2016 Community Health Needs Assessment

Bear River Valley Hospital

Intermountain® Healthcare

Intermountain Bear River Valley Hospital
Community Health Needs Assessment
2016

Bear River Valley Hospital
905 North 1000 West
Tremonton, Utah 84337

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Summary

Intermountain Healthcare created a system-wide Community Health Needs Assessment (CHNA) process to be used by each of its hospitals to identify local area health needs and understand how to help people live the healthiest lives possible.

Intermountain Bear River Valley Hospital collaborated with the Bear River Health Department and the Utah Department of Health to identify health indicators, gather data, analyze, and then prioritize those indicators to determine the significant health needs to address over the next several years. Health improvement activities to address the prioritized need are detailed in a separate implementation plan.

As a result of this extensive needs assessment and prioritization process, described in the following pages, Bear River Valley Hospital and Intermountain identified the priority health need as:

Prevention of prediabetes, high blood pressure, depression, and prescription opioid misuse

This report focuses on the adult health needs of the Bear River Valley Hospital community. Child and adolescent health needs are reported in the Intermountain Primary Children's Hospital CHNA Report. Primary Children's is the pediatric specialty and referral hospital for the state of Utah.

The 2016 CHNA report informs Intermountain leadership, public health partners, and community stakeholders of the significant health needs in our community, allowing hospitals and their local partners to develop strategies that leverage Intermountain and community resources to address those needs throughout the Intermountain system.

The Patient Protection and Affordable Care Act (ACA) requires each not-for-profit hospital to conduct a CHNA every three years and to develop an implementation strategy to address, measure, and report impact of significant health priorities.

This report fulfills the ACA reporting requirement to make results of the CHNA publicly available. This report has been reviewed and approved by the Bear River Valley Hospital Governing Board.

Bear River Valley Hospital is one of Intermountain's 22[1] hospitals located in Utah and southeastern Idaho. Intermountain's system-wide process for conducting the CHNA for each hospital community includes:

- Asking for broad community input regarding local health needs including needs of medically underserved and low-income populations
- Analyzing and prioritizing health indicators to identify significant needs
- Making the CHNA results publicly available

Intermountain hospital leaders, Community Benefit, and Strategic Planning and Research staff members conducted community input meetings that were co-hosted by each hospital, the local health department, and the Utah Department of Health. Invitees represented the broad interests of the residents, including the healthcare needs of medically underserved and low-income populations.

[1] Intermountain owns and operates 21 hospitals in Utah and southeastern Idaho and manages Garfield Memorial Hospital, owned by Garfield County, in Panguitch, Utah. Intermountain included Garfield Memorial Hospital in its system-wide CHNA. For purposes of this report, reference will be made to 22 hospitals to include this hospital.

Participants included minority, low-income, and uninsured populations, safety net clinic employees, school representatives, health advocates, mental health providers, local government leaders, senior service providers, and others.

Intermountain collaborated with local health departments, the Utah Department of Health, and internal clinical and operational leadership to identify 100 health indicators representing 16 broad health issues. The indicators form the core of public health data that Intermountain, local health departments, and the Utah Department of Health used/will use for each of their own needs assessments. The Utah Department of Health Office of Public Health Assessment assembled the 100 health indicator data for each of Intermountain's 22 hospital communities.

Intermountain developed a process to prioritize significant health needs. Representatives from local health departments, the Utah Department of Health, Intermountain hospitals and governing boards, and clinical and operational leadership, were invited to participate in the prioritization process. Participants reviewed summaries of community input meetings and health indicator data and completed a survey to quantify the relative priority of the 16 broad health issues.

The priority health need: the prevention of prediabetes, high blood pressure, depression, and prescription opioid misuse; reflects results of the prioritization process that revealed preventive services, overweight and obesity, diabetes conditions, cardiovascular conditions, mental health issues, and addictive behaviors as the top health issues. Selecting a single, specific health issue as the identified need provides clarity and guidance for implementation strategies.

Results of the CHNA were used to develop a three-year implementation strategy for Bear River Valley Hospital to address the significant health need using evidence-based programs. Outcome measures for the implementation strategy will be defined and tracked quarterly over three years; impact of the strategy will be reported annually.

Community Health Needs Assessment Background

Bear River Valley Hospital's first CHNA was part of Intermountain's 2009 comprehensive assessment to identify significant community health needs, especially for low-income residents in Utah and southeastern Idaho communities. From data review and consultation with not-for-profit and government partners, Intermountain identified these health priorities:

- Chronic disease associated with weight and unhealthy behaviors
- Access to healthcare for low-income populations
- Access to behavioral health services for low-income populations

Intermountain addressed these priorities to improve healthcare for low-income populations, reduce the cost of healthcare for Intermountain and the community, and focused on the healthcare needs of each community where its hospitals are located. The health priorities aligned with *Healthy People 2010* goals (a national program to attain high-quality, longer lives free of preventable disease, disability, injury, and premature death) and Intermountain clinical goals. The 2009 CHNA guided Intermountain's community health improvement efforts and the community health goals of its hospitals, clinics, and programs.

The Patient Protection and Affordable Care Act (ACA) requires that each not-for-profit hospital solicit input from people representing the broad interests of the community, gather quantitative data, identify and prioritize significant health needs, create strategies to address the needs, make the CHNA results public, and report on the IRS Form 990 Schedule H. Intermountain conducted another CHNA in 2013; identified the same three health priorities from the 2009 assessment and added a fourth on childhood accident and injury prevention.

New requirements, effective January 1, 2016 from the Department of the Treasury, guided the 2016 CHNA process design. Intermountain's Community Benefit and Strategic Planning and Research Departments created a system-wide process for each of its hospitals in conducting components of the CHNA and creating plans to address the significant need by:

- Soliciting community input regarding local health needs
- Collecting quantitative data on health indicators
- Prioritizing health indicators to identify significant needs
- Making the CHNA results publicly available
- Developing an implementation strategy to address the significant priority
- Making the implementation plan publicly available

Defining the Bear River Valley Hospital Community

Bear River Valley Hospital is one of 22 Intermountain Healthcare hospitals in Utah and southeastern Idaho. Located in the rural community of Tremonton, in northern Utah, Bear River Valley Hospital has 16 staffed beds and offers a spectrum of inpatient and outpatient medical services. In 2015, the hospital provided more than $766 thousand[2] in charity care to patients in more than 855 cases.

Hospitals in Box Elder County

- Brigham City Community Hospital
- Intermountain Bear River Valley Hospital

Safety Net Clinics and Federally Qualified Health Centers (FQHC) providing healthcare services to uninsured, low-income, and homeless people in Box Elder County

- Bear River Community Health Center*
- Bear River Health Department Clinic
- Clinica de Buena Salud*

**Federally Qualified Health Center*

Box Elder County

U.S. Census Quick Facts 2015[3]	Box Elder County	Utah	U.S.
Population (2015)	52,097	2,995,919	321,418,820
Population per square mile	8.7	33.6	87.4
Land area in square miles	5,745.55	82,169.62	3,531,905.43
Persons Under 18	32.4%	30.5%	22.9%
Persons 65 years and over	12.4%	10.3%	14.9%
Language other than English spoken at home, percent of persons age 5+	6.6%	14.6%	20.9%
High school graduate or higher, percent of persons age 25+	92.0%	91.0%	86.3%
Bachelor's degree or higher, percent of persons age 25+	21.6%	30.6%	29.3%
Persons in poverty	11.6%	11.7%	14.8%
Race and Hispanic Origin:			
White	87.0%	79.0%	61.6%
Hispanic or Latino	9.3%	13.7%	17.6%
Black or African American	0.5%	1.3%	13.3%
American Indian and Alaska Native	1.2%	1.5%	1.2%
Asian	1.0 %	2.5%	5.6%
Native Hawaiian and Other Pacific Islander	0.2%	1.0%	0.2%

[2] Total gross charges the total adjusted charity care based on standard established by the Utah State Tax Commission is approximately $478 thousand.
[3] United States Census, 2015 Quick Facts, http://quickfacts.census.gov

The Bear River Valley Hospital community was defined by the zip codes in which a majority of inpatient discharges reside. The hospital community includes medically underserved, low-income, and minority populations. These zip codes were used to assemble available data for health indicators:

84301 Bear River City	84302 Brigham City	84306 Collinston
84307 Corinne	84309 Deweyville	84311 Fielding
84312 Garland	84313 Grouse Creek	84314 Honeyville
84316 Howell	84324 Mantua	84329 Park Valley
84330 Plymouth	84331 Portage	84334 Riverside
84336 Snowville	84337 Tremonton	84340 Willard

In 2014, approximately 14.4 percent of the population in the Bear River Valley Hospital community (defined by zip codes) was uninsured.[4]

[4] Utah Department of Health Behavioral Health Risk Factor Surveillance System (BRFSS) Combined Landline and Cell Query Module – Healthcare Coverage [Healthy People 2020 AHS-1]

2016 Community Health Needs Assessment

CHNA Process Planning, Governance, and Collaboration

Intermountain's mission of helping people live the healthiest lives possible® is best realized with a comprehensive understanding of the health needs of the community served by its hospitals, clinics, and health plans. Intermountain is committed to routinely assessing the community's health needs through a comprehensive assessment process that both engages members of the community and analyzes the most current health status information. Intermountain uses the assessment to inform its system-wide and local strategies to improve community health.

Several committees within Intermountain guided the assessment and implementation planning process. This engagement led to a commitment from leaders to apply the assessment results in a three-year cycle to create health improvement strategies in the communities where our facilities are located.

- The Community Health Improvement Guidance Council, established in early 2014, provides strategic direction for Intermountain's Community Health Improvement activities, including the development of the 2016 CHNA and Implementation Strategy Planning process. The Council includes executive leadership from Population Health, Strategic Planning, SelectHealth, (Intermountain's insurance company), Clinical Operations, Medical Group Operations, Legal, Tax, Finance, Communications, and Community Benefit to facilitate alignment with Intermountain strategy and ensure compliance with relevant tax and regulatory requirements. The Council established Guiding Principles for Community Health Improvement during 2014 which guided the development of the 2016 CHNA and Implementation Strategy Process.
- The Community Benefit Steering Committee provides tactical leadership to integrate the CHNA, implementation strategies, and other health improvement initiatives within the Intermountain system while supporting collaborative work with public health departments and other stakeholders. The Steering Committee includes senior leaders for hospital operations, Integrated Care Management, Strategic Planning and Research, Population Health, Behavioral Health, Communications, Medical Group, SelectHealth, and regional Community Benefit.
- The CHNA Executive Committee coordinated the subcommittees and managed the hand-off of each stage in the process through final public reporting. Subcommittees included: Communications, Data Collection, Health Need Prioritization, Evaluation, and Implementation Planning.
- Community Benefit Managers representing geographic areas of Intermountain's service area coordinated local hospital activities including planning and identifying community members with whom to solicit input, convening meetings to report on the CHNA results, exploring potential collaborations, and planning strategies with local health departments and agencies to address the significant health need. Long-term and emerging relationships with community partners and local hospital Community Benefit staff have led to opportunities for collaborative strategies to address health needs.
- The Community Advisory Panel was convened to provide public health expertise and community guidance to Intermountain in its CHNA and to formalize collaborative partnerships with the local health departments where Intermountain facilities are located. The role of the panel included providing recommendations on designing the collaborative assessment that met Intermountain and public health departments' needs; identifying the health indicators; co-hosting community input meetings; reviewing data results; providing input to prioritize needs; and participating in planning strategies to address the significant health need.

Success of the collaborative CHNA with local and state health departments has resulted in the panel members committing to expand the membership to share information, leverage resources, and measure and evaluate community health improvement strategies together for the benefit of people throughout our service areas. Membership on the Community Advisory Panel includes:

- Leadership from the Association for Utah Community Health (Federally Qualified Health Centers)
- Representatives from HealthInsight (Utah's designated quality improvement organization and quality innovation network)
- Leadership from Utah's public behavioral health system, Davis Behavioral Health, Southwest Behavioral Health Center, Utah Division of Substance Abuse and Mental Health, Wasatch Mental Health, and Weber Human Services
- Executive directors from the following health departments: Davis County Health Department, Central Utah Health Department, Box Elder County Health Department, Summit County Health Department, Utah County Health Department, Utah Department of Health, Wasatch County Health Department, and Weber-Morgan Health Department
- Representatives of Intermountain Community Benefit Department, Strategic Planning and Research Department, and Medical Group Clinics

CHNA Methodology

Following the Intermountain system-wide approach, Bear River Valley Hospital conducted its 2016 CHNA by:

- Asking for broad community input regarding local health needs including needs of medically underserved and low-income populations
- Gathering quantitative data collection on health indicators
- Reviewing Area Deprivation Index maps
- Analysis and prioritization of health needs indicators to identify significant needs
- Making the CHNA results publicly available

Community Input

Bear River Valley Hospital, Bear River Health Department, and the Utah Department of Health co-hosted the community input meeting. Invitees included representatives of the following groups:

- Food pantries
- Health advocate groups
- Healthcare providers
- Human service agencies
- Law enforcement
- Local business
- Local government
- Low-income, uninsured, underserved population members
- Mental health service providers
- Minority organizations
- Safety net clinics
- School districts
- State and local health departments

These participants, representing a broad range of interests, including the healthcare needs of uninsured and low-income people, were invited to attend the meeting to share their perspectives on health needs in the hospital's community. Staff from Intermountain facilitated the meeting on May 11, 2015 which was manually and digitally recorded and transcribed.

