prioritized Significant Health Needs for NGHS – PSA 100 CHNA Implementation Strategy 101 Community Health Needs Assessment – NGHS Secondary Service Area 400 102 Community Served Definition 102 Demographic and Socioeconomic Summary 103 Watson Health Community Data 112 Public Health Indicators 118 Focus Groups & Interviews 118 Prioritized Significant Health Needs for NGHS – SSA 400 119 Chamunity Health Needs Assessment – NGHS Secondary Service Area North 121 120 Community Served Definition 121 Demographic and Socioeconomic Summary 122 Watson Health Indicators 136 Focus Groups & Interviews 136 Community Health Needs Assessment – Stephens County Hospital 139 Community Served Definition 139 Demographic and Socioeconomic Summary <td< td=""><td></td><td>CHNA Implementation Strategy</td><td>80</td></td<>		CHNA Implementation Strategy	80
Demographic and Socioeconomic Summary 83 Watson Health Community Data 93 Public Health Indicators 99 Focus Groups & Interviews 99 Prioritized Significant Health Needs for NGHS – PSA 100 CHNA Implementation Strategy 101 Community Health Needs Assessment – NGHS Secondary Service Area 400 102 Community Served Definition 102 Demographic and Socioeconomic Summary 103 Watson Health Community Data 112 Public Health Indicators 118 Focus Groups & Interviews 118 Prioritized Significant Health Needs for NGHS – SSA 400 119 CHNA Implementation Strategy 120 Community Health Needs Assessment – NGHS Secondary Service Area North 121 121 Community Served Definition 121 Demographic and Socioeconomic Summary 122 Watson Health Indicators 136 Focus Groups & Interviews 136 Community Health Needs Assessment – Stephens County Hospital 139 Community Berved Definition 139 Community Health Needs Assessment – Stephens County Hospital 156 Focus Groups &	C	ommunity Health Needs Assessment – NGHS Primary Service Area	81
Watson Health Community Data .93 Public Health Indicators .99 Focus Groups & Interviews .99 Prioritized Significant Health Needs for NGHS – PSA .100 CHNA Implementation Strategy .101 Community Health Needs Assessment – NGHS Secondary Service Area 400 .102 Community Served Definition .102 Demographic and Socioeconomic Summary .103 Watson Health Community Data .112 Public Health Indicators .118 Focus Groups & Interviews .118 Prioritized Significant Health Needs for NGHS – SSA 400 .119 CHNA Implementation Strategy .120 Community Health Needs Assessment – NGHS Secondary Service Area North 121 .21 Community Served Definition .121 Demographic and Socioeconomic Summary .122 Watson Health Indicators .136 Focus Groups & Interviews .136 Community Health Needs Assessment – Stephens County Hospital .139 Community Served Definition .139 Community Health Needs Assessment – Stephens County Hospital .130 Public Health Indicators .156 Focus		Community Served Definition	81
Public Health Indicators		Demographic and Socioeconomic Summary	83
Focus Groups & Interviews		Watson Health Community Data	93
Prioritized Significant Health Needs for NGHS – PSA 100 CHNA Implementation Strategy 101 Community Health Needs Assessment – NGHS Secondary Service Area 400		Public Health Indicators	99
CHNA Implementation Strategy 101 Community Health Needs Assessment – NGHS Secondary Service Area 400		Focus Groups & Interviews	99
Community Health Needs Assessment – NGHS Secondary Service Area 400 102 Community Served Definition		Prioritized Significant Health Needs for NGHS – PSA	.100
Community Served Definition 102 Demographic and Socioeconomic Summary 103 Watson Health Community Data 112 Public Health Indicators 118 Focus Groups & Interviews 118 Prioritized Significant Health Needs for NGHS – SSA 400 119 CHNA Implementation Strategy 120 Community Health Needs Assessment – NGHS Secondary Service Area North 121 121 Community Served Definition 121 Demographic and Socioeconomic Summary 122 Watson Health Community Data 131 Public Health Indicators 136 CHNA Implementation Strategy 138 Community Health Needs Assessment – Stephens County Hospital 139 Community Served Definition 139 Demographic and Socioeconomic Summary 140 Watson Health Community Data 150 Public Health Indicators 156 Focus Groups & Interviews 156 Prioritized Significant Health Needs for Stephens County Hospital 157		CHNA Implementation Strategy	.101
Demographic and Socioeconomic Summary 103 Watson Health Community Data 112 Public Health Indicators 118 Focus Groups & Interviews 118 Prioritized Significant Health Needs for NGHS – SSA 400 119 CHNA Implementation Strategy 120 Community Health Needs Assessment – NGHS Secondary Service Area North 121 121 Community Served Definition 121 Demographic and Socioeconomic Summary 122 Watson Health Community Data 131 Public Health Indicators 136 CHNA Implementation Strategy 138 Community Health Needs Assessment – Stephens County Hospital 139 Community Served Definition 139 Community Served Definition 139 Community Health Needs Assessment – Stephens County Hospital 150 Public Health Indicators 156 Public Health Indicators 156 Focus Groups & Interviews 156 Prioritized Significant Health Needs for Stephens County Hospital 157	C	ommunity Health Needs Assessment – NGHS Secondary Service Area 400	102
Watson Health Community Data 112 Public Health Indicators 118 Focus Groups & Interviews 118 Prioritized Significant Health Needs for NGHS – SSA 400 119 CHNA Implementation Strategy 120 Community Health Needs Assessment – NGHS Secondary Service Area North 121 Community Served Definition 121 Demographic and Socioeconomic Summary 122 Watson Health Community Data 131 Public Health Indicators 136 CHNA Implementation Strategy 138 Community Health Needs Assessment – Stephens County Hospital 139 Community Served Definition 139 Demographic and Socioeconomic Summary 140 Watson Health Community Data 150 Public Health Indicators 156 Focus Groups & Interviews 156 Prioritized Significant Health Needs for Stephens County Hospital 157		Community Served Definition	.102
Public Health Indicators		Demographic and Socioeconomic Summary	.103
Focus Groups & Interviews		Watson Health Community Data	.112
Prioritized Significant Health Needs for NGHS – SSA 400		Public Health Indicators	.118
CHNA Implementation Strategy 120 Community Health Needs Assessment – NGHS Secondary Service Area North 121 Community Served Definition 121 Demographic and Socioeconomic Summary 122 Watson Health Community Data 131 Public Health Indicators 136 Focus Groups & Interviews 136 CHNA Implementation Strategy 138 Community Health Needs Assessment – Stephens County Hospital 139 Community Served Definition 139 Demographic and Socioeconomic Summary 140 Watson Health Community Data 150 Public Health Indicators 156 Focus Groups & Interviews 156 Prioritized Significant Health Needs for Stephens County Hospital 157		Focus Groups & Interviews	.118
Community Health Needs Assessment – NGHS Secondary Service Area North 121 Community Served Definition		Prioritized Significant Health Needs for NGHS – SSA 400	.119
Community Served Definition		CHNA Implementation Strategy	.120
Demographic and Socioeconomic Summary	C	ommunity Health Needs Assessment – NGHS Secondary Service Area North	121
Watson Health Community Data		Community Served Definition	.121
Public Health Indicators		Demographic and Socioeconomic Summary	.122
Public Health Indicators		· · · · · · · · · · · · · · · · · · ·	.131
CHNA Implementation Strategy			.136
Community Health Needs Assessment – Stephens County Hospital		Focus Groups & Interviews	.136
Community Served Definition		CHNA Implementation Strategy	.138
Demographic and Socioeconomic Summary	C	ommunity Health Needs Assessment – Stephens County Hospital	139
Watson Health Community Data		Community Served Definition	.139
Public Health Indicators		Demographic and Socioeconomic Summary	.140
Focus Groups & Interviews156 Prioritized Significant Health Needs for Stephens County Hospital157		Watson Health Community Data	.150
Prioritized Significant Health Needs for Stephens County Hospital157		Public Health Indicators	.156
		Focus Groups & Interviews	. 156
CHNA Implementation Strategy158		Prioritized Significant Health Needs for Stephens County Hospital	.157
		CHNA Implementation Strategy	. 158

Description of Northeast Georgia Region Priority Health Needs	160
Mental and Behavioral Health	160
Substance Abuse	167
Access to Care – Primary Care	169
Access to Care – Preventable Hospitalizations	170
Access to Care – Insurance Coverage	
Access to Care –Teen Pregnancy, Maternal & Child Health, and Child Mortality	173
Access to Care – Transportation	
Chronic Disease – Diabetes	178
Chronic Disease – Cardiovascular Disease	179
Chronic Disease – Physical Activity	180
Septicemia	
Summary	
Appendix A: Key Health Indicator Sources	
Appendix B: Watson Health Focus Groups and Interviews Participants	
Appendix C: Watson Health Focus Groups and Interviews Summary	
Advisory Board Focus Group, Northeast Georgia Health System	
NGHS Greater Braselton Service Area (GBSA)	
Mental Health and Substance Abuse	
Obesity and Food Access	
NGHS Primary Service Area (PSA)	
Mental Health and Addiction	199
Access to Care	199
NGHS Secondary Service Area 400 (SSA 400)	
The underinsured population	
NGHS Secondary Service Area North (SSA North)	
Lack of affordable housing	
Lack of "living wage" employment	
Healthcare and generational habits	
Barrow County Focus Group	
Access to healthcare Education and generational habits	
Dawson County Focus Group	204
Mental and Behavioral Health	204
Access to Care	
Food Access and Nutrition	
Gwinnett and Jackson Counties Focus Group	
Access to Care	206

Substance Abuse	
Food Access and Nutrition	
Habersham and Stephens Counties Focus Group	
Access to Care	208
Mental Health and Substance Abuse	
Obesity and Food Access	
Hall County Focus Group	
Lack of affordable housing Lack of access to health care	
Lack of "living wage" employment	
Healthcare and generational habits	211
Hall County Hispanic Focus Group	
Health education - Awareness, lack of preventive care, wellness Care in convenient locations	
Cost	
Lumpkin County Focus Group	214
Lack of affordable housing	214
Lack of access to health care	
Lack of "living wage" employment	
Interviews Summary	
Community Interviews	
Interview Themes by Community	
Appendix D: Additional Qualitative Data	
Hall County Survey conducted by Bill Stiles at the Johnson Group	
NGHS Hall County Mental and Behavioral Health Listening Sessions	
Union General Hospital and Chatuge Regional Hospital 2018 CHNA Reports	
Appendix E: Prioritization Session Participants	256
Appendix F: Community Resources Identified to Potentially Address Signi	ficant
Health Needs	258
Appendix G: Federally Designated Health Professional Shortage Areas and Medically Underserved Areas and Populations	
Health Professional Shortage Areas (HPSA)	
Medically Underserved Areas and Populations (MUA/P)	
Appendix H: Public Health Indicators for Northeast Georgia Region	
Recommended Priority Needs	
Appendix I: Evaluation of Prior Implementation Strategy Impact	270
Habersham Medical Center Evaluation of 2016 Implementation Strategy	270
NGHS 2018 Progress Report	271
Stephens County Hospital Evaluation of 2016 Implementation Strategy	283

Appendix J: CHNA Partner Meetings	284
Appendix K: Northeast Georgia Medical Center Patient Origin	287

Executive Summary

The following organizations have partnered and collaborated to conduct a Community Health Needs Assessment (CHNA) for communities they (CHNA Partners) serve in northeastern Georgia:

- District 2 Public Health
- Habersham Medical Center
- Northeast Georgia Medical Center Gainesville
- Northeast Georgia Medical Center Braselton
- Northeast Georgia Medical Center Barrow
- Northeast Georgia Medical Center Lumpkin
- Stephens County Hospital

These CHNA Partners understand the importance of serving the health needs of their communities. In order to do that successfully, they must first take a comprehensive look at the issues that patients, families, and neighbors face when making healthy life choices and health care decisions.

Beginning in November 2018, the CHNA Partners began the process of assessing the health needs of the communities served by the hospital facilities and the health department with a collaborative community health needs assessment. IBM Watson Health (Watson Health) was engaged to help collect and analyze the data for this process, and to compile a final report to be made publicly available by September 30, 2019.

The communities served by each of the CHNA Partners overlapped and combined to include all or part of 16 counties in northeast Georgia. While a collaborative approach was utilized, a needs analysis was conducted for each CHNA Partner's defined community; community-specific subsections are included in this report. Northeast Georgia Health System (NGHS) defined four communities served by their four hospital facilities: NGHS Greater Braselton Service Area (GBSA), NGHS Primary Service Area (PSA), NGHS Secondary Service Area 400 (SSA 400), and NGHS Secondary Service Area North (SSA North).

Watson Health performed a quantitative and a qualitative assessment. Over 129 public health indicators were examined, and a benchmark analysis of the data was conducted. The analysis compared community values to the overall state of Georgia and United States (U.S.) values. For the qualitative assessment, input from over 500 people was included via several different qualitative methods; focus groups, interviews, in-person surveys, and listening sessions. Participants in these sessions included District 2 Public Health as well as individuals or organizations serving and/or representing the interests of medically underserved, low-income, and minority populations in the community.

Needs were first identified when an indicator for a community was worse than the Georgia state benchmark. A need differential analysis conducted on all of the low performing indicators determined the relative severity by using the percent difference from benchmark. The outcome of this quantitative analysis aligned with the qualitative findings to create a list of health needs in the community. Each health need received assignment into one of four quadrants in a health needs matrix. The matrix shows the convergence

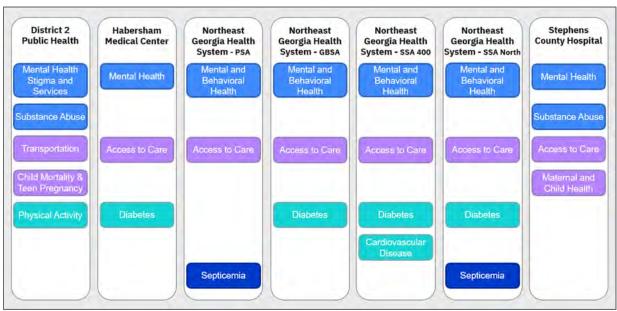
of needs identified in the qualitative data (interview and focus group feedback) and quantitative data (health indicators) and identifies the top health needs for each community.

In June 2019, a session was held with the CHNA Partners and their community advisors to identify and prioritize the significant health needs for each CHNA Partner's community. The meeting was moderated by Watson Health and included an overview of the CHNA process for the communities of northeast Georgia; the methodology for determining the top health needs; and the selection and prioritization of significant health needs for the communities served.

The group was provided an overview of the CHNA process undertaken for northeast Georgia. The participants reviewed the CHNA findings and the Health Needs Matrix for each community. Working in community specific work groups, they identified the significant community health needs to prioritize. The community work group participants used criteria selected by the CHNA Partners to score each community's significant health needs. The list of significant health needs for each community was then prioritized based on the overall scores.

In the prioritization session described above, each community work group was tasked with recommending up to five (5) priority needs their respective CHNA Partner should address through their CHNA implementation strategies. After each work group established their recommendations, the groups reconvened to review their recommended priorities across the communities. Common priorities were identified, and collectively the group discussed areas of potential collaboration and synergies in implementation efforts between the CHNA Partners. The recommended priority health needs are as follows:

Recommended Priority Health Needs



Note: priority needs that are common across communites are shaded based on their commonality by category

Source: IBM Watson Health, 2019

A description of these needs is included in the body of this report. The hospital facilities will each develop implementation strategies with specific initiatives to address the chosen health needs, to be completed and adopted by each hospital partner by February 15, 2020.

An evaluation of each hospital's implementation strategy drafted after the 2016 assessment is included in **Appendix I** of this document.

The Community Health Needs Assessment for northeast Georgia has been presented and approved by each hospital partners' governing body, and the full assessment is available to the public at no cost for download and comment via each CHNA Partner's website:

- District 2 Public Health: http://phdistrict2.org/
- Habersham Medical Center: tellus@hcmcmed.org
- Northeast Georgia Health System: http://www.nghs.com/community-benefitresources
- The Stephens County Hospital: stephenscountyhospital.com

The CHNA partners collaborated with Watson Health to develop an interactive Tableau dashboard that displays the quantitative data collected as part of the 2019 CHNA. The Community Health Data provides access to over 120 county-level public health indicators as well as proprietary Watson Health estimates for demographics, community need, disease prevalence, insurance coverage, and emergency department visits. The dashboard is available to the community at http://www.nghs.com/community-benefit-resources.

This assessment and the corresponding implementation strategies are intended to meet the requirements for hospital community benefit planning and reporting as set forth in federal law, including but not limited to the Internal Revenue Code Section 501(r).

Community Health Needs Assessment Requirement

As a result of the Patient Protection and Affordable Care Act (PPACA), all tax-exempt organizations operating hospital facilities are required to assess the health needs of their community through a Community Health Needs Assessment (CHNA) once every three years.

The written CHNA Report must include descriptions of the following:

- The community served and how the community was determined
- The process and methods used to conduct the assessment, including sources and dates of the data and other information as well as the analytical methods applied to identify significant community health needs
- How the organization took into account input from persons representing the broad interests of the community served by the hospital, including a description of when and how the hospital consulted with these persons or the organizations they represent
- The prioritized significant health needs identified through the CHNA as well as a description of the process and criteria used in prioritizing the identified significant needs
- The existing healthcare facilities, organizations, and other resources within the community available to meet the significant community health needs
- An evaluation of the impact of any actions that were taken, since the hospital facility(s) most recent CHNA, to address the significant health needs identified in that last CHNA

PPACA also requires hospitals to adopt an Implementation Strategy to address prioritized community health needs identified through the assessment. An Implementation Strategy is a written plan that addresses each of the significant community health needs identified through the CHNA and is a separate but related document to the CHNA report.

The written Implementation Strategy must include the following:

- List of the prioritized needs the hospital plans to address and the rationale for not addressing other significant health needs identified
- Actions the hospital intends to take to address the chosen health needs
- The anticipated impact of these actions and the plan to evaluate such impact (e.g. identify data sources that will be used to track the plan's impact)
- Programs and resources the hospital plans to commit to address the health needs
- A description of any planned collaboration between the hospital and other facilities or organizations in addressing the health needs

CHNA Overview, Methodology, and Approach

The following organizations have partnered and collaborated to conduct a CHNA for communities they serve in northeastern Georgia:

- District 2 Public Health
- Habersham Medical Center
- Northeast Georgia Medical Center Gainesville
- Northeast Georgia Medical Center Braselton
- Northeast Georgia Medical Center Barrow
- Northeast Georgia Medical Center Lumpkin
- Stephens County Hospital

These CHNA Partners began the 2019 CHNA process in November 2018 and partnered with Watson Health to complete a CHNA for their combined communities.

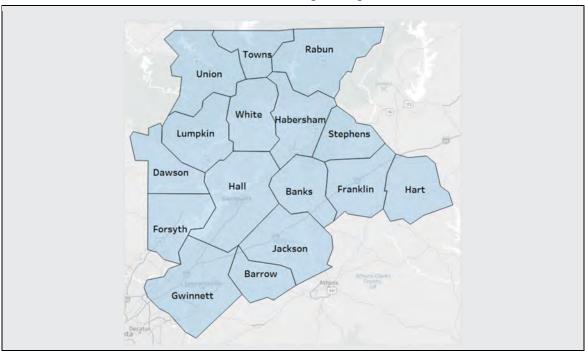
Consultant Qualifications & Collaboration

Watson Health delivers analytic tools, benchmarks, and strategic consulting services to the healthcare industry, combining rich data analytics in demographics, including the Community Needs Index, planning, and disease prevalence estimates, with experienced strategic consultants to deliver comprehensive and actionable Community Health Needs Assessments.

Community Served Definition

The communities served by each of the CHNA Partners overlap and combined include all or part of sixteen counties in northeast Georgia. Given the overlap between their respective communities, the CHNA Partners collaborated to conduct this assessment of the northeast Georgia region. While a collaborative approach was utilized, a needs analysis was conducted for each Partner's defined community and community-specific subsections are included in this report. Northeast Georgia Health System (NGHS) defined four communities served by their four hospital facilities: NGHS Greater Braselton Service Area (GBSA), NGHS Primary Service Area (PSA), NGHS Secondary Service Area 400 (SSA 400), and NGHS Secondary Service Area North (SSA North).

Combined Community Served Map Northeast Georgia Region



Source: Watson Health, 2019

Counties Included in Combined Communities Served

	Collaborating Partners					
Counties	District 2 Public Health	Habersham Medical Center	Northeast Georgia Health System	Stephens County Hospital		
Hall	Χ		Χ			
Barrow			X			
Gwinnett			Χ			
Jackson			Χ			
Banks	X	X	X			
Habersham	X	Χ	Χ			
Rabun	X	Χ	Χ			
Stephens	X		X	X		
Towns	Χ		Χ			
Union	X		Χ			
White	X		X			
Dawson	X		Χ			
Lumpkin	Χ		Χ			
Forsyth	X					
Franklin	Χ			X		
Hart	Χ					

Assessment of Health Needs

To identify the health needs of the community, the CHNA Partners established a comprehensive method of accounting for all available relevant data, including community input. The basis of identification of community health needs was the weight of qualitative and quantitative data obtained when assessing the community. Surveyors conducted interviews and focus groups with individuals representing public health, community leaders/groups, public organizations, and other providers. In some communities, supplementary qualitative data was included. In addition, quantitative data collected from several public sources was benchmarked against a state value to indicate the level of need.

Quantitative Assessment of Health Needs – Methodology and Data Sources

Public health indicators were used to assess community health needs from a quantitative data perspective. This included collection of 129 data elements grouped into 11 categories and evaluated for the counties where data was available. The categories, indicators, and sources are included in **Appendix A**.

A benchmark analysis was conducted to determine the public health indicators that demonstrated a community health need from a quantitative perspective. Benchmark health indicators included (when available): overall U.S. values and state of Georgia values.

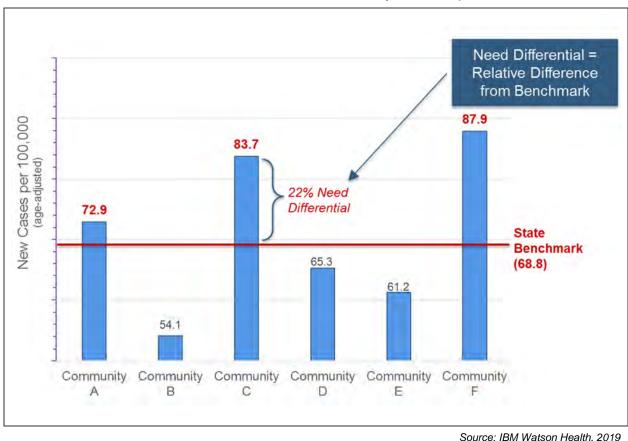
According to America's Health Rankings 2018 Annual Report, the health of Georgia residents ranks 39th out of the 50 states.¹ The health status of Georgia compared to other states in the nation presented many opportunities to impact health within local communities, including opportunities for those communities that ranked highly. Therefore, the benchmark for the community served was set to the state value.

Once the community benchmark was set to the state value, it was determined which indicators for the community did not meet the state benchmarks. This created a subset of indicators for further analysis. A need differential analysis was conducted to understand the relative severity of need for these indicators. The need differential established a standardized way to evaluate the degree each indicator differed from its benchmark. Health community indicators with need differentials above the 50th percentile were ordered by severity; the highest ranked indicators were the top health needs from a quantitative perspective.

The outcomes of the quantitative data analysis were compared to the qualitative data findings.

¹ America's Health Rankings, 2018





Health Indicator Benchmark Analysis Example

Qualitative Assessment of Health Needs and Community Input – Approach

In addition to analyzing quantitative data, Watson Health collected qualitative data via a variety of sources to gather the input of persons representing the broad interests of the communities served throughout the region. Input from over 500 people was included in the assessment via several different approaches.

- Watson Health focus groups and key informant interviews (100 people)
- Johnson Group in-person surveys conducted at the following locations (199 people):
 - The Primary Care Clinic located at the Hall County Health Department
 - The Good News Clinics
 - The Gainesville Housing Authority Melrose Community Apartments
 - Tower Heights Apartments, operated by the Gainesville Housing Authority
- NGHS Hall County Mental and Behavioral Health Listening Sessions (60 people)
- Union General & Chatuge Regional Hospital 2018 CHNA community survey and key informant interviews (148 people)

Watson Health conducted eight (8) focus groups with a total of 75 participants as well as 25 key informant interviews to gather the input of persons representing the broad interests of the communities served throughout the region. The focus groups and interviews solicited feedback from leaders and representatives who serve the community and have insight into community needs.

The focus groups familiarized participants with the CHNA process and solicited input to understand health needs from the community's perspective. Focus groups, formatted for individual as well as small group feedback, helped identify barriers and social determinants influencing the community's health needs.

Watson Health conducted key informant interviews for the communities served by the hospitals. The interviews provided insight into participants' concerns about the general health status of the community and the various drivers that contributed to health issues.

Participation in the Watson Health interview and focus groups included input from <u>at least</u> one state, local, or regional governmental public health department (or equivalent department or agency) with knowledge, information, or expertise relevant to the health needs of the community, as well as individuals or organizations who served and/or represented the interests of medically underserved, low-income and minority populations in the community.

Participation from community leaders/groups, public health organizations, other healthcare organizations, and other healthcare providers ensured that the input received represented the broad interests of the community served. A list of the organizations which participated in the Watson Health sessions can be found in **Appendix B**. Summary findings from the focus groups and interviews can be found in **Appendix C**.

Additional qualitative data sources supplemented the focus groups and interviews. These included: Johnson Group's Hall County health survey of uninsured individuals (199 surveys completed); Hall County Mental and Behavioral Health Listening Sessions (60+ participants from key stakeholder organizations); and qualitative findings from Union General & Chatuge Regional Hospitals 2018 CHNA Reports (148 community-based surveys, four key informant interviews). Information on the additional qualitative data sources can be found in **Appendix D**.

In addition to soliciting input from public health and various stakeholders in the community, the CHNA Partners were also required to consider written input received on their most recently conducted CHNA and subsequent implementation strategies. The prior hospital assessments were available on the CHNA Partners' respective websites to receive public comment or feedback on the report findings. To date the hospital CHNA Partners have addressed questions and shared information related to their prior assessments but have not received written input on their 2016 CHNA reports. The CHNA Partners continue to welcome feedback from the community on this 2019 CHNA. Feedback can be provided at the following sites:

- District 2 Public Health: http://phdistrict2.org/
- Habersham Medical Center: tellus@hcmcmed.org
- Northeast Georgia Health System: www.nghs.com/community-benefit-resources
- Stephens County Hospital: stephenscountyhospital.com/contact/

Community input from qualitative data collection was organized into themes around community needs. These themes were compared to the quantitative data findings.

Methodology for Defining Community Need

Using qualitative feedback from the interviews and focus groups, as well as the health indicator data, the issues affecting the communities served are assembled in the Health Needs Matrix below to help identify the top health needs for the community. The upper right quadrant of the matrix is where the needs identified in the qualitative data (interviews, surveys, listening sessions, focus group feedback, etc.) and quantitative data (health indicators) converge to identify the top health needs for this community.

High Data = Indicators worse than state benchmark by greater magnitude **High Data & Low Qualitative High Data & High Qualitative** High Qualitative = Frequency of Topic in Interviews & Focus Groups Data compared to state Data compared to state benchmark indicates need by benchmark indicates need by a greater magnitude a greater magnitude BUT AND Topic was not raised in Topic was frequent theme in interviews and focus groups interviews and focus groups Qualitative Qualitative Data compared to state Data compared to state benchmark indicates need by benchmark indicates need by a lesser magnitude a lesser magnitude (or no data) AND BUT Topic was <u>not</u> raised in Topic was frequent theme in interviews and focus groups interviews and focus groups Low Data & Low Qualitative Low/ No Data & High Qualitative

The Health Needs Matrix

Source: IBM Watson Health, 2019

Information Gaps

Most public health indicators were available only at the county level. In evaluating data for entire counties versus more localized data, it was difficult to understand the health needs for specific population pockets within a county. This creates a challenge in tailoring interventions to address community health needs, as placement and access to specific programs in one part of the county may or may not actually affect the population who truly need the service. The publicly available health indicator data was supplemented with

Watson Health's ZIP code estimates to assist in identifying specific populations within a community where health needs may be greater.

Approach to Identify and Prioritize Significant Health Needs

On June 19, 2019, a session was held with the CHNA Partners and their community advisors to identify and prioritize the significant health needs for each Partner's community. The Partners and their advisors utilized a comprehensive method of taking into account all available relevant data, including community input. Moderated by Watson Health, the meeting included: an overview of the CHNA process for the northeast Georgia region; the methodology for determining the top health needs; the selection and prioritization of significant health needs for each Partner community; and identification of common priorities across the communities of northeast Georgia.

Participants included the executive sponsor and project sponsor from each of the CHNA Partners. In addition, each Partner invited community advisors to the prioritization session. Community advisors were individuals with a deep knowledge of each Partner's community and were involved/invested in community development. Participants were organized into working groups for each CHNA Partner's community. A list of the participants and their community working groups is included in **Appendix E**.

Prioritization of the health needs took place in two steps. In the first step, participants reviewed the CHNA findings and the Health Needs Matrix for each community and agreed that the needs in the upper right quadrant of the matrix, those identified as high data/high qualitative, were significant. The work groups then reviewed the other quadrants of the matrix where either the quantitative data or qualitative input indicated a need (upper left and lower right quadrants respectively). Leveraging the professional experience and community knowledge of their group via discussion, each group determined if any needs from the other quadrants were considered significant due to their potential or actual impact on the community. This first step established a list of significant health needs for each CHNA Partner community.

In the second step, participants ranked the significant health needs on a set of prioritization criteria chosen by the CHNA Partners:

- 1. <u>Magnitude</u>: The number of people affected actually or potentially by the need and/or the magnitude of the need compared to other needs in the community
- 2. Alignment: Alignment with mission, vision, and values of each organization
- 3. <u>Consequences</u>: Extent of disability, premature death, social, economic or other burdens to the community
- Root Cause: The issue is a root cause of other problems, thereby possibly affecting multiple issues

Through discussion and consensus, the groups rated their community's significant health needs on the four chosen criteria utilizing a scale of 1 (low) to 10 (high). The criteria scores were summed to create an overall score for each need and the significant health needs for each community were prioritized based on the overall scores. The outcome of this process was a community-specific list of prioritized significant health needs. The lists

are located in their respective community sub-sections under "Prioritized Significant Health Needs"

Recommended Health Needs to be Addressed by the CHNA Partners

Each CHNA Partner must choose which of the prioritized significant health needs they will address via their CHNA implementation strategies. In the prioritization session described above, each work group was tasked with recommending up to five priority needs their respective CHNA Partner should address. In making their recommendations, the participants were asked to consider opportunities for collaboration and expertise sharing between the CHNA Partners and other community organizations. The resulting recommended needs are listed in their respective community sub-sections under "Recommended Health Needs to be Addressed." A table of health indicators that support the recommended health needs is in **Appendix H**.

Once each work group established their recommendations for the priority needs to be addressed by their CHNA Partner, the groups reconvened to review their recommended priorities across the communities. Common priorities were identified, and the group discussed areas of potential collaboration and synergies in implementation efforts between the CHNA Partners.

Existing Resources to Address Health Needs

Part of the assessment process included gathering input on community resources potentially available to address the significant health needs identified through the CHNA. Qualitative assessment participants identified community resources that may assist in addressing the health needs identified for their community. A description of these resources is in **Appendix F**.

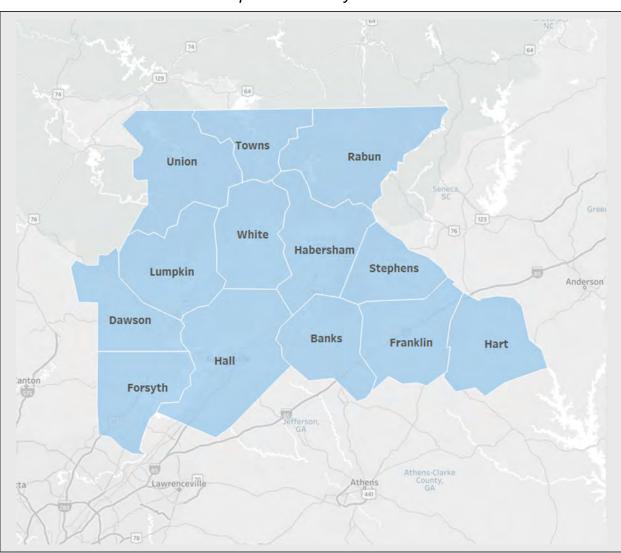
Community Health Data

The CHNA partners collaborated with Watson Health to develop an interactive Tableau dashboard that displays the quantitative data collected as part of the 2019 CHNA. The Community Health Data provides access to over 120 county-level public health indicators as well as proprietary Watson Health estimates for demographics, community need, disease prevalence, insurance coverage, and emergency department visits. The dashboard is available to the community at http://www.nghs.com/community-benefit-resources.

Community Health Needs Assessment – District 2 Public Health

Community Served Definition

The Georgia Department of Public Health funds and collaborates with eighteen separate public health districts throughout the state. District 2 Public Health is comprised of 13 counties in northeast Georgia: Banks, Dawson, Forsyth, Franklin, Habersham, Hall, Hart, Lumpkin, Rabun, Stephens, Towns, Union, and White. For the purpose of this assessment, the geographic boundaries of the community served by District 2 Public Health includes these 13 counties.



Map of Community Served

Source: District 2 Public Health, 2019

Demographic and Socioeconomic Summary

According to population statistics, the overall District 2 Public Health community is expected to grow 6.6% by 2023, an increase of over 42,000 people. The 6.6% projected population growth is higher than both the state's 5-year projected growth rate (5.0%) and the national projected growth rate (3.5%). The median age is older than both the state and national medians. Median household income for the overall community is lower than both benchmarks however there is significant income disparity within the community served. The overall community has a lower proportion of Medicaid beneficiaries than the state of Georgia benchmark and an uninsured rate that is greater than the national rate.

Demographic and Socioeconomic Comparison: Community Served and State/U.S. Benchmarks

		Community Served			
Geography		United States	Georgia	Northeast Georgia Region	District 2 Public Health
Total Current	Population	326,533,070	10,467,269	1,743,817	643,952
5 Yr Projected Pop	oulation Change	3.5%	5.0%	7.2%	6.6%
Median	Age	38.3	36.9	40.3	42.5
Populatio	on 0-17	22.6%	24.0%	25.3%	23.5%
Population	on 65+	15.9%	13.8%	13.1%	17.1%
Women Age 15-44		19.6%	20.4%	20.0%	18.7%
Non-White Population		30.0%	43.0%	36.2%	19.2%
Hispanic Population		18.2%	9.7%	16.6%	14.1%
	Uninsured	9.4%	17.1%	11.9%	13.3%
	Medicaid	19.0%	11.8%	10.4%	9.6%
Insurance Coverage	Private Market	9.6%	10.8%	11.5%	10.6%
J	Medicare	16.1%	14.4%	12.5%	16.5%
	Employer	45.9%	45.8%	53.7%	50.0%
Median HH Income		\$62,175	\$55,559	\$56,929	\$50,362
Limited English		26.2%	19.3%	28.9%	20.3%
No High Scho	ol Diploma	7.4%	8.9%	7.9%	9.3%
Unempl	oyed	6.8%	7.8%	6.3%	6.2%

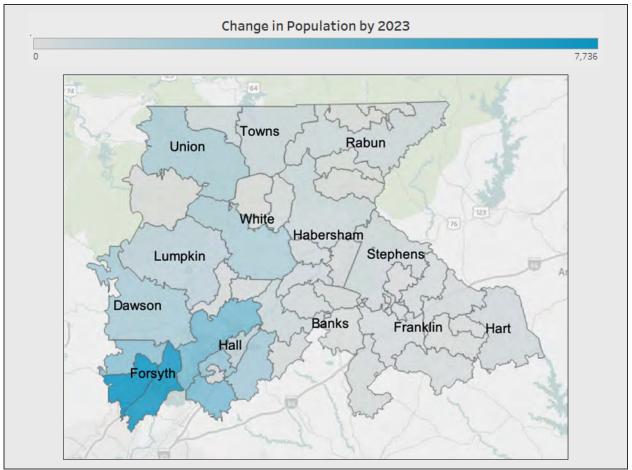
Source: IBM Watson Health / Claritas, 2018; US Census Bureau 2017 (U.S. Median Income)

Note: children (ages 0-17), older adults (ages 65+) and women of childbearing age (ages 18-44) are identified as population groups that have unique healthcare needs.

The southwestern portion of District 2 is expected to experience the most growth and the ZIP codes within that area projected to add the most people in five years are:

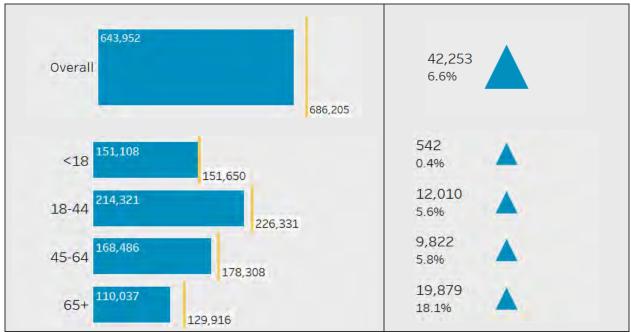
30040 – Cumming
 30041 – Cumming
 7,736 people
 7,219 people
 30506 – Gainesville
 3,388 people
 30542 – Flowery Branch
 3,244 people

2018 - 2023 Total Population Projected Change by ZIP Code



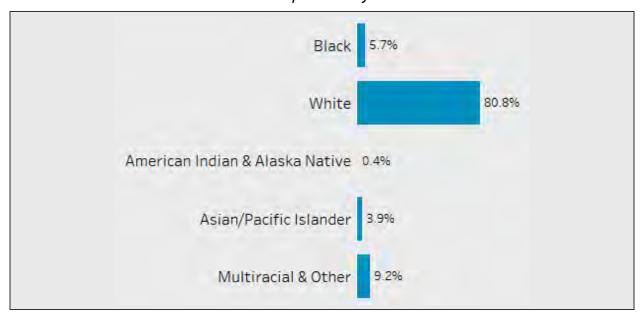
The community's population skews younger with 33.3% of the population ages 18-44 and 23.5% under age 18. The largest cohort (18-44) is expected to grow by 12,010 people by 2023. The age 65 plus cohort is the smallest but is expected to experience the fastest growth (18.1%) over the next five years, adding 19,879 seniors to the community. Growth in the senior population will likely contribute to increased utilization of services as the population continues to age.

Population Distribution by Age
2018 Population by Age Cohort Change by 2023

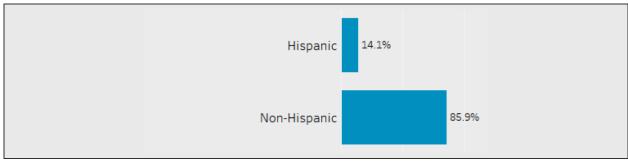


Population statistics are analyzed by race and by Hispanic ethnicity. The community is primarily racially White (80.8%), with those of Black race comprising 5.7% of the population and the other racial groups constituting the remaining 13.5%. The racial group projected to grow the fastest in the next five years is Asian/Pacific Islander (37.6%); this group will add the most non-white population in the next five years (9,343 people). The Hispanic population (all races) comprises just over 14% of the community's population. Meanwhile, the expected growth rate of the Hispanic population is over 12,000 people (13.4%) by 2023.

2018 Population by Race



2018 Population by Ethnicity



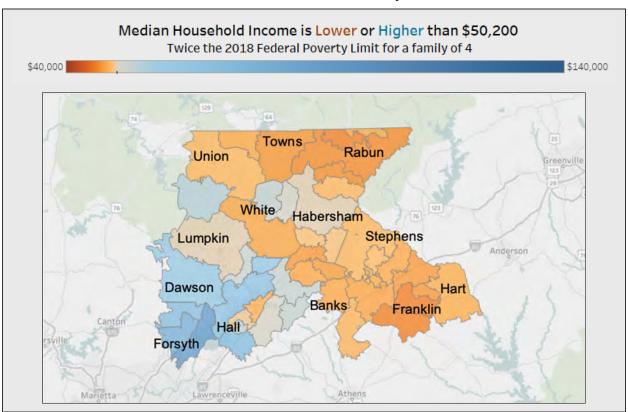
Change in Population by 2023 2,069 Towns Rabun Union White Habersham Stephens Lumpkin Dawson Banks Franklin Hart Hall Forsyth

2018 - 2023 Hispanic Population Projected Change by ZIP Code

The 2018 median household income for the United States is \$62,175 and \$55,559 for the state of Georgia. The median household income for the ZIP codes within this community ranges from \$34,369 for ZIP Code 30520-Canon to \$112,231 for ZIP Code 30041-Cumming. Thirty (30) of the 45 community ZIP codes have median household incomes less than \$50,200 which is twice the 2018 Federal Poverty Limit for a family of four. For the following nine (9) ZIP codes, the median income values are less than \$40,000.

•	30520 - Canon	\$34,369
•	30568 – Rabun Gap	\$34,615
•	30662 - Royston	\$34,640
•	30525 – Clayton	\$36,814
•	30576 – Tiger	\$37,372
•	30516 – Bowersville	\$38,527
•	30546 – Hiawassee	\$38,621
•	30531 – Cornelia	\$39,431
•	30553 – Lavonia	\$39,434

2018 Median Household Income by ZIP Code



Half of the population (50%) is insured through employer sponsored health coverage, followed by those with Medicare (16%), and those without health insurance (13%). The remainder of the population are divided between private market – 11% (the purchasers of coverage directly or through the health insurance marketplace) and Medicaid (10%). The percentage of population uninsured in this community is lower than the percentage uninsured in the state (17%). The community has a higher percent of people with employer sponsored coverage than the state (45%).

Employer

Medicare

16%

Private Market

11%

Medicaid

10%

Uninsured

13%

0 50,000 100,000 150,000 200,000 250,000 300,000

2018 Estimated Population

2018 Estimated Distribution of Covered Lives by Insurance Category

The community includes 38 Health Professional Shortage Areas and 12 Medically Underserved Areas as designated by the U.S. Department of Health and Human Services Health Resources Services Administration.² Appendix G includes the details on each of these designations.

Health Professional Shortage Areas and Medically Underserved Areas and Populations

	Health Professional Shortage Areas (HPSA)			Medically Underserved Area/Population (MUA/P)	
District 2 Public Health	Dental Health	Mental Health	Primary Care	Grand Total	MUA/P
Banks	1	1	1	3	1
Dawson		1	1	2	
Forsyth	1	2	1	4	1
Franklin	1	1	1	3	1
Habersham	2	2	2	6	1
Hall	1 1 1		1	2	1
Hart			3	2	
Lumpkin	1	1	1	3	1
Rabun		1	1	2	1
Stephens		1	1	2	
Towns		1	2	3	1
Union	1	1	1	3	1
White		1	1	2	1
Total	8	15	15	38	12

Source: U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018

² U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018



The Watson Health Community Need Index (CNI) is a statistical approach to identifying areas within a community where health disparities may exist. Leveraging U.S. Census Data and Watson Health Insurance Coverage Estimates, the CNI takes into account vital socio-economic factors (income, cultural, education, insurance and housing) about a community to generate a CNI score for every populated ZIP code in the United States. The CNI is strongly linked to variations in community healthcare needs and is an indicator of a community's demand for various healthcare services. The CNI score by ZIP code identifies specific areas within a community where healthcare needs may be greater.

Overall, the composite CNI score for the community served is 3.4, lower than the state CNI (3.8) and greater than the national benchmark score of 3.0. Thirty-six of the 45 ZIP codes in the community have scores greater than national benchmark score pointing to potentially more significant health needs among those populations. There are three ZIP codes in the community where the CNI score is greater than 4.5; Gainesville ZIP codes 30501 and 30504, and 30531-Cornelia, pointing to potentially even greater health needs in those areas.

Composite 2018 Community Need Index: high scores indicate high need District 2 Public Health Towns Composite CNI Score Rabun Union 3.4 White Habersham Stephens Lumpkin State and National Composite CNI Scores Dawson Hart **Banks** Franklin Forsyth ZIP Map where color shows the Community Need Index on a scale of 0 to 5. Orange color indicates high need areas (CNI = 4 or 5); blue color indicates low need (CNI = 1 or 2). Gray colors have needs at the national average (CNI = 3).

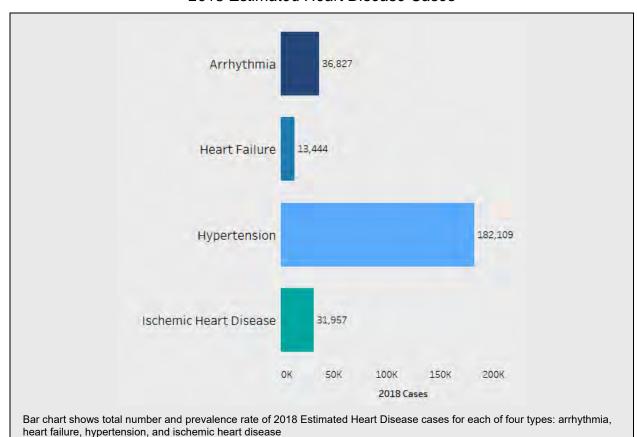
2018 Community Need Index by ZIP Code

Watson Health Community Data

Watson Health supplements the publicly available data and population statistics with estimates of localized disease prevalence of heart disease and cancer as well as emergency department visit estimates.

Watson Health Heart Disease Estimates identify hypertension as the most prevalent heart disease diagnosis; there are over 182,000 estimated cases in the community overall. The 30041 ZIP code of Cumming has the most estimated cases of each heart disease type driven primarily by population size. The 30545 ZIP code of Helen has the highest estimated prevalence rates for Arrhythmia (978 cases per 10,000 population) and Ischemic Heart Disease (1,081 cases per 10,000). The 30546 ZIP code of Hiawassee has the highest estimated prevalence rates for Heart Failure (357 cases per 10,000), and the 30572 ZIP code of Suches has the highest estimated prevalence rate for Hypertension (4,181 cases per 10,000).

Slightly more females are identified as living with Arrythmia, Heart Failure, and Hypertension than males, but more males are identified as living with Ischemic Heart Disease than females (61% versus 39%).



Note: An individual patient may have more than one type of heart disease. Therefore the sum of all four heart disease types is

2018 Estimated Heart Disease Cases

Source: IBM Watson Health, 2018

not a unique count of individuals.

For this community, Watson Health's 2018 Cancer Estimates reveals the cancers estimated to have the greatest number of new cases in 2018 are lung (634), prostate (624) and breast (531) cancers. The cancers projected to have the greatest rate of growth in the next five years are thyroid, pancreatic, and melanoma. Growth projections are based on both population changes and disease rates.

527 Breast 531 624 Prostate 307 327 Lung 170 178 Colorectal Non Hodgkins Lymphoma Melanoma 145 39 Kidney Bladder 119 Leukemia Pancreatic

2018 Estimated New Cancer Cases

Source: IBM Watson Health, 2018

400

350

Estimated New Diagnoses

Uterine Corpus

Uterine Cervical

Thyroid

Oral Cavity 29

Stomach 20 35

Ovarian 55

Other

Brain 23 29

69

203

100

Color shows details about sex with light blue for females and dark blue for males.

150

Bar chart shows estimated new diagnoses per year for each of the 17 types of Cancer and 1 category for all other cancers.

