



**2016**  
**Great River Health Systems'**  
**and Des Moines County Public Health Department's**  
**Community Health Needs Assessment**



**Great River  
Health Systems**

# 2016 Great River Health Systems Community Health Needs Assessment

## Conducted for Great River Medical Center (CMS No. 160057)

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## Executive Summary

Great River Medical Center, a part of Great River Health Systems, collaborated with the Des Moines County Department of Public Health to conduct a community health needs assessment to distinguish the unmet medical and public health needs in Des Moines County.

The study has three objectives:

1. To conduct an assessment that provides a foundation for Great River Health Systems and its partners to build a consensus about the area's most critical health care needs
2. To meet state and federal requirements for conducting Community Health Needs Assessments – hospitals, every three years; health departments, every five years
3. To develop action plans for interventions

Information was collected through live communitywide meetings, paper and emailed surveys, face-to-face interviews, and a review and analysis of publicly collected health and demographic statistics. The survey was made available at several locations in the study area. The locations were chosen and the survey was designed to elicit public responses about health needs in Des Moines County. The survey included multiple choice, open-ended and scaled questions that asked people what they perceived to be the greatest areas of community need. About 400 surveys were returned and analyzed.

Interviews were conducted with 11 community professionals and key informants, including professionals in education, law enforcement, minority populations, public health and social services, and other people representing underserved populations in the service area. They were asked to identify the largest health concerns in the community and to suggest ways to improve unmet health needs.

The health and demographic data available for Des Moines County was investigated by focusing on the problems indicated from the interviews and community survey. Using information from collaborative meetings and surveys, the Des Moines County community ranked four unmet health needs:

- Mental health and substance abuse
- Obesity
- Poverty
- Violent crime

These four needs will be the focus of Great River Health Systems' efforts to improve the health of Des Moines County.

## Message from the president and CEO

Great River Health Systems' Community Health Needs Assessment and Health Improvement Plan are based on identified community health needs, goals and priorities in Des Moines County. The plan is designed to guide our efforts as we build a healthier community together.

The Community Health Needs Assessment and Health Improvement Plan have been reviewed and approved by our Community Benefit Advisory Board, which comprises health system staff, community members and other stakeholders. The board will review and monitor progress of the plan throughout its duration.

As our community evolves, and as the health care environment transforms, our community benefit efforts will become increasingly important. The Community Health Needs Assessment and Health Improvement Plan are significant steps forward in positioning Great River Health Systems to successfully address and meet the health needs of our community.

Mark Richardson, President and CEO  
Great River Health Systems



# Introduction

## Community Health Needs Assessment background

In 2010, Congress enacted the Patient Protection and Affordable Care Act, which put in place comprehensive health insurance reforms that will enhance the quality of care for all Americans. To enhance the quality of care delivered, the act also requires all nonprofit hospitals to complete a community health needs assessment every three years.

Great River Health Systems continually works with partners and stakeholders outside the hospital to meet the health needs of the community. It continued its collaboration to identify the community's greatest unmet health care needs using a variety of approaches and methods. This community health needs assessment will build on the 2013 Des Moines County Health Needs Assessment. In 2015, Great River Health Systems and the Des Moines County Department of Public Health invited comments and obtained advice from a group of external participants about the community's health care priorities.

The goal of Great River Health Systems' community benefit plan is to respond to identified community health needs, increase access and improve the health status for people living in Des Moines County and its

entire service area. It aligns with the health system's mission to improve the region's health by providing high-quality care, world-class customer service and uncompromising value for its patients and their families.

## About Great River Medical Center and Great River Health Systems

Great River Medical Center is a community-based, not-for-profit regional referral hospital in West Burlington, Iowa. It is part of Great River Health Systems, an integrated health care system that offers acute care, skilled care, long-term care, outpatient services, retail pharmacies, retail medical equipment and supplies services, an outpatient renal dialysis center, and a network of specialty and primary-care clinics. It has served the region for 121 years.

Great River Medical Center's medical staff consists of about 130 physicians, and more than 50 nurse practitioners and physician assistants. The total workforce has about 1,250 full-time-equivalent positions.

The 780,000 square-foot hospital is licensed for 378 adult and pediatric beds. Besides the hospital, these facilities are on Great River Health Systems' campus:

- Freestanding primary-care clinic

- Great River Cancer Center
- Great River Hospice House
- Great River Klein Center, a skilled and long-term care facility
- Great River Regional Laundry
- Kid Zone, a child care center for employees' children
- Outpatient rehabilitation and wellness plaza
- Renal dialysis center
- Two medical office plazas with primary-care and specialty clinics

Beyond West Burlington, Great River Health Systems' Des Moines County-based services include a quick-care clinic in Burlington and a primary-care clinic in Mediapolis, Iowa.

## About Des Moines County

Great River Health Systems' service area is a five-county region consisting of southeast Iowa, northeast Missouri and west-central Illinois. About 70 percent of its inpatient admissions and outpatient discharges are from Des Moines County. The U.S. Census Bureau defines this area as the Burlington IA-IL Micropolitan Statistical Area.

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Des Moines County is in the southeast region of Iowa along the Mississippi River, on the Illinois border. These cities are in the county:

- Burlington
- Danville
- Mediapolis
- Middletown
- Sperry
- West Burlington
- Yarmouth

### Age

Almost half (46 percent) of Des Moines County residents are over age 45, compared to the state average of 33 percent, and the county's smallest percentage of adult residents (23.2) is between ages 24 and 44 (2014 Regional Workforce and Economic Development Status Report). In 2014, 18.8 residents were 65 or older, compared to 15.8 percent in Iowa and 14.5 in the U.S. (U.S. Census).

### Employment

Manufacturing, wholesale and retail businesses, health care and social services sustain the local economy. The major employers, listed alphabetically, are:

- American Ordinance LLC
- Catfish Bend Casino
- Federal Mogul Corporation
- Fun City

- Great River Health Systems
- Hy-Vee Food Stores
- Southeastern Community College
- Wal-Mart

Between 2008 and 2013, the county's labor force decreased 3.4 percent. Des Moines County's unemployment rate has been as high as 7.5 percent in recent years (2011), but it dropped to 4.3 percent in September 2015.

### Health insurance

Approximately 9 percent of Des Moines County residents are uninsured, 25 percent (10,320) are enrolled in Medicaid, and 23 percent (9,081) are Medicare beneficiaries, according to 2015 County Health Rankings, 2015 Department of Human Services, and 2013 HealthGrove data, respectively.

### Population

The county's total population is 40,255, with 25,539 people living in Burlington (2014 U.S. Census Bureau). From 2012 to 2013 Des Moines County's population grew 0.43 percent, which is a change from the population decline (2.7 percent) observed from 2002 to 2011 (Iowa Workforce Development). The recent growth could be attributed, in part, to construction of a large fertilizer plant in Wever, Iowa, approximately 10 miles south of Burlington.

### Race and ethnicity

2014 U.S. Census Bureau statistics indicate most Des Moines County residents (90.4 percent) identify as white, but the community's racial diversity has increased incrementally in the last four years with the growth of some minority populations. Black or African-American residents grew from 5.1 (2010) to 5.9 (2014) percent, Latino or Hispanic residents grew from 2.6 (2010) to 2.9 (2014) percent, and people who identify as two or more races increased from 2.3 (2010) to 2.5 (2014) percent.

### Social determinants

Social determinants affecting Des Moines County residents are significant. For example, Des Moines County is one of the lowest-ranked among the state's 99 counties in Health Outcomes (94) and Health Factors (92), as indicated by 2015 County Health Rankings and Roadmaps, an initiative funded by the Robert Wood Johnson Foundation. For Health Outcomes, it is the lowest-ranked county with a population of more than 25,000, and for Health Factors, it ranks better than just three other counties above this population threshold.

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These poor measures are related to social, economic, behavioral and environmental factors including:

- Adult obesity
- Adult smoking
- Child poverty
- High school graduation
- Inadequate housing
- Sexually transmitted infections
- Single-parent households
- Teen births
- Violent crimes

In the Clinical Care subcategory under Health Factors, Des Moines County ranks 20. But in the other three subcategories – Health Behaviors, Social and Economic Factors, and Physical Environment, it always ranks in the bottom 15.

### **Community Needs Index scores**

An additional source of information is the Community Needs Index (CNI), published by Dignity Health, a not-for-profit public benefit corporation. Des Moines County's CNI scores vary by city, but they echo the county's struggle with social determinants. CNI scores – 1 indicating lowest need and 5 indicating highest need) – are based on socio-economic indicators including cultural, education, housing, income and insurance barriers.

The scores are:

- Lowest need – Middletown and Sperry, 1.4 each; Danville and Yarmouth, 1.6 each
- Second lowest need – Mediapolis, 2
- Middle need – West Burlington, 3
- Second highest need – Burlington, 3.4

### **Access to food**

Data related to and explaining these socio-economic indicators are reported in the 2014 Iowa State University Extension and Outreach's Poverty and Food Needs: Des Moines County, Iowa report. For example, 14.5 percent of Des Moines County residents live in poverty, and many struggle to access food because of low income, lack of transportation and locations of grocery stores. More than half (52.4 percent) of children in Des Moines County schools are eligible for free or reduced lunch, compared to the state value of 41.1 percent. Also, for every 1,000 residents, 217 participate in food-assistance programs. The statewide ratio is 136 for every 1,000 residents.

### **Education**

2014 Census Bureau estimates indicate that 90.7 percent of Des Moines County residents 25 and older have high school diplomas or higher education, which is consistent with the State of Iowa (91.3 percent). But only 20.2 percent of Des Moines County residents 25 and older have bachelor's degrees or higher, compared to 26.4 percent for the entire state. It is noteworthy then that 19.7 percent of Des Moines County

workers are employed in an industry classified as "manufacturing," while only 14.9 percent of Iowa workers are in this category. Those employed in "retail trade" also exceed the state value (14.1 percent for Des Moines County, and 11.7 percent for Iowa).

### **Income**

The median household income in Des Moines County is \$42,146, compared to \$52,716 for the State of Iowa. The gap in median family income is even higher (\$52,239 for Des Moines County; \$66,829 for the entire state). Finally, 76 percent of Des Moines County residents live in owner-occupied housing units, which have a median value of \$94,300, compared to \$126,300 for the state as a whole. The remaining 24 percent of residents live in rental housing units, paying a median monthly rent of \$638, slightly lower than the statewide median of \$689.

## Approach and Methods

Great River Health Systems adopted a collaborative approach to completing the 2016 Community Health Needs Assessment (CHNA)-Health Improvement Plan (HIP) and sought partnership with Des Moines County Public Health (DMCPH), an agency experienced in planning and implementing community health initiatives. This first-time partnership began in March 2015. Using best-practice recommendations from the Centers for Disease Control and Prevention and other sources, Great River Health Systems and DMCPH gathered information and community input for Des Moines County's CHNA-HIP using four main data sources:

- Face-to-face interviews with key informants
- Live communitywide meetings
- Paper and electronic surveys for professionals and community members
- Secondary research

### Live meetings

Two live, communitywide meetings were planned and co-facilitated by Barbara Baker, director, DMCPH, and Sue Ferguson, director, Corporate Education, Great River Health Systems. They were conducted in July 2015 and October 2015, to identify and prioritize Des Moines County's health priorities and develop corresponding plans.

