Utah Atlas of Healthcare

Volume 1, Number 1, September 2010

Antidepressant Use In Utah

Utah Health Data Committee

UTAH DEPARTMENT OF HEALTH

Depression and Antidepressant Use in Utah

Depression is recognized as a significant public health concern. It has been estimated that as many as one in eight Americans nationwide will experience an episode of depression requiring treatment.[1-2] According to the Council on Scientific Affairs of the American Medical Association, up to four percent of people at any one time suffer from depression.[3] The following report describes the extent and dimensions of this public health issue in Utah.

Depression is a common illness characterized by a variety of potentially debilitating symptoms. These symptoms may include:

- Loss of interest in important activities, friendships, and family
- Decreased energy and increased levels of fatigue
- Disturbances in cognitive functioning including difficulty concentrating, making decisions, and organizing one's thoughts
- Disturbances in one's mood such as increased irritability and restlessness
- Sleep and appetite disturbances
- Persistent and overwhelming feelings of sadness and anxiety
- Feelings of worthlessness, helplessness and/or hopelessness
- Thoughts of suicide and suicide attempts[4]

With so many potentially devastating symptoms it is easy to see how depression can negatively impact one's life. Earlier research has estimated that nearly 80% of people with depression experience difficulties maintaining their marriage, family, and social relationships and experience difficulties at work and school.[5]

Researchers have estimated that the impact of depression on one's quality of living and daily functioning matches that of heart disease and actually exceeds that of diabetes and arthritis.[6-7] In addition to personal and family distress, the functional impairment caused by depression results in billions of dollars of direct and indirect healthcare costs, decreased workplace productivity and increased absenteeism.[5-6]

The prevalence of depression, in addition to the emergence of a new class of effective and safer antidepressant medications, has contributed to antidepressants becoming one of the most widely prescribed medications in the United States and Utah. Evaluating antidepressant use in Utah provides a unique opportunity to better understand the demographics, real costs and impact of depression.

For this report commercial health insurance claims from 899,323 Utah residents were examined for antidepressant use. In all, more than six million pharmacy claims from 2009 were reviewed, representing nearly $277 million in total pharmaceutical expenditures. From these claims more than 84,000 people were prescribed antidepressants. More than a half a million insurance claims were submitted for antidepressant medications, representing more than $19 million dollars in expenditures for antidepressant medications.

This report looks at how antidepressant use compares to other medications. In addition, this report looks at antidepressant use by age, sex, geographic location, and the health status of the Utah healthcare consumer. This report is intended to serve as a foundation for greater dialogue between healthcare consumers, healthcare providers, policy makers, researchers and public health professionals. This report and those to follow will support dialogue based upon a foundation of sound empirical data.

How Do Antidepressants Compare?

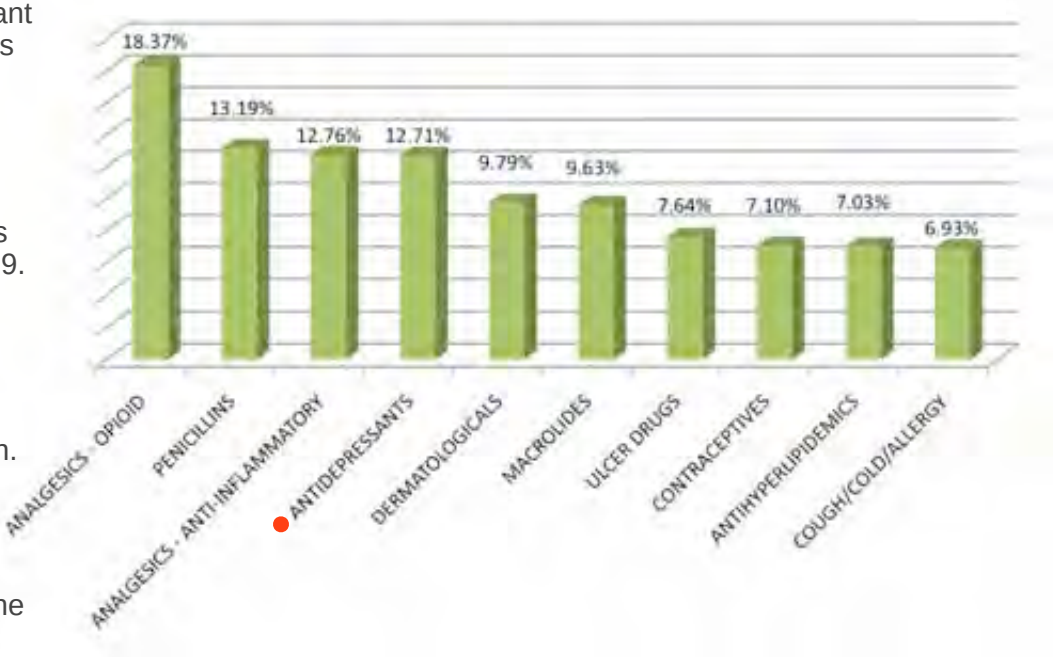
Antidepressants are one of the most widely prescribed medications in the United States and Utah. To better grasp the magnitude of antidepressant use in Utah, utilization characteristics among the top ten most prescribed drug classifications are compared.

This comparison examines percentage of dollars spent and percentage of healthcare consumers prescribed these medications in 2009.

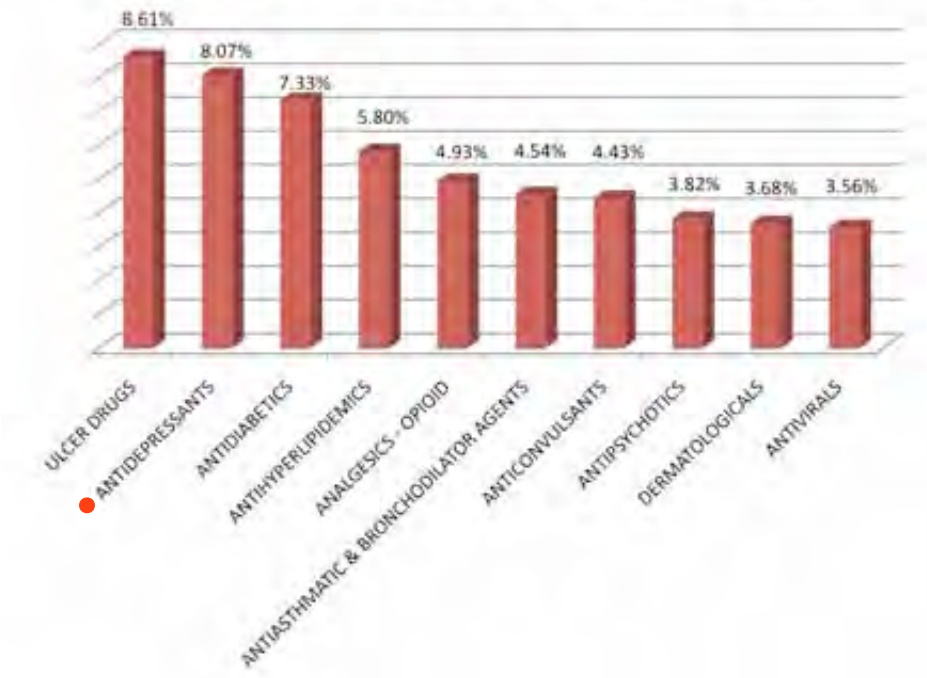
Comparing the percentage of Utah healthcare consumers prescribed antidepressants to other classifications of pharmaceuticals provides a broad picture of utilization.

