# Community Health Needs Assessment

## General John J. Pershing Memorial Hospital
## Linn County, Missouri

## 2021-22

**Pershing Health System**

Let the people who care about you care for you
An affiliate of Boone Hospital Center

Collaborating Support

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**Community Health Needs Assessment**

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**Executive Summary**

**Short description of the community** Pershing Health System, Brookfield, MO, is the only hospital serving rural, Northeast Missouri's Linn County area (the 51st-largest county in Missouri by area), and provides outpatient, laboratory, respiratory, rehabilitation, radiology, cardiac, and nutritional services. This rural census tract is a HRSA-designated Health Professional Shortage Area for primary care [12,168:1], dental, and mental health [509:1]; as well as a Medically-Underserved Area. The US Census reports County (pop. ~12, 113) residents, mostly (96.9%) White, possess a median household income of $45,930.00 (far lower than the national rate) with a poverty rate of 15.4%, (far higher than the national rate), and 10.6% rate of uninsured (higher than the national rate). Rates for deaths and/or hospitalizations for the chronic conditions of heart disease, all cancers, diabetes, COPD, smoking-related, and arthritis are significantly higher than the state rate.

**Short description of the overall CHNA process** included Establish Assessment Infrastructure, Process Timeline, Community Representatives [4/20/21; 4/27/21]; Convene CHNA Committee, Meeting Schedule, Community Definition [4/6/21]; Data Collection and Gathering, Demographic, Health Status [5/1/21 – 8/30/21]; Review of Availability of Other Health Providers in Community, Summary Report [9/2021]; Convene CHNA Committee, Preliminary List of Needs Identified, Process for Broad Community Input [4/13/21]; Opportunities for Community Input, Refine Process for Input [4/15/21]; Multiple Locations to Provide Opportunities for Special Interest Groups, Gather Community Input [5/11/21]; Review Information Gathered from Community Input, Draft Report of Data Collected and Analyzed [3/1/22]; Convene Community Committee, Identify Needs, Steering Committee Finalizes Needs List [3/15/22]; Develop Draft CHNA Report for Public [5/1/22]; Convene Community Committee Final Time [5/15/22], and Finalize Report for Publication and Reporting in Schedule H, Form 990, Make Available on Hospital Website [6/1/22].

**Key partners in the initiative included** those with special knowledge in public health (Linn County Health Department- as best they could during pandemic), agencies with current data relevant to community health needs (Area Agency on Aging), leaders/members of medically underserved, low-income/minority, senior citizens, and those with chronic disease needs (K Clubine/Director of Operations; an individual with physical impairment, an individual of Inuit lineage/lower SES, and a senior citizen). Additionally, partners included **c**onsumer/healthcare advocates (J Smith/Ministerial Alliance), non-profits (H Wampler, Senior Center), those with academic expertise (C Cox/Truman State University), local government officials (D Tarpenin/City Mgr.), health-related community-based organizations (B Pointon/Auxiliary President), and healthcare providers (Advanced Medical Express Clinic, Community Medical Associates, Meadville Medical Clinic, Brookfield Physical Therapy, Premier Eye Care Associates). The Hospital Internal Team included P Hamilton/CEO as Lead with T Breuner - Marketing/Benefits/HR, W Engberg- Medical Executive Coordinator, Strategic Planning Office staff – D Burton/Clinic Referral Specialist, Population Health Office staff – H Wood/Social Worker, and staff with community health expertise- D Adler/Informatics Nurse, B Locke/IT Director.

**Public health input was provided by** Dr. Darson Rhoads, PhD, MCHES® Associate Professor & Graduate Director, Department of Public Health and Health Education, SUNY Brockport; Dr. Carol Cox, PhD, MCHES® FAWHP FASHA FESG Professor Health Science, Truman State University; and K. Penyweit, T. Gisi, P. Heman, R. Shertzer, E. Rembush, E. Klietz, J. Leong, M. Huhn, N. Sunar- Health Science Students, Truman State University.

T**he process for seeking input from the medically underserved, chronically ill and low-income populations** was to identify and personally contact to ask representatives from the medically underserved, low-income, and chronically ill populations for their expertise/input in the process. They were specifically included in the preliminary stage as survey 'pre-testers' to provide feedback on survey drafts. Data specific to the medically underserved, low-income, and chronically ill populations was researched in the

secondary assessment. In the primary assessment, the medically underserved, low-income, and chronically ill populations were active participants in survey draft evaluation, oversampled in data collection, and specifically incentivized to participate in the process. In prioritization and planning processes, an individual with physical impairment, an individual of Inuit lineage, and an individual from the geriatric population represented the interests of the medically underserved, low-income, and chronically ill populations.

**The key sources of secondary data were** The Missouri Public Health Information Management System ExploreMOhealth, County Health Rankings and Roadmaps, and All Things MO – Get Better Data.

**The process for primary data collection** first reviewed the previous assessment that used a town hall format. An individual survey methodology was used in this CHNA for better representativeness, convenient data gathering/analysis, and generalizability. Both hard copy and e-copy were used to maximize feedback and make the process more accessible for hard-to-reach populations. Paper surveys were given to patients and visitors to the hospital and Rural Health Clinic. Surveys were also distributed during every health fair sponsored by Pershing at local businesses, schools, and community events. Starting early summer 2021, to encourage maximum community participation, especially for the medically underserved, low-income, and chronically ill populations, Pershing offered an incentive for those who returned a completed survey. They were entered in a drawing for one of two $150 Visa prepaid gift cards. Links to the e-version were sent to e-media channels and placed on multiple social media sites to be shared within those networks. Links to the e-version were also sent/advertised on radio stations KZBK, KDWD, KMZU, and the local community information Channel 6.

**The list of identified health issues based on secondary and data analysis included**:

- Multiple chronic conditions
- Lack of preventive services/access
- Poverty/uninsured
- Poor mental health
- Substance use/abuse
- High cost of care/prescriptions

**The process to prioritize the health issues, including a list of key partners that participated,** included the Hospital team, Truman team, and Community team (including an individual with physical impairment, an individual of Inuit lineage, and an individual from the geriatric population to represent interests of the medically underserved, low-income, and chronically ill populations). Using a strategy grid, prioritization matrix, and Hanlon technique, data was analyzed, community assets were reviewed, and priorities were then selected using nominal group process.

**A summary list of those health issues prioritized for action included:**

- Multiple chronic conditions
- Lack of preventive services/access

**For questions or involvement, please contact** Karla Clubine, RN, MSN, Chief Executive Officer, Pershing Health System, 130 E. Lockling, Brookfield, MO 64628, 660-258-1148

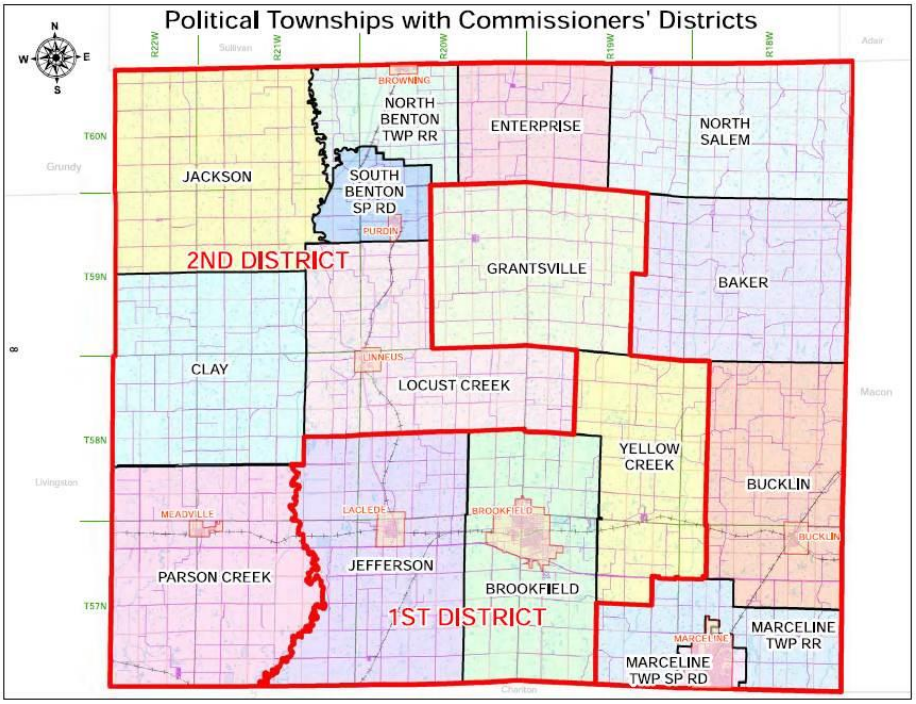
X_____ Karla Clubine, RN, MSN; Chief Executive Officer

**II. Community Health Needs Assessment: Community Defined**

**a. Description of the community served by the hospital facility**

**i. geography: map**

1. **List of counties**
2. **ZIP codes**
3. **Square miles**




The community served by the hospital, Linn County, is located in rural Northeast Missouri and covers an area of 615.56 square miles (US Census, 2019) and 9 zip codes [63557 New Boston | 63566 Winigan | 64628 Brookfield | 64630 Browning | 64631 Bucklin | 64651 Laclede | 64653 Linneus | 64658 Marceline | 64659 Meadville | 64674 Purdin | (ZipDataMaps, 2021). Additional maps/graphs [Township/Road Maps, GIS Map, Zip Code graph]: Appendix C.

**ii. population (may include additional information as an appendix)**

1. **total**
2. **population density**
3. **at-risk (description and estimated percentage of population), source**
4. **demographic description**

With a population of ~12,773 residents and a population density of 20.7, Linn County residents possess a median household income $45,930.00 (below state average) and a median household value of $87,200.00 (below state average). Although 83% of households have a computer (US Census, 2019), only 67.6% have internet access, lower than the state rate (US News Healthiest Communities/ Overview of Linn County, MO, 2020).

Since the latest US Census, county population has decreased by almost 1000 residents (7.2%) (US Census, 2019). Most residents (97%) are White, almost half (45.7%) of those over 25 are high school

graduates (MO Census Data Center/MCDC ACS Profiles, 2021), 14.1% are under 65 without health insurance (higher than state rate), and 18.9% are in poverty (higher than the state rate) (US Census, 2019). About one-fifth (21.4%) are over age 65 (higher than the state rate) (US Census, 2019), almost 8% of those seniors are in poverty, and one-third of seniors (33.1%) possess a disability (MO Census Data Center/MCDC ACS Profiles, 2021). In most (77.6%) households, both parents are working (MO Census Data Center/MCDC ACS Profiles, 2021); however, for children/youth, 50.94% live in homes with income below 200% of the Federal Poverty Level, and 7.97% lack health insurance (ExploreMOhealth/Health Atlas, 2021). Additional maps/graphs [County Quick Facts, Map of Population by County Subdivision in Linn County, Demographics table comparison to MO]: Appendix B.

| | Linn County, Missouri | United States |
|---|---|---|
| **Population estimates, July 1, 2019, (V2019)** | **11,920** | **328,239,523** |
| **PEOPLE** | | |
| **Population** | | |
| **Population estimates, July 1, 2019, (V2019)** | **11,920** | **328,239,523** |
| Population estimates base, April 1, 2010, (V2019) | 12,773 | 308,758,105 |
| Population, percent change - April 1, 2010 (estimates base) to July 1, 2019, (V2019) | -6.7% | 6.3% |
| Population, Census, April 1, 2020 | 11,874 | 331,449,281 |
| Population, Census, April 1, 2010 | 12,761 | 308,745,5 |

Health outcomes

Heart disease, cancer, and lower respiratory disease are the leading causes of death in the county (MO Department of Health and Senior Services/Missouri Resident Death - Leading Causes Profile, 2019). Years of potential life lost and length of life expectancy (101/115) for county residents ranked in the bottom 20% when all MO counties were compared on health outcomes (ExploreMOhealth/MO Health Atlas/Linn County, 2021).

Ranked in the lower quarter to half of Missouri counties related to overall health outcomes and health factors; rates of premature deaths, sexually transmissible infections, lack of primary care providers, and children in poverty are trending higher over time (County Health Rankings and Roadmaps/Linn (LN), 2021). Resident poor physical and mental health days (4.6%; 4.9%) are higher than state rates, and clinical care indicators such as insured, screenings, and vaccinations are worse than state rates (County Health Rankings and Roadmaps/Linn (LN), 2021).

