BACKGROUND
University of Utah Health is the Intermountain West’s only academic health care system, combining excellence in patient care, the latest in medical research, and teaching to provide leading-edge medicine in a caring and personal setting. The system provides care for Utahns and residents of five surrounding states in a referral area encompassing more than 10 percent of the continental United States.

Whether it’s for routine care or highly specialized treatment in orthopedics, stroke, ophthalmology, cancer, radiology, fertility, cardiology, genetic-related diseases, organ transplant, or many other areas of medicine, University of Utah Health offers the latest technology and advancements, including some services available nowhere else in the region.

As part of that system, University Hospitals & Clinics relies on more than 1,100 board-certified physicians who staff four university hospitals (University Hospital, Huntsman Cancer Hospital, University Orthopaedic Center, and the University Neuropsychiatric Institute); 10 community clinics; and several specialty centers including the John A. Moran Eye Center, the Cardiovascular Center, the Clinical Neurosciences Center, and the Utah Diabetes Center.

University of Utah Health is consistently ranked among US News & World Report’s Best Hospitals, and its academic partners at the University of Utah School of Medicine and Colleges of Nursing, Pharmacy, and Health are internationally regarded research and teaching institutions.

COMMUNITY NEED AND COMMUNITY BENEFIT
University of Utah Health strives to identify and address the health and wellbeing-related needs of our immediate and regional communities through multiple approaches.

- U OF U HEALTH supports patients in need through the direct provision of charity care, as well as write-offs of debt for those unable to complete payment due to hardship. In the most recent fiscal year, U OF U HEALTH provided over $78 million in charity care and an additional $58 million in bad debt write-offs. Additionally, U OF U HEALTH funded approximately $7.7 million in charity care and wrote-off approximately $6.7 million in bad debt at the University of Utah Neuropsychiatric Institute.

- U OF U HEALTH provides direct service to residents with special health-related needs and those living in under-served communities through outreach and education efforts, telemedicine and outreach clinics, free screenings, and direct patient care through partnerships with multiple community agencies.

The Patient Protection and Affordable Care Act (ACA), signed into law in March 2010, requires each nonprofit hospital to conduct a Community Health Needs Assessment (CHNA) every three years. After identifying and prioritizing unmet needs, each hospital is required to develop a three-year implementation strategy to address one or more identified community health needs. This report documents the process through which U OF U HEALTH conducted the CHNA, the key findings, the identified priorities, and the implementation strategies, and fulfills the requirement to make results of the CHNA available to the public.
COMMUNITY HEALTH NEEDS ASSESSMENT PROCESS

The focus of the CHNA was on Salt Lake County; however, some of the implications and strategies address a broader region, including rural areas beyond Salt Lake County.

The CHNA process was led by U OF U HEALTH leadership and staff, and supported by a consulting team with public health and health policy expertise from Stamats Healthcare Marketing.

The multi-faceted CHNA process, conducted from March–August 2014, encompassed:

1. **Epidemiological and socio-demographic analysis.** This intensive data analysis drew on multiple national, state, and county public data sources. Health risks, behaviors, and access to health care services for Salt Lake County (SLC) residents were compared with those of Utah, the US, and Health People 2020 goals. Relative risk and relative rate calculations helped identify the greatest gaps for the SLC population.

2. **Qualitative interviews.** Consultants conducted interviews with ten community business and government agency leaders, as well as U OF U HEALTH Board members. These interviews provided perspectives on current and emerging health issues, as well as emerging community and environmental situations that may affect health and quality of life.

3. **Focus groups.** All segments of the community were represented through a series of six focus groups, including four groups with the leadership of community agencies that work directly with under-served populations, and two groups with U OF U HEALTH clinical and non-clinical staff who serve the community, manage outreach programs, and interact daily with community members. The community agency focus groups represented (1) agencies serving specific ethnic and cultural segments, (2) agencies that provide health services to the individuals and communities in need, (3) agencies that provide support counseling for a wide range of health-related needs (including behavioral health, rape recovery, addiction recovery, and others), (4) education, youth services, and wellness agencies. A total of 57 individuals participated in the six focus groups.

4. **Priority setting.** Potential priority health risks and gaps in access to care were identified from the summary of the three stages of research (identified above). These lists were narrowed down and the final priorities selected in two meetings with the U OF U HEALTH CHNA team, conducted in May and July, 2014. Criteria for priority-setting included:
   - Severity of the issue, as represented by some or all of the following: highly acute, affects a large number of people, has significant economic and/or opportunity cost, growing or worsening over time
   - Availability of known, feasible interventions, with measurable impact, that are likely to achieve results and improve community’s quality of life and health in a reasonable time frame
   - Unaddressed or under-addressed issue: no/few organizations or (insufficient) resources focusing on it effectively at present
   - U OF U HEALTH synergies: special expertise, strategic priority, and/or programs in place to serve as building blocks
5. **Development of implementation strategies.** Implementation strategies were outlined during a session conducted with a wide range of U OF U HEALTH clinical and administrative leadership, including those involved in direct community outreach. Each implementation team will include representatives of relevant community agencies, as well as U OF U HEALTH clinicians and staff.