### First meeting – Prioritizing needs, July 16, 2015

Great River Health Systems and DMCPH invited approximately 100 organizations and leaders from sectors of the community. Seventy people attended. The agencies and populations represented were:

Organization	Groups served
Alcohol and Drug Dependency Services*	Individuals and family members who experience the effects of alcohol and drug dependency, and gambling addiction
Burlington Area YMCA*	Area youth, families and communities
Burlington Community School District*	School district students and their families
Burlington Police Department	Burlington residents and businesses
Burlington Public Library	Area children, adults, families and businesses
Child Abuse Council*	Abused and at-risk children and their families
Children First*	Children and families in Lee and Van Buren counties
City of Burlington	Burlington residents and businesses
Community Action of Southeast Iowa*	Impoverished residents of southeast Iowa
Community Health Centers of Southeastern Iowa*	People who have problems accessing health care, including limited financial resources
Des Moines County Attorney	Des Moines County residents
Des Moines County Board of Supervisors	Des Moines County residents
Des Moines County Emergency Management	Des Moines County residents

Approach and Methods continued on next page

Organization	Groups served
Des Moines County Public Health Department*	Des Moines County residents
Des Moines County Sheriff's Office	Des Moines residents and businesses
Drug Free Workplace Program	Des Moines County employers
Great River Christian School*	Christian students, grades k-12
Great River Health Systems*	Des Moines County residents and others
Home Caring Services Inc.*	Area residents and families where a physical or mental disability, handicap, illness or social inadequacies threaten family living
Humanities Iowa	People, communities and culture of Iowa
Lee County Health Department's	
I-Smile Oral Health Program*	Underserved families and Medicaid-eligible children in Lee County
Mental Health and Disability Services*	Residents of Des Moines, Henry, Jefferson, Keokuk, Lee, Louisa, Van Buren and Washington counties with complex mental health and disability services challenges
Milestones Area Agency on Aging*	Seniors
NAACP	African-Americans
Planned Parenthood of the Heartland*	Area residents including low-income and students
Southeast Iowa Regional Planning Commission	Local governments (cities, counties and school districts) in the four-county southeast Iowa region
Young House Family Services*	Children and families

*\*Serves low-income, medically underserved and minority populations*

The method for assessing community needs at this meeting was based on the Nominal Group Technique. Attendees were divided into 12 groups of five to six people. The multistep process for determining and ranking needs included:

- Each participant wrote his or her need perceptions on Post-It notes – one idea per note.
- All notes were posted on the wall and then categorized by topic.
- Each group determined its top three topics by individual, anonymous votes.
- Each group presented its top three topics to the group at large.
- At this point the group at large had narrowed the topic list to 18, excluding duplications.
- All participants placed three more anonymous votes for their perception of the most-significant community needs.

### **Second meeting – Developing action plans, Oct. 27, 2015**

The July meeting participants were invited to another meeting in October, and 50 attended. They chose or were assigned to one of the four areas of need identified at the previous meeting. The groups followed a multistep process to develop their plans:

- Define and analyze the problem
- Develop a purpose statement for the overall goal
- Define objectives
- Identify interventions
- Complete plan

*Approach and Methods continued on next page*



These groups will continue meeting to address their objectives and tactics, and submit quarterly progress reports to Great River Health Systems and DMCPH.

### **Paper and electronic surveys**

Paper surveys [Appendix 1] were distributed to CHNA attendees and made available at:

- Community Health Centers of Southeastern Iowa
- Great River Emergency Department
- Heritage Park Pharmacy
- Physician offices
- Social service organizations
- Community Action of Southeast Iowa
- Southeastern Community College

Electronic surveys were distributed by email.

Surveys asked respondents to assess the community's health, rate their individual health and quality of life, and report demographic information, such as age, race and income level. A total of 414 surveys were returned and tabulated.

### **Face-to-face interviews**

Great River Health Systems also conducted face-to-face interviews with local key informants using an open-ended question format. Questions [Appendix 2] focused on the key informants' perceptions of Des Moines County's significant health issues, organizational challenges, and available and lacking community resources. The key informants represented:

- Autumn Heights low-rent housing agency
- Burlington Community School District
- Burlington Police Department
- Community Action of Southeast Iowa
- Community Health Centers of Southeastern Iowa
- Department of Human Services
- Des Moines County Public Health Department
- Des Moines County Sheriff's Office
- Iowa Workforce Development
- NAACP
- Planned Parenthood of the Heartland

Results of information gathered at live meetings and through surveys and face-to-face interviews, four community needs were prioritized. The top four and the number of votes each received were:

- Mental health and substance abuse (37)
- Obesity – physical Activity (34)
- Poverty – economic opportunities (22)
- Violent crimes (14)

# Conclusions

## Summary of actions in response to 2013 Community Health Needs Assessment

On behalf of Great River Health Systems, a team of employees conducted a community health needs assessment in 2013 to distinguish the unmet medical and public-health needs in Des Moines County. The top three needs identified were:

- Obesity
- Access
- Mental health

Over the next three years, the health system worked diligently to increase access to health care and improve health in the identified areas.

### Obesity

One-third of adults in Des Moines County are obese, and many more are overweight. Seventy-eight percent of survey respondents said it is a significant issue. Great River Health Systems set a goal to increase awareness, access and education regarding healthy behaviors.

### Obesity prevention education

From 2013 to 2015, Great River Health Systems provided an educational display, nutrition information and activities at 11 health fairs for children, families and employers.

Great River Health Systems is a member of the Southeast Iowa Regional Coalition for Lifestyle Enhancement, which meets quarterly. It is a major sponsor of the coalition's annual Healthy Lifestyle Conference for health care educators and providers, giving financial and professional support.

### Great River Health Fitness

In August 2013, Great River Health Systems opened its greatly expanded exercise facility, Great River Health Fitness. It is the largest and most advanced workout facility in Des Moines County. The new space holds double the amount of wellness equipment as the original space. New features were a full exercise track and a three-story rock-climbing tower, the only one in the region. The warm- and cool-water therapy pools continue to provide exercise and therapy opportunities.

Fitness-center use is gauged by membership card scans. These numbers reflect growing use of Great River Health Fitness:

September 2012 – 5,473  
September 2013 – 6,918  
September 2015 – 9,507

Special programs and services offered by Great River Health Fitness include:

- **ABLE (A Better Life Every day)** – A program for people who have difficulty obtaining or maintaining a healthy weight
- **Delay the Disease** – An exercise program for People with Parkinson's disease
- **FAME (Fitness and Mobility Exercise)** – A program for people who have had a stroke
- **Wellness coaching** – An employee who has a master's degree in health promotion and emphasis on wellness coaching works with Great River Health Systems employees who didn't pass metabolic panel testing and are choosing to be improve their health. More than 100 people have participated.

### Great River Healthy Living Clinic

In 2015, Great River Healthy Living Clinic moved into the new Great River Family Practice Clinic. It has a demonstration kitchen for healthy cooking programs, which fill quickly.

The clinic provides services that promote healthy lifestyle choices, which are conducive to long-term success in weight loss and preventing metabolic syndrome. Its signature program, Operation Transformation, addresses a group of risk factors associated with coronary artery disease, stroke and type 2 diabetes.

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The physician-supervised weight-loss program focuses on changing lifestyle behaviors coupled with nutrition guidance and exercise regimens to achieve lasting weight-loss goals. Its success rate is greater than 90 percent. Area businesses, including Great River Medical Center, have begun using Operation Transformation as a wellness benefit for their employees.

The Healthy Living Clinic worked with area restaurants and Great River Medical Center's Cafeteria to provide Operation Transformation-approved healthier menu items.

The Healthy Living Clinic also works with the Burlington YMCA to offer Finding a Healthier You, a program that helps improve fitness and eating choices.

#### **Pioneering Healthy Communities grant**

Great River Health Systems participates in the Des Moines County Living Well Coalition in partnership with the Burlington YMCA. Projects have included planning, supporting and implementing community gardens in Burlington to support healthy eating. Fruits and vegetables grown are available to the community, and surplus items are offered at the YMCA for a free-will donation.

#### **Access**

Stakeholder interviews and public surveys showed concern for the lack of access to health care providers and the disproportionately low number of physicians for the size of the community. With a goal to increase access and awareness of services, Great River Health Systems developed a three-part action plan consisting of developing Great River QuickCare, providing clinical services to the underserved and tirelessly recruiting physicians.

#### **Great River QuickCare**

Great River QuickCare opened in October 2012 to provide primary care for patients who don't have primary-care providers or who can't get immediate appointments with their providers. The walk-in clinic treats people 18 months and older who have lower-acuity illnesses such as colds, influenza, earaches, pink eye and insect bites. It also offers limited laboratory services, and camp and sports physicals. Great River QuickCare provides cost-effective treatment compared to emergency department visits.

Postcards announcing the opening of Great River QuickCare were sent to every home in Des Moines County. Advertising continues in newspapers and local periodicals. Information about services appears in Great River Health Systems' service guide and on the health systems' website.

Since its opening, Great River QuickCare has:

- Increased the number of providers from one to seven
- Added certified medical assistants
- Extended its schedule from five days a week to seven
- Doubled the number of examination rooms and enlarged the waiting area

The number of patients treated yearly doubled from 2013 to 2015:

- 2013 – 4,847
- 2014 – 8,123
- 2015 – 9,875

#### **Providing clinical services to the underserved**

Besides expanding services through Great River QuickCare, Great River Family Practice Clinic opened in September 2015 with three new providers. Great River Medicine Specialists, Great River Nephrology and Great River Pulmonology extended their hours, added appointment times and added visiting physicians to provide services in specialty areas.

In 2014, Great River Health Systems financial counselors completed training to become Certified Application Counselors for the Health Insurance Marketplace. They are available by appointment to help lowans enroll in health coverage. The state-based marketplace gives consumers a single source to compare options, learn if they can get lower premiums or free coverage, and enroll in a plan.

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The hospital was designated a Champion of Coverage Organization and a Certified Application Counselor Organization by the Centers for Medicare and Medicaid Services. It also is a Presumptive Medicaid Organization. With basic information, financial counselors can enroll patients and family members likely to be eligible for Medicaid immediately, without waiting for an eligibility determination from the state. Medicaid will pay the hospital for the services provided, just as though the patient already enrolled in Medicaid.

### **Physician recruitment**

Great River Health Systems added seven primary-care providers to its medical staff in the areas of family practice, internal medicine and quick care.

### **Mental Health**

Great River Medical Center is the only hospital offering adult inpatient mental health services in the southeast Iowa region. It has an eight-bed Behavioral Health Unit. Great River Health Systems also has an outpatient mental health and substance abuse clinic.

As identified through the community survey and stakeholder interviews, the hospital determined the two greatest mental health needs are maintaining or increasing the mental health services it provides and increasing community education about mental health.

In three years, Great River Health Systems recruited three psychiatrists, increasing the total to five, and increased service locations:

- In 2013, a physician began seeing patients only in the inpatient Psychiatric Care Unit. By conducting patient rounds in the unit several times throughout the day, he continually assesses patient statuses, medicines and progress, which leads to increased patient stability, shorter lengths of stay and a higher turnover of inpatient beds.
- In 2014, a psychiatrist began providing outpatient services at Community Health Centers of Southeastern Iowa through a contract agreement. This makes behavioral health services more accessible to the community's under- and uninsured populations, and reduces the patient load of the psychiatrists at the hospital. As a result, more office appointment times are available.
- In 2015, a psychiatrist began holding weekly office hours at Great River Women's Health, where she sees patients during scheduled and walk-in appointments.

Besides the five psychiatrists, the health system's mental health treatment staff includes one nurse practitioner, one psychologist, two licensed master social workers, three licensed therapists, and two substance abuse counselors.

### **Behavioral Health Assessment Team**

In 2014, Great River Health Systems developed a Behavioral Health Assessment Team to help meet the increasing need for mental health services. The team consists of the Behavioral Health director, Social Work supervisor, a psychiatrist, four assessment specialists and an addictions specialist. It works with patients, providers and community agencies to ensure existing services are provided effectively and efficiently. Services are provided for patients in the Acute Care Center, Emergency Department and Intensive Care Unit.

