

# Boone County Hospital

*Boone, Iowa*

Community Health Needs Assessment  
and Implementation Strategy

Adopted by Board Resolution June 25, 2019<sup>1</sup>



<sup>1</sup>Response to Schedule H (Form 990) Part V B 4 & Schedule H (Form 990) Part V B 9



Dear Community Member:

At Boone County Hospital (BCH), we have spent more than 117 years providing high-quality compassionate healthcare to the greater Boone County community. The “2019 Community Health Needs Assessment” identifies local health and medical needs and provides a plan of how BCH will respond to such needs. This document illustrates one way we are meeting our obligations to efficiently deliver medical services.

In compliance with the Affordable Care Act, all not-for-profit hospitals are required to develop a report on the medical and health needs of the communities they serve. We welcome you to review this document not just as part of our compliance with federal law, but of our continuing efforts to meet your health and medical needs.

BCH will conduct this effort at least once every three years. The report produced three years ago is also available for your review and comment. As you review this plan, please see if, in your opinion, we have identified the primary needs of the community and if you think our intended response will lead to needed improvements.

We do not have adequate resources to solve all the problems identified. Some issues are beyond the mission of the hospital and action is best suited for a response by others. Some improvements will require personal actions by individuals rather than the response of an organization. We view this as a plan for how we, along with other area organizations and agencies, can collaborate to bring the best each has to offer to support change and to address the most pressing identified needs.

Because this report is a response to a federal requirement of not-for-profit hospitals to identify the community benefit they provide in responding to documented community need, footnotes are provided to answer specific tax form questions; for most purposes, they may be ignored. Most importantly, this report is intended to guide our actions and the efforts of others to make needed health and medical improvements in our area.

I invite your response to this report. As you read, please think about how to help us improve health and medical services in our area. We all live in, work in, and enjoy this wonderful community, and together, we can make our community healthier for every one of us.

Thank You,

Joe Smith  
Chief Executive Officer  
Boone County Hospital

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# EXECUTIVE SUMMARY

## EXECUTIVE SUMMARY

Boone County Hospital ("BCH" or the "Hospital") has performed a Community Health Needs Assessment to determine the health needs of the local community.

Data was gathered from multiple well-respected secondary sources to build an accurate picture of the current community and its health needs. A survey of a select group of Local Experts was performed to review the prior CHNA and provide feedback, and to ascertain whether the previously identified needs are still a priority. Additionally, the group reviewed the data gathered from the secondary sources and determined the Significant Health Needs for the community.

The 2019 Significant Health Needs identified for Boone County are:

1. Affordability/Accessibility – 2016 Significant Need
2. Mental Health
3. Obesity – 2016 Significant Need
4. Drug/Substance Abuse
5. Heart Disease
6. Chronic Pain Management

The Hospital will develop implementation strategies for these six needs including activities to continue/pursue, community partners to work alongside, and measures to track progress.

# APPROACH

## APPROACH

Boone County Hospital ("BCH" or the "Hospital") is organized as a not-for-profit hospital. A Community Health Needs Assessment (CHNA) is part of the required hospital documentation of "Community Benefit" under the Affordable Care Act (ACA), required of all not-for-profit hospitals as a condition of retaining tax-exempt status. A CHNA helps the hospital identify and respond to the primary health needs of its residents.

This study is designed to comply with standards required of a not-for-profit hospital.<sup>2</sup> Tax reporting citations in this report are superseded by the most recent Schedule H (Form 990) filings made by the hospital.

In addition to completing a CHNA and funding necessary improvements, a not-for-profit hospital must document the following:

- Financial assistance policy and policies relating to emergency medical care
- Billing and collections
- Charges for medical care

Further explanation and specific regulations are available from Health and Human Services (HHS), the Internal Revenue Service (IRS), and the U.S. Department of the Treasury.<sup>3</sup>

## Project Objectives

BCH partnered with Quorum Health Resources (Quorum) to:<sup>4</sup>

- Complete a CHNA report, compliant with IRS Guidelines
- Provide the Hospital with information required to complete the IRS – Schedule H (Form 990)
- Produce the information necessary for the Hospital to issue an assessment of community health needs and document its intended response

## Overview of Community Health Needs Assessment

Typically, non-profit hospitals qualify for tax-exempt status as a Charitable Organization, described in Section 501(c)(3) of the Internal Revenue Code; however, the term 'Charitable Organization' is undefined. Prior to the passage of Medicare, charity was generally recognized as care provided those who did not have means to pay. With the introduction of Medicare, the government met the burden of providing compensation for such care.

In response, IRS Revenue ruling 69-545 eliminated the Charitable Organization standard and established the Community Benefit Standard as the basis for tax-exemption. Community Benefit determines if hospitals promote the health of a broad class of individuals in the community, based on factors including:

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<sup>2</sup> Federal Register Vol. 79 No. 250, Wednesday December 31, 2014. Part II Department of the Treasury Internal Revenue Service 26 CFR Parts 1, 53, and 602

<sup>3</sup> As of the date of this report all tax questions and suggested answers relate to 2017 Draft Federal 990 Schedule H instructions i990sh—dft(2) and tax form

<sup>4</sup> Part 3 Treasury/IRS – 2011 – 52 Section 3.03 (2) third party disclosure notice & Schedule H (Form 990) V B 6 b

- An Emergency Room open to all, regardless of ability to pay
- Surplus funds used to improve patient care, expand facilities, train, etc.
- A board controlled by independent civic leaders
- All available and qualified physicians granted hospital privileges

Specifically, the IRS requires:

- Effective on tax years beginning after March 23, 2012, each 501(c)(3) hospital facility must conduct a CHNA at least once every three taxable years, and adopt an implementation strategy to meet the community needs identified through the assessment.
- The assessment may be based on current information collected by a public health agency or non-profit organization, and may be conducted together with one or more other organizations, including related organizations.
- The assessment process must take into account input from persons who represent the broad interests of the community served by the hospital facility, including those with special knowledge or expertise of public health issues.
- The hospital must disclose in its annual information report to the IRS (Form 990 and related schedules) how it is addressing the needs identified in the assessment and, if all identified needs are not addressed, the reasons why (e.g., lack of financial or human resources).
- Each hospital facility is required to make the assessment widely available and downloadable from the hospital website.
- Failure to complete a CHNA in any applicable three-year period results in an excise tax to the organization of \$50,000. For example, if a facility does not complete a CHNA in taxable years one, two, or three, it is subject to the penalty in year three. If it then fails to complete a CHNA in year four, it is subject to another penalty in year four (for failing to satisfy the requirement during the three-year period beginning with taxable year two and ending with taxable year four).
- An organization that fails to disclose how it is meeting needs identified in the assessment is subject to existing incomplete return penalties.<sup>5</sup>

## Community Health Needs Assessment Subsequent to Initial Assessment

The Final Regulations establish a required step for a CHNA developed after the initial report. This requirement calls for considering written comments received on the prior CHNA and Implementation Strategy as a component of the development of the next CHNA and Implementation Strategy. The specific requirement is:

*“The 2013 proposed regulations provided that, in assessing the health needs of its community, a hospital facility must take into account input received from, at a minimum, the following three sources:*

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<sup>5</sup> Section 6652

- (1) *At least one state, local, tribal, or regional governmental public health department (or equivalent department or agency) with knowledge, information, or expertise relevant to the health needs of the community;*
- (2) *members of medically underserved, low-income, and minority populations in the community, or individuals or organizations serving or representing the interests of such populations; and*
- (3) *written comments received on the hospital facility's most recently conducted CHNA and most recently adopted implementation strategy.*<sup>6</sup>

*...the final regulations retain the three categories of persons representing the broad interests of the community specified in the 2013 proposed regulations but clarify that a hospital facility must "solicit" input from these categories and take into account the input "received." The Treasury Department and the IRS expect, however, that a hospital facility claiming that it solicited, but could not obtain, input from one of the required categories of persons will be able to document that it made reasonable efforts to obtain such input, and the final regulations require the CHNA report to describe any such efforts."*

Representatives of the various diverse constituencies outlined by regulation to be active participants in this process were actively solicited to obtain their written opinion. Opinions obtained formed the introductory step in this Assessment.

To complete a CHNA:

*"... the final regulations provide that a hospital facility must document its CHNA in a CHNA report that is adopted by an authorized body of the hospital facility and includes:*

- (1) *A definition of the community served by the hospital facility and a description of how the community was determined;*
- (2) *a description of the process and methods used to conduct the CHNA;*
- (3) *a description of how the hospital facility solicited and took into account input received from persons who represent the broad interests of the community it serves;*
- (4) *a prioritized description of the significant health needs of the community identified through the CHNA, along with a description of the process and criteria used in identifying certain health needs as significant and prioritizing those significant health needs; and*
- (5) *a description of resources potentially available to address the significant health needs identified through the CHNA.*

*... final regulations provide that a CHNA report will be considered to describe the process and methods used to conduct the CHNA if the CHNA report describes the data and other information used in the*

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<sup>6</sup> Federal Register Vol. 79 No. 250, Wednesday December 31, 2014. Part II Department of the Treasury Internal Revenue Service 26 CFR Parts 1, 53, and 602 P. 78963 and 78964

*assessment, as well as the methods of collecting and analyzing this data and information, and identifies any parties with whom the hospital facility collaborated, or with whom it contracted for assistance, in conducting the CHNA.”<sup>7</sup>*

Additionally, all CHNAs developed after the very first CHNA must consider written commentary on the prior Assessment and Implementation Strategy efforts. The Hospital followed the Federal requirements in the solicitation of written comments by securing characteristics of individuals providing written comment but did not maintain identification data.

*“...the final regulations provide that a CHNA report does not need to name or otherwise identify any specific individual providing input on the CHNA, which would include input provided by individuals in the form of written comments.”<sup>8</sup>*

The methodology takes a comprehensive approach to the solicitation of written comments. As previously cited, input was obtained from the required three minimum sources and expanded input to include other representative groups. The Hospital asked all participating in the written comment solicitation process to self-identify themselves into any of the following representative classifications, which is detailed in an Appendix to this report. Written comment participants self-identified into the following classifications:

- (1) Public Health** – Persons with special knowledge of or expertise in public health
  - (2) Departments and Agencies** – Federal, tribal, regional, State, or local health or other departments or agencies, with current data or other information relevant to the health needs of the community served by the hospital facility
  - (3) Priority Populations** – Leaders, representatives, or members of medically underserved, low income, and minority populations, and populations with chronic disease needs in the community served by the hospital facility. Also, in other federal regulations the term Priority Populations, which include rural residents and LGBT interests, is employed and for consistency is included in this definition
  - (4) Chronic Disease Groups** – Representative of or member of Chronic Disease Group or Organization, including mental and oral health
  - (5) Broad Interest of the Community** – Individuals, volunteers, civic leaders, medical personnel, and others to fulfill the spirit of broad input required by the federal regulations
- Other** (please specify)

The methodology also takes a comprehensive approach to assess community health needs. Perform several independent data analyses based on secondary source data, augment this with Local Expert Advisor<sup>9</sup> opinions, and resolve any data inconsistency or discrepancies by reviewing the combined opinions formed from local experts. The Hospital relies on secondary source data, and most secondary sources use the county as the smallest unit of analysis. Local expert area residents were asked to note if they perceived the problems or needs identified by secondary sources

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<sup>7</sup> Federal Register Op. cit. P 78966 As previously noted the Hospital collaborated and obtained assistance in conducting this CHNA from Quorum Health Resources. Response to Schedule H (Form 990) B 6 b

<sup>8</sup> Federal Register Op. cit. P 78967 & Response to Schedule H (Form 990) B 3 h

<sup>9</sup> “Local Expert” is an advisory group of at least 15 local residents, inclusive of at least one member self-identifying with each of the five Quorum written comment solicitation classifications, with whom the Hospital solicited to participate in the Quorum/Hospital CHNA process. Response to Schedule H (Form 990) V B 3 h

existed in their portion of the county.<sup>10</sup>

Most data used in the analysis is available from public Internet sources and proprietary data. Any critical data needed to address specific regulations or developed by the Local Expert Advisor individuals cooperating in this study are displayed in the CHNA report appendix.