**KEY FINDINGS OF THE ASSESSMENT**

The areas with the highest relative risks in comparison with the state of Utah, the US as a whole, and/or Healthy People 2020 goals included:

- Environmental factors: Air quality, crime rate
- Health indicators: Suicide, poisonings
- Maternity: Infant mortality, low birth weight
- Disability: age 18–64
- Infectious conditions, including STDs
- Asthma, other respiratory conditions
- Various cancers: incidence, mortality
- Diabetes: incidence, mortality
- Senior frailty: falls, Parkinson’s
- Binge drinking
- Low rate of childhood immunizations
- Low use of preventive dental care

In addition, the assessment identified population dynamics and access issues that may affect health status and wellbeing, such as:

- High rate of youth and young adult population growth
- Rapidly growing ethnic and cultural diversity, including growth of the immigrant and refugee populations – affecting English language proficiency as well as cultural literacy and ability to navigate the health system
- High percentage of adults ages 18–64 who are disabled
- STD and infectious disease rates
- Lower-than-average percentage of mothers who received first trimester prenatal care
- Lower rates of health care coverage and higher rates reporting cost as a barrier to obtaining health care, vs. reference populations
- Limited access to behavioral health services – particularly ongoing care, appropriate placement, and medication access for those with chronic or long-term conditions – among individuals facing financial, access, and other barriers to care
The qualitative research identified ways in which these health risks and access barriers affect specific population segments. In addition, the qualitative research delineated culture- and community-specific barriers to health maintenance, access to and use of health care services, and effective communication with health care providers.

PRIORITY SELECTION

Priorities for community health enhancement were determined after weighing the severity of each area of heightened relative risk, the availability of known and effective interventions, determination that the area was un-addressed or under-addressed by existing resources, and synergies with other U OF U HEALTH and UNI initiatives. Three-year implementation plans have been outlined and implementation teams identified for each of the priorities.

1. Diabetes: early identification and effective risk reduction for populations with potential for the development of this condition

2. First trimester prenatal care: ensuring consistent early access to prenatal care to reduce risks for at-risk women and their babies

3. Behavioral health services: addressing the behavioral health needs of patients where they present within the U OF U HEALTH system, minimizing long-term individual, family, social and U OF U HEALTH costs associated with untreated or late-treated mental health issues in the U OF U HEALTH patient population
IMPLEMENTATION STRATEGIES

Priority #1: Diabetes

Goal

- Early identification and effective risk reduction for populations with potential for development of this condition.

Performance Measures

- HEDIS metrics (A1C, eye exam, etc.) and compliance, tracked through University of Utah Health systems.

Strategies/Tactics

- Partner with appropriate community agencies to prioritize needs by geography and target audiences.
- Develop culturally sensitive education and intervention programs that encompass family involvement and provide resources to help manage diabetes risk; partner with agencies to implement.
- Conduct screenings to facilitate early identification of potential diabetes, focusing on selected at-risk populations and geographies.
- Implement an evolving range of tactics to sustain impact of program over time.

Background

Diabetes is a serious public health issue that is on the rise in Utah and throughout the nation. Per the Utah Health Department:

- About 142,000 Utah adults (about 7.1%, or one in 14) have been diagnosed with diabetes.
- Diabetes is the seventh leading cause of death in Utah. In 2013, diabetes was the underlying cause of death for more than 550 Utah residents.

If not well controlled, diabetes can lead to a number of serious complications, including blindness, amputation, cardiovascular disease, and kidney failure:

- Diabetes is the leading cause of blindness among adults aged 25 to 74.
- More than half of all non-traumatic, lower-extremity amputations occur in people with diabetes. In Utah, there are about 250 hospital discharges for lower-extremity amputations among people with diabetes each year.
- Diabetes increases the risk of heart attack and stroke by two to four times. In Utah, there are about 4,500 hospital discharges for cardiovascular complications related to diabetes every year.
Diabetes rates are generally higher for members of most minority racial and ethnic groups. More than one in ten Pacific Islanders and one in ten Native American/Alaskan Native adults in Utah have been diagnosed with diabetes. An estimated 45,000 Utahns have diabetes but have not yet been diagnosed. Additional statistics provide a clearer picture of diabetes in the U.S. and Utah:

- 17% of children and adolescents in the U.S. are obese
- 11% of Utah teens are overweight and 6.4% are obese
- In the U.S., one of every three adults (35.7%) is obese
- In Utah, less than one of four (24.1%) adults are obese
- Pacific Islander adults have the highest rate of obesity (45.0%), followed by American Indian adults (34.6%) in Utah
- Asian American adults have the lowest rate (8.9%)
- Adults of Hispanic/Latino ethnicity have slightly higher rates of obesity than non-Hispanics (26.1% vs. 24.1%)

Lifestyle risk factors for obesity include sedentary lifestyles, poor diet, and other environmental factors.