Specifically, rates for deaths and/or hospitalizations for the chronic conditions of heart disease, all cancers, diabetes, COPD, smoking-related, and arthritis are significantly higher than the state rate. Trends since 2004 for these conditions (except diabetes and arthritis hospitalizations that have increased over time) have remained steady or decreased a small amount. For females, deaths/hospitalization for heart disease and lower respiratory disease as well as smoking-related deaths are higher than state rates and have stayed fairly consistent over time (MO Department of Health and Senior Services/Missouri Resident Chronic Disease Comparisons Profile, 2019). For Medicare beneficiaries, heart disease prevalence (32.0%) is also higher than the state rate (US News Healthiest Communities/ Overview of Linn County, MO, 2020).

Similarly, self-reported prevalence of fair/poor health status (27.39%), arthritis (40.26%), cancer (15.89%), pre-/diabetes (17.80%; 15.90%), and hypertension (47.16%) are higher than state rates [Trend analysis not available] (MO Department of Health and Senior Services/Missouri Resident County-Level Study Profile, 2016). The percent reporting fair/poor health and average unhealthy days/month rank in the bottom half when all MO counties were compared. Overall, quality of life ranks 77/115, in the bottom half when all MO counties were compared (ExploreMOhealth/MO Health Atlas/Linn County, 2021).

*Highlighted County-Level Issues for Linn County*

| Health Factor | Rank* |
|---|---|
| Physical Environment | Rank 08 |
| Health Behaviors | Rank 44 |
| Clinical Care | Rank 49 |
| Health Factors | Rank 65 |
| Quality of Life | Rank 77 |
| Socioeconomic Factors | Rank 88 |
| Health Outcomes | Rank 94 |
| Length of Life | Rank 101 |

[* Statewide Rank of 115 (1=best)]

(ExploreMOhealth/MO Health Atlas/Linn County, 2021).

Health behaviors/factors

Contributing behavioral risk factors for chronic conditions in county adults include the negative health behaviors of smoking (24%) and physical inactivity (32%) that are higher than the state rate (County Health Rankings and Roadmaps/Linn (LN), 2021). Excessive/binge drinking (17.4%) and lack of sleep (31.0%) are also risk factors for county residents. When all MO counties were compared on health behaviors, the county ranked 44/115 (ExploreMOhealth/MO Health Atlas/Linn County, 2021).

In addition, self-reported lack of dental visits (27.37%), activity limitation (32.85%), and obesity (40.06%) are health risks reported at higher than state rates. Many residents also reported lack of recent flu immunization (66.35%) and, for those over 65, lack of pneumonia vaccination (37.74%); both higher than the state rate [Trend analysis not available] (MO Department of Health and Senior Services/Missouri Resident County-Level Study Profile, 2016) that may lead to preventable chronic health conditions.

For children/youth, tobacco/vaping (9.0%; 20.1% - trending up), alcohol (20.3%), and inhalant (2.6% - trending up) past 30-day self-reported use rates were higher than the state rates. Past 3-months fighting (19.1%- trending up), bullying (60.3%), and cyber-bullying (17.3%) were also higher than state rates (MO Department of Mental Health/2020 Missouri Student Survey/Linn County, 2020). Juvenile status offenses for injurious behavior (56) are also trending up over the past two years (MO Department of Mental Health/Behavioral Health Indicators by County/Linn County, 2020).

Infant WIC participation and child and teen ER injury visits, although trending somewhat downward since 2004, are still higher than state rates (MO Department of Health and Senior Services/Missouri Resident Child Health Profile, 2019). Additionally, the teen birth rate/1000 (32.8) is higher than the state rate (US News Healthiest Communities/ Overview of Linn County, MO, 2020).

Clinical

When all MO counties were compared on clinical care, the county ranked 49/115. The ratio of dentists and mental health providers to the county population as well as proportion of uninsured ranked in the bottom half of MO counties. Only 40% of Medicare recipients obtained their annual flu vaccination, and only 37% of female Medicare recipients received an annual mammogram (ExploreMOhealth/MO Health

Atlas/Linn County, 2021). In addition, only 11% of Medicare beneficiaries had a recent primary care visit, lower than the state rate (US News Healthiest Communities/ Overview of Linn County, MO, 2020).

Nutrition

Although food availability rates are high, diabetes (14%) and obesity (33.3%) prevalence is also high (US News Healthiest Communities/ Overview of Linn County, MO, 2020). For students, almost half (45.3%) were eligible for free/reduced lunch, ranking in the bottom half when all MO counties were compared (ExploreMOhealth/MO Health Atlas/Linn County, 2021).

Socioeconomic factors

Socioeconomically, unemployment (4.9%) and children in poverty (31%) rates are higher than the state rate (County Health Rankings and Roadmaps/Linn (LN), 2021). When all MO counties were compared, county percentage of unemployed and children in single-parent homes ranked in the bottom 20%, with child poverty rates ranking in the bottom half of counties. Overall, socioeconomic factors rank for the county is 88/115 (ExploreMOhealth/MO Health Atlas/Linn County, 2021).

*Top factors in the lowest-ranked zip codes in Linn County*

| ZIP Code | Name | Rank | Top Health Factor | Top Social Factor |
|---|---|---|---|---|
| 64628 | Brookfield | 658 | Diabetes | One-Parent Households |
| 64631 | Bucklin | 577 | Teen Pregnancy | Household Size |
| 64658 | Marceline | 463 | Arthritis/Joint Disease | After-Hour Emergency Visits |
| 64674 | Purdin | 437 | Years of Potential Life Lost | Injury Deaths |

(ExploreMOhealth/Spotlight on ZIP Health/Linn County, 2021)

Environmental factors

When all MO counties were compared, the county ranked high (8/115) for physical environment. (ExploreMOhealth/MO Health Atlas/Linn County, 2021). However, 10% of homes tested had elevated radon levels, childhood blood lead testing rate is below state average (Environmental Public Health Tracking Network/Linn County Environmental Health Profile, n.d.), and county violent crime rate (322.5 per 100,000) is lower than the state rate, but trending towards the state and national rates (ExploreMOhealth/Health Atlas, 2021). Although violent crime is down over the past year, property crimes have increased (MO State Highway Patrol/Crime in MO, 2020).

In addition, recent mental disorder-related ER visits (726) and alcohol-involved crashes (15) in the county have trended up over the past two years (MO Department of Mental Health/Behavioral Health Indicators by County/Linn County, 2020). Overall vehicle crash fatality rate /100k is 26.1, also higher than the state rate (US News Healthiest Communities/ Overview of Linn County, MO, 2020).

[Additional charts/graphs/detailed information: MDHSS Secondary Needs Assessment Template: Appendix C]

Barriers/access gaps

Some barriers and gaps exist for healthcare access (service availability and utilization) due to high county rates of low-income/uninsured and high prevalence of chronic conditions.

Lower income has been associated with increased healthcare barriers, poorer clinical outcomes, and premature death (McMaughan, Oloruntoba, & Smith, 2020). Linn County, with a poverty rate of about 19% (higher than the state rate) (US Census, 2019), ranks in the lower half of Missouri counties related to health outcomes and premature death/life expectancy (County Health Rankings and Roadmaps/Linn (LN), 2021; ExploreMOhealth/MO Health Atlas/Linn County, 2021).

Families with low incomes are more likely to be uninsured and have at least one worker in the family (Kaiser Family Foundation/Key Facts about the Uninsured Population, 2020). In Linn County, the median household income is $45,930.00 (below state average), and about half (50.94%) of children/youth live in homes with income below 200% of the Federal Poverty Level (ExploreMOhealth/Health Atlas, 2021). In most (77.6%) county households, both parents are working (MO Census Data Center/MCDC ACS Profiles, 2021).

About 14% of county adults under 65 are without health insurance (higher than state rate) (US Census, 2019). Those without coverage have less access to care, leading to lack of preventive services for major health conditions (Kaiser Family Foundation/Key Facts about the Uninsured Population, 2020). In Linn County, screening and vaccination rates are low (County Health Rankings and Roadmaps/Linn (LN), 2021), as are self-reported dental visits (MO Department of Health and Senior Services/Missouri Resident County-Level Study Profile, 2016).

Without regular healthcare and screenings due to cost of care, the low-income/uninsured are more likely to be hospitalized (Kaiser Family Foundation/Key Facts about the Uninsured Population, 2020). Deaths and/or hospitalizations for major chronic conditions in county residents are higher than the state rate and have stayed consistent over time (MO Department of Health and Senior Services/Missouri Resident Chronic Disease Comparisons Profile, 2019).

Especially vulnerable are low-income county seniors, as almost 8% are in poverty (MO Census Data Center/MCDC ACS Profiles, 2021). Income level is associated with healthcare access for seniors (McMaughan, Oloruntoba, & Smith, 2020). Even for those seniors in the county with Medicare, their heart disease rates are higher than state rates (US News Healthiest Communities/ Overview of Linn County, MO, 2020), and less than half received their annual flu vaccination, and, for females, their annual mammogram (ExploreMOhealth/MO Health Atlas/Linn County, 2021). In addition, few (11%) had recently visited their primary care provider (US News Healthiest Communities/ Overview of Linn County, MO, 2020).

Those with chronic health conditions, especially multiple conditions, tend to delay necessary medical care or annual provider visits, even when cost is not a factor (Ward, 2017). Chronic health conditions are the leading causes of death in the county (MO Department of Health and Senior Services/Missouri Resident Death - Leading Causes Profile, 2019), and heart disease, all cancers, diabetes, COPD, smoking-related, and arthritis rates are significantly higher than the state rate (MO Department of Health and Senior Services/Missouri Resident Chronic Disease Comparisons Profile, 2019).

Although community hospitals and health centers serve as safety nets for the low-income/uninsured and other vulnerable populations such as seniors and those with chronic conditions, they possess limited resources (Kaiser Family Foundation/Key Facts about the Uninsured Population, 2020). Rural Linn County is a HRSA-designated Health Professional Shortage Area and a Medically-Underserved Area (dataHRSA.gov/HUA/HPSA Find, n.d.). Linn County has lower than state rates for hospital bed availability and primary care provider availability (US News Healthiest Communities/ Overview of Linn County, MO, 2020), with lack of primary care providers trending higher over time (County Health Rankings and Roadmaps/Linn (LN), 2021). In addition, the ratio of dentists and mental health providers to the county population ranked in the bottom half of MO counties (ExploreMOhealth/MO Health Atlas/Linn County, 2021).

Hospital utilization

The top medical services for inpatient include Medicine (53 Medicare; Avg. stay 3.11 days), Pulmonology (40 Medicare; Avg. stay 3.18 days), and Urology (12 Medicare; Avg. stay 2.25 days).

From October 2018 to September 2019, total inpatient hospitalizations were 134. Inpatient origin: The top zip codes of residence were 64628 (65 discharges/204 days of care) and 64658 (27 discharges/93 days of care (AHD, 2022). For emergency department admissions during 2020, the top MDCs included respiratory, cardiovascular, musculo-skeletal, endocrine/nutrition/metabolic, and genito-urinary. The top DRGs included 190-191 COPD w/CC/MCC, 194-195 pneumonia/pleurisy, 641 Misc nutrition/metabolism/fluids. For emergency department admissions during 2021, the top MDCs included respiratory, cardiovascular, musculo-skeletal, digestive, endocrine/nutrition/metabolic, and signs/symptoms/ill-defined. The top DRGs included 193-194 pneumonia w/CC/MCC, 948 signs/symptoms/ill-defined, 177-178 respiratory w/CC.

**iii. unique community characteristics**

**1. colleges, tourism, etc.**

Linn County is proud of its hometown heroes and rich history. Disney's Main Street USA/Walt Disney Museum and General John Joseph "Black Jack" Pershing's Boyhood Home are examples of unique, historical sites in the Linn County area. The Walt Disney Hometown Museum, located in a restored railroad depot in the town of the Marceline (inspiration for Main Street USA) celebrates Marceline's favorite son, Walter Elias Disney. The museum houses family artifacts, exhibits, memorabilia, video footage, a Disneyland model, an Autotopia car from the Disneyland ride, his Dreaming Tree (registered as a historic tree by American Forests), and Marceline Railroad Story Exhibits (Walt Disney Hometown Museum, 2021). Marceline also operates the smallest Carnegie Library in the nation (Marceline Carnegie Library, n.d.). Military history is exhibited at the Gen. John J. Pershing Boyhood Home State Historic Site in Laclede. The home (National Register of Historic Places, National Historic Landmark) and school building exhibits tell the story of Pershing from farm boy to West Point cadet to General of the Armies (MO State Parks/ Gen. John J. Pershing Boyhood Home State Historic Site, n.d.) In the town of Linneus, the Linn County Jail and Sheriff's Residence, built in 1871, was a WPA project (National Register of Historic Places, n.d.).