Data sources include:<sup>11</sup>

| Website or Data Source   | Data Element  | Date Accessed     | Data Date |
|--|---|-------------------|-----------|
| <a href="http://www.countyhealthrankings.org">www.countyhealthrankings.org</a>                                       | Assessment of health needs of Boone County compared to all Iowa counties  | March 1, 2019     | 2012-2014 |
| IBM Watson Health (formerly known as Truven Health Analytics)  | Assess characteristics of the hospital's primary service area, at a zip code level, based on classifying the population into various socio-economic groups, determining the health and medical tendencies of each group and creating an aggregate composition of the service area according to the proportion of each group in the entire area; and, to access population size, trends and socio-economic characteristics | March 1, 2019     | 2019      |
| <a href="http://svi.cdc.gov">http://svi.cdc.gov</a>  | To identify the Social Vulnerability Index value  | February 28, 2019 | 2012-2016 |
| <a href="http://www.healthdata.org/us-county-profiles">http://www.healthdata.org/us-county-profiles</a>              | To look at trends of key health metrics over time   | February 28, 2019 | 2014      |
| <a href="http://www.worldlifeexpectancy.com/usa-health-rankings">www.worldlifeexpectancy.com/usa-health-rankings</a> | To determine relative importance among 15 top causes of death   | March 1, 2019     | 2016      |

Federal regulations surrounding CHNA require local input from representatives of particular demographic sectors. For this reason, a standard process of gathering community input was developed. In addition to gathering data from the above sources:

- A CHNA survey was deployed to the Hospital's Local Expert Advisors to gain input on local health needs and the

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<sup>10</sup> Response to Schedule H (Form 990) Part V B 3 i

<sup>11</sup> The final regulations clarify that a hospital facility may rely on (and the CHNA report may describe) data collected or created by others in conducting its CHNA and, in such cases, may simply cite the data sources rather than describe the "methods of collecting" the data. Federal Register Op. cit. P 78967 & Response to Schedule H (Form 990) Part V B 3 d

needs of priority populations. Local Expert Advisors were local individuals selected according to criteria required by the Federal guidelines and regulations and the Hospital's desire to represent the region's geographically and ethnically diverse population. Community input from 18 Local Expert Advisors was received. Survey responses started May 14, 2019 and ended on June 6, 2019.

- Information analysis augmented by local opinions showed how Boone County relates to its peers in terms of primary and chronic needs and other issues of uninsured persons, low-income persons, and minority groups. Respondents commented on whether they believe certain population groups ("Priority Populations") need help to improve their condition, and if so, who needs to do what to improve the conditions of these groups.<sup>12 13</sup>
- Local opinions of the needs of Priority Populations, while presented in its entirety in the Appendix, was abstracted in the following "take-away" bulleted comments
  - The top three priority populations in the area are low-income groups, older adults and residents of rural areas
  - There should be a focus on providing affordable and accessible care to the community
  - Additional mental health services

Having taken steps to identify potential community needs, the Local Experts then participated in a structured communication technique called a "Wisdom of Crowds" method. The premise of this approach relies on a panel of experts with the assumption that the collective wisdom of participants is superior to the opinion of any one individual, regardless of their professional credentials.<sup>14</sup>

In the BCH process, each Local Expert had the opportunity to introduce needs previously unidentified and to challenge conclusions developed from the data analysis. While there were a few opinions of the data conclusions not being completely accurate, most of the comments agreed with the findings. A list of all needs identified by any of the analyzed data was developed. The Local Experts then allocated 100 points among the list of health needs, including the opportunity to list additional needs that were not identified from the data.

The ranked needs were divided into two groups: "Significant" and "Other Identified Needs." The Significant Needs were prioritized based on total points cast by the Local Experts in descending order, further ranked by the number of local experts casting any points for the need. By definition, a Significant Need had to include all rank ordered needs until at least fifty percent (60%) of all points were included and to the extent possible, represented points allocated by a majority of voting local experts. The determination of the break point — "Significant" as opposed to "Other" — was a qualitative interpretation where a reasonable break point in rank order occurred.<sup>15</sup>

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<sup>12</sup> Response to Schedule H (Form 990) Part V B 3 f

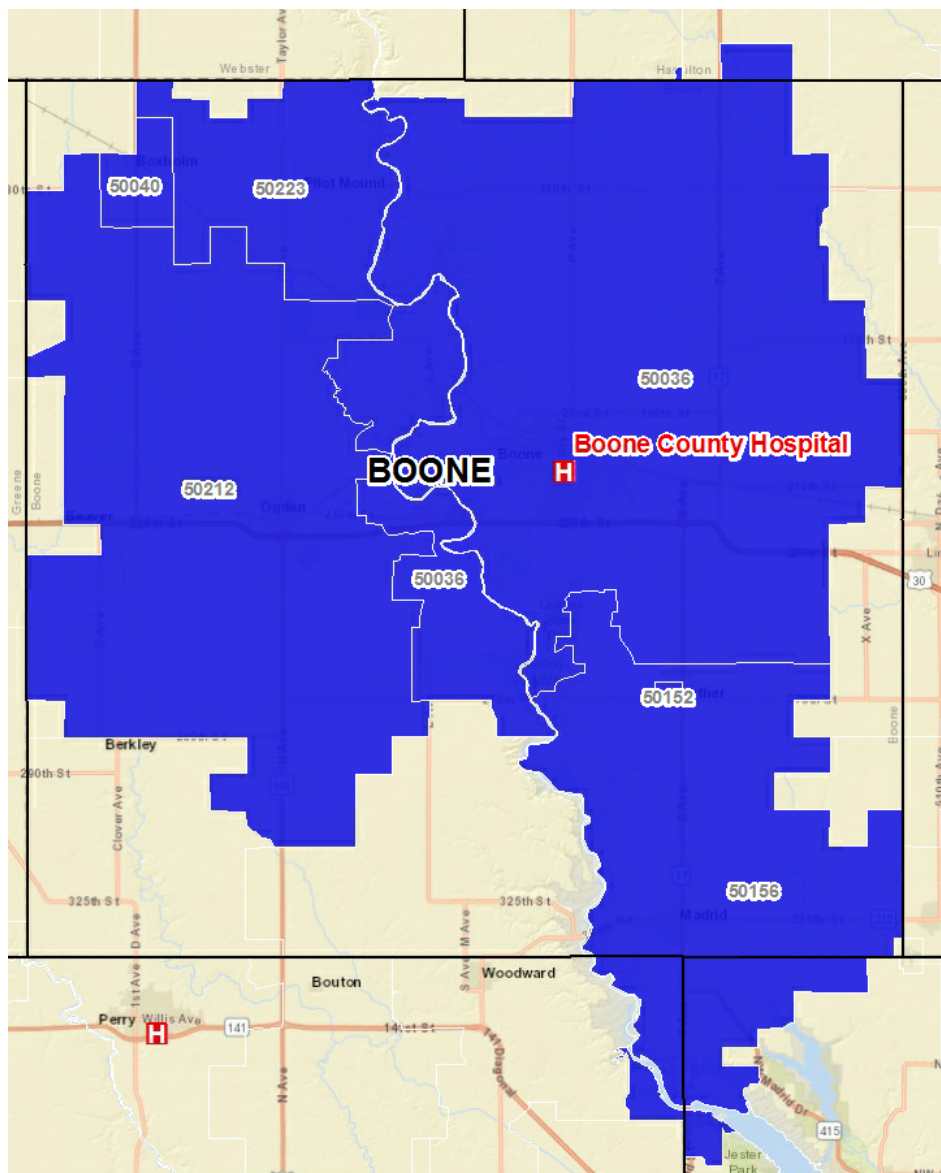
<sup>13</sup> Response to Schedule H (Form 990) Part V B 3 h

<sup>14</sup> Response to Schedule H (Form 990) Part V B 5

<sup>15</sup> Response to Schedule H (Form 990) Part V B 3 g

## COMMUNITY CHARACTERISTICS

## Definition of Area Served by the Hospital<sup>16</sup>



For the purposes of this study, Boone County Hospital defines its service area as Boone County in Iowa, which includes the following ZIP codes:<sup>17</sup>

50036 – Boone      50040 – Boxholm      50152 – Luther      50156 – Madrid      50212 – Ogden  
50223 – Pilot Mound

In 2017, the Hospital received 91.0% of its patients from Boone County.<sup>18</sup>

*Zip codes 50031, 50037 and 50099 are included in the zip codes listed above.*

<sup>16</sup> Responds to IRS Schedule H (Form 990) Part V B 3 a

<sup>17</sup> The map above amalgamates zip code areas and does not necessarily display all county zip codes represented below

<sup>18</sup> Truven MEDPAR patient origin data for the hospital

## Demographics of the Community<sup>19 20</sup>

| Variable                                       | Boone County |        |          | Iowa      |           |          | United States |             |          |
|--|--------------|--------|----------|-----------|-----------|----------|---------------|-------------|----------|
|  | 2019         | 2024   | % Change | 2019      | 2024      | % Change | 2019          | 2024        | % Change |
| <b>DEMOGRAPHIC CHARACTERISTICS</b>             |              |        |          |           |           |          |               |             |          |
| Total Population                               | 24,779       | 25,216 | 1.8%     | 3,166,802 | 3,240,932 | 2.3%     | 326,533,070   | 337,947,912 | 3.5%     |
| Total Male Population                          | 12,373       | 12,607 | 1.9%     | 1,575,401 | 1,612,878 | 2.4%     | 160,763,625   | 166,448,475 | 3.5%     |
| Total Female Population                        | 12,406       | 12,609 | 1.6%     | 1,591,401 | 1,628,054 | 2.3%     | 165,769,445   | 171,499,437 | 3.5%     |
| Females, Child Bearing Age (15-44)             | 4,360        | 4,374  | 0.3%     | 596,585   | 607,994   | 1.9%     | 63,920,735    | 64,819,726  | 1.4%     |
| Average Household Income                       | \$71,113     |        |          | \$79,458  |           |          | \$86,278      |             |          |
| <b>POPULATION DISTRIBUTION</b>                 |              |        |          |           |           |          |               |             |          |
| <i>Age Distribution</i>                        |              |        |          |           |           |          |               |             |          |
| 0-14   | 4,381        | 4,316  | -1.5%    | 608,210   | 611,844   | 0.6%     | 61,041,209    | 61,251,924  | 0.3%     |
| 15-17  | 970          | 990    | 2.1%     | 124,927   | 129,997   | 4.1%     | 12,768,680    | 13,285,276  | 4.0%     |
| 18-24  | 1,989        | 2,119  | 6.5%     | 332,159   | 344,236   | 3.6%     | 31,582,678    | 32,239,015  | 2.1%     |
| 25-34  | 2,908        | 2,782  | -4.3%    | 386,796   | 381,562   | -1.4%    | 43,889,724    | 43,505,348  | -0.9%    |
| 35-54  | 6,165        | 6,122  | -0.7%    | 751,213   | 748,924   | -0.3%    | 83,269,718    | 83,715,341  | 0.5%     |
| 55-64  | 3,742        | 3,610  | -3.5%    | 415,064   | 401,708   | -3.2%    | 42,204,839    | 43,372,785  | 2.8%     |
| 65+  | 4,624        | 5,277  | 14.1%    | 548,433   | 622,661   | 13.5%    | 51,776,222    | 60,578,223  | 17.0%    |
| <b>HOUSEHOLD INCOME DISTRIBUTION</b>           |              |        |          |           |           |          |               |             |          |
| Total Households                               | 10,341       | 10,575 | 2.3%     | 1,280,852 | 1,315,345 | 2.7%     | 123,942,877   | 128,512,554 | 3.7%     |
| <i>2018 Household Income</i>                   |              |        |          |           |           |          |               |             |          |
| <\$15K   | 879          |        |          | 122,779   |           |          | 13,504,093    |             |          |
| \$15-25K                                       | 1,060        |        |          | 117,319   |           |          | 11,746,600    |             |          |
| \$25-50K                                       | 2,491        |        |          | 293,869   |           |          | 27,363,648    |             |          |
| \$50-75K                                       | 2,287        |        |          | 240,223   |           |          | 21,179,900    |             |          |
| \$75-100K                                      | 1,380        |        |          | 176,716   |           |          | 15,192,390    |             |          |
| Over \$100K                                    | 2,244        |        |          | 329,946   |           |          | 34,956,246    |             |          |
| <b>EDUCATION LEVEL</b>                         |              |        |          |           |           |          |               |             |          |
| Pop Age 25+                                    | 17,439       |        |          | 2,101,506 |           |          | 221,140,503   |             |          |
| <i>2018 Adult Education Level Distribution</i> |              |        |          |           |           |          |               |             |          |
| Less than High School                          | 231          |        |          | 66,371    |           |          | 12,391,997    |             |          |
| Some High School                               | 672          |        |          | 105,742   |           |          | 16,363,756    |             |          |
| High School Degree                             | 6,063        |        |          | 659,536   |           |          | 61,028,690    |             |          |
| Some College/Assoc. Degree                     | 6,583        |        |          | 680,873   |           |          | 64,253,906    |             |          |
| Bachelor's Degree or Greater                   | 3,890        |        |          | 588,984   |           |          | 67,102,154    |             |          |
| <b>RACE/ETHNICITY</b>                          |              |        |          |           |           |          |               |             |          |
| <i>2018 Race/Ethnicity Distribution</i>        |              |        |          |           |           |          |               |             |          |
| White Non-Hispanic                             | 23,329       |        |          | 2,693,646 |           |          | 197,066,325   |             |          |
| Black Non-Hispanic                             | 273          |        |          | 117,138   |           |          | 40,402,616    |             |          |
| Hispanic                                       | 665          |        |          | 197,917   |           |          | 59,581,510    |             |          |
| Asian & Pacific Is. Non-Hispanic               | 142          |        |          | 89,697    |           |          | 18,958,063    |             |          |
| All Others                                     | 370          |        |          | 68,404    |           |          | 10,524,556    |             |          |

<sup>19</sup> Responds to IRS Schedule H (Form 990) Part V B 3 b

<sup>20</sup> Claritas (accessed through IBM Watson Health)

## Consumer Health Service Behavior<sup>21</sup>

Key health services topics for the service area population are presented in the table below. In the second column of the chart, the national average is 100%, so the 'Demand as % of National' shows a community's likelihood of exhibiting a certain health behavior more or less than the national average. The next column shows the percentage of the population that is likely to exhibit those behaviors.