**Sedentary lifestyles**

- 41.9% of Utah adults do not meet the recommended level of aerobic activity
- Adults need to do muscle-strengthening activities at least 2 days a week

**Low consumption of fruits and vegetables**

- 70.4% of Utah adults eat less than two servings of fruits a day
- 82.6% of Utah adults eat less than three servings of vegetables a day

**Environmental factors**

- Adults who live in households at or below the poverty level of 13.3% have higher rates of obesity than adults who live in households above this level (28.3% vs. 24.8%)
- Families with lower incomes tend to live in poorer neighborhoods
- Poorer neighborhoods generally have fewer playgrounds and limited safe places to exercise
- Poorer neighborhoods tend to have fewer supermarkets but more fast food restaurants

Obesity has serious health consequences. An increased risk of high blood pressure, high cholesterol, type 2 diabetes, heart disease and stroke. Additionally, obesity can lead to higher rates of gallbladder disease, sleep apnea, respiratory problems and some types of cancer.
Our Response

University of Utah Health is responding to the significant public health crisis of obesity and diabetes in variety of ways. Combined, the Diabetes Service Line (DSL), Utah Diabetes & Endocrinology Center (UDEC), the Division of Endocrinology, Metabolism and Diabetes (DEMD), the Office of Wellness and Integrative Health (OWIH), the College of Health, and the Department of Population Health Sciences have coordinated efforts to assess the needs of patients with diabetes and prediabetes throughout the greater Salt Lake City area and across the Wasatch Front.

Strategy #1: Partner with appropriate community agencies to prioritize needs by geography and target audience.

The DSL/UDEC/Division/COH/OWIH has worked within the U of U Health system to prioritize clinical needs by geography and target audience. Our goal has been to provide diabetes services to high-risk populations by strategically expanding our clinical services to community clinics across the greater Salt Lake City area. The intention is to bring diabetes services closer to patients. A Certified Diabetes Educator is practicing one day a week at the Redwood Health Center.

Board certified endocrinologists have set up clinical services at the Farmington Health Center, South Jordan Health Center, and at St. Mark’s Hospital. We have also placed advance practice care providers at our Redwood and Westridge Clinics.

We will soon launch our Mobile Health Program. We are partnering with community organizations to provide health and wellness counseling, education and diabetes screening. We have begun to create partnerships with community organizations and identify underserved areas. The Mobile Health Program is being implemented in conjunction with the Larry H. and Joan Miller Family Wellness Initiative.
Strategy #2: Develop culturally sensitive education/interventions that encompass family involvement and provide resources to help manage diabetes risk; partner with agencies to implement.

Our team has participated in community based health fairs as way to reach various demographic groups. We have specifically targeted health fairs at the Utah Cultural Celebration Center in West Valley City. At the health fairs, printed information is provided in English and Spanish. Participants also have access to nutrition and meal planning specialists at the fairs. A1C blood tests are routinely performed to identify individuals who have increased levels of blood glucose. We have started tracking median A1C scores for our patients by race to help us understand which groups may need more targeted interventions to help manage this critical metric (see chart below):

During the past three years, we have been testing an increasing number of patient’s A1C scores to help our patients better manage pre-diabetes conditions and patients with diabetes. Since 2014 we have seen an approximate 75% increase in the number of patients that we are testing for A1C scores.
Additionally, to promote healthy lifestyles and reduce the rate of pre-diabetes in our community we have formed several important partnerships and programs. We have solidified partnerships to run the Food, Movement & U program. The program teaches homeless families healthy eating habits.

We have developed a program for middle school students and their families called “Crush Diabetes.” The program is designed to encourage healthy habits. The first program had 175 participants. In addition, our Mobile Health Program will be staffed with culturally competent employees and will offer literacy-appropriate educational materials to patients. We are partnering with local community organizations (Utah Partners for Health, Utah Olympic Legacy Foundation, United Way, and others) to implement this program.

**Strategy #3: Conduct screenings to facilitate early identification of early diabetes, focusing on at-risk populations and at-risk locations.**

As part of our Be Well Utah event we provide a free Family Health Fair which includes health care screenings and blood pressure checks. For the past three years, these events have had an average attendance of about 4,500 attendees. We typically have about 60 different exhibitors including demonstrations on healthy cooking and eating.