Antidepressant use ranks as the fourth highest among the top ten pharmaceutical classifications with 12.71% of the population between the ages of 18 and 64 having been prescribed antidepressants in 2009.

Percent of People (ages 18-64) Prescribed Pharmaceuticals by Therapeutic Classification



Percent of Total Dollars Spent on Pharmaceuticals Among People Ages 18-64 by Therapeutic Classification



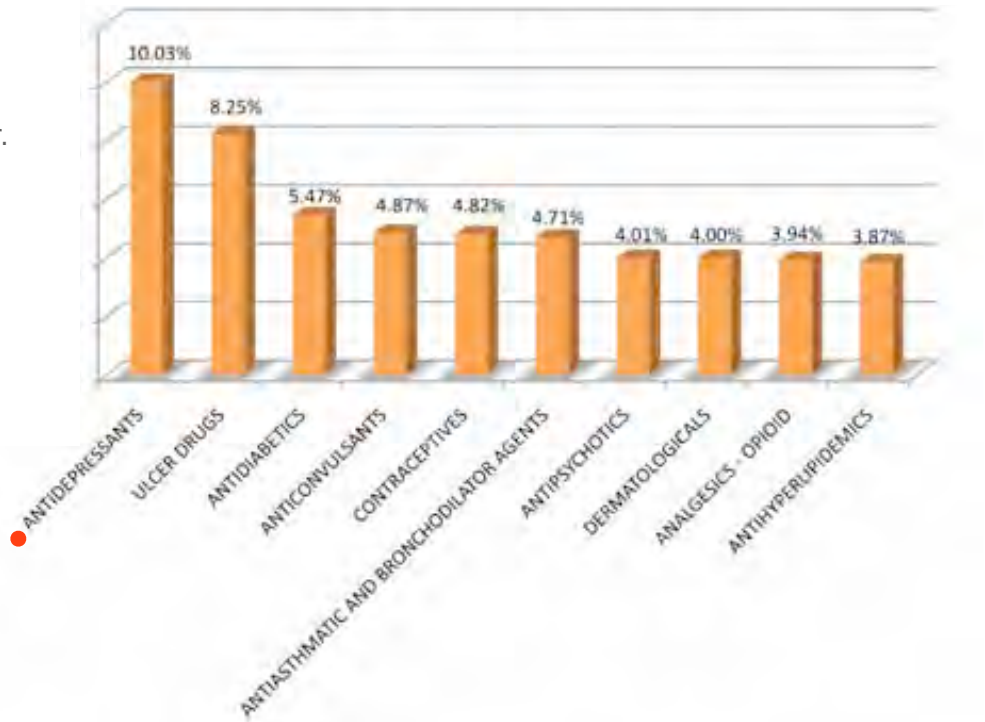
When the percentage of total dollars spent on pharmaceuticals among Utah residents (ages 18-64) is examined we see that antidepressants are ranked second, just behind medications for treating gastric ulcers/acid reflux. Medications to treat and manage diabetes fall just below antidepressants.

How Do Antidepressants Compare? - Continued

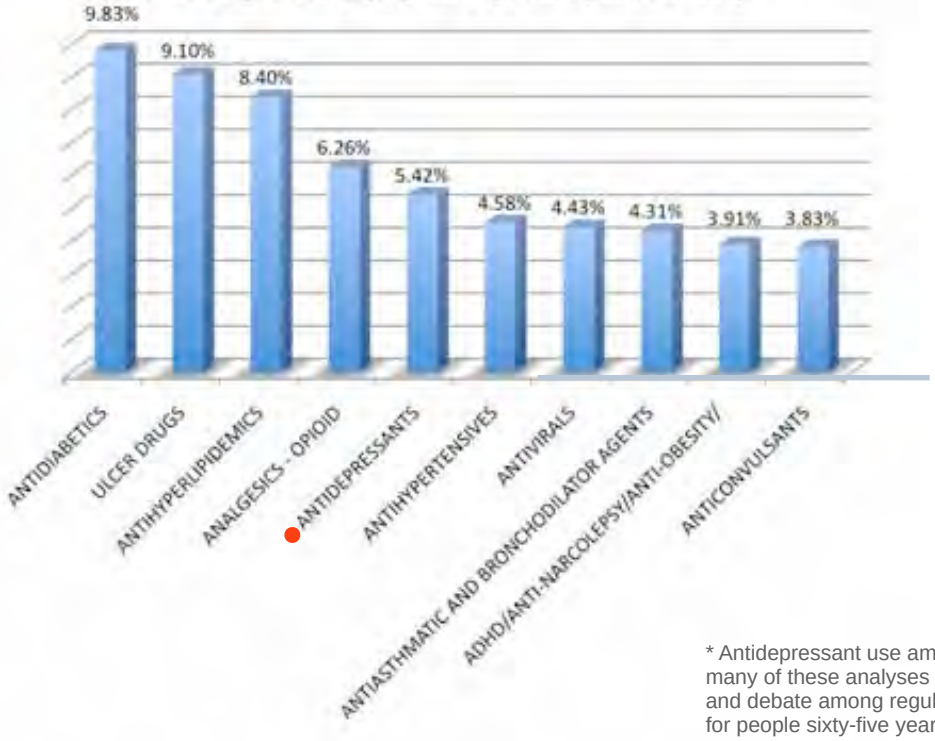
Different prescription use patterns emerge when the percentage of dollars spent on pharmaceuticals is viewed by sex of the healthcare consumer.

The cost of antidepressants prescribed to females ages 18-64* ranked first among the top ten - amounting to just over 10% of the total dollars spent on pharmaceuticals for females in 2009.