#### **Acute Care Center:**

- Follows patients who have mental health or substance-abuse issues
- Provides complete assessments on patients who have psychiatric consultations

#### **Emergency Department:**

- Provides complete assessments on patients who have court committal documents
- Provides complete assessments on patients with mental health or substance-abuse issues
- Helps patients who return frequently in search of other resources
- Helps patients who need social work services

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**Intensive Care Unit:**

- Follows patients who have substance-abuse or mental health issues
- Helps patients who need social work services for mental health or substance abuse
- Completes assessments on patients with mental health or substance-abuse issues

**Crisis Stabilization Services**

Great River Health Systems' Director of Behavioral Health worked with Hope Haven Area Development Center to develop criteria for its Crisis Stabilization Services. The five-bed crisis service is available to adults with a mental illness or developmental disability who temporarily cannot live independently and need immediate intervention. Providing outpatient psychiatric care in this setting reduces the need for hospital admissions.

**Increased collaboration with judicial system**

The director of Behavioral Health and medical director of Great River Mental Health meet with Des Moines County judges twice a year to discuss the process for mental health committals to ensure the best treatment for patients.

**Intake coordinator**

An intake coordinator position was established at Great River Mental Health. In face-to-face appointments, the coordinator screens new patients and makes appointments with appropriate providers to improve timeliness of care.

**Integrated care clinic**

In 2015, Great River Health Systems implemented an integrated care clinic, offering population-based health services that address the comprehensive physical and mental health needs of patients. The first of its kind in southeast Iowa, it serves clients from Optimae LifeServices, an organization that provides residential and support services for people with mental illness or developmental disabilities.

Optimae clients meet with a Great River Health Systems team that includes a primary-care provider, psychiatrist, pharmacist and other health professionals. This approach eliminates the need for multiple appointments, improves communication among health care providers and reduces the potential for unnecessary emergency department visits or admissions.

**Jail diversion program**

The new program provides evaluation and coordination of care for people who are in jail for suspected crimes that may be the result of their mental illnesses.

**Partial hospital program**

The partial hospital program, which began in 2015, is for patients who don't require inpatient hospitalization but are in need of intensive mental health services beyond what the outpatient clinic can provide. Patients come to the hospital for six hours a day, Monday through Friday, for group therapy, medicine management and psychiatric care. The program helps bridge the gap between inpatient and outpatient services, helping patients gradually transition to less-intensive psychiatric services.

**Substance abuse group**

To help bridge the three- to six-week waiting period before being admitted for inpatient rehabilitation for substance abuse at other facilities, Great River Mental Health established a substance abuse group that meets three times a week. Random urine drug screens are conducted.

# Appendices

## Appendix 1: Community health needs survey

Great River Health Systems and our public-health partners are gathering information about the health needs of our community. Please complete this survey so we can better help with the communities' needs. All responses are anonymous. Thank you for your time and interest.

### Part I: Community health

1. What do you think are the **three most-important factors for a healthy community and good quality of life?**

#### Check only three:

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Good place to raise children                 | <input type="checkbox"/> Affordable housing                       | <input type="checkbox"/> Low infant deaths          |
| <input type="checkbox"/> Low crime rate and safe neighborhoods        | <input type="checkbox"/> Religious and spiritual values           | <input type="checkbox"/> Access to health insurance |
| <input type="checkbox"/> Low level of child abuse                     | <input type="checkbox"/> Excellent race and ethnic relations      | <input type="checkbox"/> Emergency preparedness     |
| <input type="checkbox"/> Good schools                                 | <input type="checkbox"/> Good jobs and healthy economy            | <input type="checkbox"/> Arts and cultural events   |
| <input type="checkbox"/> Access to health care (e.g., family doctors) | <input type="checkbox"/> Availability of positive teen activities |   |
| <input type="checkbox"/> Parks and recreation                         | <input type="checkbox"/> Healthy behaviors or lifestyles          | <input type="checkbox"/> Other _____                |
| <input type="checkbox"/> Clean environment                            | <input type="checkbox"/> Low adult death and disease rates        |   |

2. What do you think are the **three most-important health problems** in our community?

#### Check only three:

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Aging problems (e.g., arthritis, hearing/vision loss) | <input type="checkbox"/> Heart disease and stroke                            | <input type="checkbox"/> Obesity                       |
| <input type="checkbox"/> Cancers   | <input type="checkbox"/> High blood pressure                                 | <input type="checkbox"/> Rape/Sexual assault           |
| <input type="checkbox"/> Child abuse and neglect                               | <input type="checkbox"/> HIV and AIDS  | <input type="checkbox"/> Respiratory/Lung disease      |
| <input type="checkbox"/> Dental problems                                       | <input type="checkbox"/> Homicide  | <input type="checkbox"/> Sexually transmitted diseases |
| <input type="checkbox"/> Diabetes  | <input type="checkbox"/> Infant death  | <input type="checkbox"/> Suicide                       |
| <input type="checkbox"/> Domestic violence                                     | <input type="checkbox"/> Infectious diseases (e.g., hepatitis, tuberculosis) | <input type="checkbox"/> Teenage pregnancy             |
| <input type="checkbox"/> Firearm-related injuries                              | <input type="checkbox"/> Mental health problems                              | <input type="checkbox"/> Other _____                   |
|  | <input type="checkbox"/> Motor vehicle crash injuries                        |  |

Appendix 1 continued on next page

3. What do you think are the **three most-important unhealthy behaviors** in our community?

**Check only three:**

- ☐ Alcohol abuse
- ☐ Being overweight/Obese
- ☐ Dropping out of school
- ☐ Drug abuse
- ☐ Lack of exercise
- ☐ Lack of maternity care

- ☐ Poor eating habits
- ☐ Not getting vaccines to prevent disease
- ☐ Discrimination based on sexual orientation or identity
- ☐ Racism
- ☐ Tobacco use
- ☐ Not using birth control

- ☐ Not using seat belts and child safety seats
- ☐ Unsafe sex
- ☐ Unsecured firearms
- ☐ Violent behavior
- ☐ Other \_\_\_\_\_

4. How would you rate the health of our community?

- ☐ very unhealthy      ☐ unhealthy      ☐ somewhat unhealthy      ☐ healthy      ☐ very healthy

5. How would you rate your health?

- ☐ very unhealthy      ☐ unhealthy      ☐ somewhat unhealthy      ☐ healthy      ☐ very healthy

6. About how many hours per month do you volunteer your time to community service?

- ☐ none      ☐ 1 to 5 hours      ☐ 6 to 10 hours      ☐ more than 10 hours

## Part II: Demographics

Please answer questions 7 through 15 so we can see how different types of people feel about local health issues.

7. ZIP code where you live \_\_\_\_\_

8. Age

- ☐ 25 or less      ☐ 26 to 39      ☐ 40 to 54      ☐ 55 to 64      ☐ 65 or over

9. Sex

- ☐ Male      ☐ Female

Appendix 1 continued on next page

10. Ethnic group you most identify with

- ☐ African-American/Black
- ☐ Asian/Pacific Islander
- ☐ Hispanic/Latino

- ☐ Native American
- ☐ White/Caucasian

☐ Other \_\_\_\_\_

11. Marital status

- ☐ Married/Cohabiting

- ☐ Not married/Single

12. Education

- ☐ Less than high school
- ☐ High school diploma or GED

- ☐ College degree or higher

☐ Other \_\_\_\_\_

13. Household income

- ☐ Less than \$20,000
- ☐ \$20,000 to \$29,999

- ☐ \$30,000 to 49,999
- ☐ \$50,000 to \$75,000

☐ More than \$75,000

14. How do you pay for your health care? (check all that apply)

- ☐ Pay cash (no insurance)
- ☐ Health insurance (e.g., private insurance, Blue Cross, Health Insurance Marketplace)

- ☐ Medicaid
- ☐ Medicare
- ☐ Veterans' Administration
- ☐ Indian Health Service

☐ Other \_\_\_\_\_

15. Where or how you got this survey (check one)

- ☐ Church
- ☐ Community meeting
- ☐ Grocery store

- ☐ Workplace
- ☐ Local business or organization
- ☐ Email

☐ Personal contact

☐ Other \_\_\_\_\_

Appendix 1 continued on next page



### Part III: Quality of life

**Directions:** Please read the questions and circle the number that matches your opinion.

1 = Strongly No      2 = No      3 = Neutral      4 = Yes      5 = Strongly Yes

Quality of life questions	Likert Scale responses (1 to 5, with 5 being most positive)				
16. Are you satisfied with the quality of life in our community? Factors to consider are your sense of safety, well-being, and participation in community life and associations.	1 NO	2	3	4	5 YES
17. Are you satisfied with the health care system in the community? Factors to consider may include access, cost, availability, quality and options in health care.	1 NO	2	3	4	5 YES
18. Is this community a good place to raise children? Factors to consider may include school quality, day care, after-school programs and recreation.	1 NO	2	3	4	5 YES
19. Is this community a good place to grow old? Factors to consider may include elder-friendly housing, transportation to medical services, churches, shopping, elder day care, social support for elderly living alone and home-delivered meals.	1 NO	2	3	4	5 YES
20. Is there economic opportunity in the community? Factors to consider may include locally owned and operated businesses, jobs with career growth, job-training/higher-education opportunities, affordable housing and a reasonable commute.	1 NO	2	3	4	5 YES
21. Is this community a safe place to live? Factors to consider may include residents' perceptions of safety in the home, the workplace, schools, playgrounds, parks and the mall. Do neighbors know and trust one another? Do they look out for one another?	1 NO	2	3	4	5 YES
22. Are there networks of support for people and families (neighbors, support groups, faith community outreach, agencies and organizations) during times of stress and need?	1 NO	2	3	4	5 YES

Appendix 1 continued on next page

Quality of life questions	Likert Scale responses (1 to 5, with 5 being most positive)				
23. Do all people and groups have the opportunity to contribute to and participate in the community's quality of life?	1 NO	2	3	4	5 YES
24. Do all residents perceive that they – individually and collectively – can make the community a better place to live?	1 NO	2	3	4	5 YES
25. Is there a broad variety of health services in the community?	1 NO	2	3	4	5 YES
26. Is there a sufficient number of health and social services in the community?	1 NO	2	3	4	5 YES
27. Are levels of mutual trust and respect increasing among community partners as they participate in collaborative activities to achieve shared community goals?	1 NO	2	3	4	5 YES
28. Is there a sense of civic responsibility, engagement and pride in shared accomplishments?	1 NO	2	3	4	5 YES