Discussion highlighted specific issues in the community, concrete examples of challenges, perceptions, and strategies for addressing health needs. An online survey was sent to people who could not attend

the community input meeting to encourage more representative feedback and engage all who were invited. Not all the people who received the surveys responded to the request. Representatives from the following organizations were included:

- Bear River Area Agency on Aging
- Bear River Health Department
- Bear River Mental Health
- Bear River Valley Chamber of Commerce
- Box Elder School District
- Intermountain Bear River Valley Hospital
- Intermountain Healthcare
- Malt O'Meal (major employer)
- Tremonton City Council
- Tremonton Senior Center
- Utah Department of Health

Health Indicators

The selection of reliable, meaningful health indicators was an important part of the 2016 CHNA. First, Intermountain created an inventory of health indicators used in the 2009 and 2013 assessments and compared those indicators with published needs assessments and/or annual reports from the Utah Department of Health and local health departments. Second, an extensive literature review of national reporting metrics, particularly those used by *Healthy People 2020,*[5] also contributed indicators to the inventory. Third, the staff conducted interviews with epidemiologists at the Utah Department of Health and local health departments to identify additional indicators important to their own needs assessments and specific measures for each with good reliability and availability. The Community Advisory Panel reviewed the list and provided final recommendations.

Next, the 100 indicators were grouped into 16 different broad health issues to simplify and organize discussions of data. The groupings were based on recommendations from the Institute of Medicine[6] and *Healthy People 2020*.[7] Finally, the completed list of 100 indicators grouped by 16 broad health issues was presented to and approved by Intermountain's Community Benefit Steering Committee and Community Health Improvement Guidance Council.

Intermountain collaborated with the Utah Department of Health Office of Public Health Assessment to assemble available data on health indicators for each hospital community. Analysts aggregated two or three years of data for each indicator to achieve a large enough sample size to have a reliable estimate for each health indicator. Appendix A contains data for each indicator for the Bear River Valley Hospital service area, the Intermountain service area, the state of Utah, and the United States.

[5] https://www.healthypeople.gov/2020/topics-objectives

[6] Vital Signs: Core Metrics for Health and Health Care Progress, Institute of Medicine Committee on Core Metrics for Better Health at Lower Cost, 2015

[7] www.healthypeople.gov/2020/tools-resources

The following table lists the health indicators and respective groupings for the 2016 CHNA:

Addictive Behaviors
· Drug poisoning deaths
· Cigarette smoking
· E-cigarette use
· Smokeless tobacco use
· Binge drinking
· Chronic drinking

Cancers
· All cancer deaths
· Breast cancer diagnosis
· Colon cancer diagnosis
· Lung cancer diagnosis
· Skin cancer diagnosis

Cardiovascular Conditions
· High blood pressure
· High cholesterol
· Cardiovascular deaths
· Heart failure deaths
· Cerebrovascular deaths

Care Access
· No health insurance
· Cost as a barrier to care
· Have personal provider
· Non-emergent ED use
· Dental visit within year

Diabetes Conditions
· Prediabetes
· Diabetes

General Health Status
· Fair or poor

Maternal & Child Health
· Infant mortality
· No prenatal care until 3rd trimester
· Multivitamin use before pregnancy
· Preterm births
· Low birth weight
· Gestational diabetes
· Obese BMI prior to pregnancy
· Excess gestational weight gain
· Alcohol use during pregnancy
· Smoking during pregnancy
· Breastfeeding
· Births from unintended pregnancy
· Duration between pregnancies less than 13 mo.
· Births to women under 18

Mental Health
· Mental health status
· Suicide
· Attempted suicide by minors
· Depression

Other Chronic Conditions
· Arthritis
· Alzheimer's disease

Other Infectious Diseases
· Chlamydia
· Gonorrhea
· HIV
· Syphilis, all stages
· Hepatitis C, chronic
· Hepatitis C, acute
· West Nile virus, total
· Tuberculosis, active
· Campylobacter
· Shiga toxin-producing
· E.coli
· Salmonellosis
· Giardiasis
· Cryptosporidiosis
· Rabies, animal

Overweight and Obesity
· Overweight
· Obese
· Recommended physical activity
· Vegetable consumption
· Fruit consumption

Preventive Services
· Mammogram
· Cholesterol checked
· Colon cancer screening
· Influenza vaccination
· Pneumococcal vaccinations
· Childhood vaccination
· Sun safety
· HIV testing

Respiratory Conditions
· Asthma
· COPD

Social Determinants of Health
· Social determinants of health
· Income
· Education
· Persons living in poverty
· Households headed by a single female

Vaccine Preventable Diseases
· Pertussis
· Influenza-associated hospitalization
· Hepatitis B, chronic
· Hepatitis B, acute
· Hepatitis A
· Tetanus
· Diphtheria
· Varicella (chickenpox)

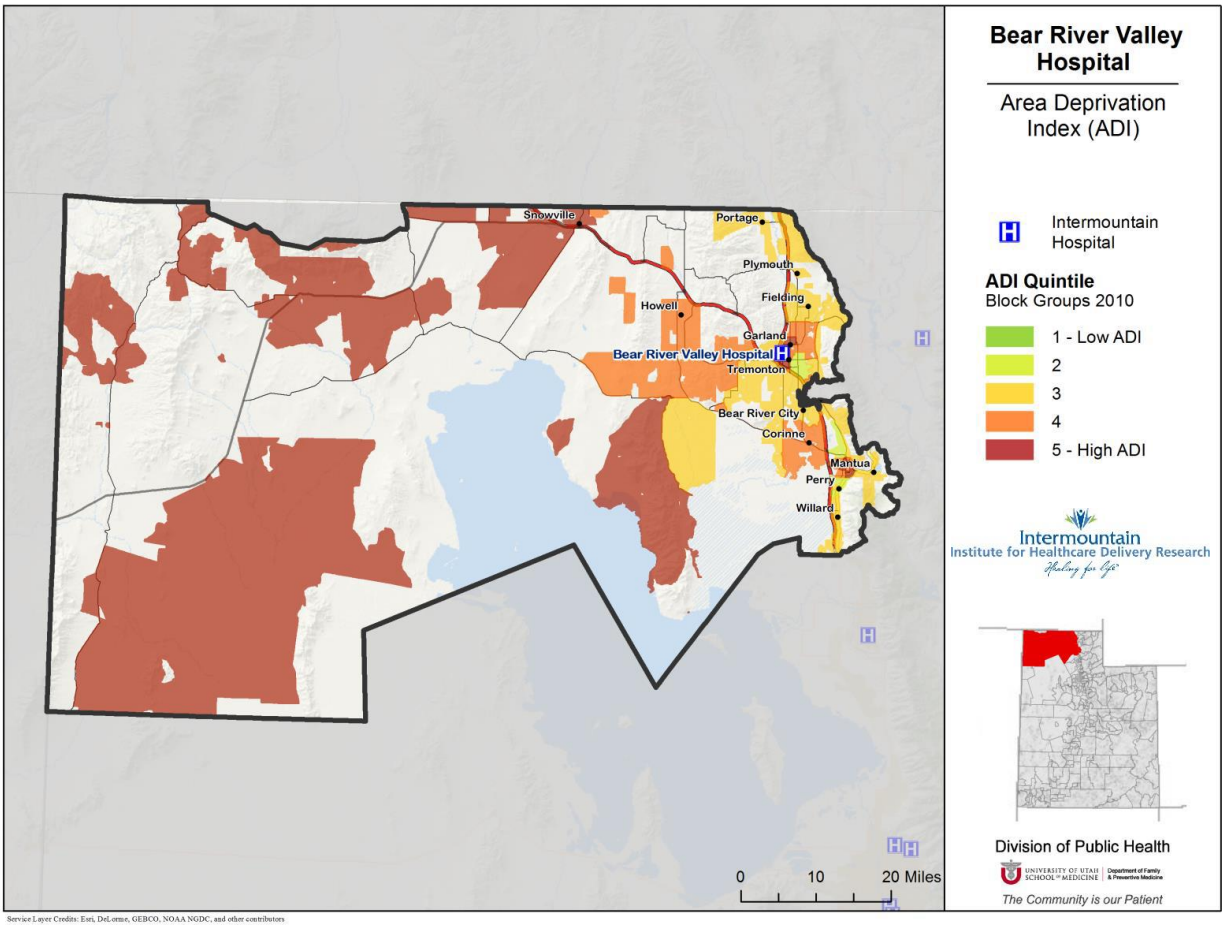
Violence and Injury Prevention
· Seatbelt use
· Helmet use by minors
· Unintentional injury deaths
· Any motor vehicle deaths
· Firearm deaths
· Drowning deaths
· Poisoning deaths
· Burn deaths

Area Deprivation Index

Income, education, and other economic and social risk factors affect individual health and well-being. The Area Deprivation Index (ADI) is a validated, community socio-economic composite measure developed specifically for Utah by Intermountain. The ADI measures the distribution of socio-economic disadvantage within a community at the U.S. Census block group level. Higher socio-economic deprivation levels in communities (noted in orange and red on the map below) are often associated with poorer health and health delivery outcomes. While the ADI does not provide information on specific health needs in a community, it does provide context and information about segments of communities in which greater health disparities may be expected and where implementation strategies could be targeted.

Elements included in the Area Deprivation Index:

- Median family income (dollars)
- Income disparity
- Percent of families below poverty level
- Percent of population below 150 percent poverty threshold
- Percent of single parent households with dependents under age 18
- Percent of households without a motor vehicle
- Percent of households without a telephone
- Percent of housing units without complete plumbing
- Percent occupied housing units
- Percent of households with less than one person per room
- Median monthly mortgage (dollars)
- Median gross rent (dollars)
- Median home value (dollars)
- Percent of employed persons over age 16 with a white collar occupation
- Percent of unemployed civilian labor force over age 16
- Percent of population over age 25 with less than nine years of education
- Percent of population over age 25 with at least a high school education



Prioritization

Intermountain engaged its internal and external partners in a rigorous prioritization process to identify significant health needs in each hospital community. Prioritization involved identifying dimensions, determining the weight for each, inviting key stakeholders to evaluate the 16 broad health issues on those dimensions, and calculating scores to identify the significant health need.

Intermountain identified dimensions for prioritization using practices established by public health professionals.[8, 9, 10, 11, 12] The dimensions reflect needs assessment best practices, ACA requirements, and Intermountain strategic goals.

Dimensions included:

- **Affordability**: the degree to which addressing this health issue can result in more affordable healthcare
- **Alignment**: the degree to which the health issue aligns with Intermountain Healthcare's or stakeholder organization's mission and strategic priorities
- **Community input**: the degree to which community input meetings highlighted it as a significant health issue
- **Feasibility**: the degree to which the health issue is feasible to change, taking into account resources, evidence-based interventions, and existing groups working on it
- **Health iquity**: the degree to which the health issue disproportionately affects population subgroups
- **Seriousness**: the degree to which the health issue is associated with severe outcomes such as mortality and morbidity, severe disability, or significant pain and suffering
- **Size**: the number of people affected by the health issue
- **Upstream**: the degree to which the health issue is upstream from and a root cause of other health issues

Intermountain's Community Benefit Steering Committee determined weights for each dimension through a survey process; committee members indicated the relative weight (out of 100 percent) that each dimension should carry. Scores were averaged across committee members to create the assigned weight for each dimension.

Final weights are shown in the chart.