Where Boone County varies more than 5% above or below the national average (that is, less than 95% or greater than 105%), it is considered noteworthy. Items in the table with **red text** are viewed as **adverse** findings. Items with **blue text** are viewed as **beneficial** findings. Items with black text are neither a favorable nor unfavorable finding.

| Health Service Topic                        | Demand as % of National | % of Population Affected | Health Service Topic                   | Demand as % of National | % of Population Affected |
|---|-------------------------|--------------------------|--|-------------------------|--------------------------|
| Weight / Lifestyle                          |                         |                          | Cancer                                 |                         |                          |
| <b>BMI: Morbid/Obese</b>                    | <b>117.5%</b>           | <b>35.9%</b>             | <b>Cancer Screen: Skin 2 yr</b>        | <b>88.5%</b>            | <b>9.5%</b>              |
| Vigorous Exercise                           | 98.0%                   | 56.0%                    | Cancer Screen: Colorectal 2 yr         | 97.5%                   | 20.0%                    |
| <b>Chronic Diabetes</b>                     | <b>90.8%</b>            | <b>14.2%</b>             | Cancer Screen: Pap/Cerv Test 2 yr      | 102.9%                  | 49.6%                    |
| <b>Healthy Eating Habits</b>                | <b>84.2%</b>            | <b>19.7%</b>             | <b>Routine Screen: Prostate 2 yr</b>   | <b>95.0%</b>            | <b>26.9%</b>             |
| Ate Breakfast Yesterday                     | 97.0%                   | 76.7%                    | Orthopedic                             |                         |                          |
| <b>Slept Less Than 6 Hours</b>              | <b>110.2%</b>           | <b>15.0%</b>             | Chronic Lower Back Pain                | 103.6%                  | 32.0%                    |
| <b>Consumed Alcohol in the Past 30 Days</b> | <b>90.4%</b>            | <b>48.6%</b>             | Chronic Osteoporosis                   | 99.6%                   | 10.1%                    |
| Consumed 3+ Drinks Per Session              | 104.9%                  | 29.6%                    | Routine Services                       |                         |                          |
| Behavior                                    |                         |                          | FP/GP: 1+ Visit                        | 102.5%                  | 83.4%                    |
| Search for Pricing Info                     | 89.5%                   | 24.1%                    | <b>NP/PA Last 6 Months</b>             | <b>111.7%</b>           | <b>46.3%</b>             |
| I am Responsible for My Health              | 101.5%                  | 91.8%                    | OB/Gyn 1+ Visit                        | 100.7%                  | 38.7%                    |
| I Follow Treatment Recommendations          | 97.7%                   | 75.3%                    | Medication: Received Prescription      | 103.0%                  | 62.4%                    |
| Pulmonary                                   |                         |                          | Internet Usage                         |                         |                          |
| <b>Chronic COPD</b>                         | <b>108.3%</b>           | <b>5.8%</b>              | Use Internet to Look for Provider Info | 85.4%                   | 34.1%                    |
| <b>Chronic Asthma</b>                       | <b>113.1%</b>           | <b>13.4%</b>             | Facebook Opinions                      | 85.3%                   | 8.6%                     |
| Heart                                       |                         |                          | Looked for Provider Rating             | 83.6%                   | 19.6%                    |
| Chronic High Cholesterol                    | 96.4%                   | 23.5%                    | Emergency Services                     |                         |                          |
| <b>Routine Cholesterol Screening</b>        | <b>93.8%</b>            | <b>41.6%</b>             | <b>Emergency Room Use</b>              | <b>105.3%</b>           | <b>34.8%</b>             |
| <b>Chronic Heart Failure</b>                | <b>134.1%</b>           | <b>5.4%</b>              | Urgent Care Use                        | 91.8%                   | 30.2%                    |

## Conclusions from Demographic Analysis Compared to National Averages

The following areas were identified from a comparison of Boone County to national averages. **Adverse** metrics impacting more than 30% of the population and statistically significantly different from the national average include:

- 17.5% more likely to have a **BMI of Morbid/Obese**, affecting 35.9%
- 6.2% less likely to receive **Routine Cholesterol Screenings**, affecting 41.6%

<sup>21</sup> Claritas (accessed through IBM Watson Health)

- 5.3% more likely to visit the **Emergency Room (for non-emergent issues)**, affecting 34.8%

**Beneficial** metrics impacting more than 30% of the population and statistically significantly different from the national average include:

- 9.6% less likely to **Consume Alcohol in the Past 30 Days**, affecting 48.6%
- 11.7% more likely to have a **Routine Visit with NP/PA**, affecting 46.3%

## Leading Causes of Death<sup>22</sup>

The Leading Causes of Death are determined by official Centers for Disease Control and Prevention (CDC) final death total. Iowa's Top 15 Leading Causes of Death are listed in the table below in Boone County's rank order. Boone County was compared to all other Iowa counties, Iowa state average and whether the death rate was higher, lower or as expected compared to the U.S. average.

| Cause of Death |                   |                    | Rank among all counties in IA<br><br>(#1 rank = worst in state) | Rate of Death per 100,000 age adjusted |              | Observation<br>(Boone County Compared to U.S.) |
|----------------|-------------------|--------------------|---|--|--------------|--|
| IA Rank        | Boone County Rank | Condition          |   | IA                                     | Boone County |  |
| 1              | 1                 | Heart Disease      | 14 of 99  | 162.8                                  | 214.4        | Higher than expected                           |
| 2              | 2                 | Cancer             | 47 of 99  | 159.8                                  | 173.3        | Higher than expected                           |
| 3              | 3                 | Lung Disease       | 27 of 99  | 48.6                                   | 47.1         | As expected                                    |
| 6              | 4                 | Stroke             | 30 of 99  | 32.3                                   | 46.3         | Higher than expected                           |
| 4              | 5                 | Accidents          | 14 of 99  | 45.8                                   | 44.9         | As expected                                    |
| 5              | 6                 | Alzheimer's        | 36 of 99  | 31.3                                   | 35.8         | As expected                                    |
| 7              | 7                 | Diabetes           | 10 of 99  | 20.9                                   | 29.2         | Higher than expected                           |
| 8              | 8                 | Flu-Pneumonia      | 17 of 99  | 11.6                                   | 25.3         | Higher than expected                           |
| 9              | 9                 | Suicide            | 66 of 99  | 14.6                                   | 11.4         | As expected                                    |
| 11             | 10                | Nephritis/Kidney   | 60 of 99  | 8.3                                    | 8.1          | As expected                                    |
| 12             | 11                | Liver Disease      | 33 of 99  | 9.4                                    | 6.7          | As expected                                    |
| 14             | 12                | Blood Poisoning    | 39 of 99  | 6.2                                    | 6.6          | As expected                                    |
| 10             | 13                | Hypertension/Renal | 85 of 99  | 8.5                                    | 5.8          | As expected                                    |
| 13             | 14                | Parkinson's        | 33 of 99  | 8.2                                    | 5.1          | As expected                                    |
| 15             | 15                | Homicide           | 29 of 93  | 2.8                                    | 2.1          | As expected                                    |

<sup>22</sup> [www.worldlifeexpectancy.com/usa-health-rankings](http://www.worldlifeexpectancy.com/usa-health-rankings)

## Priority Populations<sup>23</sup>

Earlier in the document, a description was provided for Priority Populations, which is one of the groups whose needs are to be considered during the CHNA process. It can be difficult to obtain information about Priority Populations in a hospital's community. The objective is to understand the general trends of issues impacting Priority Populations and to interact with the Local Experts to discern if local conditions exhibit any similar or contrary trends. The following discussion examines findings about Priority Populations from a national perspective.

Begin by analyzing the National Healthcare Quality and Disparities Reports (QDR), which are annual reports to Congress mandated in the Healthcare Research and Quality Act of 1999 (P.L. 106-129). These reports provide a comprehensive overview of the quality of healthcare received by the general U.S. population and disparities in care experienced by different racial, ethnic, and socioeconomic groups. The purpose of the reports is to assess the performance of the Hospital's health system and to identify areas of strengths and weaknesses in the healthcare system along three main axes: **Access to healthcare, quality of healthcare, and priorities of the National Quality Strategy (NQS)**. The complete report is provided in Appendix C.

A specific question was asked to the Hospital's Local Expert Advisors about unique needs of Priority Populations, and their responses were reviewed to identify if there were any report trends in the service area. Accordingly, the Hospital places a great reliance on the commentary received from the Hospital's Local Expert Advisors to identify unique population needs to which the Hospital should respond. Specific opinions from the Local Expert Advisors are summarized below:<sup>24</sup>

- The top three priority populations in the area are low-income groups, older adults and residents of rural areas
- There should be a focus on providing affordable and accessible care to the community
- Additional mental health services

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<sup>23</sup> <http://www.ahrq.gov/research/findings/nhqdr/nhqdr14/index.html> Responds to IRS Schedule H (Form 990) Part V B 3 i

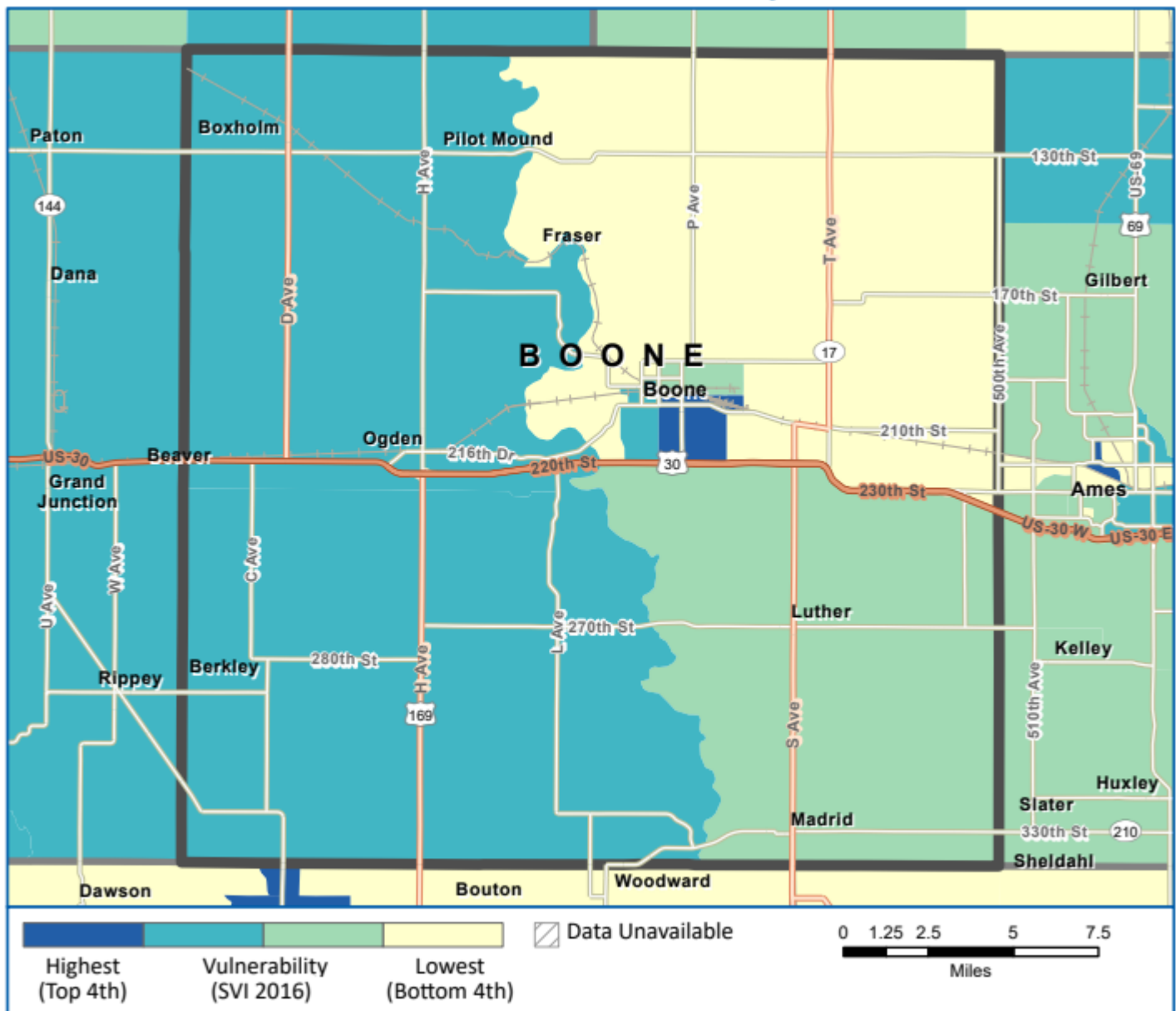
<sup>24</sup> All comments and the analytical framework behind developing this summary appear in Appendix A

## Social Vulnerability<sup>25</sup>

Social vulnerability refers to the resilience of communities when confronted by external stresses on human health, such as natural or human-caused disasters, or disease outbreaks.