One primary focus of the Mobile Health program will be health screenings to identify people at risk of developing diabetes. Those at risk will receive appropriate educational materials and be directed towards appropriate prevention programs.

Our Health system has also developed a protocol to screen, test and refer patients with prediabetes to diabetes prevention programs using electronic health record. The protocol will alert primary care providers to refer patients for evidence-based lifestyle interventions. This program is being implemented across our entire health system.

Our team actively supports the University’s Diabetes Prevention Program (DPP) which is run by U of U Heath. The DPP specifically identifies people with prediabetes and enrolls them in a year-long educational program on diet, weight loss, and exercise. This program now offers classes in English and Spanish.

Funding from the Miller Family Wellness Initiative will provide scholarship money for patients to attend DPP programs at reduced cost. Sites include the Farmington Health Center and Skaggs Wellness Center. An online diabetes prevention program will also be offered to 300 participants.
Lastly, over the past three years we have screened approximately 14,939 diabetes patients for vision/eye issues connected to diabetes. We have also tested approximately 2,446 diabetes patients for podiatry complications resulting from the disease. When test results indicate a health concern patients are routinely referred for additional testing and treatment.

**Strategy #4: Implement and evolving range of tactics to sustain impact over time**

Our team has received a gift from the Larry H. and Gail Miller Family Foundation to establish Driving Out Diabetes, A Miller Family Wellness Initiative. This is a three-year gift to reduce the incidence of diabetes in the state of Utah and beyond. In addition to new clinical programs and expansion of the Diabetes Prevention Program, a large portion of these funds will be used to develop programs targeting those in the community that are at high-risk and are underserved.

The Run in Rhythm 5K event has been held since 2014 in conjunction with our Be Well Utah event. It was started as an initiative to encourage active, healthy lifestyles. There were approximately 2,500 people that participated in the most recent event, a record. Staying physically active is one of the most important lifestyle choices to reducing the chance of developing diabetes. We are encouraged by increasing participation in this run and the belief that the benefit of such events largely comes from training that occurs in the months and weeks leading up to the event.

Walk Away Obesity is another U of U Health initiative that promotes an active, healthy lifestyle to help prevent prediabetes. Obesity is often a precursor to the onset of diabetes. The rising rate of obesity in Utah follow a troubling national trend. The Walk Away Obesity event was initiated in 2015 as part of our Be Well Utah campaign. The walk has been held every summer since 2015, and is now a regular component of our Be Well Utah event.
Priority #2: First Trimester Prenatal Care

Goal
- Ensure consistent early access to prenatal care to reduce risks for at-risk women.

Performance Measures
- Process measures, such as number of educational sessions conducted in the community.
- Outcomes measures, such as reduction in percentage of first-time mothers delivering at University of Utah Health with no first trimester care.

Strategies/Tactics
- Address lack of financial coverage for prenatal care for low-income individuals
- Offer free pregnancy testing
- Tele-health for low risk prenatal care
- Expand use of group prenatal care visits

Response
U of U Health is committed to providing quality pregnancy care to low-income patients and has a robust charity care system that provides approximately $78 million in charity care annually. Additionally, we are one of the largest providers of health care to patients with Medicaid coverage. Low-income women are often eligible for emergency Medicaid assistance.

We offer a sliding fee schedule based on federal poverty levels for all patients at our South Main Clinic for prenatal care, labs and ultrasounds. We also offer free pregnancy testing services as well as assistance to these patients to help develop a plan to facilitate access to care for the balance of their pregnancy. Free pregnancy testing available at Hartland, Teen Mom, South Main Clinics

During the last three years, we have seen the number of patients without any insurance increase across almost all race demographics. The following three charts provide additional detail regarding the patients we have served, that qualify for Emergency Medicaid coverage:

<table>
<thead>
<tr>
<th>Race</th>
<th>Emergency Medicaid 2014</th>
<th>Emergency Medicaid 2017</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian and Alaska Native</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Asian</td>
<td>0.38%</td>
<td>3.30%</td>
<td>2.91%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>0.28%</td>
<td>3.02%</td>
<td>2.73%</td>
</tr>
<tr>
<td>Native Hawaiian and Other Pacific Islander</td>
<td>0.37%</td>
<td>2.10%</td>
<td>1.72%</td>
</tr>
<tr>
<td>Unknown</td>
<td>3.13%</td>
<td>5.15%</td>
<td>2.02%</td>
</tr>
<tr>
<td>White or Caucasian</td>
<td>0.06%</td>
<td>0.03%</td>
<td>-0.03%</td>
</tr>
</tbody>
</table>
Ensuring consistent access to prenatal care for at-risk women is a critical measure we track to ensure healthy pregnancies and outcomes. Over the past three years we have been tracking the number of times that a woman had no prenatal care in the first trimester of her pregnancy. The overall rate that had no first trimester care was approximately 15% of our patients. We had very few cases of mothers in traditional at-risk groups that had no prenatal care in their first trimester, as shown on the graphic below. We are continuing to focus our efforts on proper first trimester care, with an emphasis on bringing down the rates on no first trimester prenatal care for women in at-risk demographic groups.
Prenatal care expansion in within U OF U HEALTH Community Clinics