Dimension	Weight
Affordability	14%
Feasibility	14%
Upstream	14%
Health equity	12%
Seriousness	12%
Size	12%
Community input	11%
Alignment	11%

[8] Association for Community Health Improvement (2007). ACHI Community Health Assessment Toolkit. Available at http://www.assesstoolkit.org/assesstoolkit/member/Priorities/index.jsp

[9] Centers for Disease Control and Prevention. Assessment Protocol for Excellence in Public Health: Appendix E. Available at http://www.cdc.gov/nphpsp/documents/prioritization-section-from-apexph-in-practice.pdf

[10] National Association of County & City Health Officials. First Things First: Prioritizing Health Problems. Available at http://archived.naccho.org/topics/infrastructure/accreditation/upload/Prioritization-Summaries-and-Examples.pdf

[11] Excerpted from Nancy R. Tague's The Quality Toolbox, Second Edition, ASQ Quality Press, 2004

[12] Duttweiler, M. 2007. Priority Setting Tools: Selected Background and Information and Techniques.

Intermountain identified more than 400 individuals to participate in the prioritization process for the system-wide step; a subset of the 400 completed the prioritization for Bear River Valley Hospital. Participants included:

- Bear River Valley Hospital
    - Administrator/Chief Executive, Financial, Medical, Nursing, and Operations Officers
    - Strategic Planner
    - Community Benefit Manager
    - Communications Director
    - Governing Board
- Intermountain Healthcare
    - Region Vice President
    - Medical Group Chief Executive, Financial, Medical, Nursing, and Operations Officers
    - SelectHealth Chief Executive, Financial, Medical, and Operations Officers
- Local Health Department Officer
- State Health Department Leaders

Participants in the prioritization process for each hospital received the following materials to support their participation:

- An executive summary of the hospital's community input meeting
- A summary of the 100 publicly reported health indicators for the hospital community
- An Area Deprivation Index (ADI) map of the hospital community

Four weeks after receiving the supporting information, participants received an invitation to complete an online survey to rate the 16 broad health issues on four dimensions (alignment, feasibility, seriousness, upstream) using a scale of low (1), medium (2), or high (3). Strategic Planning and Research staff assigned ratings for the remaining dimensions (affordability, community input, health equity, size) based on the following criteria:

- **Affordability**: reduction of costs associated with addressing the health issue being small (1), moderate (2), or large (3), provided by Intermountain's Population Health Analytics team.
- **Community input**: not mentioned by the community as an issue (1); mentioned, but not a common theme (2); common theme mentioned by several community members (3).
- **Health equity**: calculated by creating a disparity score using race as the only indictor of disparity. The highest number in the race categories was subtracted from the lowest number, divided by the lowest number, and then multiplied by 100 to get a percentage (% disparity). 1 = 0-100% disparity; 2 = 101-300% disparity; 3 = >300% disparity.
- **Size**: prevalence: 1 = 0 – 9%; 2 = 10 – 24%; 3 = ≥ 25%; incidence: 1 = 0-49 per 100k; 2 = 50-99 per 100k; 3 = 100+ per 100k. Scales reflect national metrics.

CHNA Results

Summary of key issues and ideas from community input meeting:
Key Issues

- Healthy eating options are limited by insufficient number of grocery stores, lack of public transportation, and low incomes
- Lack of education about healthy food choices, preventive care, and physical activity
- No walking trails; not a safe environment for bike riding and other physical activities, which limits physical activity
- Lack of mental health providers especially for children and adolescents
- Stigma associated with mental health
- Suicide

Chronic diseases, weight, and unhealthy behaviors

- Challenges of healthy eating combined with demanding work schedules (and life in general)
- Healthy food options are severely limited by lack of public transportation and insufficient number of grocery stores
- Access to healthy food choices is limited by low-incomes
- Lack of awareness and motivation to eat healthy
- Lack of physical activity; community environment doesn't facilitate walking trails, not safe environment for people to ride their bikes on the road or walk to school

Access to healthcare

- High deductible plans are a major issue when people are not using the insurance they have because of paying the deductible amounts
- Lack of education about preventive care and what's covered
- Need to improve convenience and access to extended appointment time
- Lack of understanding about the Affordable Care Act, insurance options and cost, where to receive care, and how to access services
- Understanding (both by the enrollee and the provider) of changing Medicaid coverage
- Need for navigators or care mangers to help transition a person from one appointment to another, from one insurance to another
- Lack of transportation to healthcare services is compounded by the expense of car ownership, challenges of living in rural area to travel for specialty healthcare services

Access to mental health

- Lack of access to mental health providers for children and teenagers
- Stigma associated with mental health
- Challenge of transportation to providers
- Lack of mental health providers
- Suicide and need for suicide prevention programs
- Insurance coverage for behavioral health (only covered by Medicaid)

Children's health

- Increasing incidence of suicide
- Prevalence of sex abuse
- Prevalence of child abuse
- Cost of insurance
- Cost of healthcare services, including oral health services
- Prevalence of obesity
- Lack of education and motivation for children and teenagers about healthy eating and drinking (soda) choices
- Lack of motivation to be physically active
- Addictive behaviors, including addiction to pornography

Environmental influences on health

- Dry environment can lead to health complications, need to educate public
- Poor air quality and related health conditions
- Need for sidewalks and walking and bike trails to facilitate activity and safety

Significant Community Health Need:

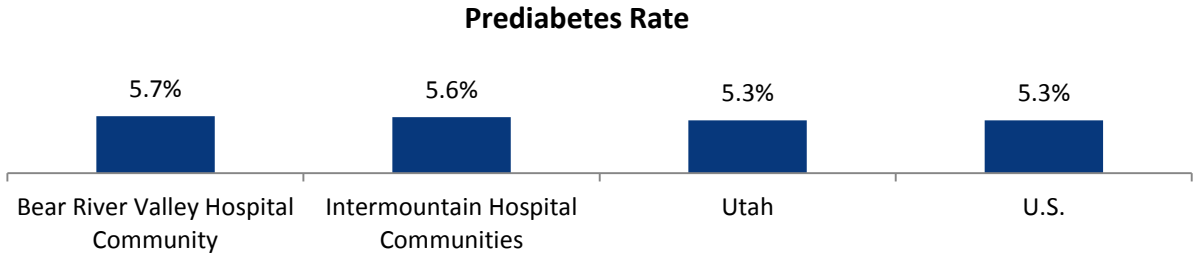
Bear River Valley Hospital and Intermountain reviewed community input and the final calculation of priority scores based on ratings across the eight dimensions and identified the priority health need as:

Prevention of prediabetes, high blood pressure, depression, and prescription opioid misuse

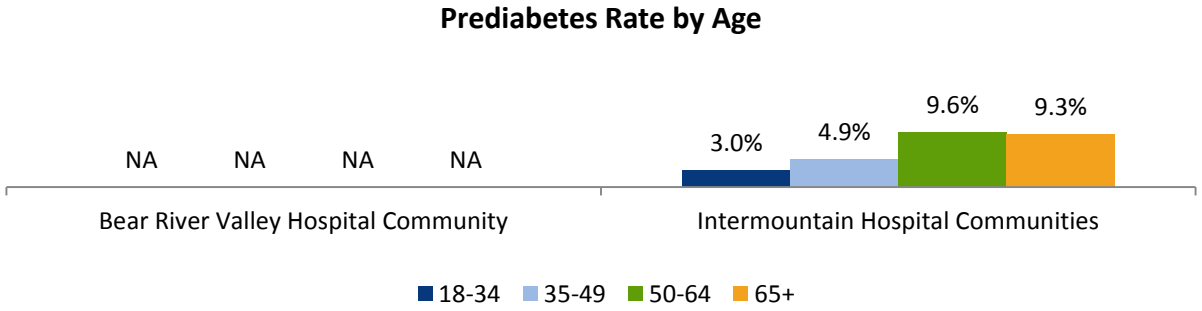
Prioritized Health Indicator Data

Prevention of Prediabetes

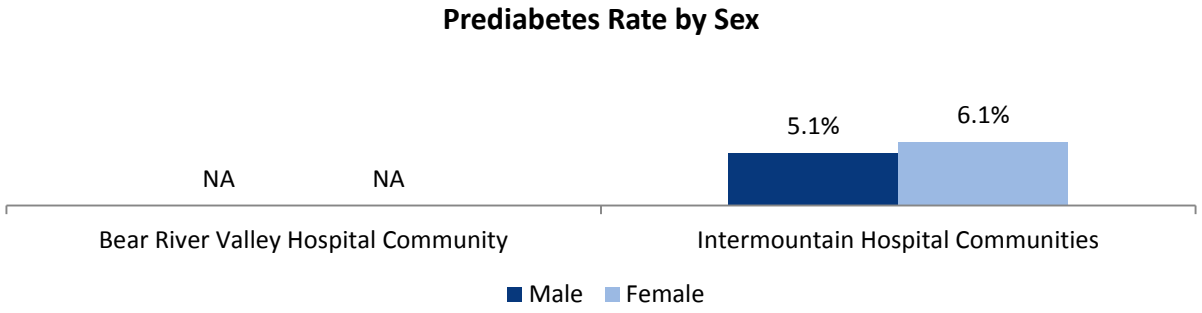
➢ **Approximately one in 20 adults in the Bear River Valley Hospital community reports a diagnosis of prediabetes. That prevalence rate is likely an underestimate, since the majority of adults affected by prediabetes are unaware of it.**



➢ **Prediabetes rates vary with age. Prediabetes affects adults over age 50 to a greater extent than those under 50.**



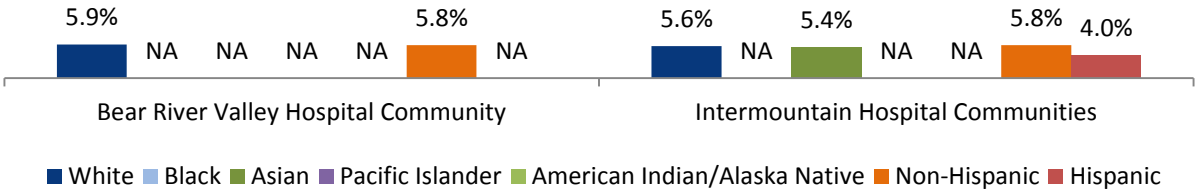
➢ **Prediabetes rates also vary by sex. Females are more likely than males to be diagnosed with prediabetes.**



NA = Data not available due to small sample size in the community.

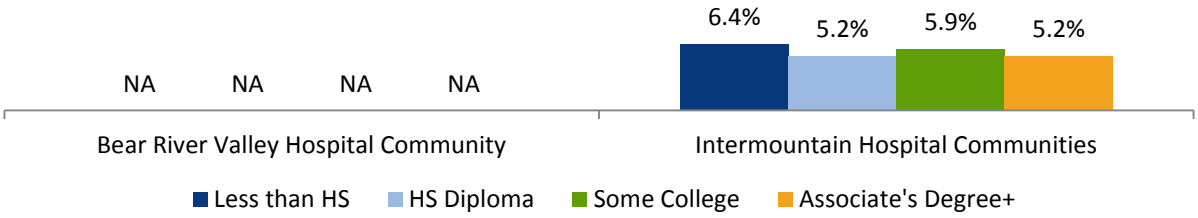
➢ **Prediabetes rates do not appear to vary across race groups. Prediabetes rates do vary across ethnicity groups. Prediabetes affects non-Hispanic groups more than Hispanic groups. Small sample sizes for some race and ethnicity groups make robust comparisons difficult.**

Prediabetes Rate by Race/Ethnicity



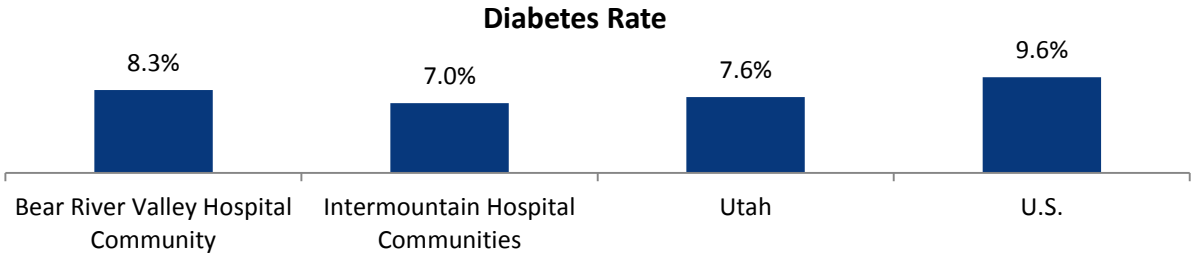
➢ **Prediabetes rates vary across educational attainment. Individuals with less than a high school diploma are more likely to be diagnosed than compared to those with an Associate's Degree or higher.**

Prediabetes Rate by Education



➢ **Prediabetes often leads to a diagnosis of type 2 diabetes (25 percent diagnosed in three to five years, 50 percent diagnosed in 10 years).[13] The current rate of diabetes is higher than that of prediabetes and will likely grow without focused prevention efforts.**

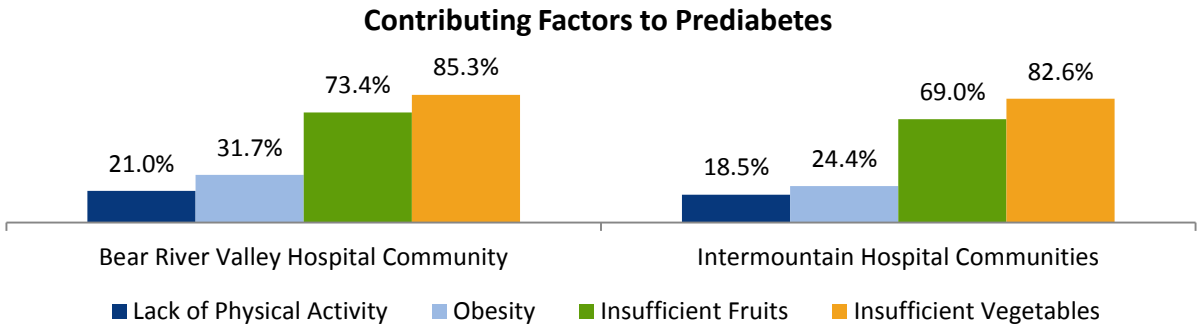
Diabetes Rate



NA = Data not available due to small sample size in the community.