Overall, Boone County falls into all four quartiles of social vulnerability. With the left region of the county falling into the 3rd quartile (light blue) and the majority of the right region making up the 1<sup>st</sup> (yellow) and 2nd (green) quartile, making those areas less vulnerable than the light blue and dark blue regions.

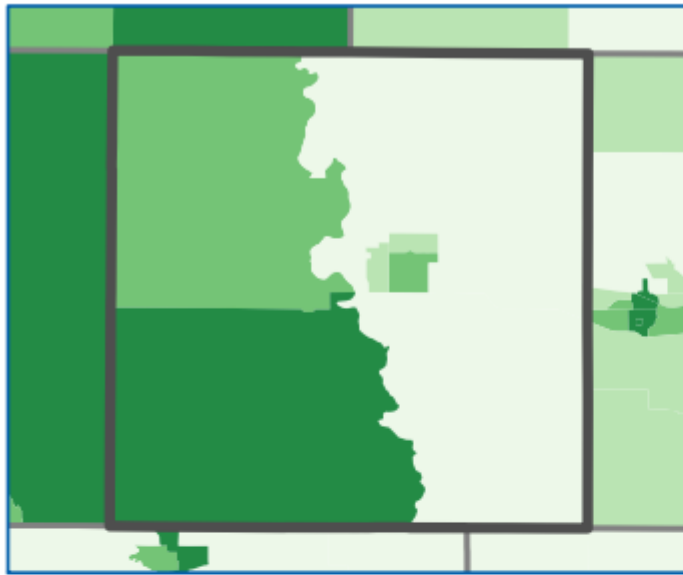
### Overall Social Vulnerability



<sup>25</sup> <http://svi.cdc.gov>

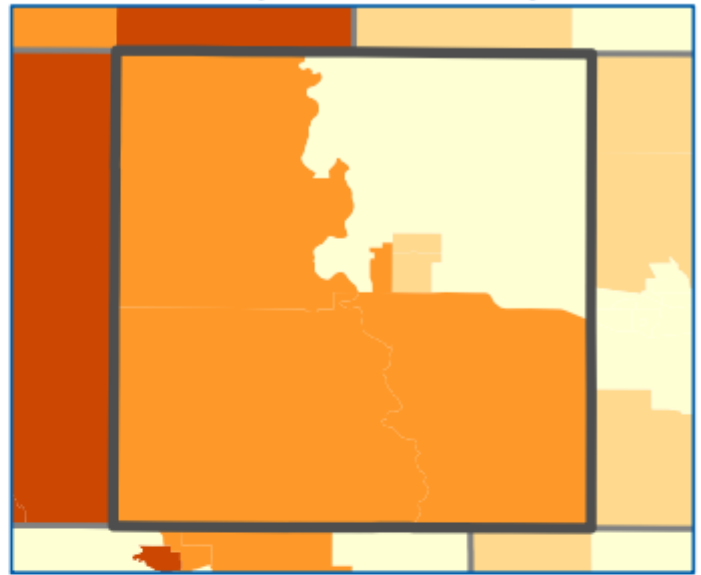
## SVI Themes

**Socioeconomic Status<sup>5</sup>**



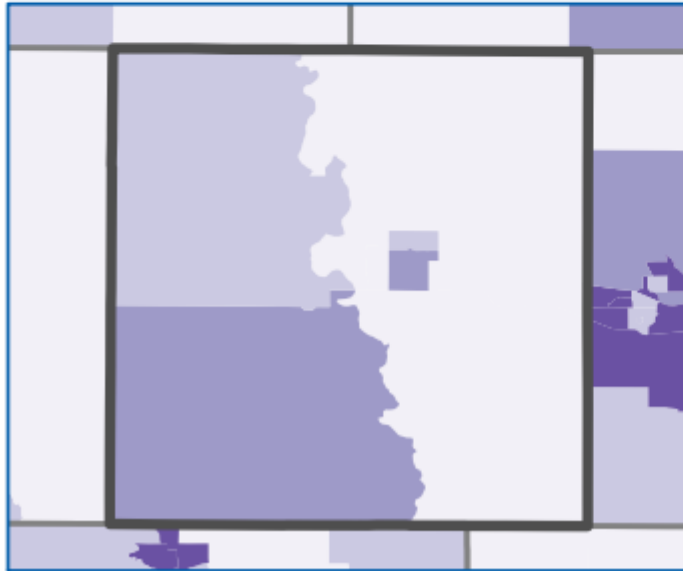
Highest (Top 4th)      Vulnerability (SVI 2016)      Lowest (Bottom 4th)

**Household Composition/Disability<sup>6</sup>**



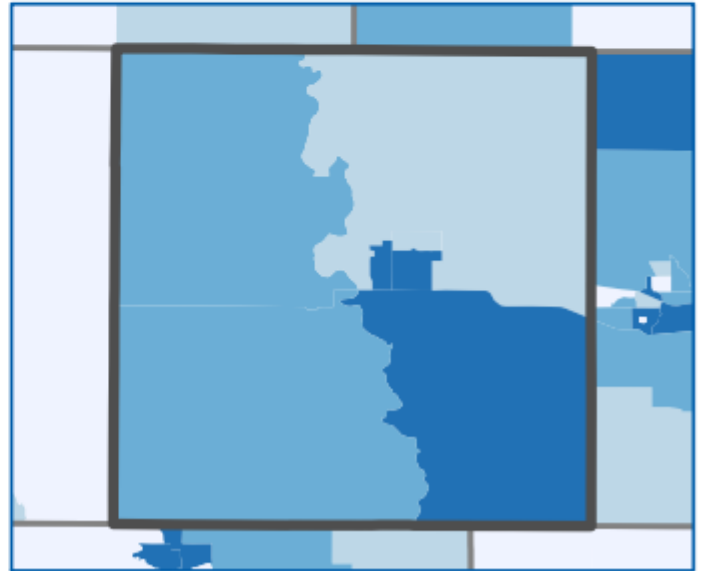
Highest (Top 4th)      Vulnerability (SVI 2016)      Lowest (Bottom 4th)

**Race/Ethnicity/Language**



Highest (Top 4th)      Vulnerability (SVI 2016)      Lowest (Bottom 4th)

**Housing/Transportation**



Highest (Top 4th)      Vulnerability (SVI 2016)      Lowest (Bottom 4th)

## Comparison to Other State Counties<sup>26</sup>

To better understand the community, Boone County has been compared to all 99 counties in the state of Iowa across six areas: Length of Life, Quality of Life, Health Behaviors, Clinical Care, Social & Economic Factors, and Physical Environment.

In the chart below, the county's rank compared to all counties is listed along with measures in each area compared to the state average and U.S. Median.

|  | Boone County | Iowa    | U.S. Median |
|--|--------------|---------|-------------|
| <b>Length of Life</b>                        |              |         |             |
| Overall Rank ( <i>best being #1</i> )        | 18/99        |         |             |
| - Premature Death*                           | 4,800        | 5,900   | 7,800       |
| <b>Quality of Life</b>                       |              |         |             |
| Overall Rank ( <i>best being #1</i> )        | 39/99        |         |             |
| - Poor or Fair Health                        | 13%          | 13%     | 17%         |
| - Poor Mental Health Days                    | 3.2          | 3.3     | 3.9         |
| <b>Health Behaviors</b>                      |              |         |             |
| Overall Rank ( <i>best being #1</i> )        | 29/99        |         |             |
| - Adult Smoking                              | 14%          | 17%     | 17%         |
| - Adult Obesity                              | 34%          | 32%     | 32%         |
| - Physical Inactivity                        | 24%          | 25%     | 27%         |
| - Excessive Drinking                         | 21%          | 22%     | 17%         |
| - Alcohol-Impaired Driving Deaths            | 23%          | 27%     | 29%         |
| <b>Clinical Care</b>                         |              |         |             |
| Overall Rank ( <i>best being #1</i> )        | 49/99        |         |             |
| - Uninsured                                  | 5%           | 6%      | 11%         |
| - Population to Primary Care Provider Ratio  | 2,220:1      | 1,360:1 | 2,040:1     |
| - Population to Dentist Ratio                | 2,210:1      | 1,560:1 | 2,520:1     |
| - Population to Mental Health Provider Ratio | 1,660:1      | 760:1   | 1,050:1     |
| - Preventable Hospital Stays                 | 63           | 49      | 56          |
| - Diabetes Monitoring                        | 91%          | 90%     | 86%         |
| - Mammography Screening                      | 68%          | 69%     | 61%         |
| <b>Social &amp; Economic Factors</b>         |              |         |             |
| Overall Rank ( <i>best being #1</i> )        | 23/99        |         |             |
| - Unemployment                               | 2.8%         | 3.7%    | 5.0%        |
| - Children in Poverty                        | 12%          | 15%     | 21%         |
| - Children in Single-Parent Households       | 29%          | 29%     | 32%         |
| - Violent Crime*                             | 313          | 270     | 198         |
| - Injury Deaths*                             | 69           | 65      | 79          |
| <b>Physical Environment</b>                  |              |         |             |
| Overall Rank ( <i>best being #1</i> )        | 73/99        |         |             |
| - Severe Housing Problems                    | 13%          | 12%     | 14%         |

\*Per 100,000 Population

<sup>26</sup> [www.countyhealthrankings.org](http://www.countyhealthrankings.org)

## Conclusions from Other Statistical Data<sup>27</sup>

The Institute for Health Metrics and Evaluation at the University of Washington analyzed all 3,143 U.S. counties or equivalents applying small area estimation techniques to the most recent county information. The below chart compares Boone County statistics to the U.S. average, as well as the trend in each measure over a 34-year span.

| Boone County, IA  | Current Statistic<br>(2014) | Percent Change<br>(1980-2014) |
|---|-----------------------------|-------------------------------|
| <b>UNFAVORABLE</b> Boone County measures that are <b>WORSE</b> than the U.S. average and had an <b>UNFAVORABLE</b> change |                             |                               |
| - Female Tracheal, Bronchus, and Lung Cancer*   | 44.1                        | 82.6%                         |
| - Female Skin Cancer*   | 2.0                         | 23.8%                         |
| - Female Diabetes, Urogenital, Blood, and Endocrine Disease Deaths*   | 54.4                        | 112.5%                        |
| - Male Diabetes, Urogenital, Blood, and Endocrine Disease Deaths*   | 69.5                        | 59.7%                         |
| <b>UNFAVORABLE</b> Boone County measures that are <b>WORSE</b> than the U.S. average and had a <b>FAVORABLE</b> change    |                             |                               |
| - Male Tracheal, Bronchus, and Lung Cancer*   | 73.8                        | -13.7%                        |
| - Female Life Expectancy  | 80.9                        | 0.7%                          |
| - Female Transport Injuries Related Deaths*   | 11.7                        | -19.0%                        |
| - Male Transport Injuries Related Deaths*   | 23.8                        | -27.9%                        |
| - Female Heart Disease*   | 166.6                       | -14.9%                        |
| - Male Heart Disease*   | 225.3                       | -51.8%                        |
| - Female Stroke*  | 50.6                        | -38.4%                        |
| <b>DESIRABLE</b> Boone County measures that are <b>BETTER</b> than the US average and had a <b>FAVORABLE</b> change       |                             |                               |
| - Female Self-Harm and Interpersonal Violence Related Deaths*   | 6.1                         | -4.6%                         |
| - Male Self-Harm and Interpersonal Violence Related Deaths*   | 23.2                        | -7.0%                         |
| - Male Liver Disease Related Deaths*  | 14.6                        | -16.6%                        |
| - Male Life Expectancy  | 77.1                        | 6.1%                          |
| - Female Breast Cancer*   | 22.9                        | -24.8%                        |
| - Male Stroke*  | 43.8                        | -54.4%                        |
| <b>DESIRABLE</b> Boone County measures that are <b>BETTER</b> than the US average and had an <b>UNFAVORABLE</b> change    |                             |                               |
| - Female Liver Disease Related Deaths*  | 8.2                         | 29.2%                         |
| - Female Mental and Substance Use Related Deaths*   | 3.8                         | 383.8%                        |
| - Male Mental and Substance Use Related Deaths*   | 10.5                        | 327.6%                        |
| <b>AVERAGE</b> Boone County measures that are <b>EQUAL</b> to the US average and had a <b>FAVORABLE</b> change            |                             |                               |
| - Male Breast Cancer*   | 0.3                         | -10.4%                        |
| <b>AVERAGE</b> Boone County measures that are <b>EQUAL</b> to the US average and had an <b>UNFAVORABLE</b> change         |                             |                               |
| - Male Skin Cancer*   | 4.5                         | 48.0%                         |

\*rate per 100,000 population, age-standardized

<sup>27</sup> <http://www.healthdata.org/us-county-profiles>

## Community Benefit

Worksheet 4 of Form 990 h can be used to report the net cost of community health improvement services and community benefit operations.

