



An Assessment of the Burden of Arthritis in Utah

Findings from the 2013 and 2014 Behavioral Risk Factor Surveillance System



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Executive Summary

This report examines the burden of doctor-diagnosed arthritis among adults in Utah using data primarily from the 2014 Behavioral Risk Factor Surveillance System (BRFSS). The 2014 BRFSS data generated a sample of 3,892 Utah adults who reported having arthritis.

The report describes the prevalence of arthritis in Utah overall and within specific demographic groups, such as sex, age, race/ethnicity, education, and income. Other factors such as activity limitation, physical activity, health status, health-related quality of life, and weight category were also examined. Finally, the report includes information about hospitalizations and hospital charges associated with arthritis in Utah.

We hope the report will increase awareness of arthritis in Utah as a major public health issue and provide direction for implementing interventions needed to improve the health and quality-of-life for Utahns suffering from arthritis.

The 2014 Utah BRFSS data demonstrated that:

- Approximately 410,000 (20.1%) of Utah adults had some form of arthritis.
- Higher rates of arthritis were present in women (23.7%) vs. men (16.4%).
- The prevalence of arthritis increased with age, from 4.9 percent among those aged 18-34 to 52.4 percent among those aged 75 and older.
- Approximately 71.3 percent of adults with arthritis were overweight or obese compared to 56.5 percent of adults without arthritis.
- The percentage of adults who described their general health as fair or poor was 27.2 percent among those with arthritis compared to 8.2 percent among those without arthritis.
- Adults with arthritis reported being in poor physical health at a rate three times higher than adults without arthritis (31.1% vs. 9.9%).
- Adults with arthritis were twice as likely to report being inactive (23.3%) than adults without arthritis (15.0%).
- Among persons aged 25 and older, those with a college education or higher were least likely to have arthritis.
- Arthritis rates declined with increasing income; only 17.2 percent of adults in households with annual incomes of \$75,000 or more reported they had arthritis.

-
- Arthritis prevalence was highest among non-Hispanic/Latino Whites (21.7%), followed by 15.8 percent for non-Hispanic/Latino non-Whites, and 10.7 percent for Hispanic/Latinos.
 - Arthritis affected all racial groups, but rates are highest for Whites (21.1%) and American Indians (20.0%).
 - The prevalence of arthritis was significantly lower in Utah County Health District (17.6%) compared to the state rate (20.1%).
 - Local health districts where arthritis prevalence was significantly higher than the state rate included Central Utah (27.5%), Southeastern (28.8%), Southwest (24.4%), Tooele County (26.1%), and Weber-Morgan (23.2%).
 - In 2014, the age-adjusted prevalence of arthritis in Utah was 21.4 percent; which was slightly lower than the U.S. age-adjusted rate of 22.4 percent.
 - The prevalence of arthritis among Utah Small Areas ranged from a low of 9.1 percent in Provo (South) to a high of 33.4 percent in Carbon/Emery Counties.

Records from the 2013 Utah Hospital Inpatient Discharge Database also confirmed that arthritis is a major public health issue in Utah. There were 13,299 inpatient hospital visits with a primary diagnosis of arthritis in 2013, or 5.1 percent of all hospital visits in Utah. Total charges for patients with a primary diagnosis of arthritis were more than \$535 million and the average charge per visit was \$41,000.

Arthritis Definition

The word arthritis means joint inflammation. The twelfth edition of The Primer on Rheumatic Diseases, an Arthritis Foundation publication, identifies more than 100 rheumatic diseases and conditions, including osteoarthritis (which is the most common), rheumatoid arthritis, lupus, gout, and bursitis.¹ Typically, rheumatic conditions are characterized by inflammation, pain, and stiffness in and around one or more joints, the tissues which surround the joint, and other connective tissues.

“Diagnosed arthritis” or a “diagnosis” of arthritis is a term used in this report to describe persons who answer “yes” to the question, “Have you ever been told by a doctor that you have arthritis?” Therefore, arthritis refers to self-reported, doctor-diagnosed arthritis in this report. Although doctor-diagnosed arthritis is self-reported in the BRFSS and is not confirmed by a health care provider, such self-reports have been shown to be acceptable for surveillance purposes.

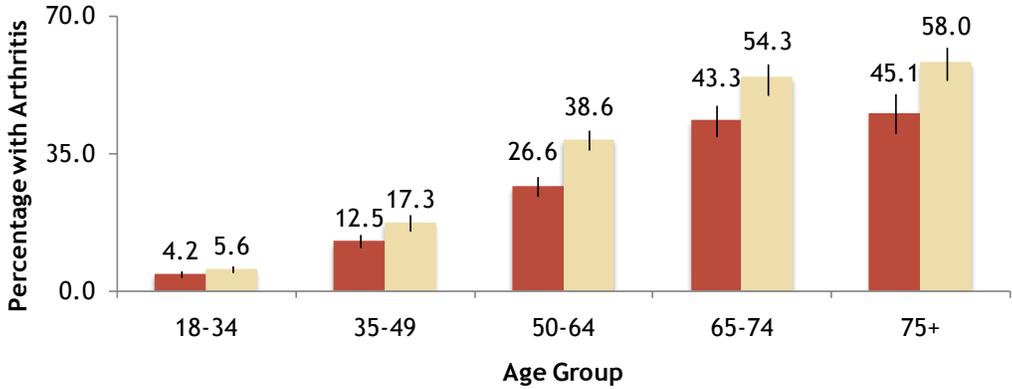
NOTE: Unless otherwise noted, rates shown in this document are 2014 crude rates.

Prevalence of Arthritis in Utah

In 2014, about one of every five adults (20.1%), or approximately 410,000 individuals, aged 18 and over in Utah had arthritis.² While arthritis affects both men and women, nearly one-fourth (23.7%), of Utah women reported arthritis compared to 16.4 percent of Utah men. Based on the 2014 Utah population 18 and older, this represents 243,000 women and 167,000 men.²

Although arthritis affects Utahns of all ages, some age groups are more likely to be impacted. The prevalence of self-reported arthritis ranged from 4.9 percent among 18-to 34-year-olds, to 52.4 percent among those 75 and older. Among women 75 and older, 58.0 percent reported arthritis compared to 45.1 percent of men in the same age category (See Figure 1).