500

Estimated Cancer Cases and Projected 5 Year Change by Type

Cancer Type	2018 Estimated New Cases	2023 Estimated New Cases	5 Year Growth (%)
Bladder	154	176	14.5%
Brain	52	57	9.4%
Breast	531	594	11.8%
Colorectal	349	335	-3.9%
Kidney	110	125	13.9%
Leukemia	116	131	13.1%
Lung	634	700	10.5%
Melanoma	241	279	16.0%
Non-Hodgkin's Lymphoma	175	198	13.2%
Oral Cavity	100	114	14.4%
Ovarian	55	61	10.8%
Pancreatic	131	152	16.2%
Prostate	624	651	4.4%
Stomach	55	61	9.9%
Thyroid	93	108	17.0%
Uterine Cervical	15	16	5.8%
Uterine Corpus	95	108	14.3%
All Other Cancers	525	596	13.4%
Grand Total	4,053	4,462	10.1%

Source: IBM Watson Health, 2018

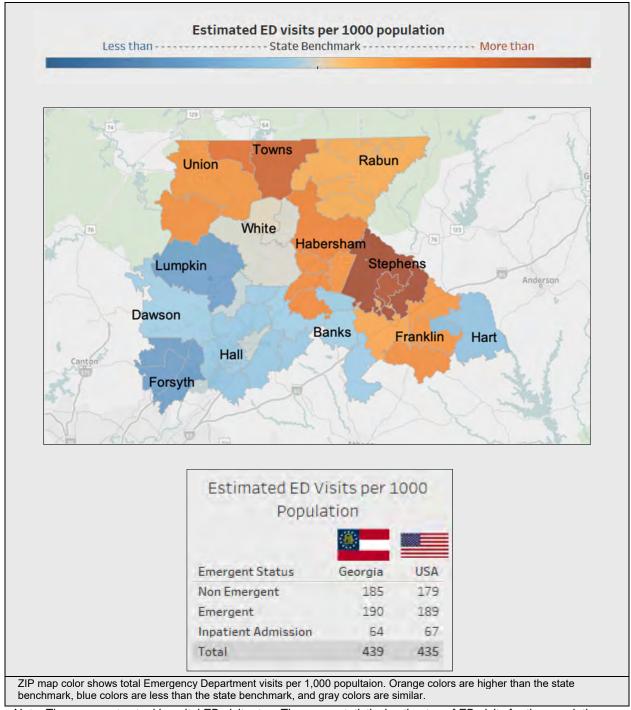
Based on population characteristics and regional utilization rates, Watson Health projects all emergency department (ED) visits in this community to increase by 7.6% over the next five years. Almost half of the community ZIP codes have higher ED use rates for their population than the Georgia state benchmark of 439 visits and the U.S. benchmark of 435 visits per 1,000. The highest estimated ED use rates are in the ZIP codes 30557-Martin (804 ED visits per 1,000 population), 30577-Toccoa (799 ED visits per 1,000), and 30538-Eastanollee (769 ED visits per 1,000).

These ED visits consist of three main types: those resulting in an inpatient admission, emergent ED visits treated and released, and non-emergent ED visits that are lower acuity. Non-emergent ED visits present to the ED but can possibly be treated in more appropriate and less intensive outpatient settings.

Non-emergent ED visits can be an indication of systematic issues within the community regarding access to primary care, managing chronic conditions, or other access to care issues such as ability to pay. Watson Health estimates non-emergent ED visits will increase by 2.9% over the next five years in this community. Over one-third (16 out of 45) of the District 2 Public Health ZIP codes have an estimated non-emergent ED visit rate higher than the state benchmark of 185 visits per 1,000 population. The five ZIP codes with the highest estimated number of non-emergent ED visits are:

- 30577 Toccoa
- 30557 Martin
- 30538 Eastanollee
- 30582 Young Harris
- 30531 Cornelia

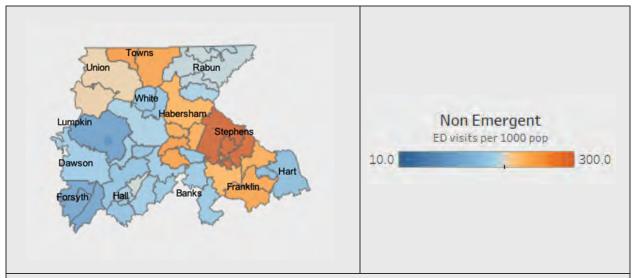
Total Estimated 2018 Emergency Department Visit Rate



Note: These are not actual hospital ED visit rates. These are statistical estimates of ED visits for the population.

Source: IBM Watson Health, 2018

Non-Emergent Estimated 2018 Emergency Department Visits by ZIP Code



ZIP map color shows total Emergency Department vists per 1,000 population by non-emergent status. Orange colors are higher than the state benchmark (see table at right), blue colors are less than the state benchmark, and gray colors are similar. Color range is set for the entire study region. ED visits are defined by the presence of specific CPT® codes in claims. Non-emergency visits to the ED do not necessarily require treatment in a hospital emergency department and can potentially be treated in a fast-track ED, an urgent care treatment center, a clinic or physician's private office.

Note: These are not actual hospital ED visit rates. These are statistical estimates of ED visits for the population.

Source: IBM Watson Health, 2018

Public Health Indicators

Public health indicators (129 total) were collected and analyzed to assess community health needs. For each health indicator, a comparison was made between the most recently available community data and benchmarks for the same/similar indicator. The basis of benchmarks was available data for the U.S. and the state of Georgia. A list of these indicators is in **Appendix A**.

Where the community indicators showed greater need when compared to the state of Georgia comparative benchmark, the difference between the community values and the state benchmark was calculated (need differential). The highest ranked indicators with need differentials in the 50th percentile of greater severity pinpointed community health needs from a quantitative perspective.

Focus Groups & Interviews

In the Watson Health focus group sessions and interviews, participants identified and discussed the greatest health needs in the community, as well as the barriers and strengths impacting overall health status. For this community, five (5) focus group sessions (listed below) with a total of 32 participants and 20 interviews were conducted March through April 2019. A list of the organizations providing input can be found in **Appendix B**. Summary findings from the focus groups and interviews can be found in **Appendix C**. Additional input gathered via the Johnson Group Hall County Survey; NGHS Hall County Mental and Behavioral Health Listening Sessions; and Union General and Chatuge Regional Hospitals 2018 CHNA Reports were used to assess need from a qualitative perspective (**Appendix D**).

Focus Group	Date	Location	Number of Participants
Dawson County Focus Group	March 5, 2019	Medical Plaza 400 Dawsonville, GA	3
Hall County Focus Group	March 5, 2019	Fair Street Neighborhood Center Gainesville, GA	8
Habersham & Stephens Counties Focus Group	March 6, 2019	Habersham Medical Center Demorest, GA	9
Lumpkin County Focus Group	March 8, 2019	UNG Professional & Continuing Education Dahlonega, GA	5
Hall County Hispanic Focus Group	April 13, 2018	Norma Hernandez Income Tax Offices Gainesville, GA	7

Prioritized Significant Health Needs for District 2 Public Health

The Health Needs Matrix identified through the community health needs assessment (see Methodology for Defining Community Needs section) shows the convergence of needs identified in the qualitative data (interview and focus group feedback) and quantitative data (health indicators). The top health needs for this community are defined in the Health Needs Matrix below.

High Data & Low Qualitative High Data & High Qualitative Access to Dental Care Violence - Child Abuse Access to Care - Insurance Status, Fair or Poor Health Status · Bone and Muscle Disease Teen Pregnancy · Infectious Disease-STI, TB, Hep A Preventable Hospitalizations, · Disability Endocrine Disease · Injury and Death Primary Care Gastrointestinal Disease · Segregation . Maternal and Child Health - Child Mortality Cancer Musculoskeletal Disease Arthritis · Mental Health - Providers, Suicide Nervous System Disease Cardiovascular Disease Physical Activity Reproductive and Urinary Disease Cerebrovascular Disease Education Employment Septicemia Diabetes · Income Respiratory Disease · Social Isolation · Substance Abuse - Alcohol, Drugs, Opioids Transportation Qualitative Qualitative Access to Care – Cost, Preventive Care Asthma Cultural/Religious Barriers Health Behaviors Genitourinary Disease Single Parent Household Obesity · Health Education/Literacy Air Quality Homelessness Food Access and Nutrition Immigrant, Undocumented, Housing and/or Refugee Status Substance Abuse – Smoking Assess to Case Inquies Language Barriers Access to Care Issues Policy and Government ➤ Coordination of Care/Resources Stigma around MH and Social Services > Medications • Trust > Specialty Care - Dialysis > Senior Services > Urgent Care > ER and Emergency Services Low Data & Low Qualitative Low / No Data & High Qualitative

Community Health Needs Matrix

Note: Lower right quadrant items in italics do not have quantitative data indicators available

Source: IBM Watson Health, 2019

Through the prioritization process, the significant health needs for this community were identified, reviewed, and prioritized (see "Approach to Identify and Prioritize Significant Health Needs" section). The resulting prioritized health needs for the community are provided in the table below.

Prioritized Significant Community Health Needs

Priority Rank	Health Need
1	Substance Abuse
1	Physical Activity
1	Infectious Disease - STI, TB, Hepatitis A
1	Transportation
1	Diabetes
2	Cardiovascular Disease

Priority Rank	Health Need
2	Stigma around Mental Health and Social Services (added)
2	Maternal and Child Health (added Teen Pregnancy)
3	Access to Care (added Cost, Preventive Care, and Senior Services)
3	Immigrant, Undocumented and/or Refugee Status (added)
4	Income
4	Social Isolation
5	Cancer
6	Violence - Child Abuse
6	Mental Health
7	Alzheimer's Disease and Dementia (added)
8	Cerebrovascular Disease
9	COPD and Respiratory Disease
10	Access to Dental Care
10	Education
11	Employment
12	Injury and Death
13	Arthritis
14	Fair or Poor Health Status

Notes: Needs noted as "added" were pulled from quadrants other than the upper right (high data/high qualitative) as they were considered significant by the prioritization working group.

Needs with the same priority rank received the same overall score in the prioritization process

Recommended Health Needs to be Addressed for District 2 Public Health

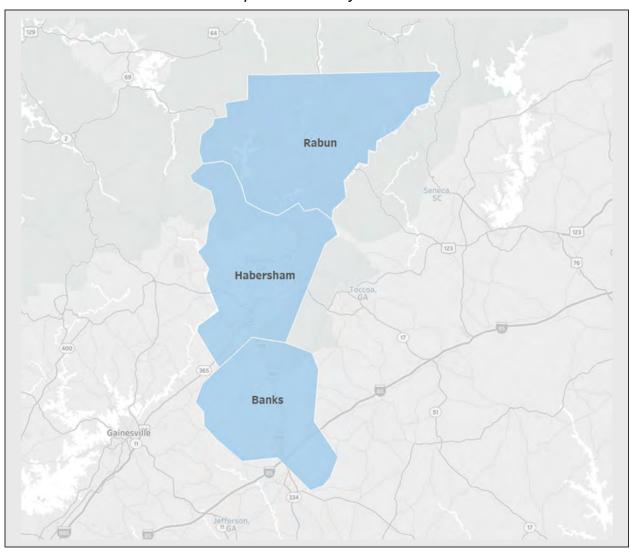
As part of the prioritization work session, work group participants recommended a set of prioritized significant health needs that should be addressed by each CHNA Partner (see "Recommended Health Needs to be Addressed by the CHNA Partners" section). The members of this community's prioritization work group recommended the following significant needs to be addressed via District 2 Public Health's CHNA implementation strategy:

- Substance Abuse
- Physical Activity
- Transportation
- Mental Health Stigma and Services
- Child Mortality and Teen Pregnancy

Community Health Needs Assessment – Habersham Medical Center

Community Served Definition

For the purpose of this assessment, the geographic boundaries of the community served by Habersham Medical Center (HMC) includes the counties from which a majority of HMC patients originate. The counites included are where HMC has a minimum of 20% market share based on inpatient and outpatient claims. The HMC community served is comprised of Banks, Habersham, and Rabun counties.



Map of Community Served

Source: Habersham Medical Center, 2019

Demographic and Socioeconomic Summary

According to population statistics, the HMC community is expected to grow 3.6% by 2023, an increase of more than 2,700 people. The 3.6% projected population growth is less than the state's 5-year projected growth rate (5.0%) but slightly higher when compared to the national projected growth rate (3.5%). The median age is much older than both the state and national benchmarks. Median household income for the community is much lower than state and national benchmarks. The overall community has a slightly lower proportion of Medicaid beneficiaries than the state of Georgia benchmark and the estimated uninsured rate is greater than the national and state levels.

Demographic and Socioeconomic Comparison: Community Served and State/U.S. Benchmarks

Geography		Benchmarks			Community Served
		United States	Georgia	Northeast Georgia Region	Habersham Medical Center
Total Current	Population	326,533,070	10,467,269	1,743,817	76,542
5 Yr Projected Pop	oulation Change	3.5%	5.0%	7.2%	3.6%
Median	Age	38.3	36.9	40.3	43.6
Population	on 0-17	22.6%	24.0%	25.3%	21.3%
Population	on 65+	15.9%	13.8%	13.1%	20.3%
Women Age 15-44		19.6%	20.4%	20.0%	18.9%
Non-White P	opulation	30.0%	43.0%	36.2%	14.0%
Hispanic Po	pulation	18.2%	9.7%	16.6%	12.0%
	Uninsured	9.4%	17.1%	11.9%	18.4%
	Medicaid	19.0%	11.8%	10.4%	11.0%
Insurance Coverage	Private Market	9.6%	10.8%	11.5%	9.4%
	Medicare	16.1%	14.4%	12.5%	20.3%
	Employer	45.9%	45.8%	53.7%	40.9%
Median HH Income		\$62,175	\$55,559	\$56,929	\$42,041
Limited English		26.2%	19.3%	28.9%	17.2%
No High Scho	ool Diploma	7.4%	8.9%	7.9%	11.9%
Unempl	oyed	6.8%	7.8%	6.3%	7.6%

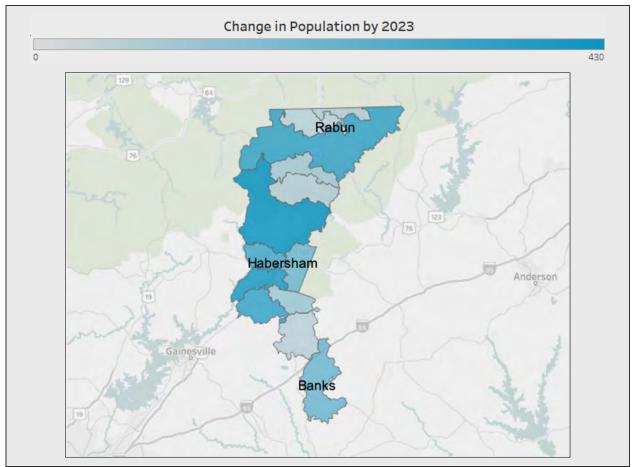
Source: IBM Watson Health / Claritas, 2018; US Census Bureau 2017 (U.S. Median Income)

Note: children (ages 0-17), older adults (ages 65+) and women of childbearing age (ages 18-44) are identified as population groups that have unique healthcare needs.

The ZIP codes expected to experience the most growth in five years are:

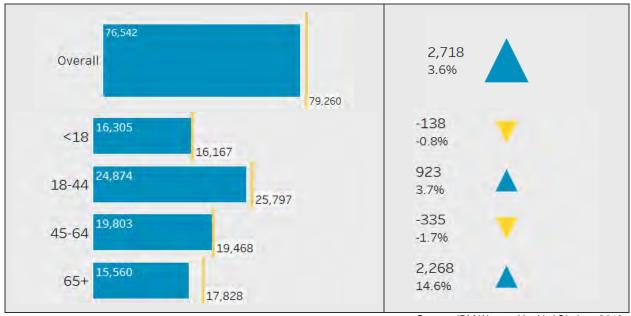
•	30523 – Clarkesville	430 people
•	30531 – Cornelia	397 people
•	30525 – Clayton	333 people
•	30510 – Alto	330 people
•	30535 - Demorest	303 people

2018 - 2023 Total Population Projected Change by ZIP Code



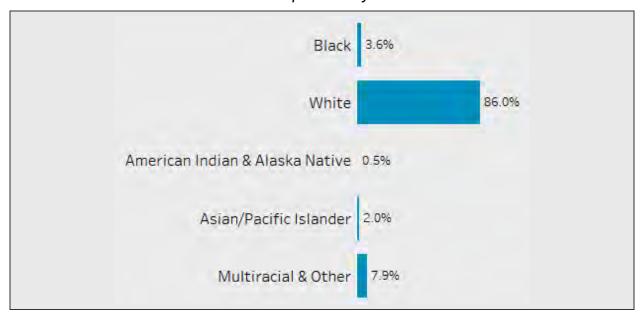
The community's population skews slightly younger with 53.8% of the population younger than 44 (32.5% of the population ages 18-44 and 21.3% under age 18). The largest cohort (18-44) is expected to grow by 923 people by 2023. Two (2) cohorts are expected to decrease in population size by 2023, the under age 18 (-138 people) and the 45-64 cohorts (-335 people). The age 65 plus cohort is the smallest, representing 20.3% of the population, but is expected to experience the fastest growth (14.6%) over the next five years; adding 2,268 seniors to the community. Growth in the senior population will likely contribute to increased utilization of services as the population continues to age.

Population Distribution by Age
2018 Population by Age Cohort Change by 2023

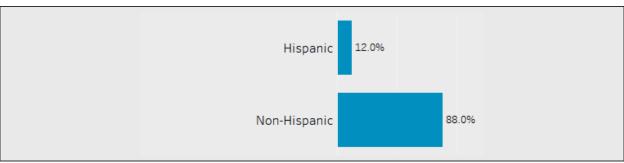


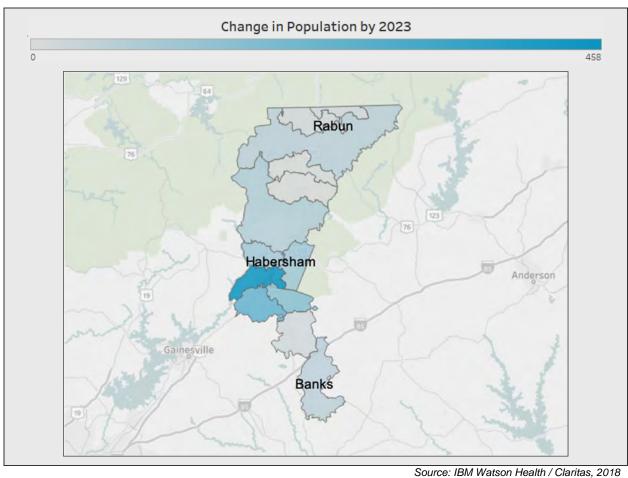
Population statistics are analyzed by race and by Hispanic ethnicity. The community is primarily racially White (86.0%), with the Black population comprising 6.0% of the population and a combination of other racial groups comprising the remaining 8.0% of the population. In terms of ethnicity, the community population is primarily non-Hispanic (88.0%) but projected growth in the Hispanic population is expected to outpace other groups increasing 1,338 people by 2023.

2018 Population by Race



2018 Population by Ethnicity



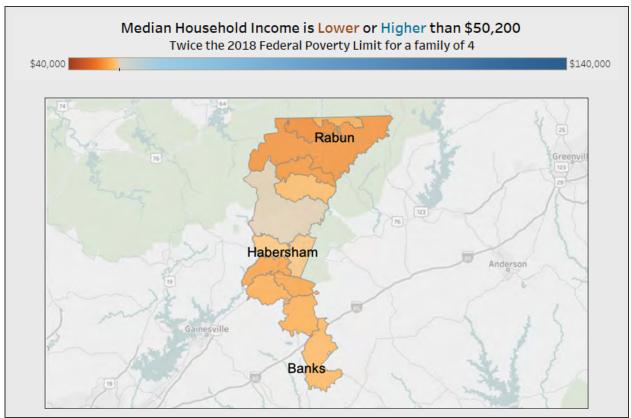


2018 - 2023 Hispanic Population Projected Change by ZIP Code

The 2018 median household income for the United States is \$62,175 and \$55,559 for the state of Georgia. The median household income for the ZIP codes within this community ranges from \$34,615 for ZIP code 30568-Rabun Gap to \$49,253 for ZIP code 30523-Clarkesville. All 13 ZIP Codes in the Habersham service area have median household incomes less than \$50,200, twice the 2018 Federal Poverty Limit for a family of four:

•	30523 – Clarkesville	\$49,253	•	30537 - Dillard	\$41,486
•	30563 – Mount Airy	\$47,158	•	30511 – Baldwin	\$40,518
•	30535 - Demorest	\$46,919	•	30531 - Cornelia	\$39,431
•	30552 - Lakemont	\$45,214	•	30576 – Tiger	\$37,372
•	30530 - Commerce	\$44,227	•	30525 - Clayton	\$36,814
•	30547 - Homer	\$41,815	•	30568 – Rabun Gap	\$34,615
•	30510 – Alto	\$41.707			

2018 Median Household Income by ZIP Code



Much of the population (41%) is insured through employer sponsored health coverage, followed by those with Medicare (20%), and residents without health insurance (18%). The remainder of the population is divided between those with Medicaid (11%) and private market insurance (9%); purchasers of coverage directly or through the health insurance marketplace.

The proportion of residents who have Medicare (20%) coverage and who are uninsured (18%) is higher than the proportion for the state of Georgia (14% and 17% respectively).

Employer 20%

Medicare 20%

Private Market 9%

Medicaid 11%

Uninsured 18%

0 5,000 10,000 15,000 20,000 25,000 30,000 2018 Estimated Population

2018 Estimated Distribution of Covered Lives by Insurance Category

The community includes 11 Health Professional Shortage Areas and three (3) Medically Underserved Areas as designated by the U.S. Department of Health and Human Services Health Resources Services Administration.³ Appendix G includes the details on each of these designations.

Health Professional Shortage Areas and Medically Underserved Areas and Populations

	Health Professional Shortage Areas (HPSA)			Medically Underserved Area/Population (MUA/P)	
Habersham Medical Center	Dental Health	Mental Health	Primary Care	Grand Total	MUA/P
Banks	1	1	1	3	1
Habersham	2	2	2	6	1
Rabun		1	1	2	1
Total	3	4	4	11	3

Source: U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018

³ U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018



The Watson Health Community Need Index (CNI) is a statistical approach to identifying areas within a community where health disparities may exist. Leveraging U.S. Census Data and Watson Health Insurance Coverage Estimates, the CNI takes into account vital socio-economic factors (income, cultural, education, insurance and housing) about a community to generate a CNI score for every populated ZIP code in the United States. The CNI strongly links to variations in community healthcare needs and is an indicator of a community's demand for various healthcare services. The CNI score by ZIP code identifies specific areas within a community where healthcare needs may be greater.

Overall, the composite CNI score for the community served is 3.9, higher than the state CNI of 3.8 and national benchmark of 3.0, potentially indicating greater health care needs in this community. The CNI score in ZIP code 30531-Cornelia is 4.8; a score greater than 4.5 may point to even more significant health needs among this population.

Twelve of the 13 ZIP codes in the community have insurance barrier scores of 5, reflecting the percentage of the labor force without employment and percentage of population without health insurance. Additionally, seven of the 13 ZIP codes have education barrier scores of 5, which means these ZIP codes rank in the bottom quintile across the nation for the percentage of population over age 25 without a high school diploma.

Composite 2018 Community Need Index: high scores indicate high need Habersham Medical Rabun Center Composite CNI Score 3.9 Habersham State and National Composite CNI Scores Banks ZIP Map where color shows the Community Need Index on a scale of 0 to 5. Orange color indicates high need areas (CNI = 4 or 5); blue color indicates low need (CNI = 1 or 2). Gray colors have needs at the national average (CNI = 3).

2018 Community Need Index by ZIP Code

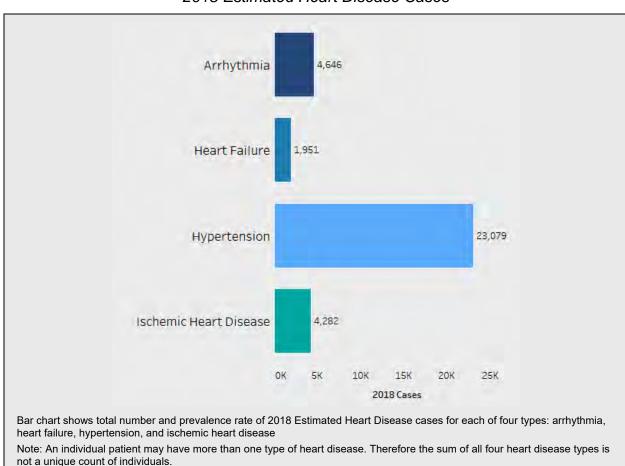
Watson Health Community Data

Watson Health supplements the publicly available data and population statistics with estimates of localized disease prevalence of heart disease and cancer as well as emergency department visit estimates.

Watson Health Heart Disease Estimates identify hypertension as the most prevalent heart disease diagnosis; with over 23,000 estimated cases in the community. The 30523 ZIP code of Clarkesville has the most estimated cases of each heart disease type, driven primarily by population size.

Slightly more females are identified as living with Arrythmia, Heart Failure, and Hypertension than males, but more males are identified as living with Ischemic Heart Disease than females (62% versus 38%).

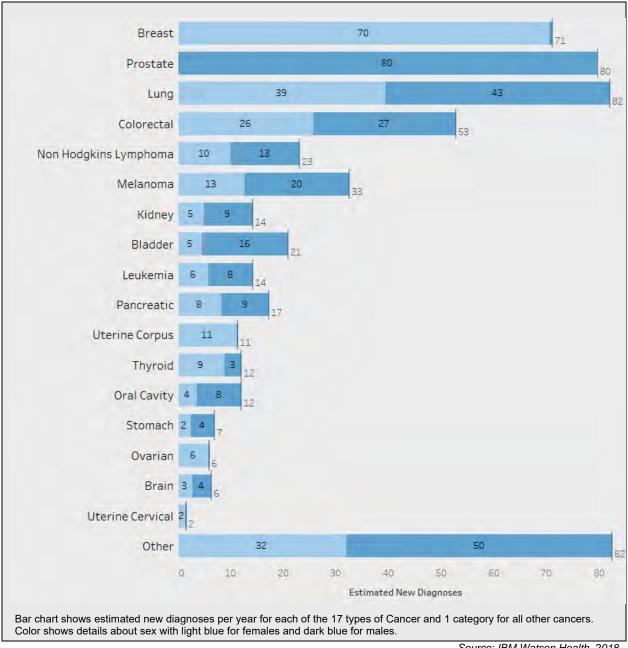
The 30523 ZIP code of Clarkesville has the highest estimated prevalence rates for Heart Failure (308 cases per 10,000 population), Hypertension (3,454 cases per 10,000 population), and Ischemic Heart Disease (716 cases per 10,000 population). The 30552 ZIP code of Lakemont has the highest estimated prevalence rate for Arrhythmia (725 cases per 10,000 population.



2018 Estimated Heart Disease Cases

For this community, Watson Health's 2018 Cancer Estimates reveal the cancers estimated to have the greatest number of new cases in 2018 are lung, prostate, and breast. The cancers projected to have the greatest rate of growth in the next five years are melanoma (13.3%), thyroid (12.9%), pancreatic (12.1%), and bladder (11.1%). Growth projections are based on both population changes and disease rates.





Estimated Cancer Cases and Projected 5 Year Change by Type

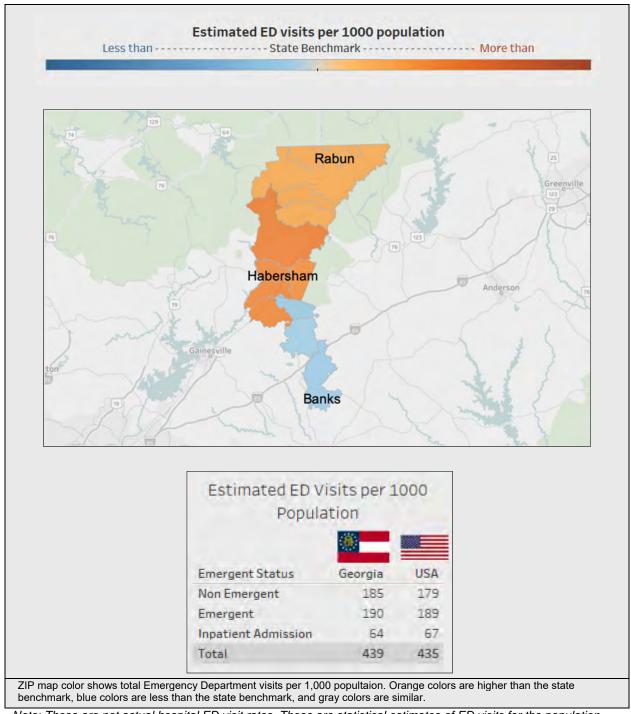
Cancer Type	2018 Estimated New Cases	2023 Estimated New Cases	5 Year Growth (%)
Bladder	21	23	11.1%
Brain	6	7	6.3%
Breast	71	77	7.7%
Colorectal	53	48	-8.5%
Kidney	14	16	9.7%
Leukemia	14	16	9.6%
Lung	82	87	6.6%
Melanoma	33	37	13.3%
Non-Hodgkin's Lymphoma	23	25	9.6%
Oral Cavity	12	13	9.6%
Ovarian	6	6	6.3%
Pancreatic	17	19	12.1%
Prostate	80	80	-0.1%
Stomach	7	7	4.7%
Thyroid	12	14	12.9%
Uterine Cervical	2	2	1.5%
Uterine Corpus	11	12	9.3%
All Other Cancers	82	91	9.9%
Grand Total	547	580	6.1%

Based on population characteristics and regional utilization rates, Watson Health projects all emergency department (ED) visits in this community will increase by 5.7% over the next five years. Ten of the communities 13 ZIP codes have ED use rates higher than those for the state of Georgia (439 visits per 1,000 population) and the U.S. benchmark (435 visits per 1,000 population).

These ED visits consist of three main types: those resulting in an inpatient admission, emergent ED visits treated and released, and non-emergent ED visits that are lower acuity. Non-emergent ED visits present to the ED but can possibly be treated in more appropriate and less intensive outpatient settings.

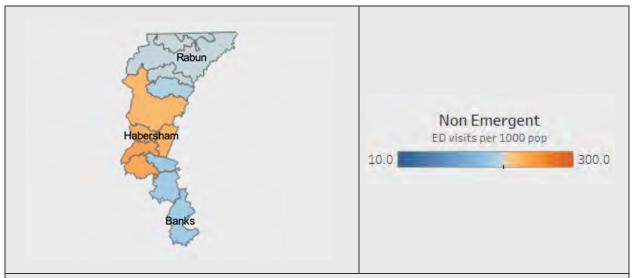
Non-emergent ED visits can be an indication of systematic issues within the community regarding access to primary care, managing chronic conditions, or other access to care issues such as ability to pay. Five (5) ZIP codes have estimated Non-emergent ED visit rates higher than the state benchmark of 185 visits per 1,000 population: ZIP codes 30531-Cornelia, 30510-Alto, 30535-Demorest, 30563-Mount Airy, and 30523-Clarkesville. Watson Health estimates non-emergent ED visits to increase by an average of 1.4% over the next five years in this community.

Total Estimated 2018 Emergency Department Visit Rate



Note: These are not actual hospital ED visit rates. These are statistical estimates of ED visits for the population.

Non-Emergent Estimated 2018 Emergency Department Visits by ZIP Code



ZIP map color shows total Emergency Department vists per 1,000 population by non-emergent status. Orange colors are higher than the state benchmark (see table at right), blue colors are less than the state benchmark, and gray colors are similar. Color range is set for the entire study region. ED visits are defined by the presence of specific CPT® codes in claims. Non-emergency visits to the ED do not necessarily require treatment in a hospital emergency department and can potentially be treated in a fast-track ED, an urgent care treatment center, a clinic or physician's private office.

Note: These are not actual hospital ED visit rates. These are statistical estimates of ED visits for the population.

Public Health Indicators

Public health indicators (129 total) were collected and analyzed to assess community health needs. For each health indicator, a comparison was made between the most recently available community data and benchmarks for the same/similar indicator. The basis of benchmarks was available data for the U.S. and the state of Georgia. A list of these indicators is in **Appendix A**.

Where the community indicators showed greater need when compared to the state of Georgia comparative benchmark, the difference between the community values and the state benchmark was calculated (need differential). The highest ranked indicators with need differentials in the 50th percentile of greater severity pinpointed community health needs from a quantitative perspective.

Focus Groups & Interviews

In the Watson Health focus group sessions and interviews, participants identified and discussed the greatest health needs in the community, as well as the barriers and strengths impacting overall health status. For this community, one focus group session (listed below) with nine (9) participants and two (2) interviews was conducted between March and April 2019. A list of the organizations providing input can be found in **Appendix C**.

Focus Group	Date	Location	Number of Participants
Habersham & Stephens Counties Focus Group	March 6, 2019	Habersham Medical Center Demorest, GA	9

Prioritized Significant Health Needs for Habersham Medical Center

The Health Needs Matrix identified through the community health needs assessment (see Methodology for Defining Community Needs section) shows the convergence of needs identified in the qualitative data (interview and focus group feedback) and quantitative data (health indicators). The top health needs for this community are defined in the Health Needs Matrix below.



Community Health Needs Matrix

Note: Lower right quadrant items in italics do not have quantitative data indicators available

Through the prioritization process, the significant health needs for this community were identified, reviewed, and prioritized (see "Approach to Identify and Prioritize Significant Health Needs" section). The resulting prioritized health needs for the community are provided in the table below.

Prioritized Significant Community Health Needs

Priority Rank	Health Need
1	Access to Care
1	Violence - Child Abuse
2	Mental Health
3	Diabetes
3	Substance Abuse
4	Cardiovascular Disease
4	Physical Activity
5	Maternal and Child Health
6	Access to Dental Care
7	Injury and Death
7	Transportation

Notes: HMC prioritization working group did not add needs from quadrants other than the upper right (high data/high qualitative). Needs with the same priority rank received the same overall score in the prioritization process

Source: IBM Watson Health, 2019

Recommended Health Needs to be Addressed for Habersham Medical Center

As part of the prioritization work session, work group participants recommended a set of prioritized significant health needs that should be addressed by each CHNA Partner (see "Recommended Health Needs to be Addressed by the CHNA Partners" section). The members of this community's prioritization work group recommended the following significant needs to be addressed via Habersham Medical Center's CHNA implementation strategy:

- Access to Care
- Mental Health
- Diabetes

CHNA Implementation Strategy

HMC will choose which needs it will address from those identified in the assessment. An implementation strategy with specific initiatives to address the chosen health will be completed and adopted by the hospital by February 15, 2020.

An evaluation of the HMC 2016 CHNA implementation strategy and its impact can be found in **Appendix I**.

Community Health Needs Assessment - NGHS Greater Braselton Service Area

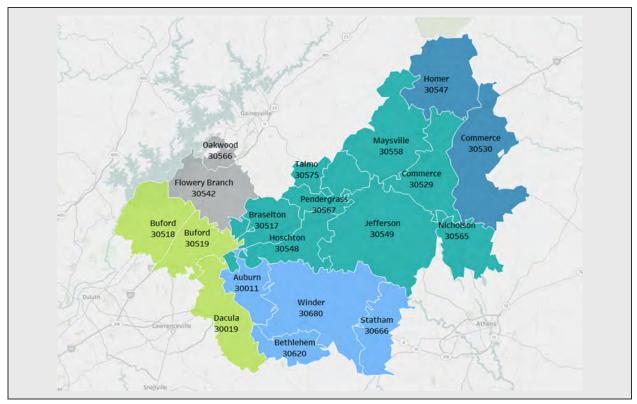
Community Served Definition

For the purpose of this assessment, the geographic boundaries of the community served by NGHS encompass the counties and ZIP codes where 90% of NGHS hospital admissions originate (**Appendix K**). These counties were grouped into four communities based on consideration for patient volume, location, and the broad interests of the community, including medically underserved populations, low-income persons, minority groups, or those with chronic disease needs. The NGHS Greater Braselton Service Area (GBSA) is comprised of 19 ZIP codes from Banks, Barrow, Gwinnett, Hall, and Jackson counties.

ZIP Code	City	County
30011	Auburn	Barrow, GA
30019	Dacula	Gwinnett, GA
30517	Braselton	Jackson, GA
30518	Buford	Gwinnett, GA
30519	Buford	Gwinnett, GA
30529	Commerce	Jackson, GA
30530	Commerce	Banks, GA
30542	Flowery Branch	Hall, GA
30547	Homer	Banks, GA
30548	Hoschton	Jackson, GA

ZIP Code	City	County
30549	Jefferson	Jackson, GA
30558	Maysville	Jackson, GA
30565	Nicholson	Jackson, GA
30566	Oakwood	Hall, GA
30567	Pendergrass	Jackson, GA
30575	Talmo	Jackson, GA
30620	Bethlehem	Barrow, GA
30666	Statham	Barrow, GA
30680	Winder	Barrow, GA

This community was defined by ZIP codes, however public health indicators are most commonly available by county. Therefore, the counties which principally comprise a majority of the community were used in determining health needs. The principal counties used for the NGHS GBSA community needs analysis are Banks, Barrow, and Jackson counties.



Map of Community Served

Source: NGHS, 2019

Demographic and Socioeconomic Summary

The population of the community served is expected to grow 8.6% by 2023, an increase of more than 32,800 people. The 8.6% projected population growth is higher than the state's 5-year projected growth rate (5.0%) and the national projected growth rate (3.5%). The median age is older than the state benchmark but younger than the US median. Median household income for the overall community is higher than both the state and U.S. benchmarks.

Demographic and Socioeconomic Comparison: Community Served and State/U.S. Benchmarks

Geography			Community Served		
		United States	Georgia	Northeast Georgia Region	NGHS Greater Braselton Service Area
Total Current	Population	326,533,070	10,467,269	1,743,817	383,014
5 Yr Projected Pop	ulation Change	3.5%	5.0%	7.2%	8.6%
Median	Age	38.3	36.9	40.3	37.9
Populatio	on 0-17	22.6%	24.0%	25.3%	26.2%
Population	on 65+	15.9%	13.8%	13.1%	12.4%
Women Ag	e 15-44	19.6%	20.4%	20.0%	19.7%
Non-White P	opulation	30.0%	43.0%	36.2%	26.8%
Hispanic Po	pulation	18.2%	9.7%	16.6%	12.4%
	Uninsured	9.4%	17.1%	11.9%	10.1%
	Medicaid	19.0%	11.8%	10.4%	9.4%
Insurance Coverage	Private Market	9.6%	10.8%	11.5%	11.3%
J	Medicare	16.1%	14.4%	12.5%	13.9%
	Employer	45.9%	45.8%	53.7%	55.3%
Median HH Income		\$62,175	\$55,559	\$56,929	\$64,152
Limited English		26.2%	19.3%	28.9%	22.0%
No High Scho	ol Diploma	7.4%	8.9%	7.9%	8.2%
Unempl	oyed	6.8%	7.8%	6.3%	6.3%

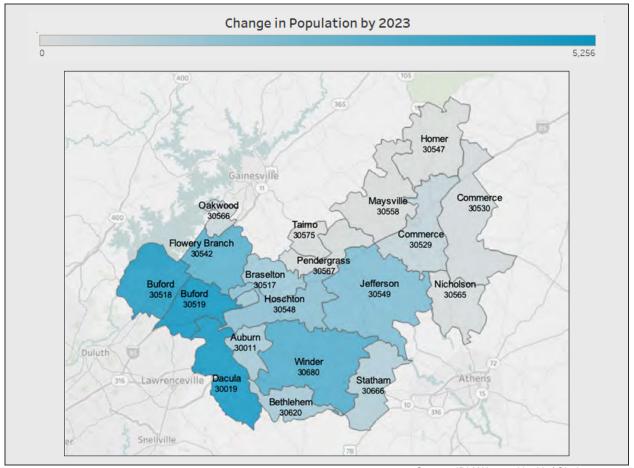
Source: IBM Watson Health / Claritas, 2018; US Census Bureau 2017 (U.S. Median Income)

Note: children (ages 0-17), older adults (ages 65+) and women of childbearing age (ages 18-44) are identified as population groups that have unique healthcare needs.

The ZIP codes expected to experience the most growth in number of people by 2023 are:

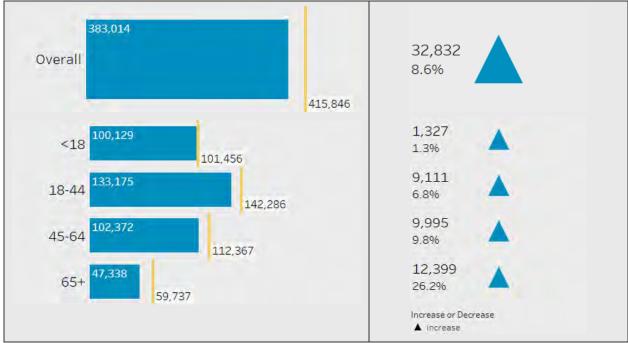
•	30519 – Buford	5,256 people
•	30019 - Dacula	5,148 people
•	30518 – Buford	4,709 people
•	30680 – Winder	3,500 people
•	30542 - Flowery Branch	3,244 people
•	30549 – Jefferson	2,229 people

2018 - 2023 Total Population Projected Change by ZIP Code



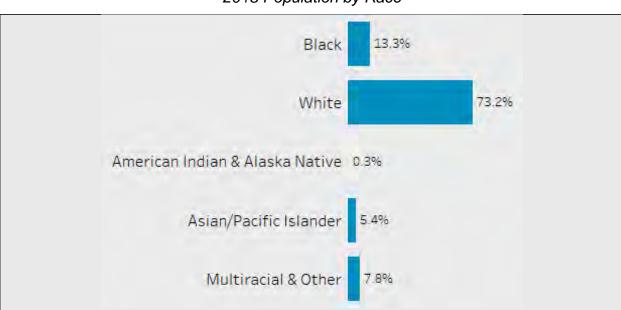
The community's population skews younger with 35% of the population ages 18-44 and 26% under age 18. The largest cohort (18-44) is expected to grow by 9,111 people by 2023. The age 65 plus cohort is the smallest, representing 12% of the total 2018 population, but is expected to experience the fastest growth (26.2%) over the next five years adding 12,399 seniors to the community. Growth in the senior population will likely contribute to increased utilization of services as the population continues to age.

Population Distribution by Age
2018 Population by Age Cohort Change by 2023



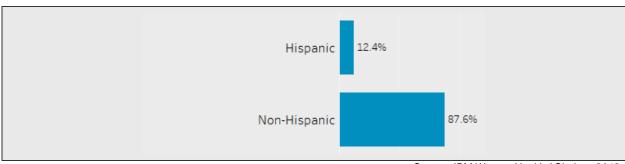
Population statistics are analyzed by race and by Hispanic ethnicity. The community is primarily White (73.2%), with those of Black race comprising 13.3% of the population and the other racial groups constituting the remaining 13.5%. The Asian/Pacific Islander population in the community is projected to experience the greatest amount of growth by 2023 (23.9%), followed by the multi-racial population (23%), and the Black population (22.3%). The White population is projected to experience the least amount of growth over the next five years (3.9%).

The non-Hispanic population (all races) is expected to grow by over 24,700 people (7.4%) by 2023. The expected growth of the Hispanic population (all races) is over 8,000 people (17%) by 2023. The Hispanic population is projected to increase in the towns of Buford, Flowery Branch, Winder, and Dacula—the top growth ZIPs in this community.



2018 Population by Race





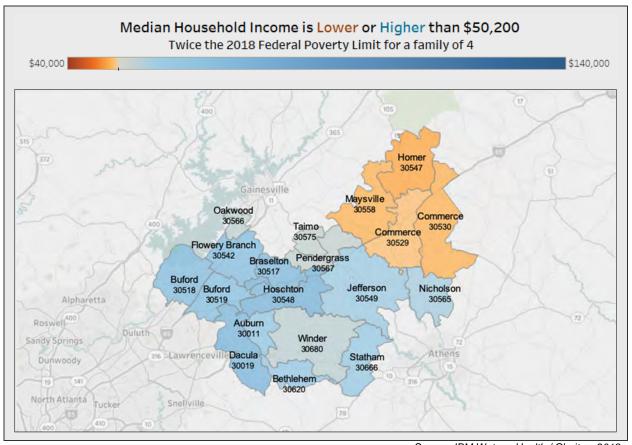
Change in Population by 2023 1,545 400 30547 Gainesville Commerce 30530 Maysville 30558 Oakwood 30566 Taimo 30575 Commerce Flowery Branch 30542 Pendergrass 30567 Braselton 30517 Jefferson Buford 30518 Nicholson 30549 Buford loschton 30565 Auburn 30011 Duluth Winder Dacula 30019 Statham Athens Lawrenceville 30666 Bethlehem 30620 Snellville.

2018 - 2023 Hispanic Population Projected Change by ZIP Code

The 2018 median household income for the United States is \$62,175 and \$55,559 for the state of Georgia. The median household income for the ZIP codes within this community range from \$41,815 for Homer ZIP code 30547 to \$90,304 for Hoschton ZIP code 30548. There are four (4) ZIP Codes with median household incomes less than \$50,200, twice the 2018 Federal Poverty Limit for a family of four:

30547 – Homer \$41,815
30530 – Commerce \$44,227
30558 – Maysville \$44,414
30529 – Commerce \$46,904

2018 Median Household Income by ZIP Code



Most of the population (55%) are insured through employer sponsored health coverage. The remainder of the population is divided between people on Medicare (14%), people who purchase coverage directly from or through the private health insurance marketplace (11%), people who are Uninsured (10%) or people on Medicaid (9%). This community has a larger proportion of employer sponsored coverage and a smaller proportion of uninsured when compared to the distribution in the state of Georgia (46% employer and 17% uninsured).

55% Employer 14% Medicare Private Market 11% 9% Medicaid 10% Uninsured 0 50,000 100,000 150,000 200,000 2018 Estimated Population

2018 Estimated Distribution of Covered Lives by Insurance Category

The community includes eight (8) Health Professional Shortage Areas and two (2) Medically Underserved Areas as designated by the U.S. Department of Health and Human Services Health Resources Services Administration.⁴ **Appendix G** includes the details on each of these designations.

Health Professional Shortage Areas and Medically Underserved Areas and Populations

	Health Professional Shortage Areas (HPSA)				Medically Underserved Area/Population (MUA/P)
NGHS-GBSA	Dental Health	Mental Health	Primary Care	Grand Total	MUA/P
Banks	1	1	1	3	1
Barrow	1	1	1	3	
Jackson		1	1	2	1
Total	2	3	3	8	2

Source: U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018

⁴ U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018



\1.

The Watson Health Community Need Index (CNI) is a statistical approach to identifying areas within a community where health disparities may exist. Leveraging U.S. Census Data and Watson Health Insurance Coverage Estimates, the CNI takes into account vital socio-economic factors (income, cultural, education, insurance and housing) about a community to generate a CNI score for every populated ZIP code in the United States. The CNI strongly links to variations in community healthcare needs and is an indicator of a community's demand for various healthcare services. The CNI score by ZIP code identifies specific areas within a community where healthcare needs may be greater.

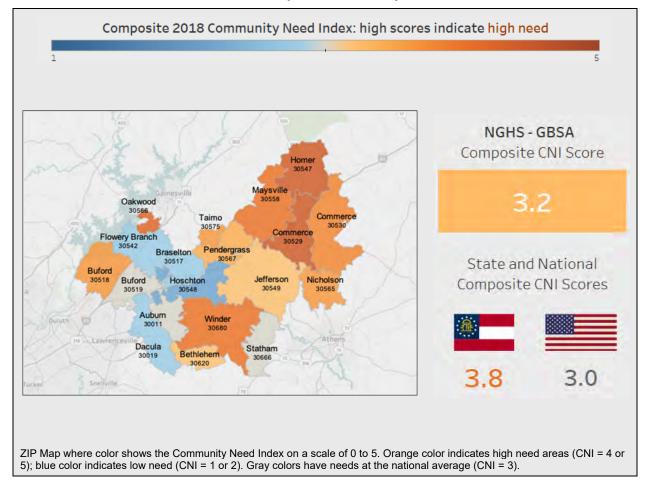
Overall, the composite CNI score for the community served is 3.2 which is lower than the state CNI score (3.8) and higher than the national benchmark score of 3.0. Five ZIP Codes in the community have CNI scores of 4 and above, pointing to potentially higher health needs within the population.

•	30547 – Homer	4.4
•	30529 – Commerce	4.4
•	30566 – Oakwood	4.2
•	30680 – Winder	4.0
•	30558 – Maysville	4.0

Nine out of the 19 ZIPs in the community have an education barrier sub-score of 5. These ZIP Codes rank in the bottom quintile across the nation for the percentage of population over age 25 without a high school diploma:

- 30530 Commerce
- 30529 Commerce
- 30547 Homer
- 30558 Maysville
- 30565 Nicholson
- 30566 Oakwood
- 30567 Pendergrass
- 30575 Talmo
- 30680 Winder

2018 Community Need Index by ZIP Code



Watson Health Community Data

Watson Health supplements the publicly available data and population statistics with estimates of localized disease prevalence of heart disease and cancer as well as emergency department visit estimates.

Watson Health Heart Disease Estimates identify hypertension as the most prevalent heart disease diagnosis; there are over 101,900 estimated cases in the community overall affecting slightly more females (51.6%) than males (48.4%).