Our SUPeRAD Prenatal Specialty Clinic (Substance Use in Pregnancy Recovery, Addiction And Dependence) offers specialty prenatal care for women with substance use disorders at our South Jordan Health Center. Patients are seen by a Maternal Fetal Medicine provider and Addiction Fellow, amongst other providers. Care and support are offered to patients throughout pregnancy and post-partum. Additionally, the clinic offers Naloxone training and free Naloxone kits.
Project ECHO

The Pregnancy Care ECHO is an innovative telehealth project that seeks to provide greater access to the knowledge of obstetrics specialists in both rural and urban areas, with one of the benefit being more consistent access to prenatal care. This program benefits both clinicians and patients. Using teleconferencing technologies to facilitate an effective "knowledge network," advanced practice clinicians, midwives, family physicians, and obstetricians can enhance their knowledge of high-risk pregnancy care in a safe learning environment. Providers and their peers can present real life cases and receive feedback from a multidisciplinary team of experts. In addition, clinicians are updated regarding the latest in clinical trends from leading experts in the field of obstetrics.

Pregnancy Care ECHO offers community providers, at all levels of obstetric experience, access to a team of obstetrics specialists with the goal of increasing treatment efficacy at a primary care level, including prenatal care. Pregnancy Care ECHO launched June 5, 2015. The following statistics and charts show the progress we have made with this innovative tele-health program:

<table>
<thead>
<tr>
<th>Pregnancy Care ECHO Overall:</th>
<th>FY16 (July 1, 2015 – June 30, 2016)</th>
<th>FY17 (July 1, 2016 – June 30, 2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 ECHO sessions held</td>
<td>24 ECHO sessions held</td>
<td>26 ECHO sessions held</td>
</tr>
<tr>
<td>59 didactics</td>
<td>90 unique attendees</td>
<td>86 unique attendees</td>
</tr>
<tr>
<td>133 new patient presentations</td>
<td>197 total attendances</td>
<td>219 total attendances</td>
</tr>
<tr>
<td>30 follow up presentations</td>
<td>Average of 8.2 people/session</td>
<td>Average of 8.4 people/session</td>
</tr>
<tr>
<td>31 attendees presented cases</td>
<td>47 new patient presentations</td>
<td>60 new patient presentations</td>
</tr>
<tr>
<td>479 total attendances</td>
<td>11 follow up presentations</td>
<td>16 follow up presentations</td>
</tr>
<tr>
<td>163 unique attendees</td>
<td>21 attendees presented cases</td>
<td>10 attendees presented cases</td>
</tr>
<tr>
<td>Average of 8 people/session</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2015 ECHO Attendance Graph
Prenatal Classes
Childbearing is an exciting time of growth, change, and personal choices. To help patients prepare, we offer perinatal education on a variety of subjects related for pregnant women. Qualified educators, who are certified in each of their specialty areas, teach our classes. These classes are designed to assist women in meeting the upcoming changes in their lives and to make choices from many options available to expectant parents. Between 2015–2017 we have had approximately 845 women attend these prenatal classes.

Be Well Health Fair
Be Well Utah is a trademark of University of Utah Health designed to promote healthy lifestyle choices through research, education, and consumer driven healthcare. We believe that given quality information, consumers will make healthcare choices leading to preventative activities and early intervention when healthcare is required. Research has demonstrated that prevention and early intervention is less costly and positively impacts quality of life.

Community Education Sessions
The OBGYN department participates annually in the event coordinating volunteers and booth information including Birthcare Healthcare, South Main Clinic, Pediatrics, Reproductive Endocrinology and Research. We regularly conduct community education sessions. The following is a list of some of the prenatal related sessions we have conducted:

- Meet the Midwives, 6 times yearly
- Meet and greet followed by a tour of the Labor and Delivery unit at University Hospital.
- Volunteer Doula Workshop, twice yearly
- Free all-day workshop for community members who are interesting in becoming a birth doula. A doula is a person who assists a woman before, during, and after childbirth by providing physical, emotional, and informational support. No experience necessary.
• Despite steady rise in New OB Visits, the number of first time mothers seen during the first trimester remained stable at approximately 70% for the Birthcare Healthcare Midwifery Practice.