[13] *Diseases and Conditions: Prediabetes*, Mayo Clinic, Mayo Foundation for Medical Education and Research, 2014

➢ **Several health behaviors contribute to developing prediabetes, including lack of physical activity, obesity, and insufficient fruit and vegetable consumption. Rates for these factors are high and illustrate areas in which work can be done to reduce the risk of developing prediabetes.**



Prioritization Results: Diabetes conditions were highly prioritized relative to other health issues
The table below shows how diabetes conditions ranked among the 16 broad health issues in each of the prioritization dimensions, for both the Bear River Valley Hospital community and for all Intermountain hospital communities. The rankings across prioritization dimensions illustrate that diabetes conditions were highly prioritized relative to other health issues in the Bear River Valley Hospital and Intermountain communities.

Rank of Diabetes Conditions Relative to Other Health Issues		
Prioritization Dimension	**Bear River Valley Hospital Community**	**Intermountain Hospital Communities**
Affordability	1st *	1st *
Alignment	4th *	3rd
Community Input	3rd *	3rd *
Feasibility	2nd *	4th
Health Equity	2nd *	2nd *
Seriousness	4th *	3rd
Size	2nd *	2nd *
Upstream	3rd	2nd

**Indicates there was a tie in the prioritization score between diabetes conditions and other health issues on this prioritization dimension.*

Likewise, the health issue of overweight and obesity that contributes to developing prediabetes was also highly prioritized
The following table shows how overweight and obesity ranked among the 16 broad health issues in each of the prioritization dimensions, for the Bear River Valley Hospital community and for all Intermountain hospital communities. The rankings across prioritization dimensions illustrate that overweight and obesity were highly prioritized relative to other health issues in the Bear River Valley Hospital and Intermountain communities.

Rank of Overweight and Obesity Relative to Other Health Issues		
Prioritization Dimension	**Bear River Valley Hospital Community**	**Intermountain Hospital Communities**
Affordability	3rd *	3rd *
Alignment	2nd *	5th
Community Input	1st *	1st *
Feasibility	3rd *	7th
Health Equity	2nd *	2nd *
Seriousness	1st *	4th
Size	1st *	1st *
Upstream	1st	1st

**Indicates there was a tie in the prioritization score between overweight and obesity and other health issues on this prioritization dimension.*

Why We Are Focusing On Prediabetes

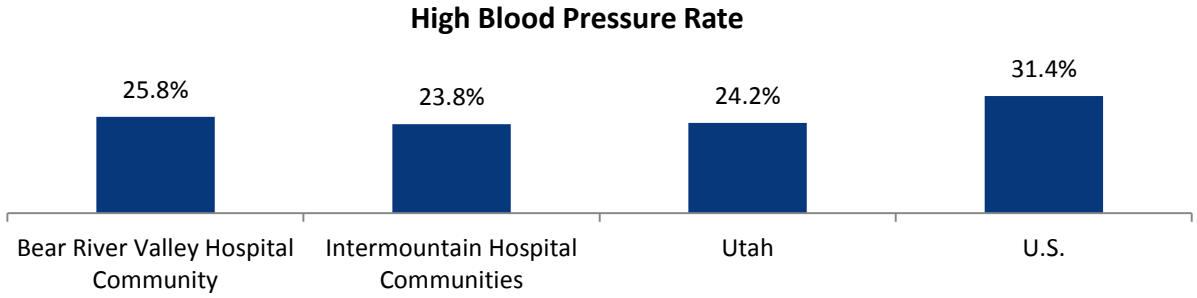
The number of individuals undiagnosed with prediabetes is an estimated 86 million.[14] Prediabetes is characterized as higher than usual blood sugar levels, though lower than the levels associated with type 2 diabetes.[15] If left untreated, prediabetes will progress to type 2 diabetes.[16]

Diabetes is a very costly condition, with approximately $245 billion spent annually in the U.S.; in Utah, more than a billion dollars each year are spent on direct and indirect costs associated with prediabetes and diabetes.[17] Identifying people with prediabetes can create opportunity to prevent the development of type 2 diabetes, which is the leading cause of non-traumatic lower-extremity amputation, renal failure, blindness among adults younger than 75, and one of the leading causes of heart disease.[18]

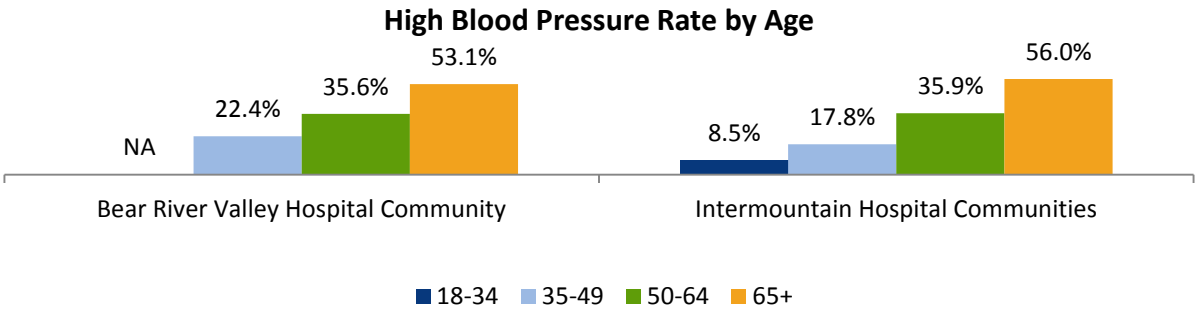
[14] Annal of Intern Med. doi:10.7326/M15-2345
[15] *Diseases and Conditions: Prediabetes*, Mayo Clinic, Mayo Foundation for Medical Education and Research, 2014
[16] Ibid
[17] Utah Diabetes Prevention Strategic Plan, October 2015 to September 2020
[18] *Diabetes*, Public Health Indicator Based Information System (IBIS), Utah Department of Health, 2014

Prevention of High Blood Pressure

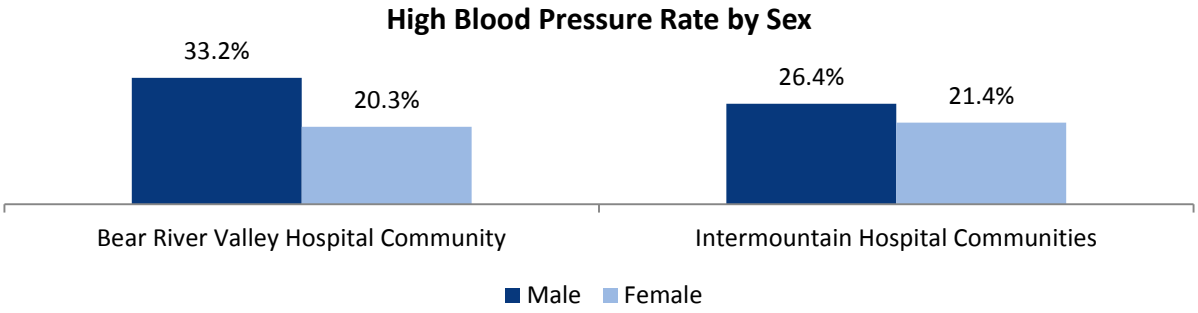
➢ **Approximately one in four adults in the Bear River Valley Hospital community reports a diagnosis of high blood pressure. That prevalence rate is likely an underestimate, since many adults affected by high blood pressure are unaware of it.**



➢ **High blood pressure rates vary with age. High blood pressure affects greater proportions of adults with increasing age.**

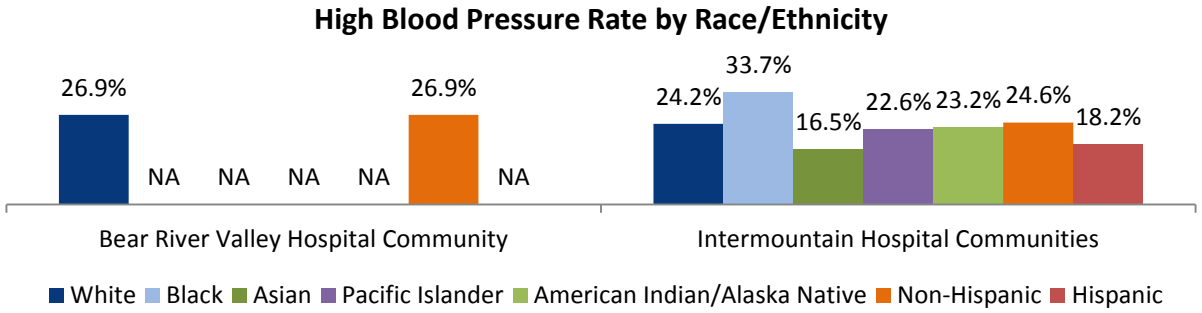


➢ **High blood pressure rates also vary by sex. Males are more likely to be diagnosed with high blood pressure than are females.**

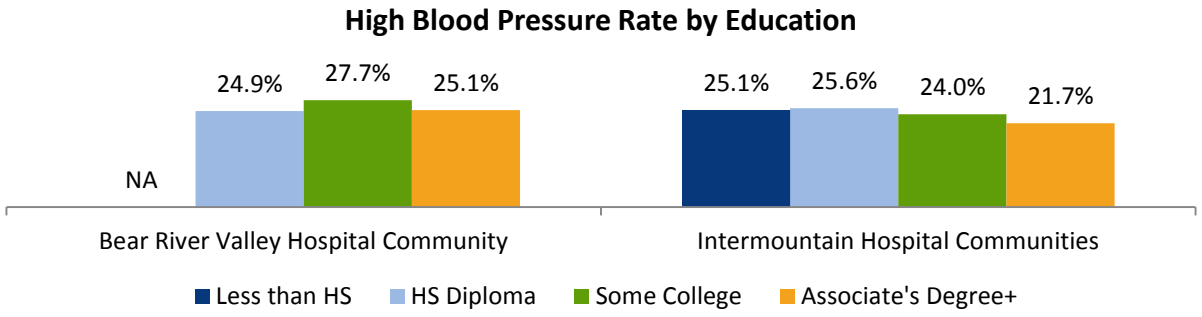


NA = Data not available due to small sample size in the community.