Figure 1. Prevalence of Arthritis by Sex and Age Group Among Utah Adults, 2014



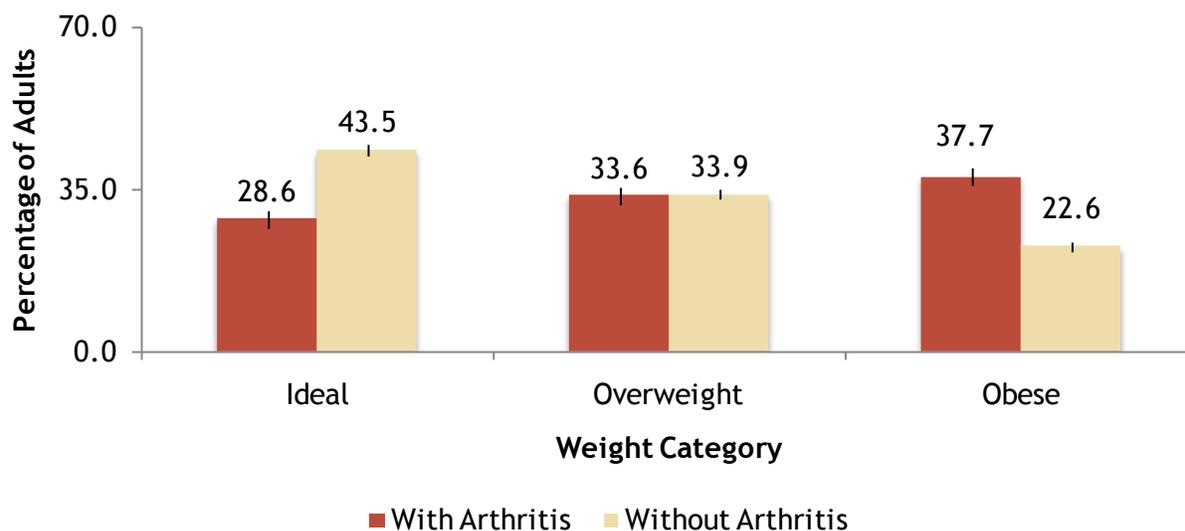
Source: Utah BRFSS 2014

■ Males ■ Females

Body Mass Index Rates Among People with and Without Arthritis

Obesity is a known risk factor for the development and progression of arthritis. Among adults with arthritis, 28.6 percent were at an ideal weight, 33.6 percent were overweight, and 37.7 percent were obese. This means that nearly three-fourths of adults with arthritis (71.3%) were overweight or obese. Among adults without arthritis 43.5 percent were ideal weight, 33.9 percent were overweight, and 22.6 percent were obese (See Figure 2).

Figure 2. Body Mass Index Rates Among People with and Without Arthritis, 2014



Source: Utah BRFSS 2014

Arthritis and Activity Limitation

When asked if arthritis or joint symptoms limited their activities, nearly one-half (46.7%) of Utah adults with arthritis or joint symptoms reported limiting their activities in 2013. Women with arthritis were more likely to have activity limitation due to arthritis and joint symptoms (49.4%) than men (42.7%).

In addition to activity limitations, 34.7 percent of working age (18-64 years) Utah adults with arthritis reported being limited in their ability to work in 2013. Among working-age women with arthritis in 2013, 37.8 percent have some work limitation due to their arthritis, compared to 30.3 percent of working-age men.

In 2013, pain played a leading role in limiting the activities of people with arthritis. Among Utahns with arthritis, 22.0 percent reported pain at a level of seven or higher, on a scale from 0 to 10, with 0 representing no pain, and 10 representing intense pain.

In 2014, persons with arthritis had a rate of activity limitation four times higher because of a physical, mental, or emotional problem than persons without arthritis (45.0% vs. 10.9%).

Management of Arthritis

In 2013, among Utah adults with arthritis:

- 72.0 percent (273,000) could do everything or almost everything they would like to do;
- 33.9 percent (132,000) reported a doctor or other health professional had suggested they lose weight;
- 58.7 percent (229,000) were told by their doctor or other health professional to exercise; and
- 2.9 percent (50,000) reported attending a self-management class to learn how to deal with their arthritis.

Persons with arthritis were six times more likely to report using special equipment such as a cane, wheelchair, or special bed compared to persons without arthritis (16.6% vs. 2.8%).

Health Status, Physical Health, and Arthritis

Utah adults with arthritis reported fair or poor health at three times the rate as adults without arthritis (27.2% vs. 8.2%). For this report, poor physical health was defined as experiencing seven or more days in the last month when their physical health was not good. Adults with arthritis reported being in poor physical health at a rate three times higher than adults without arthritis (31.1% vs. 9.9%) (See Figure 3).

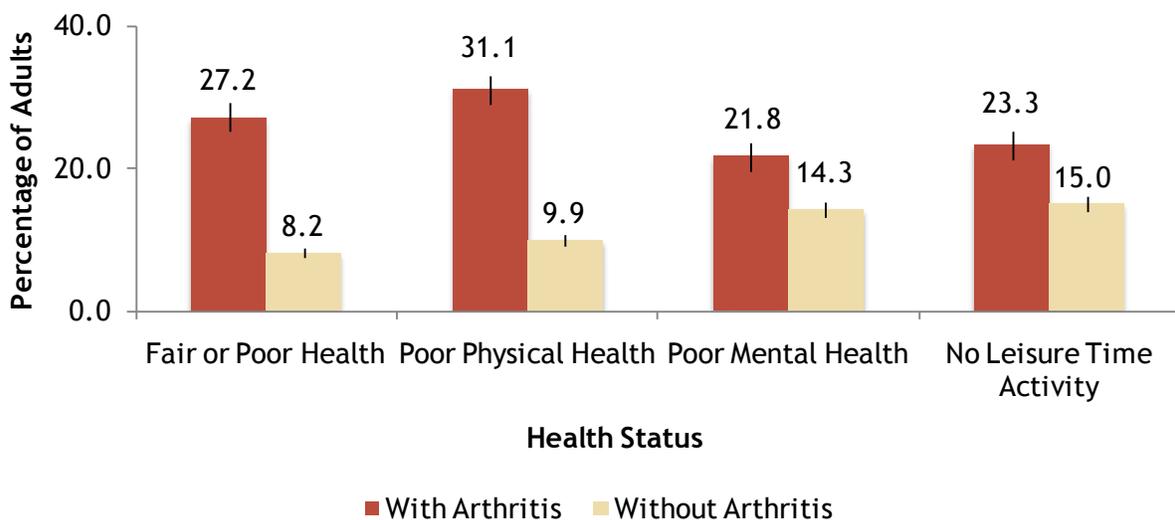
Arthritis and Mental Health

Poor mental health was defined as having seven or more days of poor mental health in the past month. The relationship between arthritis and poor mental health was less dramatic than it was for physical health; however, the pattern remained the same. One in five Utah adults with arthritis (21.8%) reported having poor mental health compared to one in seven adults (14.3%) without arthritis (See Figure 3).

Arthritis and Physical Inactivity

Although research shows physical activity can benefit people with arthritis, Utah adults with arthritis were more likely to report being inactive (23.3%) than persons without arthritis (15.0%) (See Figure 3).

Figure 3. Impact of Arthritis on Health-Related Quality of Life Among Utah Adults, 2014



Source: Utah BRFSS 2014

Health Care Access Among People with Arthritis Overall and by Age Groups

Compared to individuals aged 65 and older with arthritis, health care access was more limited among individuals aged 18-64 with arthritis (See Figure 4).

Among all Utah adults with arthritis:

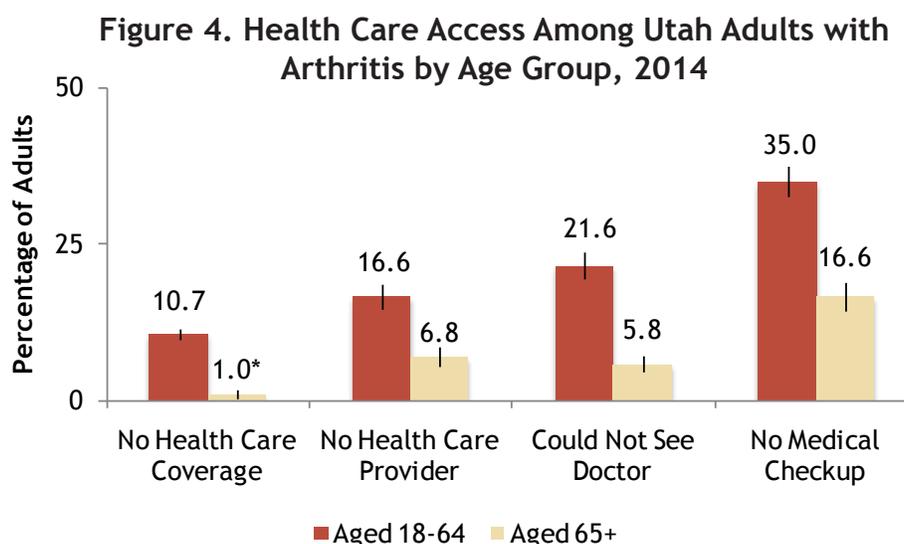
- 7.1 percent reported not having health care coverage;
- 12.8 percent reported not having a personal doctor or health care provider;
- 15.8 percent could not see a doctor when needed in the past 12 months because of the cost; and
- 28.1 percent did not have a routine medical checkup in the past 12 months.