Percent of Total Dollars Spent on Pharmaceuticals Among Females Ages 18-64 by Therapeutic Classification



Percent of Total Dollars Spent on Pharmaceuticals Among Males Ages 18-64 (Top Ten by Therapeutic Class)



The cost of antidepressants prescribed to males ages 18-64 ranked fifth among the top ten - amounting to just over 5.4% of the total dollars spent on pharmaceuticals for males in 2009.

Selective serotonin re-uptake inhibitors (SSRIs) represent the vast majority of antidepressant medications prescribed in Utah among men and women. SSRIs account for nearly 70% of all antidepressants prescribed in Utah (See Appendix A).

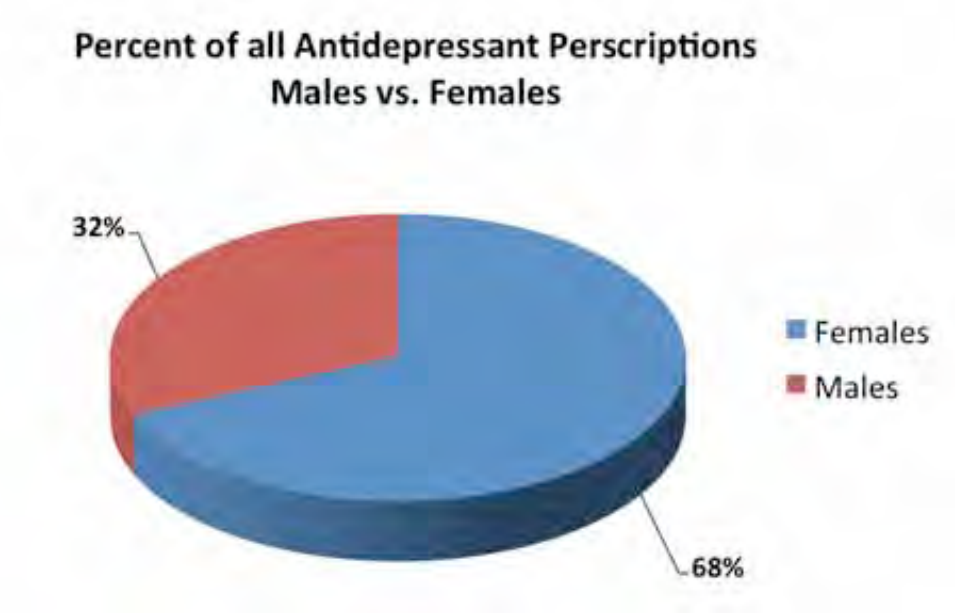
* Antidepressant use among persons birth to seventeen years old are excluded from many of these analyses as antidepressant use with children is a topic of discussion and debate among regulatory agencies, healthcare providers and researchers. Data for people sixty-five years old and older are currently not available.

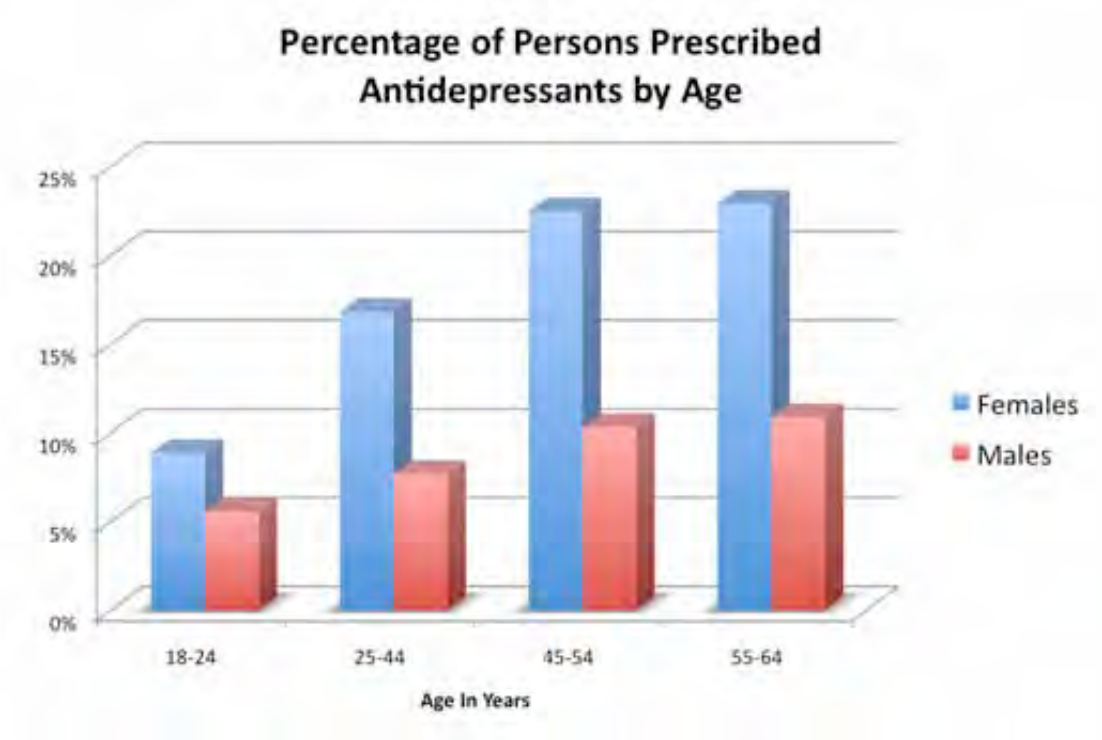
Antidepressant Use by Age and Sex

When antidepressant utilization is evaluated by sex of the healthcare consumer we see dramatic differences between males and females.

In the sample evaluated, females were prescribed antidepressants at a rate more than twice that of males.

In 2009, the proportion of persons prescribed antidepressants was 68% female and 32% male among people 18-64 years old.