The cities of Winder, Flowery Branch, Buford, and Dacula all rank in the top five highest number of cases for each of the four heart disease types. Winder ZIP Code 30680 has the most estimated cases in three of four heart disease types including Arrhythmia (2,344 cases), Heart Failure (903 cases), and Ischemic Heart Disease (1,772). Buford ZIP Codes 30519 and 30518 have the highest number of Hypertension cases at 13,472 and 13,447 respectively.

The 30547 ZIP code of Homer has the highest estimated prevalence rates for Arrhythmia (587 cases per 10,000 population), Heart Failure (234 cases per 10,000 population), and Ischemic Heart Disease (496 cases per 10,000 population), while ZIP code 30558 Maysville has the highest estimated prevalence rate of Hypertension with 2,991 cases per 10,000.

Heart Failure 6.782 Hypertension 101.942 Ischemic Heart Disease 13,841 0K 20K 40K 60K 80K 100K 120K 2018 Cases Bar chart shows total number and prevalence rate of 2018 Estimated Heart Disease cases for each of four types: arrhythmia, heart failure, hypertension, and ischemic heart disease

Note: An individual patient may have more than one type of heart disease. Therefore the sum of all four heart disease types is

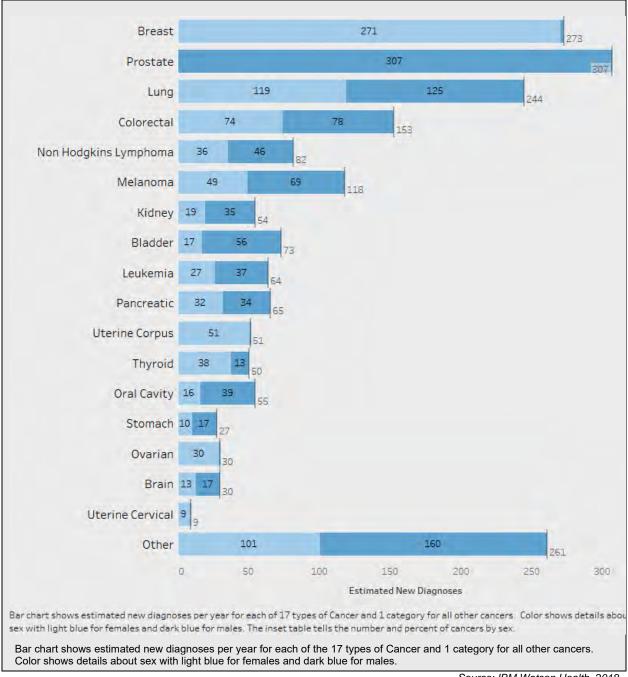
2018 Estimated Heart Disease Cases

Source: IBM Watson Health, 2018

not a unique count of individuals.

For this community, Watson Health's 2018 Cancer Estimates reveal the cancers estimated to have the greatest number of new cases in 2018 are prostate (307), breast (273), and lung (244) cancers. The cancers projected to have the greatest rate of growth in the next five years are pancreatic (22.5%), bladder (20.2%), thyroid (19.9%), and kidney (19.5%) based on both population changes and disease rates.

2018 Estimated New Cancer Cases



Source: IBM Watson Health, 2018

Estimated Cancer Cases and Projected 5 Year Change by Type

Cancer Type	2018 Estimated New Cases	2023 Estimated New Cases	5 Year Growth (%)
Bladder	73	88	20.2%
Brain	30	33	12.1%
Breast	273	318	16.5%
Colorectal	153	159	4.0%
Kidney	54	65	19.5%
Leukemia	64	75	17.3%
Lung	244	284	16.2%
Melanoma	118	139	17.9%
Non-Hodgkin's Lymphoma	82	96	17.5%
Oral Cavity	55	65	18.6%
Ovarian	30	34	14.6%
Pancreatic	65	80	22.5%
Prostate	307	341	11.4%
Stomach	27	32	16.6%
Thyroid	50	61	19.9%
Uterine Cervical	9	10	8.5%
Uterine Corpus	51	61	19.2%
All Other Cancers	261	309	18.6%
Grand Total	1,947	2,251	15.6%

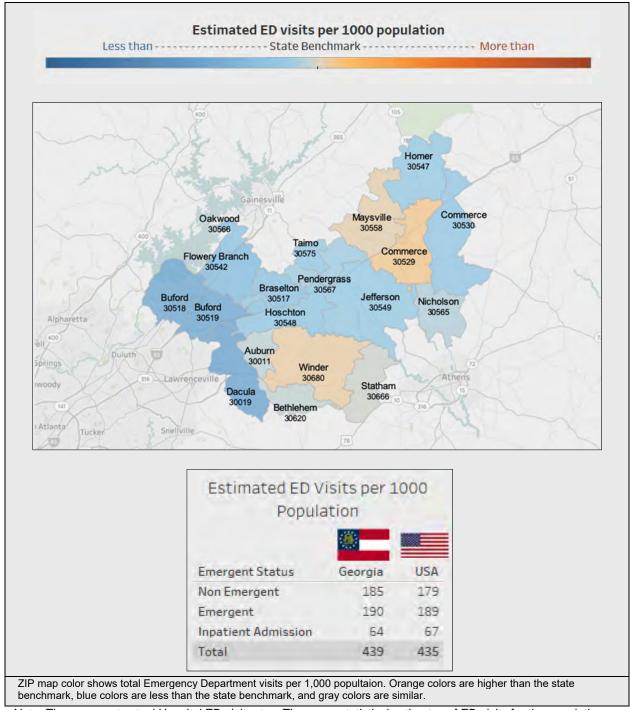
Source: IBM Watson Health, 2018

Based on population characteristics and regional utilization rates, Watson Health projects all emergency department (ED) visits in this community will increase by 10% over the next five years. Three ZIP codes have total ED use rates higher than the state of Georgia (439 visits per 1000 population). Commerce – ZIP code 30529, Winder – ZIP code 30680 and Maysville – ZIP code 30558 have ED use rates of 459, 451 and 448 visits per 1,000 population respectively.

These ED visits consist of three main types: those resulting in an inpatient admission, emergent ED visits treated and released, and non-emergent ED visits that are lower acuity. Non-emergent ED visits present to the ED but can potentially be treated in more appropriate and less intensive outpatient settings.

Non-emergent ED visits can be an indication of systematic issues within the community regarding access to primary care, managing chronic conditions, or other access to care issues such as ability to pay. Watson Health estimates non-emergent ED visits will increase by 4.7% over the next five years in this community. Only Winder ZIP code 30680 has an estimated non-emergent ED visit rate that is greater than the state benchmark of 185 visits per 1,000 population (189 visits per 1,000 population).

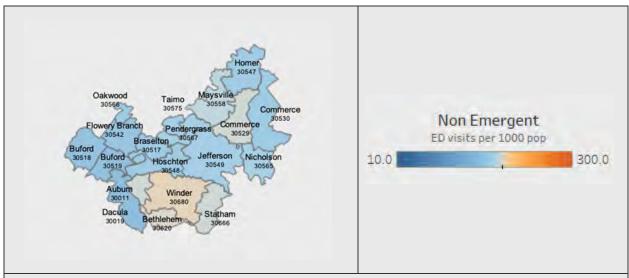
Total Estimated 2018 Emergency Department Visit Rate



Note: These are not actual Hospital ED visit rates. These are statistical estimates of ED visits for the population.

Source: IBM Watson Health, 2018

Non-Emergent Estimated 2018 Emergency Department Visits by ZIP Code



ZIP map color shows total Emergency Department vists per 1,000 population by non-emergent status. Orange colors are higher than the state benchmark (see table at right), blue colors are less than the state benchmark, and gray colors are similar. Color range is set for the entire study region. ED visits are defined by the presence of specific CPT® codes in claims. Non-emergency visits to the ED do not necessarily require treatment in a hospital emergency department and can potentially be treated in a fast-track ED, an urgent care treatment center, a clinic or physician's private office.

Note: These are not actual hospital ED visit rates. These are statistical estimates of ED visits for the population.

Source: IBM Watson Health, 2018

Public Health Indicators

Public health indicators (129 total) were collected and analyzed to assess community health needs. For each health indicator, a comparison was made between the most recently available community data and benchmarks for the same/similar indicator. The basis of benchmarks was available data for the U.S. and the state of Georgia. A list of these indicators is found in **Appendix A**.

Where the community indicators showed greater need when compared to the state of Georgia comparative benchmark, the difference between the community values and the state benchmark was calculated (need differential). The highest ranked indicators with need differentials in the 50th percentile or greater severity pinpointed community health needs from a quantitative perspective.

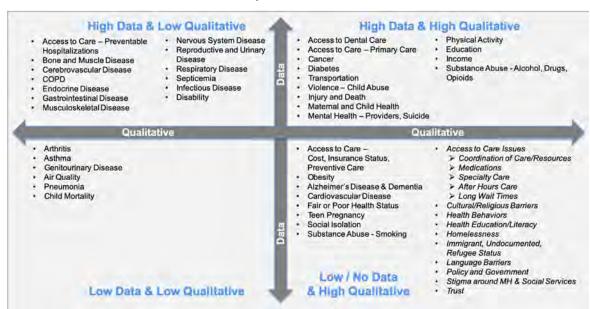
Focus Groups & Interviews

In the Watson Health focus group sessions and interviews, participants identified and discussed the greatest health needs in the community, as well as the barriers and strengths impacting overall health status. For this community, three (3) focus group sessions (listed below) with a total of 20 participants and six (6) interviews were conducted March through April 2019. A list of the organizations providing input can be found in **Appendix B**. Summary findings from the focus groups and interviews can be found in **Appendix C**.

Focus Group	Date	Location	Number of Participants
Barrow County Focus Group	March 4, 2019	NGMC Barrow Winder, GA	5
Gwinnett and Jackson Counties Focus Group	March 7, 2019	NGMC Braselton Braselton, GA	6
NGHS Advisory Board Focus Group - GBSA	February 4, 2019	NGMC Gainesville Gainesville, GA	9

Prioritized Significant Health Needs for NGHS - GBSA

The Health Needs Matrix identified through the community health needs assessment (see Methodology for Defining Community Needs section) shows the convergence of needs identified in the qualitative data (interview and focus group feedback) and quantitative data (health indicators). The top health needs for this community are defined in the Health Needs Matrix below.



Community Health Needs Matrix

Note: Lower right quadrant items in italics do not have quantitative data indicators available

Source: IBM Watson Health, 2019

Through the prioritization process, the significant health needs for this community were identified, reviewed, and prioritized (see "Approach to Identify and Prioritize Significant Health Needs" section). The resulting prioritized health needs for the community are provided in the table below.

Prioritized Significant Community Health Needs

Priority Rank	Health Need
1	Mental Health
2	Substance Abuse
3	Diabetes
3	Access to Care (added Preventable Hospitalizations)
4	Maternal and Child Health
5	Physical Activity

Priority Rank	Health Need
6	Injury and Death
6	Violence - Child Abuse
7	Income
7	Education
8	Septicemia (added)
9	Access to Dental Care
10	Cancer
11	Transportation

Notes: Needs noted as "added" were pulled from quadrants other than the upper right (high data/high qualitative) as they were considered significant by the prioritization working group.

Needs with the same priority rank received the same overall score in the prioritization process

Source: IBM Watson Health, 2019

Recommended Health Needs to be Addressed for NGHS - GBSA

As part of the prioritization work session, work group participants recommended a set of prioritized significant health needs that should be addressed by each CHNA Partner (see "Recommended Health Needs to be Addressed by the CHNA Partners" section). The members of this community's prioritization work group recommended the following significant needs to be addressed via the CHNA implementation strategy:

- Mental and Behavioral Health
- Access to Care
- Diabetes

CHNA Implementation Strategy

NGHS will choose which needs it will address from those identified in this assessment. An implementation strategy with specific initiatives to address the chosen health needs will be completed and adopted by the hospitals by February 15, 2020.

An evaluation of the NGHS 2016 CHNA implementation strategy and its impact can be found in **Appendix I**.

Community Health Needs Assessment - NGHS Primary Service Area

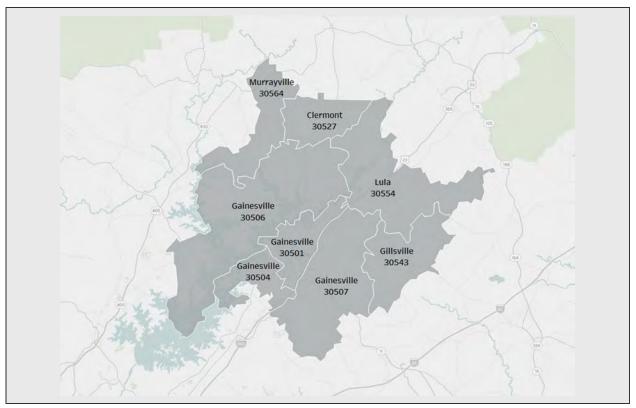
Community Served Definition

For the purpose of this assessment, the geographic boundaries of the community served by NGHS encompass the counties and ZIP codes where 90% of NGHS hospital admissions originate (Appendix K). These counties were grouped into four communities based on consideration for patient volume, location, and the broad interests of the community, including medically underserved populations, low-income persons, minority groups, or those with chronic disease needs. The NGHS Primary Service Area (PSA) is comprised of eight ZIP codes from Hall County.

ZIP Code	City	County
30501	Gainesville	Hall, GA
30504	Gainesville	Hall, GA
30506	Gainesville	Hall, GA
30507	Gainesville	Hall, GA
30527	Clermont	Hall, GA
30543	Gillsville	Hall, GA
30554	Lula	Hall, GA
30564	Murrayville	Hall, GA

This community was defined by ZIP codes, however public health indicators are most commonly available by county. Therefore, the counties which principally comprise a majority of the community were used in determining health needs. The principal county used for the NGHS PSA community needs analysis is Hall County.

Map of Community Served



Source: NGHS, 2019

Demographic and Socioeconomic Summary

The population of the community served is expected to grow 6.2% by 2023, an increase of 9,755 people. The 6.2% projected population growth is higher than both the state's 5-year projected growth rate (5.0%) and the national projected growth rate (3.5%). The median age is younger than both the state and national medians. Median household income for the overall community is lower than both benchmarks.

Demographic and Socioeconomic Comparison: Community Served and State/U.S. Benchmarks

Geography			Benchmarks Cor S		
		United States	Georgia	Northeast Georgia Region	NGHS Primary Service Area
Total Current	Population	326,533,070	10,467,269	1,743,817	157,458
5 Yr Projected Po	pulation Change	3.5%	5.0%	7.2%	6.2%
Mediar	n Age	38.3	36.9	40.3	38.0
Population	on 0-17	22.6%	24.0%	25.3%	25.8%
Populati	on 65+	15.9%	13.8%	13.1%	14.5%
Women A	ge 15-44	19.6%	20.4%	20.0%	19.6%
Non-White F	Population	30.0%	43.0%	36.2%	29.8%
Hispanic P	opulation	18.2%	9.7%	16.6%	30.9%
	Uninsured	9.4%	17.1%	11.9%	13.7%
Insurance	Medicaid	19.0%	11.8%	10.4%	14.2%
Coverage	Private Market	9.6%	10.8%	11.5%	10.6%
Ooverage	Medicare	16.1%	14.4%	12.5%	15.1%
	Employer	45.9%	45.8%	53.7%	46.4%
Median HH Income		\$62,175	\$55,559	\$56,929	\$55,328
Limited English		26.2%	19.3%	28.9%	32.6%
No High School Diploma		7.4%	8.9%	7.9%	11.4%
Unemp	loyed	6.8%	7.8%	6.3%	5.4%

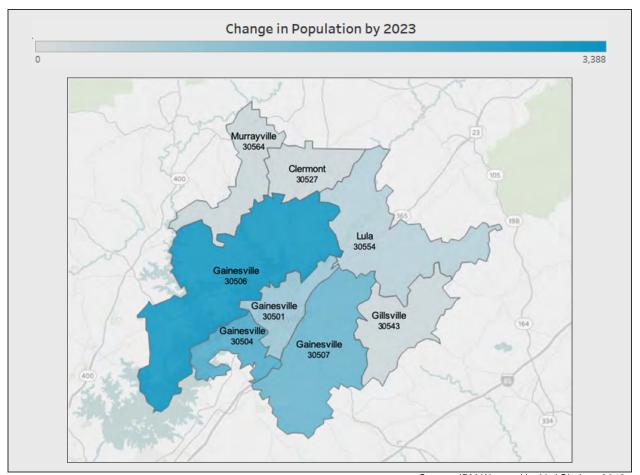
Source: IBM Watson Health / Claritas, 2018; US Census Bureau 2017 (U.S. Median Income)

Note: children (ages 0-17), older adults (ages 65+) and women of childbearing age (ages 18-44) are identified as population groups that have unique healthcare needs.

Three Gainesville ZIP codes are expected to experience the most growth in number of people by 2023:

30506 – Gainesville
 30504 – Gainesville
 30507 – Gainesville
 3,388 people
 2,238 people
 1,845 people

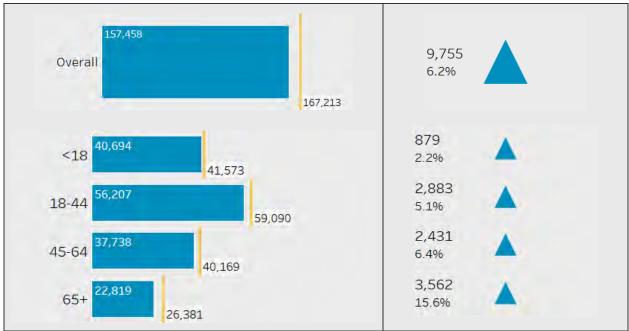
2018 - 2023 Total Population Projected Change by ZIP Code



The community's population skews younger with 36% of the population ages 18-44 and 26% under age 18. The largest cohort (18-44) is expected to grow by 2,883 people by 2023 (5.1%). The age 65 plus cohort is the smallest, representing 14% of total 2018 population estimates, but is expected to experience the fastest growth (15.6%) over the next five years adding 3,562 seniors to the community. Growth in the senior population will likely contribute to increased utilization of services as the population continues to age.

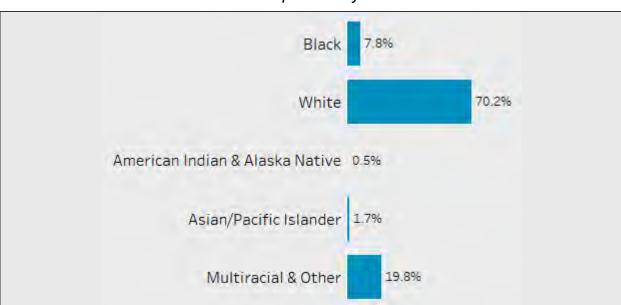
Population Distribution by Age

2018 Population by Age Cohort Change by 2023



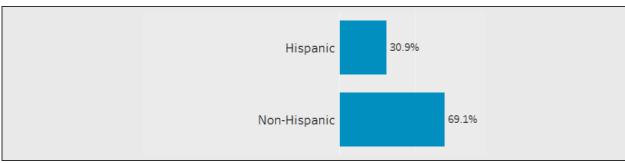
Population statistics are analyzed by race and by Hispanic ethnicity. The community is primarily racially White (70.2%), with those of Black race comprising 7.8% of the population and the other racial groups constituting the remaining 22%. The multi-racial population in the community is projected to experience the greatest amount of growth by 2023 (16.4%), followed by Other (11.9%), and Asian/Pacific Islander (11.7%). The White population is projected to experience the least amount of growth over the next five years (3.8%).

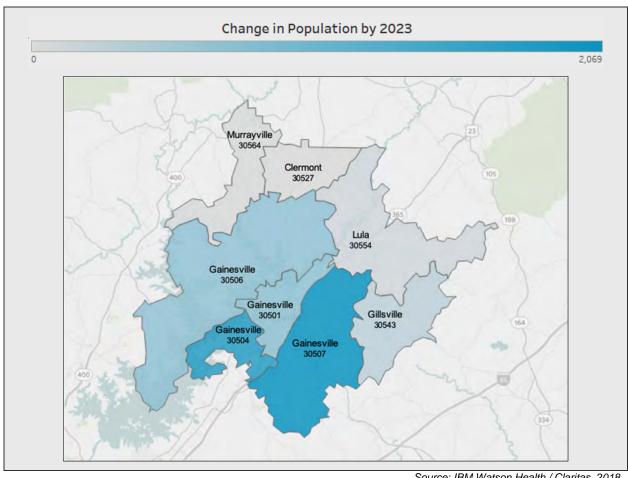
The non-Hispanic population (all races) is expected to grow by 4,200 people (3.9%) by 2023. The expected growth of the Hispanic population (all races) is over 5,500 people (11.4%) by 2023. Most of this growth (3,800 people) is in two Gainesville ZIP codes: ZIP codes 30507 and 30504.



2018 Population by Race



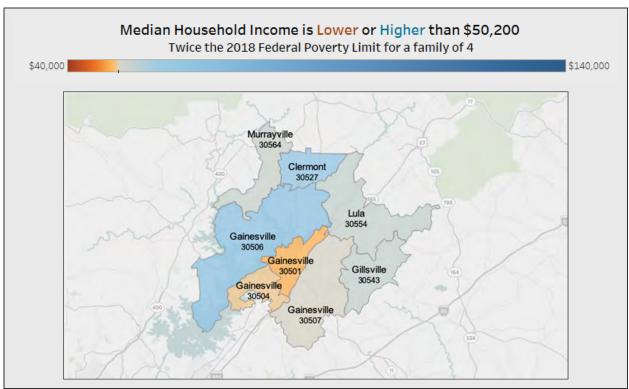




2018 - 2023 Hispanic Population Projected Change by ZIP Code

The 2018 median household income for the United States is \$62,175 and \$55,559 for the state of Georgia. The median household income for the ZIP codes within this community range from \$44,486 for Gainesville ZIP code 30501 to \$71,851 for Gainesville ZIP code 30506. There are two (2) ZIP Codes with median household incomes less than \$50,200, twice the 2018 Federal Poverty Limit for a family of four: Gainesville ZIP code 30501 (\$44,486) and ZIP code 30504 (\$48,114).

2018 Median Household Income by ZIP Code



Most of the population (46%) are insured through employer sponsored health coverage. The remainder of the population is divided between people on Medicare (15%), people who purchase coverage directly from or through the private health insurance marketplace (11%), people who are on Medicaid (14%) or uninsured (14%). This community has a larger proportion of people on Medicaid and a smaller proportion of uninsured when compared to the distribution in the state of Georgia.

Employer 46%

Medicare 15%

Private Market 11%

Medicaid 14%

Uninsured 14%

0 20,000 40,000 60,000 B0,000

2018 Estimated Population

2018 Estimated Distribution of Covered Lives by Insurance Category

The community includes two (2) Health Professional Shortage Areas and one (1) Medically Underserved Area as designated by the U.S. Department of Health and Human Services Health Resources Services Administration.⁵ **Appendix G** includes the details on each of these designations.

Health Professional Shortage Areas and Medically Underserved Areas and Populations

	Health Professional Shortage Areas (HPSA)				Medically Underserved Area/Population (MUA/P)
NGHS-PSA	Dental Health	Mental Health	Primary Care	Grand Total	MUA/P
Hall		1	1	2	1
Total	0	1	1	2	1

Source: U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018

⁵ U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018



5

The Watson Health Community Need Index (CNI) is a statistical approach to identifying areas within a community where health disparities may exist. Leveraging U.S. Census Data and Watson Health Insurance Coverage Estimates, the CNI takes into account vital socio-economic factors (income, cultural, education, insurance and housing) about a community to generate a CNI score for every populated ZIP code in the United States. The CNI strongly links to variations in community healthcare needs and is an indicator of a community's demand for various healthcare services. The CNI score by ZIP code identifies specific areas within a community where healthcare needs may be greater.

Overall, the composite CNI score for the community served is 4.0 which is higher than the state CNI score (3.8) and the national benchmark score of 3.0. Three ZIP Codes in the community have CNI scores of 4 and above, pointing to potentially higher health needs within the population.

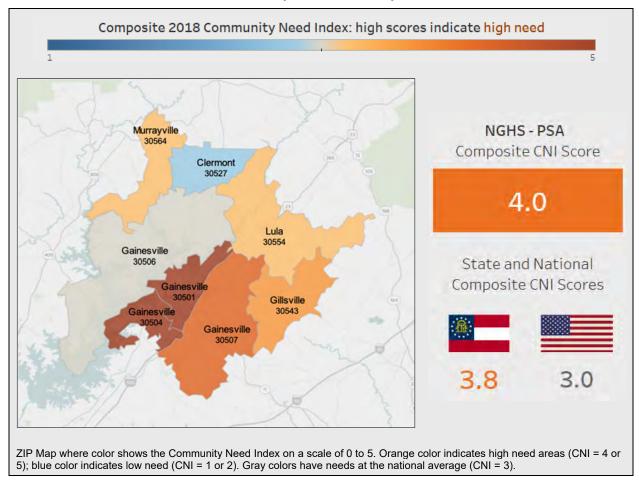
30504 – Gainesville
 30501 – Gainesville
 30507 – Gainesville
 4.2

ZIP codes with a CNI score of 5 rank in the bottom quintile on all five (5) barriers: income, culture, education, insurance, and housing. The education barrier sub-score is a 4 or 5 in all ZIP codes in this community.

The insurance barrier sub-score is a 4 or 5 in seven (7) of the eight (8) ZIP codes in this community:

- 30501 Gainesville
- 30504 Gainesville
- 30564 Murrayville
- 30527 Clermont
- 30507 Gainesville
- 30543 Gillsville
- 30554 Lula

2018 Community Need Index by ZIP Code



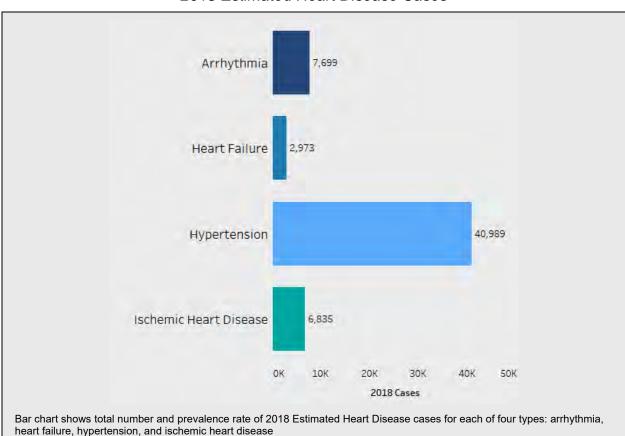
Watson Health Community Data

Watson Health supplements the publicly available data and population statistics with estimates of localized disease prevalence of heart disease and cancer as well as emergency department visit estimates.

Watson Health Heart Disease Estimates identify hypertension as the most prevalent heart disease diagnosis; there are almost 41,000 estimated cases in the community overall affecting slightly more females (51.3%) than males (48.7%).

The 30506 ZIP code of Gainesville has the highest estimated number of cases for all four heart disease types: Arrhythmia (2,690 people), Heart Failure (1,058 people), Hypertension (13,757 people), and Ischemic Heart Disease (2,480). The 30564 ZIP code of Murrayville has the highest estimated prevalence rates for all four heart disease conditions.

- Arrhythmia 621 cases per 10,000 population
- Heart Failure 245 cases per 10,000 population
- Hypertension 3,087 cases per 10,000 population
- Ischemic Heart Disease 581 cases per 10,000 population



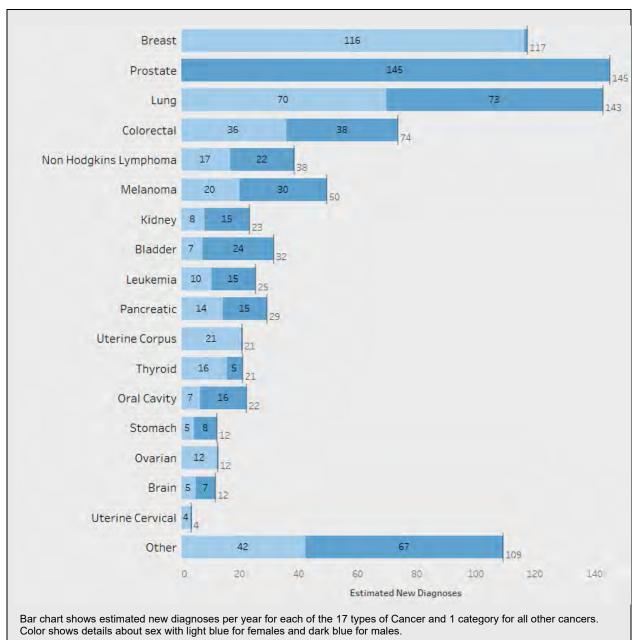
Note: An individual patient may have more than one type of heart disease. Therefore the sum of all four heart disease types is

2018 Estimated Heart Disease Cases

Source: IBM Watson Health, 2018

not a unique count of individuals.

For this community, Watson Health's 2018 Cancer Estimates reveal the cancers projected to have the greatest rate of growth in the next five years are Thyroid (16.4%), Melanoma (14.6%), and Pancreatic (14.3%); based on both population changes and disease rates. The cancers estimated to have the greatest number of new cases in 2018 are prostate (145), lung (143) and breast (117).



2018 Estimated New Cancer Cases

Source: IBM Watson Health, 2018

Estimated Cancer Cases and Projected 5 Year Change by Type

Cancer Type	2018 Estimated New Cases	2023 Estimated New Cases	5 Year Growth (%)
Bladder	32	36	12.8%
Brain	12	13	8.4%
Breast	117	130	10.9%
Colorectal	74	71	-3.3%
Kidney	23	26	12.7%
Leukemia	25	28	11.3%
Lung	143	155	8.8%
Melanoma	50	57	14.6%
Non-Hodgkin's Lymphoma	38	43	11.6%
Oral Cavity	22	25	12.9%
Ovarian	12	14	9.0%
Pancreatic	29	33	14.3%
Prostate	145	150	3.5%
Stomach	12	13	8.2%
Thyroid	21	24	16.4%
Uterine Cervical	4	4	4.9%
Uterine Corpus	21	23	12.9%
All Other Cancers	109	122	12.2%
Grand Total	890	969	8.9%

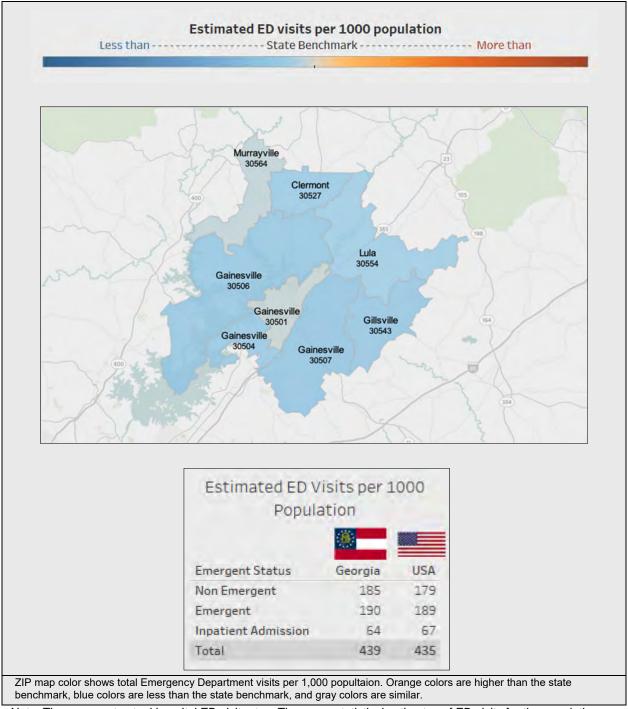
Source: IBM Watson Health, 2018

Based on population characteristics and regional utilization rates, Watson Health projects all emergency department (ED) visits in this community will increase by 6.9% over the next five years. All eight (8) ZIP codes have total ED use rates lower than the state of Georgia (439 visits per 1,000 population). The highest estimated ED use rate is in the Gainesville ZIP code 30501 with 427.5 visits per 1,000 population.

These ED visits consist of three main types: those resulting in an inpatient admission, emergent ED visits treated and released, and non-emergent ED visits that are lower acuity. Non-emergent ED visits present to the ED but can potentially be treated in more appropriate and less intensive outpatient settings.

Non-emergent ED visits can be an indication of systematic issues within the community regarding access to primary care, managing chronic conditions, or other access to care issues such as ability to pay. Watson Health estimates non-emergent ED visits will increase by 2.2% over the next five years in this community. None of the ZIP Codes have non-Emergent ED use rates higher than the state benchmark of 185 visits per 1,000 population.

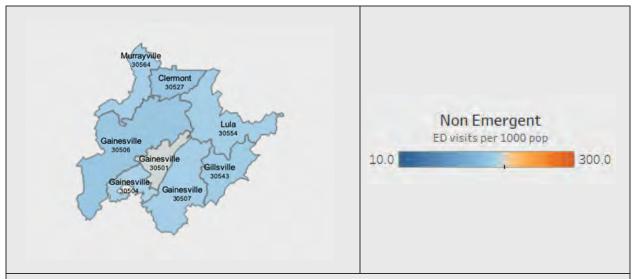
Total Estimated 2018 Emergency Department Visit Rate



Note: These are not actual hospital ED visit rates. These are statistical estimates of ED visits for the population.

Source: IBM Watson Health, 2018

Non-Emergent Estimated 2018 Emergency Department Visits by ZIP Code



ZIP map color shows total Emergency Department vists per 1,000 population by non-emergent status. Orange colors are higher than the state benchmark (see table at right), blue colors are less than the state benchmark, and gray colors are similar. Color range is set for the entire study region. ED visits are defined by the presence of specific CPT® codes in claims. Non-emergency visits to the ED do not necessarily require treatment in a hospital emergency department and can potentially be treated in a fast-track ED, an urgent care treatment center, a clinic or physician's private office.

Note: These are not actual hospital ED visit rates. These are statistical estimates of ED visits for the population.

Source: IBM Watson Health, 2018

Public Health Indicators

Public health indicators (129 total) were collected and analyzed to assess community health needs. For each health indicator, a comparison was made between the most recently available community data and benchmarks for the same/similar indicator. The basis of benchmarks was available data for the U.S. and the state of Georgia. A list of these indicators is in **Appendix A**.

Where the community indicators showed greater need when compared to the state of Georgia comparative benchmark, the difference between the community values and the state benchmark was calculated (need differential). The highest ranked indicators with need differentials in the 50th percentile of greater severity pinpointed community health needs from a quantitative perspective.

Focus Groups & Interviews

In the Watson Health focus group sessions and interviews, participants identified and discussed the greatest health needs in the community, as well as the barriers and strengths impacting overall health status. For this community, three (3) focus group sessions (listed below) with a total of 28 participants and five (5) interviews were conducted March through April 2019. A list of the organizations providing input can be found in **Appendix B**. Summary findings from the focus groups and interviews can be found in **Appendix C**. Additional input gathered via the Johnson Group Hall County Survey and NGHS Hall County Mental and Behavioral Health Listening Sessions were used to assess need from a qualitative perspective (**Appendix D**).

Focus Group	Date	Location	Number of Participants
Hall County Focus Group	March 5, 2019	Fair Street Neighborhood Center Gainesville, GA	8
Hall County Hispanic Focus Group	April 13, 2018	Norma Hernandez Income Tax Offices Gainesville, GA	7
NGHS Advisory Board Focus Group - PSA	February 4, 2019	NGMC Gainesville Gainesville, GA	13

Prioritized Significant Health Needs for NGHS – PSA

The Health Needs Matrix identified through the community health needs assessment (see Methodology for Defining Community Needs section) shows the convergence of needs identified in the qualitative data (interview and focus group feedback) and quantitative data (health indicators). The top health needs for this community are defined in the Health Needs Matrix below.

High Data & Low Qualitative High Data & High Qualitative Access to Care - Insurance Status, Preventable Musculoskeletal Disease Hospitalizations, Primary Care Septicemia Food Access and Nutrition Infectious Disease Maternal and Child Health Teen Pregnancy Mental Health - Providers, Suicide Education Social Isolation Substance Abuse - Alcohol, Drugs, Opioids Qualitative Qualitative Endocrine Disease Access to Dental Care · Cultural/Religious Barriers Gastrointestinal Disease Cancer · Health Behaviors Nervous System Disease Diabetes · Health Education/Literacy Homelessness Housing · Immigrant, Undocumented. Transportation and/or Refugee Status Income . Fair or Poor Health Status Language Barriers Injury and Death · Policy and Government · Stigma around MH and Access to Care Issues Social Services > Coordination of Care/Resources · Trust > Medications > Specialty Care > Urgent Care and After Hours Care > Senior Services/ Geriatrics Low Data & Low Qualitative Low/ No Data & High Qualitative

Community Health Needs Matrix

Note: Lower right quadrant items in italics do not have quantitative data indicators available

Source: IBM Watson Health, 2019

Through the prioritization process, the significant health needs for this community were identified, reviewed, and prioritized (see "Approach to Identify and Prioritize Significant Health Needs" section). The resulting prioritized health needs for the community are provided in the table below.

Prioritized Significant Community Health Needs

Priority Rank	Health Need
1	Mental Health
2	Substance Abuse
3	Access to Care
4	Maternal and Child Health
5	Septicemia (added)

Priority Rank	Health Need		
6	Food Access and Nutrition		
7	Social Isolation		

Notes: Needs noted as "added" were pulled from quadrants other than the upper right (high data/high qualitative) as they were considered significant by the prioritization working group.

Needs with the same priority rank received the same overall score in the prioritization process

Source: IBM Watson Health, 2019

Recommended Health Needs to be Addressed for NGHS - PSA

As part of the prioritization work session, work group participants recommended a set of prioritized significant health needs that should be addressed by each CHNA Partner (see "Recommended Health Needs to be Addressed by the CHNA Partners" section). The members of this community's prioritization work group recommended the following significant needs to be addressed via the CHNA implementation strategy:

- Mental and Behavioral Health
- Access to Care
- Septicemia

CHNA Implementation Strategy

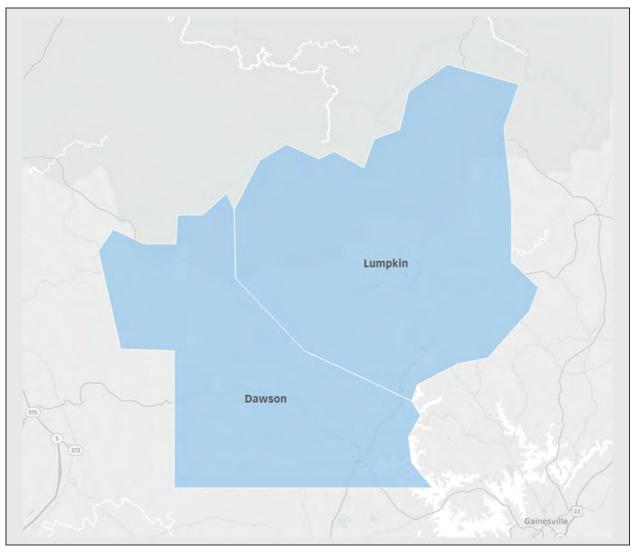
NGHS will choose which needs it will address from those identified in this assessment. An implementation strategy with specific initiatives to address the chosen health needs will be completed and adopted by the hospitals by February 15, 2020.

An evaluation of the NGHS 2016 CHNA implementation strategy and its impact can be found in **Appendix I**.

Community Health Needs Assessment - NGHS Secondary Service Area 400

Community Served Definition

For the purpose of this assessment, the geographic boundaries of the community served by NGHS encompass the ZIP counties and ZIP codes where 90% of NGHS hospital admissions originate (**Appendix K**). These counties were grouped into four communities based on consideration for patient volume, location, and the broad interests of the community, including medically underserved populations, low-income persons, minority groups, or those with chronic disease needs. The NGHS Secondary Service Area 400 (SSA 400) is comprised of Dawson and Lumpkin counties.



Map of Community Served

Source: NGHS, 2019

Demographic and Socioeconomic Summary

The population of the community served is expected to grow 4.8% by 2023, an increase of 2,640 people. The 4.8% projected population growth is lower than the state's 5-year projected growth rate (5.0%) but higher than the national projected growth rate (3.5%). The median age is younger than both the state and national medians. Median household income for the overall community is lower than both benchmarks.

Demographic and Socioeconomic Comparison: Community Served and State/U.S. Benchmarks

Geography			Benchmarks Community Served			
		United States	Georgia	Northeast Georgia Region	NGHS Secondary Service Area 400	
Total Current	t Population	326,533,070	10,467,269	1,743,817	54,433	
5 Yr Projected Po	pulation Change	3.5%	5.0%	7.2%	4.8%	
Media	n Age	38.3	36.9	40.3	33.2	
Population	on 0-17	22.6%	24.0%	25.3%	20.0%	
Populati	ion 65+	15.9%	13.8%	13.1%	17.5%	
Women A	ge 15-44	19.6%	20.4%	20.0%	19.9%	
Non-White I	Population	30.0%	43.0%	36.2%	7.0%	
Hispanic P	opulation	18.2%	9.7%	16.6%	4.8%	
	Uninsured	9.4%	17.1%	11.9%	15.5%	
Insurance	Medicaid	19.0%	11.8%	10.4%	8.4%	
Coverage	Private Market	9.6%	10.8%	11.5%	10.6%	
Ooverage	Medicare	16.1%	14.4%	12.5%	17.4%	
Employer		45.9%	45.8%	53.7%	48.0%	
Median HH Income		\$62,175	\$55,559	\$56,929	\$54,291	
Limited English		26.2%	19.3%	28.9%	9.8%	
No High School Diploma		7.4%	8.9%	7.9%	10.2%	
Unemp	loyed	6.8%	7.8%	6.3%	8.0%	

Source: IBM Watson Health / Claritas, 2018; US Census Bureau 2017 (U.S. Median Income)

Note: children (ages 0-17), older adults (ages 65+) and women of childbearing age (ages 18-44) are identified as population groups that have unique healthcare needs.

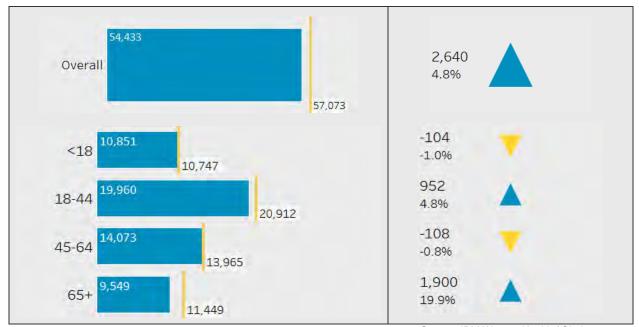
Dawson County will drive most of the growth in the community with an expected population increase of 5.9% or 1,628 people, compared to Lumpkin County which is projected to grow by 3.8% (990 people) in ZIP code 30533 - Dahlonega and by 3% (22 people) in ZIP code 30597 - Dahlonega.

Change in Population by 2023 Lumpkin Dawson Gainesville

2018 - 2023 Total Population Projected Change by ZIP Code

The community's population skews younger with 37% of the population ages 18-44 and 20% under age 18. The largest cohort (18-44) is expected to grow by 952 people by 2023 (4.8%). The age 65 plus cohort is the smallest, representing 17.5% of total 2018 population estimates. This group is projected to experience the fastest growth (20%) over the next five years, adding 1,900 seniors to the community. Growth in the senior population will likely contribute to increased utilization of services as the population continues to age.

Population Distribution by Age
2018 Population by Age Cohort Change by 2023



Population statistics are analyzed by race and by Hispanic ethnicity. The community is predominantly White (93%) with all other racial groups comprising the remaining 7% of the population. The Black population is projected to experience the most growth by 2023 (38.5%, 370 people), followed by the Asian/Pacific Islander population (29.1%, 143 people).

The non-Hispanic population (all races) is expected to grow by 2,415 people (4.7%) by 2023 while the Hispanic population is estimated to grow by 225 people (8.5%).

Black
White
93.0%

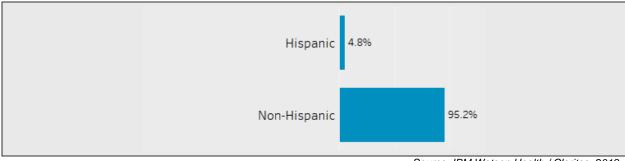
American Indian & Alaska Native 0.6%

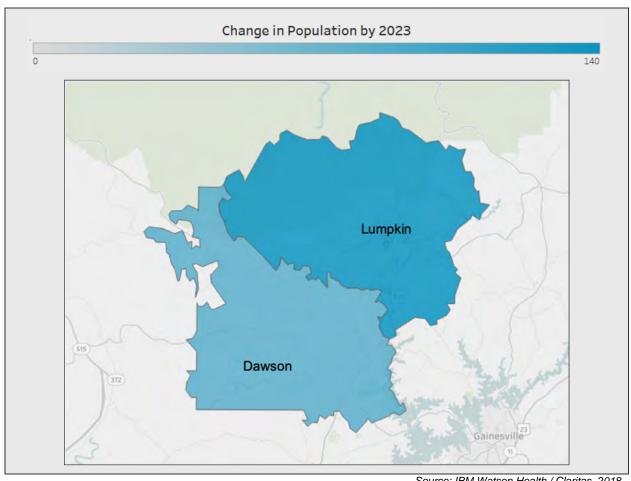
Asian/Pacific Islander 0.9%

Multiracial & Other
3.8%

2018 Population by Race



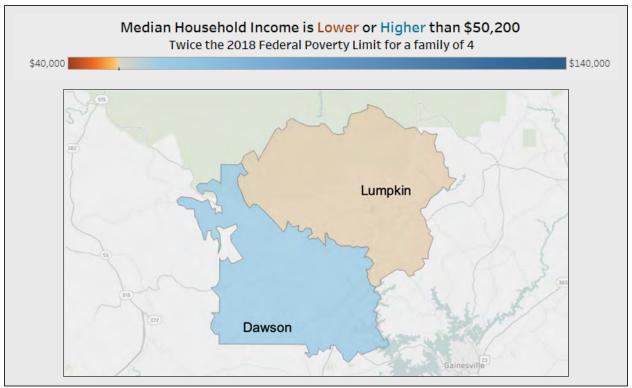




2018 - 2023 Hispanic Population Projected Change by ZIP Code

The 2018 median household income for the United States is \$62,175 and \$55,559 for the state of Georgia. The median household income for this community is estimated at \$49,225 for Lumpkin and \$64,333 for Dawson. Lumpkin's median household income is below twice the 2018 Federal Poverty Limit for a family of four.

2018 Median Household Income by ZIP Code



Most of the population (48%) are insured through employer sponsored health coverage. The remainder of the population is divided between people on Medicare (17%), people without insurance (16%), people who purchase coverage directly from or through the private health insurance marketplace (11%), and people who were on Medicaid (8%). This community has a smaller proportion of people who are uninsured or on Medicaid and a larger proportion of people with Employer sponsored coverage or Medicare when compared to the distribution in the state of Georgia.

48% Employer 17% Medicare Private Market 11% Medicaid 8% Uninsured 16% 5,000 10,000 15,000 20,000 25,000 30,000 2018 Estimated Population

2018 Estimated Distribution of Covered Lives by Insurance Category

The community includes five (5) Health Professional Shortage Areas and one (1) Medically Underserved Areas as designated by the U.S. Department of Health and Human Services Health Resources Services Administration.⁶ **Appendix G** includes the details on each of these designations.

Health Professional Shortage Areas and Medically Underserved Areas and Populations

		th Profess ortage Ar (HPSA)			Medically Underserved Area/Population (MUA/P)
NGHS-SSA 400	Dental Health	Mental Health	Primary Care	Grand Total	MUA/P
Dawson		1	1	2	
Lumpkin	1	1	1	3	1
Total	1	2	2	5	1

Source: U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018

⁶ U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018



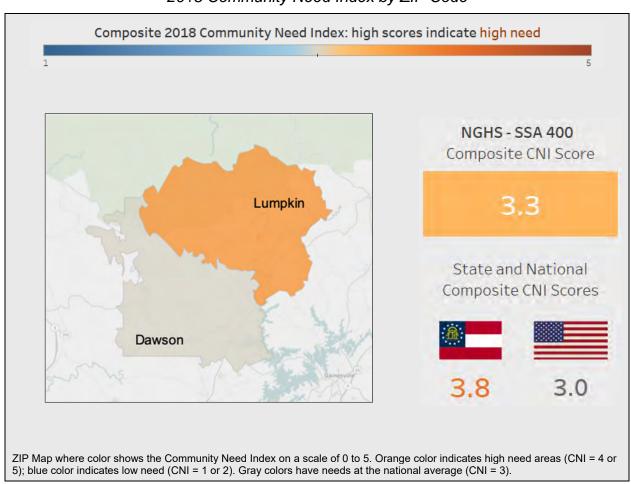
The Watson Health Community Need Index (CNI) is a statistical approach to identifying areas within a community where health disparities may exist. Leveraging U.S. Census Data and Watson Health Insurance Coverage Estimates, the CNI takes into account vital socio-economic factors (income, cultural, education, insurance and housing) about a community to generate a CNI score for every populated ZIP code in the United States. The CNI strongly links to variations in community healthcare needs and is an indicator of a community's demand for various healthcare services. The CNI score by ZIP code identifies specific areas within a community where healthcare needs may be greater.