• Birthcare Healthcare Midwifery Group provided 2 to 3 group sessions per year at the Teen Mom Clinic. This involved approximately 25 patients per year.

• The Virtual Prenatal Care Program uses a combination of face-to-face and virtual appointments with a provider. For virtual visits the patient uses a smartphone, tablet or computer from the comfort of their home or office. Virtual prenatal care allows for more flexibility and convenience than traditional prenatal care.

Expand use of group prenatal care visits

Through a variety of delivery mechanisms, we have seen an increase in prenatal care visits. In fiscal year 2017, we increased the number of annual prenatal care visits by more than 6,200 visits, which is an increase of more than 34%. The following table details the various types of visits we have offered during this period:

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH RISK NEW PATIENT</td>
<td>5</td>
<td>2</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>HIGH RISK RETURN PATIENT</td>
<td>26</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LACTATION</td>
<td>423</td>
<td>422</td>
<td>474</td>
<td>455</td>
</tr>
<tr>
<td>LACTATION SJHC</td>
<td></td>
<td></td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>MYCHAR T OB</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>NEW FIVE FOR LIFE</td>
<td></td>
<td></td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>NEW INFERTILITY</td>
<td>5</td>
<td>1,288</td>
<td>1,439</td>
<td></td>
</tr>
<tr>
<td>NEW OB</td>
<td>2,063</td>
<td>2,515</td>
<td>2,645</td>
<td>2,765</td>
</tr>
<tr>
<td>OB VIDEO VISIT</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PREGNATAL DIAGNOSIS</td>
<td>48</td>
<td>51</td>
<td>48</td>
<td>8</td>
</tr>
<tr>
<td>REI VISIT</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RETURN INFERTILITY PATIENT</td>
<td></td>
<td></td>
<td>2</td>
<td>325</td>
</tr>
<tr>
<td>RETURN OB VISIT</td>
<td>14,649</td>
<td>17,264</td>
<td>18,084</td>
<td>18,503</td>
</tr>
<tr>
<td>TELEHOME</td>
<td></td>
<td>1</td>
<td>136</td>
<td>97</td>
</tr>
<tr>
<td>TELE-MED (no cost)</td>
<td>15</td>
<td>12</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>TELEMEDICINE OB</td>
<td>13</td>
<td>149</td>
<td>136</td>
<td>106</td>
</tr>
<tr>
<td>TELEMEDICINE VISIT</td>
<td>9</td>
<td>1</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>TELEPHONE VISIT</td>
<td>667</td>
<td>577</td>
<td>418</td>
<td>445</td>
</tr>
<tr>
<td>WELL WOMAN EXAM</td>
<td>78</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>17,996</td>
<td>21,025</td>
<td>23,269</td>
<td>24,213</td>
</tr>
</tbody>
</table>
South Main Clinic

The South Main Clinic offers primary care services to women, men and children during all stages of life. South Main also has an obstetrics/gynecology clinic and a Teen Mother and Child Program to help promote health during pregnancy.

For 22 years, the South Main Clinic has provided comprehensive medical care for at-risk and underserved families. The South Main Clinic provides primary care services including Pediatrics, Obstetrics and Gynecology, Midwifery Care, Family Medicine, and our Teen Mother and Child Program. South Main Clinic addresses the needs of underserved families in our community through high quality, comprehensive, and cost-effective care. In addition, it strives to provide care to specialized populations, such as Children with Special Health Care Needs and Teen Mothers, which lack access to appropriate services.

We provide families a Medical Home, assisting them with navigating a complex health care system, learning about important medical conditions, and receiving services in a comprehensive, coordinated fashion. We provide care to nearly 5,000 patients each year. Most patient’s families speak Spanish at home, but we have seen a growth in English speaking as well.

Currently there are 34 languages spoken at the South Main Clinic. Approximately 70% of our patients live at or below the federal poverty level. The South Main Clinic delivers full spectrum care to families regardless of their ability to pay. Approximately 65% of the patients are on Medicaid, 15% are privately insured, and 20% are uninsured and use our sliding scale fee system (based on income). We also offer our multicultural populations translation services. The increase in visits for prenatal patients at the South Main Clinic is shown in the chart below:
Hartland Family Partnership

To maintain services for the underserved population at Ellis R Shipp Community Health Center, Birthcare & Healthcare Midwifery provided prenatal care from July 2014 to June 2016 at UNP Hartland Partnership Center until it moved to South Main Clinic and expanded access and services for this patient population.