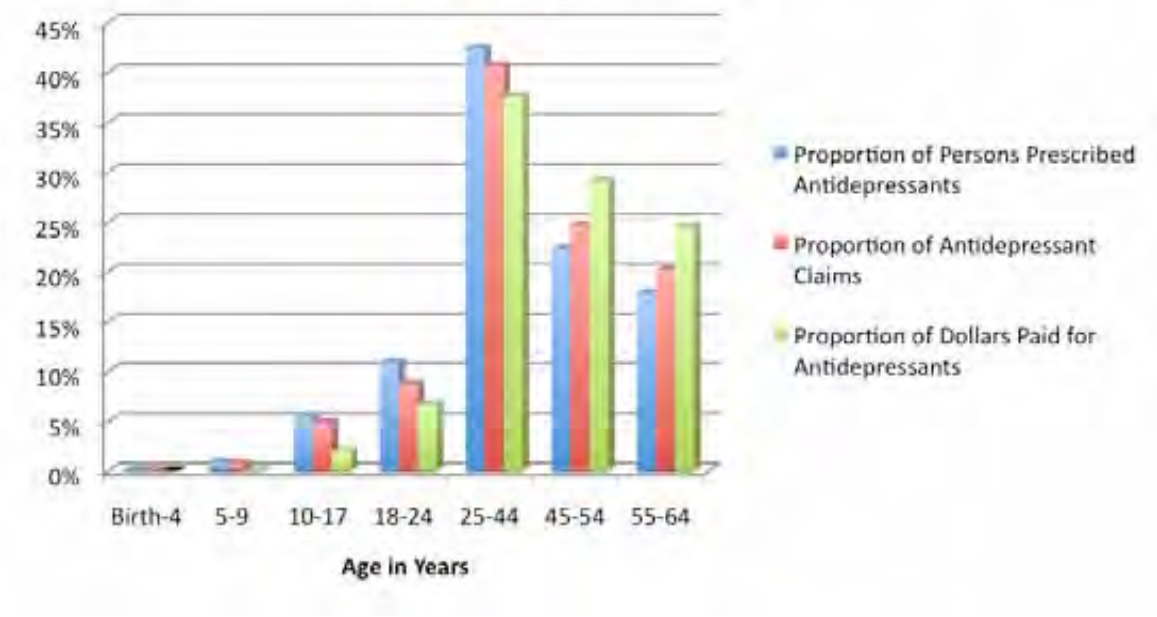
The percentage of females in Utah ages 18-64 prescribed antidepressants in 2009 was 17.1%. This is more than double the rate for males. The percentage of males in Utah ages 18-64 prescribed antidepressants in 2009 was 8.2%.

The frequency distribution among males and females increases with age, peaking among persons between 55-64 years old. The frequency distribution also shows the gap between males and females widens with age.

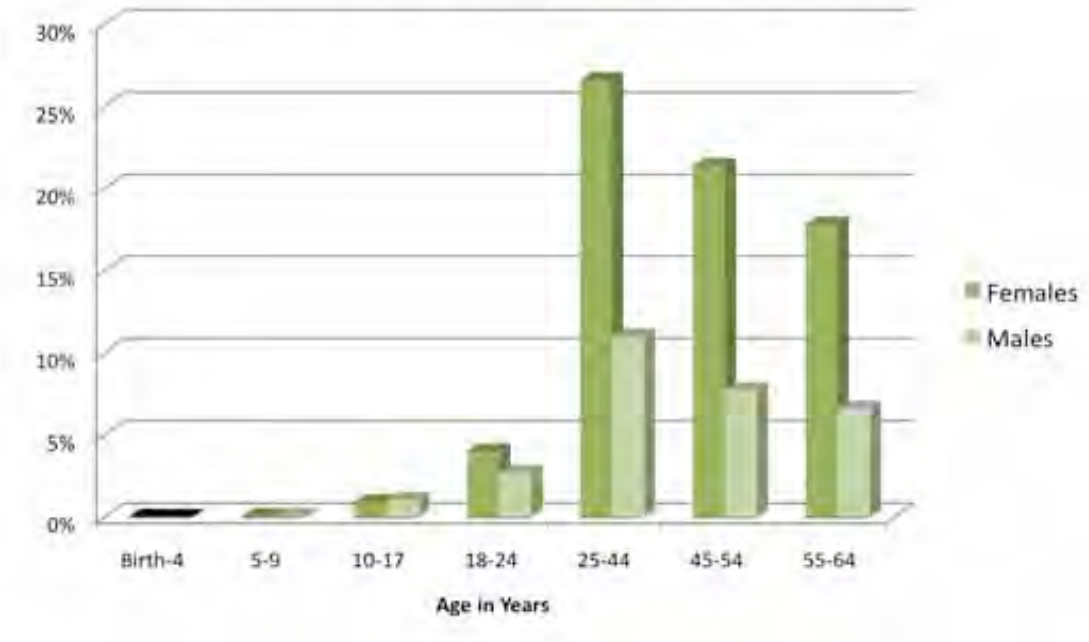
Antidepressant Use by Age and Sex - Continued

Among people prescribed antidepressants, those between 25-44 years old are prescribed at the highest rate and at the greatest cost - 42 % of all people prescribed antidepressants fall between 25-44 years old; 38% of all dollars paid for antidepressants are for people 25-44 years old.

Comparison of Prevalence, Cost and Age Among People Prescribed Antidepressants



Proportion of Dollars Spent for Antidepressants - Among People Prescribed Antidepressants - by Age and Sex



When people who are prescribed antidepressants are evaluated by sex and age similar cost and use trends emerge between sexes - males and females between 24 and 44 years old represent the highest proportion of persons prescribed antidepressants.