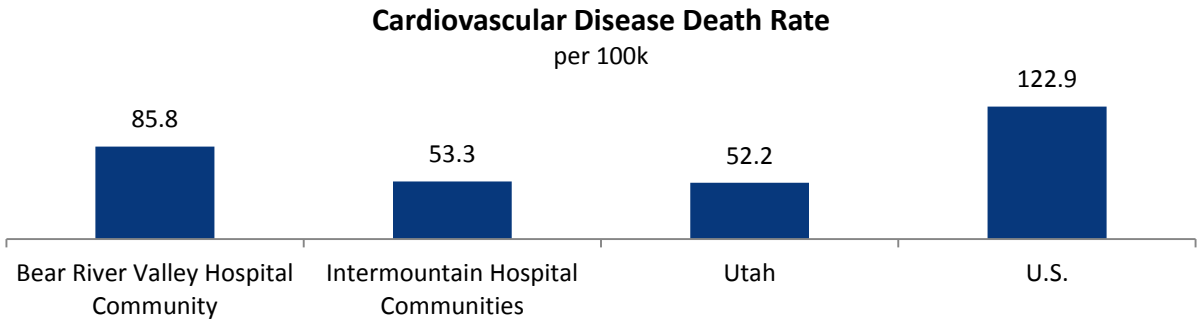
➢ **High blood pressure rates vary across race and ethnicity. Small sample sizes for some race and ethnicity groups make robust comparisons difficult in the Bear River Valley Hospital community. However, across Intermountain hospital communities, high blood pressure rates are higher among Black populations and lower among Asian populations. High blood pressure rates are higher among non-Hispanic than Hispanic groups.**



➢ **High blood pressure rates vary across educational attainment levels. Individuals with an Associate's degree or higher are less likely to report being diagnosed with high blood pressure than those with less educational attainment.**

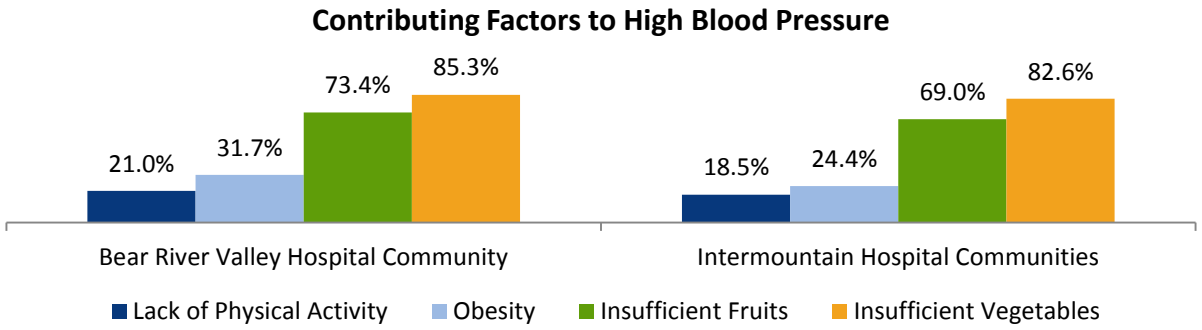


➢ **Uncontrolled high blood pressure can lead to a variety of cardiovascular diseases. The current death rate for cardiovascular disease is higher for the Bear River Valley Hospital community when compared to all Intermountain hospital communities and the state and remains a leading cause of death.**



NA = Data not available due to small sample size in the community.

➢ **Several health behaviors contribute to developing high blood pressure, including lack of physical activity, obesity, and insufficient fruit and vegetable consumption. Rates for these factors are high and illustrate areas in which work can be done to reduce risk of developing high blood pressure.**



Prioritization Results: cardiovascular conditions were highly prioritized relative to other health issues
The table below shows how cardiovascular conditions ranked among the 16 broad health issues in each of the prioritization dimensions, for the Bear River Valley Hospital community and for all Intermountain hospital communities. The rankings across prioritization dimensions illustrate that cardiovascular conditions were highly prioritized relative to other health issues in the Bear River Valley Hospital and Intermountain communities.

Rank of Cardiovascular Conditions Relative to Other Health Issues		
Prioritization Dimension	**Bear River Valley Hospital Community**	**Intermountain Hospital Communities**
Affordability	1st *	1st *
Alignment	5th *	4th
Community Input	3rd *	3rd *
Feasibility	2nd *	5th
Health Equity	3rd *	3rd *
Seriousness	1st *	1st
Size	1st *	1st *
Upstream	6th *	6th

**Indicates there was a tie in the prioritization score between cardiovascular conditions and other health issues on this prioritization dimension.*

Likewise, the health issue of overweight and obesity that contributes to developing high blood pressure was also highly prioritized
The table below shows how overweight and obesity ranked among the 16 broad health issues in each of the prioritization dimensions, for the Bear River Valley Hospital community and for all Intermountain hospital communities. The rankings across prioritization dimensions illustrate that overweight and obesity were highly prioritized relative to other health issues in the Bear River Valley Hospital and Intermountain communities.

Rank of Overweight and Obesity Relative to Other Health Issues		
Prioritization Dimension	**Bear River Valley Hospital Community**	**Intermountain Hospital Communities**
Affordability	3rd *	3rd *
Alignment	2nd *	5th
Community Input	1st *	1st *
Feasibility	3rd *	7th
Health Equity	2nd *	2nd *
Seriousness	1st *	4th
Size	1st *	1st *
Upstream	1st	1st

**Indicates there was a tie in the prioritization score between overweight and obesity and other health issues on this prioritization dimension.*

Why We Are Focusing on High Blood Pressure

High blood pressure can be problematic because it is unlikely to result in obvious symptoms making it difficult to detect. Around 70 million American adults have high blood pressure, which is close to one out of every three adults.[19] However, only 52 percent of these adults are successfully managing their condition.[20] High blood pressure can also cause further complications through an increased risk of heart disease and stroke, which continue to be among the highest causes of mortality in the United States.[21]

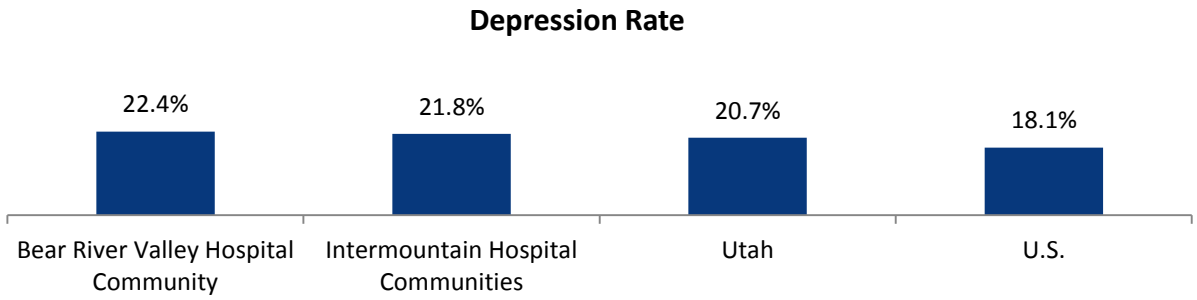
[19] *High Blood Pressure,* Center for Disease Control and Prevention, U.S. Department of Health and Human Services, 2016

[20] *Blood Pressure: Doctor-diagnosed Hypertension*, Public Health Indicator Based Information System (IBIS), Utah Department of Health, 2014

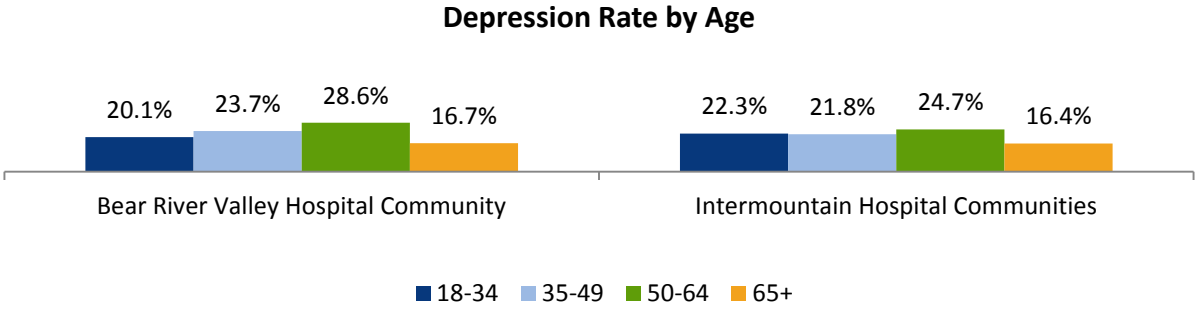
[21] Ibid

Prevention of Depression

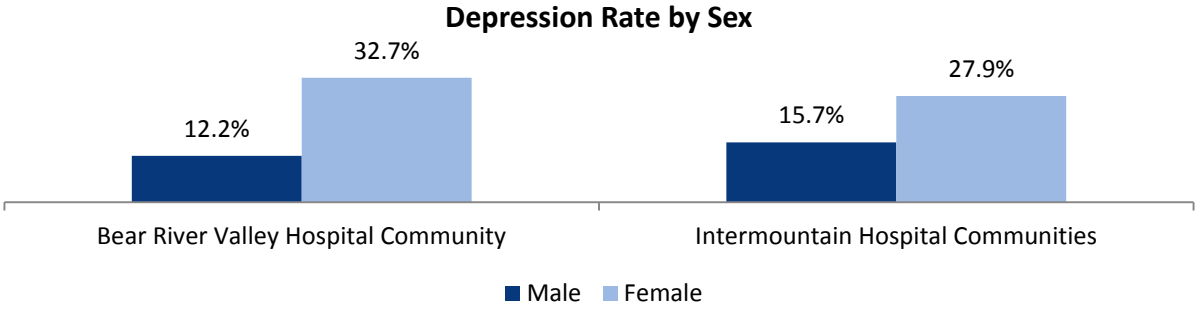
➢ **Approximately one in five adults in the Bear River Valley Hospital community reports a diagnosis of depression. That prevalence rate is likely an underestimate, since many adults affected by depression do not seek diagnosis and treatment.**



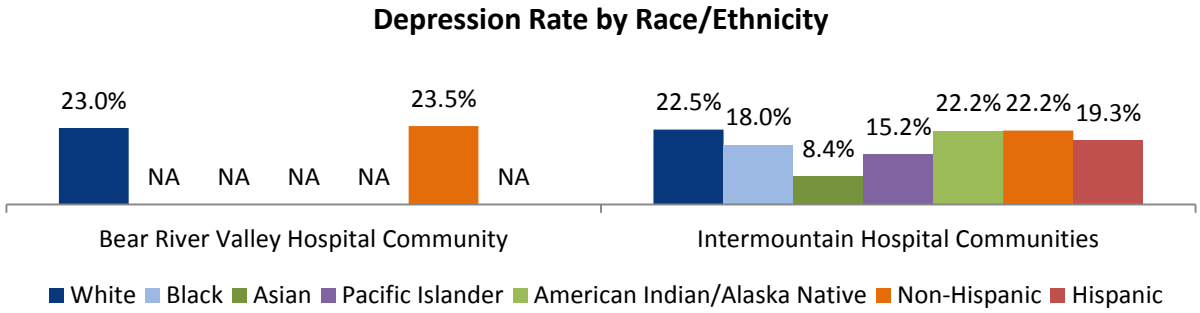
➢ **Depression rates vary with age. Adults under the age of 65 are more likely to be diagnosed with depression than those over 65.**



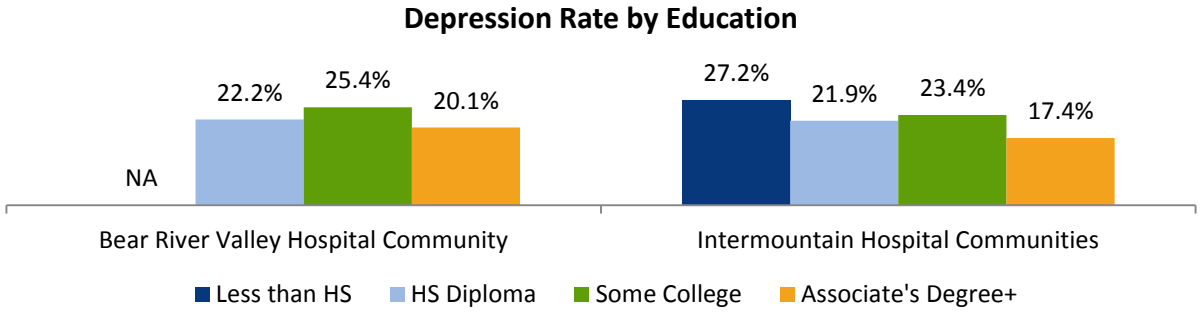
➢ **Depression rates vary by sex. Females are more likely to be diagnosed with depression than are males.**