Overall, the composite CNI score for the community served is 3.3 which is lower than the state CNI score (3.8) and higher than the national benchmark score of 3.0. Lumpkin county has a CNI score of 3.6 and Dawson county has a CNI score of 3.0.

All three ZIP codes in the community have an education barrier sub-score of 4 and insurance barrier sub-score of 4 or 5:

- 30533 Dahlonega
- 30597 Dahlonega
- 30534 Dawsonville

2018 Community Need Index by ZIP Code





Watson Health Community Data

Watson Health supplements the publicly available data and population statistics with estimates of localized disease prevalence of heart disease and cancer as well as emergency department visit estimates.

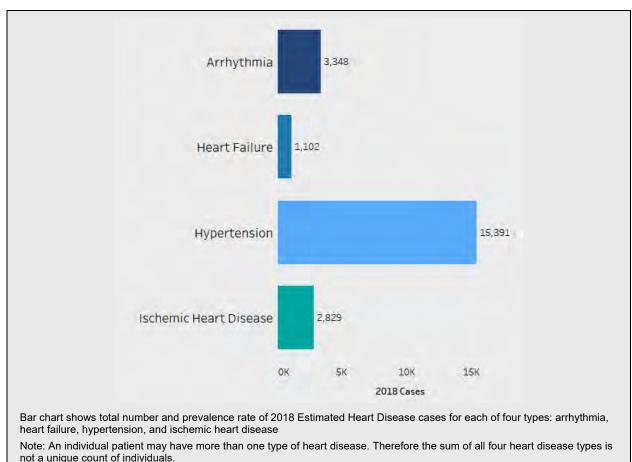
Watson Health Heart Disease Estimates identify hypertension as the most prevalent heart disease diagnosis; there are almost 15,400 estimated cases in the community overall affecting slightly more females (51.4%) than males (48.6%).

Dawsonville ZIP code 30534 has a higher estimated number of cases for each of the four heart disease types compared to Lumpkin ZIP codes.

- Arrhythmia 1,748 cases
- Heart Failure 551 cases
- Hypertension 7,849 cases
- Ischemic Heart Disease 1,418 cases

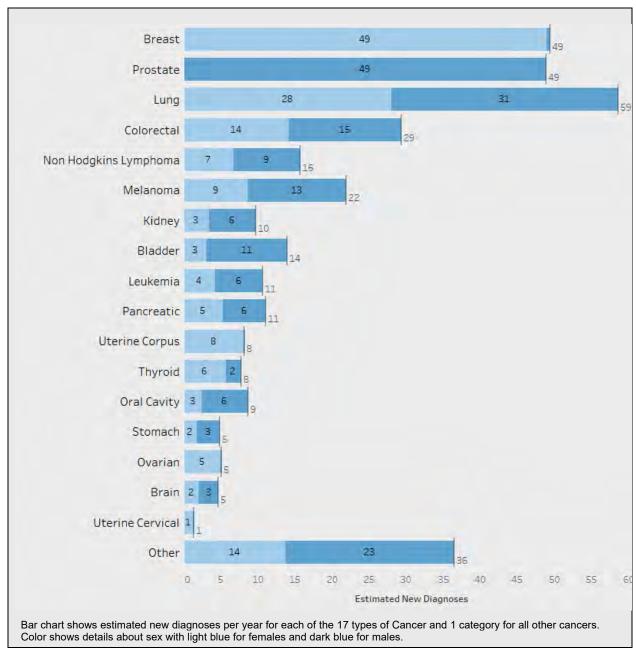
Dawsonville also has a higher prevalence rate per 10,000 population for arrythmia (635) and hypertension (2,852). Dahlonega ZIP code 30533 in Lumpkin county has a slightly higher prevalence rate per 10,000 population for heart failure (207) and ischemic heart disease (530).

2018 Estimated Heart Disease Cases





For this community, Watson Health's 2018 Cancer Estimates reveal the cancers projected to have the greatest rate of growth in the next five years are Pancreatic (16.2%), Melanoma (15.9%), and Thyroid (15.1%) based on both population changes and disease rates. The cancers estimated to have the greatest number of new cases in 2018 are lung (59), prostate (49), and breast (49).



2018 Estimated New Cancer Cases

Estimated Cancer Cases and Projected 5 Year Change by Type

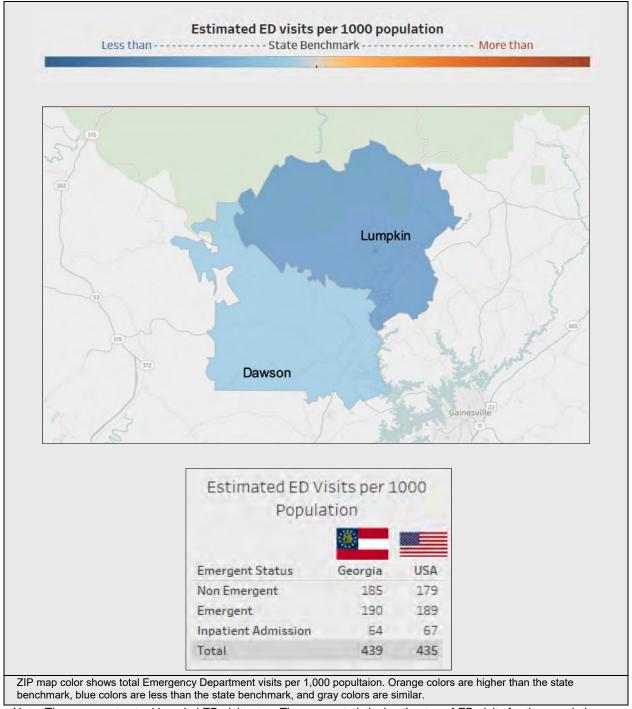
Cancer Type	2018 Estimated New Cases	2023 Estimated New Cases	5 Year Growth (%)
Bladder	14	16	14.9%
Brain	5	5	8.8%
Breast	49	55	10.5%
Colorectal	29	28	-5.3%
Kidney	10	11	12.8%
Leukemia	11	12	13.0%
Lung	59	65	10.5%
Melanoma	22	25	15.9%
Non-Hodgkin's Lymphoma	16	18	12.9%
Oral Cavity	9	10	12.8%
Ovarian	5	5	9.4%
Pancreatic	11	13	16.2%
Prostate	49	50	3.1%
Stomach	5	5	8.0%
Thyroid	8	9	15.1%
Uterine Cervical	1	1	3.4%
Uterine Corpus	8	9	12.2%
All Other Cancers	36	41	13.1%
Grand Total	346	379	9.4%

Based on population characteristics and regional utilization rates, Watson Health projects all emergency department (ED) visits in this community will increase by 7.9% over the next five years. Both counties have total ED use rates lower than the state of Georgia (439 visits per 1000 population). Dawson county has a higher ED use rate than Lumpkin county with 396 visits per 1,000 population. Lumpkin county's Dahlonega ZIP code 30533 has an estimated ED use rate of 260 visits per 1,000 population.

These ED visits consist of three main types: those resulting in an inpatient admission, emergent ED visits treated and released, and non-emergent ED visits that are lower acuity. Non-emergent ED visits present to the ED but can potentially be treated in more appropriate and less intensive outpatient settings.

Non-emergent ED visits can be an indication of systematic issues within the community regarding access to primary care, managing chronic conditions, or other access to care issues such as ability to pay. Watson Health estimates that non-emergent ED visits will increase by an average of 2.6% over the next five years in this community. Both Dawson and Lumpkin counties have lower estimated non-emergent ED use rates than the state benchmark of 185 visits per 1,000 population. Based on projections, Dawson county's non-emergent ED use rate will increase 2.7% by 2023, while Lumpkin county's non-emergent use rate will increase 2.4% for ZIP code 30533 and 0.6% for ZIP code 30597.

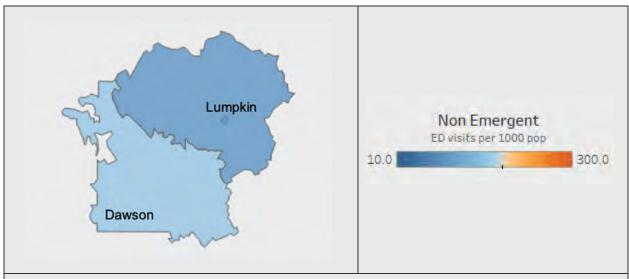
Total Estimated 2018 Emergency Department Visit Rate



Note: These are not actual hospital ED visit rates. These are statistical estimates of ED visits for the population.

Source: IBM Watson Health, 2018

Non-Emergent Estimated 2018 Emergency Department Visits by ZIP Code



ZIP map color shows total Emergency Department vists per 1,000 population by non-emergent status. Orange colors are higher than the state benchmark (see table at right), blue colors are less than the state benchmark, and gray colors are similar. Color range is set for the entire study region. ED visits are defined by the presence of specific CPT® codes in claims. Non-emergency visits to the ED do not necessarily require treatment in a hospital emergency department and can potentially be treated in a fast-track ED, an urgent care treatment center, a clinic or physician's private office.

Note: These are not actual hospital ED visit rates. These are statistical estimates of ED visits for the population.

Public Health Indicators

Public health indicators (129 total) were collected and analyzed to assess community health needs. For each health indicator, a comparison was made between the most recently available community data and benchmarks for the same/similar indicator. The basis of benchmarks was available data for the U.S. and the state of Georgia. A list of these indicators is in **Appendix A**.

Where the community indicators showed greater need when compared to the state of Georgia comparative benchmark, the difference between the community values and the state benchmark was calculated (need differential). The highest ranked indicators with need differentials in the 50th percentile of greater severity pinpointed community health needs from a quantitative perspective.

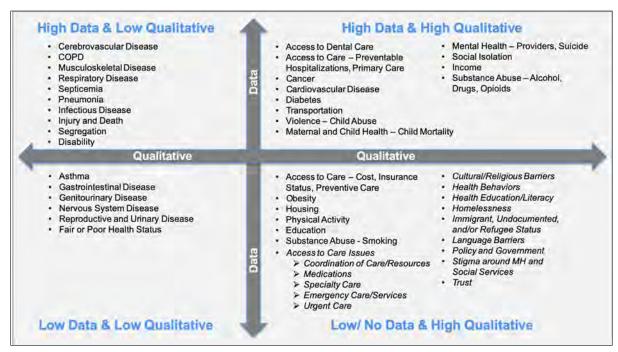
Focus Groups & Interviews

In the Watson Health focus group sessions and interviews, participants identified and discussed the greatest health needs in the community, as well as the barriers and strengths impacting overall health status. For this community, three (3) focus group sessions (listed below) with a total of 13 participants and six (6) interviews were conducted March through April 2019. A list of the organizations providing input can be found in **Appendix B**. Summary findings from the focus groups and interviews can be found in **Appendix C**.

Focus Group	Date	Location	Number of Participants
Dawson County Focus Group	March 5, 2019	Medical Plaza 400 Dawsonville, GA	3
Lumpkin County Focus Group	March 8, 2019	UNG Professional & Continuing Education Dahlonega, GA	5
NGHS Advisory Board Focus Group – SSA 400	February 4, 2019	NGMC Gainesville Gainesville, GA	5

Prioritized Significant Health Needs for NGHS – SSA 400

The Health Needs Matrix identified through the community health needs assessment (see Methodology for Defining Community Needs section) shows the convergence of needs identified in the qualitative data (interview and focus group feedback) and quantitative data (health indicators). The top health needs for this community are defined in the Health Needs Matrix below.



Community Health Needs Matrix

Note: Lower right quadrant items in italics do not have quantitative data indicators available

Source: IBM Watson Health, 2019

Through the prioritization process, the significant health needs for this community were identified, reviewed, and prioritized (see "Approach to Identify and Prioritize Significant Health Needs" section). The resulting prioritized health needs for the community are provided in the table below.

Prioritized Significant Community Health Needs

Priority Rank	Health Need
1	Mental Health
2	Substance Abuse
3	Diabetes
3	Access to Care
4	Maternal and Child Health

Priority Rank	Health Need
5	Cardiovascular Disease
6	Smoking (added)
7	Violence - Child Abuse
8	Septicemia (added)
9	Income
9	Access to Dental Care
10	Social Isolation
11	Cancer
12	Transportation

Notes: Needs noted as "added" were pulled from quadrants other than the upper right (high data/high qualitative) as they were considered significant by the prioritization working group.

Needs with the same priority rank received the same overall score in the prioritization process

Source: IBM Watson Health, 2019

Recommended Health Needs to be Addressed for NGHS - SSA 400

As part of the prioritization work session, work group participants recommended a set of prioritized significant health needs that should be addressed by each CHNA Partner (see "Recommended Health Needs to be Addressed by the CHNA Partners" section). The members of this community's prioritization work group recommended the following significant needs to be addressed via the CHNA implementation strategy:

- Mental and Behavioral Health
- Access to Care
- Diabetes
- Cardiovascular Disease

CHNA Implementation Strategy

NGHS will choose which needs it will address from those identified in this assessment. An implementation strategy with specific initiatives to address the chosen health needs will be completed and adopted by the hospitals by February 15, 2020.

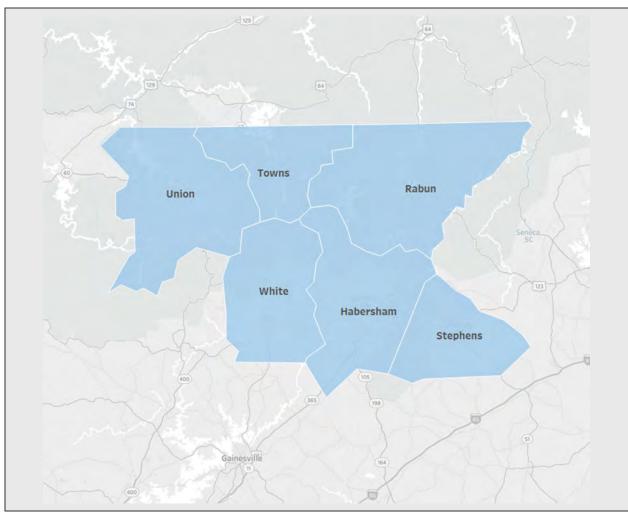
An evaluation of the NGHS 2016 CHNA implementation strategy and its impact can be found in **Appendix I**.

Community Health Needs Assessment - NGHS Secondary Service Area North

Community Served Definition

For the purpose of this assessment, the geographic boundaries of the community served by NGHS encompass the counties and ZIP codes where 90% of NGHS hospital admissions originate (**Appendix K**). These counties were grouped into four communities based on consideration for patient volume, location, and the broad interests of the community, including medically underserved populations, low-income persons, minority groups, or those with chronic disease needs. The NGHS Secondary Service Area North (SSA North) is comprised of one ZIP code from Banks County (30511 – Baldwin) and six counties: Habersham, Rabun, Stephens, Towns, Union, and White.

The counties which principally comprise a majority of the community were used in determining health needs. The principal counites used for the NGHS SSA North community needs analysis are Habersham, Rabun, Stephens, Towns, Union, and White counties.



Map of Community Served

Source: NGHS, 2019

Demographic and Socioeconomic Summary

The population of the community served is expected to grow 4.4% by 2023, an increase of more than 7,100 people. The 4.4% projected population growth is less than the state's 5-year projected growth rate (5.0%) but higher when compared to the national projected growth rate (3.5%). The median age is older than both the state and national medians. Median household income for the overall community is lower than both benchmarks.

Demographic and Socioeconomic Comparison: Community Served and State/U.S. Benchmarks

			Benchmarks		Community Served
Geography		United States	Georgia	Northeast Georgia Region	NGHS Secondary Service Area North
Total Current	t Population	326,533,070	10,467,269	1,743,817	160,801
5 Yr Projected Po	pulation Change	3.5%	5.0%	7.2%	4.4%
Media	n Age	38.3	36.9	40.3	46.7
Population	on 0-17	22.6%	24.0%	25.3%	19.6%
Populati	on 65+	15.9%	13.8%	13.1%	23.8%
Women A	ge 15-44	19.6%	20.4%	20.0%	17.5%
Non-White Population		30.0%	43.0%	36.2%	11.3%
Hispanic P	opulation	18.2%	9.7%	16.6%	7.5%
	Uninsured	9.4%	17.1%	11.9%	17.3%
Insurance	Medicaid	19.0%	11.8%	10.4%	10.7%
Coverage	Private Market	9.6%	10.8%	11.5%	8.8%
Ooverage	Medicare	16.1%	14.4%	12.5%	25.5%
	Employer	45.9%	45.8%	53.7%	37.6%
Median HH Income		\$62,175	\$55,559	\$56,929	\$43,951
Limited I	English	26.2%	19.3%	28.9%	12.4%
No High Sch	ool Diploma	7.4%	8.9%	7.9%	10.7%
Unemp	loyed	6.8%	7.8%	6.3%	8.6%

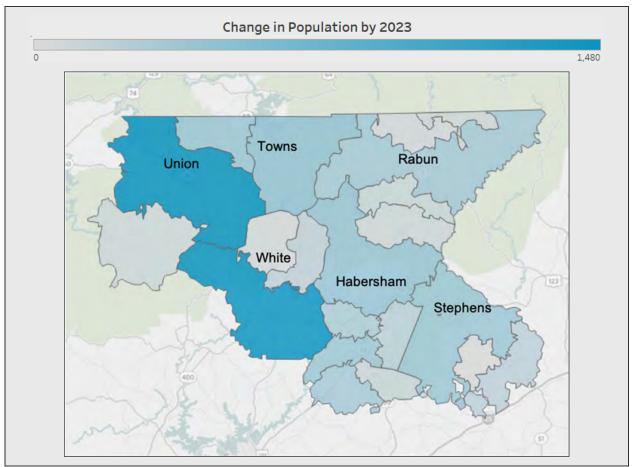
Source: IBM Watson Health / Claritas, 2018; US Census Bureau 2017 (U.S. Median Income)

Note: children (ages 0-17), older adults (ages 65+) and women of childbearing age (ages 18-44) are identified as population groups that have unique healthcare needs.

The ZIP codes expected to experience the most growth in five years are:

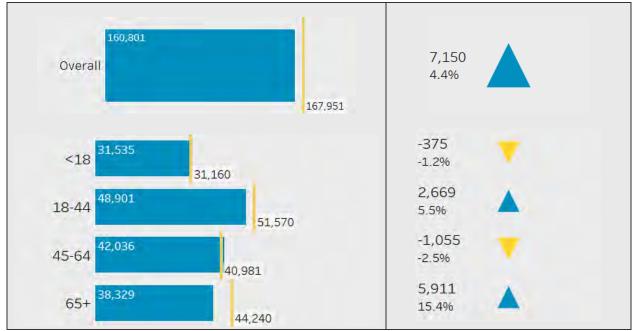
• 30512 – Blairsville 1,480 people 30528 - Cleveland 1,463 people

2018 - 2023 Total Population Projected Change by ZIP Code



The community's population is split with half the population 44 years and younger and the other half 45 years and older. The largest cohort (18-44) represents 30% of the population and is expected to grow by 2,669 people by 2023. The age 65 plus cohort accounts for 24% of the population and is projected to experience the fastest growth (15.4%) over the next five years, adding more than 5,900 seniors to the community. Growth in the senior population will likely contribute to increased utilization of services as the population continues to age.

Population Distribution by Age
2018 Population by Age Cohort Change by 2023



Population statistics are analyzed by race and by Hispanic ethnicity. The community is primarily racially White (88.7%), with people who define themselves as multiracial and other making up the second largest group at 5.4%. The Asian/Pacific Islander population is projected to experience the greatest growth by 2023 (18.7%). The White population is projected to experience the least amount of growth over the next five years (2.9%).

The expected growth rate of the Hispanic population (all races) is over 2,100 people (17.7%) by 2023, while the non-Hispanic population (all races) is expected to grow by approximately 5,000 people (3.4%) by 2023.

Black 4.1%

White 88.7%

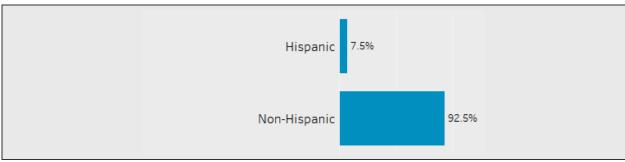
American Indian & Alaska Native 0.5%

Asian/Pacific Islander 1.4%

Multiracial & Other 5.4%

2018 Population by Race





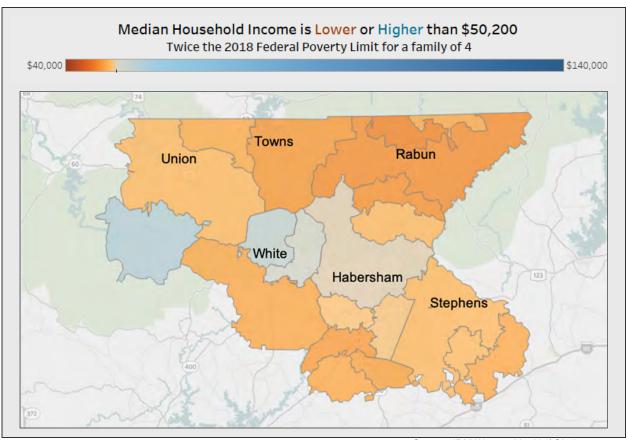
Change in Population by 2023 458 Towns Rabun Union White Habersham Stephens

2018 - 2023 Hispanic Population Projected Change by ZIP Code

The 2018 median household income for the United States is \$62,175 and \$55,559 for the state of Georgia. The median household income for the ZIP codes within this community range from \$34,615 for ZIP code 30568 - Rabun Gap to \$57,561 for ZIP code 30572 - Suches. Eighteen (18) of the 21 ZIP Codes in the SSA North service area have median household incomes less than \$50,200, twice the 2018 Federal Poverty Limit for a family of four. Five (5) ZIP codes have median income values less than \$40,000.

•	30531 – Cornelia	\$39,431
•	30546 – Hiawassee	\$38,621
•	30576 – Tiger	\$37,372
•	30525 – Clayton	\$36,814
•	30568 – Rabun Gap	\$34,615

2018 Median Household Income by ZIP Code



Most of the population are covered via Employer sponsored plans (38%) and Medicare (26%). The remainder of the population is divided between those who purchase coverage directly from or through the private health insurance marketplace (9%), people who are on Medicaid (11%), and the uninsured (17%). The percentage of the population in this community who are covered by Medicaid or uninsured is similar to estimates for the state (11.8% and 17.1% respectively).

38% **Employer** Medicare 26% Private Market 9% Medicaid 11% Uninsured 17% 0 10,000 20,000 30,000 40,000 50,000 60,000 2018 Estimated Population

2018 Estimated Distribution of Covered Lives by Insurance Category

The community includes 18 Health Professional Shortage Areas and five (5) Medically Underserved Areas as designated by the U.S. Department of Health and Human Services Health Resources Services Administration.⁷ **Appendix G** includes the details on each of these designations.

Health Professional Shortage Areas and Medically Underserved Areas and Populations

	Health Professional Shortage Areas (HPSA)			Medically Underserved Area/Population (MUA/P)	
NGHS-SSA North	Dental Health	Mental Health	Primary Care	Grand Total	MUA/P
Habersham	2	2	2	6	1
Rabun		1	1	2	1
Stephens		1	1	2	
Towns		1	2	3	1
Union	1	1	1	3	1
White		1	1	2	1
Total	3	7	8	18	5

Source: U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018

⁷ U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018



Ξ

The Watson Health Community Need Index (CNI) is a statistical approach to identifying areas within a community where health disparities may exist. Leveraging U.S. Census Data and Watson Health Insurance Coverage Estimates, the CNI takes into account vital socio-economic factors (income, cultural, education, insurance and housing) about a community to generate a CNI score for every populated ZIP code in the United States. The CNI strongly links to variations in community healthcare needs and is an indicator of a community's demand for various healthcare services. The CNI score by ZIP code identifies specific areas within a community where healthcare needs may be greater.

Overall, the composite CNI score for the community served is 3.8, equal to the CNI for the state of Georgia and higher than the national benchmark score of 3.0. The overall CNI score potentially indicates greater health care needs in this community. In ZIP code 30531 - Cornelia, the CNI score (4.8) is greater than 4.5, pointing to potentially more significant health needs among the population.

Additionally, 18 of the 21 ZIPs in the community have insurance barrier sub-scores of 5, reflecting the high uninsured population.

Composite 2018 Community Need Index: high scores indicate high need NGHS - SSA North Composite CNI Score 3.8 State and National Composite CNI Scores Stephens ZIP Map where color shows the Community Need Index on a scale of 0 to 5. Orange color indicates high need areas (CNI = 4 or 5); blue color indicates low need (CNI = 1 or 2). Gray colors have needs at the national average (CNI = 3).

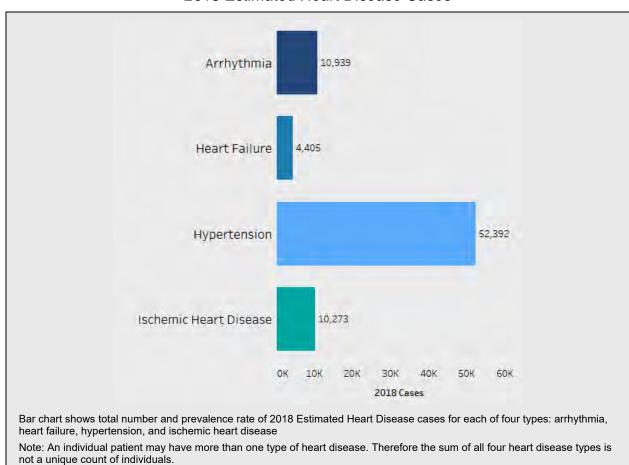
2018 Community Need Index by ZIP Code

Watson Health Community Data

Watson Health supplements the publicly available data and population statistics with estimates of localized disease prevalence of heart disease and cancer as well as emergency department visit estimates.

Watson Health Heart Disease Estimates identify hypertension as the most common heart disease diagnosis; there are almost 52,400 estimated cases in the community overall. The 30512 ZIP code of Blairsville has the most estimated cases of Hypertension, Arrhythmia, and Heart Failure while the 30528 ZIP code of Cleveland has the most estimated cases of Ischemic Heart Disease.

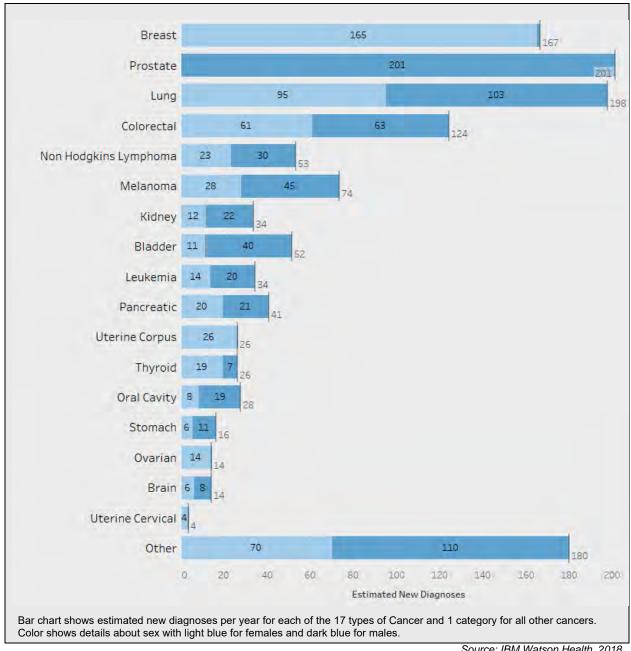
The 30545 ZIP code of Helen has the highest estimated prevalence rates for Arrhythmia (978 cases per 10,000 population) and Ischemic Heart Disease (1,081 cases per 10,000 population). The 30546 ZIP code of Hiawassee has the highest estimated prevalence rate for Heart Failure (357 cases per 10,000 population), while the 30572 ZIP code of Suches has the highest prevalence rate for Hypertension (4,181 cases per 10,000 population).



2018 Estimated Heart Disease Cases

For this community, Watson Health's 2018 Cancer Estimates reveal the cancers estimated to have the greatest number of new cases in 2018 are prostate (201), lung (198), and breast (167) cancers. The cancers projected to have the greatest rate of growth in the next five years are melanoma, thyroid, and pancreatic. Growth is based on both population changes and disease rates.





Estimated Cancer Cases and Projected 5 Year Change by Type

Cancer Type	2018 Estimated New Cases	2023 Estimated New Cases	5 Year Growth (%)
Bladder	52	58	12.3%
Brain	14	15	7.5%
Breast	167	181	8.5%
Colorectal	124	114	-8.7%
Kidney	34	37	10.7%
Leukemia	34	38	10.9%
Lung	198	213	7.5%
Melanoma	74	85	15.0%
Non Hodgkins Lymphoma	53	59	10.8%
Oral Cavity	28	31	10.5%
Ovarian	14	15	7.1%
Pancreatic	41	46	13.0%
Prostate	201	202	0.6%
Stomach	16	17	5.5%
Thyroid	26	30	13.8%
Uterine Cervical	4	4	1.9%
Uterine Corpus	26	29	9.8%
All Other Cancers	180	199	10.8%
Grand Total	1,286	1,373	6.8%

Source: IBM Watson Health, 2018

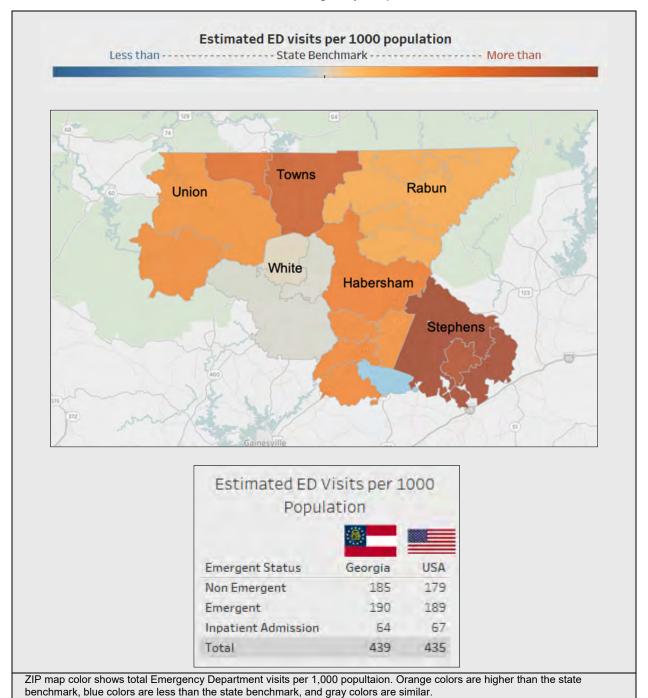
Based on population characteristics and regional utilization rates, Watson Health projects all emergency department (ED) visits in this community will increase by 6.4% over the next five years. The highest estimated ED use rates are in the ZIP codes of 30557 -Martin (804 ED visits per 1,000 residents), 30577 - Toccoa (799 ED visits per 1,000), and 30538 - Eastanollee (769 ED visits per 1,000), compared to the Georgia state benchmark of 439 visits per 1,000 and the U.S. benchmark of 435 visits per 1,000.

These ED visits consist of three main types: those resulting in an inpatient admission, emergent ED visits treated and released, and non-emergent ED visits that are lower acuity. Non-emergent ED visits present to the ED but can potentially be treated in more appropriate and less intensive outpatient settings.

Non-emergent ED visits can be an indication of systematic issues within the community regarding access to primary care, managing chronic conditions, or other access to care issues such as ability to pay. Watson Health estimates non-emergent ED visits will increase by 2.3% over the next five years in this community. Twelve (12) ZIP codes have estimated non-emergent ED visit rates higher than the state benchmark of 185 visits per 1,000 population. The five ZIP codes with the highest estimates are:

30577 – Toccoa
30557 – Martin
30538 – Eastanollee
30582 – Young Harris
30531 – Cornelia
312 visits per 1,000 population
307 visits per 1,000 population
241 visits per 1,000 population
241 visits per 1,000 population
241 visits per 1,000 population

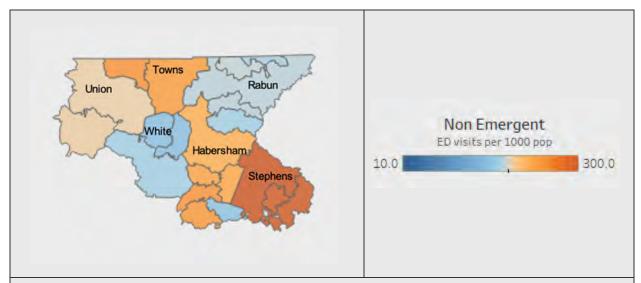
Total Estimated 2018 Emergency Department Visit Rate



Note: These are not actual hospital ED visit rates. These are statistical estimates of ED visits for the population.

Source: IBM Watson Health. 2018

Non-Emergent Estimated 2018 Emergency Department Visits by ZIP Code



ZIP map color shows total Emergency Department vists per 1,000 population by non-emergent status. Orange colors are higher than the state benchmark (see table at right), blue colors are less than the state benchmark, and gray colors are similar. Color range is set for the entire study region. ED visits are defined by the presence of specific CPT® codes in claims. Non-emergency visits to the ED do not necessarily require treatment in a hospital emergency department and can potentially be treated in a fast-track ED, an urgent care treatment center, a clinic or physician's private office.

Note: These are not actual hospital ED visit rates. These are statistical estimates of ED visits for the population.

Public Health Indicators

Public health indicators (129 total) were collected and analyzed to assess community health needs. For each health indicator, a comparison was made between the most recently available community data and benchmarks for the same/similar indicator. The basis of benchmarks was available data for the U.S. and the state of Georgia. A list of these indicators is in **Appendix A**.

Where the community indicators showed greater need when compared to the state of Georgia comparative benchmark, the difference between the community values and the state benchmark was calculated (need differential). The highest ranked indicators with need differentials in the 50th percentile of greater severity pinpointed community health needs from a quantitative perspective.

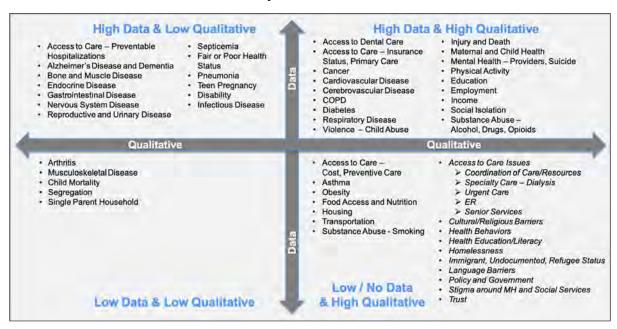
Focus Groups & Interviews

In the Watson Health focus group sessions and interviews, participants identified and discussed the greatest health needs in the community, as well as the barriers and strengths impacting overall health status. For this community, two (2) focus group session (listed below) with a total of 14 participants and three (3) interviews were conducted March through April 2019. A list of the organizations providing input can be found in **Appendix B**. Summary findings from the focus groups and interviews can be found in **Appendix C**. Additional input gathered via the Union General and Chatuge Regional Hospitals 2018 CHNA Reports were used to assess need from a qualitative perspective (**Appendix D**).

Focus Group	Date	Location	Number of Participants
Habersham & Stephens Counties Focus Group	March 6, 2019	Habersham Medical Center Demorest, GA	9
NGHS Advisory Board Focus Group – SSA North	February 4, 2019	NGMC Gainesville Gainesville, GA	5

Prioritized Significant Health Needs for NGHS – SSA North

The Health Needs Matrix identified through the community health needs assessment (see Methodology for Defining Community Needs section) shows the convergence of needs identified in the qualitative data (interview and focus group feedback) and quantitative data (health indicators). The top health needs for this community are defined in the Health Needs Matrix below.



Community Health Needs Matrix

Note: Lower right quadrant items in italics do not have quantitative data indicators available

Source: IBM Watson Health, 2019

Through the prioritization process, the significant health needs for this community were identified, reviewed, and prioritized (see "Approach to Identify and Prioritize Significant Health Needs" section). The resulting prioritized health needs for the community are provided in the table below.

Prioritized Significant Community Health Needs

Priority Rank	Health Need
1	Mental Health
2	Substance Abuse
3	Diabetes
3	Access to Care (added Preventable Hospitalizations)
4	Maternal and Child Health
5	Cardiovascular Disease

Priority Rank	Health Need
6	Income
6	Physical Activity
7	Violence - Child Abuse
8	Education
9	Septicemia (added)
10	Access to Dental Care
10	Employment
11	Cerebrovascular Disease
12	Social Isolation
13	Cancer
14	COPD and Respiratory Disease
15	Injury and Death

Notes: Needs noted as "added" were pulled from quadrants other than the upper right (high data/high qualitative) as they were considered significant by the prioritization working group. Needs with the same priority rank received the same overall score in the prioritization process

Source: IBM Watson Health, 2019

Recommended Health Needs to be Addressed for NGHS - SSA North

As part of the prioritization work session, work group participants recommended a set of prioritized significant health needs that should be addressed by each CHNA Partner (see "Recommended Health Needs to be Addressed by the CHNA Partners" section). The members of this community's prioritization work group recommended the following significant needs to be addressed via the CHNA implementation strategy:

- Mental and Behavioral Health
- Access to Care
- Diabetes
- Septicemia

CHNA Implementation Strategy

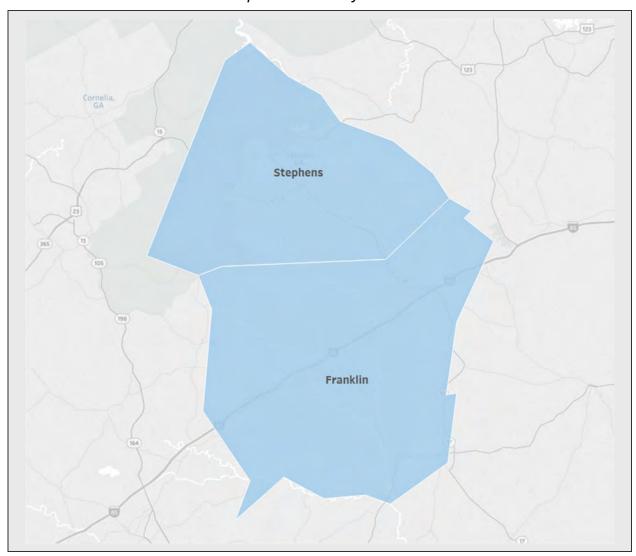
NGHS will choose which needs it will address from those identified in this assessment. An implementation strategy with specific initiatives to address the chosen health needs will be completed and adopted by the hospitals by February 15, 2020.

An evaluation of the NGHS 2016 CHNA implementation strategy and its impact can be found in **Appendix I**.

Community Health Needs Assessment – Stephens County Hospital

Community Served Definition

For the purpose of this assessment, the geographic boundaries of the community served by Stephens County Hospital (SCH) includes the counties which form the hospital's primary service area. The SCH community served is comprised of Stephens and Franklin counties.



Map of Community Served

Source: Stephens County Hospital, 2019

Demographic and Socioeconomic Summary

According to population statistics, the SCH community is expected to grow 2.3% by 2023, an increase of almost 1,300 people. The 2.3% projected population growth is less than half of the state's five-year projected growth rate (5.0%) and is also lower than the national projected growth rate (3.5%). The median age is much older than both the state and national benchmarks. Median household income for the community is much lower than state and national benchmarks. The community has a higher proportion of Medicaid beneficiaries than the state of Georgia benchmark and the estimated uninsured rate is greater than the national and state levels.

Demographic and Socioeconomic Comparison: Community Served and State/U.S. Benchmarks

Geography		Benchmarks			Community Served
		United States	Georgia	Northeast Georgia Region	Stephens County Hospital
Total Current Population		326,533,070	10,467,269	1,743,817	55,132
5 Yr Projected Population Change		3.5%	5.0%	7.2%	2.3%
Median Age		38.3	36.9	40.3	41.6
Population 0-17		22.6%	24.0%	25.3%	21.8%
Population 65+		15.9%	13.8%	13.1%	20.0%
Women Age 15-44		19.6%	20.4%	20.0%	18.2%
Non-White Population		30.0%	43.0%	36.2%	16.6%
Hispanic Population		18.2%	9.7%	16.6%	4.3%
Insurance Coverage	Uninsured	9.4%	17.1%	11.9%	20.9%
	Medicaid	19.0%	11.8%	10.4%	14.3%
	Private Market	9.6%	10.8%	11.5%	8.4%
	Medicare	16.1%	14.4%	12.5%	26.6%
	Employer	45.9%	45.8%	53.7%	29.7%
Median HH Income		\$62,175	\$55,559	\$56,929	\$40,315
Limited English		26.2%	19.3%	28.9%	9.7%
No High School Diploma		7.4%	8.9%	7.9%	14.8%
Unemployed		6.8%	7.8%	6.3%	8.8%

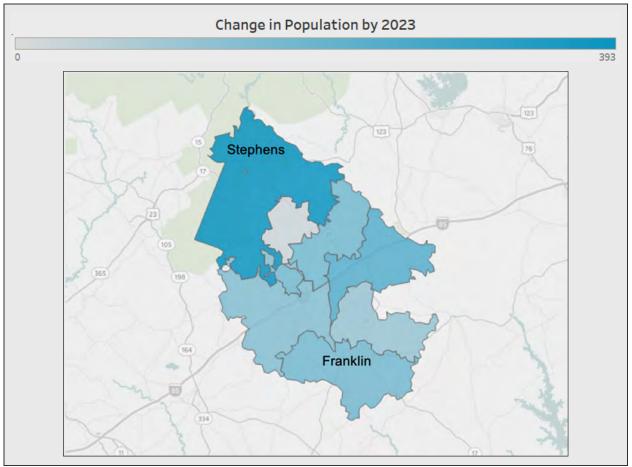
Source: IBM Watson Health / Claritas, 2018; US Census Bureau 2017 (U.S. Median Income)

Note: children (ages 0-17), older adults (ages 65+) and women of childbearing age (ages 18-44) are identified as population groups that have unique healthcare needs.

The ZIP codes expected to experience the most growth in five years are:

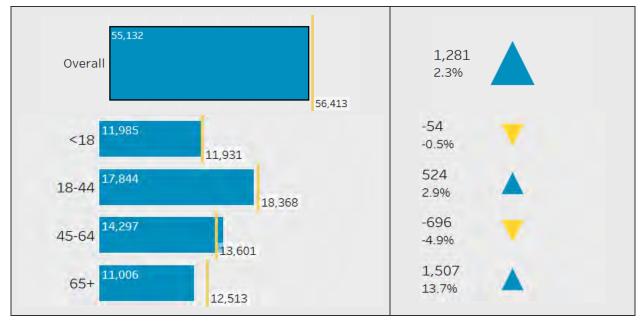
30577 – Toccoa 393 people
 30553 – Lavonia 239 people

2018 - 2023 Total Population Projected Change by ZIP Code



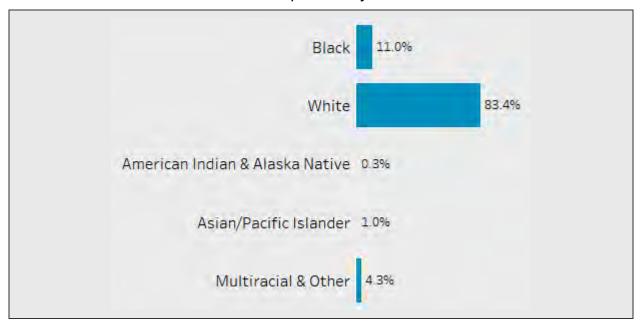
The community's population skews younger with 54% of the population age 44 and younger (32.4% of the population ages 18-44 and 21.7% under age 18). Two cohorts are expected to decrease in number by 2023, those under age 18 (-54 people) and those age 45-64 (-696 people). The age 65 plus cohort is the smallest, representing 20.0 % of the population or 11,000 people, but is expected to experience the fastest growth (13.7%) over the next five years; adding 1,507 seniors to the community. Growth in the senior population will likely contribute to increased utilization of services as the population continues to age.

Population Distribution by Age
2018 Population by Age Cohort Change by 2023

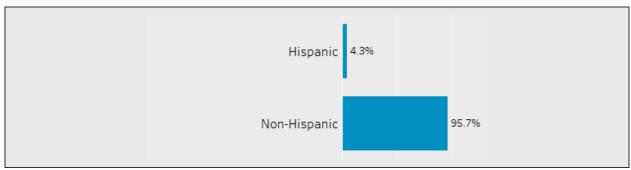


Population statistics are analyzed by race and by Hispanic ethnicity. The community is primarily racially White (83.4%), with the Black population comprising 11.0% of the population and a combination of other racial groups comprising the remaining 5.6% of the population. However, the White population is projected to grow the slowest (0.3%) adding just 145 people in five years while the Black population is projected to increase more than other racial groups, adding 535 people (8.8% growth). In terms of ethnicity, the community population is primarily non-Hispanic (95.7%) but the Hispanic population is projected to grow by 430 people (18.3%) by 2023.

2018 Population by Race



2018 Population by Ethnicity



Change in Population by 2023

2

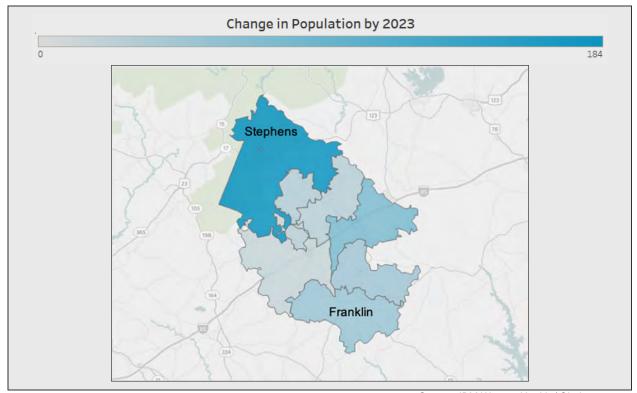
Stephens

Franklin

2018 - 2023 Black Population Projected Change by ZIP Code

Source: IBM Watson Health / Claritas, 2018

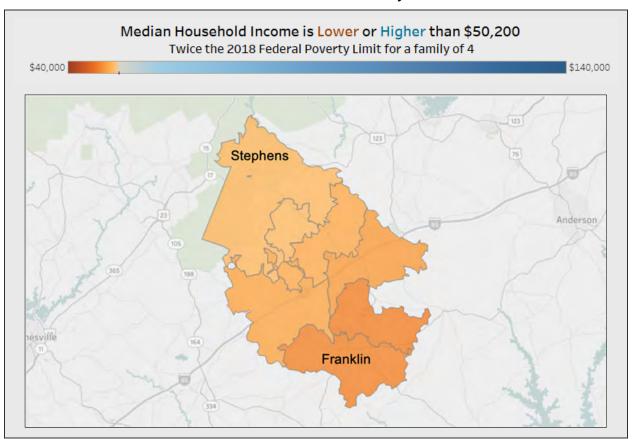
2018 - 2023 Hispanic Population Projected Change by ZIP Code



The 2018 median household income for the United States is \$62,175 and \$55,559 for the state of Georgia. The median household income for the ZIP codes within this community ranges from \$34,369 for ZIP code 30520-Cannon to \$45,362 for ZIP code 30538-Eastanollee. All seven (7) ZIP Codes in the community have median household incomes less than \$50,200, twice the 2018 Federal Poverty Limit for a family of four:

•	30520 - Canon	\$34,369
•	30662 - Royston	\$34,640
•	30553 – Lavonia	\$39,434
•	30521 - Carnesville	\$41,359
•	30557 - Martin	\$42,000
•	30577 - Toccoa	\$44,841
•	30538 - Eastanollee	\$45,362

2018 Median Household Income by ZIP Code



The top two health insurance categories in the community are employer sponsored health coverage (30%) and Medicare (27%). The proportion of people with employer sponsored coverage is considerably less than the state benchmark (46%). The proportion of Medicare enrollees is substantially higher than the state benchmark (14%). Almost 21% of the population is uninsured which is also higher than the state benchmark of 17%. Four (4) ZIP codes have a proportion of uninsured higher than the state percentage: 30520-Canon (26%), 30662-Royston (26%), 30553-Lavonia (22%), and 30538-Eastanollee (20%). The remaining categories are comparable to state proportions with only 8% of the community enrolled in private market insurance coverage (the purchasers of coverage directly or through the health insurance marketplace) and 14% covered by Medicaid.