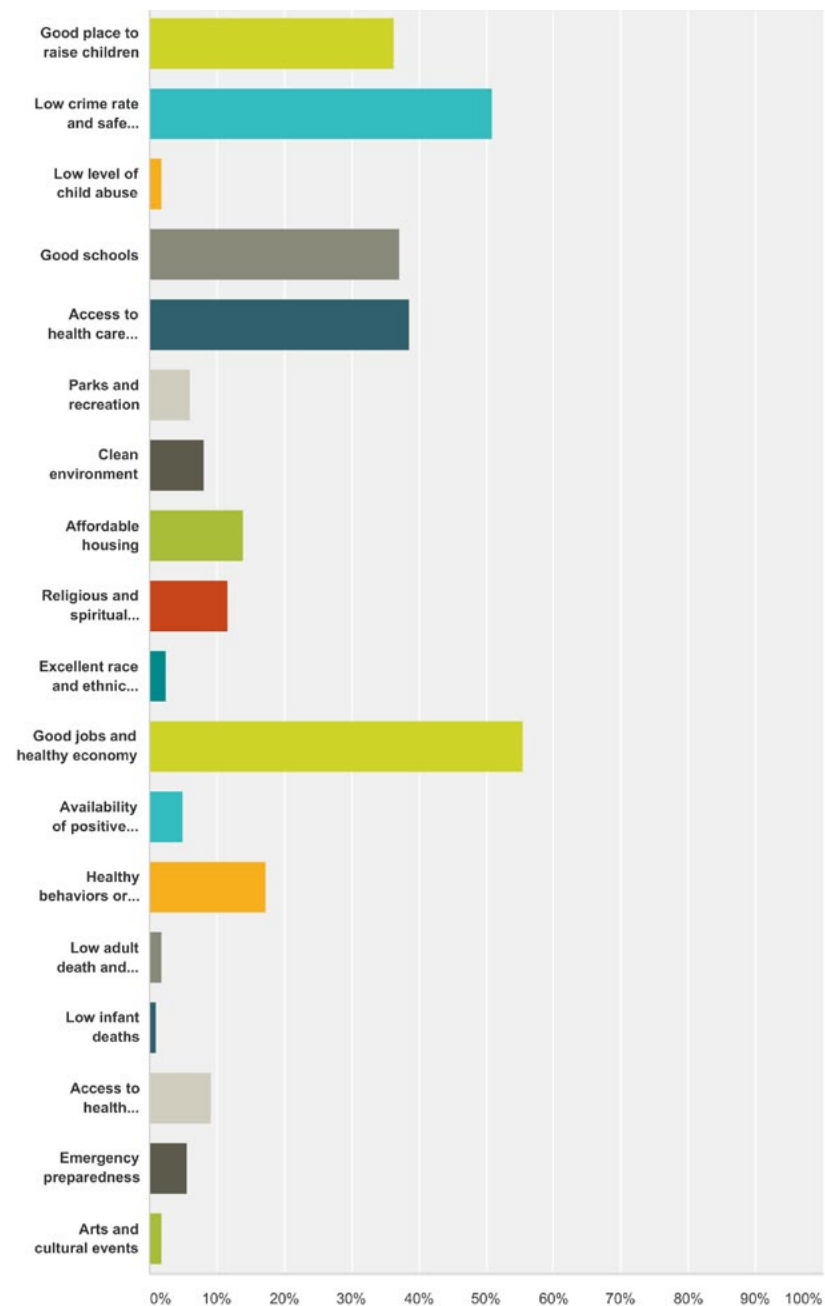
Thank you for participating in our survey.

Date completed: \_\_\_\_\_

## Appendix 2: Community health needs survey responses

**Q1** What do you think are the three most-important factors for a healthy community and good quality of life? Select only three:

Answered: 414 Skipped: 0

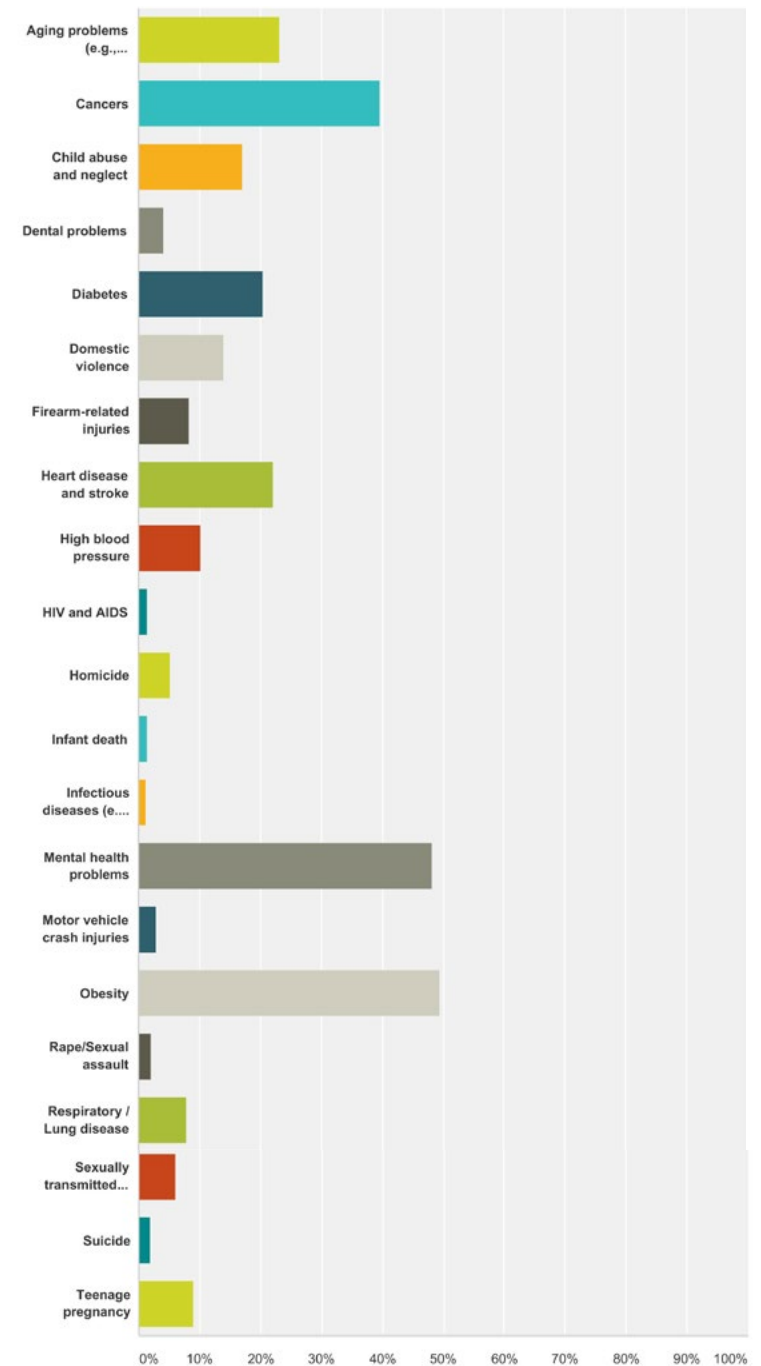


Answer Choices	Responses	
Good place to raise children	36.23%	150
Low crime rate and safe neighborhoods	50.97%	211
Low level of child abuse	1.93%	8
Good schools	37.20%	154
Access to health care (e.g., family doctors)	38.65%	160
Parks and recreation	6.04%	25
Clean environment	8.21%	34
Affordable housing	14.01%	58
Religious and spiritual values	11.59%	48
Excellent race and ethnic relations	2.42%	10
Good jobs and healthy economy	55.56%	230
Availability of positive teen activities	5.07%	21
Healthy behaviors or lifestyles	17.39%	72
Low adult death and disease rates	1.93%	8
Low infant deaths	0.97%	4
Access to health insurance	9.18%	38
Emergency preparedness	5.56%	23
Arts and cultural events	1.93%	8
<b>Total Respondents: 414</b>		



**Q2 What do you think are the three most-  
important health problems in our  
community? Select only three:**

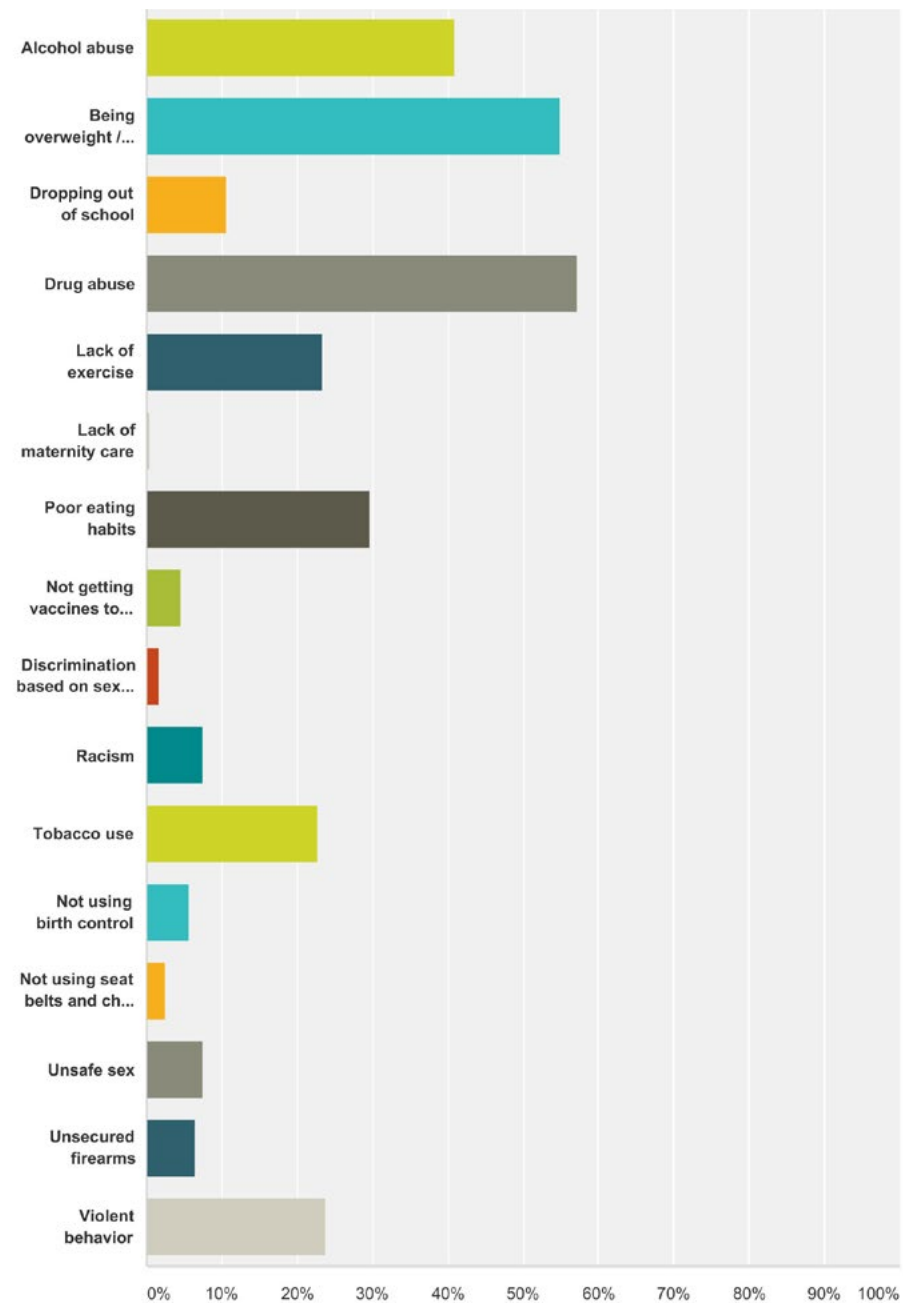
Answered: 414 Skipped: 0



Answer Choices	Responses	
Aging problems (e.g., arthritis, hearing/vision loss)	23.19%	96
Cancers	39.61%	164
Child abuse and neglect	17.15%	71
Dental problems	4.11%	17
Diabetes	20.53%	85
Domestic violence	14.01%	58
Firearm-related injuries	8.45%	35
Heart disease and stroke	22.22%	92
High blood pressure	10.14%	42
HIV and AIDS	1.45%	6
Homicide	5.31%	22
Infant death	1.45%	6
Infectious diseases (e.g., hepatitis, tuberculosis)	1.21%	5
Mental health problems	48.31%	200
Motor vehicle crash injuries	2.90%	12
Obesity	49.52%	205
Rape/Sexual assault	2.17%	9
Respiratory / Lung disease	7.97%	33
Sexually transmitted diseases	6.04%	25
Suicide	1.93%	8
Teenage pregnancy	8.94%	37
<b>Total Respondents: 414</b>		