**iv. other health services available in the same community area**

**1. federal designation for medically underserved**

**2. community health center**

**3. other hospitals, specialty providers**

This rural census tract is a HRSA-designated Health Professional Shortage Area for primary care [12,168:1], dental, and mental health [509:1]; as well as a Medically-Underserved Area (dataHRSA.gov/HUA/HPSA Find, n.d.). Pershing Health System is the only hospital in the county (MO Department of Health and Senior Services/ MO Hospital Profiles By County, 2021). Compass Health, located in Marceline, MO is the only Federally-Qualified Health Center or Look-Alike in the county (dataHRSA.gov/ FQHCs and LALs by State, 2021). Compass Health provides dental, mental health counseling, and family medicine at their clinic. (Compass Health Network/Marceline, 2019). The Linn County Health Department provides public health, environmental health, and other health programs and services (Linn County Health Department/About, n.d.).

Other providers include ambulance/EMS services, two chiropractors, four dentists, five home health providers, three hospice providers, one mental health center, four rehabilitation facilities, one optometrist, two pharmacies, and two physician clinics (Health Services Directory/Linn County MO, 2007).

## III. Community Health Needs Assessment: Process

**a. a description of the process and methods used to conduct the assessment including:**

**i. identification of the personnel involved in planning by title, organization**

| | |
|---|---|
| **Defining the community** | *Hospital internal team*: P Hamilton//K Clubine- CEO as Lead; T Breuner - Marketing/Benefits/HR, W Engberg- Medical Executive Coordinator, Strategic Planning Office staff – D Burton/Clinic Referral Specialist, Population Health Office staff – H Wood/Social Worker, and staff with community health expertise- D Adler/Informatics Nurse, B Locke/IT Director. |
| **Identifying partners and community representatives** | *Hospital internal team*: P Hamilton/CEO as Lead; T Breuner - Marketing/Benefits/HR, W Engberg- Medical Executive Coordinator, Strategic Planning Office staff – D Burton/Clinic Referral Specialist, Population Health Office staff – H Wood/Social Worker, and staff with community health expertise- D Adler/Informatics Nurse, B Locke/IT Director.<br>*Community team*: B Pointon/Auxiliary President; an individual with physical impairment, an individual of Inuit lineage/lower SES, and a senior citizen. |
| **Gather data and assessments - secondary** | *Truman State team*: D Rhodes, PhD, MCHES, SUNY Brockport; C Cox, PhD, MCHES, Truman State University |
| **Seek community perspectives - primary** | *Hospital internal team*: P Hamilton/K Clubine - CEO as Lead; T Breuner - Marketing/Benefits/HR, W Engberg- Medical Executive Coordinator, Strategic Planning Office staff – D Burton/Clinic Referral Specialist, Population Health Office staff – H Wood/Social Worker, and staff with community health expertise- D Adler/Informatics Nurse, B Locke/IT Director.<br>*Community team*: Key partners: an individual with physical impairment, an individual of Inuit lineage/lower SES, and a senior citizen. |
| **Aggregate secondary and primary data** | *Truman State team*: D Rhodes, PhD, MCHES, SUNY Brockport; C Cox, PhD, MCHES, Truman State University |
| **Analyze data/prioritize top 3 health issues** | *Hospital internal team*:<br>P Hamilton/K Clubine - CEO as Lead; T Breuner - Marketing/Benefits/HR, W Engberg- Medical Executive Coordinator, Strategic Planning Office staff – D Burton/Clinic Referral Specialist, Population |

| | |
|---|---|
| | Health Office staff – H Wood/Social Worker, and staff with community health expertise- D Adler/Informatics Nurse, B Locke/IT Director; D Burton – PHS<br>*Expanded Community team*:<br>A. Sayre – Moore Fans Co; S. Wessing – City Council; C Heaney – CMHC; S Stallo – Children's Division; K Neblock – LC Health Department;<br>*Truman State team*: D Rhodes, PhD, MCHES, SUNY Brockport; C Cox, PhD, MCHES, Truman State University |
| **Document/disseminate the CHNA** | *Hospital internal team*:<br>P Hamilton/K Clubine - CEO as Lead; T Breuner - Marketing/Benefits/HR, W Engberg- Medical Executive Coordinator, Strategic Planning Office staff – D Burton/Clinic Referral Specialist, D Burtori – PHS, Population Health Office staff – H Wood/Social Worker, and staff with community health expertise- D Adler/Informatics Nurse, B Locke/IT Director. |
| | |

**ii. description of the overall planned approach for developing and conducting the assessment**

Combining quantitative and qualitative data collection and analysis enhanced breadth and depth of health issue understanding and helped strengthen validity of the process. In the explanatory sequential design, results from the secondary data analysis were use to inform the community survey process and develop and widely disseminate the instrument (hard and e-copy). Data specific to the medically underserved, low-income, and chronically ill populations was researched in the secondary assessment. In the primary assessment, the medically underserved, low-income, and chronically ill populations were active participants in survey draft evaluation, oversampled in data collection, and specifically incentivized to participate in the process. Collecting community perspective data from a variety of individual stakeholders in the process helped explain initial results and answer project-specific questions. Primary and secondary data was analyzed (descriptive/thematic), displayed, compared, and aggregated. With input from community leaders with public health expertise, patterns were identified to note assets and disparities, trends and regional comparisons, hospital/partner and community foci, and to prioritize community health needs for action.

**iii. description of the process used to collect secondary data**

The first step in secondary data collection was to determine the purpose/focus of the process: to identify recent trends and emerging health needs/disparities in the county in order to help establish priorities. To identify, gather, and present quantitative data to satisfy the purpose and constraints, a secondary data collection team of community partners (health science professor/students in public health from an area university) was formed. Sources of secondary data were selected based on ability to provide current, relevant, reliable, quality, county-level data indicators for health outcomes and health factors from

credible sources. Data was sought for mortality, morbidity, access, behaviors, and social and physical environment. Evaluating relevance and credibility of data and sources was conducted to determine if data contributed to an improved understanding of community disease prevention and health promotion. Key sources included Missouri Public Health Information Management System, ExploreMOhealth, County Health Rankings and Roadmaps, and All Things MO – Get Better Data.

- The Missouri Public Health Information Management System (MOPHIMS) https://healthapps.dhss.mo.gov/MoPhims/MOPHIMSHome - "...Provides a common means for users to access public health related data to assist in defining the health status and needs of Missourians. The site includes Community Data Profiles [available on various subject areas such as cause of death, chronic diseases, unintentional injuries, prenatal and others. Each Community Data Profile table provides data on 15-30 indicators for each geography selected. Information provided includes the number of events, rate for the selected geography, statistical significance compared to the state, quintile ranking (for counties) and the state rate], Missouri Information for Community Assessment (MICA) [interactive system that was developed to make health data accessible at the local level through an easy-to-use format. It allows users to summarize data, calculate rates, and prepare information in a graphic format. Data MICA users can access statistics on various health conditions and associated topics. Users can choose from among the many conditions, generate data tables by year of occurrence, age, gender, race, and county or zip code of residence, and obtain age-adjusted rates. Data MICAs also allow users to create charts and maps. All forms of output are available for download], and Missouri Environmental Public Health Tracking (EPHT) [tracking system that was developed to assist scientists, communities, policymakers, and the public answer fundamental questions about the relationships between environmental exposures and health effects. Data on this site also include hazard and disease surveillance. Data may be used to create charts, tables, and maps. Most forms of output are available for download]."
- ExploreMOhealth https://exploremohealth.org/- "…Includes reports and maps [Chronic Condition Explorer, Missouri Health Atlas, and Spotlight on ZIP Health] of targeted health data specific to a particular county or ZIP Code to identify issues and take action to help create and sustain a healthier Missouri…."
- County Health Rankings and Roadmaps https://www.countyhealthrankings.org/ - …"Provides data, evidence, guidance, and examples to build awareness of the multiple factors that influence health and support community leaders working to improve health and increase health equity. The Rankings are unique in their ability to measure the health of nearly every county in all 50 states, and are complemented by guidance, tools, and resources designed to accelerate community learning and action. CHR&R is known for effectively translating and communicating complex data and evidence-based policy into accessible models, reports, and products that deepen the understanding of what makes communities healthy and inspires and supports improvement efforts…"
- All Things MO – Get Better Data https://allthingsmissouri.org/ - "…Free, online platform designed to support decision-makers in accessing, analyzing, and visualizing data about their communities. Our goal is to provide up-to-date, quality data across sectors – business, nonprofits, governments, researchers, and Extension staff. Our data can help Missourians better understand community needs, allocate resources, and make more data-informed decisions….All Things Missouri was created by the Center for Applied Research and Engagement Systems (CARES) at the University of Missouri….Includes maps, tools, and resources…gateway for interactive mapping, reports, and insights into issues facing Missourians."

After an exploratory analysis, information gaps were identified, and other credible sources were used to fill any gaps. Descriptive analysis (summarizing, describing, reducing, and comparing) was conducted before possible associations were explained in preparation for shared interpretative and prescriptive analysis by all CHNA partners.

### iv. description of the process used to develop and collect primary data

Primary data, collected specifically for the purpose of identifying recent trends and emerging health needs/disparities in the county to help establish priorities, added depth, detail, and explanation to the secondary data from a community perspective. Patients, families, and community stakeholders can apprise the needs assessment process in many ways. Upon review of the previous assessment that used a town hall format, an individual survey methodology was used in this CHNA for representativeness, convenient data gathering/analysis, and generalizability. Both hard copy and e-copy was used to maximize feedback and make the process more accessible for hard-to-reach populations.

First, the survey team was created and included membership from hospital, as well as representatives from lower income/minority, medically underserved, and with chronic health conditions. Input from these community partners, hospital leaders, citizens, and public health experts are important for representation. The survey team defined the priority population and stakeholders, assessed resources needed for the process, defined success metrics, and considered assessment methodology.

Next, the survey team met via weekly conference calls during early summer 2021 to explore design/type, sampling, survey topics, statistical issues, and timeline for creation and revision of survey drafts. Question type, content, phrasing, and ordering were specifically discussed. Multiple versions of the survey were created, examined, discussed, and revised; making sure format and content were appropriate for both hard and e-copy. Representatives from the medically underserved, low-income, and chronically ill populations were specifically included in this preliminary stage as survey 'pre-testers' to provide feedback on survey drafts. A final draft was tested on a small sample of county residents, including those representatives from the hard-to-reach/underserved populations. Feedback was received on both hard and e-copy format and content, and revised. The survey was approved for communitywide print and electronic distribution by the survey and full CHNA teams.

Then, a plan for community-wide survey distribution (hard and e-copy formats) was determined by the survey team. A special focus on survey distribution to low-income/uninsured and those with chronic diseases by means of targeted survey placement, oversampling, and use of incentives was undertaken. In addition, the data analysis plan was created.

In the survey distribution and collection phases, surveys were delivered in both print and electronic versions. Paper surveys were delivered to visitors to Pershing, and copies were also given to community partners to distribute to the community. Participation from the medically underserved, low-income, and chronically ill populations was encouraged through targeted hard copy survey placement at community health fairs, and in the Pershing's Main Entrance Lobby and in the Rural Health Clinic. Links to the e-version were sent to channels KZBK, KDWD, KMZU, Community Calendar, Channel 6 local Community Information Channel, and placed on, Pershing's website, and other community-based social media sites to be shared within those networks.

To promote awareness of the survey and its importance, advertising and marketing of the survey process through countywide mass media/multi-media/social media started early summer 2021. To encourage maximum community participation, especially for the medically underserved, low-income, and chronically ill populations, financial incentives were used. Individuals who completed and returned hard copy surveys were placed in a drawing for one of two $150 Visa prepaid gift cards. Names were drawn on December 1 when the survey was closed. Due to Covid, alternative Health Fair Surveys were distributed as widely as possible in the county between the dates of June 1 to December 1. Announcements for radio and television were created and ran three weeks prior to the release of the surveys to create awareness for community members to participate. Announcements were also placed on social media, and the Pershing website.

**b. data and information sources for secondary data**
- **i. agency or organization**
- **ii. retrieval date**
- **iii. year of data available and used**
- **iv. Web address**
- **v. rationale for use of these data sources**

Data was sought for mortality, morbidity, access, behaviors, and social and physical environment. Evaluating relevance and credibility of data and sources was conducted to determine if data contributed to an improved understanding of community disease prevention and health promotion.

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**c. data and information sources for primary data collection**

**i. description of type of methodology (interviews, survey, focus group)**

Surveys were used to collect feedback and opinions from adult respondents from the county. Multiple sources, paper or web-based, were used to gather the data. In this cross-sectional survey, questions were

asked about pressing community and individual/household health problems, service needs, health education needs, service improvement, and health/healthcare challenges faced.