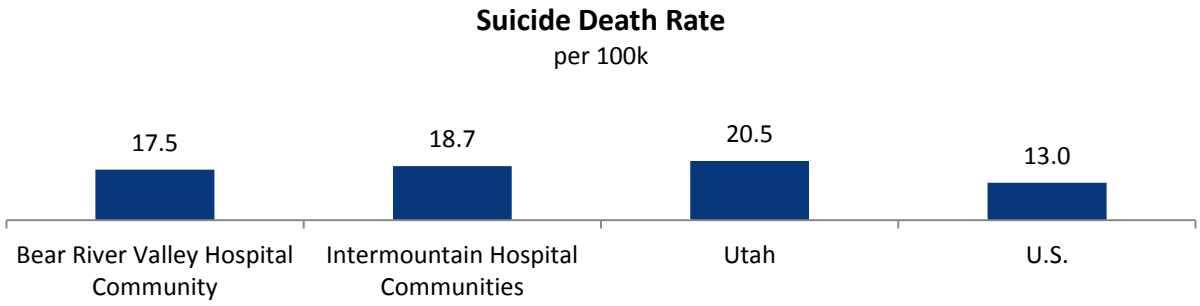
➢ **Depression rates vary by race and ethnicity. Small sample sizes for some race groups in the Bear River Valley Hospital community make robust comparisons difficult. In the Intermountain hospital communities, depression rates are lowest among the Asian population and rates are often twice as high or more among other races. Depression rates are higher for non-Hispanic groups than for Hispanic groups.**



➢ **Depression rates vary across educational attainment. Depression rates are lowest among populations with an Associate's Degree or higher.**

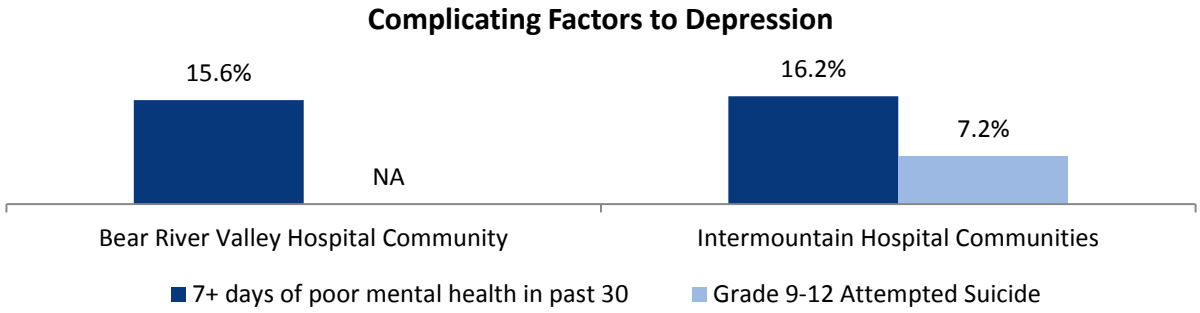


➢ **Depression can lead to suicide attempts for some individuals. The suicide death rate in the Bear River Valley Hospital community is slightly lower than the state rate, but remains well above the national rate.**



NA = Data not available due to small sample size in the community.

➢ **Poor mental health is a complicating factor to depression and the high school attempted suicide rate for the Intermountain hospital communities highlights that early prevention of depression is needed.**



Prioritization Results: mental health conditions were highly prioritized relative to other health issues
The table below shows how mental health conditions ranked among the 16 broad health issues in each of the prioritization dimensions, for the Bear River Valley Hospital community and for all Intermountain hospital communities. The rankings across prioritization dimensions illustrate that mental health conditions were highly prioritized relative to other health issues in the Bear River Valley Hospital and Intermountain communities.

Rank of Mental Health Conditions Relative to Other Health Issues		
Prioritization Dimension	**Bear River Valley Hospital Community**	**Intermountain Hospital Communities**
Affordability	1st *	1st *
Alignment	3rd *	9th
Community Input	1st *	1st *
Feasibility	3rd *	8th
Health Equity	3rd *	3rd *
Seriousness	2nd	5th
Size	2nd *	2nd *
Upstream	2nd *	3rd

**Indicates there was a tie in the prioritization score between mental health conditions and other health issues on this prioritization dimension.*

NA = Data not available due to small sample size in the community.

Why We Are Focusing on Depression

Mental health is an integral part of an individual's well-being. Depression is a mood disorder that adversely affects one's mental health through changes in how an individual thinks, feels, and behaves.[22] It is the most common of mental disorders in adults. Symptoms revolve around emotions of persistent sadness, worthlessness, and thoughts of death or suicide, among many others.[23] Approximately 18 percent of adults in the U.S. are affected by depression; Utah is slightly higher with more than 20 percent.[24] Depression is also more common in people with other health conditions, such as diabetes and heart disease, and can worsen outcomes in people with those conditions as well as contribute to a poorer overall quality of life.[25]

Depression is a serious concern for children and adolescents as well, with 25.7 percent of adolescents reporting feeling sad or hopeless.[26] In 2014, suicide was the leading cause of death for Utahns ages 10 to 17.[27]

[22] National Institute of Mental Health, National Institutes of Health (NIH), U.S. Department of Health and Human Services, 2016

[23] *Depression,* Public Health Indicator Based Information System (IBIS), Utah Department of Health, 2014

[24] Ibid

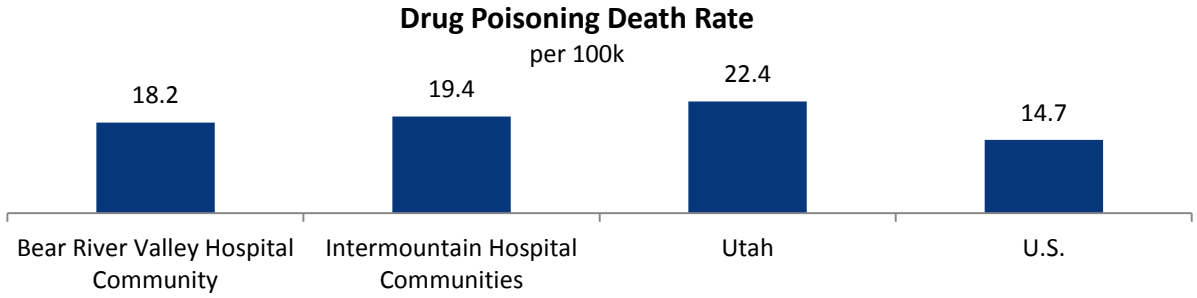
[25] [25] National Institute of Mental Health, National Institutes of Health (NIH), U.S. Department of Health and Human Services, 2016

[26] *Suicide*, Public Health Indicator Based Information System (IBIS), Utah Department of Health, 2014

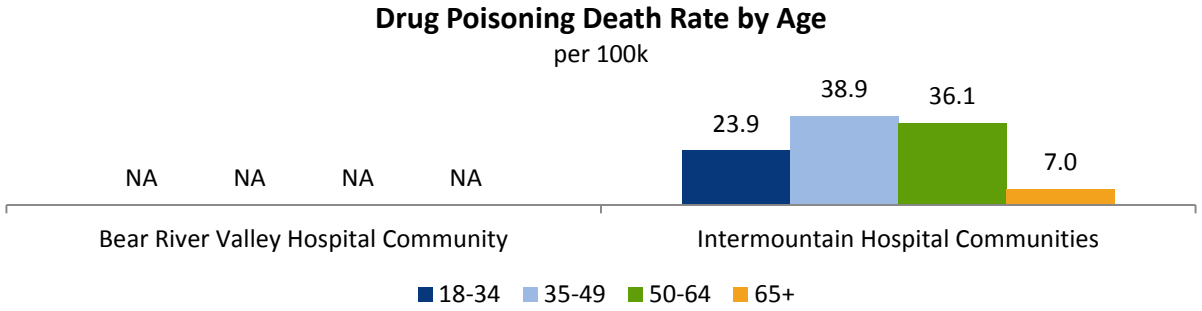
[27] Ibid

Prevention of Prescription Opioid Misuse

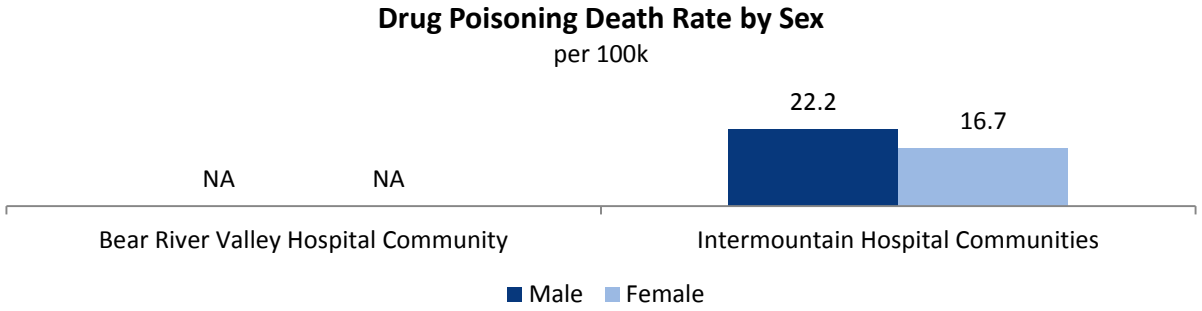
➢ **The drug poisoning death rate for the Bear River Valley Hospital community is only slightly less than the state rate, but both are substantially higher than the national rate. The majority of drug poisoning deaths are attributed to prescription opioids.**



➢ **Drug poisoning deaths vary by age. Drug poisoning deaths tend to be more common among middle-aged adults than among younger or older adults.**

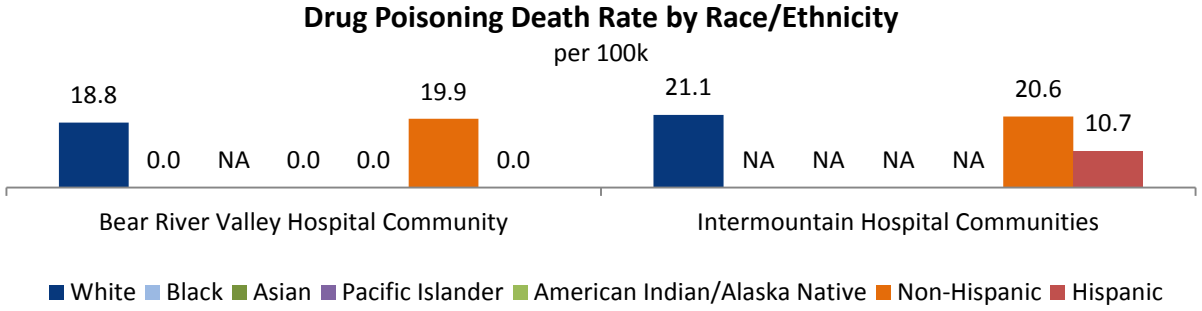


➢ **Drug poisoning deaths vary by sex. Drug poisoning deaths are higher among males than among females.**

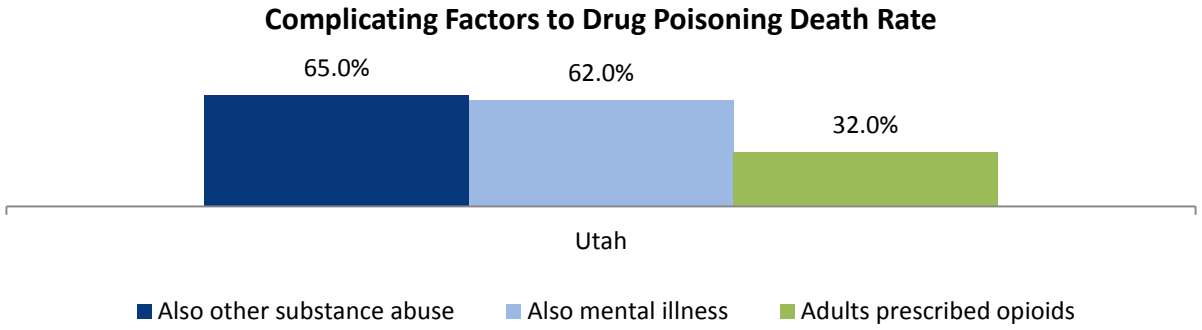


NA = Data not available due to small sample size in the community.

➢ **Drug poisoning deaths vary by race and ethnicity. Small sample sizes for some race and ethnicity groups make robust comparisons difficult. The death rate for Whites is higher than other race groups in Intermountain Hospital communities. The rate for non-Hispanic populations is higher than for Hispanic populations.**



➢ **The drug poisoning death rate is complicated by the co-occurrence of other substance abuse and** mental illness. About one in three adults in Utah has received an opioid prescription.[28]



NA = Data not available due to small sample size in the community

[28] Utah Violence and Injury Prevention Program, 2014; www.health.utah.gov/vipp/topics/prescrition-drug-overdose

Prioritization Results: addictive behaviors were highly prioritized relative to other health issues
The table below shows how addictive behaviors ranked among the 16 broad health issues in each of the prioritization dimensions, for the Bear River Valley Hospital community and for all Intermountain hospital communities. The rankings across prioritization dimensions illustrate that addictive behaviors were highly prioritized relative to other health issues in both the Bear River Valley Hospital community and Intermountain.