Among Utah adults with arthritis aged 18-64 (See Figure 4):

- 10.7 percent reported not having health care coverage;
- 16.6 percent reported not having a doctor or health care provider;
- 21.6 percent could not see a doctor when needed in the past 12 months because of the cost; and
- 35.0 percent did not have a routine medical checkup in the past 12 months.

Among Utah adults with arthritis aged 65 and older (See Figure 4):

- 1.0 percent reported they did not have health care coverage*;
- 6.8 percent did not have a personal doctor or health care provider;
- 5.8 percent could not see a doctor when needed in the past year because of the cost; and
- 16.6 percent did not have a routine medical checkup in the past 12 months.



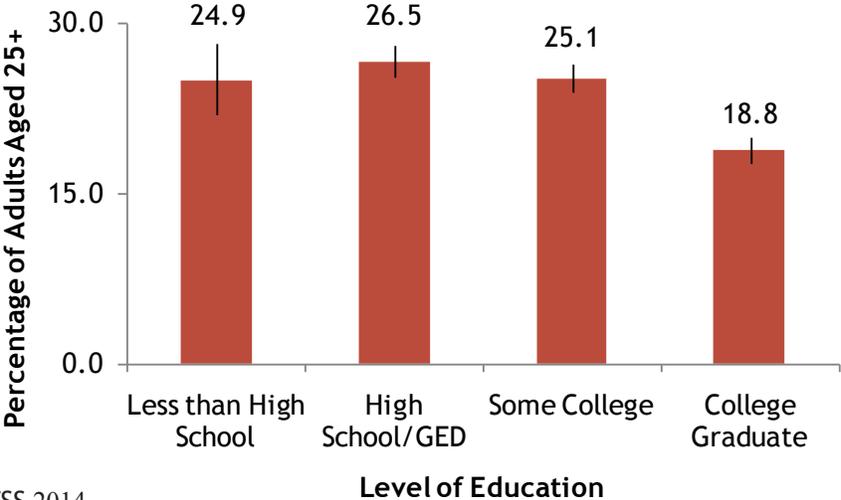
Source: Utah BRFSS 2014

*Use caution in interpreting, the estimate has a relative standard error greater than 30 percent and does not meet Utah Department of Health standards for reliability.

Prevalence of Arthritis by Education Level Attained

Because the majority of adults do not complete their highest level of education until age 25, data in Figure 5 focuses on the education level attained among adults aged 25 and older. Persons with a college education or higher were least likely to have arthritis (See Figure 5).

Figure 5. Prevalence of Arthritis by Education Level among Utah Adults Aged 25+, 2014

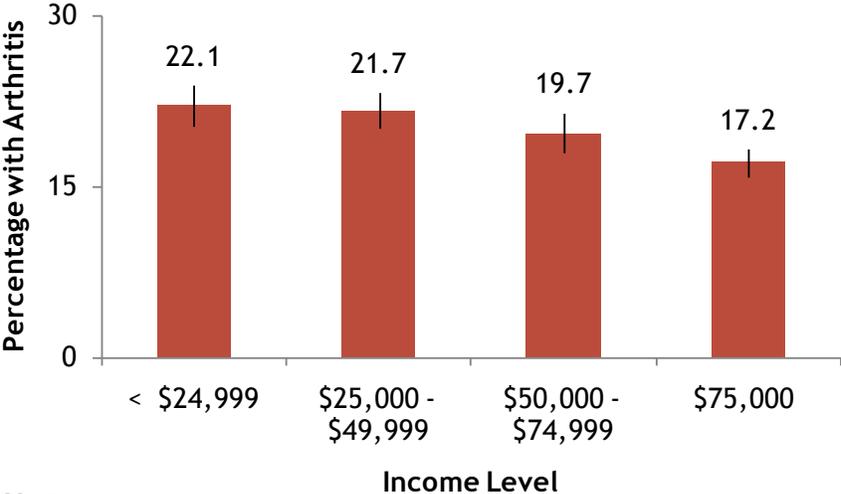


Source: Utah BRFSS 2014

Prevalence of Arthritis by Income

Arthritis rates declined with increasing income. Among persons with an annual income of less than \$25,000 in 2014, 22.1 percent stated they had arthritis. Only 17.2 percent of adults in households with annual incomes of \$75,000 or more reported they had arthritis (See Figure 6).

Figure 6. Prevalence of Arthritis by Income Among Utah Adults, 2014

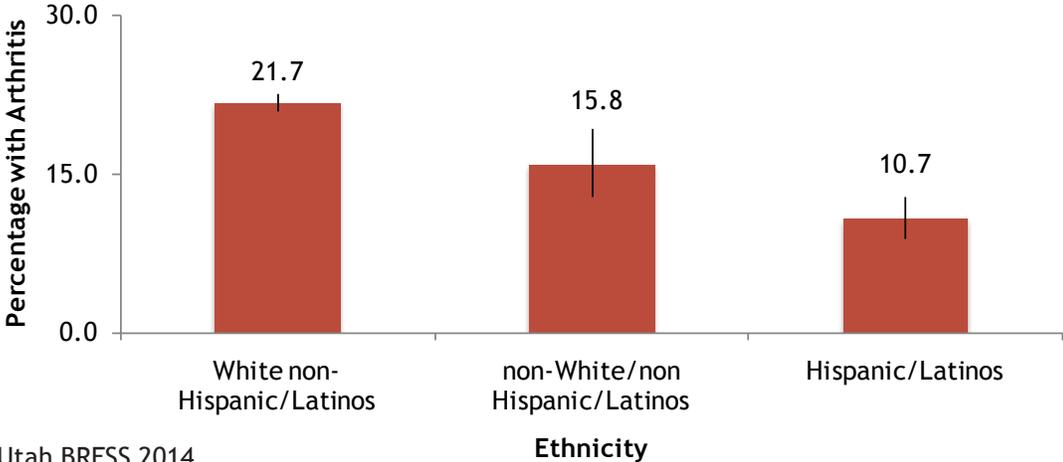


Source: Utah BRFSS 2014

Prevalence of Arthritis by Ethnicity

Arthritis prevalence was highest among non-Hispanic/Latino Whites (21.7%), followed by 15.8 percent for non-Hispanic/Latino non-Whites and 10.7 percent for Hispanic/Latinos (See Figure 7). The difference in the prevalence for the Hispanic/Latino population may be attributed to the fact that this population is younger overall. The age-adjusted estimate of arthritis among the Hispanic/Latino population was 18.5 percent.