Antidepressant Use by Location

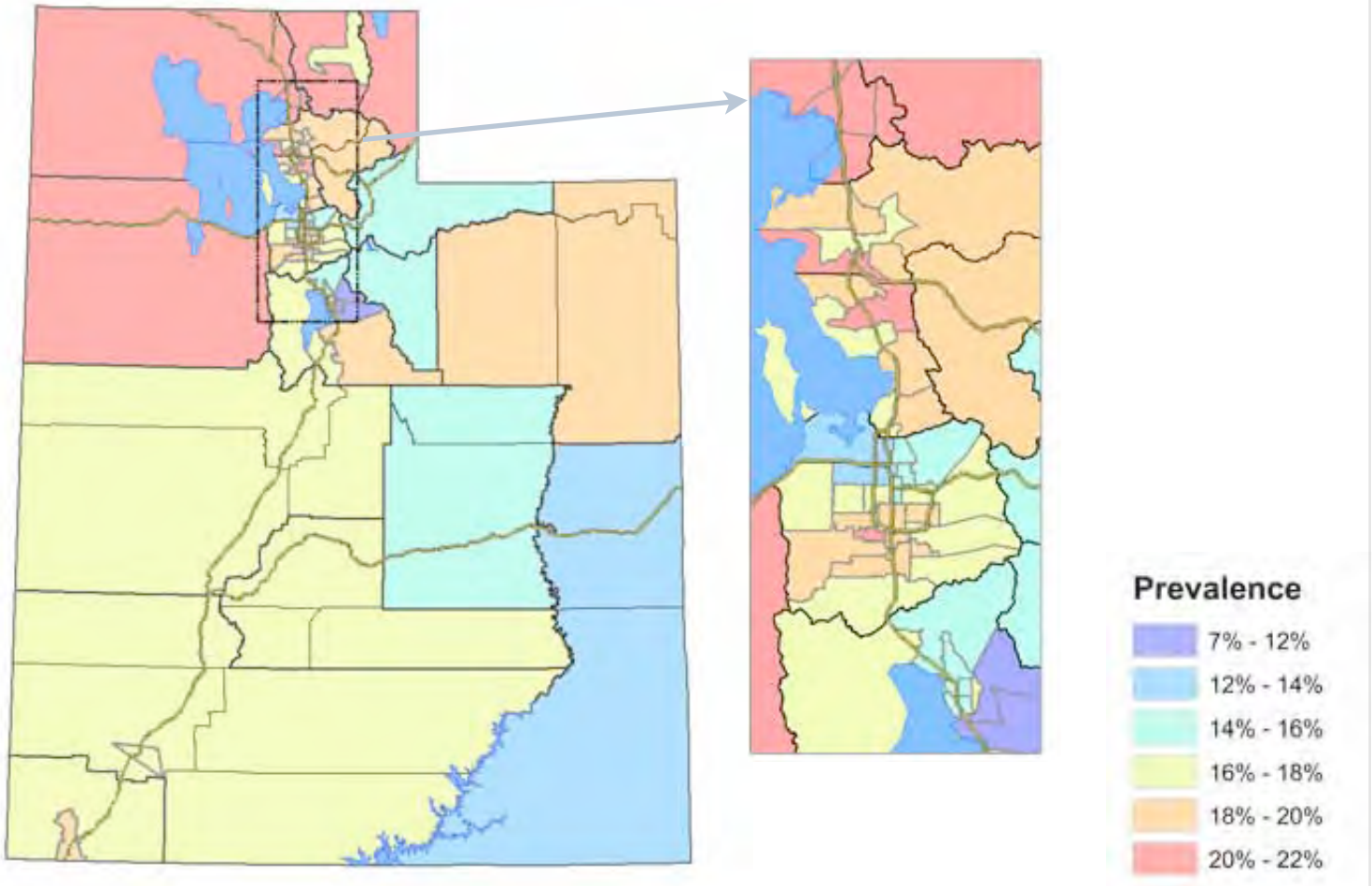
Antidepressant use in Utah was examined by geographic location. This examination was performed by looking at the prevalence of antidepressant use (people prescribed antidepressants), sex, and Utah small area.

Small areas were established by the Utah Department of Health in 1997 for the purpose of reporting health information on a community level. Criteria used to establish the 61 Utah small areas included population, local health district, county boundaries, ZIP code, income, and political boundaries.

The map below illustrates the prevalence of antidepressant use among females in Utah. The small area exhibiting the highest use among females ages 18-64 is Roy/Hooper, with 21% of females having been prescribed antidepressants in 2009. The small area exhibiting the lowest use among females ages 18-64 is Provo South, with 7.5% of females having been prescribed antidepressants in 2009.*

Appendix B contains a complete ranking of the 61 Utah small areas, for both males and females.

Prevalence of Antidepressant Use by Small Area (2009)
Females Ages 18-64



* These ranking were drawn from commercial healthcare claims and do not contain data from Medicaid pharmacy claims. Statewide rankings may change when Medicaid data are merged with the commercial claims data.

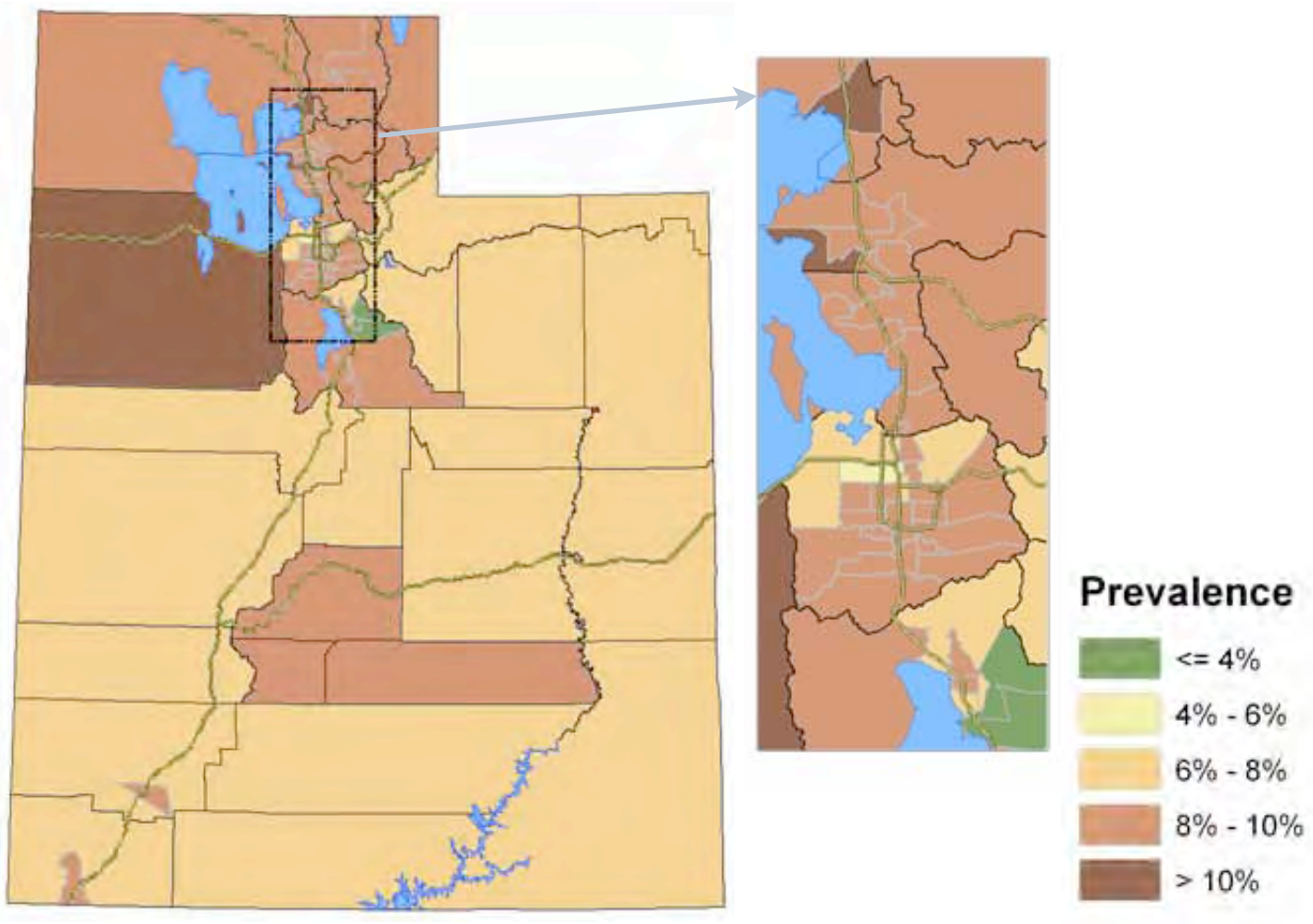
Antidepressant Use by Location - Continued

The map below illustrates the prevalence of antidepressant use for males in Utah. The small area exhibiting the highest use for males ages 18-64 is Tooele County, with 10.8% of males having been prescribed antidepressants in 2009. The small area exhibiting the lowest use for males ages 18-64 is Provo South, with an antidepressant use among males of 3.5%.