**ii. rationale for methodology selection**

Surveys were identified as an appropriate method for soliciting community data for three reasons. 1. It would allow for a large number of community members to provide direct feedback on the perceived needs of the community. 2. This method of data collection was a safe means to collect data during a pandemic, as opposed to other methods that may bring larger groups of people together such as a town hall meeting or focus groups. 3. It was a cost-effective means to collect data from a large number of people.

**iii. setting(s) of primary data collection**

Participation from the medically underserved, low-income, and chronically ill populations was encouraged through targeted hard copy survey placement. Paper surveys were given to patients and visitors to the hospital and Rural Health Clinic. Surveys were also distributed during every health fair sponsored by Pershing at local businesses, schools, and community events. Starting early summer 2021, to encourage maximum community participation, especially for the medically underserved, low-income, and chronically ill populations, Pershing offered an incentive for those who returned a completed hard copy survey. They were entered in a drawing for one of two $150 Visa prepaid gift cards. Links to the e-version were sent to e-media channels and placed on other community-based social media sites to be shared within those networks. Links to the e-version were also sent/advertised the hospital website, on radio stations KZBK, KDWD, KMZU, and the local community information Channel 6.

**iv. list specific target populations**

In addition to the general adult population, specific sub-populations were targeted. Paper surveys and survey links were intentionally mass distributed/shared and shared on social media with the special and vulnerable populations of the elderly and medically underserved (PMHS lobby, RHC, health fairs).

- The majority of respondents were from the 64628 zip code (n = 162, 52.6%), followed by the 64658 zip code (n = 67, 21.8%), and then the 64631 zip code (n = 11, 3.6%). Of the remaining respondents who reported zip codes, only 10 or fewer represented any other individual zip code.

**v. response rate by setting and population (number interviewed, numerator and denominator of surveys sent and returned — include percentage and actual numbers)**

A total of 384 individuals submitted a paper survey or clicked on the link to complete an electronic survey. Of those 384, a total of 351 (91.4%) completed some or all of the survey.

Of those respondents who answered items addressing gender, ethnicity, and age, most were female (n = 251, 79.7%), most respondents were White (n = 302, 96.5%), and age ranges were diverse with 33.5% (n = 106) reporting ages 35-54, 32.0% (n = 101) reporting ages 65+, 26.6% (n = 84) reporting ages 55-64, 5.7% (n = 18) reporting ages 25-34, and 2.2% (n = 7) reporting ages 18-24.

The most frequent number of adults (over 18) in a household was two (n = 204, 65.4%) followed by one (n = 55, 17.6%) ranged from 0-5. The most frequent number of children in the household was zero (n =

157, 67.1%) followed by 1 (n = 32, 13.7%) and ranged from 0-6. The majority of respondents (n = 235, 74.1%) reporting having lived in the area for 15+ years. Of those reporting income ranges, the most frequent response was $50,000-$99,999 (n = 124, 41.9%), followed by $20,001-$49,999 (n = 94, 31.8%), followed by $100,000+ (n = 47, 15.9%), and the least number of respondents reported income less than $20,000 (n = 31, 10.5%). Finally, most respondents indicated they lived in a house/condo they owned (n = 279, 84.6%).

**vi. description and list of successful approaches and identification**

Especially for the underserved and high-risk groups within the community, paper surveys distributed in the hospital lobby, hospital clinic, and health fair encouraged high response as people were waiting for services with not much else to do. In addition, for the low-income, high response for survey distribution at tables at small community events (no large events due to Covid-19). Incentives and prize drawings at these events also saw success in driving survey completion.

To incentivize participation, especially for underserved or high-risk groups within the community, individuals who completed surveys were entered in a drawing for one of two $150 Visa prepaid gift cards. This incentive was successful in garnering completed surveys. Additionally, surveys were specifically distributed at locations where underserved or high-risk groups within the community received services, an approach also successful in helping to ensure participation from these groups.

**vii. description and list of barriers, challenges and unsuccessful approaches**

A challenge to data collection was that data were collected during the Covid-19 pandemic, which resulted in lower numbers of individuals at some of the survey distribution locations than would have been present in a non-pandemic time.

Due to Covid-19, large community events and health fairs where large numbers of seniors, medical - underserved, and low-income usually attend were more hesitant to attend large gathering events. The biggest barrier to overcome was how to connect with those still ‘locked-down’ and generally not going out in public, getting their groceries/Meals on Wheels delivered, and with no access to the Internet. Reflecting, we should have partnered with the local grocer/Meals on Wheels to deliver/collect surveys to those shut-in.

**viii. Note: Section IV will provide more detail on broad input from the community.**

**d. analytical methods used to identify the community health needs**

**i. description**

Primary data were collected by means of a survey distributed in paper format and electronically. Survey items included quantitative variables and solicited qualitative responses by way of open-ended questions.

**ii. statistical tests or processes**

Descriptive statistics were computed on all quantitative items as appropriate. Qualitative data were compiled into one document and themes that emerged in the data were identified accordingly.

**iii. stakeholders and partners that participated in the prioritization process**

*Hospital internal team:* P Hamilton, K Clubine/CEO as Lead; T Breuner -Marketing/Benefits, W Engberg- HR Department Administration, Strategic Planning Office staff – D Burton/Clinic Referral

Specialist, Population Health Office staff – H Wood/Social Worker, and staff with community health expertise- D Adler/Informatics Nurse, B Locke/IT Director.
*Expanded Community team*: A. Sayre – Moore Fans Co; S. Wessing – City Council; C Heaney – NCMHC; S Stallo – Children's Division; K Neblock – LC Health Department; an individual with physical impairment, an individual of Inuit lineage/lower SES, and a senior citizen.
*Truman State team*: D Rhodes, PhD, MCHES, SUNY Brockport; C Cox, PhD, MCHES, Truman State University

**iv. methodology for selection including group consensus processes**

Stakeholder and partner selection was based on ensuring participation and buy-in from the community. Stakeholders and other interested individuals and groups constituted the prioritization/planning group. We tried to include those most affected by the issues, institutions that serve, organizations who will implement changes, and concerned citizens. We checked with group members to make sure there were not others who should be at the table. The social worker made sure they were comfortable speaking up in meetings and realizing that they bring a valuable perspective. All were briefed that through discussion, brainstorming, and other methods of generating ideas, the group should be able to agree on a number of issue prioritization criteria. All were told that health topics deemed important through group input but lack data will still be included in the prioritization of health issues

The hospital internal team and the expanded community team participated in the prioritization and planning processes led by the Truman team. These community partners, hospital leadership, citizens, and public health experts achieved consensus on the top community health issues by using a standard nominal group technique. After community prioritization process strategies (strategy grid, prioritization matrix, Hanlon) were completed and results displayed, the Truman team took the role as Leader to explain the technique and the importance of everyone's contributions. Leader posed the ranking of the top 3/top 1 health issue question, and participants wrote their answers on a sheet of paper, working in small groups. Each group gave the Leader oral report with their top 3/top 1 ideas, with discussion. The Leader numbered each idea on paper. Leader named the priorities out loud and asked the group if there are any questions. The object was to clarify, not persuade. Each group selected from the master list on the top 3/top 1 they thought were most important. The items were put on a piece of paper with the number given it in the master list. Then the participants ranked these items in order of their importance. Leader collected all the group input, tabulated results, and shared results with group. Group discussed to clarify any questions or changed votes. Final vote was reported to the group.

**e. gaps in information that limited the ability to assess the community served**

**i. description and list of specific gaps**

Results from the primary data generally reflected and confirmed results from the secondary data. A gap did exist, though, in the primary data that was supposed to give more depth to the rationale for some of the issues. The group questioned why respondents were not aware of all of the many physical/mental health, governmental, voluntary agencies, clinics, providers, and other local and state resources truly available to them to address many of their health needs – at low or no cost. It did seem that a deeper dive into 'why' respondents perceived as such (possibly use of focus groups) could be a possible addition to the next assessment.

**f. community organizations that collaborated or contributed to the CHNA**

**i. list by organization**

Linn County Health Department, Community Medical Associates, Meadville Medical Clinic, , Moore Fan Co, Brookfield City Council, Community Mental Health Center, Children's Division.

**ii. identify personnel by name, title, credentials**

Linn County Health Department, K Neblock
Moore Fan Company, A Sayre
Brookfield City Council, S Wessing
North Central Missouri Mental Health Center, C Heaney
Children's Division, S Stallo

**g. identification of third-party agents to assist with the CHNA, including qualifications; describe the outside party's specific role and products developed**

Dr. Darson Rhoads, PhD, MCHES® Associate Professor & Graduate Director, Department of Public Health and Health Education, SUNY Brockport created the primary data collection instrument and facilitated the community prioritization process. Dr. Carol Cox, PhD, MCHES® FAWHP FASHA FESG Professor Health Science, Truman State University compiled the secondary needs assessment and facilitated the community prioritization process. K. Penyweit, T. Gisi, P. Heman, R. Shertzer, E. Rembush, E. Klietz, J. Leong, M. Huhn, N. Sunar Health Science Students, Truman State University compiled the needs and asset/resource assessment appendix document.

**IV. Community Health Needs Assessment: Input from Community**

**a. description of how the hospital sought input from broad interests in the community**

**i. target populations, including lower socioeconomic status, chronically ill, medically underserved; for each list include:**

**1. what methods (focus groups, meetings, surveys, interviews)**
**2. when (dates and association with other events)**
**3. locations**

During spring/summer 2021 and during meetings, the survey team was created and included membership from hospital, and healthcare providers, as well as representatives from lower income/minority, medically underserved, and with chronic health conditions. The survey team defined the priority population and stakeholders, assessed resources needed for the process, defined success metrics, and considered assessment methodology.

During early summer 2021, the survey team met via weekly conference calls to explore design/type, sampling, survey topics, statistical issues, and timeline for creation and revision of survey drafts. Question type, content, phrasing, and ordering were specifically discussed. Multiple versions of the survey were created, examined, discussed, and revised; making sure format and content were appropriate for both hard and e-copy. Representatives from the medically underserved, low-income, and chronically ill populations were specifically included in this preliminary stage as survey 'pre-testers' to provide feedback on survey drafts. A final draft was tested on a small sample of county residents, including those representatives from the hard-to-reach/underserved populations. Feedback was received on both hard and e-copy format and content, and revised. The survey was approved for communitywide print and electronic distribution by the survey and full CHNA teams.

Early fall, a plan for community-wide survey distribution (hard and e-copy formats) was determined by the survey team. A special focus on survey distribution to low-income/uninsured and those with chronic diseases by means of targeted survey placement, oversampling, and use of incentives was undertaken. In

addition, the data analysis plan was created. Both hard copy and e-copy was used to maximize feedback and make the process more accessible for hard-to-reach populations. In the survey distribution and collection phases, surveys were delivered in both print and electronic versions. Participation from the medically underserved, low-income, and chronically ill populations was encouraged through targeted hard copy survey placement. Paper surveys were given to patients and visitors to the hospital and Rural Health Clinic. Surveys were also distributed during every health fair sponsored by Pershing at local businesses, schools, and community events.

Links to the e-version were sent to e-media channels and placed on other community-based social media sites to be shared within those networks. To promote awareness of the survey and its importance, advertising and marketing of the survey process through countywide mass media/multi-media/social media started early summer 2021. Links to the e-version were sent to e-media channels and other community-based social media sites to be shared within those networks. Links to the e-version were also sent/advertised on radio stations KZBK, KDWD, KMZU, and the local community information Channel 6.

To encourage maximum community participation, especially for the medically underserved, low-income, and chronically ill populations, financial incentives were used. Pershing offered an incentive for those who returned a completed survey. They were entered in a drawing for one of two $150 Visa prepaid gift cards. Due to COVID, surveys were distributed as widely as possible in the county between the dates of June 1-December 1. A kick-off media advertisements were created for community awareness of the survey and was promoted by multiple media outlets.