Figure 7. Prevalence of Arthritis by Ethnicity Among Utah Adults, 2014

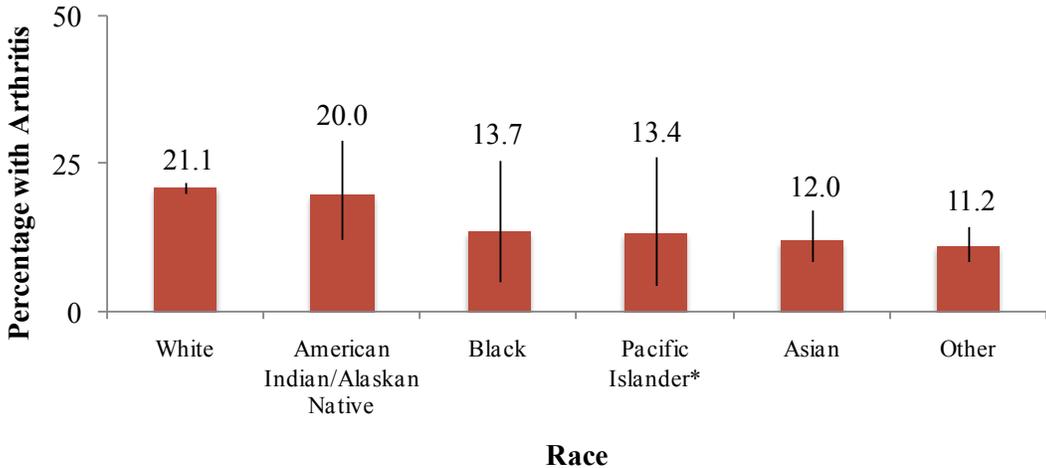


Source: Utah BRFSS 2014

Prevalence of Arthritis by Race

Arthritis affects all racial groups, but rates were highest for Whites (21.1%), followed by American Indians (20.0%) (See Figure 8).

Figure 8. Prevalence of Arthritis by Race Among Utah Adults, 2014



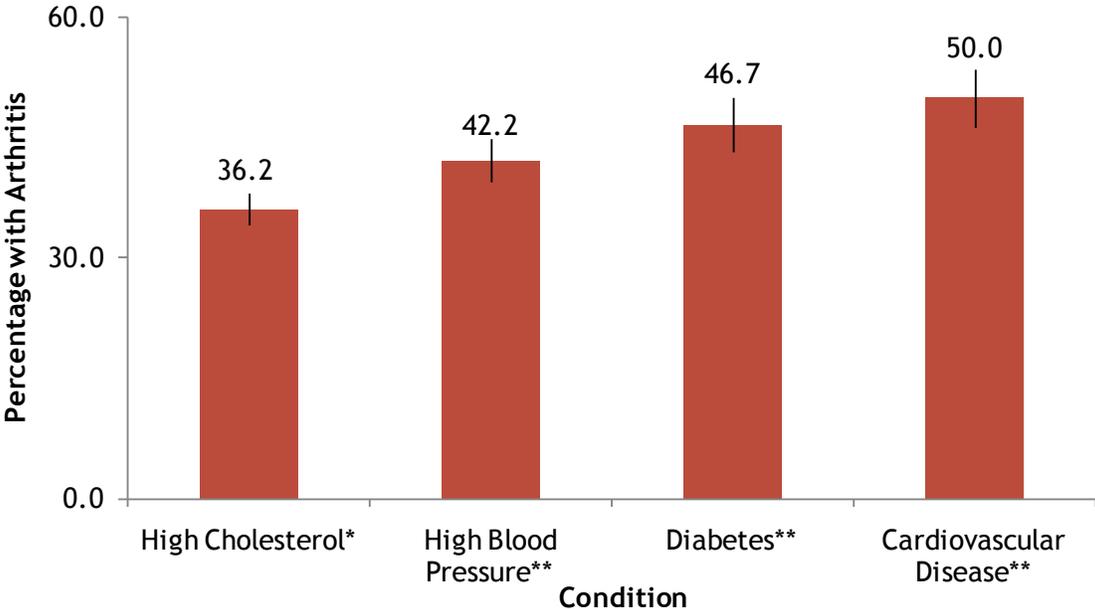
Source: Utah BRFSS 2014

*Use caution in interpreting, the estimate has a relative standard error greater than 30 percent and does not meet Utah Department of Health standards for reliability.

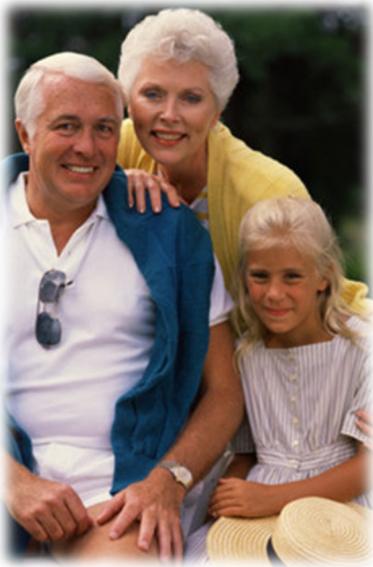
Arthritis and Coexisting Conditions

Arthritis was frequently associated with other chronic health conditions such as cardiovascular disease, diabetes, high blood pressure, and high cholesterol*. As seen in Figure 9, 36.2 percent of persons with high cholesterol, 42.2 percent with high blood pressure, 46.7 percent of adults with diabetes, and 50.0 percent of people with cardiovascular disease also had arthritis.

Figure 9. Arthritis Prevalence Among Utah Adults with Selected Chronic Conditions, 2013 and 2014



Source: * Utah BRFSS 2013
** Utah BRFSS 2014



Prevalence of Arthritis by Utah Small Areas

The prevalence of arthritis in Utah's Small Areas ranged from a low of 9.1 percent in Provo (South) to a high of 33.4 percent in Carbon/Emery Counties (See Table 1).

Table 1. Prevalence of Arthritis by Utah Small Areas, 2014

Small Area	Percentage with Arthritis	Statistical Significance Compared to the State Rate	Small Area	Percentage with Arthritis	Statistical Significance Compared to the State Rate
State Total	20.1		Springville/Spanish Fork	21.0	-
Provo (South)	9.1	Lower	South Ogden	21.1	-
West Jordan (West)/Copperton	10.9	Lower	Cache County (Other)/Rich County (All)	21.2	-
SLC (Glendale)	12.8	-	Roy/Hooper	21.2	-
Orem (West)	13.0	-	American Fork/Alpine	21.3	-
Logan	13.4	Lower	Orem (East)	21.4	-
SLC (Foothill/U of U)	14.1	-	Grand/San Juan Counties	21.6	-
Pleasant Grove/Lindon	14.2	Lower	West Jordan (Southeast)	21.7	-
Provo North (BYU)	14.2	-	Ben Lomond	22.2	-
Midvale	14.3	-	Ogden (Downtown)	22.8	-
Riverton/Draper	15.3	Lower	Southwest LHD (Other)	22.9	-
West Jordan (Northeast)V2	15.3	-	Cedar City	23.9	-
Lehi/Cedar Valley	16.1	-	Box Elder Co. (Other)	24.0	-
West Valley (West)	16.4	-	Farmington/Centerville	24.0	-
Summit County	16.8	-	Washington Co. (Other)	24.0	-
Clearfield/ Hill AFB	17.1	-	Tooele County	24.2	-
Millcreek	17.2	-	St. George	24.2	-
South Jordan	17.5	-	Cottonwood	24.5	-
South Salt Lake	17.6	-	Taylorsville (East)/Murray (West)	24.5	-
SLC (Downtown)	17.7	-	Utah County (South)	25.0	-
SLC (Avenues)	18.2	-	West Valley East Version 2	25.3	-
Syracuse/Kaysville	18.2	-	Sandy (Northeast)	25.5	-
SLC (Rose Park)	18.2	-	Juab/Millard/Sanpete Counties	26.0	Higher
Orem (North)	18.8	-	Taylorsville (West)	26.9	Higher
Magna	19.6	-	Bountiful	27.1	Higher
Sandy (SE)	19.6	-	Holladay	27.5	Higher
Wasatch County	20.2	-	Woods Cross/ North Salt Lake	27.7	Higher
TriCounty LHD	20.4	-	Sandy (Center)	27.9	Higher
Kearns V2	20.6	-	Riverdale	29.2	Higher
Layton	20.7	-	Sevier/Piute/Wayne Counties	31.0	Higher
Morgan County (All)/Weber County (East)	20.8	-	Brigham City	31.8	Higher
Murray	20.9	-	Carbon/Emery Counties	33.4	Higher

Prevalence of Arthritis by Local Health District

In 2014, the prevalence of arthritis was significantly lower in Utah County Health District (17.6%) than the state rate. Health districts that were significantly higher than the state rate were Central Utah (27.5%), Southeastern (28.8%), Southwest (24.4%), Tooele County (26.1%), and Weber-Morgan (23.2%) (See Figure 11).