Rank of Addictive Behaviors Relative to Other Health Issues		
Prioritization Dimension	**Bear River Valley Hospital Hospital Community**	**Intermountain Hospital Communities**
Affordability	2nd *	2nd *
Alignment	7th	13th
Community Input	2nd *	1st *
Feasibility	7th *	14th
Health Equity	3rd *	3rd *
Seriousness	4th *	6th
Size	2nd *	2nd *
Upstream	4th	4th

**Indicates there was a tie in the prioritization score between addictive behaviors and other health issues on this prioritization dimension.*

Why We Are Focusing on Prescription Opioid Misuse
Substance abuse is a disorder in which drugs or alcohol are used in excess to the point that it becomes disruptive to a person's daily life. 20.2 million Americans were suffering from a substance abuse disorder in 2014[29], which includes prescription opioid abuse. Though prescription opioid abuse is increasingly a concern across the U.S., Utah is especially at risk for its consequences as the death rate here exceeds the national rate. In Utah, there are more deaths from unintended prescription opioid overdose than firearms, falls, or motor vehicle crashes.[30] Each month there is an average of 24 deaths from prescription opioid abuse in Utah.[31]

Individuals who have a history of prescription opioid misuse are 19 times more likely to use heroin during their lifetime.[32] Identification of people at risk for substance abuse as well as providing treatment are key to improving the rising prescription opioid misuse problem.

[29] National Institute of Mental Health, National Institutes of Health (NIH), U.S. Department of Health and Human Services, 2016
[30] Violence and Injury Prevention Program, Utah Department of Health, 2014
[31] Ibid
[32] National Institute on Drug Abuse, National Institutes of Health (NIH), U.S. Department of Health and Human Services, 2015

Strategies to Address the Health Need

Based on the results of the CHNA, Bear River Valley Hospital staff identified community partners to address the health need over the next several years through screening, education, and treatment. The planning committee engaged representatives of state and local health departments and multiple community partners to identify potential implementation strategies. These strategies will be evaluated and health improvement impact will be measured over the next several years.

Potential collaborative partners for the Implementation Strategies

Multiple community agencies have been identified as potential collaborative partners to work with Bear River Valley Hospital on the community health improvement activities include but are not limited to:

- Bear River Association of Governments
- Bear River Health Department
- Bear River Mental Health
- Bear River Valley Senior Center
- Box Elder School District

Evaluation of Previous Implementation Strategy

2015 Community Benefit Implementation Plan Impact Summary

Identified Need

Improve the prevention, detection, treatment and/or management of chronic diseases associated with weight and unhealthy behaviors.

Intervention

Improve the health status of targeted families in high-risk neighborhoods in the hospital community to provide:

One Intermountain LiVe Well Healthy Habits for Kids program with families from high-risk communities

Results/Outcomes for 2015 Activities

Measurement:

1. One LiVe Well program taught in the targeted zones with 50 percent of participants completing the program showing knowledge and behavior improvements.
2. Biometrics of height, weight, BMI and blood pressure will be completed pre and post on 75 percent of participants.

Outcomes:

1. One LiVe Well course was taught at the Bear River Health Department (Tremonton Office) with 16 out of 22 (73 percent) participants completing the class.
2. Improvements in self-reported behavior and biometrics noted:
    - Biometric measures were complete pre and post on 100 percent of participants completing the course with more than one third of participants experiencing a decrease in BMI with more than one third of participants who improved their blood pressure

- Similar improvements noted in self-reported behaviors with more than one third improving vegetable intake, fruit intake, physical activity, and more than half with a decrease in hours of TV watching

Conclusion

Bear River Valley Hospital staff is grateful for the support of community members and agencies for their participation in the process of understanding local community health needs and developing strategies to improve health. Bear River Valley Hospital will conduct its next CHNA in 2019 and looks forward to continuing collaborations to improve the health of our community.

Send written comments on this Community Health Needs Assessment to:

2016chnacomments@imail.org

The Bear River Valley Hospital CHNA was completed by Intermountain Community Benefit and Strategic Planning and Research Departments.

Acknowledgement

This assessment would not be possible without the Utah Department of Health Office of Public Health Assessment. Their talented team of data specialists helped Intermountain identify reliable public health measures that best illustrate the health of a community. Their dedication to the quality of the data and its dissemination helped make this assessment a true community collaboration.

Contributors from the Utah Department of Health Office of Public Health Assessment included Rachel Eddington, Navina Forsythe, Kathy Marti, Kim Neerings, Brian Paoli, Wu Xu, and Tong Zheng. Other local and Utah Department of Health department contributors included Laurie Baksh, Mike Friedrichs, Nicole Stone, Sasha Zaharoff (Department of Environmental Quality), Danny Bennion and Cindy Morgan (Salt Lake County Health Department), Jacob Matthews (Weber-Morgan Health Department), Isa Perry (Davis County Health Department), Christopher Smoot (Wasatch County Health Department), and Jim Vanderslice (University of Utah).

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Appendix A

Health Indicator	Bear River Valley Hospital Community	Communities Served by Intermountain Hospitals	Utah	U.S.
Addictive Behaviors				
Binge drinking - at risk (5+ drinks for men, 4+ drinks for women, 1 or more times)	7.5%	11.9%	11.4%	16.0%
Binge drinking MINOR	NA	8.9%	8.9%	20.8%
Chronic/heavy drinking - at risk (>30 for women, >60 for men)	2.1%	4.1%	3.9%	5.8%
Cigarette smoking [HP2020 TU-1] - current smoker	11.5%	11.0%	9.7%	18.1%
Cigarette smoking MINOR	NA	8.0%	8.0%	15.7%
Drug poisoning (X40-X44, X60-X64,X85,Y10-Y14) crude death rate per 100,000, including prescription opioid overdose	18.2	19.4	22.4	14.7
E-cigarette user	NA	3.6%	NA	NA
Smokeless tobacco MINOR	NA	2.6%	2.6%	8.8%
Smokeless tobacco user	3.3%	2.9%	3.0%	4.2%
Cancer				
All cancers (C00-C97) crude rates, deaths per 100,000 population	116.3	99.6	98.2	186.2
Primary cases of breast cancer diagnosis rates per 100,000 population	75.5	81.0	114.6	138.6
Primary cases of colon cancer diagnosis rates per 100,000 population	14.5	13.5	31.6	46.4
Primary cases of lung cancer diagnosis rates per 100,000 population	13.1	16.9	27.3	69.4
Primary cases of skin cancer diagnosis rates per 100,000 population	17.1	21.6	32.2	20.8
Cardiovascular Conditions				
Cardiovascular disease (I20-I25) crude rates, deaths per 100,000 population	85.8	53.3	52.2	122.9
Cerebrovascular diseases (I60-I69) crude rates, deaths per 100,000 population	47.4	28.0	37.9	36.5
Heart failure (I-50) crude rates, deaths per 100,000 population	31.2	22.8	26.1	92.3
High Blood pressure awareness [HP2020 HDS-5.1] - told blood pressure is high	25.8%	23.8%	24.2%	31.4%
High cholesterol awareness [HP2020 HDS-7] - told cholesterol is high	26.7%	23.6%	25.5%	39.1%

Health Indicator	Bear River Valley Hospital Community	Communities Served by Intermountain Hospitals	Utah	U.S.
Care Access				
No health insurance [HP2020 AHS-1]	14.4%	17.5%	16.1%	15.2%
Non-emergent Emergency Department use rate per 100	4.6	4.1	4.3	NA
Personal doctor or healthcare provider [HP2020 AHS-3] - one or more personal doctor	85.9%	73.1%	73.3%	75.9%
Routine dental healthcare - within past 12 months	71.0%	68.7%	68.9%	65.3%
Unable to get needed care due to cost	13.4%	15.7%	14.2%	14.9%
Diabetes Conditions				
Doctor diagnosed diabetes	8.3%	7.0%	7.6%	9.6%
Ever told you have prediabetes	5.7%	5.6%	5.3%	5.3%
General Health Status - fair or poor	10.7%	12.8%	12.1%	16.8%
Maternal and Child Health				
Adolescent births rate per 1,000, girls Age 10-17	4.4	3.8	1.8	NA
Alcohol use during last 3 months of pregnancy	NA	9.6%	8.7%	NA
Births from unintended pregnancy	26.3%	32.6%	32.1%	37.0%
Breastfeeding ever	94.9%	93.2%	93.3%	79.2%
Duration between pregnancies less than 13 months	9.1%	9.8%	10.2%	NA
Excess gestational weight gain during pregnancy	49.8%	49.8%	50.8%	NA
Gestational diabetes	3.6%	4.1%	4.4%	5.3%
Infant mortality rate per 1000 births	NA	5.0	5.2	6.0
Low birth weight infants (less than 2500 grams)	6.2%	6.9%	6.9%	8.0%
Multivitamin taken before pregnancy	62.0%	55.0%	44.7%	NA
No prenatal care until 3rd trimester	NA	3.2%	2.7%	NA
Obese BMI 30+ prior to pregnancy	22.8%	18.0%	18.5%	23.4%
Pre-term births (less than 37 weeks)	8.7%	9.2%	9.2%	11.3%
Tobacco use during last 3 months of pregnancy	NA	4.3%	4.0%	NA
Mental Health				
Attempted suicide MINOR	NA	7.2%	7.2%	8.0%
Doctor ever told had depressive disorder	22.4%	21.8%	20.7%	18.1%
Mental health past 30 days - 7 or more days not good	15.6%	16.2%	15.9%	16.5%
Suicide (X60-X84,Y87.0,U03) crude death rate per 100,000	17.5	18.7	20.5	13.0

Health Indicator	Bear River Valley Hospital Community	Communities Served by Intermountain Hospitals	Utah	U.S.
Other Chronic Conditions				
Alzheimer's disease (G-30) crude rates, deaths per 100,000 population	37.7	14.1	19.5	26.8
Doctor diagnosed arthritis	26.0%	19.9%	20.1%	26.0%
Other Infectious Diseases				
Campylobacteriosis cases per 100,000 population (rate)	10.3	16.9	18.9	14.0
Chlamydia cases per 100,000 population (rate)	145.3	266.1	279.4	456.1
Cryptosporidiosis cases per 100,000 population (rate)	NA	4.0	2.3	1.0
Giardiasis cases per 100,000 population (rate)	6.4	8.3	7.5	6.4
Gonorrhea cases per 100,000 population (rate)	7.7	32.9	49.0	110.7
Hepatitis C, acute cases per 100,000 population (rate)	0.0	0.6	0.4	0.7
Hepatitis C, chronic cases per 100,000 population (rate)	15.2	30.6	47.7	NA
HIV cases - No reported cases since 2010	0.0	0.0	0.0	NA
Rabies, animal cases per 100,000 population (rate)	0.0	0.2	0.1	NA
Salmonellosis cases per 100,000 population (rate)	7.7	10.3	12.6	NA
Shiga toxin-producing Escherichia coli (STEC) infection cases per 100,000 population (rate)	NA	3.1	3.1	NA
Syphilis cases per 100,000 population (rate)	NA	7.4	8.4	11.6
Tuberculosis, active cases per 100,000 population (rate)	0.0	1.1	1.1	2.96
West Nile virus cases per 100,000 population (rate)	NA	0.1	0.1	NA
Overweight and Obesity				
Daily Fruit Consumption [HP2020 NWS-14] - less than 2	73.4%	69.0%	66.2%	NA
Daily vegetable consumption [HP2020 NWS-15.1] - less than 3	85.3%	82.6%	82.6%	NA
Obese ADULT [HP2020 NWS-9] - BMI 30+	31.7%	24.4%	25.7%	29.5%
Obese MINOR	NA	7.2%	7.2%	13.7%
Overweight ADULT [HP2020 NWS-9] - BMI 25 to 30	31.6%	34.4%	33.8%	NA
Overweight MINOR	NA	11.3%	11.3%	NA
Physical inactivity [HP2020 PA-1] - no leisure time activity	21.0%	18.5%	20.6%	25.3%
Physical inactivity MINOR	NA	9.6%	9.6%	14.3%