Variability in antidepressant use between small areas is significantly greater for females than for males. In order to show the slight variability among males different prevalence scales were required (exaggerating the scale for males).

Appendix B contains a complete ranking of the 61 Utah small areas, for both males and females.

Prevalence of Antidepressant Use by Small Area (2009)
Males Ages 18-64



Antidepressant Use by Health Status

This report has presented descriptive information on cost and prevalence of antidepressant use in Utah. Although this provides a broad overview of antidepressant utilization, it falls short of identifying relationships that exist between depression, antidepressant use/cost, and other chronic disease. Clinical Risk Groups (CRGs) were employed to assist in exploring these relationships.

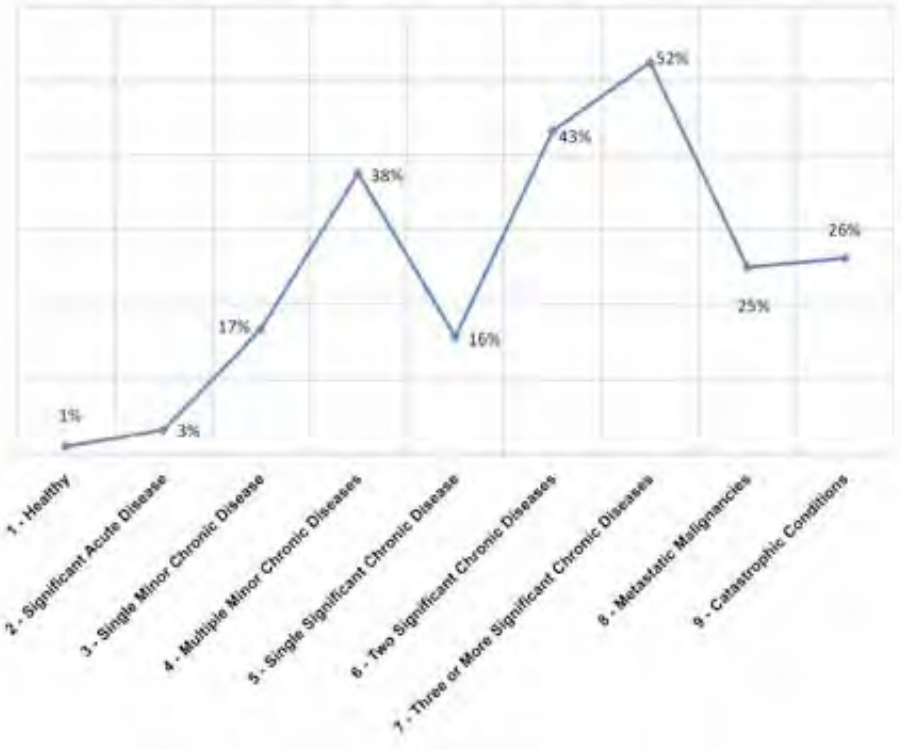
CRGs are a clinical classification system for risk adjusting people within a population. Each person within a population is assigned to a mutually exclusive risk group (CRG 1-9). These risk groups are determined by medical and demographic characteristics. This method of risk adjustment allows for precise comparisons between and among people with similar health and demographic characteristics.[7]

A thorough evaluation of the relationships between depression, antidepressant use/cost, and other chronic diseases is beyond the scope of this particular report; however, a couple of early findings warrant mention.

The rate of antidepressant use among people with a single minor chronic disease is 17.7%. This is well above the baseline of 12.7% for persons 18-64 years old. Minor chronic diseases are usually managed effectively with relatively few complications and limited effect on a person's overall well being. Examples of minor chronic diseases include migraine headaches, minor hearing loss, and minor depression. The rate of antidepressant use rises significantly, more than doubling to 37.5%, with the emergence of multiple minor chronic diseases

This trend is also observed among people who have significant chronic diseases. Examples of significant chronic diseases include diabetes, hypertension, and major depression. The rate of antidepressant use among people with a single significant chronic disease is 15.6%. This is above the baseline 12.7% for persons 18-64 years old. However, when a second significant chronic disease emerges the use of antidepressants more than doubles to 43.2%. This trend continues with the emergence of a third significant chronic disease. More than half the people (52%) who have three significant chronic diseases are prescribed antidepressant medications.