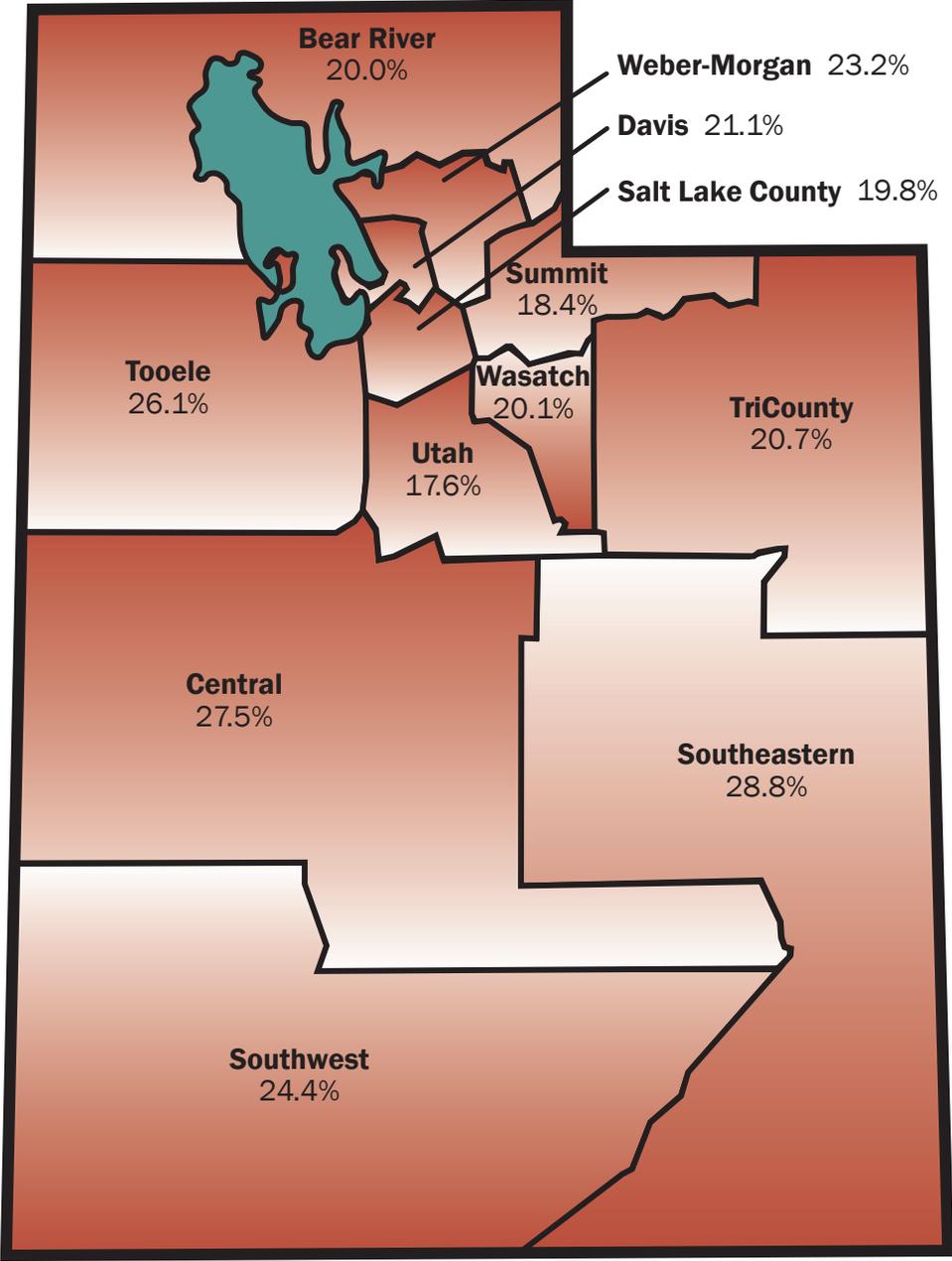
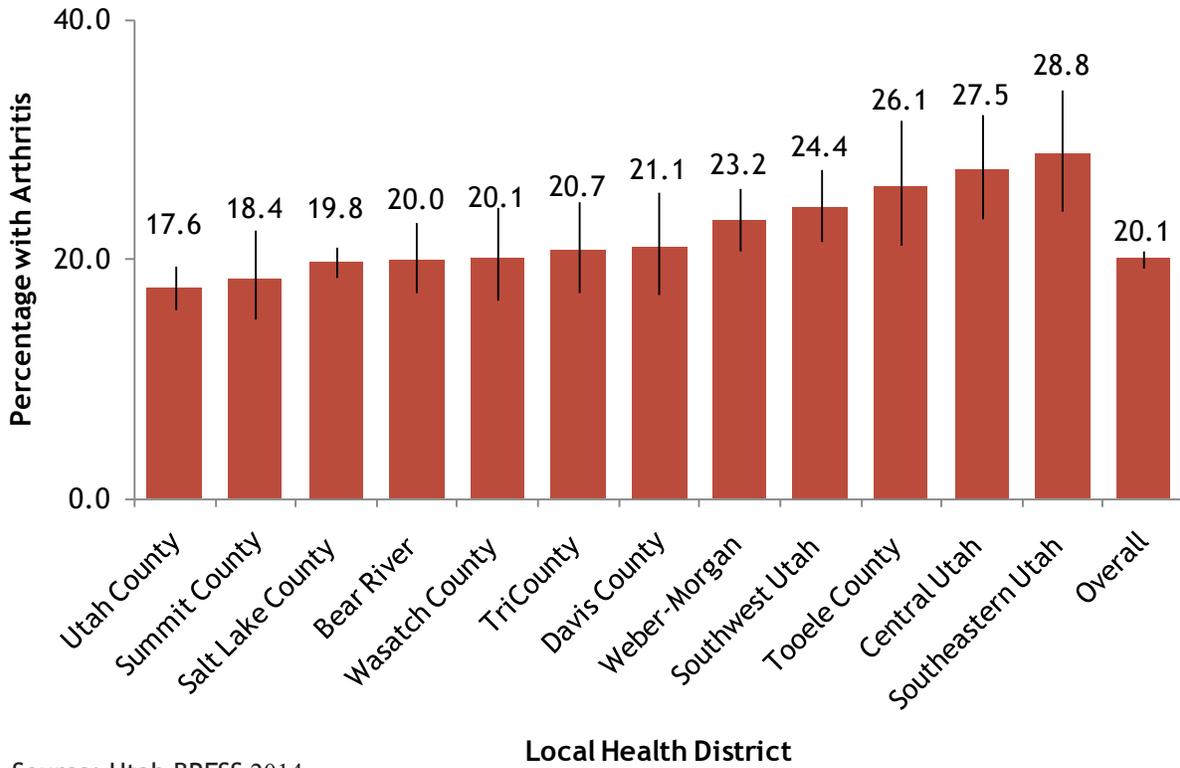