Employer 30%

Medicare 27%

Private Market 8%

Medicaid 14%

Uninsured 21%

0 4,000 8,000 12,000 16,000
2018 Estimated Population

2018 Estimated Distribution of Covered Lives by Insurance Category

The community includes five (5) Health Professional Shortage Areas and one (1) Medically Underserved Areas as designated by the U.S. Department of Health and Human Services Health Resources Services Administration.⁸ **Appendix G** includes the details on each of these designations.

Health Professional Shortage Areas and Medically Underserved Areas and Populations

	Health Professional Shortage Areas (HPSA)			Medically Underserved Area/Population (MUA/P)	
Stephens County Hospital	Dental Health	Mental Health	Primary Care	Grand Total	MUA/P
Franklin	1	1	1	3	1
Stephens		1	1	2	
Total	1	2	2	5	1

Source: U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018

⁸ U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018



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The Watson Health Community Need Index (CNI) is a statistical approach to identifying areas within a community where health disparities may exist. Leveraging U.S. Census Data and Watson Health Insurance Coverage Estimates, the CNI takes into account vital socio-economic factors (income, cultural, education, insurance and housing) about a community to generate a CNI score for every populated ZIP code in the United States. The CNI strongly links to variations in community healthcare needs and is an indicator of a community's demand for various healthcare services. The CNI score by ZIP code identifies specific areas within a community where healthcare needs may be greater.

Overall, the composite CNI score for the community served is 4.1, higher than the CNI national benchmark of 3.0, potentially indicating greater health care needs in this community. All seven (7) ZIPs in the community have insurance barrier scores of 5, reflecting the high uninsured and high unemployment rates. Additionally, six (6) ZIPs have education barrier scores of 5, meaning these ZIP Codes ranked in the bottom quintile across the nation for the percentage of population over age 25 without a high school diploma.

Stephens County Hospital Composite CNI Score 4.1 State and National Composite CNI Scores 3.8 3.0 ZIP Map where color shows the Community Need Index on a scale of 0 to 5. Orange color indicates high need areas (CNI = 4 or 5); blue color indicates low need (CNI = 1 or 2). Gray colors have needs at the national average (CNI = 3).

2018 Community Need Index by ZIP Code

Watson Health Community Data

Watson Health supplements the publicly available data and population statistics with estimates of localized disease prevalence of heart disease and cancer as well as emergency department visit estimates.

Watson Health Heart Disease Estimates identify hypertension as the most prevalent heart disease diagnosis; there are almost 16,300 estimated cases in the community overall. The 30577 ZIP code of Toccoa has the most estimated cases of each heart disease type driven primarily by population size.

Slightly more females are identified as living with Arrythmia, Heart Failure, and Hypertension than males, but more males are identified as living with Ischemic Heart Disease than females (60% versus 40%).

The 30553 ZIP code of Lavonia has the highest estimated prevalence rates for Arrhythmia (644 cases per 10,000 population) and Hypertension (3,2048 cases per 10,000 population). The 30557 ZIP code of Martin has the highest estimated prevalence for Heart Failure (287 cases per 10,000 population), and Ischemic Heart Disease (630 cases per 10,000 population).

Arrhythmia 3.388 1,505 Heart Failure 16,292 Hypertension Ischemic Heart Disease 3,150 5K 15K 20K OK 10K 2018 Cases Bar chart shows total number and prevalence rate of 2018 Estimated Heart Disease cases for each of four types: arrhythmia, heart failure, hypertension, and ischemic heart disease

Note: An individual patient may have more than one type of heart disease. Therefore the sum of all four heart disease types is

2018 Estimated Heart Disease Cases

Source: IBM Watson Health, 2018

not a unique count of individuals.

For this community, Watson Health's 2018 Cancer Estimates reveal the cancers estimated to have the greatest number of new cases in 2018 are lung, prostate, breast, and colorectal cancers. The cancers projected to have the greatest rate of growth in the next five years are melanoma, thyroid, pancreatic, and bladder. Growth rates are based on both population changes and disease rates.

Breast 48 Prostate 56 29 30 Lung 19 19 Colorectal Non Hodgkins Lymphoma Melanoma Kidney Bladder Leukemia Pancreatic Uterine Corpus Thyroid Oral Cavity Stomach 2 Ovarian Brain 2 Uterine Cervical Other 24 5 10 30 16 20 25 35 40 45 55 60 Estimated New Diagnoses Bar chart shows estimated new diagnoses per year for each of the 17 types of Cancer and 1 category for all other cancers. Color shows details about sex with light blue for females and dark blue for males.

2018 Estimated New Cancer Cases

Source: IBM Watson Health, 2018

Estimated Cancer Cases and Projected 5 Year Change by Type

Cancer Type	2018 Estimated New Cases	2023 Estimated New Cases	5 Year Growth (%)
Bladder	14	15	10.1%
Brain	5	5	4.8%
Breast	48	51	5.5%
Colorectal	38	34	-8.9%
Kidney	11	11	8.5%
Leukemia	9	10	8.4%
Lung	59	62	5.5%
Melanoma	22	25	11.4%
Non Hodgkins Lymphoma	16	17	8.1%
Oral Cavity	8	9	7.9%
Ovarian	4	5	4.2%
Pancreatic	13	14	10.9%
Prostate	56	55	-1.1%
Stomach	5	5	4.3%
Thyroid	9	10	11.0%
Uterine Cervical	1	1	-1.3%
Uterine Corpus	9	9	7.1%
Other	62	67	8.6%
Grand Total	388	406	4.8%

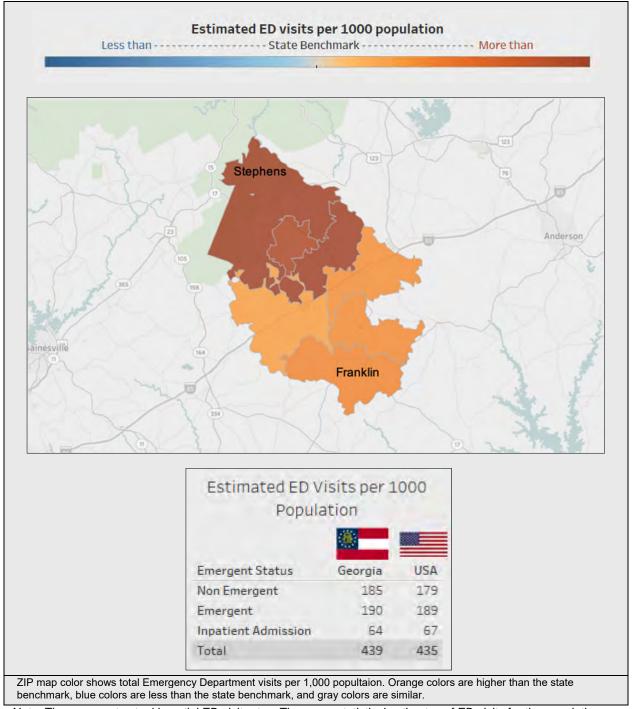
Source: IBM Watson Health, 2018

Based on population characteristics and regional utilization rates, Watson Health projects all emergency department (ED) visits in this community to increase by 3.6% over the next five years. All community ZIP codes have higher ED use rates than the Georgia state benchmark of 439 visits and the U.S. benchmark of 435 visits per 1,000. The highest estimated ED use rates are in the ZIP codes 30557-Martin (804 ED visits per 1,000 residents), 30577-Toccoa (799 ED visits per 1,000), and 30538-Eastanollee (769 ED visits per 1,000).

These ED visits consist of three main types: those resulting in an inpatient admission, emergent ED visits treated and released, and non-emergent ED visits that are lower acuity. Non-emergent ED visits present to the ED but can possibly be treated in more appropriate and less intensive outpatient settings.

Non-emergent ED visits can be an indication of systematic issues within the community regarding access to primary care, managing chronic conditions, or other access to care issues such as ability to pay. Each of the seven ZIP codes has an estimated non-emergent ED visit rate higher than the state benchmark of 185 visits per 1,000 population. Watson Health estimates non-emergent ED visits to increase slightly (0.7%) over the next five years in this community.

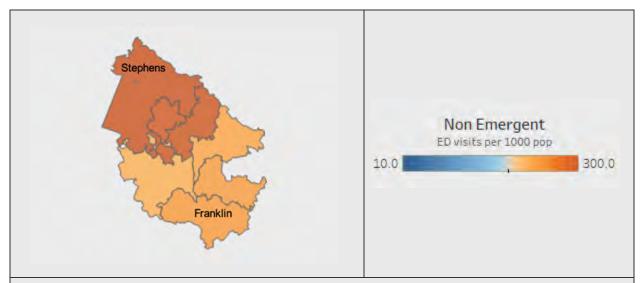
Total Estimated 2018 Emergency Department Visit Rate



Note: These are not actual hosptial ED visit rates. These are statistical estimates of ED visits for the population.

Source: IBM Watson Health, 2018

Non-Emergent Estimated 2018 Emergency Department Visits by ZIP Code



ZIP map color shows total Emergency Department vists per 1,000 population by non-emergent status. Orange colors are higher than the state benchmark (see table at right), blue colors are less than the state benchmark, and gray colors are similar. Color range is set for the entire study region. ED visits are defined by the presence of specific CPT® codes in claims. Non-emergency visits to the ED do not necessarily require treatment in a hospital emergency department and can potentially be treated in a fast-track ED, an urgent care treatment center, a clinic or physician's private office.

Note: These are not actual hospital ED visit rates. These are statistical estimates of ED visits for the population.

Source: IBM Watson Health, 2018

Public Health Indicators

Public health indicators (129 total) were collected and analyzed to assess community health needs. For each health indicator, a comparison was made between the most recently available community data and benchmarks for the same/similar indicator. The basis of benchmarks was available data for the U.S. and the state of Georgia. A list of these indicators is in **Appendix A**.

Where the community indicators showed greater need when compared to the state of Georgia comparative benchmark, the difference between the community values and the state benchmark was calculated (need differential). The highest ranked indicators with need differentials in the 50th percentile of greater severity pinpointed community health needs from a quantitative perspective.

Focus Groups & Interviews

In the Watson Health focus group sessions and interviews, participants identified and discussed the greatest health needs in the community, as well as the barriers and strengths impacting overall health status. For this community, one (1) focus group session (listed below) with nine (9) participants and four (4) interviews were conducted March through April 2019. A list of the organizations providing input can be found in **Appendix C**.

Focus Group	Date	Location	Number of Participants
Habersham & Stephens Counties Focus Group	March 6, 2019	Habersham Medical Center Demorest, GA	9

Prioritized Significant Health Needs for Stephens County Hospital

The Health Needs Matrix identified through the community health needs assessment (see Methodology for Defining Community Needs section) shows the convergence of needs identified in the qualitative data (interview and focus group feedback) and quantitative data (health indicators). The top health needs for this community are defined in the Health Needs Matrix below.

High Data & Low Qualitative High Data & High Qualitative Access to Dental Care Access to Care – Preventable · Reproductive and Urinary Income Access to Care - Primary Care · Social Isolation Hospitalizations Disease Cardiovascular Disease · Substance Abuse - Drugs, Cancer Respiratory Disease Diabetes Opioids Alzheimer's Disease and Dementia . Fair or Poor Health Status Violence - Child Abuse Bone and Muscle Disease Pneumonia Injury and Death Cerebrovascular Disease Infectious Disease Maternal and Child Health -COPD Teen Pregnancy Child Mortality Endocrine Disease Disability Mental Health - Providers, Suicide Gastrointestinal Disease Education Physical Activity Qualitative Access to Care - Cost, Insurance Cultural/Religious Barriers Musculoskeletal Disease Status, Preventive Care Health Behaviors Nervous System Disease Asthma . Health Education/Literacy Obesity Septicemia Homelessness Air Quality Transportation · Immigrant, Undocumented, · Single Parent Households Refugee Status Employment Substance Abuse – Alcohol, Smoking • Language Barriers Access to Care Issues • Policy and Government Access to Care Issues Coordination of Care/Resources Stigma around MH and Social Services > Medications > Specialty Care > Urgent Care > Paramedicine Low Data & Low Qualitative Low / No Data & High Qualitative

Community Health Needs Matrix

Note: Lower right quadrant items in italics do not have quantitative data indicators available

Source: IBM Watson Health, 2019

Through the prioritization process, the significant health needs for this community were identified, reviewed, and prioritized (see "Approach to Identify and Prioritize Significant Health Needs" section). The resulting prioritized health needs for the community are provided in the table below.

Prioritized Significar	nt Community	y Health i	Needs

Priority Rank	Health Need		
1	Substance Abuse		
2	Access to Care - Primary Care		
3	Physical Activity		
3	Diabetes		
4	Mental Health		
5	Income		

Priority Rank	Health Need			
6	Access to Care - Preventable Hospitalizations (added)			
6	Maternal and Child Health			
7	Cardiovascular Disease			
8	Social Isolation			
8	Injury and Death			
9	Violence - Child Abuse			
10	Access to Dental Care			

Notes: Needs noted as "added" were pulled from quadrants other than the upper right (high data/high qualitative) as they were considered significant by the prioritization working group.

Needs with the same priority rank received the same overall score in the prioritization process

Source: IBM Watson Health, 2019

Recommended Health Needs to be Addressed for Stephens County Hospital

As part of the prioritization work session, work group participants recommended a set of prioritized significant health needs that should be addressed by each CHNA Partner (see "Recommended Health Needs to be Addressed by the CHNA Partners" section). The members of this community's prioritization work group recommended the following significant needs to be addressed via Stephens County Hospital's CHNA implementation strategy:

- Substance Abuse
- Access to Care- Primary Care and Preventable Hospitalizations
- Mental Health
- Maternal and Child Health

CHNA Implementation Strategy

SCH will choose which needs it will address from those identified in this assessment. An implementation strategy with specific initiatives to address the chosen health will be completed and adopted by the hospital by February 15, 2020.

An evaluation of the SCH 2016 CHNA implementation strategy and its impact can be found in **Appendix I**.

Priority Health Needs for Northeast Georgia

During prioritization of the community health needs, participants in the session recommended priority needs to be addressed for each CHNA Partner community and identified common priorities across the communities as outlined below (see Recommended Health Needs to be Addressed by the CHNA Partners section):

District 2 Habersham Northeast Northeast Northeast Northeast Stephens **Public Health Medical Center** Georgia Health Georgia Health Georgia Health Georgia Health County Hospital System - PSA System - GBSA System - SSA 400 System - SSA North Mental Health Mental and lental and ental and liental and Mental Health Mental Health Behavioral Stigma and Behavioral Behavioral Behavioral Health Health Substance Abuse Substance Abuse Physical Activity Septicemia Septicemia

Recommended Priority Health Needs

Note: priority needs that are common across communities are shaded based on their commonality by category

Source: IBM Watson Health, 2019

Description of Northeast Georgia Region Priority Health Needs

Mental and Behavioral Health

Mental health is an important part of overall health and well-being. Mental health includes emotional, psychological, and social well-being. How we act, feel, think is affected by our state of mental health. It also determines how we handle stress, relate to others, and make healthy choices. Mental health is important at every stage of life, from childhood and adolescence through adulthood. Individuals that struggle with maintaining their mental health are more likely to have issues with addictions, poor social connections, possible transient living situations, and have increased difficulty in getting and maintaining successful work history.

Individual challenges with mental health are common in the United States, with an estimated half of all Americans diagnosed with a mental illness or disorder at some point in their lifetime. Mental illnesses, such as depression, are the third most common cause of hospitalization in the U.S. for those aged 18-44 years; adults living with serious mental illness die on average 25 years earlier than others. Many diagnoses fall under the umbrella of mental health including: drug/alcohol abuse, depression, and psychiatric disorders. Some mental health episodes are causal and episodic, but most are life-long struggles affecting all aspects of life. There is not one treatment that will work for every patient nor a single medication that will resolve the condition; mental health treatment is a process that requires the correct diagnoses, as well as ongoing treatment and access to care.

There are many reasons that prevent people with mental health issues from seeking and following up with treatment and care. Beliefs and attitudes toward mental illness set the stage for how individuals interact with, provide opportunities for, and help support a person with mental illness. Beliefs and attitudes toward mental illness also frame how individuals experience and express their own emotional problems and psychological distress and whether they disclose these symptoms and seek care. Whether stigma is experienced as social exclusion or discrimination, or felt as a pervasive and underlying sense of being different from others, it can be debilitating for people and poses a challenge for public health prevention efforts. Most people with serious and persistent mental illness (i.e. mental disorders that interfere with some area of social functioning) are unemployed and live below the poverty line, and many face major barriers to obtaining decent, affordable housing.¹⁰

Data on mental health diagnoses for the overall population can be difficult to gather. In some instances, self-reported survey data is available to help understand the prevalence of mental health issues, but stigma and fear can influence self-reported data. In other instances, we may need to look at proxy measures such as hospital emergency department or inpatient discharges. Nine of the 16 northeast Georgia counties had self-reported mentally unhealthy days that exceeded the state benchmark of 3.8 days month

¹⁰ Centers for Disease Control and Prevention: Attitudes Toward Mental Illness: Results from the Behavioral Risk Factor Surveillance System; 2012



⁹ Center for Disease Control and Prevention, 2019

by a difference of 5% to 11% relative to the state value (relative difference). 11 However, 14 of the counties ranged from a 10% to 104% relative difference to state benchmark for inpatient discharges related to mental and behavioral disorders. 12 This indicator was a top 10 ranked need in four of those 14 counties (Hall, Stephens, Habersham, and White). 13 Identifying health disparities between and among specific populations in the community can be challenging based on the availability of local data. However, we do know that at the state level black and multi-racial populations experience discharge rates for mental and behavior disorders at a higher rate than the state benchmark of 531.5 discharges per 100,000 population.¹⁴

2017 Discharge Rate per 100,000 Population (age-adjusted) higher need ----- state benchmark ----- lower need Banks 713.4 Barrow 582.5 Dawson 771.5 Forsyth 416.9 Rabun Towns Franklin 845.3 Union Gwinnett 318.4 Habersham White Habersham 773.1 Lumpkin Stephens 852.6 Hall Dawson Banks Hart Franklin Hart 761.3 Forsyth Jackson 767.5 Jackson Lumpkin 796.2 Athens-Clarke Barrow 614.7 Rabun Gwinnett Stephens 1,083.7 Atlanta Towns 636.4 Union 721.8 White 825.7 County Indicator Values

Mental and Behavioral Disorders

Source: Georgia Department of Public Health, Oasis, 2017

¹⁴ Source: Georgia Department of Public Health, Oasis, 2017

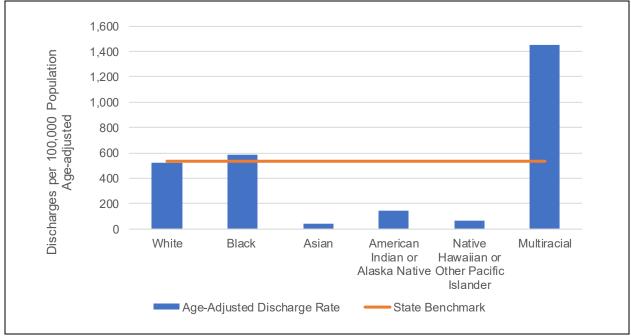


¹¹ 2016, Behavioral Risk Factor Surveillance System

¹² Source: Georgia Department of Public Health, Oasis, 2017

¹³ Source: Georgia Department of Public Health, Oasis, 2017

Mental and Behavioral Disorders Georgia Discharge Rate by Race



Source: Georgia Department of Public Health, Oasis, 2017

Suicide, according to the National Institutes of Health, is a major public health concern in the United States and is among the leading causes of death. Based on recent nationwide surveys, suicide in some populations is on the rise. Suicide was the second leading cause of death among individuals between the ages of 10 and 34, and the fourth leading cause of death among individuals between the ages of 35 and 54. Suicide and the associated mental health issues are a prevalent concern across the U.S. and in Georgia. The Georgia state suicide rate benchmark was 13.1 per 100,000 deaths. Ten of the 16 northeast Georgia counties had rates higher than the state of Georgia benchmark. Dawson County had the highest rate at 30.2 suicide deaths per 100,000, a 131% relative difference from the state value making it the top ranked need in the county. Suicide was a top ranked need in Franklin and Hart counties as well with rates of 25.8 and 23.4 suicide deaths respectively.

¹⁷ CDC WONDER Online Database, 2014-2017



Page 162 of 287

¹⁵ National Institute of Mental Health, Suicide, 2019

¹⁶ CDC WONDER Online Database, 2014-2017

higher need ------ state benchmark -----**County Indicator Value** Rank within County Banks Barrow 17.1 Dawson 30.2 13.1 Forsyth Franklin 25.8 Gwinnett 11.8 Habersham 14.3 16.8 Hall Hart 23.4 22.9 Jackson Lumpkin 20.6 Rabun Stephens 20.6 Towns Union 21.2 White

Suicide 2014 - 2017 Death Rate per 100,000 Population (age-adjusted)

Source: Georgia Department of Public Health, Oasis, 2017

Note: Due to population/sample size, data are not available for every county

Disconnected youth, according to Measure of America, 2019, are youths aged 16-24 who are neither working nor in school. A fundamental indicator of societal progress and wellbeing is how successfully its citizens transition from one life phase to another. In the U.S. in 2016, there were 4,599,100 disconnected youths, or one in nine teens and young adults. Disconnected youth are at an increased risk of violent behavior, smoking, alcohol consumption and drug use, and may have emotional deficits and less cognitive and academic skill than their peers who are working, and/or in school. Rural counties have a youth disconnection rate of 19.3%, on average, compared to 12.9% in urban centers and 11.3% in suburbs. In northeast Georgia seven

¹⁹ Opportunity Nation, Youth Disconnection 2019



Page 163 of 287

¹⁸ Opportunity Nation, Youth Disconnection 2019

counties had a rate above the state benchmark of 17%. There were three counties where the relative difference from the state benchmark was greater than 26%: Hart County (26% relative difference, Stephens County (39% relative difference) and Franklin County (78% relative difference).²⁰

Nationally, young women are slightly less likely to be disconnected, with a rate of 11.2% compared to the male rate of 12.1%. However, disconnected young women face particularly high poverty rates and unique challenges like early marriage and motherhood that merit attention and resources from communities. Youth disconnection also has economic implications. Community leaders and educators would need to proactively seek to identify youths that are at a higher risk of being disconnected and ensure that community resources are accessible.²¹ Lacking a stable living situation, youth often fall short on the emotional and financial support of parents or other consistent, caring adults, an additional barrier in the transition to adulthood.

Family and social support is vital to remaining mentally healthy. Poor family support, minimal contact with others, and limited involvement in community life are associated with increased morbidity and early mortality. Furthermore, social support networks have been identified as powerful predictors of health behaviors, suggesting that individuals without a strong social network are less likely to make healthy lifestyle choices than individuals with a strong network. Researchers have argued that social trust is enhanced when people belong to voluntary groups and organizations because people who belong to such groups tend to trust others who belong to the same group.²² Five counties in northeast Georgia had rates of social and membership associations (such as civic organizations, sports organizations, religious organizations, political organizations, and professional organizations) per population lower than that of the state of Georgia (8.9 per 10,000 population). Lumpkin, Hall, Barrow, Gwinnett and Forsyth counties all had rates 10% to 34% lower relative to the state benchmark.²³

²³ County Business Patterns, 2015



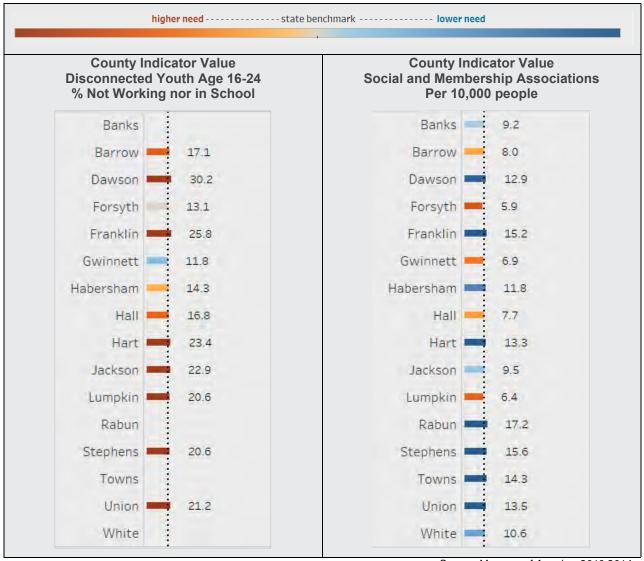
Page 164 of 287

²⁰ Measure of America, 2010-2014

²¹ Opportunity Nation, Youth Disconnection, 2019

²² County Health Rankings, 2018

Social Isolation



Source: Measure of America, 2010-2014, County Business Patterns, 2015

Note: Due to population/sample size, data are not available for every county

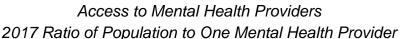
Access to mental health providers and services is an issue nationally. Nine million adults (or 1 in 5) report having an unmet mental health need and mental health provider shortages across the country continue to exist.²⁴ Rural areas especially have challenges with accessing mental health care services. Primary Care Providers (PCPs) are often relied upon to treat patients with mental health needs. These providers encounter expertise, time, and financial reimbursement constraints trying to address the gap in mental health services. Communities that have a lack of primary care providers are even more vulnerable.

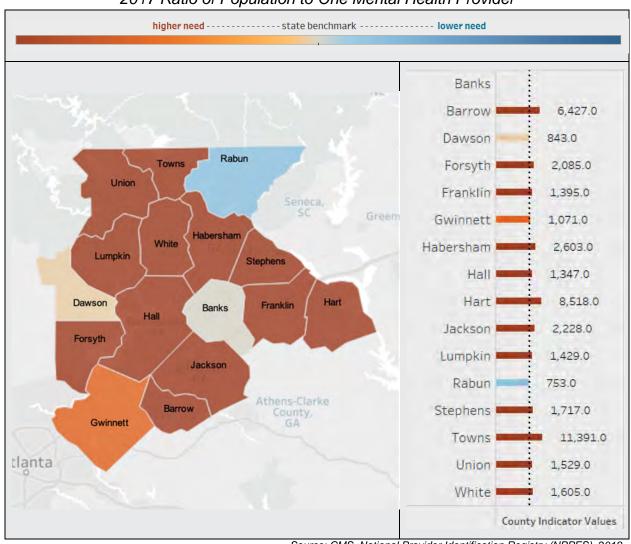
²⁴ Mental Health America, 2019



Page 165 of 287

According to the CMS National Provider Identification File, the state benchmark for populations to one mental healthcare provider was 1 provider to 829 people. Most counties in the region, except Banks and Rabun counties, were higher than the state benchmark indicating a greater need and population with significant vulnerability when it comes to accessing mental health services. Half the counties which indicate a need relative to the benchmark have mental health provider ratios more than twice that of the state level. Access to mental health providers is the number one ranked need in six of the counties: Hall, Jackson, Habersham, Barrow, Hart, and Towns.





Source: CMS, National Provider Identification Registry (NPPES), 2018

Note: Due to population/sample size, data are not available for every county

²⁶ CMS, National Provider Identification Registry (NPPES), 2018



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²⁵ CMS, National Provider Identification Registry (NPPES), 2018

Substance Abuse

Opioids were involved in 47,600 overdose deaths in 2017 (67.8% of all drug overdose deaths). Twenty-three of the 50 states in the U.S. have seen a statistically significant increase in opioid drug deaths from 2016 to 2017, including Georgia. The realization that over half of the overdose deaths are opioid related is a key reason to address this issue in the community. There were 70,237 drug overdose deaths in the United States in 2017. Opioids, mainly synthetic opioids (other than methadone), are currently the main driver of drug overdose deaths.²⁷

All counties in northeast Georgia exceed the state rate for opioid prescriptions per 100 persons (70.9) and over half the counties exceed the rate by more than 2 times. ^{28,29} The Georgia state benchmark for drug overdose deaths was 12.7 per 100,000. In the northeast Georgia region, data were available for 13 of the 16 counties and 11 of those counties all had drug overdose death rates higher than the Georgia benchmark. The county with the greatest need was Franklin County with a rate of 28.4 deaths per 100,000, 123% difference relative to the state benchmark. ³⁰ Rabun and Dawson counties also had rates relative to the benchmark that indicate a significant need. Opioid deaths remain a growing and significant concern across both Georgia and the nation. Many social service agencies are impacted by the opioid epidemic burden and face challenges meeting the needs which present across all socioeconomic groups.

Excessive alcohol use, including binge drinking (drinking 5 or more drinks on an occasion for men or 4 or more drinks on an occasion for women), can lead to increased risk of health problems such as injuries, violence, liver diseases, and cancer.³¹ Of the 16 counties within the northeast Georgia region, self-reported data for 12 of the counties indicate a higher rate of excessive drinking than the Georgia state benchmark of 15.1 percent of the population.³² Six counties had rates of alcohol-impaired driving deaths that exceed the state benchmark (23.3% of all driving deaths) and three counties had percentages that were 50% or greater relative to the state benchmark (Rabun, 36.8%; Habersham, 39.5; and Hart, 47.6%).³³

³³ Fatality Analysis Reporting System, 2012-2016



²⁷ Centers for Disease Control and Prevention, 2019

²⁸ amFAR Opioids and Health Indicators Database, Centers for Disease Control and Prevention, 2017
²⁹ Describes the number of opioid prescriptions dispensed, per 100 U.S. residents. This measure uses IQVIA data from pharmacies which dispense nearly 90% of all retail prescriptions in the US. It includes prescriptions paid for by commercial insurance, Medicaid, Medicare, or cash or equivalent. Cough and cold formulations containing opioids and buprenorphine products typically used to treat opioid use disorder are excluded, and IQVIA data does not include methadone dispensed through methadone maintenance treatment programs.

³⁰ CDC WONDER mortality data, 2014-2016

³¹ Centers for Disease Control and Prevention, Alcohol and Public Health, 2019

³² Behavioral Risk Factor Surveillance System, 2016

Substance Abuse – Drugs



Source: Centers for Disease Control and Prevention, 2017, CDC WONDER mortality data, 2014-2016

Note: Due to population/sample size, data are not available for every county

Access to Care - Primary Care

According to the CDC's Healthy People 2020 (HP2020), the goal for access to health services is to "improve access to comprehensive, quality healthcare services." Such services are vital for achieving health equity and increasing the quality of life for everyone. In the United States, many people do not receive timely and appropriate health care. About one in four Americans lack a health center to receive regular medical services and a primary care provider, and almost one in five Americans under age 65 years do not have medical insurance coverage.³⁴

There is a national wide scarcity of physicians across the United States, while particularly challenging in small towns and cities, metropolitan areas are not exempt. Demographic shifts, such as growth in the elderly or near elderly populations increase the need for primary care access. Estimates of the scope of the provider shortage in America vary, however, it is generally agreed upon that thousands of additional Primary Care Providers (PCPs) are needed to meet the current demand and that tens of thousands of additional caregivers will be needed to meet the growing aging population across the country.

Primary care physician extenders (e.g. nurse practitioners, physician assistants, and clinical nurse specialists) could help close the gap in access to primary care services when they are located in a community. Non-physician providers or physician extenders are typically licensed professionals such as Physician Assistants or Nurse Practitioners who treat and see patients. Dependent upon state regulations, extenders may practice independently or in physician run practices. Physician extenders expand the scope of primary care providers within a geographic area and help bridge the gap for both access to care and management of healthcare costs.

Access to both physician and non-physician primary care providers is a need in northeast Georgia. Thirteen of the 16 northeast Georgia counties indicated a greater need or vulnerability in the population as compared to the state benchmark of 1,519 population per primary care physician. For eight of those 13 counties, primary care physician access was a top ten ranked need within the county. The population to primary care physician ratio for Banks (4,624:1), Barrow (5,025:1) and Franklin (5,578:1) counties was more than 200% higher than state value indicating an even greater need in those counties.³⁵

Access to non-physician primary care providers was also indicated as a need with 13 counties having less of these types of providers than the Georgia state benchmark 1,146 population to one provider. Again, eight counties had non-physician primary care access as a top ten ranked need within the county and two counties had ratios more than 200% higher than the state benchmark: Barrow (4,059:1) and Hart (5,111:1) counties.³⁶ As the physician shortage continues there will be greater reliance on non-physician extenders to care for the baby boomer population among others.

³⁶ CMS, National Provider Identification, 2017



Page 169 of 287

³⁴ Centers for Disease Control and Prevention, 2019

³⁵ Area Health Resource File/American Medical Association, 2015

higher need -----state benchmark -----Population to One Physician Primary Care Population to One Non-Physician Primary Care **Provider Ratio Provider Ratio** Rabun Rabun Towns Towns Union Union Gre Habersham Habersham White White Lumpkin Lumpkin Stephens Stephens Dawson Dawson Hall Hall Franklin Franklin Hart Hart Banks Banks Forsyth orsyth Jackson Jackson Athens-Clarke Barrow Barrow Gwinnett Gwinnett ta nta Georgia State Benchmark Georgia State Benchmark 1,1519:1 1,146:1

Access to Primary Care

Source: Area Health Resource File/American Medical Association, 2015; CMS, National Provider Identification, 2017

Access to Care – Preventable Hospitalizations

Preventable hospital stays are included in the broader measure of access to care. In communities where access to care is problematic, whether the issues are physical, economic or a lack of providers, the result can be an increase in medical/psychological conditions, diseases and hospitalizations. This indicator measures the hospital discharge rate for ambulatory sensitive conditions and is age adjusted across different counties.

Preventable hospital stays for ambulatory sensitive conditions examines people who were admitted to the hospital for conditions that, with appropriate care, can normally be managed in the ambulatory care setting. While not exhaustive, examples of these conditions include convulsions, chronic obstructive pulmonary disease, pneumonia, asthma, congestive heart failure, hypertension, angina, cellulitis, diabetes complications, gastroenteritis, kidney/urinary infection, and dehydration.

Several measures of preventable hospitalizations were used in this assessment: preventable stays for Medicare fee-for-service enrollees, preventable stays for acute

conditions (all patients), preventable stays for avoidable illnesses (all patients), and preventable hospital stays for chronic conditions (all patients). All counties except for one (Forsyth), exceeded the state benchmark in at least one of the measures. Avoidable hospital stays can be prevented by utilizing a primary care provider for prevention and acute ambulatory care; managing chronic conditions; and ensuring that a healthy lifestyle is a key component.

Preventable Hospitalizations

State Benchmark/ County	Preventable Hospital Stays: Medicare	Ambulatory Sensitive Discharges: Acute Conditions	Ambulatory Sensitive Discharges: Avoidable Illnesses	Ambulatory Sensitive Discharges: Chronic Conditions	
Georgia	50.2	12.2	2.0	5.7	
Banks	69.3	16.2	2.3	5.8	
Barrow	63.8	13.2	2.3	6.2	
Dawson	58.5	12.8	2.5	5.0	
Forsyth	44.8	9.7	1.8	3.7	
Franklin	61.8	15.2	1.9	6.8	
Gwinnett	43.3	9.5	2.1	3.9	
Habersham	53.2	17.4	2.0	4.6	
Hall	44.6	13.8	2.6	5.0	
Hart	53.6	13.8	1.8	6.1	
Jackson	50.2	14.3	2.6	5.7	
Lumpkin	69.8	15.3	2.9	5.9	
Rabun	67.0	20.1	1.6	6.3	
Stephens	74.1	18.0	1.9	6.8	
Towns	42.8	18.8	1.9	4.8	
Union	34.8	16.9	2.4	5.9	
White	51.2	15.2	2.9	5.0	
Measure:	Discharges per 1,000 Medicare Enrollees (age-adjusted)	Percent of Discharges (age-adjusted)	Percent of Discharges (age-adjusted)	Percent of Discharges (age-adjusted)	
Source:	Dartmouth Atlas of Health Care, 2015	Georgia Department of Public Health, OASIS, 2017			

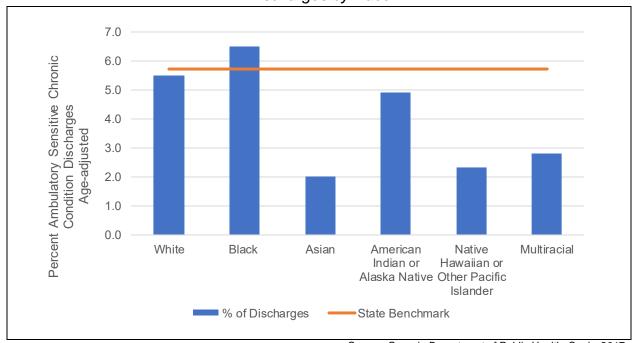
Identifying health disparities between and among specific populations in the community can be challenging based on the availability of local data. However, we do know that at a state level black populations experience discharge rates for ambulatory sensitive chronic conditions at a higher rate than the state benchmark of 5.7% of all discharges.³⁷

³⁷ Source: Georgia Department of Public Health, Oasis, 2017



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Ambulatory Sensitive Chronic Conditions Discharges by Race



Source: Georgia Department of Public Health, Oasis, 2017

Access to Care – Insurance Coverage

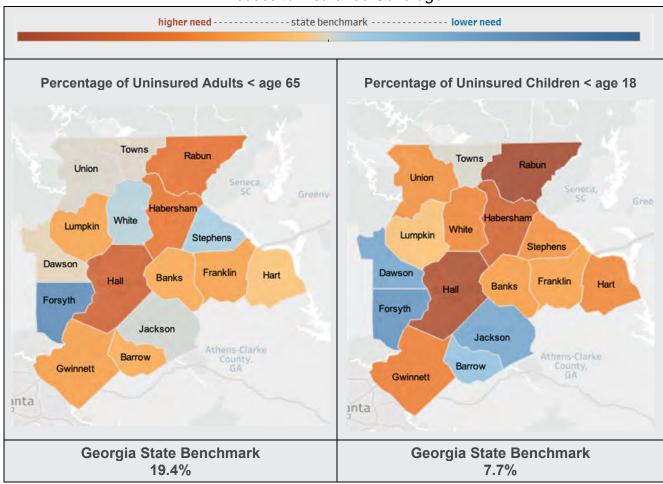
Lack of insurance coverage is correlated to more significant health care problems in the population. Lack of coverage primarily impacts the population under age 65 given the availability of Medicare to the older population, as the majority of individuals over the age of 65 have access to Medicare or disability insurance. The uninsured population under 18 years of age is a particular healthcare challenge. Children and teens without access to a routine provider will be more likely to utilize emergency room services, often for low acuity conditions such as earaches, sore throats, teeth pain, etc. The percentage of adults under age 65 without insurance for the state of Georgia is 19.4%. The statewide percentage of children under age 18 that are uninsured is 7.7%. Ten of sixteen counties had uninsured rates for the adults under age 65 population that were higher relative to the state value and nine counties had uninsured rates for children that were higher than the state. Four of those counties (Habersham, Hall, Rabun and White) were more than 20% greater than the state benchmark for both measures. 38,39

³⁹ U.S. Census Bureau, American Community Survey, Five Year Estimates, 2012-2016



Page 172 of 287

³⁸ Small Area Health Insurance Estimates, 2015



Access to Insurance Coverage

Source: Small Area Health Insurance Estimates, 2015; U.S. Census Bureau, American Community Survey, Five Year Estimates, 2012-2016

Access to Care -Teen Pregnancy, Maternal & Child Health, and Child Mortality

Access to maternal and child healthcare is of high importance especially in communities with a significant number of individuals of childbearing age. Pregnancy can provide an opportunity to identify existing health risks in women and to prevent future health problems for women and their children. The risk of maternal and infant mortality and pregnancy-related complications can be reduced by increasing access to quality care before pregnancy, during pregnancy, and between pregnancies. Moreover, healthy birth outcomes and early identification and treatment of developmental delays and disabilities and other health conditions among infants can prevent death or disability and enable children to reach their full potential.⁴⁰ Higher Emergency Department visit rates for pregnancy/childbirth complications as well as fetal/infant conditions can point to potential issues with access to the right healthcare resources for pregnant mothers and their infants. The state-wide ED visit rate for pregnancy and childbirth complications was 1,077 ED visits per 100,000 population (age-adjusted). Four of the 16 counties in the northeast Georgia region have ED visit rates greater than the state benchmark:

⁴⁰ Healthy People 2020, Maternal, Infant, and Child Health, 2019



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Union, 1,232; Franklin, 1,443; Banks, 1,588; and Stephens, 2,470. The Stephens County rate is 129% higher relative to the benchmark. The state benchmark for ED visit rates for fetal and infant conditions is 53.0 visits per 100,000 people. Four counties in the region have rates that exceed the state value: Dawson, 55.5; Habersham, 58.9; Franklin, 65.6; and Union, 93.3. The Union County rate is 76% higher relative to the state benchmark.⁴¹ Counties with higher values likely have a higher percentage of individuals with high risk pregnancies and may or may not correlate to lack of providers.

⁴¹ Georgia Department of Public Health, OASIS, 2017



Page **174** of **287**

higher need -----state benchmark -----Banks I 1,588.4 Barrow 1,276.0 Dawson | 842.1 Forsyth | 398.8 Rabun Towns Franklin I 1,443.3 Union Gwinnett | 819.9 Habersham 1,019.0 Habersham White Lumpkin Stephens Hall 1,028.4 1,055.4 Hart Dawson Hart Franklin Banks Hall 1,334.8 Jackson Forsyth Lumpkin 579.5 Jackson 931.0 Rabun Athens-Clarke Stephens 2,470.0 Barrow Gwinnett Towns 981.7 inta Union 1,231.6

Pregnancy and Childbirth Complications 2017 ED Visit Rate per 100,000 Population (age-adjusted)

Source: Georgia Department of Public Health, Oasis, 2017

1,059.8

County Indicator Values

White

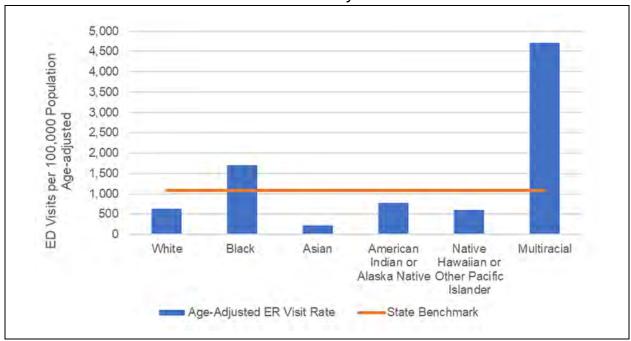
Identifying health disparities between and among specific populations in the community can be challenging based on the availability of local data. However, we do know that at a state level black and multi-racial populations experience ED visit rates pregnancy and childbirth complications conditions at a higher rate than the state benchmark of 1,077 ED visits per 100,000 population.⁴²

⁴² Georgia Department of Public Health, OASIS, 2017



Page 175 of 287

Pregnancy and Childbirth Complications ED Visit Rate by Race



Source: Georgia Department of Public Health, Oasis, 2017

Maternal education is highly important for birth outcomes since it can affect the infant's health through multiple pathways such as higher income, better access to health insurance, increased health knowledge, better cognitive ability, and less risky health behaviors. Overall for state of Georgia, 14.5% of women giving birth had less than 12 years of education. Ten of sixteen counties in northeast Georgia had rates higher than the state. Five counties had rates that were 50% or more higher than the overall state benchmark: Franklin, 22.1%; Habersham, 31.7%; Rabun, 22.8%; Union, 21.8%; and White, 28.3%.⁴³

Teen births in the U.S. have declined over the last 20 years to the lowest level ever recorded, but still more than 86,000 teens ages 15 to 17 gave birth in 2012. Giving birth during the teen years has been linked with increased medical risks and emotional, social, and financial costs to the mother and her children. Becoming a teen mom affects whether the mother finishes high school, goes to college, and the type of job she will get, especially for younger teens ages 15 to 17.⁴⁴ The Georgia state benchmark for teen birth rates (ages 15-19) is 31.6 per 1,000 female population the same age; and the state of Georgia value is higher than the U.S. rate of 27.0/1,000. Of the sixteen counties within the northeast Georgia region, seven counties have higher teen birth rates than the Georgia benchmark. Three counties had rates that were more than 24% higher than the state rate: Franklin, 46.6; Hall, 39.3; and Stephens, 41.7.⁴⁵

⁴⁵ National Center for Health Statistics - Natality files, 2010-2016



Page 176 of 287

⁴³ Birth Certificate Records, Georgia Department of Human Resources, Division of Public Health, Office of Health Information and Policy, 2016

⁴⁴ Centers for Disease Control and Prevention, Preventing Pregnancy in Younger Teens, 2014

Child mortality rates provide insight to both access of care and potentially, the social determinants that affect overall health. Child mortality is the number of deaths among children under age 18 per 100,000 population. The Georgia state benchmark for child mortality is 60.6 per 100,000 population. **Five counties had rates that exceeded the state benchmark: Stephens at 61.0, Banks at 64.4, Hart at 91.9, Franklin at 102.9 and Dawson at 105.5.** It is important to note that child death is a relatively rare event, especially in small counties. Statistics depend on large numbers of events to detect small changes, and small changes in small communities may be hard to detect. 47

Access to Care – Transportation

Each year, 3.6 million people in the United States do not obtain medical care due to transportation issues. Transportation issues include: lack of vehicle access, inadequate infrastructure, long distances and lengthy times to reach needed services, transportation costs and adverse policies that affect travel. Transportation challenges affect both rural and urban communities. Because transportation touches many aspects of a person's life, adequate and reliable transportation services are fundamental to healthy communities. Transportation issues can affect a person's access to health care services. These issues may result in missed or delayed health care appointments, increased health expenditures and overall poorer health outcomes. Transportation can also be a vehicle for wellness. Developing affordable and appropriate transportation options, walkable communities, bike lanes, bike-share programs and other healthy transit options can help boost health.⁴⁸

From a lack of public transit option in the more densely populated portions of the region, to the additional challenges of accessing healthcare services in the rural areas, access to reliable transportation was consistently raised as a theme in the community input sessions.

⁴⁸ American Hospital Association, Transportation and the Role of Hospitals, 2017



Page 177 of 287

⁴⁶ CDC WONDER mortality data, 2013-2016

⁴⁷ County Health Rankings, 2018

Chronic Disease – Diabetes

An estimated 30.3 million people of all ages - or 9.4% of the U.S. population - had diabetes in 2015. The percentage of adults with diabetes increased with age, reaching a high of 25.2% among those aged 65 years or older. Compared to non-Hispanic whites, the age adjusted prevalence of diagnosed and undiagnosed diabetes was higher among Asians. non-Hispanic blacks, and Hispanics between 2011–2014.⁴⁹

Diabetes is an important marker for a range of health behaviors. This can be a valuable source of data for communities to understand the impact of health behaviors and disease management on both their population and their health care system. 50 Diabetes is a serious disease and when not well controlled and monitored, it can be life threatening. Hospital admissions for uncontrolled diabetes is considered an avoidable event. Diabetes, when properly controlled through health management and outpatient care, should not result in the need for inpatient care. When a community has elevated rates for hospital admissions due to uncontrolled diabetes, it points to challenges in health education, behavior modification, and the outpatient care system.

Of the 16 counties in the Northeast Georgia region, 12 of the counties had a higher rate of diabetes prevalence in adults than the Georgia state benchmark of 11.3%. Three counties had rates that were more than 20% greater relative to the benchmark: Hart, 13.7%; Rabun, 14.7; and Union, 16%.51 Additionally, five counties exceeded the state benchmark for the diabetes death rate, all were 26% or higher than the state benchmark of 21.5 diabetes deaths per 100,000 population (Hart, 26.7; Lumpkin, 27.2; Banks, 28.2; Barrow, 30.3; and Franklin, 34.9).⁵²

⁵² Georgia Department of Public Health, OASIS, 2017



⁴⁹ Centers for Disease Control and Prevention, National Diabetes Statistics Report, 2017

⁵⁰ Diabetes Prevalence, County Health Rankings, 2018

⁵¹ CDC Diabetes Interactive Atlas, 2014

Diabetes



Source: CDC Diabetes Interactive Atlas, 2014 Georgia Department of Public Health, OASIS, 2017

Note: Due to population/sample size, data are not available for every county

Communities with high populations of diabetic and pre-diabetic residents must address the gaps in care effectively and efficiently, because the disease poses a significant burden on overall health. Trending and tracking both prevalence and complication rates of diabetes will position them to best provide care for the community at large. Development of programs focusing on how to effectively manage diabetes, prevention education, and overall health and nutrition education are essential.