**ii. representative organizations (may repeat Section II.f)**

**1. name**
**2. title**
**3. organization**
**4. describe the nature of representation: what organizations, populations and qualifications represent this population**
**5. describe leadership role, if applicable**

- Linn County Health Department, K Neblock – ID partners, community perspectives - all, primary data collection, data analysis/prioritization
- Chief Executive Officer, P Hamilton, RN/Karla Clubine, RN, MSN, Project Lead, Define community, ID partners, data analysis/prioritization, implementation strategy/goals/approaches, adopt/report strategies
- Marketing/Benefits/HR, T Breuner, Define community, ID partners, data analysis/prioritization, implementation strategy/goals/approaches, adopt/report strategies
- Medical Executive Coordinator, W Engberg, Define community, ID partners, data analysis/prioritization, implementation strategy/goals/approaches, adopt/report strategies
- Clinic Referral Specialist, D Burton, Define community, ID partners, data analysis/prioritization, community perspectives – chronic conditions/illnesses, implementation strategy/goals/approaches, adopt/report strategies
- Social Worker, H Wood, BSW, Project Lead, Define community, ID partners, data analysis/prioritization, community perspectives – low income, implementation strategy/goals/approaches, adopt/report strategies
- Informatics Nurse, D Adler, RN, Define community, ID partners, data analysis/prioritization, community perspectives – uninsured, implementation strategy/goals/approaches, adopt/report strategies
- IT Director, B Locke, Define community, ID partners, data analysis/prioritization, implementation strategy/goals/approaches, adopt/report strategies

- Moore Fan Co,, A Sayre, community perspectives – business/parents, primary data collection, data prioritization
- Brookfield City Council, S Wessing, community perspectives – government, primary data collection, data prioritization
- North Central Missouri Mental Health Center, C Heaney, community perspectives – mental health/disability community/at-risk, primary data collection, data prioritization
- Children's Division, S Stallo, community perspectives – youth at-risk, primary data collection, data prioritization

**iii. individual(s) included with expertise in public health (may repeat Section II.f)**

**1. name**
**2. title**
**3. affiliation(s)**
**4. brief description of individuals knowledge or expertise**
**5. describe leadership role, if applicable**

Dr. Darson Rhoads, PhD, MCHES® Associate Professor & Graduate Director, Department of Public Health and Health Education, SUNY Brockport created the primary data collection instrument and facilitated the community prioritization process. Dr. Carol Cox, PhD, MCHES® FAWHP FASHA FESG Professor Health Science, Truman State University compiled the secondary needs assessment and facilitated the community prioritization process.

**V. Community Health Needs Assessment: Findings *(Note: this section will complement the implementation plan.)***

**a. identified health issues through assessment process**

**The secondary assessment identified:**

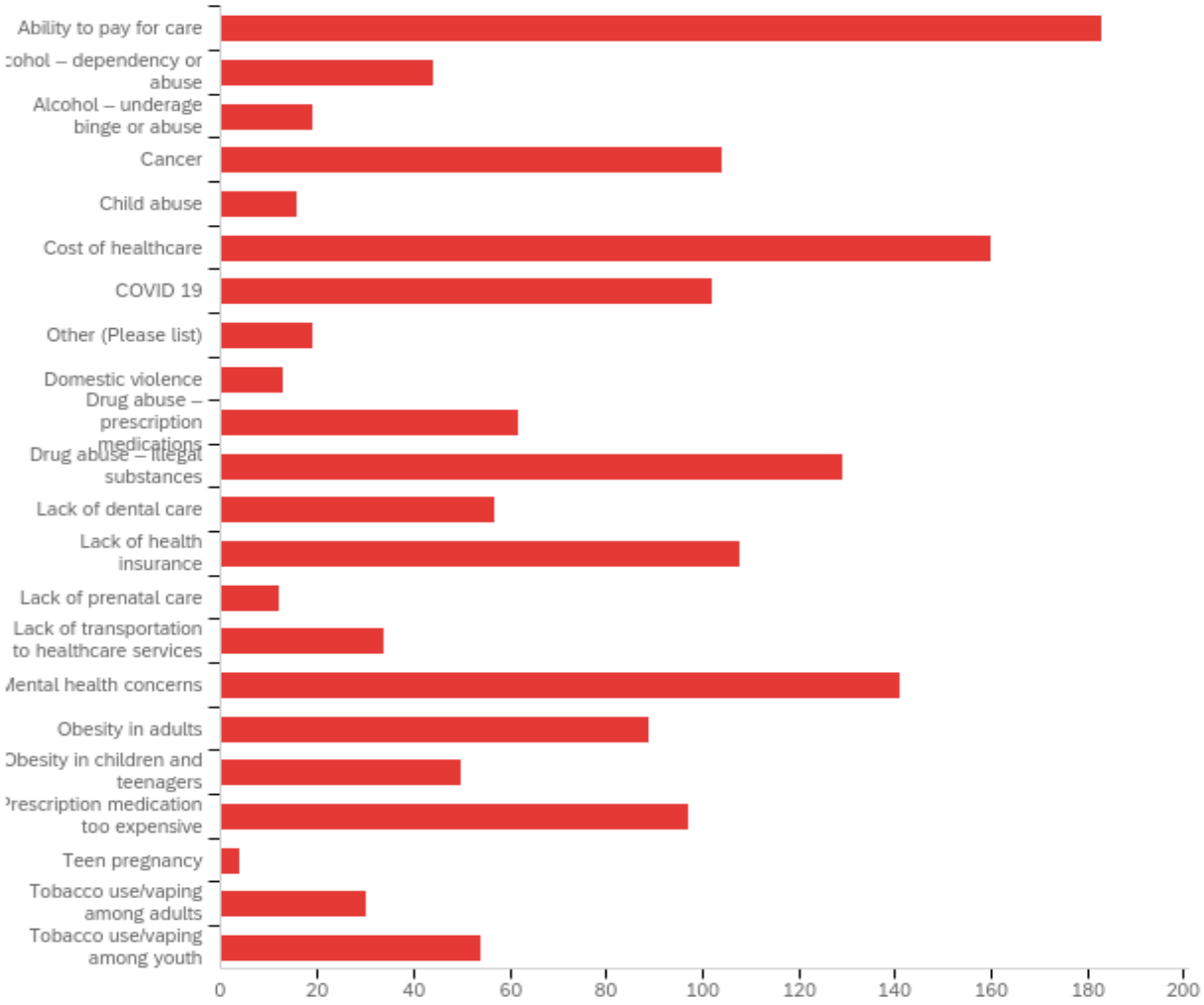
Chronic diseases (especially heart disease due to risk factors such as smoking, physical inactivity, obesity, and alcohol abuse; and especially in the low-income/uninsured populations), smoking-related/respiratory disease, lack of screening/vaccinations (especially in the low-income, vulnerable, uninsured, those with chronic disease), and youth vaping/tobacco use and bullying/violence as priority issues.

Because of high prevalence in the population, especially vulnerable populations, as well as higher than state average levels and trend data showing increasing proportions, these issues were identified as priorities.

**The primary assessment identified:**

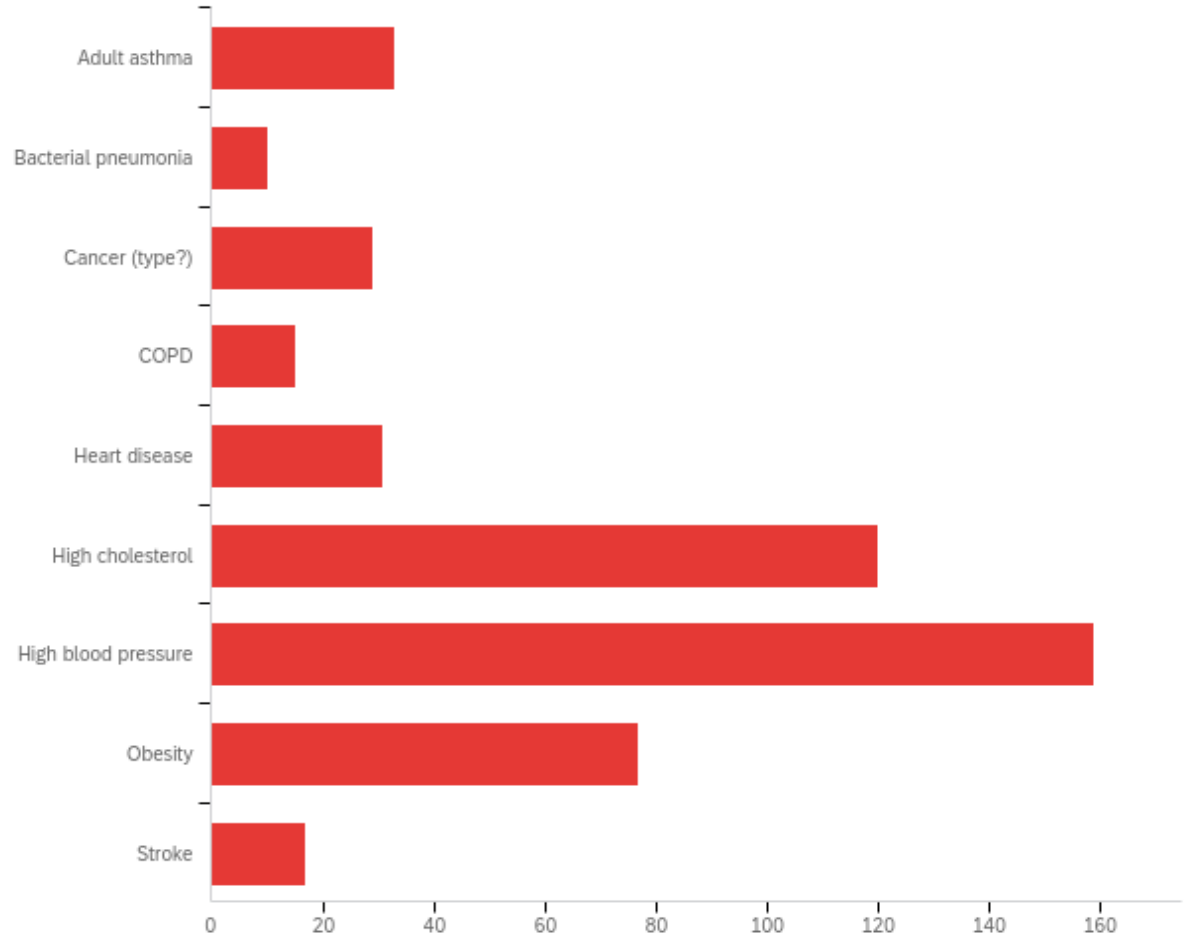
Respondents to the primary assessment identified the most pressing health problems in the community to be ability to pay for care, cost of healthcare, mental health concerns, illicit drug abuse, cancer, and costs of prescription medication as being the biggest health concerns. Also of note, for respondents who noted "other" as a pressing problem, lack of providers and/or services was cited 13 times. See figure 1.

**Figure 1**




Additionally, when asked about which conditions they had been told by a doctor that they have, respondents most frequently cited high blood pressure, high cholesterol and obesity. See figure 2.

**Figure 2**




Finally, regarding health issues that were problems within their households within the past 12 months, mental health concerns and not having enough money to pay the doctor/dentist/pharmacy were most often noted minor problems and not having enough to pay the doctor/dentist/pharmacy and not having enough money to pay for a mental health counselor were the top two major problems. See Table 1.