The UNP Hartland Partnership Center is a comprehensive capacity-building project that brings together more than 30 university departments and 20 local non-profit organizations in campus community partnership activities to offer resources such as English language instruction, mental health support, citizenship classes, employment workshops, afterschool and summer programs, and educational resources to the community. Between 2014 -2016 there were approximately 1,501 patient visits.
Priority #3: Behavioral/Mental Health

Goals

• Address behavioral health needs of patients where they present within the University of Utah Health system
• Minimize long-term individual, family, social, and U of U Health costs associated with untreated or late-treated mental health issues in the U OF U HEALTH patient population

Performance Measures

• Reduction in behavioral health emergency department (ED) visits by U OF U HEALTH patients recently seen for other conditions
• Fewer and shorter duration of ED observation cases awaiting placement in behavioral health unit or community agencies
• Expanded access to behavioral health services

Strategies/Tactics

• Integration of mental health via care plan for appropriate patients prior to leaving primary care clinics
• Expanded access to services with mix of mental health provider types
• Development of tele-health for consults throughout state
• Placement of child and adult psych residents with area community clinics

Historical Data

Utah sits in the middle of what some experts call the “suicide belt.” The state has one of the highest per capita suicide rates in the nation, often ranking between the fifth and seventh highest in the nation on a per capita basis. Currently, suicide is the leading cause of death for 10-17 year-olds in Utah. The overall suicide rate for Utah in 2015 was 24.5 per 100,000, which is considerably higher than the national average of 13.3. The data on the next page from the Utah Department of Health shows this preventable cause of death has been increasing over the last 17 years. One of the primary goals for behavior health outreach and crisis intervention services is to reduce the rate of death by suicide, suicide attempts and the need for admission to a hospital for a behavioral health crisis.
### Number of Suicide Deaths by Age Group and Rate of Suicide Deaths
Ages 10+ per 100,000 Population, Utah, 1999-2016

<table>
<thead>
<tr>
<th>Year</th>
<th>Ages 10-17</th>
<th>Ages 18-24</th>
<th>Ages 25-64</th>
<th>Ages 65+</th>
<th>Total Ages 10+</th>
<th>Overall Suicide Rate Ages 10+ per 100,000 Population</th>
<th>95% Confidence Interval</th>
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<td>32</td>
<td>*</td>
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Data Notes: *Data is suppressed due to counts less than five or the total can be used to calculate a cell with counts less than five. Rate is per 100,000 population. Pending totals represent all cases where the cause of death is yet to be determined for the age group specified. Data Sources: Utah Death Certificate Database, Utah Medical Examiner Database, US Census Bureau. Last Update: September 12, 2017
Through a variety of measures, we have reduced the average time to admit a patient into our psychiatric inpatient program following emergency department checkout. In FY 2015, the average wait time was 123.1 minutes and in FY 2017 it had been reduced to 92.4 minutes, a reduction of 30.7 minutes, or approximately 25%. We believe this leads to better patient care and less anxiety for the patient. One of the methods we used to reduce this wait time is embedding full-time psychiatrists within our emergency department who are better equipped to treat patients with mental health conditions. These physicians are able to determine which patients need to be admitted for their own safety and which ones could be better served in an outpatient setting. See the chart below for the reduction in wait times:

![Chart showing reduction in wait times from FY 2015 to FY 2017](chart.png)

**Expanded access to behavioral health services**

Given the strong demand for behavioral health care in the communities we serve, we have committed additional resources to try to better meet demand in our outpatient behavioral health clinics. Using 2014 as the baseline year, we have been able to increase the number of patients who were treated by over 44% or approximately 8,200 additional patient encounters in FY 2017.
For years, we have heard concerns from primary care physicians about lack of access to mental health specialists and poor communication with follow-through after patients are finally seen. There is an unfortunate division that exists between “medical” and “mental” health treatment. There is growing evidence that treatment of mental health disorders in the primary care setting is associated with improved overall health outcomes and the potential for cost savings. Unfortunately, implementation of mental health integration projects nationwide has been moving slowly. We are also aware that training on mental health issues during primary care residencies is variable and “on the job” experience is how most primary care physicians obtain knowledge on treating mental health disorders, usually with very little outside help from psychiatrists. To address these issues, UNI has been on the leading edge of providing primary care physicians with access to a team of on-demand psychiatrists through the GATE Program as well as improving integration of behavioral health professionals into the primary care setting.

The Gate Program is a novel, web–based consultation model aimed at extending mental health services to children and adults. This is done through patient–centered consultations between primary care physicians and psychiatric specialists. GATE is an acronym that stands for Giving Access To Everyone. Our goals are to improve access to mental health services for children and adults, improve collaboration between primary care physicians and mental health professionals, and enhance knowledge of how to manage mental health conditions in the primary care setting. As opposed to the traditional psychiatric clinic, we believe we can influence the greatest number of people with the GATE Program by providing high-quality care to families and children, while at the same time lowering costs and maintaining the majority of treatment in the medical home.