*“Community health improvement services” means activities or programs, subsidized by the health care organization, carried out or supported for the express purpose of improving community health. Such services do not generate inpatient or outpatient revenue, although there may be a nominal patient fee or sliding scale fee for these services.*

*“Community benefit operations” means:*

- *activities associated with community health needs assessments, administration, and*
- *the organization's activities associated with fundraising or grant-writing for community benefit programs.*

Activities or programs cannot be reported if they are provided primarily for marketing purposes or if they are more beneficial to the organization than to the community. For example, the activity or program may not be reported if it is designed primarily to increase referrals of patients with third-party coverage, required for licensure or accreditation, or restricted to individuals affiliated with the organization (employees and physicians of the organization).

To be reported, community need for the activity or program must be established. Community need can be demonstrated through the following:

- A CHNA conducted or accessed by the organization.
- Documentation that demonstrated community need or a request from a public health agency or community group was the basis for initiating or continuing the activity or program.
- The involvement of unrelated, collaborative tax-exempt or government organizations as partners in the activity or program carried out for the express purpose of improving community health.

Community benefit activities or programs also seek to achieve a community benefit objective, including improving access to health services, enhancing public health, advancing increased general knowledge, and relief of a government burden to improve health. This includes activities or programs that do the following:

- Are available broadly to the public and serve low-income consumers.
- Reduce geographic, financial, or cultural barriers to accessing health services, and if they ceased would result in access problems (for example, longer wait times or increased travel distances).
- Address federal, state, or local public health priorities such as eliminating disparities in access to healthcare services or disparities in health status among different populations.
- Leverage or enhance public health department activities such as childhood immunization efforts.
- Otherwise would become the responsibility of government or another tax-exempt organization.
- Advance increased general knowledge through education or research that benefits the public.

Activities reported by the Hospital in its implementation efforts and/or its prior year tax reporting (FY2018) included:

**Boone County Hospital Yearly Events/Programs**

- Blood Pressure Checks, every Tuesday
- Boone Blood Drive, bi-monthly
- Boone County Caregiver Support Group, first Tuesday of every month
- Boone County Nutrition Program/Meals on Wheels, daily (Monday-Saturday)
- Car Seat Safety Checks, as needed
- Childbirth Education Classes, every other month (2 days in the month)
- Diabetes Education Classes, as needed
- Diabetes Support Group, monthly (except for June-August, and December)
- Educating and Empowering U, monthly
- Outpatient Nutritional Services, as needed
- Sibling Class, every other month
- Valet Services, Monday through Friday
- First Grade Tours, 5-10 tours in May
- Free Clinic, 2 evenings each month (nurses, doctors, staff involved)
- RSVP (retired seniors volunteer program), daily
- Wound Clinic presentations, monthly
- EMS coverage, monthly (ex. Thomas the Tank Engine, Pufferbilly Days, Boone County Fair, Boone High football games, BCH Duathlon, etc.)
- Job shadowing for MECO students/DMACC students, throughout the year
- Cardiac/Pulmonary Education Classes, monthly
- Lab Wellness Profiles
- Pain Management Support Group (meets first Wed. of the month)
- Boone High School Health Occupation students job shadowing, annually
- Various presentations to community groups by various depts. (as requested)

## IMPLEMENTATION STRATEGY

## Significant Health Needs

BCH used the priority ranking of area health needs by Local Expert Advisors to organize the search for locally available resources as well as the response to the needs by BCH.<sup>28</sup> The Implementation Strategy includes the following:

- Identifies the rank order of each identified Significant Need
- Presents the factors considered in developing the ranking
- Establishes a Problem Statement to specify the problem indicated by use of the Significant Need term
- Identifies BCH current efforts responding to the need including any written comments received regarding prior BCH implementation actions
- Establishes the Implementation Strategy programs and resources BCH will devote to attempt to achieve improvements
- Documents the Leading Indicators BCH will use to measure progress
- Presents the Lagging Indicators BCH believes the Leading Indicators will influence in a positive fashion, and
- Presents the locally available resources noted during the development of this report as believed to be currently available to respond to this need.

In general, BCH is the primary hospital in the service area. BCH is a 25-bed, acute care medical facility located in Boone County, Iowa. The next closest facilities are outside the service area and include:

- Mary Greeley Medical Center; Ames, IA, 18.2 miles (25 minutes)
- Story County Medical Center, Nevada, IA; 25.6 miles (29 minutes)
- Dallas County Hospital, Perry, IA; 26.2 miles (30 minutes)
- Mercy Health Network, Des Moines, IA (multiple facilities within 1-hour drive)

All statistics analyzed to determine significant needs are “Lagging Indicators,” measures presenting results after a period of time, characterizing historical performance. Lagging Indicators tell you nothing about how the outcomes were achieved. In contrast, the BCH Implementation Strategy uses “Leading Indicators.” Leading Indicators anticipate change in the Lagging Indicator. Leading Indicators focus on short-term performance, and if accurately selected, anticipate the broader achievement of desired change in the Lagging Indicator. In the QHR application, Leading Indicators also must be within the ability of the hospital to influence and measure.

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<sup>28</sup> Response to IRS Schedule H (Form 990) Part V B 3 e

## 1. AFFORDABILITY/ACCESSIBILITY – 2016 Significant Need

### Public comments received on previously adopted implementation strategy:

- *See Appendix A for a full list of comments*

### BCH services, programs, and resources available to respond to this need:<sup>29</sup>

- BCH established The Free Clinic of Boone County to provide no-cost services to patients in the community; BCH physicians staff this clinic
- Financial Assistance Policy and sliding scales for fees
- Counseling for ACA exchange enrollment to help patients enroll
- Free teen and young adult clinic for OB/gyn services
- Doing the well child visits that is covered under insurance
- Free blood pressure screening at the hospital
- Provide flu shots at reduced rate (and often free for children)
- Wellness labs provide lab tests and services at a discounted rate
- Worked closely with IHA to expand coverage for Iowa citizens
- Established a patient portal to allow patients to access records, lab results, communicate with physicians, etc.
- Implemented financial counselor role to help patients determine if they qualify for any sort of assistance
- More utilization of discounted services
- More patients seeking care through the expanded hours clinic
- Worked closely with IHA to expand coverage for Iowa citizens
- Established a patient portal to allow patients to access records, lab results, communicate with physicians, etc.
- Implemented financial counselor role to help patients determine if they qualify for any sort of assistance
- More utilization of discounted services
- More patients seeking care through the expanded hours clinic

### Additionally, BCH plans to take the following steps to address this need:

- Working to add rheumatology

### BCH evaluation of impact of actions taken since the immediately preceding CHNA:

- Monthly educational program called “Educating and Empowering U”

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<sup>29</sup> This section in each need for which the hospital plans an implementation strategy responds to Schedule H (Form 990) Part V Section B 3 c

- After-hours clinic in the community to address non-emergent care needs and reduce emergency department visits
- Enhanced health coach roles in primary care clinic – diabetic and weight loss education, patient education, free glucose monitors
- Continue to increase public awareness low-cost and discount services
- Full time social worker – beneficial for inpatient resources and emergency department
- Free blood pressure screening at the clinic and let them take home the blood pressure reader for a week to monitor their own blood pressure
- Expanded infusion center to centralize the service
- Added physician/provider specialties: Endocrinologist

#### Anticipated results from BCH Implementation Strategy

| Community Benefit Attribute Element   | Yes, Implementation Strategy Addresses | Implementation Strategy Does Not Address |
|---|--|--|
| 1. Available to public and serves low income consumers                                    | X                                      |  |
| 2. Reduces barriers to access services (or, if ceased, would result in access problems)   | X                                      |  |
| 3. Addresses disparities in health status among different populations                     | X                                      |  |
| 4. Enhances public health activities  | X                                      |  |
| 5. Improves ability to withstand public health emergency                                  | X                                      |  |
| 6. Otherwise would become responsibility of government or another tax-exempt organization | X                                      |  |
| 7. Increases knowledge; then benefits the public  | X                                      |  |

#### The strategy to evaluate BCH intended actions is to monitor change in the following Leading Indicator:

- The number of patients utilizing wellness lab tests =
- Health coach visits =
- Track walk-in clinic visits =

#### The change in the Leading Indicator anticipates appropriate change in the following Lagging Indicator:

- Number of individuals utilizing financial assistance policies =

**BCH anticipates collaborating with the following other facilities and organizations to address this Significant Need:**

| Organization                    | Contact Name     | Contact Information   |
|---------------------------------|------------------|---|
| The Free Clinic of Boone County | Jennifer Clubine | <a href="http://www.freeclinicsofiowa.org/clinics/info/free-clinic-boone-county">http://www.freeclinicsofiowa.org/clinics/info/free-clinic-boone-county</a> |

**Other local resources identified during the CHNA process that are believed available to respond to this need:<sup>30</sup>**

| Organization   | Contact Name  | Contact Information          |
|--|---------------|------------------------------|
| Department of Human Services                                     |               | (515) 292-2035               |
| Story County WIC Program   | Gloria Symons | Gloria.symons@micaonline.org |
| 211 Iowa   |               |                              |
| Salvation Army   |               | (515)-432-5770               |
| IMPACT   |               | (515)-432-5052               |
| <a href="http://www.lifelonglinks.org">www.lifelonglinks.org</a> |               |                              |

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<sup>30</sup> This section in each need for which the hospital plans an implementation strategy responds to Schedule H (form 990) Part V Section B 3 c and Schedule H (Form 990) Part V Section B 11

**2. MENTAL HEALTH – Local expert concern; Boone County’s Population to Mental Health Provider Ratio is worse than the state and national averages; Suicide is the #9 Leading Cause of Death in Boone County; Boone County’s Mental and Substance Use Related Deaths increased from 1980-2014**

**Public comments received on previously adopted implementation strategy:**

*This was not a significant health need in 2016, so no comments were solicited.*

**BCH services, programs, and resources available to respond to this need include:**

- Psychiatry consultation available via tele-psychiatry when needed
- Built safe room for mental health patients in the emergency department
- Social workers available for inpatient and outpatient services
- Nurses and paramedics are trained in de-escalation processes

**Additionally, BCH plans to take the following steps to address this need:**

- Consider working with mobile crisis unit that is able to respond to acute psychotic needs in the field—work with local police department to respond with trained social workers and/or nurses
- Explore working with:
  - Youth and Shelter Services – family mental health counseling
  - Central Iowa Community Services (CICS)
  - Family Resources Center – mental health counseling

**Anticipated results from BCH Implementation Strategy**

| Community Benefit Attribute Element   | Yes, Implementation Strategy Addresses | Implementation Strategy Does Not Address |
|---|--|--|
| 1. Available to public and serves low income consumers                                  | X                                      |  |
| 2. Reduces barriers to access services (or, if ceased, would result in access problems) | X                                      |  |
| 3. Addresses disparities in health status among different populations                   | X                                      |  |
| 4. Enhances public health activities  |  | X  |
| 5. Improves ability to withstand public health emergency                                |  | X  |

| Community Benefit Attribute Element   | Yes, Implementation Strategy Addresses | Implementation Strategy Does Not Address |
|---|--|--|
| 6. Otherwise would become responsibility of government or another tax-exempt organization | X                                      |  |
| 7. Increases knowledge; then benefits the public  | X                                      |  |

**The strategy to evaluate BCH intended actions is to monitor change in the following Leading Indicator:**

- Transitional care program – follow-up within two business days and scheduled a follow up visits within 7-14 days (health coaches call)

**The change in the Leading Indicator anticipates appropriate change in the following Lagging Indicator:**

- Frequent emergency department visit related to mental health

**BCH anticipates collaborating with the following other facilities and organizations to address this Significant Need:**

| Organization                    | Contact Name | Contact Information |
|---------------------------------|--------------|---------------------|
| Youth and Shelter Services      |              | (515)-433-2091      |
| Central Iowa Community Services |              |                     |
| Family Resources Center         |              | (515)-432-4211      |
| Clinical Psychology             |              | (515)-433-0343      |

**Other local resources identified during the CHNA process that are believed available to respond to this need:**

| Organization                   | Contact Name | Contact Information |
|--------------------------------|--------------|---------------------|
| Genesis Development            |              | (515)-432-7288      |
| The Rose Center                |              | (515)-298-4394      |
| Eyerly Ball                    |              | (515)-241-0982      |
| Counseling for Growth & Change |              |                     |

- 3. OBESITY – 2016 Significant Need; Boone County’s Adult Obesity rate is worse than the state and national averages; Residents of Boone County are 17% more likely to have a BMI of Morbid/Obese compared the national average; Diabetes is the #7 Leading Cause of Death in Boone County; Boone County’s Diabetes, Urogenital, Blood, and Endocrine Disease Deaths are worse than the national average and saw an increase from 1980-2014**

**Public comments received on previously adopted implementation strategy:**

- *See Appendix A for a full list of comments*

**BCH services, programs, and resources available to respond to this need include:**

- Sponsor annual running/biking event in the community to promote healthy activities
- Sponsor healthy lifestyle lunch and learns for the community, providing healthy foods and education about behaviors
- Hospital employs a dietitian to provide diet and weight loss counseling
- Board has chosen to significantly invest in community wellness as a result of these efforts
- Health Coaches perform weight loss education sessions
- Exercise and weight loss programs with BCH employees—quarterly challenge (weight loss, walking, bike, and sleep—one per quarter for 2019)
- Cardiac Rehab focuses on exercise and diet

**BCH evaluation of impact of actions taken since the immediately preceding CHNA:**

- Quarterly challenge for employees
  - Walking challenge
  - Biking challenge
  - Sleep challenge

**BCH does not intend to develop an implementation strategy for this Significant Need**

Due to the relatively low priority assigned to Obesity, BCH chose not to respond to this need at this time. BCH feels they will have a greater impact by putting attention and resources towards other significant needs for which BCH is better qualified to serve.