**Table 1**

| Health Issue | Not a Problem %, n | | Minor Problem %, n | | Major Problem %, n | | Total responses |
|---|---|---|---|---|---|---|---|
| Adult substance abuse (alcohol or legal medications) | 90.97% | 282 | 5.48% | 17 | 3.55% | 11 | 310 |
| Adult substance abuse (illegal drugs) | 94.61% | 281 | 2.36% | 7 | 3.03% | 9 | 297 |
| Youth substance abuse (alcohol, drugs, etc.) | 95.78% | 295 | 1.95% | 6 | 2.27% | 7 | 308 |
| Caring for an adult with disabilities | 82.31% | 242 | 12.24% | 36 | 5.44% | 16 | 294 |
| Caring for a child with disabilities | 94.06% | 285 | 4.62% | 14 | 1.32% | 4 | 303 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Child abuse | 96.94% | 285 | 1.70% | 5 | 1.36% | 4 | 294 |
| Physical violence against adults | 96.71% | 294 | 1.32% | 4 | 1.97% | 6 | 304 |
| Mental health concerns | 67.34% | 200 | 25.25% | 75 | 7.41% | 22 | 297 |
| Not having enough money for food | 86.27% | 264 | 9.15% | 28 | 4.58% | 14 | 306 |
| Not able to afford nutritious food (fresh vegetables and fruits) | 85.14% | 252 | 8.78% | 26 | 6.08% | 18 | 296 |
| Not able to afford transportation | 89.87% | 275 | 6.86% | 21 | 3.27% | 10 | 306 |
| Not having enough money to pay for housing | 90.54% | 268 | 6.08% | 18 | 3.38% | 10 | 296 |
| Not having enough money to pay the doctor, dentist or pharmacy | 67.86% | 209 | 20.13% | 62 | 12.01% | 37 | 308 |
| Not having enough money to pay for mental health counselor | 84.98% | 249 | 7.17% | 21 | 7.85% | 23 | 293 |
| Use of tobacco/vaping products | 81.37% | 249 | 12.42% | 38 | 6.21% | 19 | 306 |
| Not being able to find or afford after-school childcare | 94.58% | 279 | 3.73% | 11 | 1.69% | 5 | 295 |
| Sexual abuse | 98.37% | 301 | 0.33% | 1 | 1.31% | 4 | 306 |
| Teen pregnancy | 97.96% | 288 | 1.36% | 4 | 0.68% | 2 | 294 |
| Other issues (list): | 97.48% | 116 | 2.52% | 3 | 0.00% | 0 | 119 |

**The Hospital's Focus**

- What is important to the hospital as defined by its mission and vision? Healthier community, healthier behaviors, patient education, access to care
- What are the hospital's current strategic priorities related to population based health initiatives? Covid-19, community health fairs, charity care
- What are the hospital's current community health programs? Covid-19, returning to prior programming
- What are the hospital's core lines of service and patient populations? ED, rural health clinic, in-out patient; Adult and senior healthcare
- What does the hospital do well? Wrap-around care/services, radiology, PT/OT, skilled beds
- What does the hospital have the ability to influence and thus create positive change? Some influence on the providers who have the most influence on the patients

**The Community's Focus**

- What is important to the community as conveyed in the primary research? Cost of care
- Has anything significant occurred within the community that may not be captured in any of the data? For example, the loss of a major industry or a high-profile incident may alter the immediate and subjective perspective of important community issues. Covid-19, new counselor for adults/teens FQHC in Marceline, new FedEx business distribution center is coming to town, restaurants are coming back post-Covid-19
- Is there a community health issue that is especially relevant right now regardless of data? Covid-19

- Are there other current community health programs? Senior center screenings for those with disabilities, vaping/smoking cessation programs and a new diabetes educator at the health department
- Have there been recent failed attempts to address community health issues? Smoking ban recently failed at City Council

**Top Overall Foci**

A consensus was reached to pursue the following as the top health concerns after following the Prioritization Processes below and based on based on key feasibility factors (Propriety, Economics, Acceptability, Resources, and Legality):

- Access to care
- Chronic disease

**b. process to prioritize health issues**

**i. description of process**

The process included identification of criteria for prioritization and selecting a prioritization committee with specialized knowledge and constituents. The group identified interests in relation to the process of setting priorities and established clear criteria for setting priorities for the community issues to be addressed. Data was then discussed. Qualitative and quantitative data was analyzed by the committee. An open dialogue was fostered to identify health needs thoroughly. Community assets were reviewed to identify what resources exist to address the need. Also identified was what resources (staffing, in-kind, financial, etc.) of the hospital could potentially be leveraged to address that need. Priorities were then selected. Consensus was built around priority needs as well as consequences of not addressing an issue. Selected priorities were validated through discussion with members of the hospital board for additional input. The selected priority aligned with hospital and community sentiment. Priorities were presented to senior leadership for approval. Needs that were not prioritized were also presented with a rationale as to why. Establishing criteria and processes for deciding on what are the most important issues makes decisions much easier. It also allowed for a participatory planning process from the very beginning to obtain community support and ownership of the plan. Criteria was established for selecting an approach to address priority issues, and we also looked for ways that our approach might mesh with other community efforts.

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**ii. use of any tools (e.g. prioritization matrix)**

By using formalized techniques, groups have a structured mechanism that can facilitate an orderly process. A strategy grid listed health needs viewed as priorities based on baseline data, numeric values, and feasibility factors. The community prioritization process included use of a strategy grid to facilitate focusing efforts by shifting emphasis towards addressing problems that will yield the greatest results. This tool is particularly useful for agencies that are limited in capacity and want to focus on areas that provide ‘the biggest bang for the buck.’ The methodology takes a thoughtful approach to achieving maximum results with limited resources.

**CHANGEABILITY**

| | HIGH | LOW |
|---|---|---|
| **IMPORTANCE** | | |
| HIGH | *Education/access/resources/ providers/patient services Sedentary lifestyle/chronic diseases* | |
| LOW | | |

A prioritization matrix provided a structured approach to analyze health problems and solutions, relative to all criteria and considerations, and focused on those that will prove to have the greatest impact on the overall health of a community. A prioritization matrix was used to consider health problems against a large number of criteria or when an agency is restricted to focusing on only one priority health issue. It was used to provide a visual method for prioritizing and account for criteria with varying degrees of importance.

| ISSUE | Size/Trend/Comparisons/Severity/Econ&Soc/Capacity/Chageability/Readiness | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ACCESS | H | M | M/H | M | M/H | M/L | M | M/L |
| CHRON DIS | H | M | M/H | H | H | H | M | M |

*Size/magnitude* – How big the problem is in terms of occurrence, absolute numbers/cases, frequency/%, rates, incidence/prevalence rates adjusted for population.
*Time trends* – How problems are changing over time, identify emerging or growing problems.
Other relative comparisons – Comparisons to other geographic areas/reference populations/state.
*Seriousness/severity* – Potential impact/level of outcomes on individuals or community associated with different problems. How serious compared to other problems and includes YPLL, QALY, DALY.
*Economic costs/social impact* – Quantify the dollar amount associated with the issue and related consequences.
*Capacity/resources* – Availability of human, institutional, financial resources and commitment level.
Preventability/changeability – Feasibility to prevent/control the problem or its consequences, evidence about effectiveness of interventions to change the problem.
*Readiness/political will* – Level of awareness/concern/interest of the public to support addressing the issue, public/political level of acceptability and support as associated with addressing the issue.

The Hanlon method was used to rates item based on: A. Size of problem, (0-10), B. Seriousness (0-20), C. Effectiveness of available interventions (0-10), and applies D. "PEARL" (Propriety, Economics, Acceptability, Resources, and Legality: 0 or 1). Calculate Scores. Rank based on Scores. Priority rating = (A+B)C divided by 3xD.

| Issue | Score |
|---|---|
| ACCESS | 38.3 |
| CHRONIC DISEASE | 74.67 |
| | |

**c. list of priority health issues identified and description of why these issues were identified**

Access to care was identified as a priority as it was noted in both secondary and primary results, and was rated as high importance and could be realistically changeable with environmental/policy change and promotion. When problem size, trends, severity, economic impact as well as community capacity and readiness to change was analyzed, the issue rose to a top spot.

Chronic disease was identified as a priority as it was noted in both secondary and primary results, and was rated as high importance and could be realistically changeable through community-based/evidence-based interventions. When problem size, trends, severity, economic impact as well as community capacity and readiness to change was analyzed, the issue rose to a top spot.

**d. description of rationale used not to address health issues**

Poverty, mental health issues, cost of care, preventive services, and substance abuse were also noted as concerns in both secondary and primary results. Although rated as high importance, they may not be realistically changeable for our community. Most, though, can be addressed and managed indirectly through improved access to prevention/treatment services and providers. In addition, community-based lifestyle/chronic disease management interventions focus on diet, exercise, stress management, medication management, and patient-provider communication – that can also indirectly address the health issues reported.

**VI. Resource Inventory**

**a. description of existing health care facilities within the same community description, including specialty services**

**b. other resources available to meet the community health needs identified**

**c. other resources available to meet the priority community health needs**

This rural census tract is a HRSA-designated Health Professional Shortage Area for primary care [12,168:1], dental, and mental health [509:1]; as well as a Medically-Underserved Area (dataHRSA.gov/HUA/HPSA Find, n.d.). Pershing Health system is the only hospital in the county (MO Department of Health and Senior Services/ MO Hospital Profiles By County, 2021). There is one Federally-Qualified Health Centers or Look-Alikes in Marceline (dataHRSA.gov/ FQHCs and LALs by State, 2021). Compass Health provides dental and family medicine, and counseling services at their clinic in Marceline (Compass Health Network/Marceline, 2019). The Linn County Health Department provides public health, environmental health, and other health programs and services (Linn County Health Department/About, n.d.). Other providers include ambulance/EMS services, two chiropractors, four dentists, five home health providers, three hospice providers, one mental health center, one rehabilitation facility, one optometrist, two pharmacies, and two physician clinics (Health Services Directory/Linn County MO, 2007).

Community Health Resources:

[Additional charts/graphs: Community Health Resources: Appendix H]

https://www.canva.com/design/DAEpLW4uzQo/share/preview?token=MmatO4xtCK_85lAfKcy2XA&role=EDITOR&utm_content=DAEpLW4uzQo&utm_campaign=designshare&utm_medium=link&utm_source=sharebutton

Community Resource Directory:

https://www.naco.org/sites/default/files/documents/Linn%20County%20Health%20Services%20Directory.pdf

**VII. Community Health Needs Assessment: Dissemination Plan**

**a. description and date of report release to public**
**b. list of websites, including URL**
**c. describe the process to provide printed copies upon request**
**d. describe the process to share information with the broad community, including the medically underserved, chronically ill and lower socioeconomic populations**

- The report will be widely disseminated to the public, including those with limited internet access.
    - Specifically for those medically underserved, chronically ill and lower socioeconomic populations, the report will be faxed/emailed, or hand deliver to local social service agencies and our clinic partners so it can be distributed by them to their client population. Sites include, but not limited to: Senior Services, Children's Division, Senior Center, Juvenile Office, City Hall, Health Department, and local churches.
- The report will be release to the public on June 1, 2022 through mass media, print media, and social media at the following locations/sites:
    - Copies will be available in our hospital lobby, emergency department, and clinics, as well as posted on our Facebook and on our webpage: https://phsmo.org/ https://www.facebook.com/PHSMO.ORG
    - We will also announce the release on the Linn County Information webpage on Facebook and post a link. https://www.facebook.com/groups/271368182880025/
    - We will also run an advertisement on the billboard located at East Lockling Street announcing the completion of the CHNA. https://www.google.com/maps/dir//130+E+Lockling+Ave,+Brookfield,+MO+64628/@39.774656,-93.0699365,17z/data=!4m9!4m8!1m0!1m5!1m1!1s0x87c2887826f48fad:0xb7818afcaf2055ab!2m2!1d-93.0677156!2d39.7746534!3e0
    - A notice will be faxed to our local businesses telling them that the CHNA is available for review on our webpage, and a hardcopy will be provided upon request.
    - We will also send an announcement to local church groups to place in their church bulletins with the webpage https://phsmo.org/ and number to hospital 660-258-2222 for members to request a hard copy
    - Hard copies will mailed free to all those who request a hard copy.

## VIII. Appendices

### a. model or approach for CHNA process (e.g. the county health rankings model)

Community Tool Box, Chapter Three: Assessing Community Needs and Resources: The Community Tool Box, created by the Work Group for Community Health and Development at the University of Kansas, provided the approach for how to build healthier and more equitable communities through the community health assessment process. The approach included: Step 1: Prepare and plan, Step 2: Engage the community, Step 3: Develop a goal or vision, Step 4: Conduct community health assessment(s), Step 5: Prioritize health issues, Step 6: Develop community health improvement plan, Step 7: Implement community health improvement plan, and Step 8: Evaluate and Monitor Outcomes. Throughout the approach, we tried to engage community members, include local public health, address social determinants of health, use QI strategies, and leverage hospital and community resources.

### b. additional demographic or population information

US Census, Linn County, MO (US Census, 2019). https://www.census.gov/quickfacts/fact/table/linncountymissouri,US/PST045219

Map of Population by County Subdivision in Linn County (Statistical Atlas, 2018). https://statisticalatlas.com/county/Missouri/Linn-County/Population

Demographics table comparison to MO: (MO Census Data Center/ MCDC Data Applications/ Missouri Fact Sheets: Linn County). https://mcdc.missouri.edu/applications/MO-county-factsheets/?c=29115

### c. additional secondary reports, maps and graphs

Township and Road Map: Appendix C: https://linncomo.com/county-maps/ (Linn County Courthouse, n.d.)

GIS Map: Appendix. https://linngis.integritygis.com/H5/Index.html?viewer=linn (County Office GIS Maps, n.d.)

Zip code graphs: Appendix C: https://www.zipdatamaps.com/linn-mo-county-zipcodes (Zip data maps, 2021).