Chronic Disease – Cardiovascular Disease

Heart disease is the leading cause of death in America. Cardiovascular disease is a category of diseases and conditions that include coronary artery disease, high blood pressure, cardiac arrest, congestive heart failure, arrhythmia, peripheral artery disease, stroke and congenital heart disease. More than 27.6 million Americans are diagnosed

with cardiovascular disease. Associated conditions are obesity, diabetes, hypertension along with other co-morbid conditions.⁵³ Within the northeast Georgia region, seven counties had heart disease death rates higher than the state benchmark of 75.6 deaths per 100,000 population. Four of these counties had death rates 22% - 78% higher relative to the benchmark (Towns, 92.0; Rabun, 92.7, Stephens, 95.9; and Lumpkin 134.8).⁵⁴

Chronic Disease - Physical Activity

Physical inactivity is the percentage of adults age 20 and over reporting no leisure-time; physical activity such as running, calisthenics, golf, gardening, or walking for exercise. Decreased physical activity has been related to several disease conditions such as type 2 diabetes, cancer, stroke, hypertension, cardiovascular disease, and premature mortality. Inactivity causes 11% of premature mortality in the United States and caused more than 5.3 million of the 57 million deaths that occurred worldwide in 2008. Physical inactivity is linked to increased healthcare expenditures, particularly with circulatory system diseases.

Within the 16 counties of the northeast Georgia region, 12 counties have an opportunity to improve physical activity as their rates of physical inactivity exceed the Georgia state benchmark of 24.1% and the U.S. national benchmark of 23%. Four counties exceeded the state benchmark by greater than 20%.⁵⁷

⁵⁶ Lee IM, Shiroma EJ, Lobelo F, Puska P, Blair SN, Katzmarzyk PT, for the Lancet Physical Activity Series Working Group, Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy, The Lancet. 2012; 380.9838:219-229



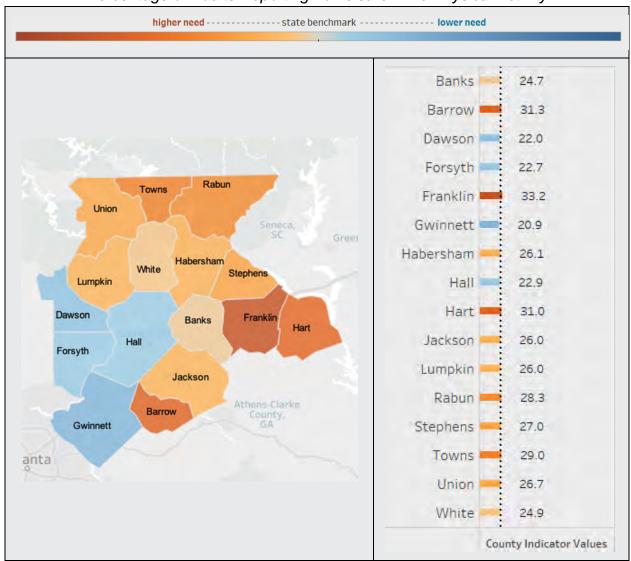


⁵³ Center for Disease Control and Prevention, Heart Disease Facts, 2019

⁵⁴ CDC WONDER mortality data, 2016

⁵⁵ County Health Rankings, Physical Inactivity, 2018

Physical Inactivity
Percentage of Adults Reporting no Leisure Time Physical Activity



Source: CDC Diabetes Interactive Atlas, 2014

Septicemia

Septicemia (Sepsis) is a serious medical condition. It is caused by an overwhelming immune response to infection in which the body releases immune chemicals into the blood to combat the infection. Those chemicals trigger widespread inflammation, which leads to blood clots and leaky blood vessels. As a result, blood flow is impaired, and that deprives organs of nutrients and oxygen and leads to organ damage.

In severe cases, one or more organs fail. In the worst cases, blood pressure drops, the heart weakens, and the patient spirals toward septic shock. Once this happens, multiple organs—lungs, kidneys, liver—may quickly fail, and the patient can die. Sepsis is a major challenge in hospitals, where it's one of the leading causes of death. It is also a main reason why people are readmitted to the hospital. Sepsis occurs unpredictably and can progress rapidly.⁵⁸

Anyone can get sepsis. The people at highest risk are infants, children, the elderly, and people who have serious injuries or medical problems such as diabetes, AIDS, cancer, or liver disease. Severe sepsis strikes more than a million Americans every year, and 15 to 30 percent of those people die. The number of sepsis cases per year has been on the rise in the United States.⁵⁹

Common symptoms of sepsis are fever, chills, rapid breathing and heart rate, rash, confusion, and disorientation. Sepsis is treated in the hospital and often in serious conditions people are treated in intensive care units. Treatment almost always includes the use of antibiotic medications and fluids. Sepsis treatment is expensive. It often involves a prolonged stay in the intensive care unit and complex therapies with high costs. The Agency for Healthcare Research and Quality lists sepsis as the most expensive condition treated in U.S. hospitals, costing nearly \$24 billion in 2013.

There is opportunity to improve septicemia in the northeast Georgia community. The overall Georgia state benchmark is 514.5 discharges per 100,000 population (age-adjusted). Ten of the 16 counties had values above the state benchmark. Three of the counties had discharge rates that were more than 50% higher relative to the state value (White, 779.3; Banks, 789.5, and Hall 813.3).⁶¹

⁶⁰ Agency for Healthcare Research and Quality Healthcare Cost and Utilization Project Statistical Brief No. 204; May 2016. National inpatient hospital costs: the most expensive conditions by payer, 2013.



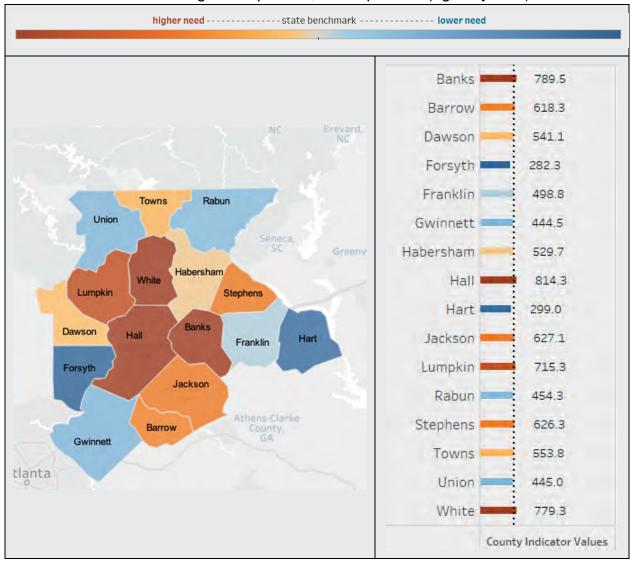


Page 182 of 287

⁵⁸ National Institute of General Medicine Sciences, Sepsis, 2019

⁵⁹ National Institute of General Medicine Sciences, Sepsis, 2019

Blood Poisoning (Septicemia) 2017 Discharge Rate per 100,000 Population (age-adjusted)



Source: Georgia Department of Public Health, Oasis, 2017

Summary

The CHNA Partners collaborated to conduct a Community Health Needs Assessment for communities they serve in northeastern Georgia. Using both qualitative community feedback as well as publicly available and proprietary health indicators, the CHNA Partners identified and prioritized health needs in their communities and the region. Implementation plans with specific tactics and time frames will be developed to improve the health of the communities served and address the Partners' priority health needs. The northeast Georgia CHNA Partners have identified needs that are common between communities in order to establish synergies, foster opportunities for collaboration, and maximize resources as they work to improve the health status of the northeast Georgia region.

Appendix A: Key Health Indicator Sources

Category	Public Health Indicator	Source
	Uninsured Children < 18 Years of Age	2012-2016 U.S. Census Bureau, American Community Survey, Five Year Estimates, Table B27001
	Diabetic Screening - Medicare	2014 Dartmouth Atlas of Health Care
	Mammography Screening - Medicare	2014 Dartmouth Atlas of Health Care
	Number of Primary Care Physicians per 100,000 Population	2015 Area Health Resource File/American Medical Association
	Population to One Primary Care Physician	2015 Area Health Resource File/American Medical Association
<u>a</u>	Preventable Hospital Stays - Medicare - Discharge Rate	2015 Dartmouth Atlas of Health Care
Access to Care	Price-Adjusted Medicare Reimbursements per Enrollee	2015 Dartmouth Atlas of Health Care
ss tc	Uninsured Adults < 65 Years of Age	2015 Small Area Health Insurance Estimates
ွင် လူ	Number of Dentists per 100,000 Population	2016 Area Health Resource File/National Provider Identification file
δ	Population to One Dentist	2016 Area Health Resource File/National Provider Identification file
	Population to One Mental Health Provider	2017 CMS, National Provider Identification
	Population to One Non-Physician Primary Care Provider	2017 CMS, National Provider Identification
	Ambulatory Sensitive Discharges: Acute Conditions	2017 OASIS
	Ambulatory Sensitive Discharges: Avoidable Illnesses	2017 OASIS
	Ambulatory Sensitive Discharges: Chronic Conditions	2017 OASIS
	All Cancer Incidence	2011-2015 State Cancer Registry
	Breast Cancer Incidence	2011-2015 State Cancer Registry
	Breast Cancer Incidence - Medicare	2011-2015 State Cancer Registry
	Colon Cancer Incidence	2011-2015 State Cancer Registry
	Colon Cancer Incidence - Medicare	2011-2015 State Cancer Registry
Je.	Lung Cancer Incidence	2011-2015 State Cancer Registry
Cancer	Lung Cancer Incidence - Medicare	2011-2015 State Cancer Registry
	Prostate Cancer Incidence	2011-2015 State Cancer Registry
	All Cancer Death Rate	2016 CDC WONDER Online Database, Compressed Mortality File 1999-2016; Centers for Disease Control and Prevention, National Center for Health Statistics.
	Cancers - Discharge Rate	2017 OASIS
	Cancers - ER Visit Rate	2017 OASIS



Category	Public Health Indicator	Source					
	Chronic Condition: Heart Disease - Percent of FFS Medicare	2007-2015 CMS.gov Chronic conditions					
	Chronic Condition: Arthritis - Percent of FFS Medicare	2007-2015 CMS.gov Chronic conditions					
	Chronic Condition: Asthma - Percent of FFS Medicare	2007-2015 CMS.gov Chronic conditions					
	Chronic Condition: Stroke Survivors - Percent of FFS Medicare	2007-2015 CMS.gov Chronic conditions					
	Adult Obesity	2014 CDC Diabetes Interactive Atlas					
	Diabetes Diagnoses - Adults Age 20+	2014 CDC Diabetes Interactive Atlas					
	Birth Defects - Discharge Rate	2017 OASIS					
	Birth Defects - ER Visit Rate	2017 OASIS					
	Blood Diseases (Anemias) - Discharge Rate 2017 OASIS						
	Blood Diseases (Anemias) - ER Visit Rate 2017 OASIS						
S	Blood Poisoning (Septicemia) - Discharge Rate	2017 OASIS					
Conditions/Diseases	Bone and Muscle Diseases - ER Visit Rate	2017 OASIS					
Dise	Digestive System Diseases - Discharge Rate 2017 OASIS						
l/su	Digestive System Diseases - ER Visit Rate 2017 OASIS						
ij	Endocrine, Nutritional, and Metabolic Diseases - ER Visit Rate	2017 OASIS					
puc	Infectious and Parasitic - Discharge Rate	2017 OASIS					
ပိ	Infectious and Parasitic Diseases - ER Visit Rate	2017 OASIS					
	Major Cardiovascular Diseases - Discharge Rate	2017 OASIS					
	Major Cardiovascular Diseases - ER Visit Rate	2017 OASIS					
	Musculoskeletal System and Connective Tissue Diseases - Discharge Rate	2017 OASIS					
	Nervous System Diseases - Discharge Rate	2017 OASIS					
	Nervous System Diseases - ER Visit Rate	2017 OASIS					
	Other Diseases of the Genitourinary System	2017 OASIS					
	Other Endocrine, Nutritional and Metabolic Diseases	2017 OASIS					
	Reproductive and Urinary System Diseases - ER Visit Rate	2017 OASIS					
	Respiratory Diseases - Discharge Rate	2017 OASIS					
	Respiratory System Disease - ER Visit Rate	2017 OASIS					
ent	Access to Exercise Opportunities	2010-2016 Business Analyst, Delorme map Data, ESRI, & US Census Tigerline Files					
Ĕ	Daily Particulate Matter Days 2012 Environmental Public Health Tracking Network						
Environment	Driving Alone to Work 2012-2016 American Community Survey, 5-year estimates						
En	Food Insecurity	2015 Map the Meal Gap					



Category	Public Health Indicator	Source
	Food - Limited Access to Healthy Foods	2015 United States Department of Agriculture (USDA)
	Food Environment Index	2015 USDA Food Environment Atlas, Map the Meal Gap from Feeding America
	Driving Alone to Work with Long Commute > 30 minutes	2012-2016 American Community Survey, 5-year estimates
	Percent Needing but Not Receiving Addiction Treatment	2014 Substance Abuse and Mental Health Services Administration.
v	Percent of People 12+ Reporting Drug Dependence	2014 Substance Abuse and Mental Health Services Administration.
avior	Percent of Population 12+ Reporting Non-medical Use of Pain Relievers	2014 Substance Abuse and Mental Health Services Administration.
Health Behaviors	Physical Inactivity	2014 CDC Diabetes Interactive Atlas
	Adult Smoking	2016 Behavioral Risk Factor Surveillance System
leal	Excessive Drinking	2016 Behavioral Risk Factor Surveillance System
_	Insufficient Sleep	2016 Behavioral Risk Factor Surveillance System
	Opioid Prescriptions per 100 Persons	2017 Centers for Disease Control and Prevention
	Frequent Mental Distress	2016 Behavioral Risk Factor Surveillance System
Health Status	Frequent Physical Distress	2016 Behavioral Risk Factor Surveillance System
Hea	Physically Unhealthy Days	2016 Behavioral Risk Factor Surveillance System
	Poor or Fair Health	2016 Behavioral Risk Factor Surveillance System
	New HIV Diagnoses per 100,000, Age 13+	2015 Centers for Disease Control and Prevention
S	Chlamydia Incidence	2015 National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
ous ion	HIV Prevalence Age 13+	2015 National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Infectious Conditions / Diseases	STD Incidence for Youth, Ages 15-19	2016 Georgia Department of Human Resources, Division of Public Health, Epidemiology Branch, Notifiable Disease Section
Ĕŏ⊟	Pneumonia - Discharge Rate	2017 OASIS
	Infant Mortality	2010-2016 CDC WONDER Mortality Data
	Firearm Fatalities	2012-2016 CDC WONDER Mortality Data
_	Injury-Related Deaths - Planned and Unplanned	2012-2016 CDC WONDER Mortality Data
eath	Alcohol-Impaired Driving Deaths	2012-2016 Fatality Analysis Reporting System
⊗	Child Mortality < 18 Years of Age	2013-2016 CDC WONDER Mortality Data
Injury & Death	Motor Vehicle Traffic Death	2013-2016, CDC WONDER Online Database, Compressed Mortality File 1999-2016; Centers for Disease Control and Prevention, National Center for Health Statistics.
_	Drug Overdose Deaths	2014-2016 CDC WONDER Mortality Data
	Years of Potential Life Lost before Age 75	2014-2016 National Center for Health Statistics - Mortality Files
	Suicide Rate	2014-2017 CDC WONDER Online Database; Underlying Cause of Death Database, 1999-2017; Centers for Disease Control and Prevention, National Center for Health Statistics

Category	Public Health Indicator	Source
	Cerebrovascular Disease Death Rate	2015-2016 CDC WONDER Online Database; Compressed Mortality File 1999-2016; Centers for Disease Control and Prevention, National Center for Health Statistics
	Chronic Lower Respiratory Disease (CLRD) Death Rate	2015-2016 CDC WONDER Online Database; Compressed Mortality File 1999-2016; Centers for Disease Control and Prevention, National Center for Health Statistics
	Unintentional Death Rate	2015-2016 CDC WONDER Online Database; Compressed Mortality File 1999-2016; Centers for Disease Control and Prevention, National Center for Health Statistics
	Heart Disease Death Rate	2016 CDC WONDER Online Database; Compressed Mortality File 1999-2016; Centers for Disease Control and Prevention, National Center for Health Statistics
	Drug-Related Deaths	2017 Centers for Disease Control and Prevention
	COPD Deaths	2017 OASIS
	Diabetes Deaths	2017 OASIS
	External Cause of Injury - Discharge Rate	2017 OASIS
	External Cause of Injury - ER Visit Rate	2017 OASIS
	Falls - Discharge Rate	2017 OASIS
	Other Mental and Behavioral Disorder Deaths - Not Related to Drug Use	2017 OASIS
	Low Birth Weight	2010-2016 National Center for Health Statistics - Natality files
£	Teen Birth Rate per 1000 Population Age 15-19	2010-2016 National Center for Health Statistics - Natality files
Healt	Births to Mothers with Less than 12 Years of Education	2016 Birth Certificate Records, Georgia Department of Human Resources, Division of Public Health, Office of Health Information and Policy
Maternal & Child Health	Very Low Birth Weight	2016 State-Level estimates are from the National Center for Health Statistics (NCHS), National Vital Statistics Reports
ಲ %	Preterm Births	2016 Data from the National Center for Health Statistics (NCHS)
nal	Fetal and Infant Conditions - Discharge Rate	2017 OASIS
ater	Fetal and Infant Conditions - ER Visit Rate	2017 OASIS
Σ	Pregnancy and Child birthing Complications - Discharge Rate	2017 OASIS
	Pregnancy and Child birthing Complications - ER Visit Rate	2017 OASIS
alth	Chronic Condition: Alzheimer's Disease/Dementia - Percent of FFS Medicare	2007-2015 CMS.gov Chronic conditions
H _e	Poor Mental Health Days	2016 Behavioral Risk Factor Surveillance System
Mental Health	Mental and Behavioral Disorders - Discharge Rate	2017 OASIS
₩	Mental and Behavioral Disorders - ER Visit Rate	2017 OASIS

or at a	Severe Housing Problems	2010-2014 Comprehensive Housing Affordability Strategy (CHAS) Data
T G 60 C	Covere riedeling riesienie	25 to 25 th Comprehensive Florening Americals mity Caractery (Of the) Batta



Category	Public Health Indicator	Source
	Disconnected Youth Age 16-24	2010-2014 Measure of America
	Homicides	2010-2016 Compressed Mortality File (CMF)
	Violent Crime Rate	2012-2014 Uniform Crime Reporting (UCR) Program
	High School Dropouts	2012-2016 U.S. Census Bureau, American Community Survey, Five Year Estimates, Table B14005
	Some College	2012-2016 American Community Survey, 5-year estimates
	Children in Single-Parent Households	2012-2016 American Community Survey, 5-year estimates
	Income Inequality	2012-2016 American Community Survey, 5-year estimates
	Residential Segregation - Black/White	2012-2016 American Community Survey, 5-year estimates
	Residential Segregation - Non-White/White	2012-2016 American Community Survey, 5-year estimates
	Poverty: Families with children with annual incomes less than 150% of the Federal Poverty Threshold	2012-2016 U.S. Census Bureau, American Community Survey, Five Year Estimates, Table B17022
	Poverty: Individuals Living Below Poverty Level in Past 12 months	2013-2017 American Community Survey 5-Year Estimates
	Disabled Persons Under Age 65	2013-2017 U.S. Census Bureau, American Community Survey (ACS) and Puerto Rico Community Survey (PRCS), 5-Year Estimates.
	High School Graduation	2014-2015 EDFacts
	Social and Membership Associations	2015 County Business Patterns
	Poverty: Children Eligible for Free Lunch	2015-2016 National Center for Education Statistics
	Children with a Substantiated Incident Of Child Abuse and/or Neglect	2016 Child Protective Services Data System, Georgia Department of Human Resources, Division of Family and Children Services
	Unemployment Rate 16+	2016 Local Area Unemployment Statistics (LAUS) program of the Bureau of Labor Statistics
	Median Household Income	2016 Small Area Income and Poverty Estimates (SAIPE)
	Poverty: Children in Poverty	2016 Small Area Income and Poverty Estimates (SAIPE)
	Poverty: All People in Poverty	2017 Census Bureau, Small Area Income and Poverty Estimates (USDA ERS)
	Births to Unmarried Women	2017 OASIS

Appendix B: Watson Health Focus Groups and Interviews Participants

Participant Organization Name	Public Health	Medically Under-served	Low-income	Chronic Disease Needs	Minority Populations	Governmental Public Health Dept.	Public Health Knowledge Expertise	
District 2 Health Department								
Avita Community Partners	Х	Х	Х	Х	Х		Х	
Basan Ministries		Х	Χ		Х			
City of Dawsonville		Χ						
City of Hartwell	Х	Х	Х	Χ	Х	Х		
ConnectAbility		Χ	Χ	Χ				
Dahlonega Country Day Academy			Χ					
Dawson County Board of Commissioner	Х						Х	
Dawson County Chamber of Commerce	Х	Χ	Χ	Χ	Х			
Dawson County Health Department	Х	Χ	Χ	Χ	Х	Х		
Dawson County Long Range Planning Committee				Х			Х	
Dawson County Wee Books Program			Х		Х		Х	
District 2 Health Department	Х	Х	Х	Х	Х	Х	Х	
Forsyth County Health Department	Х		Х		Х	Х	Х	
Forsyth County Schools		Х	Х	Х	Х			
Franklin County Health Department	Х					Х	Х	
Franklin County Health Department	Х					Х	Х	
Gainesville City School System			Х		Х			
Gainesville Housing Authority		Х	Х					
Gainesville-Hall County Community Services		Х					Х	
GCSS								
Georgia Legal Services Program		Х	Х	Х	Х			

Participant Organization Name	Public Health	Medically Under-served	Low-income	Chronic Disease Needs	Minority Populations	Governmental Public Health Dept.	Public Health Knowledge Expertise
Good News Clinics		Х	Χ	Χ			
Good Shepherd Clinic	Х	Х	Х	Χ			
Habersham County Emergency Services	Х	Х	Χ	Χ	Х		Х
Habersham County Schools		Х	Х	Χ	Х		Х
Habersham Hospital Authority							
Habersham Medical Center	Х	Х	Х	Χ			Х
Habersham Medical Center Foundation	Х	Х	Х	Х	Х		
Hall County Government	Х						
Hart County Health Department	Х	Х	Х		Х	Х	Х
HomeTown Health				Х			
Lavonia Health and Safety	Х					Х	
Lumpkin Literacy Coalition/ Community Helping Place		Х					Х
Medical Center Foundation	Х						
NAMI		Х	Х	Х	Х		
NGPG Dahlonega Internal Medicine	Х	Х	Х	Х	Х		
NGPG OBGYN Dahlonega, Dawsonville and Cleveland			Х	Х	Х		
NGPG Pediatrics Toccoa, Clarkesville, Demorest		Х	Х	Χ	Х		
North Georgia Technical College			Х		Х		
South Enotah Child Advocacy Center	Х	Х	Х	Х	Х		
White County Public Safety	Х						
Habersham Medica	al Cent	er					
Avita Community Partners			Х				
District 2 Health Department	Х	Х	Х	Χ	Х	Х	Х

Participant Organization Name	Public Health	Medically Under-served	Low-income	Chronic Disease Needs	Minority Populations	Governmental Public Health Dept.	Public Health Knowledge Expertise
Habersham County Emergency Services	Х	Х	Χ	Х	Х		Х
Habersham County Schools		Х	Х	Х	Х		Х
Habersham Hospital Authority							
Habersham Medical Center	Х	Х	Х	Х			Х
Habersham Medical Center Foundation	Х	Х	Х	Х	Х		
HomeTown Health				Х			
NGPG Pediatrics Toccoa, Clarkesville, Demorest		Х	Х	Х	Х		
North Georgia Technical College			Х		Х		
NGHS Greater Braselton	Servi	ce Are	а				
Barrow County Board of Commissioners	Х	Х	Х	Х	Х		
Barrow County DFCS			Х		Х		
Barrow County School System		Х	Х		Х		
Caldwell Electric Contractors		Х		Х			
City of Winder	Х						
District 2 Health Department	Х	Х	Х	Х	Х	Х	Х
Gwinnett County Fire and Emergency Services	Х	Х	Х	Х	Х		
Harold Webb Regions Bank							
Jackson County Area Chamber of Commerce	Х						
Jackson County Family Connection	Х	Х	Х	Х	Х		
Jackson County Habitat for Humanity		Х	Х	Х	Х		
Jackson County School System	Х	Х	Х	Х	Х		
Jackson EMC	Х						
Marathon Health			Х	Х	Х		

Participant Organization Name	Public Health	Medically Under-served	Low-income	Chronic Disease Needs	Minority Populations	Governmental Public Health Dept.	Public Health Knowledge Expertise
Medlink Georgia		Х		Х			
Movement Mortgage							
NGHS	Х	Х	Х	Х	Х		
NGHS Advisory Board	Х	Х	Х	Х	Х		Х
Town of Braselton							
United Way of Northeast Georgia		Х	Χ				
Whelchel Dunlap Jarrard & Walker LLP							
Winder Housing Authority			Х				
NGHS Primary Serv	rice Ar	ea					
Amistad Cristiana International					Х		Х
Avita Community Partners	Х	Х	Х	Х	Х		Х
Bank of America							
Basan Ministries		Х	Х		Х		
District 2 Health Department	Х	Х	Х	Х	Х	Х	Х
Edward Jones							
Gainesville City School System			Х		Х		
Gainesville Housing Authority		Х	Х				
Gainesville-Hall County Community Services		Х					Х
GCSS							
Georgia Legal Services Program		Х	Х	Х	Х		
Georgia Power Co.			Х	Х	Х		
Good News Clinic	Х	Х	Х	Х	Х		
Hall County Government	Х						

Participant Organization Name	Public Health	Medically Under-served	Low-income	Chronic Disease Needs	Minority Populations	Governmental Public Health Dept.	Public Health Knowledge Expertise
Hall County Library							
Lakeview Academy							Х
Lanier Village Estate							
Medical Center Foundation	Х						
NAMI		Х	Χ	Х	Х		
NGHS Advisory Board							
St. John Baptist Church					Х		
State Farm/ Sheila Sanchez Inc							
NGHS Secondary Serv	ice Are	ea 400					
Brenau University/ Lumpkin Co. Commissioner	Х	Х	Х	Х	Х		Х
City of Dawsonville		Х					
Community Helping Place		Х	Χ	Χ			
ConnectAbility		Х	Х	Х			
Dahlonega Country Day Academy			Х				
Dawson County Board of Commissioner	Х						Х
Dawson County Chamber of Commerce	Х	Х	Χ	Х	Х		
Dawson County Health Department	Х	Х	Χ	Х	Х	Х	
Dawson County Long Range Planning Committee				Х			Х
Dawson County Wee Books Program			Х		Х		Х
District 2 Health Department	Х	Х	Х	Х	Х	Х	Х
Good Shepherd Clinic	Х	Х	Х	Х			
Lumpkin Literacy Coalition/ Community Helping Place		Х					Х
Mike Berg & Associates LLC							

Participant Organization Name	Public Health	Medically Under-served	Low-income	Chronic Disease Needs	Minority Populations	Governmental Public Health Dept.	Public Health Knowledge Expertise
NGPG Dahlonega Internal Medicine	Х	Х	Χ	Х	Х		
NGPG OBGYN Dahlonega, Dawsonville and Cleveland			Х	Х	Х		
South Enotah Child Advocacy Center	Х	Х	Χ	Х	Х		
Tillman, Bailey Samples and Associates							
University of North Georgia							
NGHS Secondary Service	e Area	a North	1				
Avita Community Partners			Χ				
District 2 Health Department	Х	Х	Χ	Х	Х	Х	Х
Habersham County Emergency Services	Х	Х	Χ	Х	Χ		Χ
Habersham County Schools		Х	Х	Х	Х		Х
Habersham County United Way		Х	Х	Х	Х		Х
Habersham EMC							
Habersham Hospital Authority							
Habersham Medical Center	Х	Х	Х	Х			Х
Habersham Medical Center Foundation	Х	Х	Χ	Х	Х		
HomeTown Health				Х			
Mountain Judicial Circuit							
NGPG Pediatrics Toccoa, Clarkesville, Demorest		Х	Х	Х	Х		
North Georgia Technical College			Х		Х		
The Gorman Rupp Co.		Х	Х	Х	Х		
White County Public Safety	Х						
Stephens County I	Hospit	al					
Avita Community Partners			Х				

Participant Organization Name	Public Health	Medically Under-served	Low-income	Chronic Disease Needs	Minority Populations	Governmental Public Health Dept.	Public Health Knowledge Expertise
District 2 Health Department	Х	Х	Х	Χ	Χ	Х	Х
Franklin County Health Department	Х					Х	Х
Habersham County Emergency Services	Х	Х	Х	Χ	Х		Х
Habersham County Schools		Х	Х	Χ	Х		Х
Habersham Hospital Authority							
Habersham Medical Center	Х	Х	Х	Χ			Х
Habersham Medical Center Foundation	Х	Х	Х	Х	Х		
HomeTown Health				Х			
Lavonia Health and Safety	Х					Х	
NGPG Pediatrics Toccoa, Clarkesville, Demorest		Х	Х	Х	Х		

Note: multiple persons from the same organization may have participated

Appendix C: Watson Health Focus Groups and Interviews Summary

Advisory Board Focus Group, Northeast Georgia Health System

A series of focus groups took place with the Northeast Georgia Health System (NGHS) Advisory Board on February 4, 2019 at Northeast Georgia Medical Center's Gainesville campus and included 32 participants.

Advisory board members include community members who are leaders in their respective communities and reflect the demographics of the regional service area. The purpose of the Advisory Board is to gain feedback regarding new program and service opportunities, to respond to broad community issues related to healthcare and to make recommendations to the Board of Trustees of NGHS and to its management as requested.

Focus group facilitators assigned Advisory board members to one of four (4) sub-groups that corresponded to the four (4) NGHS communities; Greater Braselton Service Area (GBSA), Primary Service Area (PSA), Secondary Service Area 400 (SSA 400) and Secondary Service Area North (SSA North). Each sub-group contained Advisory Board members who lived and/or worked in that community. A Watson health facilitator completed the same exercises with all sub-groups and focused discussion on their community.

NGHS Greater Braselton Service Area (GBSA)

The GBSA market includes Jackson County, Barrow County, and portions of Gwinnett, Hall, and Banks counties. Focus group participants described a growing area in transition from rural to suburban. The primary industry was tourism and more than 800,000 people each year visited the local wineries, luxury hotels, spas, and restaurants. Many residents commuted to Atlanta for work, but there were also local employment opportunities on both ends of the income scale. The community lies along a major railway creating an increased number of industrial warehouse jobs driving the economic boom; both the retail and restaurant industries had grown dramatically in the past 10 years. There had been an influx of large companies into the area such as Amazon, Bed Bath and Beyond, and Home Goods. The population growth had been driven by families moving from Atlanta, attracted by good schools in Gwinnet and Hall counties, as well as retirees seeking more affordable housing and an escape from urban life. The town of Braselton sits at the intersection of Jackson, Barrow, Gwinnett, and Hall counties and had more than 18,000 residents. Focus group participants described Jackson County as still largely rural but growing and slowly becoming more suburban. Overall, the area was economically diverse with less racial and ethnic diversity.

Focus group participants identified multiple factors impacting access to health care. Population growth outpaced infrastructure growth and created a shortage of local specialists, especially orthopedic doctors. Many medical practices were full and didn't accept new patients, regardless of insurance status. Banks and Jackson counties didn't have a hospital, forcing residents to commute to Athens for care. A high amount of radon occurred naturally in the ground, causing an increased incidence of lung cancer. Heavy truck traffic along the I-85 corridor also led to a higher number of motor vehicle accidents. Finally, low-income

community residents often couldn't access health care because they were uninsured, couldn't afford copays, and lacked transportation.

The discussion of health needs and barriers in the community centered around substance abuse, mental health, access to care, and lack of insurance, as well as lack of health habits and chronic diseases such as obesity and diabetes.

Substance Abuse

Focus group participants said Barrow County's high rates of substance abuse and police activity were related to smoking (vaping, tobacco, marijuana) and alcohol abuse. Residents often called Bethlehem "Methlehem" because of Methamphetamine production and usage. Widespread opioid use also led to many unintentional drug overdoses.

Mental Health and Substance Abuse

The focus group said the community lacked mental health facilities and services, specifically inpatient psychiatric beds and detox facilities. The growing senior population also led to an increased demand for treatment of Parkinson's disease, Alzheimer's and Dementia.

Obesity and Food Access

The community experienced a high rate of chronic diseases such as obesity, diabetes and heart disease. The focus group said some residents lacked motivation to seek care or prioritize health. The community provided a limited number of outdoor spaces for exercise, few sidewalks and limited accessibility for the disabled. Many residents were unaware of available outdoor recreation services. The group agreed readily accessible fast food and limited healthy food options also acted as barriers to health. They recommended an increased focus on education about health care, healthy foods and exercise options.

NGHS Primary Service Area (PSA)

The PSA market includes Hall County. The focus group participants described the NGHS PSA community as diverse in both age and ethnicity. The population living in the city of Gainesville was more than fifty percent Hispanic. The community was also aging due to several factors; retirees migrated into the area, younger people migrated out for more urban/suburban environments and the remaining population was aging. Retirees found the area attractive because of its proximity to Atlanta and Athens, its strong arts community and the quality medical care available; plenty of physicians, including every type of specialist and service, were available. The primary local industry was health care, but also included manufacturing and poultry processing. The community had low unemployment and good jobs, even for those without a higher education. Hall County had an active business network and strong chamber of commerce.

The area's rapid growth presented challenges. The high cost of land drove up housing prices and resulted in a lack of affordable housing. The community's infrastructure hadn't kept pace with its growth. In a car-dependent area, the PSA community needed good public transportation. At the same time, people were philanthropic and local community and

government leaders worked well together as they set out to achieve common goals. Local leaders recently came together with a vision for their community called Vision 2030.

The focus group identified obesity, mental health/addiction and access to care as the community's major health needs and barriers.

Obesity

Local pace and lifestyle issues contributed to obesity. Families ate fewer healthy meals because they were too busy to cook them. People were more sedentary, with less outdoor play and more screen time. Many residents lacked education about healthy eating and its impact on health; for example, how poor eating habits contributed to heart disease and diabetes. In addition, poorer families couldn't afford healthy food.

Mental Health and Addiction

The PSA community had an inadequate supply of mental health providers, facilities, and services to meet the existing need. Additionally, many residents had limited or no insurance coverage for mental health services. Those seeking treatment for mental health issues felt stigmatized about needing care, a perception that transcended class, insurance status, and income.

Opioid abuse and addiction were prevalent in the community and were often intertwined with mental health issues, yet services for mental health and addiction were siloed. Additionally, the community had insufficient services to treat addiction. Participants worried about the increased use of tobacco in school-age children and blamed the availability of e-cigarettes and vaping.

Access to Care

The cost of health care services and insurance, the shortage of bilingual medical providers and poverty were barriers to care. Some insurance plans covered residents but didn't include NGHS in their network, forcing people to go outside the community for their care. Language barriers created misunderstanding and trust issues for Hispanic members of the community, especially when providers didn't speak Spanish. The community also needed more care options for undocumented residents, who didn't trust clinics and providers with their undocumented status. People living in poverty often wouldn't seek help or use resources available to low-income residents in the community because of the stigma attached to using them (e.g. food pantry).

NGHS Secondary Service Area 400 (SSA 400)

The SSA 400 market includes Dawson and Lumpkin Counties. The SSA 400 service area of the Northeast Georgia Health System conducted one focus group session with a total of 13 participants in February 2019 during the breakout session of the Advisory Board meeting. This is an area with a mix of rural and suburban sections transitioning to suburban and urban. Lumpkin County was more rural than Dawson because of Dawson County's proximity to Georgia State Route 400. The community was predominantly Caucasian but was

becoming more diversified. People living around the University of North Georgia had more varied ethnic backgrounds.

The SSA 400 community included many low-income residents with high school educations. Roughly 30% of the schools were Title 1, indicating they served a student body with a large concentration of low-income students and required federal subsidies.

The underinsured population

The community had a high underinsured population with less education and a higher proportion of obesity, high blood pressure, and diabetes. This population was hard to reach from a health communication perspective as they were wary of sources outside their smaller communities. Coordination with local religious authorities was a utilized communication route for health care knowledge.

Access to healthcare

This service area had large amounts of farm and protected land with a general lack of major roadways. As such, a main theme from the focus group was significant travel time required to access health services in the area. There was a need for better access across the entire spectrum of health services. One participant noted that she had to travel 40 minutes in labor. At a minimum, the geography of the service area created a need for satellite emergency services.

Focus group participants also noted that tax incentives and the price index has made the community attractive to retirees, driving a large increase in the older population. This increase in retirees joining the community, as well as the aging of the already established population, has created a greater need for care focused on older adults.

NGHS Secondary Service Area North (SSA North)

The SSA North market is comprised of one ZIP code from Banks County (30511 – Baldwin) and the six counties Habersham, Rabun, Stephens, Towns, Union, and White. The SSA North focus group's eight (8) participants included health agency administrators, medical professionals and representatives from various community organizations. Most of the participants worked with at-risk populations; the group at-large represented moderate to-low-income populations, minorities, and the medically under-served.

Focus group participants described SSA North as a growing faith-based community that was attracting a diverse age group and an increasing number of retirees. Employment was plentiful with a variety of jobs even for those whom did not have a higher education. The reasonable cost of living made the area attractive to a diverse group. Significant increases in agritourism and wineries provided jobs and awareness of the region.

Lack of affordable housing

The counties had a considerable amount of poverty and, until a few years ago, inadequate housing. The community removed the decrepit housing units to improve the affordable housing market. They slowly built mixed housing as new housing went up however, it wasn't enough to replace what was demolished. Low income residents faced an array of barriers to

accessing health services. Even those with insurance were often unable to afford the time and cost to seek preventive care and resorted to using emergency services. The community lacked consistent public transportation, limiting access to health and community services for residents without a car or unable to drive, especially seniors. Many residents worked hourly jobs, could not take time off for medical appointments and had potentially higher injury rates and pain management issues, leading to a high risk of prescription abuse. Language and cultural differences also created barriers to being able to live a productive life. People looking for jobs and healthcare services were challenged by a consistent lack of translators.

Lack of "living wage" employment

Both blue- and white-collar jobs were available however, the predominance of county jobs were for blue collar or "hourly" workers. The group suggested that jobs were available but said most of them didn't offer a living wage. Untrained job seekers could find jobs that provided them with a low weekly wage that made it difficult to find housing, buy groceries or afford healthcare. Young college graduates often had to move to a larger city to find employment for their specialty.

Healthcare and generational habits

Drug and alcohol addictions commonly crossed generational lines. Children didn't learn healthy decision making in their households and were unlikely to make health a priority. Parental drug use influenced their children's use and the cycle became the unfortunate norm. Other health care challenges included chronic diseases like diabetes, hypertension and COPD. Focus group participants were concerned about the lack of mental health care providers. Because no psychiatrists practiced in the county, residents were forced to leave the area for psychiatric care and often waited months for appointments. Follow-up care was problematic because many people lacked transportation.

Barrow County Focus Group

The Barrow county focus group took place on March 4, 2019 at NGMC Barrow in Winder, GA and included 5 participants.

Focus group participants described Barrow County as an historically rural area with rapid growth in the New Winder area. Growth was propelled by affordable housing options for Atlanta commuters along 316 and I-85. Group participants compared New Winder, an area of population growth, new subdivisions and investments to Old Winder, an area of mostly unchanged residents and demographics. They stated Barrow County consisted of many longtime senior residents, but also an increasing millennial population and community businesses changing to meet the new demographics. Focus group participants said residents in Barrow County were predominantly white, with growing Hispanic, African American and Hmong populations. The school system was depicted as having a transient student population due to half the housing units in the market being rentals. The homeless population was growing because of a shortage of subsidized housing in this community and long waitlists for families.

Focus group participants identified the lack of health education and generational health behaviors as the top barriers to better health in the community. The combination of these barriers led to high levels of alcohol and opioid abuse. Participants described the Northeast Georgia Medical Center Barrow as a valuable resource and a much-needed community hospital. Historical physician recruitment and retention challenges drove residents to leave the area for treatment or resulted in long wait times. The market experienced a shortage of psychologists, obstetricians, primary care physicians, pediatricians, and oncologists and most sub-specialties.

The discussion of health needs and barriers in the community centered around access to healthcare, generational habits, and health education.

Access to healthcare

Low income residents faced an array of barriers to accessing health care services. Those with insurance frequently sought out treatment in emergency rooms because they lacked the time to search for preventive services and the resources to pay them. Barrow County's inconsistent public transportation limited access to health and community services for residents without cars, especially seniors. Many residents worked hourly jobs and could not take time off for medical appointments. These hourly workers experienced higher injury rates, leading to pain management issues and a high risk of prescription abuse. Language and cultural barriers, especially in the growing Hmong community, also acted as deterrents to those seeking care.

Chronic diseases like hypertension, diabetes, and cancer were prevalent in this market. Focus group participants believed that high levels of radon in the soil caused high rates of lung cancer and possibly high rates of cancer in general.

Education and generational habits

Focus group participants correlated better education with making better health choices. In households with generational unhealthy behaviors, children were unlikely to make health a priority. Residents lacking adequate health care knowledge frequently dismissed efforts to

help them by saying, "You're going to die of something." The focus group believed the cycle of unhealthy behavior was intertwined with self-medication; parental opioid and alcohol abuse often led to similar abuse by their children. The shortage of local psychiatrists forced residents to travel outside the county for psychiatric care, where they faced long wait times for appointments. The shortage of psychologists and counseling services led to untreated high anxiety and depression rates, as evidenced by the high suicide rate at local schools.

Dawson County Focus Group

The Dawson county focus group took place on March 5, 2019 at NGHS's Medical Plaza 400 and included 3 participants.

Focus group participants described a tight-knit community that still maintained its historic, "country folk" identity. Families resided in the community for multiple generations, with young people often returning home after completing their college education elsewhere. The primary industries and employers were the government, the school district, agriculture, and chicken processing plants. Recent growth in the IT and Healthcare sectors created new job opportunities but most professionals commuted to Atlanta for work. The community lacked a railway and public transit system, forcing commuters to use Georgia State Route 400 to move in and out of the area. Dawson County was one of the fastest growing counties in the state of Georgia and the U.S., driven by expansion out of the Atlanta metro area. Participants shared that residents had mixed feelings about the growth; some feared the negative impact this might have on the local culture.

The discussion of health needs and barriers in the community centered around mental and behavioral health; access to care issues; and food access and nutrition.

Mental and Behavioral Health

Mental health and substance abuse issues plagued the community. Alcohol and drug abuse were prevalent and on the rise. Addiction to methamphetamines was common and created a cycle of generational poverty. The community housed a large homeless population, many of whom struggled with addiction. Opioid abuse was a growing concern as the medical community's pain management practices flooded the county with readily accessible drugs.

The county lacked mental health providers and all forms of mental health services: inpatient, outpatient, counseling, and rehabilitation programs. AVITA acted as the largest mental health provider in the community but the organization's services were limited due to lack of funding. Local policies further added to the challenge of addressing the mental health needs in the county. The local drug court did not provide Methadone treatment or transition services for people struggling to break the cycle of addiction.

Access to Care

Focus group participants described a variety of access to care issues impacting the community. The county had limited low and free cost primary care options. Some uninsured residents received care at Good Shepherd Clinic and the Health Department which offered a variety of preventive care services. Many residents did not have a designated primary care provider and relied on the Emergency Room as their main source of healthcare. Poor health literacy and limited knowledge of the importance of preventive care acted as a barrier to improving the health status of the community.

In some cases, retirees who moved into the area, maintained relationships with their doctors in Atlanta rather than establish new relationships with local providers. Patients needing specialty care services visited the Emergency Room or traveled to NGMC Gainesville. Dawson county lacked cardiologists, so many who were living with cardiovascular disease struggled to properly manage their condition.

High cost of care and lack of insurance acted as major barriers to health. Indigent residents who lacked insurance did not seek preventive care and often waited to see a provider until an emergency arose. Many of the large employers in the community did not offer health insurance to their minimum wage employees. Residents who were fortunate to have dental coverage were burdened by high deductibles and large out of pocket costs. Poor dental hygiene caused by lack of preventive dental care and high use of methamphetamines was common in the community. Children on Medicaid received dental coverage through age 19 but after that point many stopped seeing a dentist.

Food Access and Nutrition

Participants shared that the western portion of the county lacked access to high quality grocery stores. Residents could not afford to eat healthy and often relied on fast food as a low cost and convenient option. The county struggled with high rates of cardiovascular disease, diabetes, and obesity possibly due to poor diet and the access to care issues outlined earlier.

Additional education was needed, particularly for young people, on the benefits of healthy eating. Food pantries were under-utilized due to lack of awareness in the community and potential stigma around seeking social services. Residents in need could benefit from targeted advertising and culturally sensitive messaging.

Gwinnett and Jackson Counties Focus Group

The Gwinnett and Jackson counties focus group took place on March 7, 2019 at NGMC Braselton in Braselton, GA and included 6 participants.

Focus group participants described a community that was growing and changing rapidly due to recent economic development. Gwinnett county, historically a suburb of Atlanta, had become increasingly urban due to expansion out of the Metro area. The community was ethnically and racially diverse. Projections estimated that by 2025, the population would reach 1.5-2 million residents, driven by the influx of baby boomer retirees and young families. Increased access to Atlanta created job opportunities for residents, but also brought about negative changes. Crime and gun violence in the area were on the rise. Overall, the county offered a variety of healthcare and social services to meet residents' needs. The county boasted a Public Health Department, abundant outdoor recreation opportunities, and a variety of primary and specialty care services.

Participants described Jackson as less diverse and more rural than Gwinnett county. The community maintained a small-town feel: the area remained largely agricultural, was relatively safe, and family friendly. Expansion out of Atlanta had not reached Jackson to the same extent as Gwinnett but the community was beginning to feel the impact. The county lacked infrastructure such as roads, housing, schools and healthcare services to keep pace with the recent population growth. New industries and factories moved into the area creating jobs and economic development; however, these companies primarily offered unskilled, minimum wage employment. The area lacked high paying jobs which forced many residents to commute to Atlanta for work.

The discussion of health needs and barriers in the community centered around access to care issues; substance abuse; food access and nutrition; and housing.

Access to Care

Focus group participants shared that while Gwinnett had an abundance of healthcare services and providers available, many of these were at capacity. The local hospital lacked enough beds and had recently started diverting ambulances outside of the county. Jackson on the other hand, lacked specialty care services, after hours clinics, urgent care centers, and a 24-hour pharmacy.

High cost of care and lack of insurance posed a universal barrier to health. Patients with Medicaid did not qualify for low cost or free clinics that only serviced the uninsured and struggled to find providers who would accept their insurance. Generational poverty prevented some residents from utilizing services that had a fee attached. Participants believed that even low-cost services were prohibitive for residents that were focused on meeting basic needs.

In Jackson county, patients faced an additional transportation barrier to accessing services. Residents who lacked transportation, resorted to calling 911 and utilizing the ER for non-emergent care. Patients traveled to Atlanta and surrounding counties for specialty care, forcing them to miss a full day of work for a medical appointment.

Substance Abuse

Focus group participants discussed the rise in substance abuse across both counties. Opioid and heroin overdoses increased as opioid addiction became more prevalent. Opioid addiction, once a problem that primarily affected low income residents was now common in all segments of the population. Participants felt that the over-prescription of pain medicines was to blame for the growth in addiction. Depression was also prevalent in the community, potentially exacerbating substance abuse issues.

Food Access and Nutrition

Local food culture promoted unhealthy eating habits. Participants described a "fried food culture" that valued taste over nutrition. Residents who wished to eat healthier sometimes lacked the knowledge and financial means to prepare a healthy meal. Food pantries struggled to stock fresh foods consistently, while faith-based food pantries focused on serving their congregation. Residents who did not qualify for federal assistance but struggled to afford the high cost of healthy foods were left with limited choices and often resorted to fast food.