**Q3 What do you think are the three most-  
important unhealthy behaviors in our  
community? Select only three:**

Answered: 412 Skipped: 2



## Community Health Needs Assessment

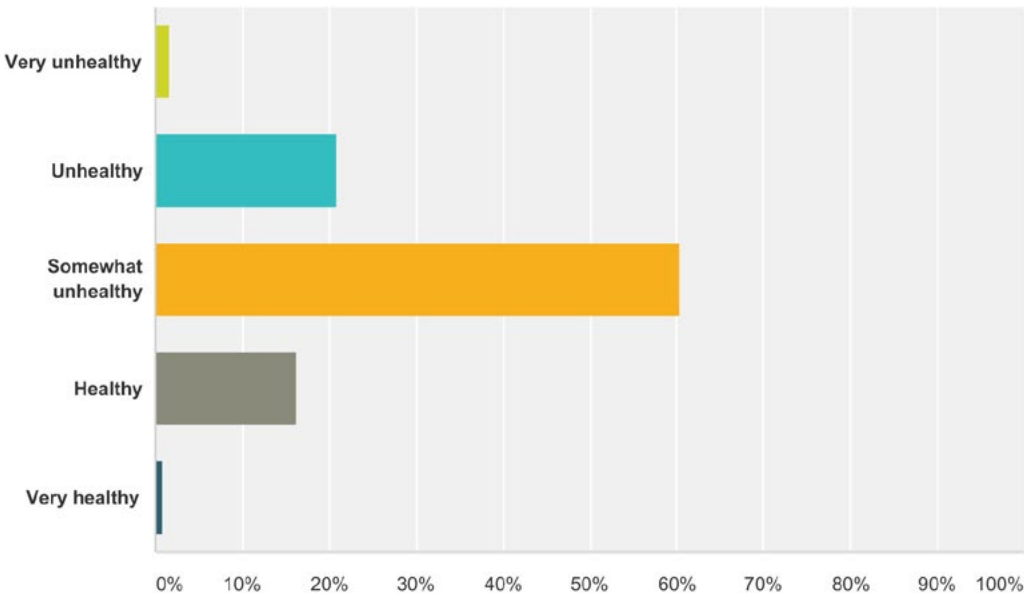
SurveyMonkey

Alcohol abuse	41.02%	169
Being overweight / Obese	54.85%	226
Dropping out of school	10.68%	44
Drug abuse	57.28%	236
Lack of exercise	23.30%	96
Lack of maternity care	0.49%	2
Poor eating habits	29.61%	122
Not getting vaccines to prevent disease	4.61%	19
Discrimination based on sexual orientation or identity	1.70%	7
Racism	7.52%	31
Tobacco use	22.82%	94
Not using birth control	5.58%	23
Not using seat belts and child safety seats	2.43%	10
Unsafe sex	7.52%	31
Unsecured firearms	6.55%	27
Violent behavior	23.79%	98
<b>Total Respondents: 412</b>		



Q4 How would you rate the health of our community?

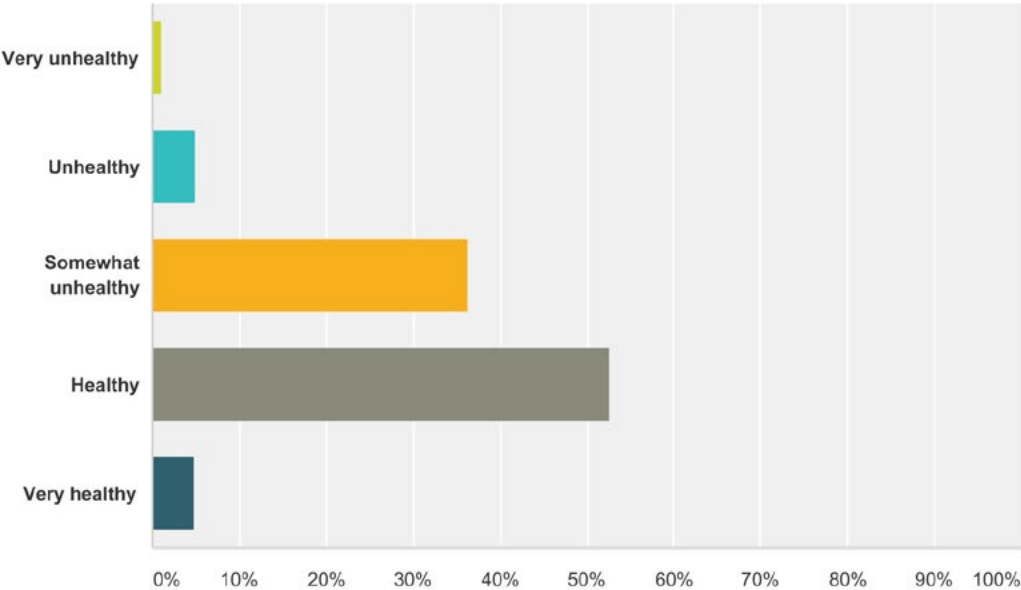
Answered: 410 Skipped: 4



Answer Choices	Responses	
Very unhealthy	1.71%	7
Unhealthy	20.98%	86
Somewhat unhealthy	60.24%	247
Healthy	16.34%	67
Very healthy	0.73%	3
Total		410

Q5 How would you rate your health?

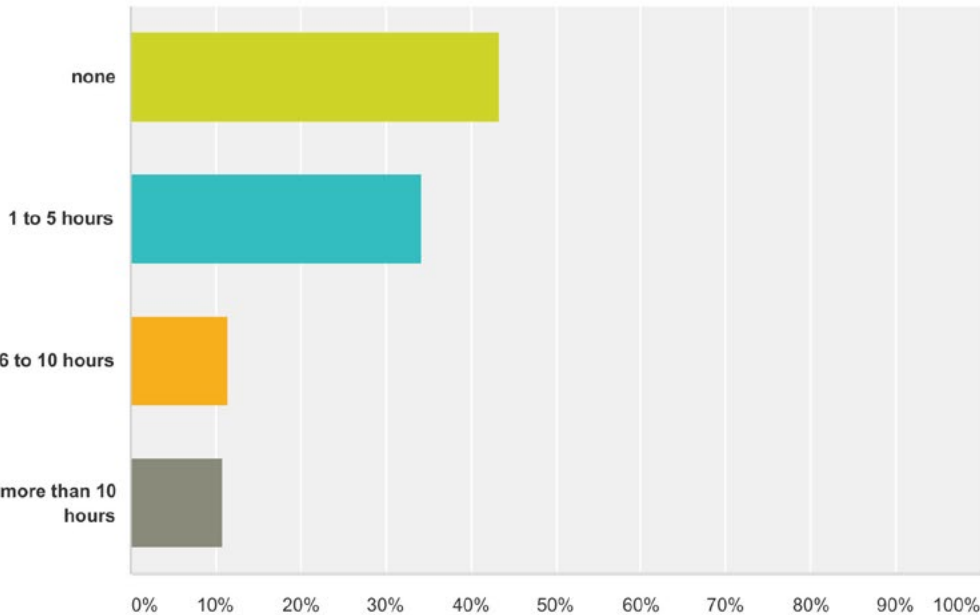
Answered: 412 Skipped: 2



Answer Choices	Responses
Very unhealthy	0.97%4
Unhealthy	5.10%21
Somewhat unhealthy	36.41%150
Healthy	52.67%217
Very healthy	4.85%20
Total	412

**Q6 About how many hours per month do you volunteer your time to community service?**

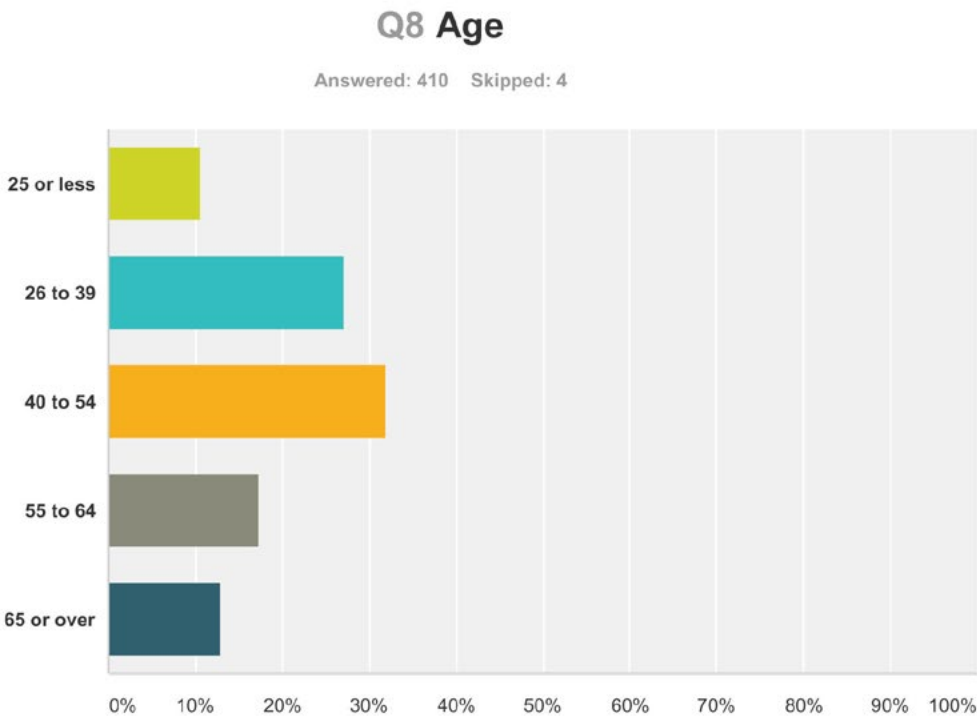
Answered: 408 Skipped: 6



Answer Choices	Responses	
none	43.38%	177
1 to 5 hours	34.31%	140
6 to 10 hours	11.52%	47
more than 10 hours	10.78%	44
Total		408

**Q7 ZIP code where you live**

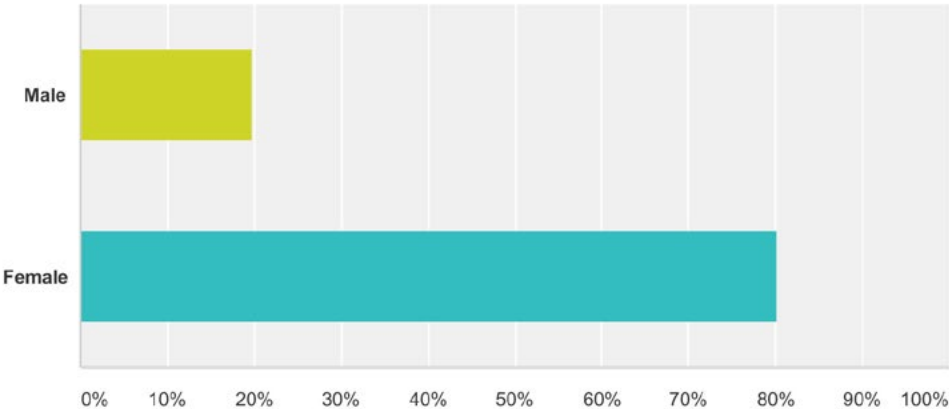
Answered: 401   Skipped: 13



Answer Choices	Responses
25 or less	10.73% 44
26 to 39	27.07% 111
40 to 54	31.95% 131
55 to 64	17.32% 71
65 or over	12.93% 53
Total	410