Figure 11. Percentage of Adults Reporting Arthritis by Local Health District, 2014



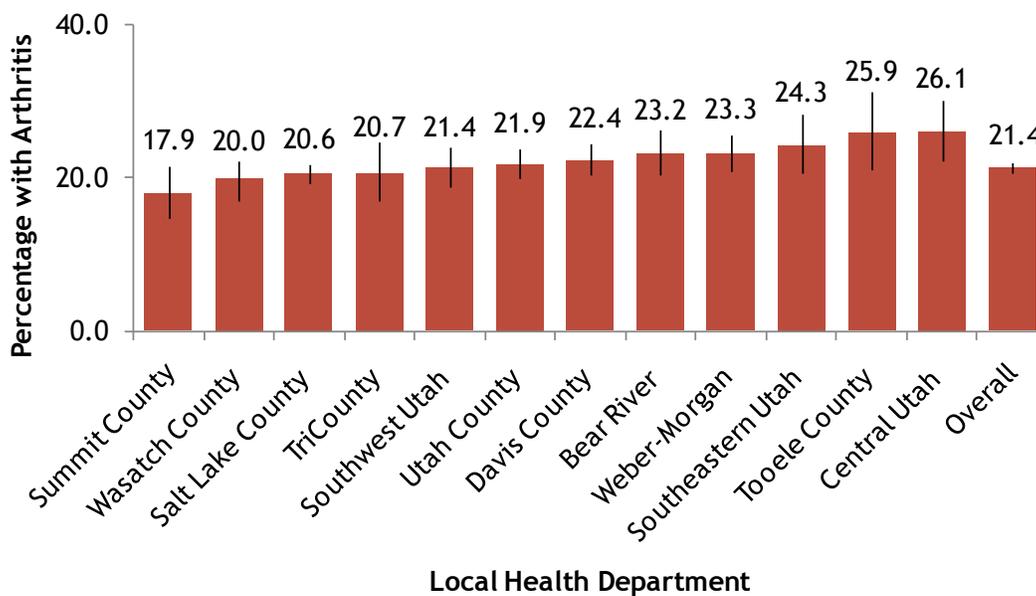
Source: Utah BRFSS 2014



Age-adjusted Prevalence of Arthritis by Local Health District

Because age is a risk factor for arthritis, it is beneficial to adjust for the effect of age when comparing populations that may have strong differences in age distributions. This helps determine if a certain population has factors that contribute to arthritis prevalence in addition to the effect of age. In 2014, the age-adjusted prevalence of arthritis was significantly higher in Central Utah Health District (26.1%) than the state rate. (See Figure 12).

Figure 12. Age-adjusted Percentage of Adults Reporting Arthritis by Local Health District, 2014



Source: Utah BRFSS 2014

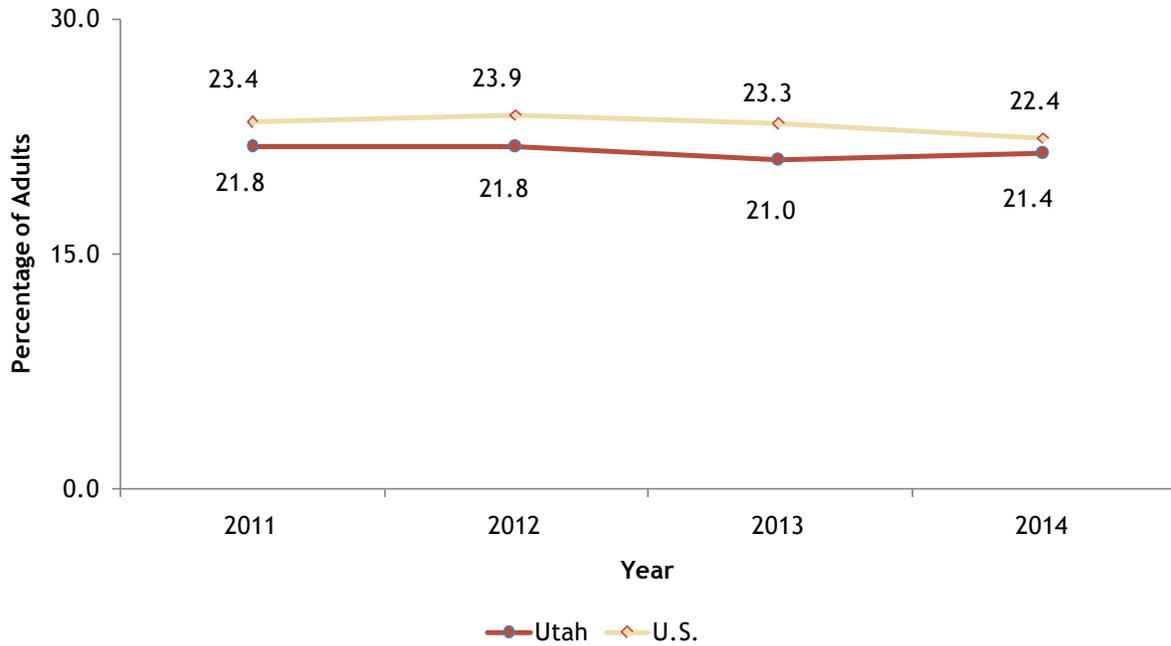
Age-adjusted to the U.S. 2000 standard population for comparison purposes.

Age-adjusted rates are based on eight age groups: 18-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75-84, and 85+.

Age-adjusted Prevalence of Arthritis Utah and U.S.

The age-adjusted prevalence of arthritis in Utah has been consistently lower than the U.S. rate from 2011 to the present. In 2014, the age-adjusted prevalence of arthritis in Utah was 21.4 percent, which was slightly lower than the U.S. age-adjusted rate of 22.4 percent.

Figure 13. Age-adjusted Prevalence of Arthritis, Utah and U.S. 2011 - 2014



Sources: Utah and U.S. BRFSS datasets

Age-adjusted to the U.S. 2000 standard population for comparison purposes.

Age-adjusted rates are based on eight age groups: 18-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75-84, and 85+.

Conclusions

Obtaining reliable arthritis data at state and local levels allows for accurate measurement of the prevalence of arthritis. Such data helps to set public health priorities and focus the use of limited public health resources in the most efficient way. It also helps us understand who is affected, who is at risk, what health behaviors increase that risk, and how the disease affects physical health, quality of life, and health care costs. Through awareness, education, and action, the public health concerns noted in this report could be addressed. Ultimately, adults with arthritis should learn about treatment options, attend self-management programs, participate in regular physical activity, and maintain appropriate body weight to relieve their symptoms.

The data in this report also described a serious problem about the impact of arthritis on the quality of life. Adults with arthritis were more likely to have poor general, physical, and mental health and to be less physically active than adults without arthritis. The lack of access to medical care reported by some adults with arthritis also raises concerns about providing these individuals with adequate treatment and education. For those with access to care, physicians and health care providers could use more opportunities to recommend exercise and weight control to those who could benefit.

References

1 Primer on the Rheumatic Diseases (Primer on Rheumatic Diseases (Klippel)) by John H. Klippel, John H. Stone, Leslie J. Crofford, and Patience H. White (Dec 12, 2007).