Health Indicator	Bear River Valley Hospital Community	Communities Served by Intermountain Hospitals	Utah	U.S.
Preventive Services				
Childhood vaccinations	NA	74.6%	70.8%	71.6%
Cholesterol screening [HP2020 HDS-6] - within past 5 years	69.0%	67.6%	68.3%	76.4%
HIV test - ever tested	15.7%	24.6%	21.6%	NA
Influenza Vaccination within past 12 months	36.0%	36.9%	38.0%	40.4%
Mammography [HP2020 C-17] - in past 2 years	63.5%	68.0%	73.2%	78.1%
Pneumococcal vaccination - ever received	71.9%	70.5%	69.3%	NA
Colon cancer screening [HP2020 C-16] - testing completed	71.5%	72.3%	74.2%	68.8%
Sun safety [HP2020 C-20] - practice one or more sun safety measure	70.8%	65.0%	65.8%	NA
Respiratory Conditions				
Emergency Department visit for uncontrolled asthma (ICD-9 493) rate per 10,000	20.5	23.0	28.5	NA
Ever told you have chronic obstructive pulmonary disease (COPD)	3.6%	3.9%	3.6%	6.5%
Social Determinants of Health				
Education - BA and higher	21.2%	30.3%	30.3%	34.0%
Female headed household	5.2%	5.6%	5.6%	NA
Median household income (weighted)	$57,177	$58,387	$59,715	$53,482
Persons living in poverty	8.7%	12.7%	12.8%	15.9%
Vaccine Preventable Diseases				
Varicella (chickenpox) cases per 100,000 population (rate)	12.9	8.3	7.1	NA
Diphtheria cases - no reported cases since 2010	0.0	0.0	0.0	NA
Hepatitis A cases per 100,000 population (rate)	0.0	0.3	0.4	NA
Hepatitis B, acute cases per 100,000 population (rate)	0.0	0.3	0.2	1.0
Hepatitis B, chronic cases per 100,000 population (rate)	4.7	8.3	9.0	NA
Influenza-associated hospitalization cases per 100,000 population (rate)	16.1	33.0	42.3	NA
Pertussis cases per 100,000 population (rate)	26.4	42.0	45.1	10.4
Tetanus cases - no reported cases since 2010	0.0	0.0	0.0	NA

Health Indicator	Bear River Valley Hospital Community	Communities Served by Intermountain Hospitals	Utah	U.S.
Violence & Injury Prevention				
Accidental discharge of firearms MINOR (W32-W34) crude rates, deaths per 100,000 population	0.0	NA	NA	NA
Accidental drowning and submersion ADULT (W65-W74) crude rates, deaths per 100,000 population	NA	0.9	NA	NA
Accidental drowning and submersion MINOR (W65-W74) crude rates, deaths per 100,000 population	0.0	1.1	NA	NA
Accidental exposure to smoke, fire and flames MINOR (X00-X09) crude rates, deaths per 100,000 population	0.0	NA	NA	NA
Accidental poisoning and exposure to noxious substances ADULT (X40-X49) crude rates, deaths per 100,000 population	22.0	18.5	21.2	12.3
Accidental poisoning and exposure to noxious substances MINOR (X40-X49) crude rates, deaths per 100,000 population	0.0	NA	0.2	NA
Helmet use MINORS	NA	23.7%	23.7%	NA
Motor vehicle crash ADULT (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2) crude rates, deaths per 100,000 population	13.0	10.0	8.7	10.2
Motor vehicle crash MINOR (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2) crude rates, deaths per 100,000 population	NA	3.6	3.0	NA
Seat belt use [HP2020 IVP-15] - always or nearly always	90.2%	92.8%	93.0%	NA
Unintentional injuries ADULT (V01-X59, Y85-Y86) crude rates, deaths per 100,000 population	61.0	50.5	42.3	41.3
Unintentional injuries MINORS (V01-X59, Y85-Y86) crude rates, deaths per 100,000 population	NA	7.4	5.2	NA

NA = Data not publicly reported or unavailable due to small sample size in the community.

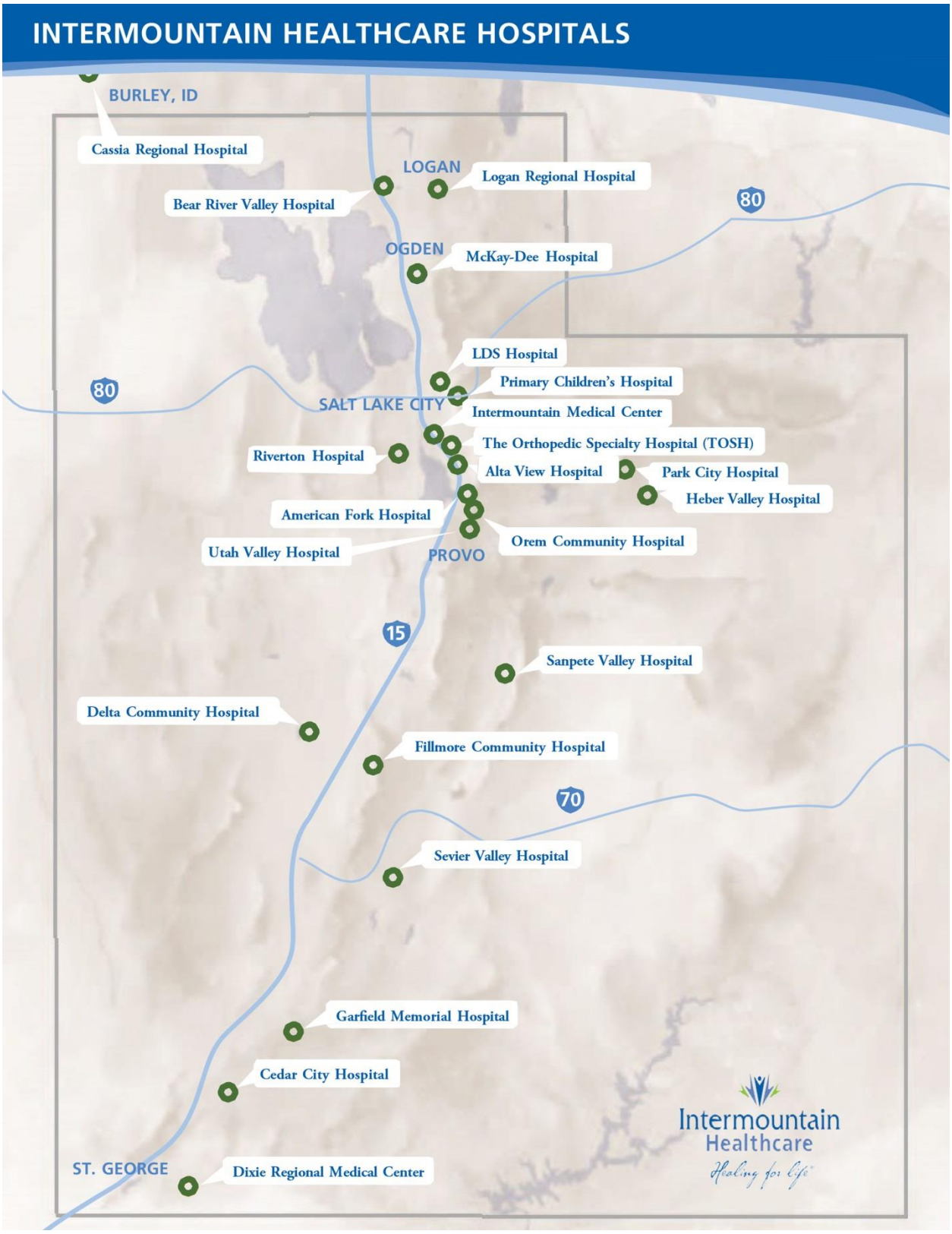
Data sources: State of Utah Behavioral Risk Factor Surveillance System (BRFSS), 2011, 2012, and 2013; State of Utah Youth Risk Behavior Survey (YRBS), 2011, 2012, and 2013; Utah Department of Health Bureau of Epidemiology, 2013; Utah Cancer Registry, 2010, 2011, and 2012; Utah Emergency Department Encounter Database, 2011, 2012, and 2013; Utah Environmental Public Health Tracking, (EPHT) 2013; Utah Vital Statistics, 2011, 2012, and 2013; State of Utah Pregnancy Risk Assessment Monitoring Survey, 2011, 2012, and 2013; National Immunization Survey, 2010; U.S. BRFSS, 2013; Centers for Disease Control, 2011, 2012, and 2013.

Appendix B

Intermountain Healthcare Hospitals w/ link to CHNA and Implementation Plans

Alta View Hospital in Sandy, Utah
https://intermountainhealthcare.org/locations/alta-view-hospital/hospital-information/alta-view-hospital-chna/
American Fork Hospital in American Fork, Utah
https://intermountainhealthcare.org/locations/american-fork-hospital/hospital-information/american-fork-hospital-chna/
Bear River Valley Hospital in Tremonton, Utah
https://intermountainhealthcare.org/locations/bear-river-valley-hospital/hospital-information/bear-river-valley-hospital-chna/
Cassia Regional Hospital in Burley, Idaho
https://intermountainhealthcare.org/locations/cassia-regional-hospital/hospital-information/cassia-regional-hospital-chna-report/
Cedar City Hospital in Cedar City, Utah
https://intermountainhealthcare.org/locations/cedar-city-hospital/hospital-information/cedar-city-chna-report/
Delta Community Hospital in Delta, Utah
https://intermountainhealthcare.org/locations/delta-community-hospital/hospital-information/delta-community-hospital-chna-report/
Dixie Regional Medical Center in St. George, Utah
https://intermountainhealthcare.org/locations/dixie-regional-medical-center/hospital-information/dixie-regional-chna-report/
Fillmore Community Hospital in Fillmore, Utah
https://intermountainhealthcare.org/locations/fillmore-community-hospital/hospital-information/fillmore-community-hospital-chna-report/
Garfield Memorial Hospital in Panguitch, Utah
https://intermountainhealthcare.org/locations/garfield-memorial-hospital/hospital-information/garfield-memorial-hospital-chna-report/
Heber Valley Hospital in Heber City, Utah
https://intermountainhealthcare.org/locations/heber-valley-hospital/hospital-information/heber-valley-hospital-chna-report/
Intermountain Medical Center in Salt Lake City, Utah
https://intermountainhealthcare.org/locations/intermountain-medical-center/hospital-information/intermountain-medical-center-chna-report/
LDS Hospital in Salt Lake City, Utah
https://intermountainhealthcare.org/locations/lds-hospital/hospital-information/lds-hospital-chna-report/
Logan Regional Hospital in Logan, Utah
https://intermountainhealthcare.org/locations/logan-regional-hospital/hospital-information/logan-regional-hospital-chna-report/
McKay-Dee Hospital in Ogden, Utah
https://intermountainhealthcare.org/locations/mckay-dee-hospital/hospital-information/mckay-dee-hospital-chna-report/

Orem Community Hospital in Orem, Utah
https://intermountainhealthcare.org/locations/orem-community-hospital/hospital-information/orem-community-hospital-chna-report/
Park City Hospital in Park City, Utah
https://intermountainhealthcare.org/locations/park-city-hospital/hospital-information/park-city-medical-center-chna-report/
Primary Children's Hospital in Salt Lake City, Utah
https://intermountainhealthcare.org/locations/primary-childrens-hospital/hospital-information/primary-childrens-hospital-chna-report/
Riverton Hospital in Riverton, Utah
https://intermountainhealthcare.org/locations/riverton-hospital/hospital-information/riverton-hospital-chna-report/
Sanpete Valley Hospital in Mount Pleasant, Utah
https://intermountainhealthcare.org/locations/sanpete-valley-hospital/hospital-information/sanpete-valley-hospital-chna-report/
Sevier Valley Hospital in Richfield, Utah
https://intermountainhealthcare.org/locations/sevier-valley-hospital/hospital-information/sevier-valley-hospital-chna-report/
TOSH-The Orthopedic Specialty Hospital in Murray, Utah
https://intermountainhealthcare.org/locations/the-orthopedic-specialty-hospital/hospital-information/tosh-chna-report/
Utah Valley Hospital in Provo, Utah
https://intermountainhealthcare.org/locations/utah-valley-hospital/hospital-information/utah-valley-chna-report/


INTERMOUNTAIN HEALTHCARE HOSPITALS
BURLEY, ID
Cassia Regional Hospital
LOGAN
Logan Regional Hospital
Bear River Valley Hospital
80
OGDEN
McKay-Dee Hospital
LDS Hospital
Primary Children's Hospital
80
SALT LAKE CITY
Intermountain Medical Center
The Orthopedic Specialty Hospital (TOSH)
Riverton Hospital
Alta View Hospital
Park City Hospital
Heber Valley Hospital
American Fork Hospital
Orem Community Hospital
Utah Valley Hospital
PROVO
15
Sanpete Valley Hospital
Delta Community Hospital
Fillmore Community Hospital
70
Sevier Valley Hospital
Garfield Memorial Hospital
Cedar City Hospital
Intermountain
Healthcare
Healing for Life
ST. GEORGE
Dixie Regional Medical Center