Housing

Participants discussed the rapid population growth and its negative impact on housing availability. Jackson county struggled to provide adequate amounts of low income and rental housing for its growing workforce. Residents resorted to sharing homes with other families, creating overcrowded and unsafe living situations. Retirees who lacked savings either moved in with family members or resided in personal care homes which were on the rise in the community. These homes often provided some medical services but were typically unregulated creating quality concerns. Despite the lack of housing, the Jackson and Gwinnett area had a relatively small homeless population due to the lack of shelters and services for this vulnerable group.

Habersham and Stephens Counties Focus Group

The Habersham and Stephens Counties focus group took place on March 6, 2019 at Habersham Medical Center in Demorest, GA and included nine participants.

Focus group participants described Habersham and Stephens counties as a desirable place to live due to the geography, the climate and the low-crime rate. The counties had good schools, several colleges and employment opportunities; it was also an attractive place to retire. The area was growing but not at the rate of other areas to the south (towards Atlanta). Southern Habersham County had a large Hispanic population, but the remainder of the area was not diverse and was primarily Caucasian. Many members of the growing undocumented population had concerns trusting the health care system. The counties needed more senior living communities because of the aging population and migration of retirees to the area, but the current infrastructure couldn't support them. Participants acknowledged the generational poverty that existed in the community and the need for more low-cost housing options. Impoverished members of the community were reluctant to seek out community/social services due to the stigma of needing assistance.

The participants noted that community groups collaborated well and had good working relationships. Community residents were generous, supported the United Way and worked together to address needs in the community. Residents had good access to health care, access that had improved in recent years. Still, a deficit of specialists and primary care providers led community members to rely on ambulance services. The Habersham County ambulance company ran as many ambulances as a county three times its size. Stephens County did not have enough recreation and activities for younger people, resulting in their migration out of the area.

The discussion of health needs and barriers in the community centered around access to care, mental health and substance abuse, as well as obesity and access to food.

Access to Care

Focus group participants identified multiple issues affecting access to care. The community had a shortage of primary care providers, yet recruiting efforts were challenging and costly. Some local providers no longer accepted Medicare patients. The walk-in clinics (including an FQHC) had limited hours that were inconvenient for those who worked or had after-hour needs. Urgent care services that helped divert residents' use of the Emergency Department (ED) for non-emergencies were unavailable. The community, which currently had no pediatricians, needed both pediatricians and pediatric specialists. Dental care was in short supply, primarily for children and low-income individuals. The community also lacked prenatal care for drug-abusers and the undocumented population. Community transportation options were limited, which compounded these access issues.

The focus group discussed other access to care issues, including the cost of care and insurance coverage. Newly insured individuals who purchased coverage through the Affordable Care Act did not understand their benefits and didn't realize they were responsible for out-of-pocket costs associated with doctor or ED visits. Residents with high-deductible plans and the uninsured avoided care because they couldn't afford the out-of-pocket costs. Many community members couldn't afford office visit and medication costs. Participants also

expressed concerns about the challenges elderly residents faced navigating the coordination of care and their Medicare benefits.

Mental Health and Substance Abuse

The group said the community had a shortage of mental health services, including a lack of inpatient mental health services in both counties. The two counties also had a problem with drug abuse, primarily methamphetamines and opioids such as Fentanyl. While the community maintained a low crime rate, any crime that occurred was related to drugs. Participants discussed the "addiction lifestyle" and the fact that drug abuse in the community was often generational, making it a challenge to break the cycle. Domestic violence and child abuse were additional community challenges. The group stressed a need for outreach related to mental health and addiction.

Obesity and Food Access

Focus group participants discussed hunger in the community, especially among the elderly and children. In households dealing with drug addiction, childhood hunger was a concern as addicts prioritized drugs over food. Many residents had poor eating habits, particularly people with limited incomes, because unhealthy foods were less expensive than healthy alternatives. The group noted the relationship between poor eating habits, high obesity rates and prevalence of diabetes in their community.

Hall County Focus Group

The Hall county focus group took place on March 5, 2019 at the Fair Street Neighborhood Center in Gainesville, GA and included 8 participants.

Focus group participants described Hall County as a growing community with significant diversity in age, ethnicity and jobs. A growing movement in the community drove residents to "do something" regarding housing, healthcare access and schools. A county effort to demolish many decrepit housing units left the county with a lack of housing; however, participants said mixed housing was the future for models. The county was trying to create more affordable housing options for current residents and Atlanta commuters. Focus group participants described Hall county as segregated. Although the county worked for 20 years to be inclusive, participants saw room for opportunity and improvements. Both significant wealth and poverty existed within in the community, although not a lot in the middle class.

Students in the school system were primarily Hispanic, followed by Caucasian students and few African American students. The population of undocumented residents challenged school and healthcare capabilities. Lower income residents struggled to access healthy foods. Participants said food deserts existed in the county, especially for people without reliable transportation.

Focus group participants were consistent in selecting lack of jobs that produce a "living wage" and a lack of affordable housing in the community as their most significant challenges. Historically, Hall County experienced a shortage of health care providers, especially sub-specialists. The county was continually challenged by a lack of mental health providers and by mental health resources for undocumented residents.

Lack of affordable housing

Many Hall County residents were living in poverty. Up until a few years ago, the county struggled with inadequate housing. They removed the decrepit housing units to improve the affordable housing market and slowly built mixed housing as new housing went up. However, new housing units didn't replace what was demolished.

Lack of access to health care

Low income residents faced an array of barriers to accessing health services. Even those with insurance were often unable to afford the time and cost to seek preventive care and resorted to using emergency services. Hall County had no consistent public transportation, limiting access to health and community services for residents without a car or an ability to drive, especially seniors. Many residents worked hourly jobs and couldn't take time off for medical appointments. These hourly workers had potentially higher injury rates and need for pain management, leading to a high risk of prescription abuse. Language and cultural barriers were also barriers to a productive life. Job searches and healthcare were particularly challenging due to the consistent lack of translators.

Lack of "living wage" employment

Both blue- and white-collar jobs were available in the county; however, jobs in the county were predominantly blue collar or "hourly" jobs. The group suggested that jobs were available,

but most of the jobs didn't offer a living wage. Untrained job seekers were employed at jobs that didn't provide them with a weekly wage, making it difficult to find housing, buy groceries or afford healthcare. Young people who attended college often had to move to a larger city to find employment for their specialty.

Healthcare and generational habits

Generational behaviors with drug and alcohol addictions were common occurrences. Because children didn't learn healthy decision making in their household, they were unlikely to make health a priority. Parents using drugs influenced their children and the cycle became the unfortunate norm. Chronic diseases like diabetes, hypertension, COPD presented challenges to health. Residents were forced to leave the county for psychiatric and mental health care, often waiting months for appointments, because providers were unavailable in the county. Residents without transportation also had problems accessing follow-up care.

Hall County Hispanic Focus Group

The Hall county Hispanic focus group took place on April 13, 2019 at the Norma Hernandez Income Tax Offices in Gainesville, GA and included 7 participants.

The Hispanic focus group participants in Hall County described the community as very kind and diverse with rich job opportunities. They discussed the abundant lakes and green space for weekend activities and the large number of Spanish speaking businesses along the "Atlanta highway." More than one participant said, "Everything you need is here" about this area of Gainesville. The City of Gainesville was half Hispanic, but participants noted that Hispanic businesses and residents were geographically concentrated. Gainesville, called the poultry capital of the world because of its many poultry processing plants, had low unemployment. The local education system was "very good," with many higher education opportunities for the people who could access them. More than three quarters of elementary school students were Hispanic. Gainesville was becoming less segregated, as exemplified by the new "tortilla express" program that encouraged social mingling among downtown businesses.

Participants spent a significant amount of time discussing the unique health needs and barriers for Hall County's Hispanic population. Basic official information about Gainesville's Hispanic population was inaccurate, even the population count. Fear of giving information to the government led many residents to avoid being counted in the census, not just the undocumented population. That fear created barriers to Hispanic residents' access to health care; if people avoided getting a driver's license and purchasing health insurance, they couldn't drive to the doctor's office or access health care services. Hall County provided more plentiful transportation options than other areas, including a city bus along the "Atlanta Highway," Uber and many Hispanic taxi companies. Because Latino churches were a dominant presence and pastors had a huge influence, some participants suggested that partnering with big churches would be a good way to share information. Very few Hispanic seniors lived alone, usually residing with family members, but social isolation and caregiver support were still hardships.

The discussion of health needs and barriers in the community centered around the lack of education and awareness of preventive care and wellness, healthcare costs and the need for more urgent care clinics in convenient locations.

Health education - Awareness, lack of preventive care, wellness

Focus group participants identified the lack of preventive care as the largest health need. They linked lack of care to issues of wellness, awareness and access to information about available services. The group said residents needed more information on how to maintain good health, including regular checkups and care. Health was not a priority for many; "You're going to die of something" was a common sentiment. Participants said that many Hispanic residents did not have insurance, believed that treatment would be inferior without insurance and needed more information about how to enroll.

The focus group described cultural and language barriers to successful health education. In Latino culture, people often espoused "the Latino Way - unless they're dying, they don't go to the doctor or emergency room." This attitude led to diabetics who didn't get care, patients who

fainted before going to the doctor and "natural" Mexican tea and ointment remedies. Language barriers made it more difficult to distribute information. Focus group participants suggested using new ways to share information about providers and wellness, including partnering with schools, distributing information at large Hispanic employers and increasing the number of health fairs held in convenient locations. Participants believed they needed to educate the community that the hospital helped, and that it was against the law to turn people away.

Care in convenient locations

The focus group said the community's top priority was to locate urgent care centers in convenient locations. The hospital recently closed a nearby urgent care center and the community needed more. Participants believed that the healthcare system had no reason to come to "Atlanta Highway," forcing Hispanic residents to travel further for services. The group asked if doctors could set up offices locally and said a local hospital presence would change the perception and awareness of hospital services.

Cost

Cost was the major barrier to better health in the community. The uninsured and underinsured populations avoided preventive care and health services due to costs and needed assistance and education to navigate the system and learn about available resources. In addition, some Hispanic residents had misconceptions and cultural beliefs that increased the barriers to health care treatment. Misconceptions included the belief that going to the hospital would always cost thousands of dollars or lead to large hospital bills, and that treatment at hospitals took a long time. Hispanic residents often turned to remedies and shots from the local market because they were cheap, easily accessible and familiar. Younger people between the ages of 20 and 40 didn't purchase insurance because they didn't think they needed it and thought employer-sponsored insurance was sometimes a waste of money. Many workers in this market were hourly workers who couldn't afford to take time off for medical appointments.

Lumpkin County Focus Group

The Lumpkin county focus group took place on March 8, 2019 at the University of North Georgia's Professional and Continuing Education building in Dahlonega, GA and included 5 participants.

Focus group participants described Lumpkin County as a commuter community, with the University and Koyo manufacturing being the primary employers. The county experienced slow growth over the last twenty years. Despite some increases in box stores (Walmart, Home Depot, etc.), community residents had to leave the area for most purchases. Participants characterized the community as having both significant wealth and poverty. Affordable housing wasn't available; home prices were expensive and out of the budget of most residents. The county included a large homeless population of whom many lived in tents.

Participants said longtime residents had an Appalachian type culture. The area was not diverse and was 95% Caucasian. Retirees, drawn to the community wineries and arts, found the area attractive. Some of the military veterans who served in the area came back and retired. Students in local schools were primarily Hispanic, followed by Caucasian students and a few African American students. The population of undocumented residents challenged schools and healthcare. Lower income residents, especially those lacking reliable transportation, struggled to access healthy foods in the county, which contained food deserts.

The focus group participants consistently identified the lack of jobs that produced a "living wage" and lack of affordable housing as the community's most significant challenges. Historically, the county experienced a shortage of health care providers, especially sub-specialists. Residents faced the continual challenge of mental health provider shortages and undocumented residents had no available mental health resources.

Lack of affordable housing

Lumpkin County had a considerable amount of poverty and, until a few years ago, inadequate housing. To improve the affordable housing market, the county razed the decrepit housing units and slowly built mixed housing as new housing was constructed. Despite the efforts, the new housing didn't sufficiently replace what was demolished.

Lack of access to health care

Low income residents faced an array of barriers to accessing health services. Even those with insurance lacked the time to search for preventive care or the cost of treatment, and they resorted to using emergency services. Lumpkin County had no consistent public transportation, limiting access to health and community services for residents without a car or an ability to drive, especially seniors. Many residents worked hourly jobs, could not take time off for medical appointments, and had potentially higher injury rates and pain management needs, leading to a high risk of prescription abuse. Language and cultural barriers were also barriers to being able to live a productive life; without an adequate number of translators, job searches and healthcare treatment were particularly challenging.

Lack of "living wage" employment

Lumpkin County businesses offered both blue- and white-collar jobs, but the predominance of employment was for blue collar or "hourly" workers. The focus group said other jobs were available, but most of them didn't offer a living wage. Untrained job seekers found jobs that provided them with a weekly wage that made it difficult to find housing, buy groceries or afford healthcare. Young college graduates often had to move to a larger city to find employment for their specialty.

Healthcare and generational habits

Generational behaviors with drug and alcohol addictions were common occurrences. Children didn't learn healthy decision making in their households and were unlikely to make health a priority. Parents using drugs influenced their children's choices and the cycle became the unfortunate norm. Chronic diseases like diabetes, hypertension and COPD presented challenges to health. Focus group participants identified the shortage of mental health care providers as a significant concern. With no psychiatrists in this county, residents were forced to leave the county for care, often waiting months for appointments. These residents had problems accessing follow-up care because they lacked transportation.

Interviews Summary

As part of the CHNA process, the northeast Georgia CHNA partners collaborated with Watson Health to complete 25 key informant interviews with community members who represented public health, low-income populations, minorities, the medically under-served, and populations with chronic diseases. Participants included public health and social service agency administrators; community leaders; and representatives who serve the community and have insight into community needs. For a list of participating organizations see **Appendix B**.

Community Interviews

Northeast Georgia Community	Interviews Completed		
District 2 Public Health	20		
Habersham Medical Center	2		
NGHS – GBSA	6		
NGHS – PSA	5		
NGHS – SSA 400	6		
NGHS – SSA North	3		
Stephens County Hospital	4		

Interview Themes by Community

	District				NOUG	NOUG		
Themes	2 Health Dept	НМС	NGHS GBSA	NGHS PSA	NGHS SSA 400	NGHS SSA North	SCH	Total
Access to Care - Dental Care	Х	X	X	X	X	X	X	7
Access to Care - Insurance Status	X	X	X	X	X	X	X	7
Access to Care - Primary Care	X	X	X	X	X	X	X	7
Conditions/Diseases - Cardiovascular Disease	Х	X	Х	Х	Х	Х	Х	7
Conditions/Diseases - Diabetes	Х	Χ	Х	Х	X	X	Х	7
Conditions/Diseases - Obesity	Х	Х	Х	Х	Х	Х	Х	7
Food Access and Nutrition	Х	Х	Х	Х	Х	Х	Х	7
Transportation	Х	Х	Х	Х	Х	Х	Х	7
Infectious Disease - STI	Х	Х	Х	Х	Х	Х	Х	7
Maternal and Child Health	Х	Х	Х	Х	Х	Х	Х	7
Mental Health	Х	Х	Х	Х	Х	Х	Х	7
Access to Care - Other	Х	Χ	Х	Х	Х	Х	Х	7
Access to Care - Specialty Care	Χ	Х	Х	Х	Х	X	Х	7
Health Education/Literacy	Х	Χ	Х	Х	X	X	Х	7
Physical Activity	Х	Х	Х	Х	Х	Х	Х	7
Access to Care - Preventive Care	Χ	Χ	Х	X	X	X	Χ	7
Access to Care - Cost	Х		Х	Х	X	X	Х	6
Housing	Χ	Χ	Х	X		X	Χ	6
Infectious Disease - Other	Χ	Χ	Х	X	X	X		6
Infectious Disease - HIV	Х	Χ	Х	X	X	X		6
Mental Health - Providers	Х	Х	Х	X	X	X		6
Access to Care - Coordination of Care/Resources	Х	Х	Х	Х	Х	Х		6
Immigrant/Undocumented/Refugee Status	Х	Х	Х	Х	Х	Х		6
Language Barriers	Х	Χ	X	Х	Χ	Χ		6
Policy and Government	X	Χ	X	Х	X	Х		6
Stigma around Mental Health and Social Services	X	Х	Х	Х	Х	Х		6
Income	X		X	X	X	Х	Х	6
Other	X		X	Х	X		Χ	5
Substance Abuse - Opioids	X		Х	Х	Х		Χ	5
Substance Abuse - Smoking	X		X	Х	X		Χ	5
Cancer - All	X		Х	Х	X			4
Homelessness	X		Х	Х	Х			4
Education	X	Χ	X			Χ		4

Themes	District 2 Health Dept	НМС	NGHS GBSA	NGHS PSA	NGHS SSA 400	NGHS SSA North	SCH	Total
Substance Abuse - Alcohol	Х			Х	X		Χ	4
Substance Abuse - Drugs	Х		X		X		X	4
Substance Abuse Care	X		X	X	Χ			4
Access to Care - Preventable Hospitalizations	Х			Х	X			3
Violence	Х		X		X			3
Access to Care - Medications	Х		X				Х	3
Health Behaviors	Х		X	X				3
Social Isolation	X		X				X	3
Fair or Poor Health Status	Х			X				2
Injury and Death	Х			X				2
Mental Health - Suicide	Х				X			2
Cultural/Religious Barriers	Х						Х	2
Segregation	Х				X			2
Cancer - Breast	Х							1
Cancer - Lung			Х					1
Employment			Х					1

Note: A value of X indicates that a theme was mentioned by at least one of the interviews for a market

Appendix D: Additional Qualitative Data

Hall County Survey conducted by Bill Stiles at the Johnson Group

March 26, 2019

TO: Christy Moore, Manager, Community Health Improvement

Northeast Georgia Health System

FROM: Bill Stiles, Director of Strategy & Research

SUBJECT: Community Health Needs Assessment Interview Results

Overview

Over a three-day period in March 2019, a bilingual interview team fielded a short health questionnaire among residents in Hall County, Georgia. The effort was part of Northeast Georgia Health System's data collection process for a new Community Health Needs Assessment (CHNA).

The interview team completed 199 surveys among lower-income and uninsured adults visiting the following public locations:

- 1. The Primary Care Clinic located at the Hall County Health Department
- 2. The Good News Clinics

Gender:

- 3. The Gainesville Housing Authority Melrose Community Apartments
- 4. Tower Heights Apartments, operated by the Gainesville Housing Authority

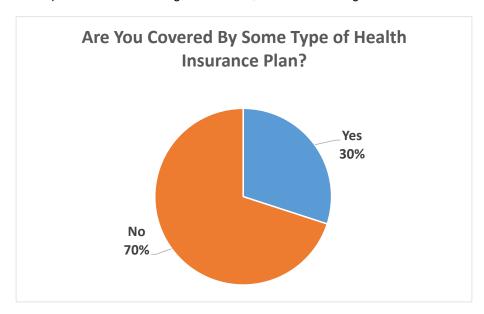
The locations for the interviews were similar to CHNA interviews conducted in 2016. The demographic profile of 2019 participants skews a little older than the 2016 study, but participation by gender and race are very close to the profile of the 2016 effort.

			
Male	51 or 26%		
Female	148 or 74%		
Age:			
18 - 24	3%		
25 - 34	12%		
35 - 44	23%		
45 - 54	23%		
55 - 64	23%		
65 - Over	17%		

Race:	
White, Non-Hispanic	30%
Black or African American	20%
Latino or Hispanic	47%
All Others	3%

Access to Health Insurance

Most of those interviewed (70%) reported they do not have health insurance of any type. This is a larger percentage than observed in 2016. Exactly 60 respondents (30% of the total) reported they do have insurance. Those with insurance would include the 34 respondents who were age 65 or older, and therefore eligible for Medicare.

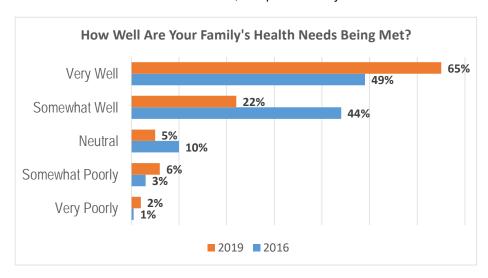


How Well Are Family Health Needs Met?

Despite a larger share of those with no health insurance, almost two-thirds of survey participants said their family's health needs are being met *very well*. This is a significant improvement over 2016. As seen in the chart on the following page, 65% said their family's needs are being met *very well*, compared to only 49% who said that three years ago.

The improvement primarily comes from those who, in 2016, said their family's health needs were met *somewhat well*, which shrank form 44% in 2016 to 22% in 2019.

Those on the poorly served end of the scale increased slightly. Though small in number, the share of those who said their needs are being met *somewhat poorly* or *very poorly* increased to 8% in the 2019 interviews, compared to only 4% in 2016.



The 69 people who said their family health needs were met *somewhat* or *very poorly*, or were being met only *somewhat well*, were asked the reasons why. The largest number of them, 41 people, cited lack of insurance as the primary reason. Further, an additional 17% cited financial difficulties or the high cost of care.

Q. What prevents your family from getting	Number of	Percent of
the care you/they need?	Responses	Responses
No insurance/lack of coverage	41	59%
Financial difficulties/Cost of care	12	17%
Lack of access to doctors	4	6%
Transportation problems	1	1%
Legal status/No documentation	1	1%
Special needs	1	1%

Some participants who reported having insurance said they still could not afford care due to their inability to afford copays and deductibles.

Greatest Health Needs

When asked to name their greatest health need, most respondents talked about their personal health struggles. The most frequently mentioned health needs were related to personal metabolic issues like diabetes, hypertension and cholesterol.

Participants could name more than one health need. The table below shows the most frequently cited health needs and the number of respondents who mentioned them.

Q. What would you say is your greatest	Number of
health need?	Responses
Diabetes	38
High blood pressure	28
Routine care/check-ups	24
Dental care	15
Pain management/joint pain/general pain	15
Thyroid issues	12
High cholesterol	9
Knee pain/knee problems	9
Mental health/depression/anxiety	9
Heart care/heart problems	8
Lack of insurance	8
Cost of care/paying for care	8
Cancer/past cancer	6
Back pain	6
COPD	6
Obesity/weight control	5
Vision	5
Women's issues	3
Asthma	3
None at all	13

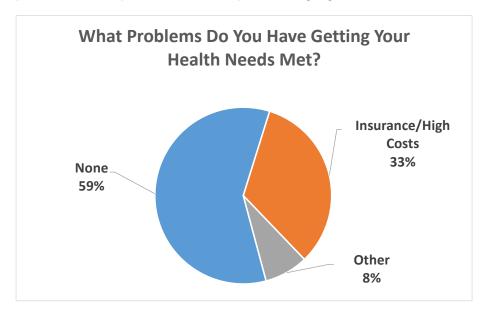
This list is substantially different than the one compiled in 2016. Three years ago, significantly more people cited issues with health insurance and health costs as their greatest health need. This was not the case this time, even though 70% of respondents have no health insurance.

Problems Getting Health Needs Met

Over half of all respondents (117 out of 199) reported they are having no problems getting their health needs met, at least not currently. Many of them cited the clinics that are available to them as the reasons why. They might have ongoing health issues, but resources like the Good News Clinics or the NGHS Primary Care Clinic are meeting their needs adequately.

Among those who did report problems getting their health needs met, lack of insurance or the inability to pay for care were the primary reasons why. A total of 65 participants, on third of total participants, reported insurance and/or financial problems. A few reported having insurance, but still being unable to pay for costly medicines or a major surgical procedure, such as a knee replacement.

Among the few remaining respondents (only 17 people), the list of problems focused on specific complaints about medical offices or waiting times. Only one person reported a problem with transportation. No one reported a language barrier.



The 2019 study indicates far fewer problems getting access to health services than was observed in the 2016 study. At that time, 68% of all respondents reported problems with insurance or the cost of care. Only 16% reported they were having no problems at all in 2016.

The Most Important Community Health Problems

Interview participants were asked to express their opinions about the top three health problems facing the community. The result is a long list of factors that, when compiled, can be grouped into the following five major issues.

1. Lack of health insurance and struggles paying the high cost of care and prescription medications. (Referenced 69 times)

Insurance and affordability issues are connected. Paying for either insurance premiums or out-of-pocket medical costs are difficult for low-income families.

Insurance is not a guarantee they can afford care. High deductibles can still be daunting. Some who want insurance said they are unable to get it due to unemployment or lack of documentation.

2. Lack of access to routine medical care, well-patient physicals and sick care. (Referenced 67 times)

This is also related to the lack of insurance and the high cost of care. Some residents expressed frustration, saying that if they only had insurance, they would have access to more options for medical care. A few reported a feeling of being disrespected when they try to make a medical appointment.

Those currently getting care at free clinics appreciate what they have, but some would like to see more choice and more access, including access to doctors outside of the free clinics. Some would also like access to weekend care or evening hours so they do not have to leave work for a medical appointment.

A small subset of this group (six people) cited lack of access to women's services and prenatal care as problems.

3. A lack of nutrition education, wellness, weight loss and exercise programs. (Referenced 48 times)

Many of those participating recognize the community has a problem with weight and poor nutrition. Many feel the low-income and uninsured community lacks adequate education, instruction and opportunity to learn and adopt healthier habits.

An additional 12 participants said that diabetes and hypertension are among the top problems in the community.

4. Drug addiction and alcohol abuse. (Referenced 19 times)

The substance abuse problems mentioned included opioid and prescription drug abuse. Several expressed concern that drug issues are making the community less safe.

5. Communication and community education. (Referenced 15 times)

Some in the community feel residents would have more access to health care and related services if they better understood all their options. They suggest more community education about using and accessing free and low-cost health services.

Additional health priorities mentioned by participants include:

Diabetes (10 mentions)
Mental health care (9)
Heart care (9)
Dental care (9)
Elder care issues (8)
Pollution/Dirty air and water (7)
Cancer (6)
Lack of documentation (6)
Women's services/prenatal care (6)
Lack of vision care (5)
Homelessness (4)
Language barriers (4)
Lack of transportation (4)
Pain management (3)
Smoking (2)

Conclusion

Compared to similar interviews collected for the 2016 CHNA, it appears more lower-income and uninsured Hall County residents have found access to care that meets most of their family's needs. That does not mean health care is always affordable. Many residents still struggle with unexpected costs, but the community seems to be doing better meeting basic needs overall.

The original interview questionnaires are available should Northeast Georgia Health System want them. Their content has been tabulated into a spreadsheet that will be sent along with this summary report.

Thank you for the opportunity to participate in this important project. Should anyone have questions about the questionnaires, the interviews or this report, please contact:

Bill Stiles, Director of Strategy and Research The Johnson Group bstiles@johngroup.com 423-305-6425

NGHS Hall County Mental and Behavioral Health Listening Sessions



US ECONOMIC IMPACT

Without greater willingness to tackle anxiety and depression, a staggering

12 billion days,

50 million years of work,

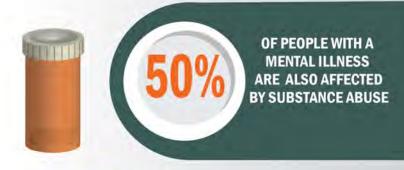
will be lost to the two disorders between now and 2030.

SOURCE: World Health Organization (WHO) analysis, recently published in The Lancet Psychiatry.

ANXIETY IS THE MOST COMMON ILLNESS IN THE U.S. AFFECTING 40 MILLION ADULTS 1 IN 5

ADULTS SUFFER FROM SOME FORM OF MENTAL ILLNESS

1 IN 4
PEOPLE WITH CANCER
DEVELOPS DEPRESSION



6.1 Million

US adults live with bipolar disorder

21.5 Million

adults live with a substance abuse disorder

SOURCE: STATE OF MENTAL HEALTH REPORT 2018, MENTAL HEALTH AMERICA



HALL COUNTY



Hall County has recognized mental/behavioral health in its latest strategic plan.

Behavioral Health Concerns Ranked as one of the

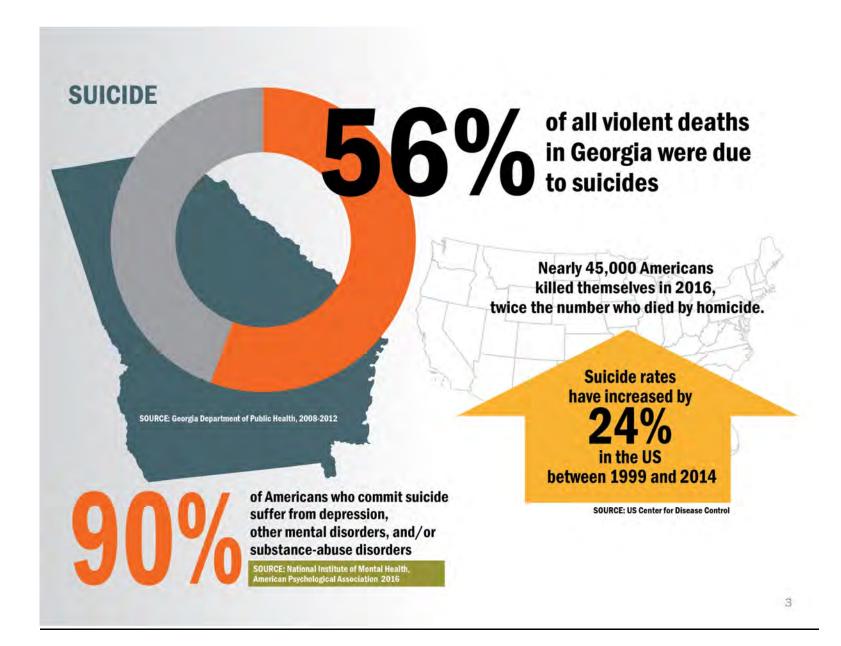
Top 5

in NGHS' Community Health Needs Assessment

Governor Deal's Executive Order forms Commission on Children's Mental Health



- 1) Access to behavioral health services for children
- 2) Employment/Supported Education programs
- 3) Behavioral health continuum of care for highest levels of need
- 4) Telemedicine infrastructure
- 5) Coordinated services
- 6) Evidence-based training/monitoring
- 7) Early intervention and prevention to combat the opioid crisis
- 8) Multi-pronged suicide prevention





1-2 attempts

3-5 attempts

+5 attempts



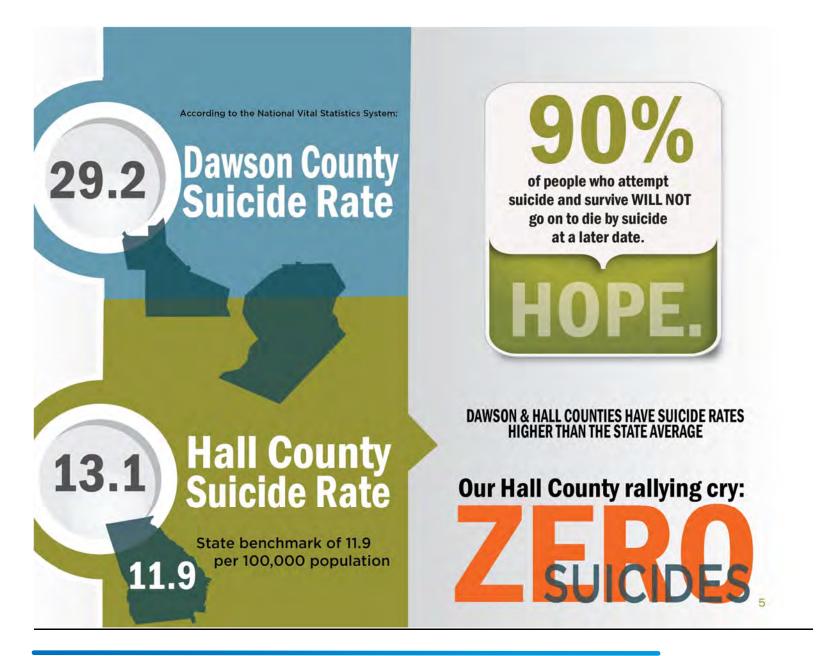
Roughly 5% of 6th to 12th grade students in Gainesville & Hall County schools reported they had attempted suicide at least once in the previous 12 months.

SOURCE: 2018 Georgia Student Health Survey **Enrollment figures from PitneyBowes**





3-5 attempts



OUR CHILDREN

1 IN 5

CHILDREN AGE 3-7 HAS A DIAGNOSED MENTAL HEALTH ISSUE

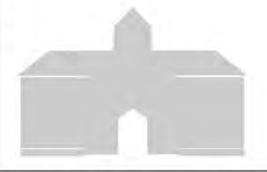
Half of all chronic mental health illnesses begin by the age of 14 10%

of youth in Ga. ages 12-17, had at least one

MAJOR DEPRESSIVE **EPISODE**

in the past year

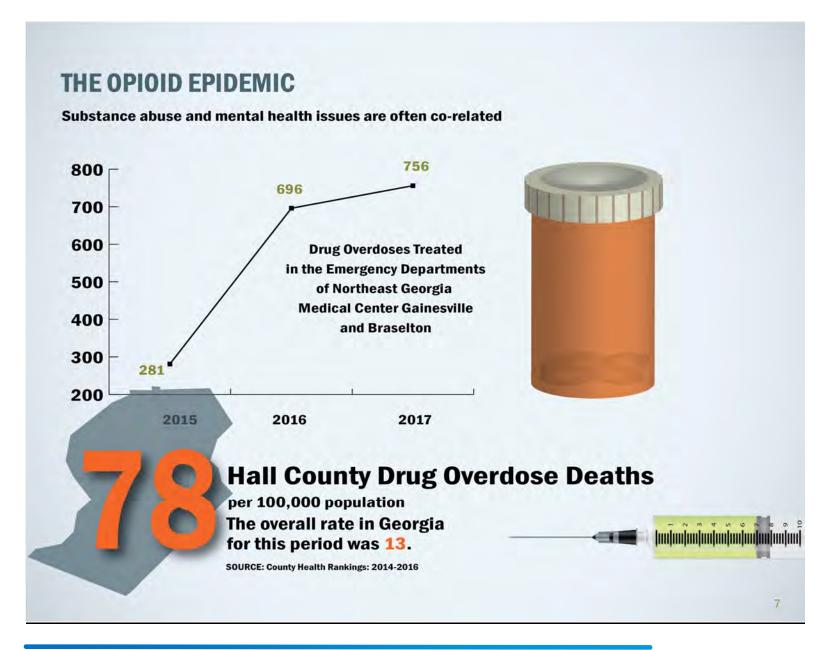
Georgia is ranked 4th highest in the nation.

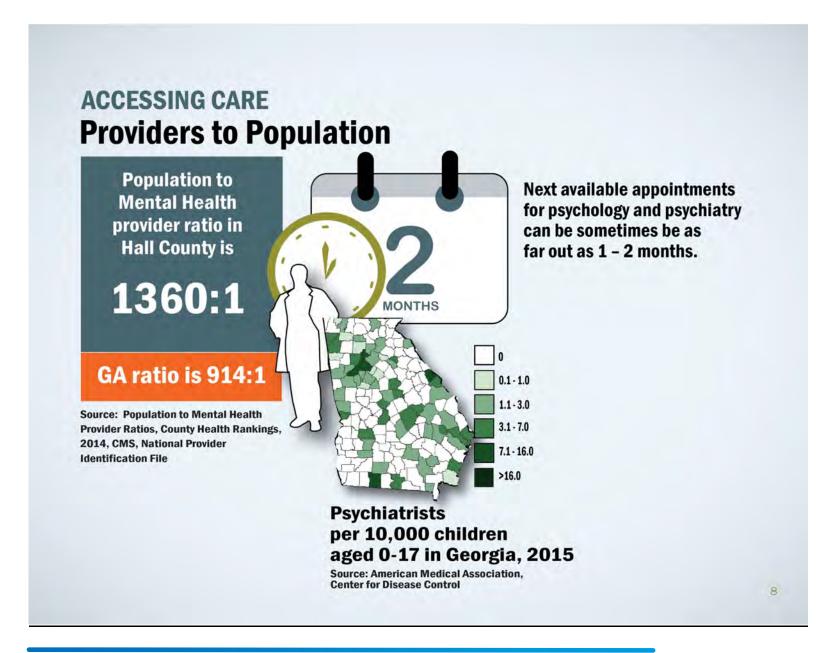


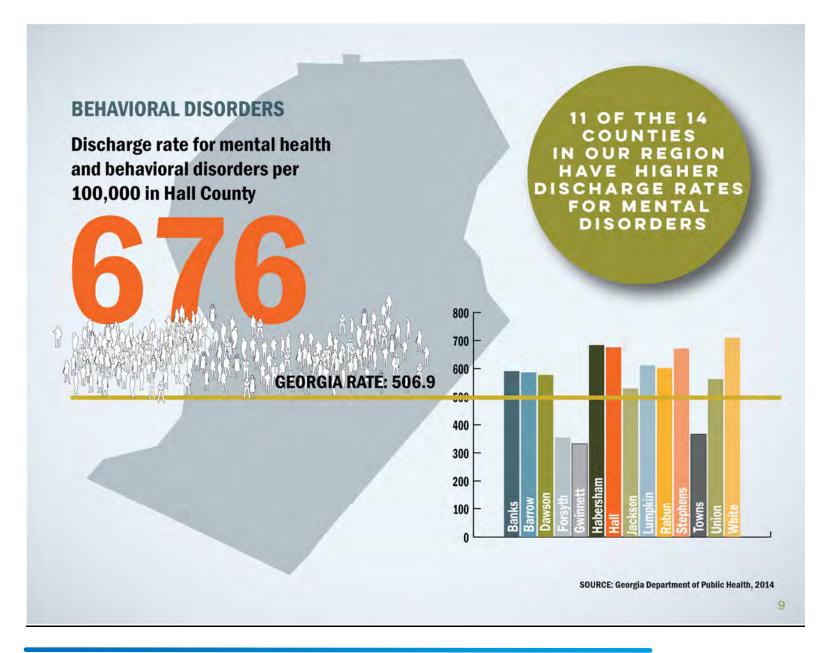
Kids, who have an unmet mental health need, miss significantly more days of school than kids who don't have those needs

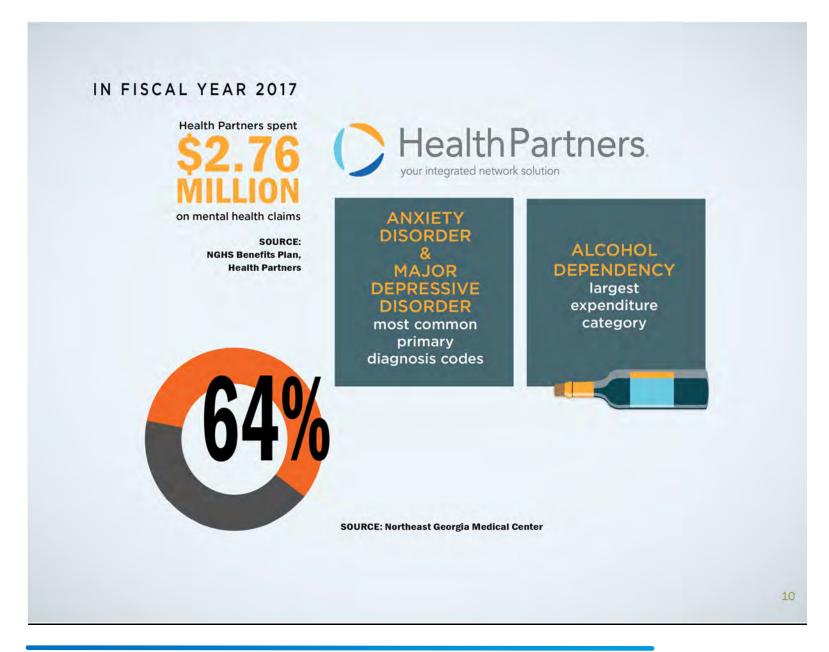


SOURCE: STATE OF MENTAL HEALTH REPORT 2018. MENTAL HEALTH AMERICA









PRIMARY DIAGNOSIS RELATED TO PSYCH IN GEORGIA of patients who sought treatment in Georgia were self-pay. Counseling on Substance Use **NGHS Gainesville &** & Abuse **Braselton saw the** was the highest diagnosis code 3rd largest number for patients age 0-17, of patients with a peak at 14-16 years old. compared to other providers in the state. **SOURCE: GHA State Database**

Hall County Behavioral Health Initiative

One Hall Meeting

November 28, 2018

Listening Sessions with 60+ Participants September, 2017

	Organizations Represented	at Listening Sessions	s, September 2018
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AVITA Good News Clinics NAMI, Hall Co

Basan Ministries Government Affairs Newtown Florist Club

Brenau University Hall Co Government NGHS
CenterPoint Hall Co Sherriff's Office NGPG BH

Children's Center for Hope & Healing Hall County Schools PEER Support Group

Community Service Center Hospitalist Physicians
Dir Employee Wellness Newtown Florist Club Psychiatrist

Employee Health Counselor NGHS Rape response therapist

Family TIES NGPG BH Social Worker

North Georgia Community Twin Lakes Recovery

GA Legal Services Foundation Center
GA Mtn Food Bank Housing Authority United Way
Gainesville City Schools Lanier Boys and Girls Clubs YMCA

GNC Laurelwood



Listening Sessions – Vision Discussion

Access	Collaboration	Education
Easily accessible (where, when, how)	Open communication	Educate our educators
Enhance public transportation system	Cultural appropriateness	First Line of Defense - public health model – Mental Health
Financial Access (Medicare/Medicaid), reduced	Hispanic culture/language, address language	Outreach/Education, understanding
costs	barriers, diversity	the diagnosis
Close gaps in care after discharge and	Stigma free, normalizing anxiety and	
between services	depression, engage churches and schools, education across the community	Mental health navigator
Flow chart – navigate the system; seamless throughout the community	Thoughtfully designed wellness campaign that recognizes diversity	Peer driven support
Integrated with urgent care	Create hope, create purpose	Improve prevention, screening in schools
Flexible – no one size fits all	Start with kids – pre-natal risk factors, big brother/sister program, mentor programs	Build social networks
Access at various levels of care across lifespan		Education on signs and symptoms
Better screening programs	Connected partners	Enhance advocacy
More care continuum options	Behavioral health approach that includes	Planning for future gaps in provider
- 10.0 cm o constituant opinions	drug/substance use	availability, training the community
More practitioners	Recovery focus – goal	Provider education, integration of mental health into practices
Availability of right provider for individual	Improving housing, transportation and employment (all linked together)	Training for teachers, police, other non-provider
Access to trained prescribing physicians	One place to get information and direction	·
	Collaborative across providers	

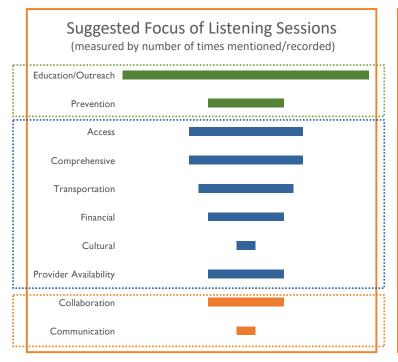






Gaps and Challenges

Comments from Listening Sessions, September 2018





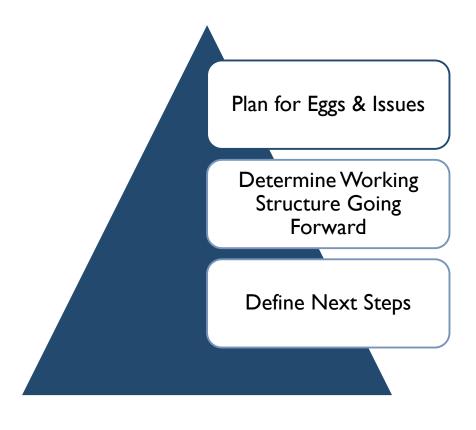


Hall County Behavioral Health Initiative

ACE Meeting

December 4, 2018

Our Purpose Today





Situation Overview

The Problem

We are not meeting the mental and behavioral health needs of our community.

Our Objective

We're seeking a more unified approach in reaching our community's mental health needs- need to maximize resources to identify and solve issues effectively.



IALL COUNTY



Hall County has included mental/behavioral health in its latest strategic plan.

Behavioral Health Concerns Ranked as one of the

Top 5

in NGHS' Community Health Needs Assessment

Governor Deal's Executive Order forms Commission on Children's Mental Health



- 1) Access to behavioral health services for children
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- 7) Early intervention and prevention to combat the opioid crisis
- 8) Multi-pronged suicide prevention



3-5 attempts

+5 attempts



Roughly 5% of 6th to 12th grade students in Gainesville & Hall County schools reported they had attempted suicide at least once in the previous 12 months.

SOURCE: 2018 Georgia Student Health Survey Enrollment figures from PitneyBowes





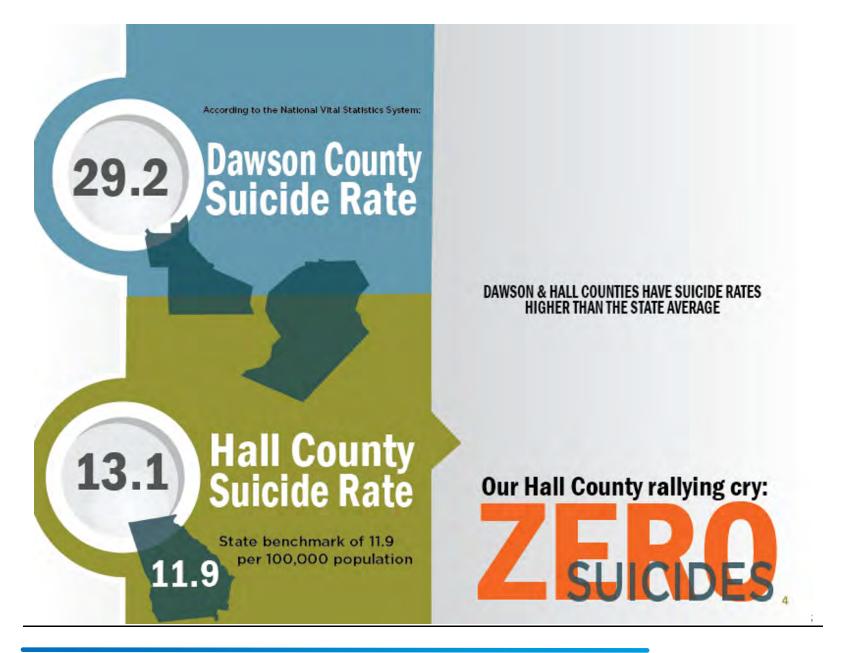
1-2 attempts

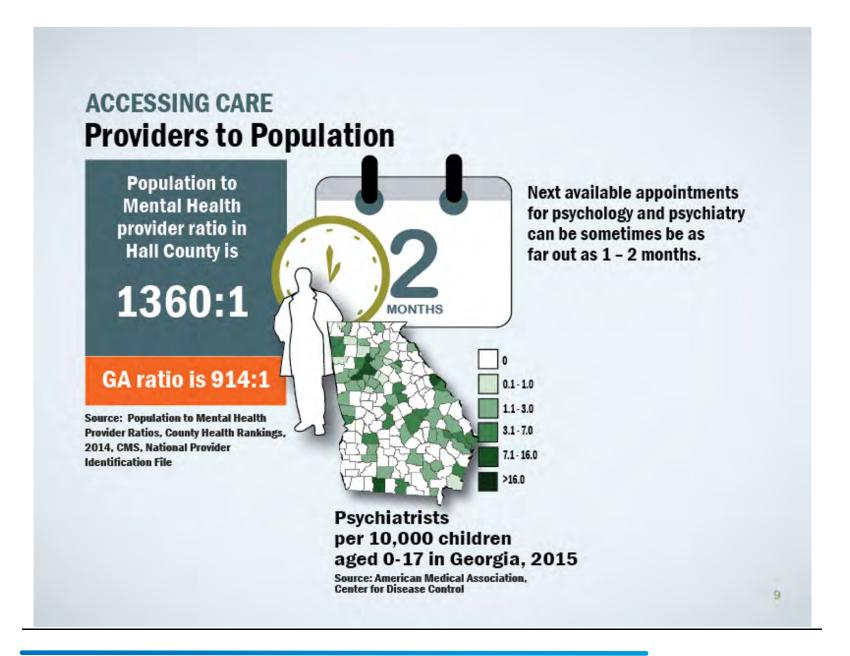
3-5 attempts

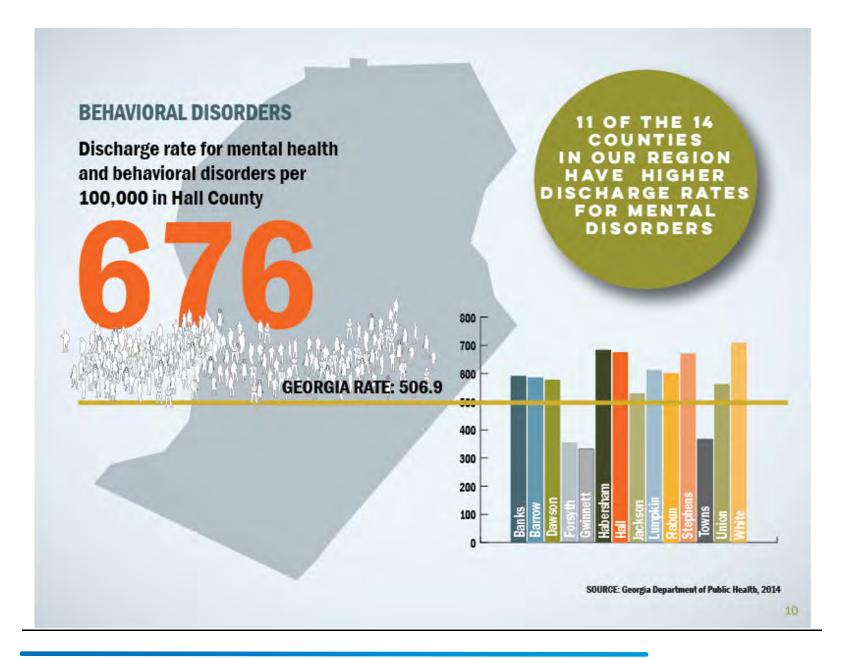
+5 attempts











Listening Sessions with 60+ Participants September, 2018

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Organizations	nebiesented	ו מו בואנכוווווצי	つとうショウロラ・ラム	eptember 2018

AVITA Good News Clinics NAMI, Hall Co

Basan Ministries Government Affairs Newtown Florist Club

Brenau University Hall Co Government NGHS
CenterPoint Hall Co Sherriff's Office NGPG BH

Children's Center for Hope & Healing Hall County Schools PEER Support Group

Community Service Center Hospitalist Physicians
Dir Employee Wellness Newtown Florist Club Psychiatrist

Employee Health Counselor NGHS Rape response therapist

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North Georgia Community Twin Lakes Recovery

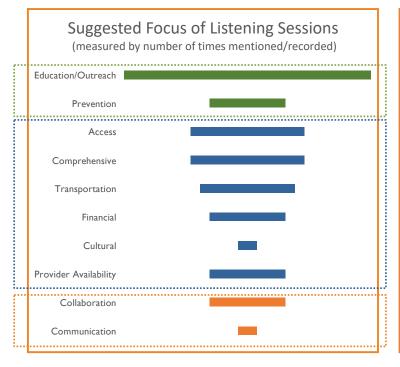
GA Legal Services Foundation Center
GA Mtn Food Bank Housing Authority United Way
Gainesville City Schools Lanier Boys and Girls Clubs YMCA

GNC Laurelwood



Gaps and Challenges

Comments from Listening Sessions, September 2018







Combining our community vision



We envision a future where behavioral health needs are recognized and treated. We seek to increase knowledge of and access to behavioral health services.