Q9 Sex

Answered: 399 Skipped: 15

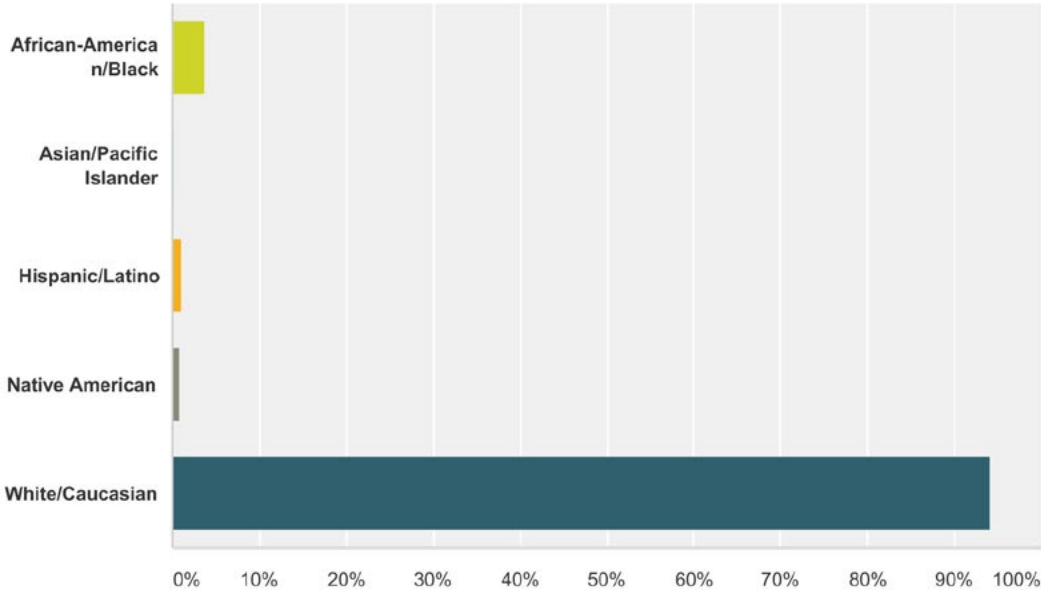


Answer Choices	Responses	
Male	19.80%	79
Female	80.20%	320
Total		399



Q10 Ethnic group you most identify with

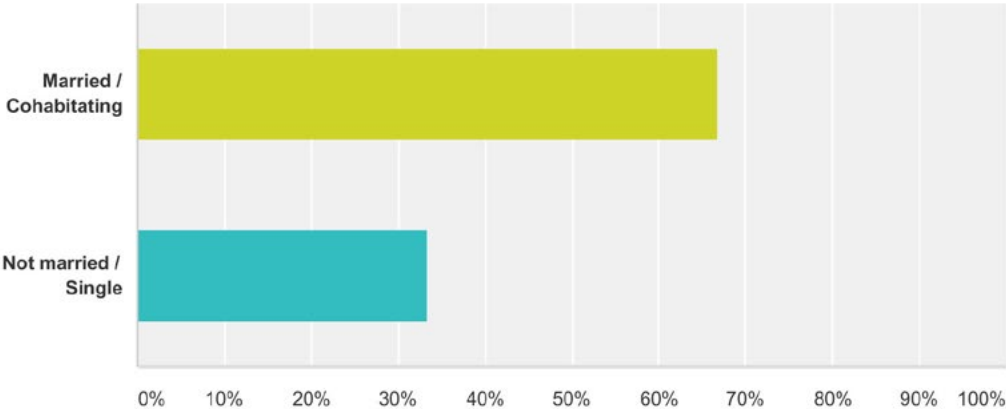
Answered: 395 Skipped: 19



Answer Choices	Responses	
African-American/Black	3.80%	15
Asian/Pacific Islander	0.25%	1
Hispanic/Latino	1.01%	4
Native American	0.76%	3
White/Caucasian	94.18%	372
Total		395

Q11 Marital status

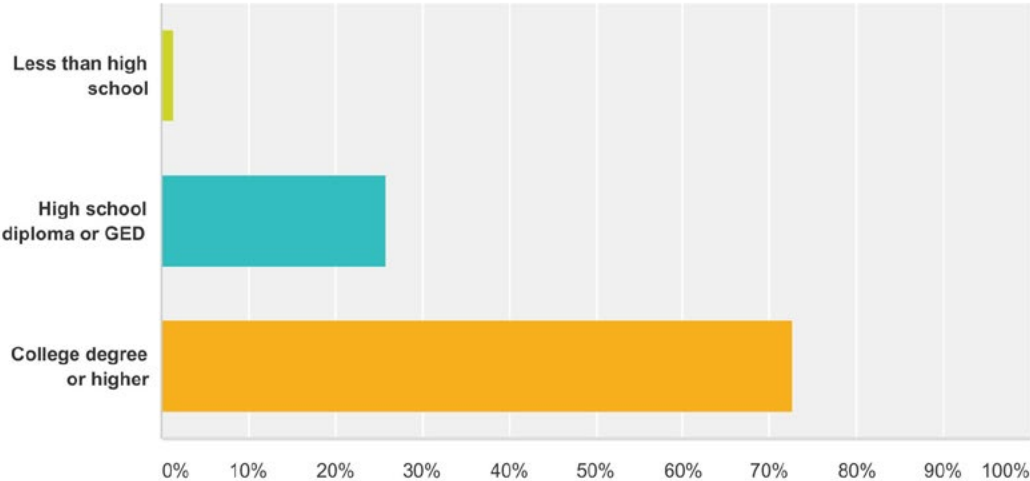
Answered: 401 Skipped: 13



Answer Choices	Responses	
Married / Cohabiting	66.83%	268
Not married / Single	33.42%	134
Total Respondents: 401		

Q12 Education

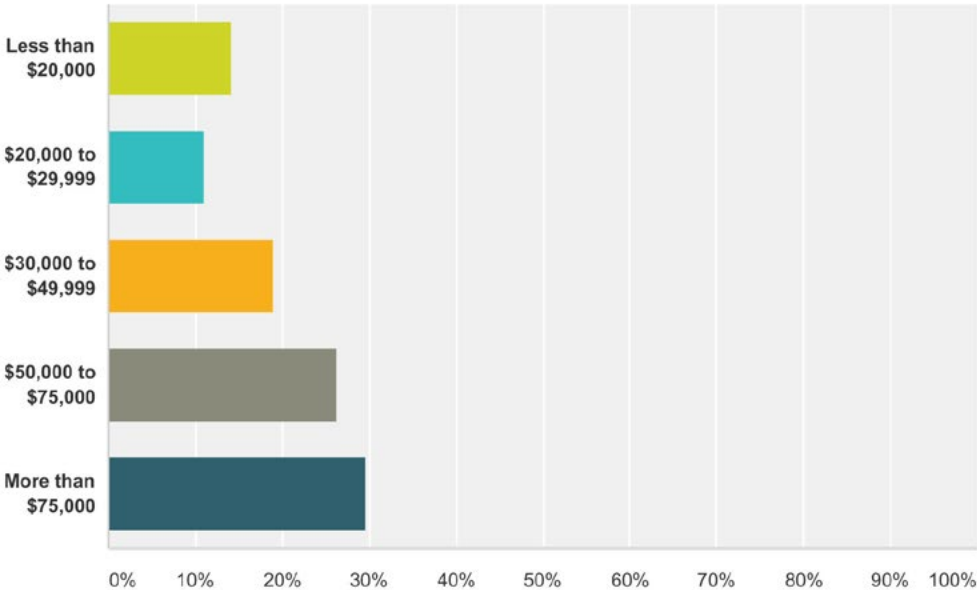
Answered: 399 Skipped: 15



Answer Choices	Responses	
Less than high school	1.50%	6
High school diploma or GED	25.81%	103
College degree or higher	72.68%	290
Total		399

Q13 Household income

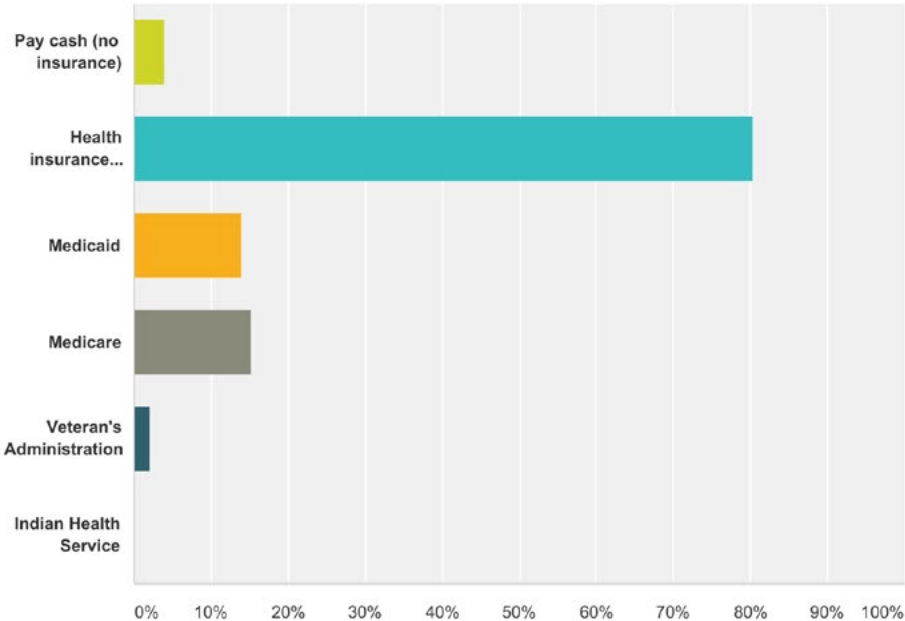
Answered: 389 Skipped: 25



Answer Choices	Responses
Less than \$20,000	14.14% 55
\$20,000 to \$29,999	11.05% 43
\$30,000 to \$49,999	19.02% 74
\$50,000 to \$75,000	26.22% 102
More than \$75,000	29.56% 115
Total	389

Q14 How do you pay for your health care?  
(check all that apply)

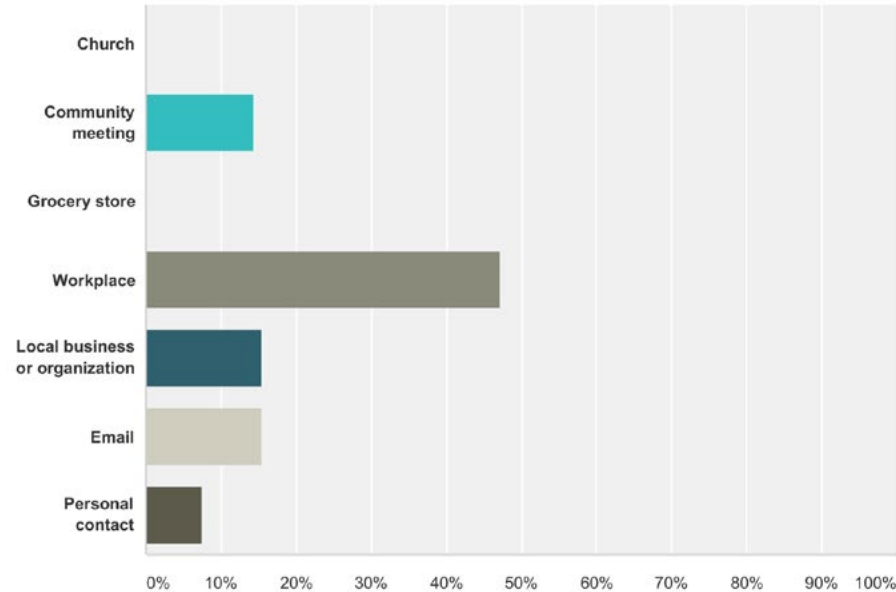
Answered: 403 Skipped: 11



Answer Choices	Responses	
Pay cash (no insurance)	3.97%	16
Health insurance (e.g., private insurance, Blue Cross, Health Insurance Marketplace)	80.40%	324
Medicaid	13.90%	56
Medicare	15.14%	61
Veteran's Administration	1.99%	8
Indian Health Service	0.00%	0
Total Respondents: 403		