2 National Center for Health Statistics (NCHS) through a collaborative agreement with the U.S. Census Bureau, IBIS Version 2014.

Appendix A: Arthritis-related Inpatient Hospital Visits and Costs

Records from the 2013 Utah Hospital Inpatient Discharge Database confirmed that arthritis is a major public health issue in Utah. There were 13,299 inpatient hospital visits with a primary diagnosis of arthritis in 2013, or 5.1 percent of all hospital visits. Osteoarthritis accounted for 11,178 hospital visits or more than three-fourths (84.0%) of all hospital visits due to arthritis. Total charges for patients with a primary diagnosis of arthritis were more than \$535 million and the average charge per visit was \$40,737. The average inpatient length-of-stay for a patient with a primary diagnosis of arthritis was 2.9 days. Hospital visits for arthritis-associated knee and hip replacements accounted for 78.0 percent or 10,369 hospital visits due to arthritis in 2013, for a total cost of \$424,791,915 or more than three-fourths (79.4%) of all hospital charges for arthritis (See Table 2).

Table 2 – Arthritis-related Inpatient Hospital Visits and Costs, Utah Residents, 2013				
Diagnosis/Procedure	Hospital Visits*	Total Charges**	Average Charge**	Average Length of Stay
Arthritis	13,299	\$535,080,375	\$40,737	2.9 days
Knee Replacement	7,588	\$306,148,929	\$40,625	2.9 days
Hip Replacement	2,781	\$118,642,986	\$43,206	2.7 days

Age was associated with hospitalization of adults with arthritis. Of the 13,299 arthritis related inpatient visits in 2013, persons aged 55 and older accounted for more than three-fourths (81.4%) of arthritis-related hospital visits and 85.5 percent of knee and hip replacements due to arthritis. Total charges for persons aged 55 and older with arthritis accounted for 82.6 percent of all hospital charges due to arthritis and 85.3 percent of arthritis-associated knee and hip replacements (See Table 3).

Table 3 – Arthritis-related Inpatient Hospital Visits and Costs, Utah Residents Age 55 and Older, 2013				
Diagnosis/Procedure	Hospital Visits*	Total Charges**	Average Charge**	Average Length of Stay
Arthritis	10,828	\$442,125,783	\$41,398	2.9 days
Knee Replacement	6,529	\$262,651,735	\$40,526	2.9 days
Hip Replacement	2,335	\$99,575,632	\$43,275	2.7 days

Source: Utah Inpatient Hospital Discharge Data, Office of Health Care Statistics, Utah Department of Health

* Includes hospital visits with a primary diagnosis of arthritis using ICD-9 Codes 095.6, 095.7, 098.5, 099.3, 136.1, 274, 277.2, 287.0, 344.6, 353.0, 354.0, 355.5, 357.1, 390, 391, 437.4, 443.0, 446, 447.6, 696.0, 710, 711, 712, 713, 714, 715, 716, 719.0, 719.2-719.9, 720, 721, 725, 726, 727, 728.0-728.3, 728.6-728.9, 729.0, 729.1, 729.4

The ICD-9 Procedure Codes for Knee and Hip Replacements are 81.54 and 81.51, respectively.

** The charges shown differ from “costs,” “reimbursement,” “price” and “payment.” Different payers have different arrangements with each hospital for payment. Many factors affect the cost for a hospital stay, including a patient’s health insurance, the type of insurance, and the billing procedures at the hospital.

Appendix B: What is Being Done to Address Arthritis in Utah?

The UAP was established in 1999 with funding from the CDC. Since that time, the UAP and its partners have been working to:

- provide an effective public health program for arthritis; monitor the burden of arthritis within Utah;
- measure the impact of interventions;
- routinely update state plans targeting persons with arthritis;
- create sustainable partnerships to expand the reach of evidence-based interventions;
- collaborate with other chronic disease programs to promote systems change; and
- implement the CDC health communication campaign, “Physical Activity. The Arthritis Pain Reliever.”

In an effort to improve the quality of life of Utahns affected by arthritis, the UAP supports the evidence-based programs listed in Table 4.

Table 4 – Evidence-based Intervention Delivery Programs	
Description of Program	Demonstrated Benefits
<p>Arthritis Foundation Exercise Program (AFEP) – This program uses low impact exercises to relieve stiffness, decrease pain, and restore or maintain muscle strength. Classes meet two or three times per week.</p>	<ul style="list-style-type: none"> • Improved functional ability • Decreased depression • Increased confidence in being able to exercise
<p>Chronic Disease Self-Management Program (CDSMP) – The CDSMP is for people with chronic health problems. The program was developed at Stanford University. Participants meet for 2 and 1/2 hours per week for six weeks. Workshop topics include: managing a chronic disease; appropriate exercise; managing medications; communicating with family, friends, and health professionals; nutrition; and how to evaluate new treatments.</p>	<ul style="list-style-type: none"> • Improved ability to exercise • Improved ability to do social and household activities • Less depression, fear, and frustration • Less worry about personal health • Reduced pain • Increased confidence to manage a chronic condition
<p>Tomando Control de su Salud - Tomando Control de su Salud is a self-management education program developed for Spanish-speaking people with a variety of chronic health problems. This program is similar in content and process to the English language version of CDSMP.</p>	<ul style="list-style-type: none"> • Improved ability to exercise • Improved ability to do social and household activities • Less depression, fear, and frustration • Less worry about personal health • Reduced pain • Increased confidence to manage a chronic condition
<p>EnhanceFitness (EF) – Program instructors focus on stretching, flexibility, balance, low impact aerobics, and strength training exercises. Classes meet three times a week for one hour.</p>	<ul style="list-style-type: none"> • Increased strength, flexibility, and balance • Increased activity levels • Elevated mood
<p>Walk With Ease (WWE) – WWE is a walking program offered by the Arthritis Foundation. Participants meet three times a week in groups of up to 30 participants under the supervision of a trained leader.</p>	<ul style="list-style-type: none"> • Increased fitness • Improved ability to walk safely and comfortably • Improved flexibility, strength, and stamina • Reduced pain