**Federal classification of reasons why a hospital may cite for not developing an Implementation Strategy for a defined Significant Need**

|   |   |
|---|---|
| 1. Resource Constraints   |   |
| 2. Relative lack of expertise or competency to effectively address the need | X |
| 3. A relatively low priority assigned to the need                           | X |
| 4. A lack of identified effective interventions to address the need         |   |
| 5. Need is addressed by other facilities or organizations in the community  |   |

**Other local resources identified during the CHNA process that are believed available to respond to this need:<sup>31</sup>**

| Organization                  | Contact Name | Contact Information |
|-------------------------------|--------------|---------------------|
| Boone County YMCA             |              |                     |
| Boone Community Schools       |              |                     |
| Hy-Vee & Fareway - Dieticians |              |                     |
| TFW Fitness Center            |              |                     |
| Anytime Fitness               |              |                     |
| Lifelonglinks.com             |              |                     |

<sup>31</sup> This section in each need for which the hospital plans an implementation strategy responds to Schedule H (form 990) Part V Section B 3 c and Schedule H (Form 990) Part V Section B 11

**4. DRUG/SUBSTANCE ABUSE – Local expert concern; Boone County’s Mental and Substance Use Related Deaths increased from 1980-2014**

**Public comments received on previously adopted implementation strategy:**

*This was not a significant health need in 2016, so no comments were solicited.*

**BCH services, programs, and resources available to respond to this need include:**

- Work with pharmacies, medical staff, and other hospitals to track opioid prescriptions
- Medical staff has received education on alternative pain management
- Follow state mandated Prescription Monitoring Program (PMP) before prescribing any control substances
- Many of the physician are utilizing pain contracts
- Performing random drug screenings
- Some physicians are electronically prescribing controlled substances
- Walk in clinic and ED does not prescribe controlled substances as a policy for patients outside the site of service
- Hosted “In Plain Sight”, produced by Youth and Shelter Services (TSS), at the hospital
  - Mock bedroom of a teenager with hidden drug paraphernalia, which shows attendees what to look for and where it could be hidden
  - Supplied education on easily obtainable products that can be used for drugs
- Physician is certified to manage Suboxone treatment
- Pharmacies provide Narcan in the community
- Ensures community service programs have a space to utilize for probation and other community service activities

**Additionally, BCH plans to take the following steps to address this need:**

- Continue above actions
- Ensure all physicians perform electronic prescribing of controlled substances

**Anticipated results from BCH Implementation Strategy**

| Community Benefit Attribute Element                    | Yes, Implementation Strategy Addresses | Implementation Strategy Does Not Address |
|--|--|--|
| 1. Available to public and serves low income consumers | X                                      |  |

| Community Benefit Attribute Element   | Yes, Implementation Strategy Addresses | Implementation Strategy Does Not Address |
|---|--|--|
| 2. Reduces barriers to access services (or, if ceased, would result in access problems)   | X                                      |  |
| 3. Addresses disparities in health status among different populations                     | X                                      |  |
| 4. Enhances public health activities  |  | X  |
| 5. Improves ability to withstand public health emergency                                  |  | X  |
| 6. Otherwise would become responsibility of government or another tax-exempt organization | X                                      |  |
| 7. Increases knowledge; then benefits the public  | X                                      |  |

**The strategy to evaluate BCH intended actions is to monitor change in the following Leading Indicator:**

- Follow-up attempt rate with patients admitted for overdose-related conditions

**The change in the Leading Indicator anticipates appropriate change in the following Lagging Indicator:**

- Reduction of known drug overdoses in the emergency department

**BCH anticipates collaborating with the following other facilities and organizations to address this Significant Need:**

| Organization                                 | Contact Name | Contact Information |
|--|--------------|---------------------|
| Youth and Shelter Services                   |              | (515)-433-2091      |
| CFR  |              | (515)-433-0369      |
| Boone County Prevention & Community Services |              | (515)-432-7995      |

Other local resources identified during the CHNA process that are believed available to respond to this need:<sup>32</sup>

| Organization                           | Contact Name | Contact Information |
|--|--------------|---------------------|
| Local law enforcement                  |              |                     |
| Boone County Substance Abuse Coalition |              | (870)-391-3540      |
| Narcotics Anonymous                    |              |                     |
| Alcoholics Anonymous                   |              |                     |

<sup>32</sup> This section in each need for which the hospital plans an implementation strategy responds to Schedule H (form 990) Part V Section B 3 c and Schedule H (Form 990) Part V Section B 11

**5. HEART DISEASE – Local expert concern; Heart Disease is the #1 Leading Cause of Death in Boone County and the Heart Disease Death rate is worse than the state and national averages; Hypertension/Renal is the #13 Leading Cause of Death in Boone County**

**Public comments received on previously adopted implementation strategy:**

*This was not a significant health need in 2016, so no comments were solicited.*

**BCH services, programs, and resources available to respond to this need include:**

- Strong cardiopulmonary rehab services available
  - 3 phases, with Phase 3 being a sustainability program
- Offer stress tests and echocardiograms
- Health coaches do hypertension training and blood pressure cuff program, diet control, INR program
- Offers wellness labs – low cost triglycerides and other measures
- Allow community to come walk on the first floor of the hospital
- Accessibility to cardiologist that rotates in the BCH Specialty Clinic
- Quarterly challenge for employees
  - Walking challenge
  - Biking challenge
  - Sleep challenge
- Free clinic provides blood pressure and cholesterol medications
  - Staffed by BCH physicians and available twice per month
- Sponsor annual running/biking event in the community to promote healthy activities
- Sponsor healthy lifestyle lunch and learns for the community, providing healthy foods and education about healthy behaviors
- Hospital employs a dietitian to provide diet and weight loss counseling

**Additionally, BCH plans to take the following steps to address this need:**

- Explore expanding relationship with pharmacy and the management of coumadin therapy
- Explore the addition of discounted cardiac-related services onsite at BCH

**Anticipated results from BCH Implementation Strategy**

| Community Benefit Attribute Element   | Yes, Implementation Strategy Addresses | Implementation Strategy Does Not Address |
|---|--|--|
| 1. Available to public and serves low income consumers                                    | X                                      |  |
| 2. Reduces barriers to access services (or, if ceased, would result in access problems)   | X                                      |  |
| 3. Addresses disparities in health status among different populations                     | X                                      |  |
| 4. Enhances public health activities  |  | X  |
| 5. Improves ability to withstand public health emergency                                  |  | X  |
| 6. Otherwise would become responsibility of government or another tax-exempt organization |  | X  |
| 7. Increases knowledge; then benefits the public  | X                                      |  |

**The strategy to evaluate BCH intended actions is to monitor change in the following Leading Indicator:**

- Participation in Phase 3 cardiopulmonary rehab program

**The change in the Leading Indicator anticipates appropriate change in the following Lagging Indicator:**

- Cardiac-related readmissions (readmits by diagnosis)
- Cardiac-related deaths

**BCH anticipates collaborating with the following other facilities and organizations to address this Significant Need:**

| Organization   | Contact Name | Contact Information |
|--|--------------|---------------------|
| American Association of Cardiovascular & Pulmonary Rehabilitation (AACVPR) |              |                     |
| Jackson Medical  |              |                     |

**Other local resources identified during the CHNA process that are believed available to respond to this need:**

| Organization      | Contact Name | Contact Information |
|-------------------|--------------|---------------------|
| Boone County YMCA |              |                     |

## 6. CHRONIC PAIN MANAGEMENT – Local Expert Concern

### Public comments received on previously adopted implementation strategy:

*This was not a significant health need in 2016, so no comments were solicited.*

### BCH services, programs, and resources available to respond to this need include:

- Expanded pain management clinic, including bringing in a second pain management provider
  - Clinic managed by CRNA
- Physicians educated on how to treat chronic pain and avoid opioid use
- Epidural injections are performed on an interventional basis, along with radio frequency and ultrasound procedures
- A provider performs a procedure intranasally for migraine management—an anesthetic substance (SPG Block)
- Physical Therapy services are available and well-utilized
  - Dry needling services available
  - Expanded PT services to Ogden, IA
- Osteopathic Manipulation Therapy (OMT) being offered by a couple DO's, with one DO specifically offering that service alone

### Additionally, BCH plans to take the following steps to address this need:

- Continue above actions

### Anticipated results from BCH Implementation Strategy

| Community Benefit Attribute Element   | Yes, Implementation Strategy Addresses | Implementation Strategy Does Not Address |
|---|--|--|
| 1. Available to public and serves low income consumers                                  |  | X  |
| 2. Reduces barriers to access services (or, if ceased, would result in access problems) | X                                      |  |
| 3. Addresses disparities in health status among different populations                   | X                                      |  |
| 4. Enhances public health activities  |  | X  |
| 5. Improves ability to withstand public health emergency                                |  | X  |

| Community Benefit Attribute Element   | Yes, Implementation Strategy Addresses | Implementation Strategy Does Not Address |
|---|--|--|
| 6. Otherwise would become responsibility of government or another tax-exempt organization | X                                      |  |
| 7. Increases knowledge; then benefits the public  | X                                      |  |

**The strategy to evaluate BCH intended actions is to monitor change in the following Leading Indicator:**

- Patient-stated level of pain starting and following treatment

**The change in the Leading Indicator anticipates appropriate change in the following Lagging Indicator:**

- Number of patients prescribed opioids for chronic pain treatment
- Reduction in patients seen for chronic pain management

**BCH anticipates collaborating with the following other facilities and organizations to address this Significant Need:**

| Organization                          | Contact Name | Contact Information |
|---------------------------------------|--------------|---------------------|
| Mid-Iowa Anesthesia and Pain Services |              | (515)-433-8760      |
| Boone Rehab Services                  |              | (515)-433-8680      |

**Other local resources identified during the CHNA process that are believed available to respond to this need:**

| Organization | Contact Name | Contact Information |
|--------------|--------------|---------------------|
|              |              |                     |

## Other Needs Identified During CHNA Process

7. Education/Prevention
8. Physical Inactivity
9. Alzheimer's
10. Tobacco Use
11. Diabetes
12. Cancer
13. Suicide
14. Dental
15. Women's Health
16. Alcohol Abuse
17. Stroke
18. Write in: Another transportation resource for elderly out of town medical appointments
19. Write in: Opioid education
20. Hypertension
21. Lung Disease
22. Flu/Pneumonia
23. Kidney Disease
24. Liver Disease
25. Respiratory Infections
26. Write in: Confidential/Teen Friendly Services
27. Accidents
28. Write in: Electronic cigarettes and vaping

## Overall Community Need Statement and Priority Ranking Score

### **Significant needs where hospital has implementation responsibility<sup>33</sup>**

1. Affordability/Accessibility – 2016 Significant Need
2. Mental Health
3. Drug/Substance Abuse
4. Heart Disease
5. Chronic Pain Management

### **Significant needs where hospital did not develop implementation strategy<sup>34</sup>**

1. Obesity

### **Other needs where hospital developed implementation strategy**

1. N/A

### **Other needs where hospital did not develop implementation strategy**

1. N/A

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<sup>33</sup> Responds to Schedule h (Form 990) Part V B 8

<sup>34</sup> Responds to Schedule h (Form 990) Part V Section B 8

# APPENDIX

## Appendix A – Written Commentary on Prior CHNA (Local Expert Survey)

BCH solicited written comments about its 2016 CHNA.<sup>35</sup> 18 individuals responded to the request for comments. The following presents the information received in response to the solicitation efforts by the hospital. No unsolicited comments have been received.

1. Please indicate which (if any) of the following characteristics apply to you. If none of the following choices apply to you, please give a description of your role in the community.

|  | Yes (Applies to Me) | No (Does Not Apply to Me) | Response Count |
|--|---------------------|---------------------------|----------------|
| 1) <b>Public Health Expertise</b>  | 7                   | 8                         | 15             |
| 2) <b>Departments and Agencies</b> with relevant data/information regarding health needs of the community served by the hospital | 11                  | 4                         | 15             |
| 3) <b>Priority Populations</b>   | 6                   | 7                         | 13             |
| 4) Representative/Member of <b>Chronic Disease Group</b> or Organization   | 3                   | 8                         | 11             |
| 5) Represents the <b>Broad Interest of the Community</b>   | 11                  | 1                         | 12             |
| Other  |                     |                           | 6              |
| Answered Question  |                     |                           | 18             |
| Skipped Question   |                     |                           | 0              |

### Congress defines “Priority Populations” to include:

- Racial and ethnic minority groups
- Low-income groups
- Women
- Children
- Older Adults
- Residents of rural areas
- Individuals with special needs including those with disabilities, in need of chronic care, or in need of end-of-life care
- Lesbian Gay Bisexual Transsexual (LGBT)
- People with major comorbidity and complications

2. Do any of these populations exist in your community, and if so, do they have any unique needs that should be addressed?