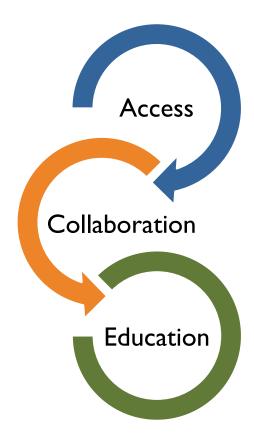
Community listening session consolidated vision

A comprehensive system of integrated services that recognizes and treats the behavioral health needs of people where and when they need care.

ш



Priorities for Action



NewHeights Group

Initial Actions Proposed

ACCESS

Acquisition of a shared data platform that will provide information and tracking of clients in support of a robust navigation program.

COLLABORATION

Development of a partnership structure that will support ongoing collaborative efforts.

EDUCATION

Implementation of an expanded education effort utilizing the trainers that the Gainesville City School system is preparing to offer the Mental Health First Aid Program.



Union General Hospital and Chatuge Regional Hospital 2018 CHNA Reports

As part of the 2019 CHNA, qualitative findings from the Union General and Chatuge Regional Hospitals 2018 CHNA Reports were utilized to further assess the needs in Union and Towns counties respectively. The two combined reports gathered qualitative input via 148 community-based surveys and four key informant interviews.

The full reports can be downloaded for free via:

- Union General Hospital 2018 CHNA Report:
 http://www.uniongeneralhospital.com/fullpanel/uploads/files/final-2018-chna-union-general-hospital.pdf
- Chatuge Regional Hospital 2018 CHNA Report:
 http://www.uniongeneralhospital.com/fullpanel/uploads/files/final-2018-chna-chatuge-regional-hospital.pdf



Appendix E: Prioritization Session Participants

CHNA Advisors- Prioritization Work Session Attendees

Absent Walk-In

NGHS		
		Tracy Vardeman, Christy Moore
1.	Olivia Skey	Board member, Co-Chair, NGMC CHNA
2.	Monica Newton, DO	Physician, Co-Chair, NGMC CHNA
3.	Semuel Maysonet	Advisory Board Chair
4.	Deborah Mack	Board Member
5.	Jessica Dudley	President, UWHC
6.	Jackie Wallace	Board Member
7.	Jo Brewer	NGMC Admin, Medical Plaza 400
8.	Phillippa Lewis Moss	Board Member NGMC, United Way, NGCF, JEMC
9.	Gretchen Holmes	Director of Scholarly Activity and Research, GME
Distric	ct II Public Health	
		Dr. Pamela Logan, Erika Lopez Gil
	Nadine Wardenga	White County BOH Chair
2.	William Wade	Dawson County BOH
3.	Elizabeth Fielden	Hall County Family Connection
4.	Greg Supianoski	Hall County YMCA
5.	Stacy Brooks	Office Manager Advisory Lead
6.	Mark Palen	EP Manager, DPH
7.	Alan Satterfield	Nursing Manager, DPH
8.	Aylin Alvorado (walk in)	Health Educator, Adolescent Health (DPH)
SCH		
		Samantha Rickman, Tonya Chitwood
1.	Bryan Dorsey	SC Superintendent, Stephens Co Schools
2.	David Cronic	TC Manager, NGHS
3.	Noel Pauley	Family Connections Director
4.	Sherry Beavers	Executive Director, Open Arms GA
5.	Tim Martin	DA Director, SCDA
6.	Ashely Dunson	Community Paramedicine, Stephens Co. Hospital
7.	Joyce Payne	SCHD Manager, DPH
8.	Mark Smith	Power House for Kids
9.	Van Loskoski (walk in)	VP Physician Practices
10	. Michael Carter (walk in)	
11	. Sarah Welch (walk in)	
12	. Tonya Chitwood (walk in)	

HMC	Kesha Clinkscale, Vice President of External Affairs Leigh Hunnicutt, Director of Regulatory Services
1. Mike Beecham	Director of Planning and Development, Habersham Co.
2. Jeanne Buffington	Executive Director, Rape Response
3. Kesha Clinkscale	VP, External Affairs & Executive, HMC Foundation
4. Lane Gresham	Director of Community Relations, Tallulah Falls School
5. Kristy Hammond	Membership Coordinator, Habersham Chamber of Commerce and HMC Foundation Board Member
6. Thomas Hatchett	MD, HMC OBGYN
7. Leigh Hunnicutt	Director, Regulatory Services
8. Ken Johnson	First Vice President, Investments, Raymond James and HMC Foundation Board Member

<u>Appendix F: Community Resources Identified to Potentially Address Significant</u> Health Needs

A list of community resources available by county across the northeast Georgia region can be accessed via https://www.nghs.com/community-resource-guide.

Below is a list of additional resources in the northeast Georgia region identified via community input through the CHNA process:

Community Resources
A Kids Dream
Action Incorporated
American Cancer Society
Avita Community Partners
Backpacks Buddies
Backpacks of Love
Barrow County Cooperative Benevolence Ministries, Inc
Barrow County Family Connection
Barrow County Food 2 Kids Program
Barrow Ministry Village
Bethlehem Church
Boys and Girls Club
Brenau University Counseling
Chamber of Commerce
Churches
Clarkston Community Health Center
Community Helping Place
Community Paramedicine
Crisis intervention Training for Police Officers
Faith Based Groups
Family Connections
Family Resource Center
Family Treatment Court
Felony Drug Court Program
First Baptist Church
Food Pantries
Foundations for Living

Community Resources
Franklin Georgia Head Start
Free & Low-Cost Clinics
Georgia Highlands Medical Services
Georgia Lions Lighthouse Foundation
Georgia Mountain Food Bank
Georgia's 9th Congressional District
Good News Clinic
Good Shepherd Clinic of Dawson County, Inc.
Grace Episcopal Church
Grace Gate Free Clinic
Greater Hall Chamber of Commerce
Gwinnett Coalition for Health and Human Services
Habitat for Humanity
Hall County Free Clinic
Harmony House, Darkness to Light (D2L)
Hart Partners
Health Department
Help a Child Smile
Hispanic Health Clinics
HMA Physician Group
iServe Ministries
Jackson County Family Connection
Jackson Electrical Membership Co-Op
Jackson Faith Based Food Pantries
Junior League
Lakewood Baptist Church
Lanier Technical College
Longstreet Clinic
Low income Dental Clinic in Hall County
Meals on Wheels
Medical Education Residency program
MedLink Georgia Clinic
Mustard Seed Counseling

Community Resources
Northeast Georgia Food Bank
Open Arms
Peace Place
Piedmont Rape Crisis Center
PINES Piedmont Regional Library System
Prince of Peace Catholic Church
Project Adam
Recreation Centers
Ric Rack Charity Thrift Store and Food Bank
School System
Senior Centers
Sharing & Caring Place
St. Anthony of Padua Catholic Church
St. John Baptist Church
St. Mary's Sacred Heart Hospital
St. Paul United Methodist Church
St. Vincent de Paul Georgia
Teen Maze
The Chamber of Commerce 2030 Plan
The Hart County Botanical Gardens
The HOPE Center
The Wimberly Center for Community Development
Uber Health
United Way
United Way 211 Helpline
USDA, Food Distribution Program
Vision 2030
Wee Books Program
WIC
YMCA

Appendix G: Federally Designated Health Professional Shortage Areas and Medically Underserved Areas and Populations

Health Professional Shortage Areas (HPSA)62

County Name	HPSA ID	HPSA Name	HPSA Discipline Class	Designation Type		
Banks	1138664546	Low Income - Banks County	Primary Care	Low Income Population HPSA		
Banks	6137445572	Low Income-Banks County	Dental Health	Low Income Population HPSA		
Banks	7139510135	Mental Health Catchment Area 3 - Low Income-Georgia Mountains Service Area	Mental Health	Low Income Population HPSA		
Barrow	1132460351	Low Income-Barrow County	Primary Care	Low Income Population HPSA		
Barrow	6132181413	Low Income - Barrow County	Dental Health	Low Income Population HPSA		
Barrow	7139976672	Mental Health Catchment Area 10- Advantage Behavioral Health Systems	Mental Health	High Needs Geographic HPSA		
Dawson	1137927685	Low Income-Dawson County	Primary Care	Low Income Population HPSA		
Dawson	7139510135	Mental Health Catchment Area 3 - Low Income-Georgia Mountains Service Area	Mental Health	Low Income Population HPSA		
Forsyth	113999131Y	Georgia Highlands Community Health Center	Primary Care	Federally Qualified Health Center		
Forsyth	6139991372	Georgia Highlands Community Health Center	Dental Health	Federally Qualified Health Center		
Forsyth	7139510135	Mental Health Catchment Area 3 - Low Income-Georgia Mountains Service Area	Mental Health	Low Income Population HPSA		
Forsyth	7139991342	Georgia Highlands Community Health Center	Mental Health	Federally Qualified Health Center		

⁶² U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018



County Name	HPSA ID	HPSA Name	HPSA Discipline Class	Designation Type		
Franklin	1132769023	Low Income - Franklin County	Primary Care	Low Income Population HPSA		
Franklin	6135853677	Low Income - Franklin County	Dental Health	Low Income Population HPSA		
Franklin	7139510135	Mental Health Catchment Area 3 - Low Income-Georgia Mountains Service Area	Mental Health	Low Income Population HPSA		
Gwinnett	1132600320	Phillips State Prison	Primary Care	Correctional Facility		
Gwinnett	1136032667	Low Income-Northwest Gwinnett County	Primary Care	Low Income Population HPSA		
Gwinnett	113999130D	Four Corners Primary Care Center	Primary Care	Federally Qualified Health Center		
Gwinnett	113999130F	Center for Pan Asian Community Services, Inc.	Primary Care	Federally Qualified Health Center		
Gwinnett	613999130E	Four Corners Primary Care Center	Dental Health	Federally Qualified Health Center		
Gwinnett	613999130G	Center for Pan Asian Community Services, Inc.	Dental Health	Federally Qualified Health Center		
Gwinnett	7135795987	Phillips State Prison	Mental Health	Correctional Facility		
Gwinnett	713999130B	Four Corners Primary Care Center	Mental Health	Federally Qualified Health Center		
Gwinnett	713999130D	Center for Pan Asian Community Services, Inc.	Mental Health	Federally Qualified Health Center		
Habersham	1138060368	Low Income-Habersham County	Primary Care	Low Income Population HPSA		
Habersham	1132314624	Lee Arrendale State Prison	Primary Care	Correctional Facility		
Habersham	6135285433	Low Income-Habersham County	Dental Health	Low Income Population HPSA		

County Name	HPSA ID	HPSA Name	HPSA Discipline Class	Designation Type		
Habersham	6135020614	Lee Arrendale State Prison	Dental Health	Correctional Facility		
Habersham	7139510135	Mental Health Catchment Area 3 - Low Income-Georgia Mountains Service Area	Mental Health	Low Income Population HPSA		
Habersham	7138642355	Lee Arrendale State Prison	Mental Health	Correctional Facility		
Hall	1136718037	Low Income-Hall County	Primary Care	Low Income Population HPSA		
Hall	7139510135	Mental Health Catchment Area 3 - Low Income-Georgia Mountains Service Area	Mental Health	Low Income Population HPSA		
Hart	1134202365	Hart County	Primary Care	High Needs Geographic HPSA		
Hart	6133427009	Low Income - Hart County	Dental Health	Low Income Population HPSA		
Hart	7139510135	Mental Health Catchment Area 3 - Low Income-Georgia Mountains Service Area	Mental Health	Low Income Population HPSA		
Jackson	1137890671	Low Income-Jackson County	Primary Care	Low Income Population HPSA		
Jackson	7139976672	Mental Health Catchment Area 10- Advantage Behavioral Health Systems	Mental Health	High Needs Geographic HPSA		
Lumpkin	1134202365	Hart County	Primary Care	High Needs Geographic HPSA		
Lumpkin	6133427009	Low Income - Hart County	Dental Health	Low Income Population HPSA		
Lumpkin	7139510135	Mental Health Catchment Area 3 - Low Income-Georgia Mountains Service Area	Mental Health	Low Income Population HPSA		
Rabun	1132432544	Low Income - Rabun County	Primary Care	Low Income Population HPSA		
Rabun	7139510135	Mental Health Catchment Area 3 - Low Income-Georgia Mountains Service Area	Mental Health	Low Income Population HPSA		

County Name	HPSA ID	HPSA Name	HPSA Discipline Class	Designation Type			
Stephens	1133838979	Low Income-Stephens County	Primary Care	Low Income Population HPSA			
Stephens	7139510135	Mental Health Catchment Area 3 - Low Income-Georgia Mountains Service Area	Mental Health	Low Income Population HPSA			
Towns	1137756679	Low Income - Towns County	Primary Care	Low Income Population HPSA			
Towns	113999134H	Hiawassee Family Health Practice, Primary Care	Primary Care	Rural Health Clinic			
Towns	7139510135	Mental Health Catchment Area 3 - Low Income-Georgia Mountains Service Area	Mental Health	Low Income Population HPSA			
Union	1131641363	Low Income - Union County	Primary Care	Low Income Population HPSA			
Union	6136764089	Low Income - Union County	Dental Health	Low Income Population HPSA			
Union	7139510135	Mental Health Catchment Area 3 - Low Income-Georgia Mountains Service Area	Mental Health	Low Income Population HPSA			
White	1133522531	Low Income-White County	Primary Care	Low Income Population HPSA			
White	7139510135	Mental Health Catchment Area 3 - Low Income-Georgia Mountains Service Area	Mental Health	Low Income Population HPSA			

Medically Underserved Areas and Populations (MUA/P)⁶³

County Name	MUA/P Source Identification Number	Service Area Name	Designation Type	Rural Status		
Banks	601	Banks County	Medically Underserved Area	Rural		
Forsyth	637	Forsyth County	Medically Underserved Area	Non-Rural		

⁶³ U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018



🁸 IBM Watson Health.

County Name	MUA/P Source Identification Number	Service Area Name	Designation Type	Rural Status	
Franklin	4017	Franklin Service Area	Medically Underserved Area	Rural	
Gwinnett	642	Gwinnett Governor	Medically Underserved Population – Governor's Exception	Non-Rural	
Habersham	7924	Low Income - Habersham County Medically Underserved Population		Rural	
Hall	715	Med Ind - Southeast Gainesville Service Area	Medically Underserved Area – Governor's Exception	Non-Rural	
Hart	645	Hart County	Medically Underserved Area	Rural	
Hart	7569	Hart County	Medically Underserved Area	Rural	
Jackson	718	Jackson Service Area	Medically Underserved Area	Rural	
Lumpkin	661	Lumpkin County	Medically Underserved Area	Rural	
Rabun	685	Rabun County	Medically Underserved Area	Rural	
Towns	7725	Low Income - Towns	Medically Underserved Area	Rural	
Union	702	Union County Medically Underserved Area		Rural	
White	709	White County	Medically Underserved Area	Rural	

Appendix H: Public Health Indicators for Northeast Georgia Region Recommended Priority Needs

			County Values															
Health Need	Health Indicator	Indicator Type	Banks	Barrow	Dawson	Forsyth	Franklin	Habersham	Hall	Hart	Jackson	Lumpkin	Rabun	Stephens	Towns	Union	White	State Benchmark
	Suicide Rate	rate per 100k		17.1	30.2		25.8	14.3	16.8	23.4	22.9	20.6		20.6		21.2		13.1
	Mental and Behavioral Disorders - Discharge Rate	rate per 100k	713.4	582.5	771.5		845.3	773.1	852.6	761	767.5	796.2	614.7	1083.7	636.4	721.8	825.7	531.5
	Disconnected Youth Age 16-24	%	19.1	17.7			30.2	18.2	17.1	21.5	19.7			23.6				17.0
	Other Mental and Behavioral Disorder Deaths - Not Related to Drug Use	rate per 100k	51.4	33.3	37.6				47.1		33.1	52.2				35.4	38.1	30.8
	Mental and Behavioral Disorders - ER Visit Rate	rate per 100k		1431.2	1249.1			1103.8	1126		1231.4			1526.2	1355	1572	1142	1098.5
Behavioral Health	Social and Membership Associations	rate per 10k		8.0		5.9			7.7			6.4						8.9
	Poor Mental Health Days	days/mo	4.0	3.8			4.2	4.0	3.8	4.1		4.1	4.0	4.1	3.8		3.9	3.8
	Population to One Mental Health Provider	/provider		6427	843	2085	1395	2603	1347	8518	2228	1429	753	1717	11391	1529	1605	829
	Frequent Mental Distress	%					13.6			13.5		13.0		13.4				13.0
	Drug Overdose Deaths	rate per 100k		15.5	22.9	13.6	28.4		13.4		19.0	14.9	24.4	20.8		16.4	16.4	12.7
	Opioid Prescriptions per 100 Persons	rate per 100		74.0	142.7		111.3	98.9	87.1	####	109.1	73.9	145.8	153.4	87.6	106.0	92.0	70.9
	Alcohol-Impaired Driving Deaths	%		27.3				39.5	25.8	47.6			36.8					23.3

			County Values															
Health Need	Health Indicator	Indicator Type	Banks	Barrow	Dawson	Forsyth	Franklin	Habersham	Hall	Hart	Jackson	Lumpkin	Rabun	Stephens	Towns	Union	White	State Benchmark
	Excessive Drinking	%	16.0	16.8	17.7	17.6	15.6	16.1	16.6		18.5	17.7		15.3			15.9	15.1
	Drug-Related Deaths	rate per 100k							17.1									14.7
	Adult Smoking	%	19.5	18.1			20.0	19.8		19.7		19.5	18.6	19.3				17.9
Mental and Behavioral Health	Percent of Population 12+ Reporting Non- medical Use of Pain Relievers	%		5.0							5.0							4.7
	Percent of People 12+ Reporting Drug Dependence	%		3.1							3.1							2.9
	Birth Defects - ER Visit Rate	rate per 100k	31.5	15.8	27.2			20.2					41.6	19.5				12.5
	Fetal and Infant Conditions - Discharge Rate	rate per 100k	50.9				55.5	44.8		82.9			99.4	51.3				34.8
	Birth Defects - Discharge Rate	rate per 100k	64.9	39.2	58.2	32.4	62.6	38.6	41.3		39.8	53.6	90.4	44.9		63.8	66.3	31.7
Access to Care	Pregnancy and Childbirthing Complications - ER Visit Rate	rate per 100k	#####	1276.0			1443.3				1334.8			2470.0		#####		1077.3
	Births to Mothers with Less than 12 Years of Education	%	14.9				22.1	31.7		16.6	17.3	15.8	22.8	15.3		21.8	28.3	14.5
	Fetal and Infant Conditions - ER Visit Rate	rate per 100k			55.5		65.6	58.9								93.3		53.0
	Child Mortality < 18 Years of Age	rate per 100k	64.4		105.5		102.9			91.9				61.0				60.6

									Coun	ty Valu	ıes							
Health Need	Health Indicator	Indicator Type	Banks	Barrow	Dawson	Forsyth	Franklin	Habersham	Hall	Hart	Jackson	Lumpkin	Rabun	Stephens	Towns	Union	White	State Benchmark
	Teen Birth Rate per 1000 Population Age 15-19	rate per 1k	35.0				46.6	35.8	39.3	35.6			32.2	41.7				31.6
	Pregnancy and Childbirthing Complications - Discharge Rate	rate per 100k	#####			1392.7	1429.4	1374.0	1467.0		1446.2						#####	1289.5
	Low Birth Weight	%					9.7											9.5
	Driving Alone to Work with Long Commute > 30 minutes	%	47.6		57.2	50.2						42.4					43.2	40.0
Access to	Driving Alone to Work	%	83.1			83.4	85.0	84.6	80.1	83.4		85.1		83.9		82.2	81.0	79.6
Care	Population to One Primary Care Physician	/provider	4624	5025	1554		5578	1833	1698		1760	2416	1628				4046	1519
	Population to One Non-Physician Primary Care Provider	/provider	2300	4059	1967		1240	1526			2393	1310	1505		1266		2626	1146
	Uninsured Children < 18 Years of Age	%	8.9				8.8	10.4	11.3			8.1	15.3	9.1		9.1	9.3	7.7
	Number of Primary Care Physicians per 100,000 Population	rate per 100k	21.6	19.9	64.3		17.9	54.6	58.9		56.8	41.4	61.4				24.7	65.8
	Ambulatory Sensitive Discharges: Acute Conditions	%	16.2	13.2	12.8		15.2	17.4	13.8		14.3	15.3	20.1	18.0	18.8	16.9	15.2	12.2
	Preventable Hospital Stays - Medicare - Discharge Rate	rate per 1k	69.3	63.8	58.5		61.8	53.2			50.2	69.8	67.0	74.1			51.2	50.2
	Uninsured Adults < 65 Years of Age	%	21.8	21.7	19.6		22.3	24.5	26.4			22.0	24.8		19.5	19.4		19.4
	Ambulatory Sensitive Discharges: Avoidable Illnesses	%	2.3	2.3	2.5				2.6		2.6	2.9				2.4	2.9	2.0
	Ambulatory Sensitive Discharges: Chronic Conditions	%	5.8	6.2			6.8					5.9	6.3	6.8		5.9		5.7

Health Need	Health Indicator	Indicator Type	County Values															
			Banks	Barrow	Dawson	Forsyth	Franklin	Habersham	Hall	Hart	Jackson	Lumpkin	Rabun	Stephens	Towns	Union	White	State Benchmark
	Mammography Screening - Medicare	%	61.5		61.4		54.7				57.6		59.7	56.3				62.0
Access	Diabetic Screening - Medicare	%										82.9	85.0					85.3
to Care	Price-Adjusted Medicare Reimbursements per Enrollee	dollars		10173	9845		10031				9710	9966		10307				9582
	Physical Inactivity	%	24.7				33.2	26.1		31.0		26.0	28.3	27.0	29.0	26.7	24.9	24.1
	Access to Exercise Opportunities	%	52.6				70.0	72.3		74.6								76.7
	Diabetes Deaths	rate per 100k	28.2	30.3								27.2						21.5
Chronic Conditions	Diabetes Diagnoses - Adults Age 20+	%	12.0	12.5	11.7							11.5	14.7	12.3	13.1	16.0	12.7	11.3
	Heart Disease Death Rate	rate per 100k										134.8						75.6
	Chronic Condition: Heart Disease - Percent of FFS Medicare	%			26.8							25.7						25.2
Septicemia	Blood Poisoning (Septicemia) - Discharge Rate	rate per 100k						529.7	814.3					626.3	553.8		779.3	514.5

Note: Blank county values indicate that the indicator was either not available for that geography or was not a need when compared to the state benchmark. Appendix A contains additional information on health indicator sources.

Appendix I: Evaluation of Prior Implementation Strategy Impact

Habersham Medical Center Evaluation of 2016 Implementation Strategy

1. Substance Abuse

- Worked with Avita CSB to help facilitate faster transfer of our 1013 patients who were abusing drugs and alcohol out of our Emergency Department and into more appropriate treatment areas
- Opened a medical stabilization service line to provide inpatient detoxification to individuals suffering from drug and alcohol addiction
- Joined NGHS and other facilities in a grant application to help develop ways to combat the opioid epidemic
- Joined in the class-action lawsuit against pharmaceutical companies for the hand in causing the opioid epidemic

2. Obesity/Lack of Physical Activity

- Hosted multiple wellness seminars on the campus of Habersham Medical Center with a focus on improving overall health by increasing physical activity
- Began the process of planning for a new "Wellness Center" for the community
- Changed the food vendor at the hospital to provide healthier options with dishes created in a "farm-to-table" manner
- Hired two surgeons with experience in bariatrics procedures and an interest in starting that service line in Habersham County

3. Infant Mortality Rate

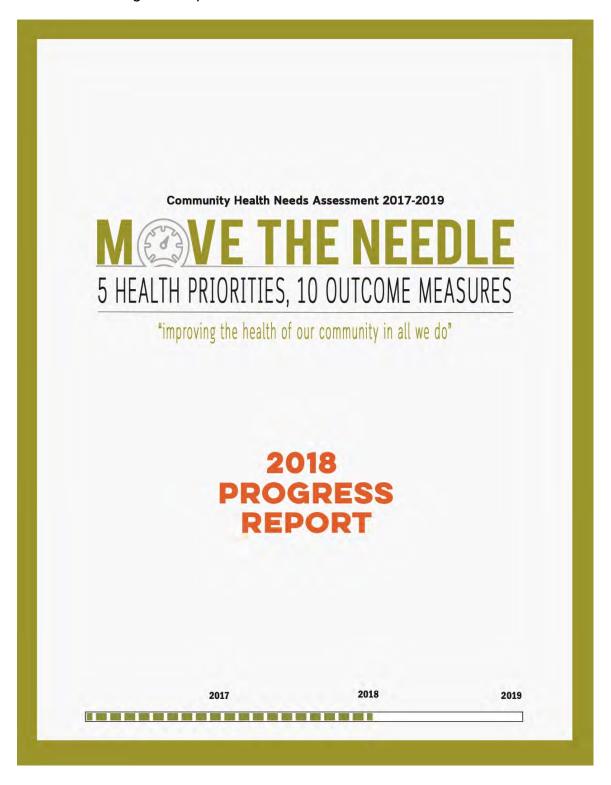
- Worked with local Obstetrician and Nursing Midwives to improve policies, practices, and procedures related to our Obstetrical Department
- Invested in new equipment for our nursery
- Provided education to community residents in both English and Spanish on the importance of prenatal care and the effects of smoking, drugs, and alcohol on infant mortality rate

4. Hospital Enhancement

- Recruited 2 orthopedic surgeons, 2 general surgeons, and 2 internal medicine physicians to the area
- Began conversations to join Habersham Medical Center to Northeast Georgia Health System. At the time of submission, the two parties are currently under an LOI and working toward a Definitive Agreement.
- Improved Patient Satisfaction scores by 43% in respect to overall "rate the hospital"

Completely redesigned the hospital's billing statement so that individuals could better understand what they were being charged for and who to call if they needed assistance.

NGHS 2018 Progress Report



ased on a comprehensive community health needs assessment conducted in 2016, Northeast Georgia Health System identified five important health priorities and ten outcome measures to assess the health system's progress in reaching ambitious goals for addressing specific health concerns for our community. If you want to learn more about each priority, click on the "Move The Needle" icon in this 2018 update report.



PERCENT OF PATIENTS WITH SEVERE SEPSIS/SEPTIC SHOCK WHO LOST THEIR LIVES AT NGHS



2018 ACTIONS:



Standard work was developed for the NGMC emergency departments with EPIC electronic medical record support. Screenings are now conducted as part of standard workflow at admission, as part of each shift assessment of inpatients and at discharge.

One hundred forty Georgia healthcare providers attended the 2019 Northeast Georgia Regional Infection Prevention Symposium. This free conference, offered by NGMC's Infection Prevention & Control department, educated providers in the region about methods to improve patient outcomes related to infections and antibiotic resistant organisms.



Sepsis education classes were provided to five Intro to Healthcare classes and one Advanced Healthcare class at Johnson High School to increase sepsis awareness among the next generation of healthcare workers. Of the 131 high school students in these classes, only five students knew the word sepsis before the class.

Two sepsis videos were developed and began running on social media September 2018.

CDC patient education materials are being provided to discharged sepsis patients, pneumonia patients, and UTI patients through the EPIC medical record.

A Signs and Symptoms Handout is being developed to be given to patients in the ambulatory setting to ensure they have actionable activities based on their signs and symptoms related to healthcare associated infections and antibiotic resistant organisms.

The Sepsis Coordinator led one-to-one sepsis education at the Barrow Community Fall Festival.



RELATED COMPLICATIONS

ADMISSIONS WITH DIABETES AS PRINCIPLE DIAGNOSIS



Source: NGMC Data

■total admissions

diabetes-principle diagnosis

RE-ADMISSIONS WITH DIABETES AS PRINCIPLE DIAGNOSIS



Source: NGMC Data

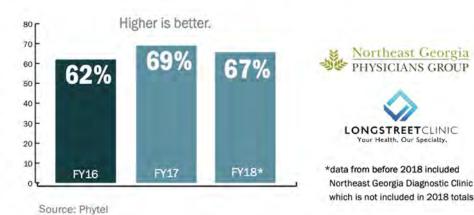
2018 ACTIONS:

Though no significant improvements in admissions or readmissions have yet been realized, in 2018, NGHS continued work to standardize diabetic care across the system. Using Epic optimizations, insulin Infusion order set auditing and optimizations, glucometric baseline data, standardization for meal delivery/glucose/insulin administration and other enhancements, NGHS has strengthened the foundations for improving diabetic care.

ä



PERCENT OF OUTPATIENTS WITH DIABETES WITH AN A1-C OF LESS THAN 8 AT PARTICIPATING MEDICAL PRACTICES:



2018 ACTIONS:



The Diabetes Education Program was expanded to offer individual and group classes at **NGMC Barrow**.





NGMC achieved "full recognition status" for the Prevent T2 Program, which offers group support and encouragement to prevent diabetes in at-risk populations. The program was offered in FY18 through partnerships with YMCA Gainesville, YMCA in Winder and Good News Clinics.

With 26 total participants in FY18, the average weight loss of T2 participants was 9.3 pounds. According to the CDC, losing 5%-7% of weight by reducing calories and increasing physical activity will reduce the risk of developing type 2 diabetes by 58%.



IMPROVE THE STAGE OF DIAGNOSIS OF LUNG CANCER IN HIGH RISK COUNTIES

NGMC improved the stage of diagnosis of lung cancer in five of the eight high-risk counties when compared to baseline data. When it comes to cancer, the earlier you can diagnose it, the greater your chance of survival. The goal is to reduce percentage of newly diagnosed late stage (stage 3 & 4) lung cancers, thereby raising newly diagnosed early stage diagnosis (stage 1 & 2). See page 6.

REDUCE INITIATION OF TOBACCO USE AMONG MIDDLE SCHOOLERS IN BARROW COUNTY

According to NGMC's Community Health Needs Assessment, Barrow County had a lung cancer indicator value of 87.9, compared to 54.1 in neighboring Gwinnett County.

2018 ACTIONS:



A Multidisciplinary Cancer Team approach has been implemented, including a Lung Cancer Conference in Braselton. The NGMC Nurse Navigator for lung cancer ensures patient follow-ups are conducted with the team's recommendations with further imaging studies.

NGMC received a grant from the Georgia Healthy Family Alliance to promote awareness and access to low dose CT scans for lung cancer screening for indigent patients in Barrow County. This program will increase access and assist those without insurance coverage so they can receive proactive screening.

Oncology Services also provided education to the community in Barrow County at local health fairs, as well as, three lung cancer support groups that will continue into FY19.



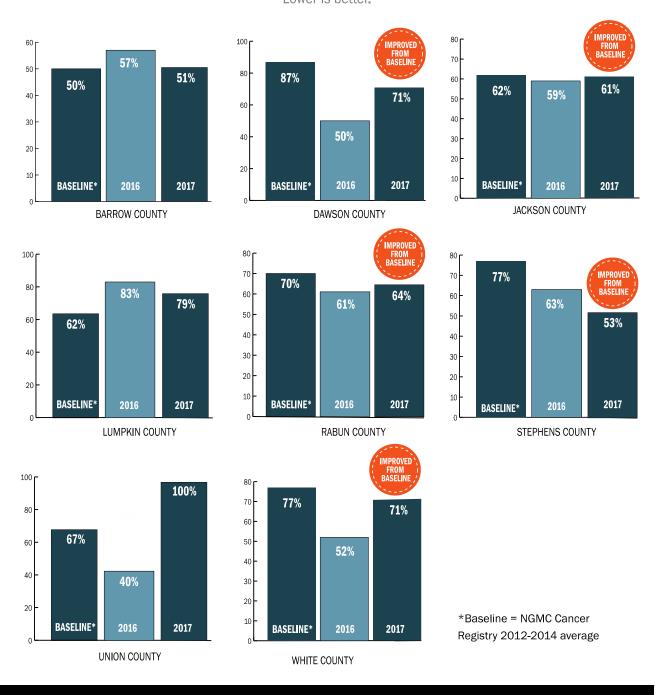
NGMC partnered with Barrow County Schools to implement "Tar Wars" to 2,258 elementary school students. Total average learning gain for students was 21%.

The greatest misconception among students was that "vapes are safer than regular cigarettes". When asked, "do you plan to use tobacco when you are an adult," 98.8% of students reported "no" in the pre-test and also in the post-test. "Tar Wars" is a tobacco-free education program for fourth and fifth grade students developed by the American Academy of Family Physicians to teach kids about the dangers of tobacco use, the cost associated with using tobacco products, and the advertising techniques used by the tobacco industry to market their products to youth.



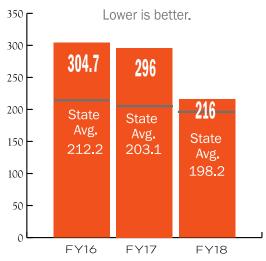
Diagnosis at Stage 3 or 4 (late stage)

Lower is better.





FALLS PER 100,000 STEPHENS COUNTY



Source: Georgia Department of Public Health

According to the CDC, more than 95% of hip fractures are caused by falling, and falls are the most common cause of traumatic brain injuries.

In FY16, Stephens County had the highest indicator value for falls within our service area at 304.7 with 92 more falls per 100,000 people than the state average. In FY18, the falls rate declined to 216, a decrease of 29% from FY16.



2018 ACTIONS:

While no single intervention is responsible for the decrease in falls in Stephens County for FY18, NGMC contributed to improvement through education, awareness, and enhanced care planning.

Fall Prevention displays using the CDC's STEADI (*Stopping Elderly Accidents, Deaths & Injuries*) self-awareness tools were placed for use at Stephens County pharmacies and other public locations.

NGMC partnered with organizations such as Legacy Link Area Agency on Aging and the Stephens County Senior Center to provide **fall prevention education** classes.

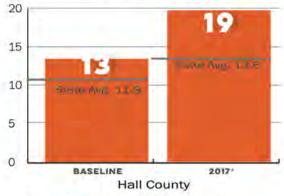
NGMC Trauma Outreach Coordinator traveled with Meals on Wheels to provide falls prevention education and resources to individuals around Stephens County.

NGMC and Northeast Georgia Physicians Group Toccoa Clinic providers began to develop a **shared decision making process** whereby patients screened at high risk for falls decide jointly with their provider on the best path for improvement, such as home exercise, physical therapy, local exercise programs, or other appropriate options.



REDUCE SUICIDE RATE TO ZERO IN HALL COUNTY

SUICIDE DEATH RATE PER 100,000



Source: Centers for Disease Control and Prevention/ National Center for Health Statistics *2014-2017 The zero suicide rate outcome measure for Hall County is meant to be an audacious goal: a rallying cry around which the community will come together to intervene upstream on the issues and conditions which after lead to suicide.

2018 ACTIONS:



NGMC conducted listening sessions with over 60 stakeholder participants to identify top priorities for community-based solutions for mental health concerns. Stakeholders ranged from representatives from AVITA Community Partners to school systems and local businesses. Out of those sessions, a steering committee emerged that is being housed under **United Way's One Hall.** Within the One Hall framework, the steering committee is working to better **coordinate mental health services** in northeast Georgia via various new forms of connectivity including a to-be-developed shared data platform and navigation system, providing Mental Health First Aid training to targeted audiences, and collaboration.



Proceeds from the 2019 Medical Center Open will go toward a Student Success Center located on the campus of Gainesville High School and will be available to students and families throughout Hall County. Components of the center include addressing academic and workforce development while also increasing access, collaboration and education regarding mental and behavioral health supports that are in great demand.



NGMC and the Georgia Council on Substance Abuse provide the state's first program to connect people surviving overdoses to Certified Addiction Recovery Empowerment Specialists (CARES) in its EDs. In 2018, the Peer Support Program was expanded to the Neonatal Intensive Care Unit (NICU). This program connects mothers who deliver babies with symptoms of Neonatal Abstinence Syndrome (NAS) to people in recovery who have been in similar circumstances. This attention on how opioids impact babies born to addicted moms in the NICU helped introduce best practices which have reduced the length of NICU stays from an average 31 days to 16 days.



NGHS is an active leader in the Partnership for a Drug Free Hall, which is a partnership of agencies and community members dedicated to providing Hall County with information, resources and actions to address the drug problems of Hall County. The group holds regular community forums, workshops and training sessions and workwith Center Point to conduct prevention programs in local middle schools, high schools and colleges. NGHS recently helped the organization apply for and receive a \$250,000 grant to open J's Place: The Jeffrey Dallas Gay, Jr. Recovery Center which will provide resources and connections of support to people in recovery in our community. The need for this service became evident through the Peer Program in the ED and NICU.



Northeast Georgia Physicians Group (NGPG) has embedded **behavioral health specialists** who are Licensed Clinical Social Workers who provide counseling and guidance to patients who are dealing with challenges like addiction and mental illness.



Northeast Georgia Medical Center had early successes beginning in 2012 when new Emergency Department prescribing policies took effect limiting the number of opioids prescribed for Emergency Department patients. NGMC physicians also participate in the state's drug monitoring programs to reduce overprescribing.



NGHS supported the effort to pass Senate Bill 121, the Jeffrey Dallas Gay, Jr. Act, in 2017 which allows pharmacists to dispense Naloxone/Narcan without an individual prescription. Legislation was also passed which provides amnesty to prosecution for people who report a drug overdose.



DEVELOP PARTNERSHIP WITH INDIGENT CLINICS BASED ON BEST PRACTICE TARGETING POPULATIONS ALONG THE 400 CORRIDOR

PARTNER WITH AREA CLINICS DEDICATED TO SERVING INDIGENT AND UNDER- SERVED POPULATION TO MONITOR AND IMPROVE CLINICAL EXCELLENCE IN CHRONIC DISEASE MANAGEMENT

GRADUATE MEDICAL EDUCATION: FILL ALL GME SLOTS IN 2019

2018 ACTIONS:



NGMC continues to partner with **Good Shepherd Clinic in Dawsonville** and provides the clinic with office space. Jo Brewer, Administrator of Medical Plaza 400, serves on the clinic's board.



NGMC continues to partner with the Longstreet Clinic and Hall County Health Department to serve low income mothers and by helping them to receive much-needed **prenatal care**. Over 200 patients are seen per month. The clinic serves uninsured and underinsured expectant moms living in the 13-county Public Health District 2 for the entire nine months of pregnancy through delivery.



NGMC continued its partnership

with Good News Clinics (GNC) in Hall County, providing \$560,000 in FY18 to support free medical and dental care to uninsured residents of Hall County who cannot afford health care services. The Medical Center Foundation will fund a \$1 million investment in Epic – NGMC's electronic medical records system – at the clinic, projected to be implemented in 2019.



Northeast Georgia Medical Center's **Graduate Medical Education (GME)** program continues to progress. The System will train specialists in the fields of internal medicine, family medicine, general surgery, OB/GYN, psychiatry and emergency medicine to grow our physician workforce in Georgia. Inaugural residents for General Surgery and Internal Medicine start in July 2019.

Dr. Antonio Rios, Chief Physician Executive for NGPG, continues as Chairman of The Georgia Board for Physician Workforce to identify the physician workforce needs of Georgia communities and to meet those needs through the support and development of medical education programs. He was also awarded the 2018 Sam Poole Volunteer of the Year Award from Good News Clinics where he is a longtime volunteer and member of the Board of Directors.



Questions?

Contact: Christy Moore, Manager, Community Health Improvement 770-219-8097 | christy.moore@nghs.com

Stephens County Hospital Evaluation of 2016 Implementation Strategy

1. Obesity & Lifestyle

- Improved and increased our numbers of attendance in our Community Diabetes Education Course (added educational hours at the Wound Care Center)
- Implemented a Community Weight Loss Education Course for free
- Partnered with local gyms to offer employee discounted memberships

2. Mental Health and Substance Abuse

- Used a grant to build the Stephens County Mental Health Collaborative
- Implemented tele-psych evaluations for ED patients and Inpatients for Crisis stabilization related to mental health

3. Chronic Disease

- Added WorkWell Occupational Health Clinic with FNPs
- Added an Urgent Care to bridge PCP gap (extended hours to come)
- Extended our Wellness Education Classes (stress management, diabetes Management, weight management)
- Cardiac Rehab program that continues to grow and expand with many thanks from community donors

4. Access to Care

- Addition of WorkWell with FNPs (expanded hours coming 2019)
- Added an FNP to Internal Medicine Practice
- Added an OB/GYN- adding a CNM in October 2019
- Added a General Surgeon
- Added a Pediatrician in August 2019
- Adding a PA to our Orthopedics practice September 2019

Appendix J: CHNA Partner Meetings

As part of a Health Department's Accreditation CHNA requirement, Health Departments are required to provide documentation of at least two meetings about the CHNA process. Below is a summary of CHNA partner meetings that took place starting in November 2018.

CHNA PARTNER MEETING KICKOFF

November 15, 2018 3:00 PM - 4:30 PM

Location: Ramsay Conference Room, Outpatient Services Building on the campus of NGMC

Invitees:

- Pamela Logan District 2 PH
- Tracy Vardeman Northeast Georgia Health System
- Tyler Williams Habersham Medical Center
- Jeff Laird Stephens County Hospital
- Samantha Rickman Stephens County Hospital
- Rani Yau IBM Watson Health
- Francine Poel IBM Watson Health

Agenda:

- Introductions of Steering Committee
- Overview of Watson Health CHNA process
- Collaborative approach for communities of northeast Georgia
- Deliverables
- Timing and Milestones
- Steering Committee Role
- Questions/Discussion

PARTNER MEETING

December 13, 2018 3:30 PM - 4:30 PM

Invitees:

- Jeff Laird Stephens County Hospital
- Samantha Rickman Stephens County Hospital
- Tyler Williams Habersham Medical Center
- Alex Nolley Habersham Medical Center
- Tracy Vardeman Northeast Georgia Health System
- Christy Moore Northeast Georgia Health System
- Rani Yau IBM Watson Health
- Francine Poel IBM Watson Health

Agenda:

- Introduction of additional Watson Health team member (5 min)
- Update on CHNA Partnership (10 minutes)
- Demonstration of Box usage for shared/collaborative items (15 min)

- Focus Group Planning
- Review Focus Group format
- Confirm location of January in person partner meeting; 1/24/19, 9-11AM

PARTNER MEETING

January 24, 2019 9:00 AM - 11:00 Am Location: Habersham Medical Center

Invitees:

- Christy Moore Northeast Georgia Health System
- Sabrina Lane Northeast Georgia Health System
- Tracy Vardeman Northeast Georgia Health System
- Samantha Rickman Stephens County Hospital
- Tyler Williams Habersham Medical Center
- Alex Nolley Habersham Medical Center
- Rani Yau IBM Watson Health
- Francine Poel IBM Watson Health

Agenda:

- Review preliminary indicator data 45 mins
- Review focus group guide and interview guestions 30 mins
- Discuss focus group logistics and schedule week of Mar. 4 30 mins

PARTNERS MEETING - Prioritization Planning

May 14, 2019

Invitees:

- Alex Nolley Habersham Medical Center
- Christy Moore Northeast Georgia Health System
- Jeff Laird Stephens County Hospital
- Pamela Logan District 2 Health Department
- Erika Lopez-Gil District 2 Health Department
- Tonya Chitwood Stephens County Hospital
- Tyler Williams Habersham Medical Center
- Rani Yau IBM Watson Health
- Francine Poel IBM Watson Health

Agenda:

- Overview of Prioritization Meeting
- Prioritization Participants Advisors Invited by Each Partner
- Finalize Prioritization Criteria
- Questions/Discussion



PRIORITIZATION MEETING

June 19, 2019 12:00 PM - 4:30 PM

Location: Civic Center, Sydney Lanier Room (upstairs)

Invitees:

- CHNA Partners
- Community Advisors see Appendix E
- Rani Yau IBM Watson Health
- Francine Poel IBM Watson Health
- Nancy Ying IBM Watson Health
- Betsy Block IBM Watson Health

Agenda:

- Welcome and Introductions
- Overview of CHNA Process
- Purpose of Today's Meeting
- Assessment Findings by Community
- Determine Significant Health Needs
- Prioritization Working Session
- Review Findings by Community/Assess Synergies

Appendix K: Northeast Georgia Medical Center Patient Origin

For the purpose of this community needs assessment, the geographic boundaries encompass the counties where 90% of NGMC hospital admissions originate. Forsyth County was excluded from analysis because NGMC serves a relatively small proportion of the county population as compared to other counties served.

	Gainesville, Braselton, and Barrow Facilities Combined									
County	2018	% of Total	% Included in Communities Served							
Hall	16,061	38.6%	38.6%							
Jackson	3,793	9.1%	47.7%							
Barrow	3,348	8.1%	55.8%							
White	2,625	6.3%	62.1%							
Gwinnett	2,617	6.3%	68.4%							
Habersham	2,228	5.4%	73.8%							
Lumpkin	1,737	4.2%	77.9%							
Banks	1,492	3.6%	81.5%							
Stephens	1,081	2.6%	84.1%							
Dawson	944	2.3%	86.4%							
Rabun	890	2.1%	88.5%							
Union	557	1.3%	89.9%							
Forsyth	420	1.0%	-							
Towns	398	1.0%	90.8%							
Sub Total	38,191	91.8%	n/a							
All Others	3,392	8.2%	n/a							
Grand Total	41,583	100.0%	90.4%							

Source: Georgia Hospital Association, CY2018, excludes Normal Newborns