*https://www.canva.com/design/DAEpLW4uzQo/share/preview?token=MmatO4xtCK_85lAfKcy2XA&role=EDITOR&utm_content=DAEpLW4uzQo&utm_campaign=designshare&utm_medium=link&utm_source=sharebutton*

### d. primary data collection tool (e.g. survey)

**Community Health Needs Assessment**

**Pershing Health System, Linn County and surrounding area**

1. What do you think are the most pressing health problems in your community? **Check up to five.**

_____ Ability to pay for care _____ Lack of health insurance

_____ Alcohol – dependency or abuse
_____ Alcohol – underage binge or abuse
_____ Cancer
_____ Child abuse
_____ Cost of healthcare
_____ COVID 19
_____ Domestic violence
_____ Drug abuse – prescription medications
_____ Drug abuse – illegal substances
_____ Lack of dental care
_____ Lack of prenatal care
_____ Lack of transportation to healthcare service
_____ Mental health concerns
_____ Obesity in adults
_____ Obesity in children and teenagers
_____ Prescription medication too expensive
_____ Teen pregnancy
_____ Tobacco use/vaping among adults
_____ Tobacco use/vaping among youth
_____ Other (list):_____

2. How effective do you feel local resources are at caring for your community's healthcare needs?

☐ Very effective ☐ Effective ☐ Somewhat effective ☐ Not effective

3. What medical services are most needed in your community? **Check up to three.**

_____ Adult primary care services
_____ Alcohol and drug abuse treatment
_____ Cancer treatment
_____ Counseling/mental health services
_____ Diabetes care
_____ Other (list):_____
_____ Emergency/trauma care
_____ Heart care services
_____ Orthopedic care (bone and joint)
_____ Pediatric services
_____ Women's services, such as obstetrics/gynecological services

4. What are the most important types of health education services needed in your community? **Check up to three.**

_____ Alcohol abuse
_____ Alzheimer's disease
_____ Asthma
_____ Cancer screening
_____ Child abuse/family violence
_____ Diabetes
_____ Other (list):_____
_____ Diet and/or exercise
_____ Drug abuse
_____ HIV/AIDS
_____ Sexually transmitted diseases
_____ Smoking cessation and/or prevention
_____ Stress management

5. What health or community services should Pershing Health System provide that currently are not available?

6. What ideas or suggestions do you have for improving the overall health of your community?

7. How effective were Linn County resources in their response to the Covid-19 pandemic?

   ☐ Very effective ☐ Effective ☐ Somewhat effective ☐ Not effective

8. How could Linn County resources have improved their response to the Covid-19 pandemic?

9. Have you ever been told by a doctor that you have one of the following conditions? **Check all that apply.**

_____ Adult asthma
_____ Bacterial pneumonia
_____ Cancer (type?):_____
_____ COPD
_____ Heart disease
_____ High cholesterol
_____ High blood pressure
_____ Obesity
_____ Stroke

**10.** How would you describe your housing situation? **Check only one.**

☐ Own a house or condo

☐ Rent a house, apartment or room

☐ Living in a group home

☐ Living temporarily with a friend or relative

☐ Multiple households sharing an apartment or house

☐ Living in a shelter

☐ Living in a motel

☐ Living in senior housing or assisted living

☐ Other (explain): _____

11. For each issue below, please check the box that best describes if it has been a problem in your household during the past 12 months.

| | Not a problem | Minor Problem | Major Problem | Don't Know |
|---|---|---|---|---|
| Adult substance abuse (alcohol or legal medications) | | | | |
| Adult substance abuse (illegal drugs) | | | | |
| Youth substance abuse (alcohol, drugs, etc.) | | | | |
| Caring for an adult with disabilities | | | | |
| Caring for a child with disabilities | | | | |
| Child abuse | | | | |
| Physical violence against adults | | | | |
| Mental health concerns | | | | |
| Not having enough money for food | | | | |
| Not able to afford nutritious food (fresh vegetables and fruits) | | | | |
| Not able to afford transportation | | | | |
| Not having enough money to pay for housing | | | | |
| Not having enough money to pay the doctor, dentist or pharmacy | | | | |
| Not having enough money to pay for mental health counselor | | | | |
| Use of tobacco/vaping products | | | | |
| Not being able to find or afford after-school childcare | | | | |
| Sexual abuse | | | | |
| Teen pregnancy | | | | |
| Other issues (list): | | | | |

12. What is the biggest challenge you face?

    As an individual: _____

    As a family: _____

13. What issues most concern you regarding young persons (under 18) in your household?

14. Has everyone in your family (those living in your household) seen a healthcare professional at least once in the last 12 months?

☐ Yes, everyone ☐ No, but some have ☐ No, no one has

15. If the last visit for a household member was more than 12 months ago, please check why. **Check all that apply.**

    ☐ Do not have medical condition that requires any care/I only seek healthcare when I need to

    ☐ Do not routinely receive any health screenings

    ☐ Could not schedule due to work or personal conflicts with normal business hours

    ☐ Could not afford the payments due, regardless of insurance status

    ☐ Could not arrange transportation

16. If you or a household member used a hospital emergency room in the past 12 months, was it due to:

    ☐ No one in my household used a hospital emergency room in the past 12 months

    ☐ An injury that required immediate attention

    ☐ An injury or illness that did not require immediate attention, but ER was the most convenient or only service available

    ☐ An ongoing illness

17. Please write your ZIP code: _____

18. What is your gender?

    ☐Female ☐ Male ☐ Other

19. What is your age?

    ☐18-24 ☐ 25-34 ☐ 35-54 ☐ 55-64 ☐ 65+

20. What is your ethnicity?

    ☐White ☐ Black or African American ☐ American Indian or Alaska Native

    ☐ Asian ☐ Hispanic or Latino ☐ Native Hawaiian & Other Pacific Islander

    ☐ Other ☐ Choose not to answer

21. Including you, how many in your household are over 18 _____ Under 18_____?

22. About how long have you lived in the area?

☐ Less than a year ☐ 1-5 years ☐ 5-15 years ☐ 15 + years

23. Counting all income sources from everyone in your household, what was the combined household income last year?

☐Less than $20,000 ☐ $20,001 - $49,999 ☐ $50,000 - $99,999 ☐ $100,000 or more

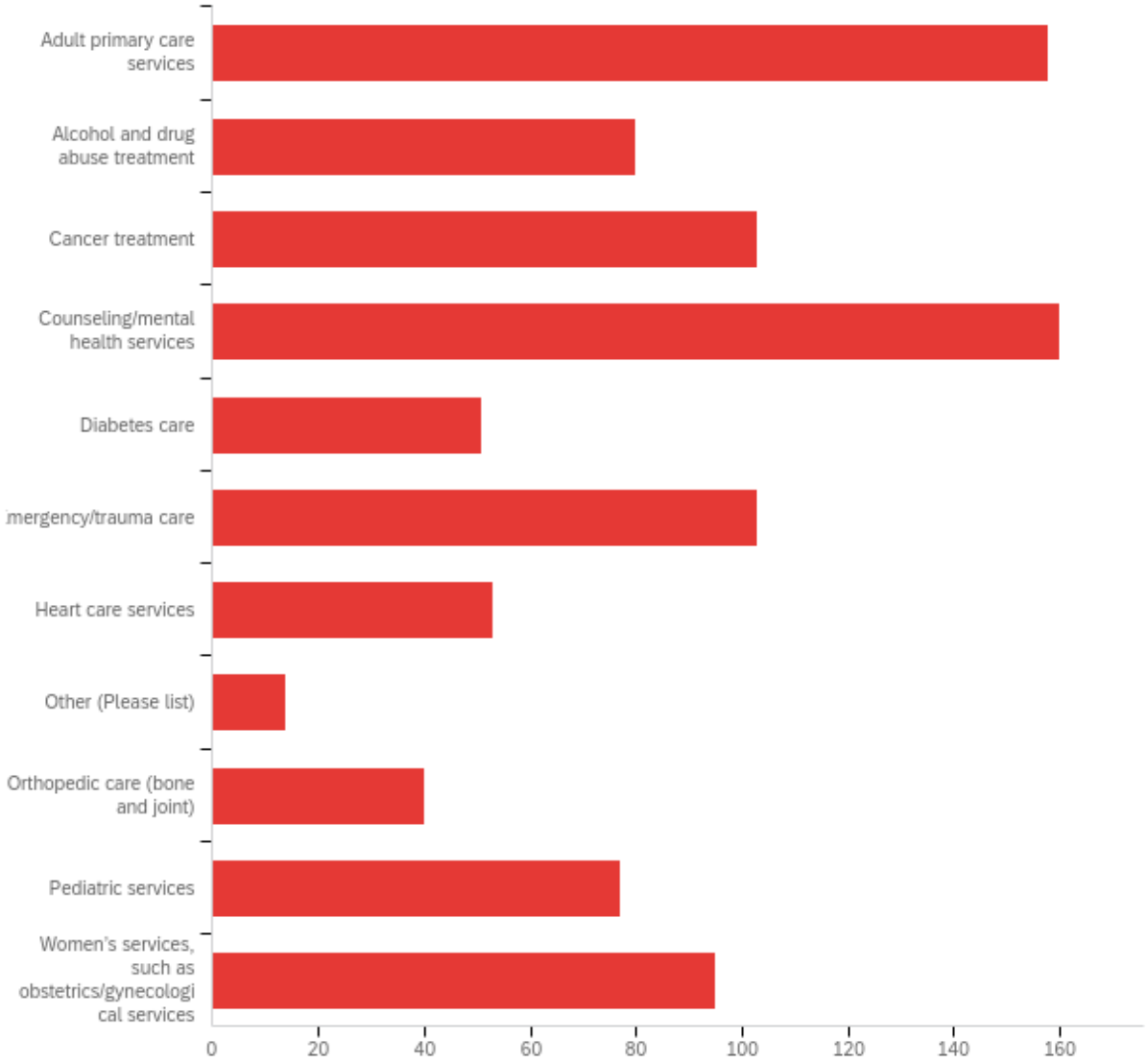
Thank your for completing this survey.

**e. summary of primary data analysis**

A summary of primary data that is not previously presented is included below.

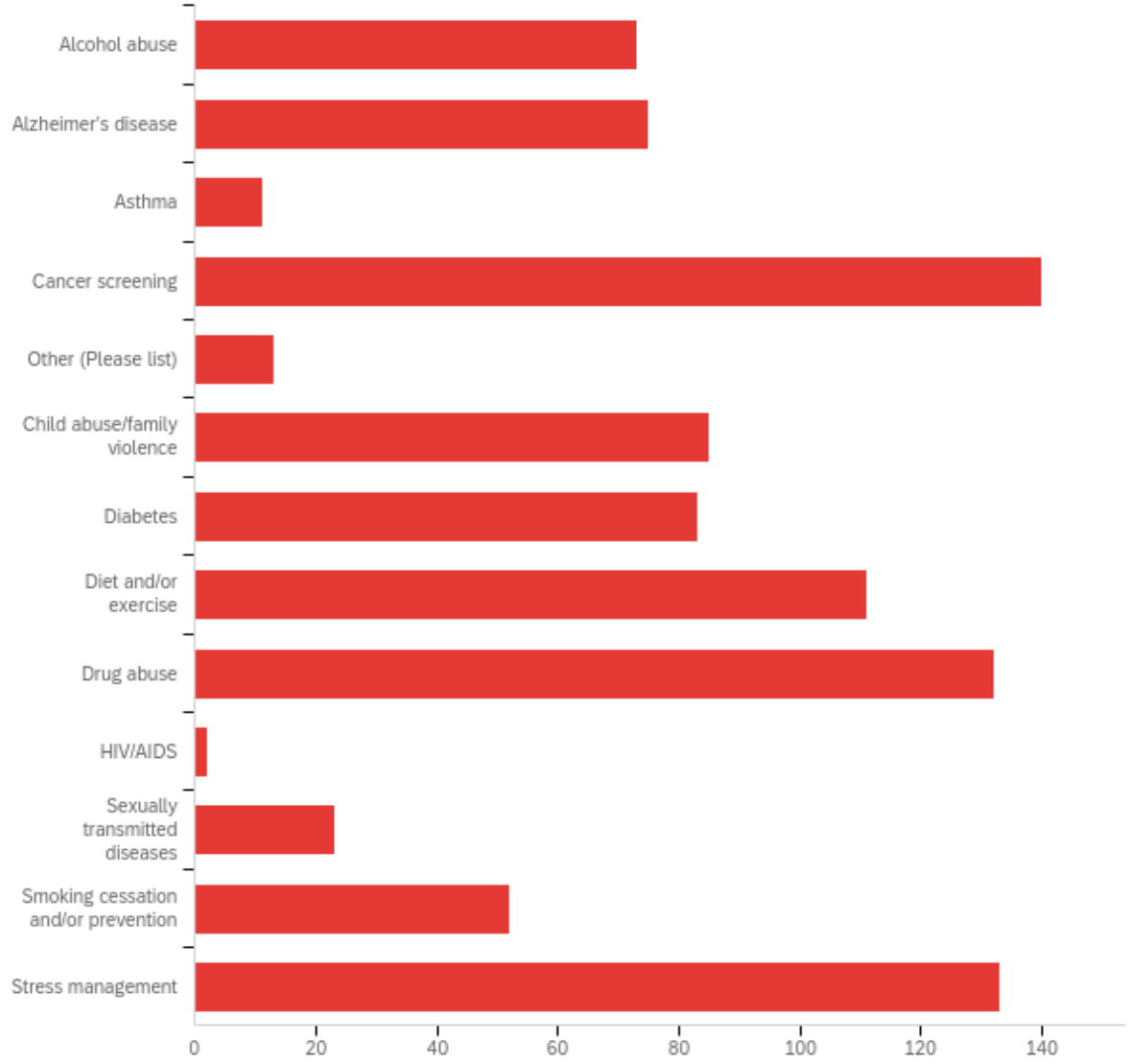
Respondents answered two questions regarding service needs within the community. Specific to needed medical services counseling/mental health services (n= 160) was noted as the greatest need followed by adult primary care services (n = 158) See figure 3.