- *Home care/home health is lacking; transportation to appointments; housing options; caregivers; meals on wheels especially in rural areas.*
- *more mental health help.*

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<sup>35</sup> Responds to IRS Schedule H (Form 990) Part V B 5

- *Low-income individuals may lack access to or knowledge of health related resources and are often quick to utilize the emergency room as their primary provider rather than establish a relationship with a primary physician. With only one physician in Boone County specifically providing OB/GYN services, women in Boone County frequently have to wait long periods of time for appointments or seek care outside of the Boone County area. Children: particularly adolescents, would be helpful to have more teen friendly services in Boone County, particularly surrounding access to confidential testing and family planning services. Residents in rural areas may also experience poverty and face barriers in accessing health related services.*
- *affordable housing, jobs that offer a livable wage that is willing to work with schedules,*
- *We no longer have a DHS agency in the county, and many individuals have a difficult time applying for financial assistance, and sometimes accessing services. Mental health services are lacking. Our MCO providers tout that they have in home counseling, but when we delve into this, there are no providers in our county that provide this much needed service. We frequently refer people to Dr Martin, and we are very pleased with the service he provides to the community. We just need more. Our local transit was taken over by HIRTA, and HIRTA does not have a local dispatcher, so sometimes the transit is lacking. The dispatchers are unfamiliar with the area, and schedule rides inappropriately at times. Sometimes, HIRTA is a no-show, and our clients miss essential doctor appointments. The MCO's use Non emergent transit in an inefficient manner, scheduling transit companies from Des Moines or elsewhere, at times, to take our clients to appointments locally or out of town, increasing the expense of the transit.*
- *Many low-income people do not have access to health care in our area. They work but do not have health insurance*

**In the 2016 CHNA, there were three health needs identified as “significant” or most important:**

- 1. Affordability/Accessibility**
- 2. Obesity**
- 3. Should the hospital continue to consider and allocate resources to help improve the needs identified in the 2016 CHNA?**

|                             | <b>Yes</b> | <b>No</b> | <b>Response Count</b> |
|-----------------------------|------------|-----------|-----------------------|
| Affordability/Accessibility | 17         | 0         | 17                    |
| Obesity                     | 10         | 6         | 16                    |

Comments:

- *Pediatric/Adolescent Mental Health*
- *This needs to be expanded to other populations.*
- *There has been a movement over the past few years to add dialysis services locally. Not sure if there is enough need to justify equipment, but we have plenty of local folks that suffer from a debilitating level of diabetes (and more on the way)*
- *As noted before, mental health is also a significant issue in the community.*
- *I would like the focus to change from obesity to mental health and drug/alcohol treatment*

**6. Please share comments or observations about the actions BCH has taken to address**

**AFFORDABILITY/ACCESSIBILITY.**

- *After hours clinic has increased accessibility and speed for pt assessment. Would like to see more physician staffing of Walk in Clinic*
- *I feel BCH does well to address indicators of community needs in health-related issues. I have heard good comments from folks who have used the free clinic and the walk-in clinic. It would be nice to have more partnership of community and health fairs together to bring out a wide diverse of population to attend to become aware of a lot of services in our community.*
- *The Walk In Clinic has been a huge help in providing access and an alternative to the ER for less acute illness. It still takes weeks to get in to see some of the local docs for first appointments. The Free Clinic is limited to twice a month. The underinsured and uninsured people in the community us on the rise. Access to specialists is still limited, especially pediatrics, urology, and most importantly mental health.*
- *Taken the time to approach the issue, engage with community.*
- *Afterhours Clinic has on surface been successful, but we have lost physicians. Is there a relationship? Quality of care at Afterhours Clinic is not as good as provided in ER or PCP office.*
- *Walk in clinic has been a huge success but the low-cost; discount service need to be better communicated within the community.*
- *The Walk-in Clinic has been an asset to Boone County residents and increasing accessibility.*
- *After hours/walk-in clinic is a homerun.*
- *The free clinic has been amazing for a lot of IMPACT's clients that don't have health insurance or that can't afford to go to the doctor.*
- *The hospital was successful in opening the Walk in Clinic and it has been very well received! They hold BP clinics in the infusion center weekly at no charge to the person, they offer financial counseling to anyone identified at risk for healthcare coverage. The hospital also supports the Free Clinic located in Boone 2 evenings /month. The Health Fairs have not been as active as they were in the past but when there is an opportunity BCH definitely participates with well rounded representation.*
- *Several crews to make more accessible. Great staff*
- *The Walk-in clinic has been a huge benefit to the community. We're thrilled to have this service nearby!!*
- *The walk-in clinic has been great, it doesn't address the affordability problem as they still need insurance to go, or cash which is expensive. I think the free clinic is better at addressing affordability.*

**7. Please share comments or observations about the actions BCH has taken to address OBESITY.**

- *Increased awareness of treatments for obesity. Wellness needs to be continually addressed as a way of life. Programs need to be accessible for all ages.*
- *Like idea of implementation of a wellness program for BCH employees and community. Possibly BCH instigate*

*helping businesses, non-profits and organizations begin their own wellness programs. The running/biking event I am aware of raises funds for the BCH Foundation which necessarily does not benefit all community members except for those who participate.*

- *We do have a couple of health coaches, but I don't know how community members access them if not through a local provider. I assume the YMCA has programs. I am not sure about Hy Vee or Weight Watchers.*
- *Obesity rates continue to rise. Need to work on more exercise opportunities. Work with the committee to bring bike trails to Boone from Madrid and other communities.*
- *Obese people are not going to run/bike or go to health fairs. What are you doing for those that are stuck in their home because of lack of transportation. Obese people are generally embarrassed and are not going to exercise with normal or perceived skinny people.*
- *I was not aware of this issue nor actions taken to address it.*
- *Not sure.*
- *none*
- *The hospital along with the foundation host different events that involve activity. The Foundation also has educational sessions open to the public at times during the year that cover nutrition.*
- *N/A*
- *The wellness coaches are fantastic, and may be a great way to help with obesity in a one on one setting as opposed to signing up for a running event. The events are an awesome community event, but those struggling with obesity need more one to one attention, and follow through.*
- *I think what they have done is adequate.*

## Appendix B – Identification & Prioritization of Community Needs (Local Expert Survey Results)

| Need Topic  | Total Votes | Number of Local Experts Voting for Needs | Percent of Votes | Cumulative Votes | Need Determination     |
|---|-------------|--|------------------|------------------|------------------------|
| Affordability/Accessibility*  | 256         | 13                                       | 17.1%            | 17.1%            | Significant Needs      |
| Mental Health   | 217         | 14                                       | 14.5%            | 31.5%            |                        |
| Obesity*  | 128         | 10                                       | 8.5%             | 40.1%            |                        |
| Drug/Substance Abuse  | 116         | 11                                       | 7.7%             | 47.8%            |                        |
| Heart Disease   | 85          | 9  | 5.7%             | 53.5%            |                        |
| Chronic Pain Management   | 70          | 10                                       | 4.7%             | 58.1%            | Other Identified Needs |
| Education/Prevention  | 69          | 8  | 4.6%             | 62.7%            |                        |
| Physical Inactivity   | 65          | 11                                       | 4.3%             | 67.1%            |                        |
| Alzheimer's   | 62          | 8  | 4.1%             | 71.2%            |                        |
| Tobacco Use   | 49          | 9  | 3.3%             | 74.5%            |                        |
| Diabetes  | 46          | 9  | 3.1%             | 77.5%            |                        |
| Cancer  | 45          | 7  | 3.0%             | 80.5%            |                        |
| Suicide   | 38          | 6  | 2.5%             | 83.1%            |                        |
| Dental  | 32          | 6  | 2.1%             | 85.2%            |                        |
| Women's Health  | 30          | 6  | 2.0%             | 87.2%            |                        |
| Alcohol Abuse   | 28          | 7  | 1.9%             | 89.1%            |                        |
| Stroke  | 25          | 6  | 1.7%             | 90.7%            |                        |
| Write in: Another transportation resource for elderly out of town med | 25          | 1  | 1.7%             | 92.4%            |                        |
| Write in: Opioid education  | 20          | 1  | 1.3%             | 93.7%            |                        |
| Hypertension  | 17          | 5  | 1.1%             | 94.9%            |                        |
| Lung Disease  | 15          | 5  | 1.0%             | 95.9%            |                        |
| Flu/Pneumonia   | 14          | 5  | 0.9%             | 96.8%            |                        |
| Kidney Disease  | 10          | 4  | 0.7%             | 97.5%            |                        |
| Liver Disease   | 10          | 4  | 0.7%             | 98.1%            |                        |
| Respiratory Infections  | 8           | 4  | 0.5%             | 98.7%            |                        |
| Write in: Confidential/Teen Friendly Services                         | 8           | 1  | 0.5%             | 99.2%            |                        |
| Accidents   | 6           | 4  | 0.4%             | 99.6%            |                        |
| Write in: Electronic cigarettes and vaping                            | 5           | 1  | 0.3%             | 99.9%            |                        |
| Write in: Blank   | 1           | 1  | 0.1%             | 100.0%           |                        |
| Total   | 1500        |  | 100.0%           |                  |                        |

\*=2016 Significant Needs

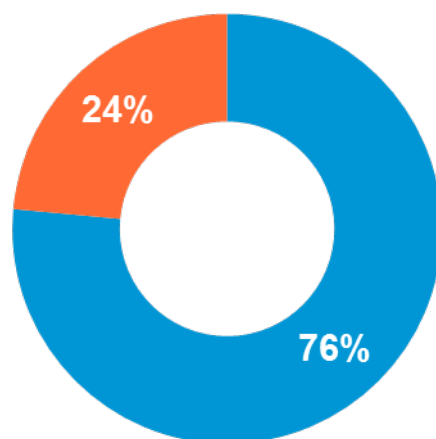
### Individuals Participating as Local Expert Advisors<sup>36</sup>

|  | Yes (Applies to Me) | No (Does Not Apply to Me) | Response Count |
|--|---------------------|---------------------------|----------------|
| 1) <b>Public Health Expertise</b>  | 7                   | 8                         | 15             |
| 2) <b>Departments and Agencies</b> with relevant data/information regarding health needs of the community served by the hospital | 11                  | 4                         | 15             |
| 3) <b>Priority Populations</b>   | 6                   | 7                         | 13             |
| 4) Representative/Member of <b>Chronic Disease Group</b> or Organization   | 3                   | 8                         | 11             |
| 5) Represents the <b>Broad Interest of the Community</b>   | 11                  | 1                         | 12             |
| Other  |                     |                           | 6              |
| Answered Question  |                     |                           | 18             |
| Skipped Question   |                     |                           | 0              |

### Advice Received from Local Expert Advisors

<sup>36</sup> Responds to IRS Schedule H (Form 990) Part V B 3 g

**Question: Do you agree with the comparison of Boone County to all other Iowa counties?**

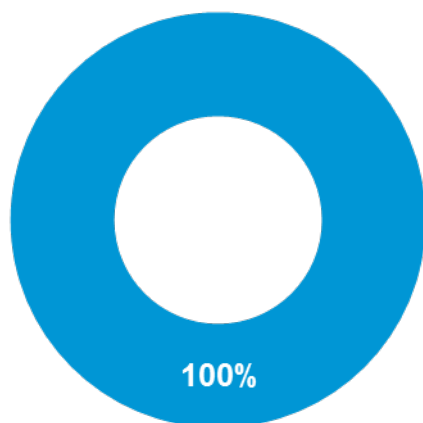


- Yes, the data accurately reflects my community today
- No, the data does not reflect my community today

Comments:

- *From what I do in placing volunteers to serve a diverse population through community non-profit, health and education entities I attend meetings and a few trainings to hear and learn about some of the above. I would say I agree for the most part but cannot say fully because there are some areas I do not know about.*
- *I think the data looks better than reality.*
- *The children in poverty and Single-Parent Households surprises me. We have a higher than average rate of Free and Reduced meals in our school district. Also, we have higher than average rate of XIX in this county.*
- *Because of the rural area these look accurate*
- *I think Madrid is better than the stats show. I do believe it would be accurate for Boone. Our health behavior is better with the trail running through town and people taking advantage of it. Madrid is the only growing City in the County. That shows that our physical environment is shown more positive than the 73/99 ranking.*
- *I think the numbers on the uninsured are too low. I see many working poor who are not offered insurance by their employer or it is too expensive to carry. Access to dental care is not available to the poor.*

Question: Do you agree with the demographics and common health behaviors of Boone County?