Q15 Where or how you got this survey  
(check one)

Answered: 291 Skipped: 123

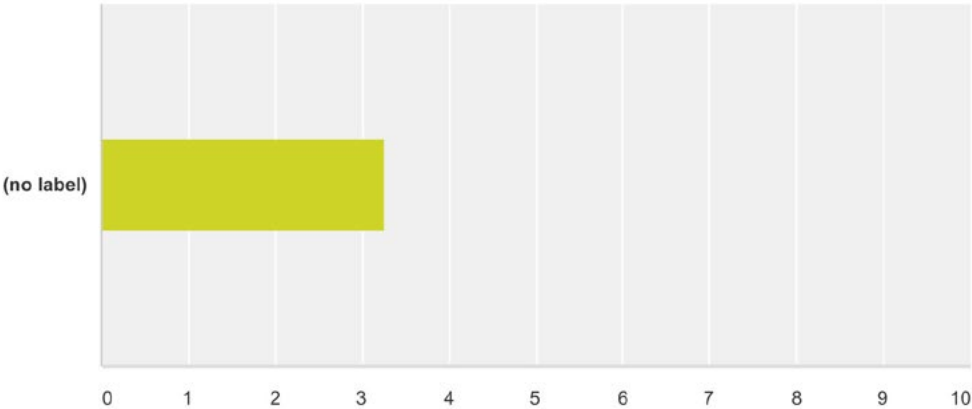


Answer Choices	Responses	
Church	0.00%	0
Community meeting	14.43%	42
Grocery store	0.00%	0
Workplace	47.08%	137
Local business or organization	15.46%	45
Email	15.46%	45
Personal contact	7.56%	22
Total		291



**Q16 Are you satisfied with the quality of life in our community? Factors to consider are your sense of safety, well-being, and participation in community life and associations.**

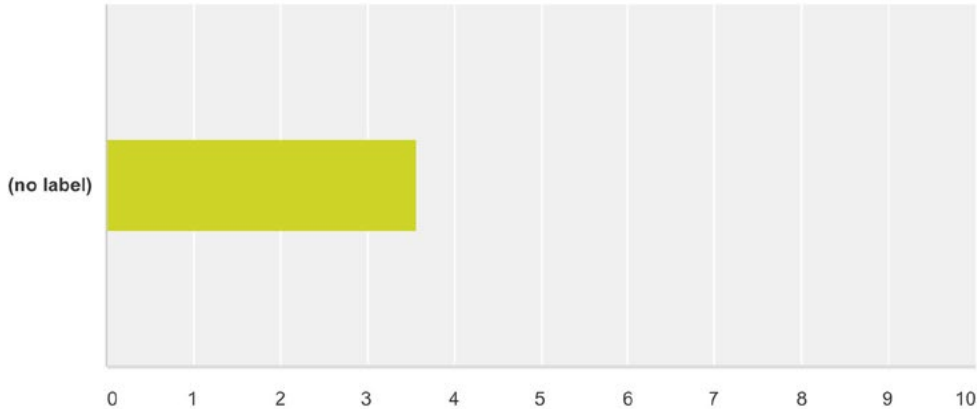
Answered: 410 Skipped: 4



	No	(no label)	(no label)	(no label)	Yes	Total	Weighted Average
(no label)	5.61% 23	16.59% 68	35.12% 144	31.95% 131	10.73% 44	410	3.26

**Q17 Are you satisfied with the health care system in the community? Factors to consider may include access, cost, availablilty, quality and options in health care.**

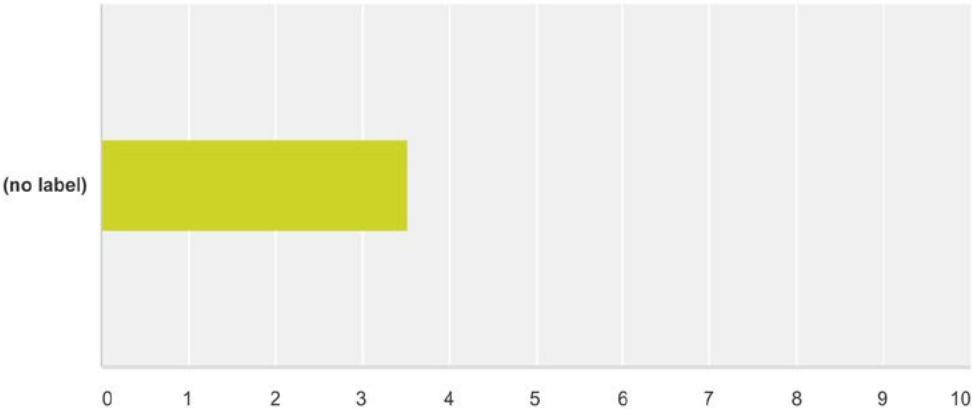
Answered: 411 Skipped: 3



	No	(no label)	(no label)	(no label)	Yes	Total	Weighted Average
(no label)	4.38% 18	12.65% 52	26.03% 107	36.50% 150	20.44% 84	411	3.56

**Q18 Is this community a good place to raise children? Factors to consider may include school quality, day care, after-school programs and recreation.**

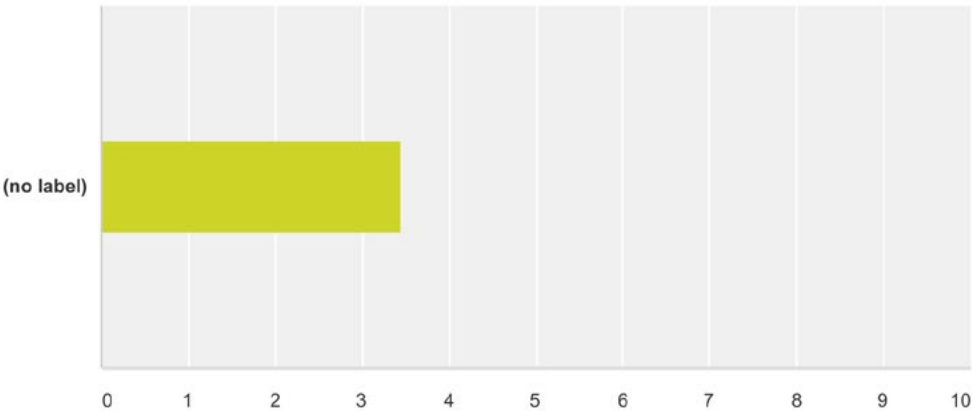
Answered: 406 Skipped: 8



	No	(no label)	(no label)	(no label)	Yes	Total	Weighted Average
(no label)	1.72% 7	12.07% 49	35.22% 143	33.25% 135	17.73% 72	406	3.53

**Q19 Is this community a good place to grow old? Factors to consider may include elder-friendly housing, transportation to medical services, churches, shopping, elder day care, social support for elderly living alone and home-delivered meals.**

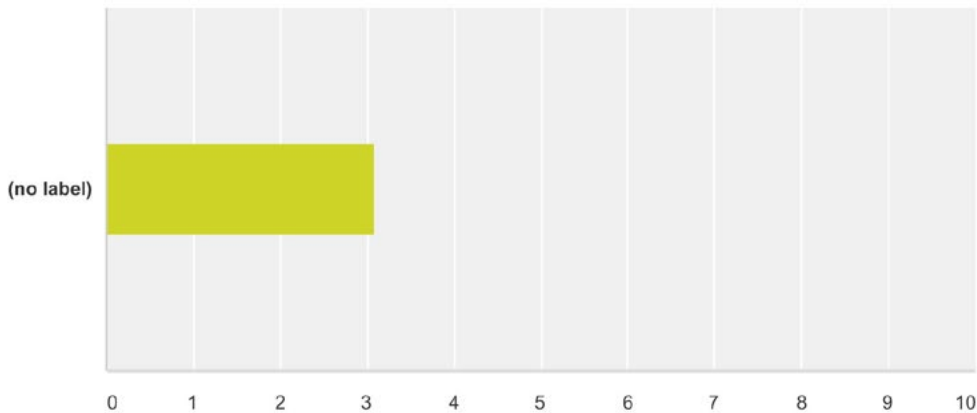
Answered: 411   Skipped: 3



	No	(no label)	(no label)	(no label)	Yes	Total	Weighted Average
(no label)	2.19% 9	12.17% 50	36.25% 149	36.98% 152	12.41% 51	411	3.45

**Q20 Is there economic opportunity in the community? Factors to consider may include locally owned and operated businesses, jobs with career growth, job-training / higher-education opportunities, affordable housing and a reasonable commute.**

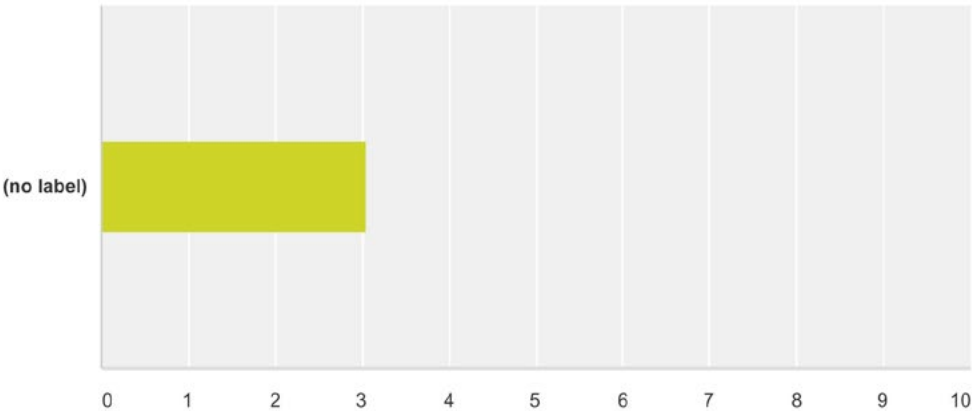
Answered: 410 Skipped: 4



	No	(no label)	(no label)	(no label)	Yes	Total	Weighted Average
(no label)	5.12% 21	19.02% 78	44.39% 182	23.17% 95	8.29% 34	410	3.10

**Q21 Is this community a safe place to live?**  
**Factors to consider may include residents'**  
**perceptions of safety in the home, the**  
**workplace, schools, playgrounds, parks and**  
**the mall. Do neighbors know and trust one**  
**another? Do they look out for one another?**

Answered: 411 Skipped: 3

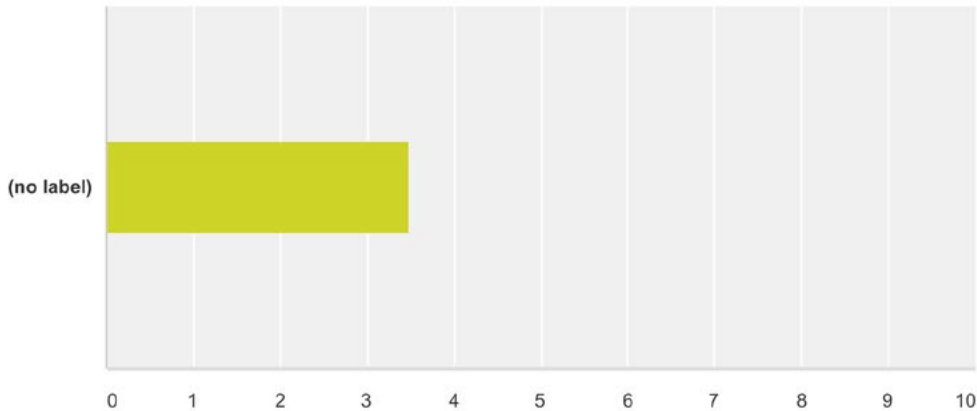


	No	(no label)	(no label)	(no label)	Yes	Total	Weighted Average
(no label)	5.84% 24	22.38% 92	42.09% 173	21.41% 88	8.27% 34	411	3.04