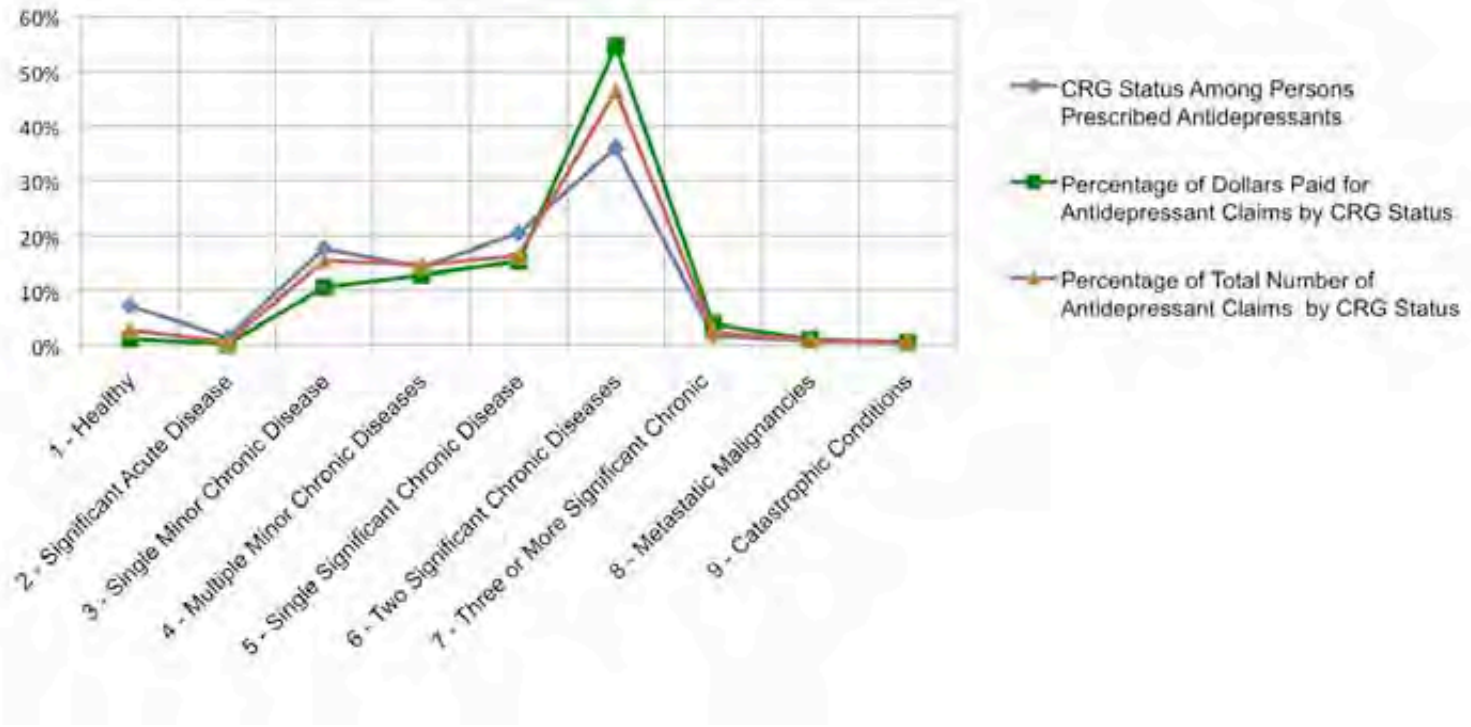
Percentage of Persons within Clinical Risk Groups (CRGs) Prescribed Antidepressants



Antidepressant Use by Health Status - Continued

When the CRG status and cost data among people prescribed antidepressants are examined we see that persons with two significant chronic diseases (CRG 6) stand out. More than half of all dollars spent for antidepressants, among people prescribed antidepressants, are for people with two significant chronic diseases. Furthermore, more than a third of all people prescribed antidepressants have two significant chronic diseases.

Comparison of Antidepressant Usage and Claims by Clinical Risk Group (CRG) Among Persons Prescribed Antidepressants



Further examination of antidepressant utilization patterns and health status of healthcare consumers is required to better define the relationships between chronic diseases, depression and antidepressant use.

Further analysis would assist in answering important questions such as “To what degree does depression impact the cost of treating and the progression of other common chronic diseases?” Further analysis might also be helpful in better understanding disease onset - answering the question, “What comes first, the chronic disease(s) or depression and how does each effect the other?”

Greater understanding of these relationships might open the door to earlier, more effective and less costly treatment practices for chronic disease.

Healthcare Cost, Quality, and Transparency: Putting together the pieces and moving forward

Depression is a serious public health issue. Its prevalence is widespread and the impact on individuals, families and the economy is significant. Depression has been projected to emerge as the second leading cause of disability among developed nations over the next two decades.[8] Utah does not appear to be immune to this public health issue or emerging trend.

Antidepressant use can serve as a proxy for depression, aiding in the identification of prevalence, demographic characteristics, relationships to other chronic diseases and total costs of this potentially debilitating disease.

A better understanding of these prevalences, demographics, relationships and costs will inform healthcare and public health professionals, policy makers, and researchers about depression and its impact on people and communities.

This report presented several key findings.

- Antidepressant medications account for a large share of the total costs for prescribed medications.
- Females are prescribed antidepressants at a rate more than twice that of males.
- There are distinct age variations in how antidepressants are prescribed.
- Among women, there are large geographic variations in prescription rates for antidepressants across Utah.
- Among men there are very little geographic variations in prescription rates for antidepressants across Utah.
- Antidepressants are prescribed much more often to people with other chronic diseases. The rate of antidepressant use increases greatly with the emergence of additional chronic diseases.

This report represents what is likely to be the first of several publications on antidepressant use and depression in Utah. Further examination of antidepressant utilization patterns and health status of the Utah healthcare consumer is required to better define the relationships between depression, chronic diseases, and antidepressant use. Greater understanding of these relationships might open the door to earlier, more effective and less costly treatment practices for both depression and other chronic diseases.

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About this Publication

The Utah Atlas of Healthcare: Antidepressant Use in Utah is a publication of the Utah Department of Health, Health Data Committee, Office of Health Care Statistics. The findings in this publication are based upon data from the Utah All Payer Database.