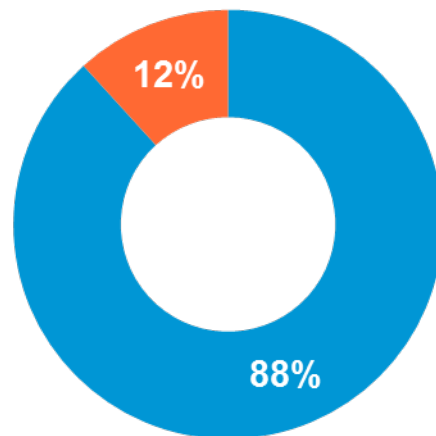


- Yes, the data accurately reflects my community today
- No, the data does not reflect my community today

Comments:

- *Income might be a bit high*

Question: Do you agree with the overall social vulnerability index for Boone County?

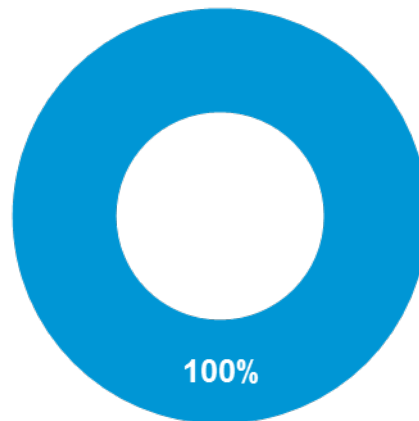


- Yes, the data accurately reflects my community today
- No, the data does not reflect my community today

Comments:

- *If I am understanding these maps correctly I cannot agree with them if in fact, the darker colors all suggest greater vulnerability. As an example, the SE region of the county is portrayed as having greater vulnerability to housing and transportation needs. However, this area includes Madrid, the fastest growing community in the county with multiple new housing developments in the past ten years. How does the south side of Boone have the highest degree of vulnerability when it has relatively few homes in the area, and of those homes, represents the highest value home-price in the city.*

**Question: Do you agree with the national rankings and leading causes of death?**

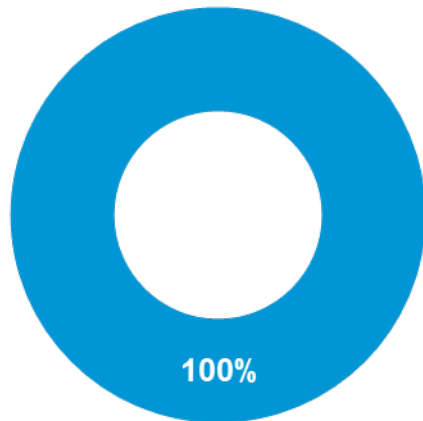


- Yes, the data accurately reflects my community today
- No, the data does not reflect my community today

Comments:

- *Not being part of health field I agree because of members of BCH and other agencies I interface with daily in job.*
- *I'm assuming the first one is heart disease not "heat disease". I think it's pretty ok*

**Question: Do you agree with the health trends in Boone County?**



- Yes, the data accurately reflects my community today
- No, the data does not reflect my community today

Comments:

- *Although I agree I honestly cannot say either way. What I know is through work interfacing with BCH and community agencies.*
- *This is related exactly to lack of accessibility of health care.*

## Appendix C – National Healthcare Quality and Disparities Report<sup>37</sup>

The National Healthcare Quality and Disparities Reports (QDR; annual reports to Congress mandated in the Healthcare Research and Quality Act of 1999 (P.L. 106-129)) are based on more than 300 healthcare process, outcome, and access measures, covering a wide variety of conditions and settings. Data years vary across measures; most trend analyses include data points from 2000-2002 to 2012-2015. An exception is rates of uninsured, which we are able to track through 2017. The reports are produced with the support of an HHS Interagency Work Group (IWG) and guided by input from AHRQ's National Advisory Council and the Institute of Medicine (IOM), now known as the Health and Medicine Division of the National Academies of Sciences, Medicine, and Engineering.

For the 15th year in a row, the Agency for Healthcare Research and Quality (AHRQ) has reported on progress and opportunities for improving healthcare quality and reducing healthcare disparities. As mandated by the U.S. Congress, the report focuses on “national trends in the quality of health care provided to the American people” (42 U.S.C. 299b-2(b)(2)) and “prevailing disparities in health care delivery as it relates to racial factors and socioeconomic factors in priority populations” (42 U.S.C. 299a-1(a)(6)).

The 2017 report and chartbooks are organized around the concepts of access to care, quality of care, disparities in care, and six priority areas—including patient safety, person-centered care, care coordination, effective treatment, healthy living, and care affordability. Summaries of the status of access, quality, and disparities can be found in the report.

The report presents information on trends, disparities, and changes in disparities over time, as well as federal initiatives to improve quality and reduce disparities. It includes the following:

- **Overview of Quality and Access in the U.S. Healthcare System** that describes the healthcare systems, encounters, and workers; disease burden; and healthcare costs.
- **Variation in Health Care Quality and Disparities** that presents state differences in quality and disparities.
- **Access and Disparities in Access to Healthcare** that tracks progress on making healthcare available to all Americans.
- **Trends in Quality of Healthcare** that tracks progress on ensuring that all Americans receive appropriate services.
- **Trends in Disparities** that tracks progress in closing the gap between minority racial and ethnic groups and Whites, as well as income and geographic location gaps (e.g., rural/suburban disparities).
- **Looking Forward** that summarizes future directions for healthcare quality initiatives.

### Key Findings

**Access:** An estimated 43% of access measures showed improvement (2000-2016), 43% did not show improvement, and 14% showed worsening. For example, from 2000 to 2017, there were significant gains in the percentage of people who reported having health insurance.

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<sup>37</sup> <http://www.ahrq.gov/research/findings/nhqdr/nhqdr14/index.html> Responds to IRS Schedule H (Form 990) Part V B 3 i

**Quality:** Quality of healthcare improved overall from 2000 through 2014-2015, but the pace of improvement varied by priority area:

- Person-Centered Care: Almost 70% of person-centered care measures were improving overall.
- Patient Safety: More than two-thirds of patient safety measures were improving overall.
- Healthy Living: More than half of healthy living measures were improving overall.
- Effective Treatment: More than half of effective treatment measures were improving overall.
- Care Coordination: Half of care coordination measures were improving overall.
- Care Affordability: Eighty percent of care affordability measures *did not* change overall.

**Disparities:** Overall, some disparities were getting smaller from 2000 through 2014-2015; but disparities persist, especially for poor and uninsured populations in all priority areas.

### Trends

- Trends show that about 55% percent of quality measures are improving overall for Blacks.<sup>38</sup> However, most recent data in 2014-2015 show that about 40% of quality measures were worse for Blacks compared with Whites.
- Trends show that about 60% of quality measures are improving overall for Asians. However, most recent data in 2014-2015 show that 20% of quality measures were worse for Asians compared with Whites.
- Trends show that almost 35% of quality measures are improving overall for American Indians/Alaska Natives (AI/ANs). However, most recent data in 2014-2015 show that about 30% of quality measures were worse for AI/ANs compared with Whites.
- Trends show that approximately 25% of quality measures are improving overall for Native Hawaiians/Pacific Islanders (NHPs). However, most recent data in 2014-2015 show that nearly 33% of quality measures were worse for NHPs compared with Whites.
- Trends show that about 60% of quality measures are improving overall for Hispanics, but in 2014-2015, nearly 33% of quality measures were worse for Hispanics compared with non-Hispanic Whites.
- Variation in care persisted across the urban-rural continuum in 2014-2016, especially in access to care and care coordination.

### Looking Forward

The National Healthcare Quality and Disparities Report (QDR) continues to track the nation's performance on healthcare access, quality, and disparities. The QDR data demonstrate significant progress in some areas and identify other areas that merit more attention where wide variations persist. The number of measures in each priority area varies, and some measures carry more significance than others as they affect more people or have more significant consequences. The summary charts are a way to quantify and illustrate progress toward achieving accessible, high-quality, and affordable

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<sup>38</sup> Throughout this report and its appendixes, "Blacks" refers to Blacks or African Americans, and "Hispanics" refers to Hispanics or Latinos. More information is available in the Reporting Conventions section of the Introduction and Methods.

care at the national level using available nationally representative data. The summary charts are accessible via the link below.

This report shows that while performance for most access measures did not change significantly over time (2000-2014), insurance coverage rates did improve (2000-2016). Quality of healthcare improved in most areas but some disparities persist, especially for poor and low-income households and those without health insurance.

U.S. Department of Health and Human Services (HHS) agencies are working on research and conducting programs in many of the priority areas—most notably opioid misuse, patient safety, effective treatment, and health disparities.

**Link to the full report:**

<https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqrdr/2017qdr.pdf>

## Appendix D – Illustrative Schedule H (Form 990) Part V B Potential Response

### Illustrative IRS Schedule h Part V Section B (Form 990)<sup>39</sup>

#### Community Health Need Assessment Illustrative Answers

1. Was the hospital facility first licensed, registered, or similarly recognized by a State as a hospital facility in the current tax year or the immediately preceding tax year?

*Answer*

2. Was the hospital facility acquired or placed into service as a tax-exempt hospital in the current tax year or the immediately preceding tax year? If “Yes,” provide details of the acquisition in Section C

*Answer*

3. During the tax year or either of the two immediately preceding tax years, did the hospital facility conduct a community health needs assessment (CHNA)? If “No,” skip to line 12. If “Yes,” indicate what the CHNA report describes (check all that apply)

- a. A definition of the community served by the hospital facility

*See footnote 16 on page 11*

- b. Demographics of the community

*See footnote 19 on page 12*

- c. Existing health care facilities and resources within the community that are available to respond to the health needs of the community

*See footnote 30 on page 27*

- d. How data was obtained

*See footnote 11 on page 8*

- e. The significant health needs of the community

*See footnote 29 on page 25*

- f. Primary and chronic disease needs and other health issues of uninsured persons, low-income persons, and minority groups

*See footnote 12 on page 9*

- g. The process for identifying and prioritizing community health needs and services to meet the community health needs

*See footnote 15 on page 9*

- h. The process for consulting with persons representing the community's interests

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<sup>39</sup> Questions are drawn from 2014 Federal 990 schedule H.pdf and may change when the hospital is to make its 990 H filing

*See footnotes 8 and 9 on page 7*

- i. **Information gaps that limit the hospital facility's ability to assess the community's health needs**

*See footnote 10 on page 8, footnotes 13 and 14 on page 9, and footnote 23 on page 16*

- j. **Other (describe in Section C)**

*N/A*

- 4. **Indicate the tax year the hospital facility last conducted a CHNA: 20\_\_**

*2016*

- 5. **In conducting its most recent CHNA, did the hospital facility take into account input from persons who represent the broad interests of the community served by the hospital facility, including those with special knowledge of or expertise in public health? If "Yes," describe in Section C how the hospital facility took into account input from persons who represent the community, and identify the persons the hospital facility consulted**

*Yes, see footnote 14 on page 9 and footnote 35 on page 43*

- 6. **a. Was the hospital facility's CHNA conducted with one or more other hospital facilities? If "Yes," list the other hospital facilities in Section C**

*No*

- b. Was the hospital facility's CHNA conducted with one or more organizations other than hospital facilities? If "Yes," list the other organizations in Section C**

*See footnote 4 on page 4 and footnote 7 on page 7*

- 7. **Did the hospital facility make its CHNA report widely available to the public?**

*Yes*

**If "Yes," indicate how the CHNA report was made widely available (check all that apply):**

- a. **Hospital facility's website (list URL)**

*<https://www.boonehospital.com/>*

- b. **Other website (list URL)**

*No other website*

- c. **Made a paper copy available for public inspection without charge at the hospital facility**

*Yes*

- d. **Other (describe in Section C)**

- 8. **Did the hospital facility adopt an implementation strategy to meet the significant community health needs identified through its most recently conducted CHNA? If "No," skip to line 11**

Yes

9. Indicate the tax year the hospital facility last adopted an implementation strategy: 20\_\_

2016

10. Is the hospital facility's most recently adopted implementation strategy posted on a website?

- a. If "Yes," (list url):

[https://www.boonehospital.com/about\\_us/community-health-needs-assessment/](https://www.boonehospital.com/about_us/community-health-needs-assessment/)

- b. If "No," is the hospital facility's most recently adopted implementation strategy attached to this return?

11. Describe in Section C how the hospital facility is addressing the significant needs identified in its most recently conducted CHNA and any such needs that are not being addressed together with the reasons why such needs are not being addressed

*See footnote 29 on page 25*

12. a. Did the organization incur an excise tax under section 4959 for the hospital facility's failure to conduct a CHNA as required by section 501(r) (3)?

*None incurred*

- b. If "Yes" to line 12a, did the organization file Form 4720 to report the section 4959 excise tax?

*Nothing to report*

- c. If "Yes" to line 12b, what is the total amount of section 4959 excise tax the organization reported on Form 4720 for all of its hospital facilities?

*Nothing to report*