**Q22 Are there networks of support for people and families (neighbors, support groups, faith community outreach, agencies and organizations) during times of stress and need?**

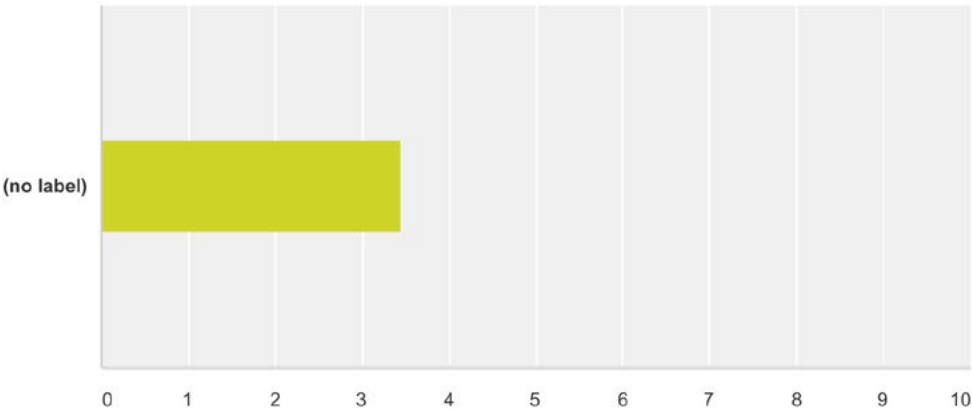
Answered: 409 Skipped: 5



	No	(no label)	(no label)	(no label)	Yes	Total	Weighted Average
(no label)	1.47% 6	9.78% 40	39.12% 160	38.63% 158	11.00% 45	409	3.48

**Q23 Do all people and groups have the opportunity to contribute to and participate in the community's quality of life?**

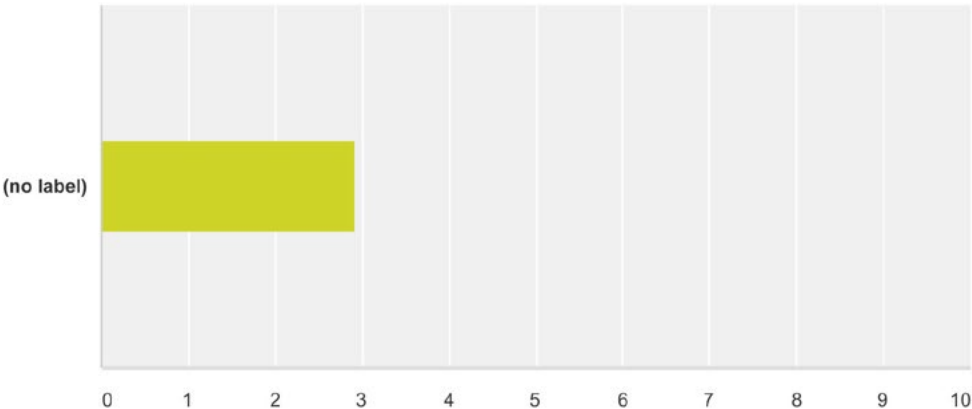
Answered: 405 Skipped: 9



	No	(no label)	(no label)	(no label)	Yes	Total	Weighted Average
(no label)	3.95% 16	11.60% 47	35.06% 142	34.32% 139	15.06% 61	405	3.45

**Q24 Do all residents perceive that they - individually and collectively - can make the community a better place to live?**

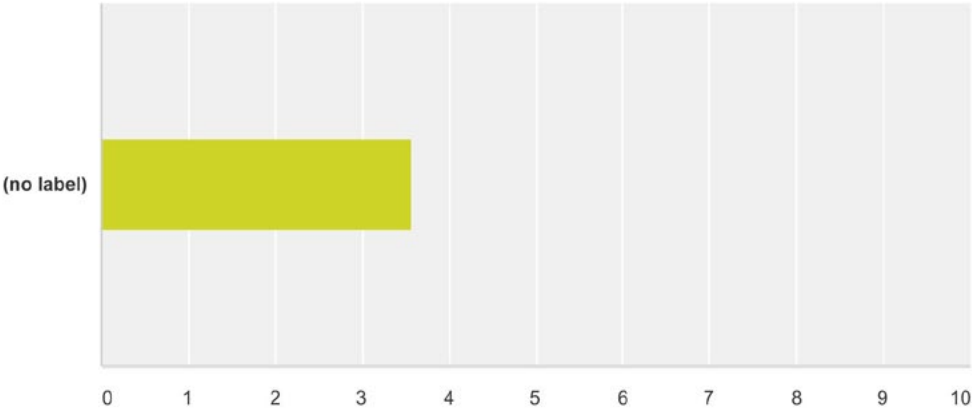
Answered: 399 Skipped: 15



	No	(no label)	(no label)	(no label)	Yes	Total	Weighted Average
(no label)	7.27% 29	23.81% 95	43.61% 174	19.55% 78	5.76% 23	399	2.93

Q25 Is there a broad variety of health services in the community?

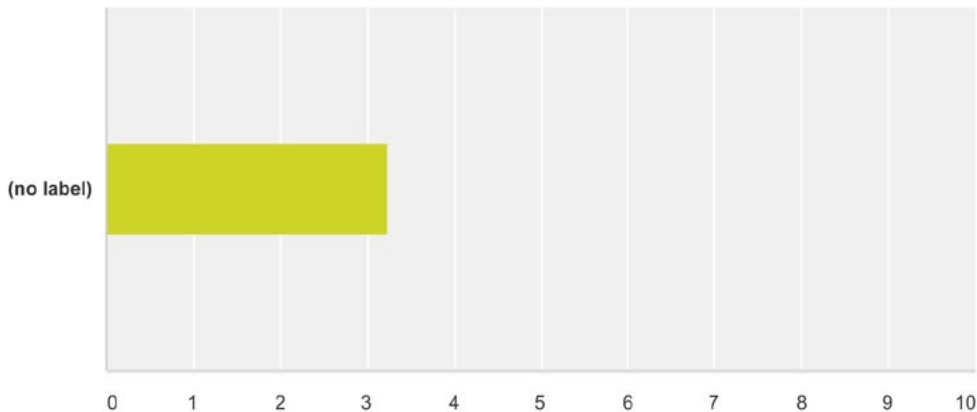
Answered: 406 Skipped: 8



	No	(no label)	(no label)	(no label)	Yes	Total	Weighted Average
(no label)	1.97% 8	11.08% 45	31.53% 128	38.18% 155	17.24% 70	406	3.58

Q26 Is there a sufficient number of health and social services in the community?

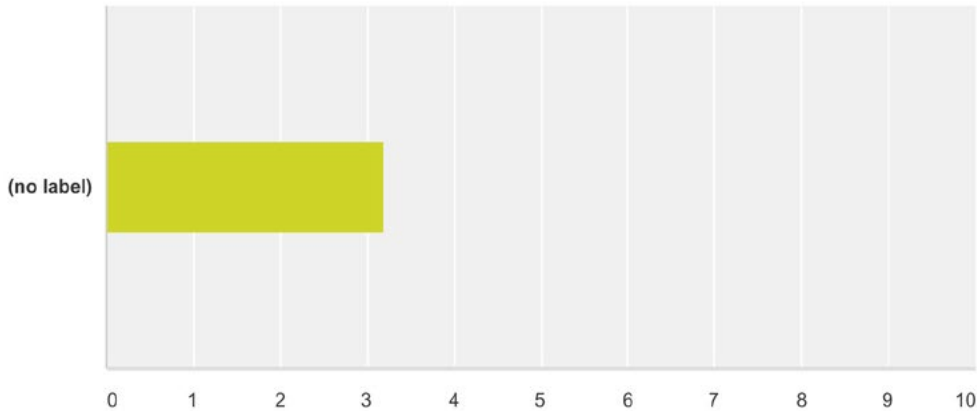
Answered: 409 Skipped: 5



	No	(no label)	(no label)	(no label)	Yes	Total	Weighted Average
(no label)	5.62% 23	17.60% 72	33.50% 137	33.25% 136	10.02% 41	409	3.24

**Q27 Are levels of mutual trust and respect increasing among community partners as they participate in collaborative activities to achieve shared community goals?**

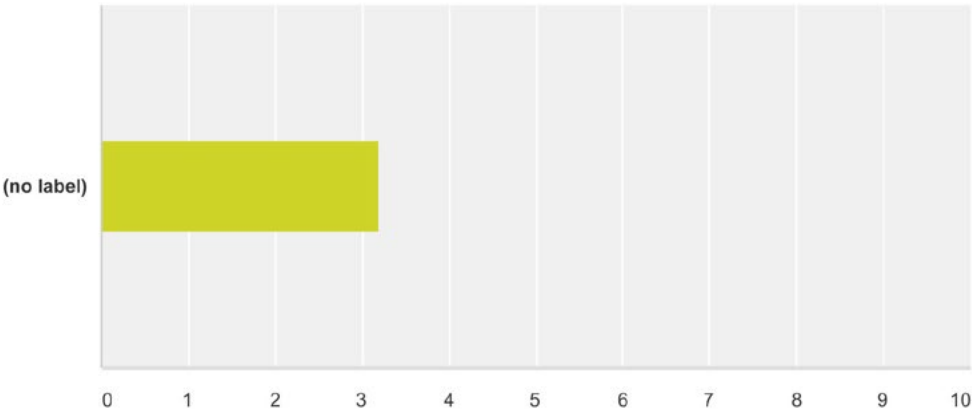
Answered: 407 Skipped: 7



	No	(no label)	(no label)	(no label)	Yes	Total	Weighted Average
(no label)	4.18% 17	16.22% 66	43.98% 179	28.01% 114	7.62% 31	407	3.19

Q28 Is there a sense of civic responsibility, engagement and pride in shared accomplishments?

Answered: 407 Skipped: 7



	No	(no label)	(no label)	(no label)	Yes	Total	Weighted Average
(no label)	4.18% 17	17.44% 71	43.00% 175	26.04% 106	9.34% 38	407	3.19



### Appendix 3: Community key informant interview template

Interviewee Name:

Organization(s) being represented:

Job Title(s):

Population(s) being represented:

Education:

Licenses and Certifications:

Associations

Affiliations:

Date:

1. Can you tell me a bit about your organization? What types of programs/ services do you provide?
2. What are some of the biggest challenges you face in providing these programs/ services in the community?
3. Please describe the most significant health issues you see in our community. (Ask probing questions as necessary to get greater detail).
4. What resources does the community have to address these significant health issues (and social, economic, and other factors)?
5. What resources, needed to address these issues, are lacking in our community?
6. Hospitals provide four things: individuals (e.g. doctors), services (e.g. specialties), locations (e.g. hospital and clinics) and objects (prescriptions, equipment, etc.). Are any of these four things lacking in our community in any way?
7. What do you think causes problems for community residents when accessing health care?
8. What do believe are the best health services offered by Great River Medical Center and other providers in the region?
9. If funds were unlimited, what would you recommend Great River Medical Center and other community organizations do to respond to these health needs?
10. Are there any other questions I have forgotten to ask you or that you would like to make sure get included in our analysis?

#### Appendix 4: Key informant responses

Area of greatest need	Mentions
Mental health	7
Service awareness	5
Transportation	5
Provider access/location	3
Basic life skills	2
Lack of agency/services/Cooperation	2
Prescription drugs	2
Dental	1
Funding/staffing	1
Insurance coverage	1
Obesity	1
Patient compliance/Motivation	1
Sexually transmitted diseases	1
Substance abuse	1