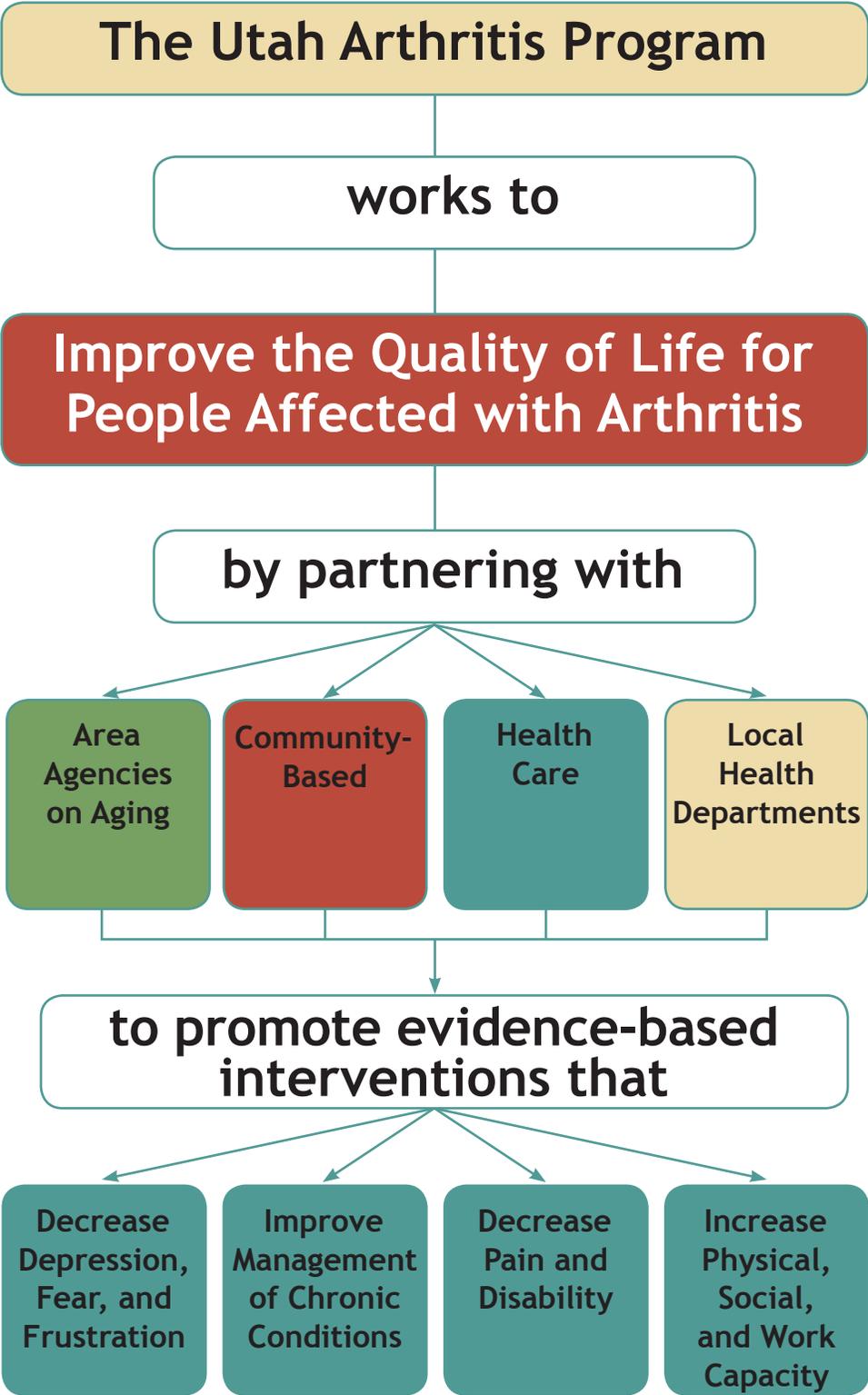
Appendix C: Utah Arthritis Program Delivery Partners

For information about evidence-based programs in Utah shown to reduce the burden of arthritis, visit <http://livingwell.utah.gov.html>.

During the last five years, the UAP has built an outstanding partner network. Currently the UAP partners with the following organizations to provide evidence-based programs to reduce the burden of arthritis in Utah (See Table 5). To learn more about our current partners, visit <http://health.utah.gov/arthritis/currentpartners.html>.

Arthritis Foundation Great West Region	Salt Lake County Active Aging Program
Bear River Health Department	San Juan Counseling
Bear River Association of Governments	The Orthopedic Specialty Hospital
Centers for Independent Living	Tooele County Health Department
Central Utah Health Department	University of Utah Community Clinics
Comunidades en Accion	Utah County Health Department
Davis County Health Department	Utah Navajo Health System
Five County Area Agency on Aging	Veterans Administration
Intermountain Healthcare	Wasatch County Health Department
Molina Healthcare	Weber Human Services
National Tongan American Society	Weber-Morgan Health Department

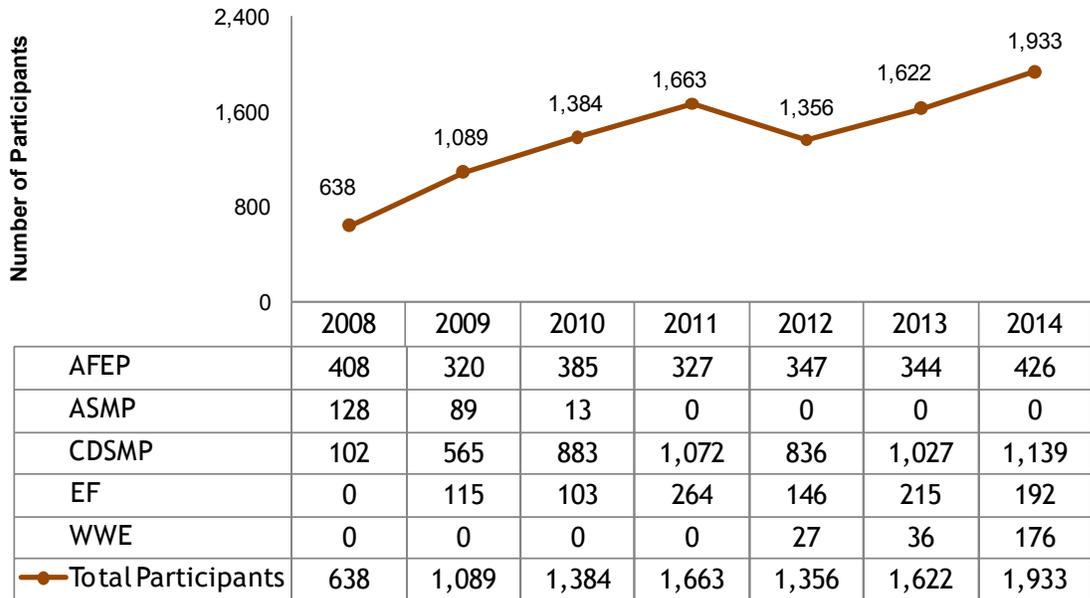
Appendix D: Arthritis Program Delivery Model



Appendix E: Impact of Interventions in Utah

The UAPs existing partners have successfully implemented the AFEP, CDSMP, EF, and Tomando Control de su Salud interventions in a way that has allowed for growth almost every year (See Figure 12).

**Figure 12. Participation in Evidence-based Programs by Calendar Year
January 2008 - December 2014**



Source: Utah Arthritis Program participant reach data

AFEP – There are currently 14 ongoing Arthritis Foundation Exercise Program (AFEP) classes being offered in seven Utah counties. From 2008 through 2014, the Utah Arthritis Foundation enrolled 2,557 participants in the AFEP. For information about the AFEP, contact Randy Tanner at rtanner@utah.gov.

Arthritis Self-Management Program (ASMP) – At one time, the Arthritis Foundation offered the ASMP; however, because most individuals with arthritis have multiple chronic conditions, it was determined that the CDSMP was more suitable to our target population.

CDSMP and Tomando Control de su Salud – From September 2008 through December 2014, 5,624 participants enrolled in the CDSMP workshops (English and Spanish). The number of participants grew from 102 in 2008, to a high of 1,139 in 2014. Since 2008, more than three-fourths (79%) of participants attended a workshop in Davis, Salt Lake, Utah, or Weber Counties, which closely reflects the distribution of the state population. Eighteen host organizations provided workshops at 285 unique sites in 20 of Utah’s 29 counties. The number of workshops increased from eight in 2008 to a high of 109 in 2014. For information about the CDSMP (Spanish and English) and a current list of classes, visit <http://livingwell.utah.gov>.

EnhanceFitness – Since the Salt Lake County Active Aging Program implemented the EnhanceFitness Program in January 2009, they have enrolled 1,035 new participants at 16 senior centers. For information about the EnhanceFitness program, contact Nichole Shephard at NShepard@slco.org.

Walk With Ease (WWE) – From July 2012 through December 2014, 239 individuals participated in the WWE program. For information about the WWE program, contact Leslie Nelson at lnelson@arthritis.org.

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