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Suggested Citation

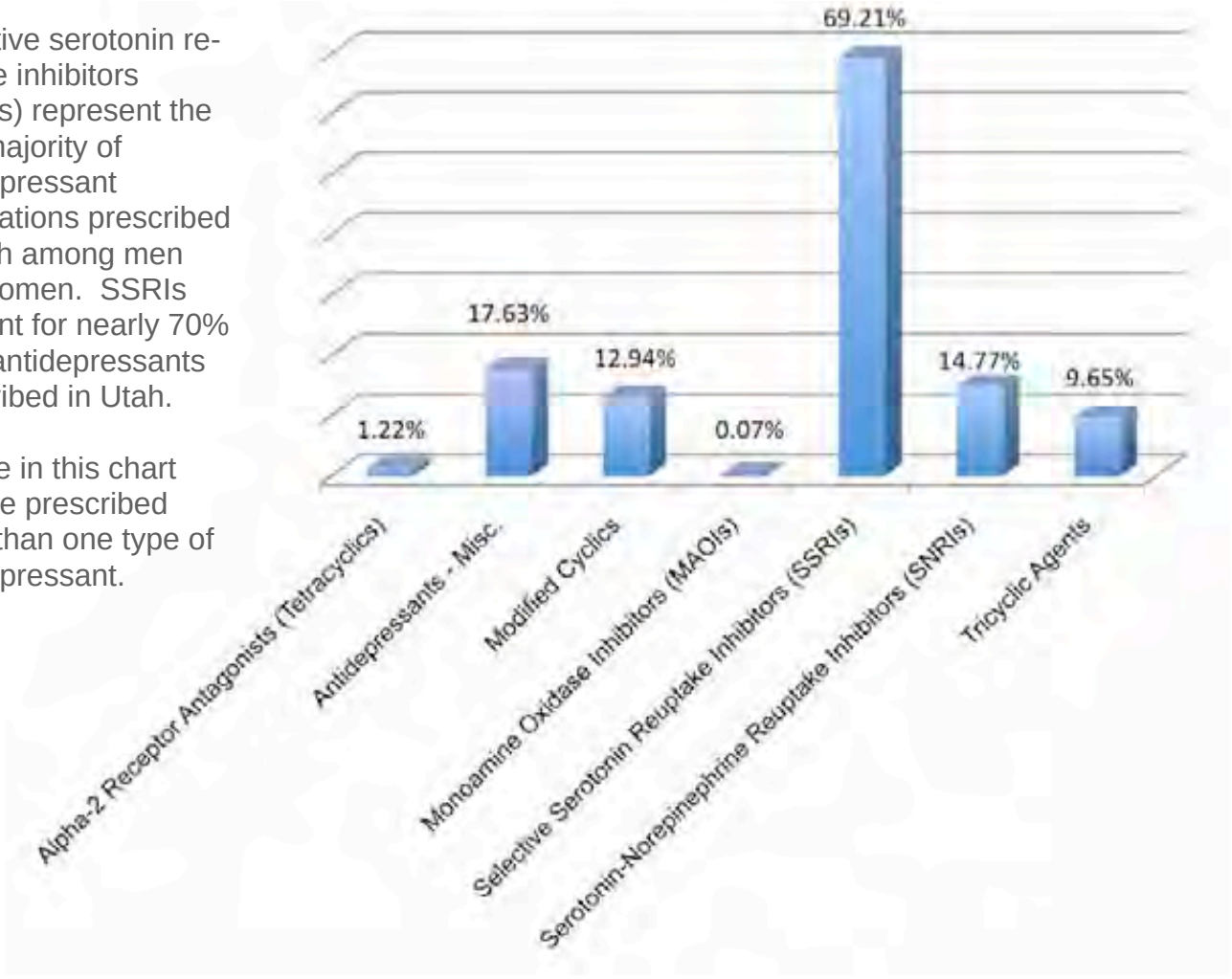
Gaskill, M. Antidepressant Use in Utah. Utah Department of Health, Health Data Committee, Office of Health Care Statistics. Utah Atlas of Healthcare: 1(1), September 2010.

Appendix A: Antidepressants Prescribed by Mechanism of Action

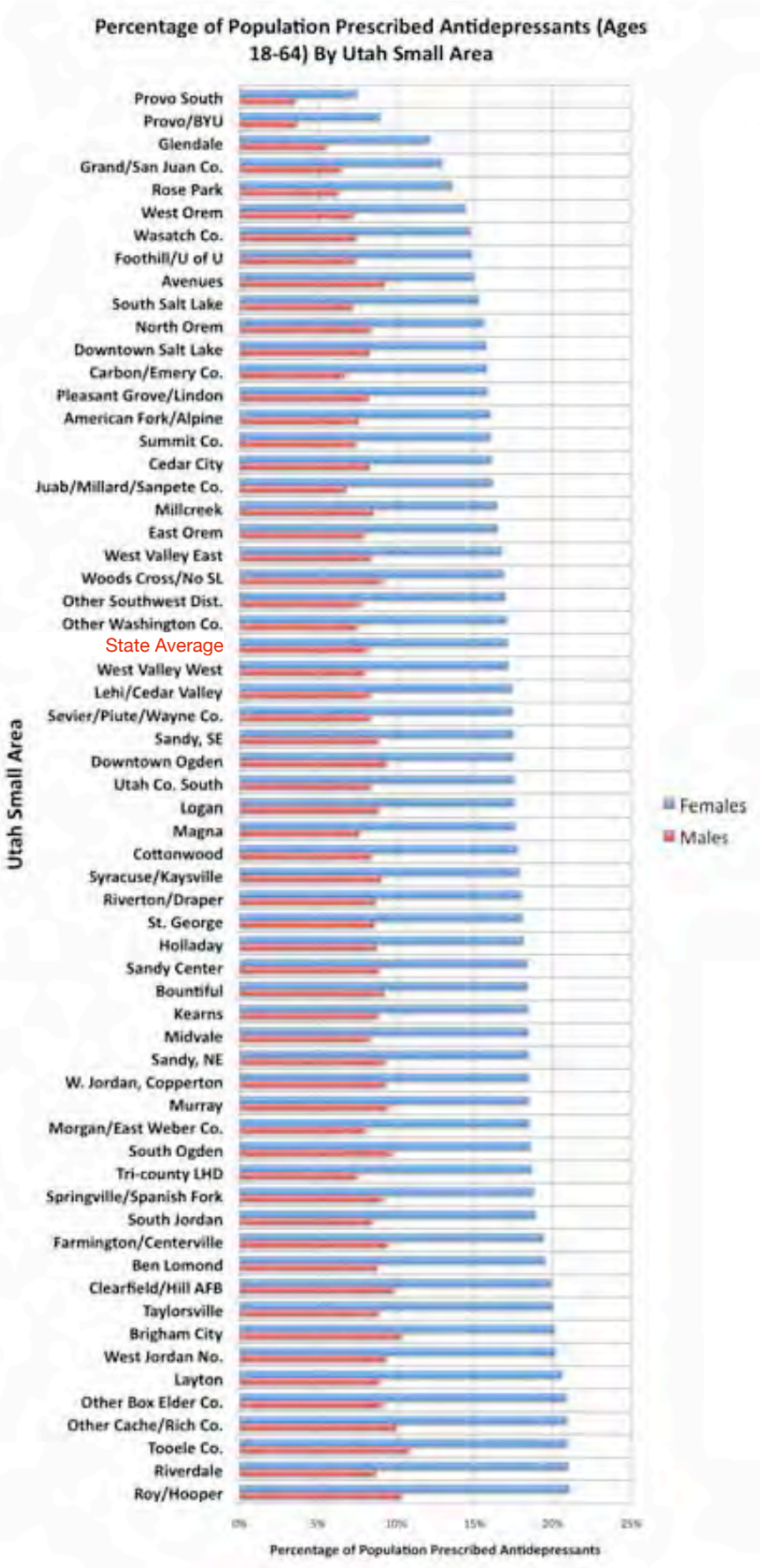
Selective serotonin re-uptake inhibitors (SSRIs) represent the vast majority of antidepressant medications prescribed in Utah among men and women. SSRIs account for nearly 70% of all antidepressants prescribed in Utah.

People in this chart may be prescribed more than one type of antidepressant.

Breakdown of Antidepressants Prescribed by Mechanism of Action



Appendix B: Antidepressant Utilization by Utah Small Area



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