The number of GATE consultations has increased from zero in 2014 to more than 100 consults per year for the past two years. The decrease in consultations from 2016 to 2017 is primarily due to the integration of Clinical Social Workers who have been embedded in our primary care clinics. This has been a great benefit to both providers and patients as it allows a patient needing more in–depth mental health services to be seen at the time of their visit to the clinic without the short delay that is experienced by patients being treated via a GATE consultation. The following chart shows the utilization of the GATE consults over the past four years.
Placement of child and adult psych residents with area community clinics

Over the past several year we have focused on embedding Licensed Clinical Social Workers (LCSW) in a number of our primary care clinics. When a primary care physician determines a patient has a behavioral health need, they have the patient visit with an LCSW before they leave the clinic, thereby eliminating the need to schedule another visit. This has helped lower costs associated with untreated or late-treated mental health issues in the U of U Health patient population. Integrated behavioral health care has been a welcomed, and much needed, benefit that we now offer our patients at no additional charge. The following chart shows the significant increase in community clinic integration visits by LCSWs and psychiatric residents embedded in our primary care clinics. We will continue to pursue this effective integration strategy and expect the numbers will continue to increase:
In addition to the GATE Program we deliver other types of behavioral health outreach visits performed using tele-medicine via phone or internet-related technologies (e.g., crisis text). The primary outreach method is the 24/7 Crisis Line, which is an affiliate of the National Suicide Prevention Lifeline. The SafeUT app was rolled out as a free community resource for students in partnership with the Office of the Utah Attorney General and the Utah State Board of Education. UNI also provides free crisis response and hospital diversion programs that aim to keep individuals safe and divert them from an emergency department, if possible. The community crisis service programs are designed to provide the community with a full range of options to help solve the crisis in the best setting possible. Our team of professionals are highly trained in mental health crisis management and suicide prevention.

Our licensed clinicians provide prompt and compassionate crisis intervention, suicide prevention, information and referrals, as well as follow-up services, emotional support, and assistance to individuals experiencing emotional distress or psychiatric crisis.

We also operate a “Warm Line.” This line is for individuals who are not in immediate crisis, but are seeking support, engagement, or encouragement. Certified Peer Specialists offer support and empower callers to resolve problems by fostering a sense of hope, dignity, and self-respect. Callers may speak with peer specialists daily 9am to 10pm.

During the three-year period covering our initial Community Health Needs Assessment, the combined calls and text communications increased each year in accordance with the baseline goal to expand outreach services. It is important to note that these services are offered at no cost to the community. In 2015, the volume increased 12.2%; in 2016 it increased 11.5%; and in 2017 it increased an incremental 5.5%. As more individuals used the Warm Line and Crisis Chat options we saw the volume to the traditional Crisis Line drop in 2017, after three years of increased utilization:

One exciting emerging crisis-intervention service has been the crisis chat option that has been made available primarily to K-12 students via the SafeUT app. The SafeUT Crisis Text and Tip Line is a statewide service that provides real-time crisis intervention to youth through texting and a confidential tip program from a smartphone. Licensed clinicians in our 24/7 Crisis Line call center respond to all incoming chats, texts, and calls by providing supportive or crisis counseling, suicide prevention and referral services.
UNI’s goal is to help anyone with emotional crises, bullying, relationship problems, mental health, or suicide related issues.

Nearly 1,000 students utilized the service in FY 2016 when it was first introduced. In 2017, there was a nearly 10-fold increase in its utilization. The graph and chart below show the dramatic increase in crisis communications since the apps’ inception. This service is being rolled out to all of Utah’s 41 K-12 school districts and is being rolled out to students at the University of Utah in late 2017, on a pilot basis. If the pilot program works as expected it will be available to all institutions of higher education in the State of Utah.

![Crisis & Follow-up Texts Graph]

**Chat - CrisisLine**
Opens 2-way messaging with a SafeUT CrisisLine counselor.

**Call - CrisisLine**
Tap this to speak to a SafeUT CrisisLine counselor. The CrisisLine number will appear and you can call immediately.

**Submit a Tip**
Submit confidential tips to school administrators on bullying, threats, or violence.
Triaged through the Crisis Line, UNI Mobile Crisis Outreach Teams (MCOT) provide a free, prompt, face-to-face response to any resident of Salt Lake County who is experiencing a behavioral health crisis. MCOT teams are typically comprised of a Licensed Clinical Social Worker as well as a Peer Mentor with a lived experience. Youth and adult services teams are available 24/7 and offer consultation and support to individuals, families, schools, treatment providers and first responders. Follow-up services provide ongoing support, including referrals to health care providers and to community-based mental health services.