**Figure 3**




Specific to needed health education services, cancer screening (n= 140) was noted as the greatest need followed by stress management (n = 133), and drug abuse (n = 132) See figure 4.

**Figure 4**




Respondents were asked two open-ended questions about services and improvement in community health. The first questioned what services should Pershing Health System provide that are not currently available. Responses were categorized into themes and themes with 10 or more responses included mental health services (n = 44), more/better doctors/primary care providers (also includes walk-in clinics) (n = 25), and unsure/not applicable (n = 19). For the open-ended question that asked for ideas or suggestions for improving overall community health, responses were categorized into themes and themes with 10 or more responses included doctors/primary care providers (n = 24) and mental health services (n = 14).

In response to an open-ended item asking about the biggest challenge they faced as an individual, responses were categorized into themes and themes with 10 or more responses included mental health of oneself or others (n = 40), money/costs of goods/services (includes all types of services within and outside of healthcare) (n = 35), overall health (n = 17), weight (n = 17), and aging/old (n = 15). Similarly, when asked about the biggest challenge their family faced, themes with 10 or more responses included money/costs of goods/services (includes all types of services within and outside of healthcare) (n = 41), mental health (n = 12), being or finding a caretaker (n = 10), and aging (n = 10). Finally, in regard to what

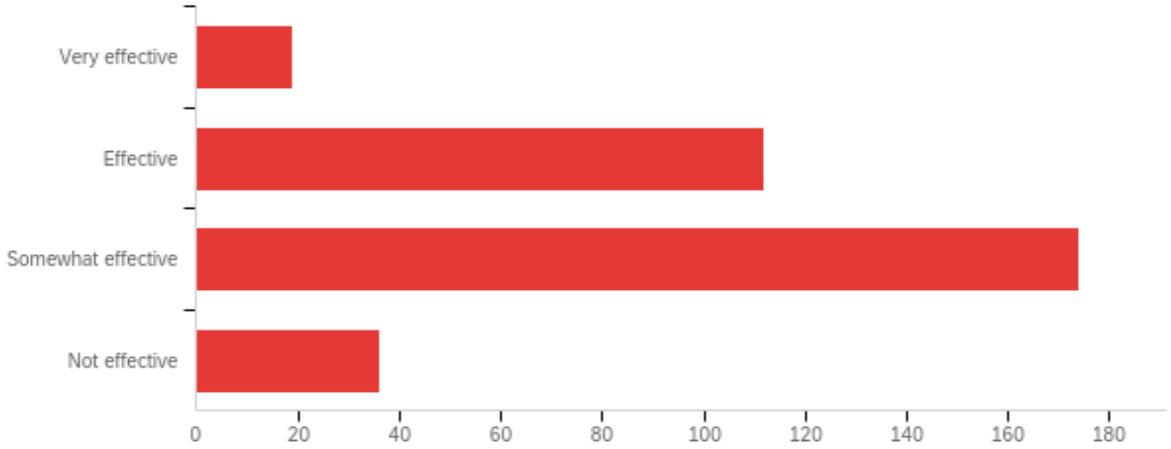
is most concerning about children (under 18) in the household, other than not applicable, the two most dominant themes were mental health (n = 16) and alcohol/tobacco/drugs (n = 9).

When asked if all family members living in the household had seen a healthcare professional at least once in the last year, 73.1% responded yes. The most common reason cited for those who had not done so was "does not have a medical condition that requires any care/I only seek healthcare when I need to".

Regarding emergency room use in the past 12 months, 56.6% (n = 142) reported that household member had used the ER. For reasons the ER was used, most commonly it was for an injury needing immediate attention (n = 62, 24.7%), followed by an injury not needing immediate attention but the ER was convenient (n = 30, 12.0%), followed by an ongoing illness (n = 17, 6.8%)

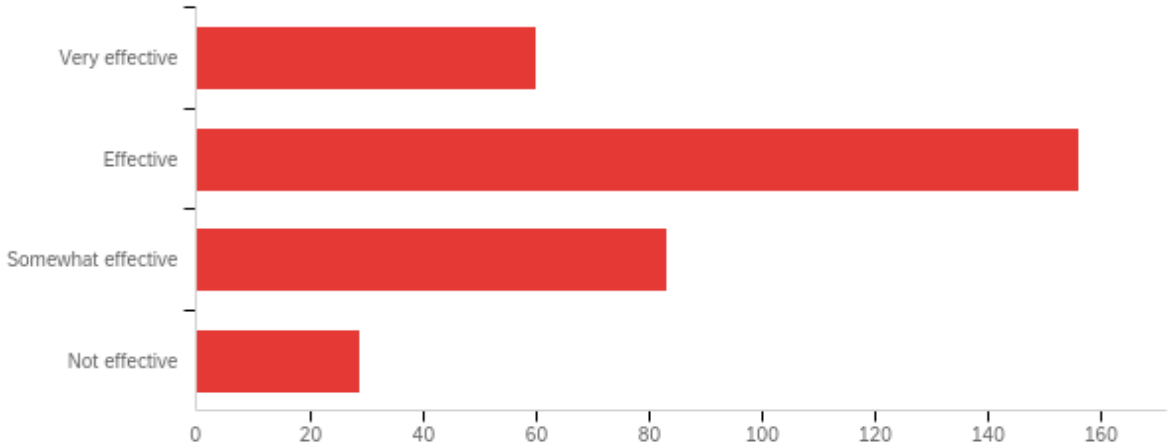
Regarding how effective do you feel local resources are at caring for your community's healthcare needs, the majority responded "somewhat effective (n = 174, 51.0%). See figure 5.

**Figure 5**




In response to an item asking, how effective were Linn County resources in their response to the Covid-19 pandemic, near half of respondents answered "effective" (n = 156, 47.6%). See figure 6.

**Figure 6**



In response to an open-ended question on how Linn County resources could have improved its response to COVID-19, themes were identified and themes with 10 or more responses included education (of all types vaccines, masks, services) (n = 16), response was sufficient/great/excellent (n = 20), and encourage/mandate masks (n = 20).

**f. tools used to prioritize health issues**

A strategy grid listed health needs viewed as priorities based on baseline data, numeric values, and feasibility factors. The community prioritization process included use of a strategy grid to facilitate focusing efforts by shifting emphasis towards addressing problems that will yield the greatest results. This tool is particularly useful for agencies that are limited in capacity and want to focus on areas that provide 'the biggest bang for the buck.' The methodology takes a thoughtful approach to achieving maximum results with limited resources.

CHANGEABILITY

HIGH LOW

IMPORTANCE

HIGH

LOW

A prioritization matrix provided a structured approach to analyze health problems and solutions, relative to all criteria and considerations, and focused on those that will prove to have the greatest impact on the overall health of a community. A prioritization matrix was used to consider health problems against a large number of criteria or when an agency is restricted to focusing on only one priority health issue. It was used to provide a visual method for prioritizing and account for criteria with varying degrees of importance.

ISSUE Size/Trend/Comparisons/Severity/Econ&Soc/Capacity/Chageability/Readiness

1

2

3

4

5

*Size/magnitude* – How big the problem is in terms of occurrence, absolute numbers/cases, frequency/%, rates, incidence/prevalence rates adjusted for population.
*Time trends* – How problems are changing over time, identify emerging or growing problems.

Other relative comparisons – Comparisons to other geographic areas/reference populations/state.
*Seriousness/severity* – Potential impact/level of outcomes on individuals or community associated with different problems. How serious compared to other problems and includes YPLL, QALY, DALY.
*Economic costs/social impact* – Quantify the dollar amount associated with the issue and related consequences.
*Capacity/resources* – Availability of human, institutional, financial resources and commitment level.
Preventability/changeability – Feasibility to prevent/control the problem or its consequences, evidence about effectiveness of interventions to change the problem.
*Readiness/political will* – Level of awareness/concern/interest of the public to support addressing the issue, public/political level of acceptability and support as associated with addressing the issue

The Hanlon method was used to rates item based on: A. Size of problem, (0-10), B. Seriousness (0-20), C. Effectiveness of available interventions (0-10), and applies D. "PEARL" (Propriety, Economics, Acceptability, Resources, and Legality: 0 or 1). Calculate Scores. Rank based on Scores. Priority rating = (A+B)C divided by 3xD.

| Issue | Score |
|---|---|
| | |
| | |
| | |
| | |
| | |

**g. complete community resource inventory**

https://www.canva.com/design/DAEpLW4uzQo/share/preview?token=MmatO4xtCK_85lAfKcy2XA&role=EDITOR&utm_content=DAEpLW4uzQo&utm_campaign=designshare&utm_medium=link&utm_source=sharebutton

*Community Resource Directory:*
*https://www.naco.org/sites/default/files/documents/Linn%20County%20Health%20Services%20Directory.pdf*

**h. community health resources**

**COMMUNITY HEALTH CENTERS**

Compass Health Marceline MO 64658

Preferred Family Health Care Brookfield, MO 64628

Advanced Medical Express, Brookfield, MO 64628

**DIAGNOSTIC AND TESTING CENTER**

**FREE STANDING AMBULATORY CENTER**

**FREE STANDING OUTPATIENT SURGERY CENTER**

**HOSPITAL**

Pershing Health System/Pershing Memorial Hospital Brookfield, MO 64628

• 24 Hour Physician Staffed ER • Laboratory

• Cardiac Rehab • Outpatient Surgery

• CMA-walk in Clinic • Respiratory Therapy

- Skilled Nursing Care
- Inpatient/Outpatient Physical Therapy, Occupational Therapy and Speech Therapy

• Specialty Clinics

• Inpatient Acute Care • Telemedicine

**HOME HEALTH**

ServeLink Brookfield, MO 64628

Outside of county, but used by residents:

Elara Caring, Columbia, MO

Northeast Regional Home Health, Kirksville, MO

St. Luke's, Home Health and Hospice, Chillicothe, MO

Mid MO Home Health, Moberly, MO

**MEDICAL GROUP PRACTICE**

Community Medical Associates Brookfield, MO 64628

Premier Eyecare Associates Brookfield, MO 64628

**PUBLIC HEALTH CLINIC**

Linn County Health Department Brookfield, MO 64628

Compass Health FQHC

**RECREATIONAL FACILITIES**

North Central Missouri YMCA Brookfield, MO 64628

Brookfield Parks and Recreation Brookfield, Missouri, 64628

Parks and Recreation City of Marceline Marceline, MO 64658

**RURAL HEALTH CLINICS**

Community Health Assoc., Brookfield, MO 64628

Federally-Qualified Health Center, Compass Health Marceline MO 64658 dental and family medicine, counseling, and mental health services

**CRITICAL ACCESS HOSPITALS**

Pershing Health System/Pershing Memorial Hospital Brookfield, MO 64628

**SKILLED HEALTH FACILITIES**

Pioneer Skilled Nursing Center Marceline, MO 64658

McLarney Manor, Brookfield, MO 64628

Life Care Center, Brookfield, MO 64628

**ASSISTED LIVING**

Bristol Manor, Marceline, MO, Brookfield, MO

**HOSPICE**

St. Luke Hospice, Chillicothe, MO

Hospice Compasses, Macon, MO

Shirkey Hospice and Palliative Care, Richmond, Mo

**In Home Services**

Advantage in home services, Brookfield, MO

ServLink In Home Services, Brookfield, MO

Elara Caring, Kirksville, MO 63501

Home Care Of Mid MO., Moberly, MO 65270

A Better Way In Home Services, Chillicothe, MO 64601