UTAH DEPARTMENT OF HEALTH

Utah Health Status Update:
Utah Medicaid Beneficiaries With Complex Needs

March 2019

The Utah Department of Health identified a small proportion of Medicaid beneficiaries who accounted for a large burden of resources. This pattern mirrored Medicaid nationally. Little was known about these beneficiaries and it was suspected that they were possibly a heterogeneous group with complex needs. High utilization often indicates chronic physical conditions with mental health needs. These complex needs are often worsened by socioeconomic disparity among the beneficiaries. We needed to improve our understanding of this population in order to make recommendations that could help in addressing the problem of resource burden and poor health outcomes. To do this, we conducted an analysis to characterize Medicaid beneficiaries and to examine the relationship between complex needs, healthcare utilization, and socioeconomic status.

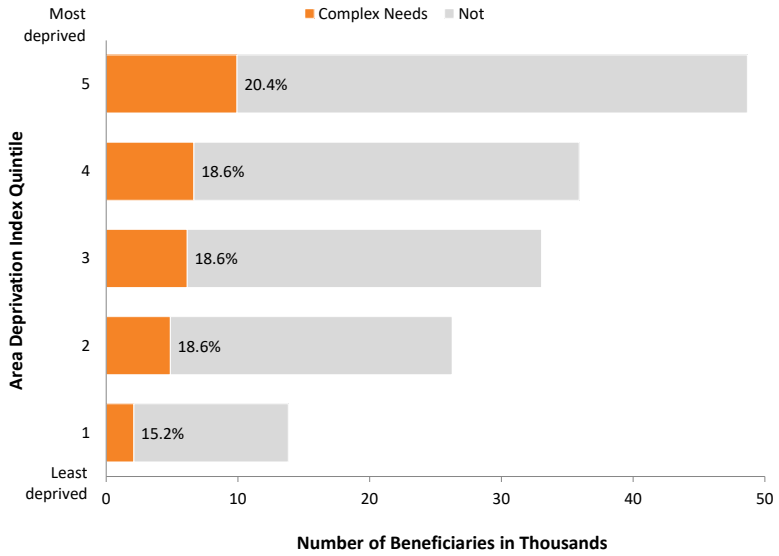
For our analysis, we included Medicaid beneficiaries aged 18 years and older enrolled in Medicaid during the state fiscal year 2017 (July 1, 2016 to June 30, 2017). All cost data associated with each beneficiary in the 12 months leading up to his or her last medical claim for the state fiscal year were used. We defined complex needs as beneficiaries with either one chronic condition plus depression, or ≥2 chronic conditions plus ≥1 mental health condition. We geocoded beneficiary addresses, assigned them to census block groups,

KEY FINDINGS

- **18.9% of Medicaid beneficiaries in Utah were classified as having complex needs in state fiscal year 2017.**
- **The proportion of complex needs Medicaid beneficiaries was higher in areas of high deprivation.**
- **More than half of Utah complex needs Medicaid beneficiaries had depression (69.4%), anxiety disorders (56.8%), and hypertension (56.0%). A significant number had rheumatoid arthritis/osteoarthritis (35.5%), hyperlipidemia (33.7%), drug use disorders (16.2%), or alcohol use disorders (15.4%).**
- **Geographically, there were no Medicaid covered mental health facilities within the six census blocks with the highest prevalence of complex needs Medicaid beneficiaries.**

Complex Needs Medicaid Beneficiaries by ADI

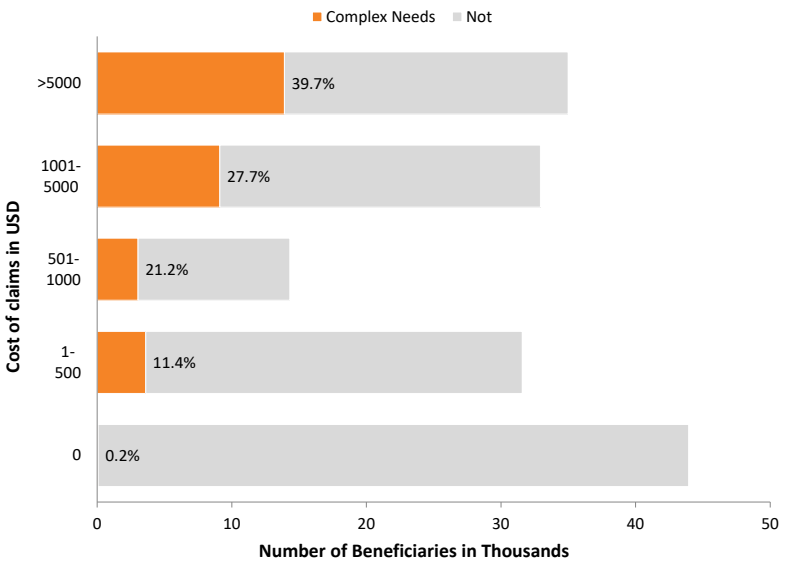
Figure 1. Proportion of Medicaid beneficiaries with complex needs by area deprivation index (ADI) group, Utah, state fiscal year 2017



Source: Utah Medicaid Claims Database

Complex Needs Medicaid Beneficiaries by Cost

Figure 2. Proportion of Medicaid beneficiaries with complex needs by cost of claims in a 12-month period, Utah, state fiscal year 2017



Source: Utah Medicaid Claims Database

and designated an area deprivation index (ADI) for measuring socioeconomic status. An ADI calculates a score by census block group using 17 United States census measures that characterize the level of socioeconomic need in a neighborhood.[1] Higher index values represent higher levels of deprivation.

Of the 157,739 Medicaid beneficiaries included in the analysis, 29,742 (18.9%) were classified as having complex needs. The proportion of beneficiaries with complex needs increased with increase in socioeconomic deprivation reaching 20.4% among those living in areas with the highest deprivation index as shown in Figure 1. We used the Kruskal-Wallis test to examine if the ADI groups were significantly different among them for the proportion of the population with complex needs. There were statistically significant (at $p<0.05$) differences among the ADI groups for the proportion of cases with complex needs. Pairwise Kruskal-Wallis tests showed that comparison of ADI groups 2&3, 2&4, and 3&4 were not statistically significant at $p<0.05$ level. The rest of the pairwise comparisons of ADI groups for proportion of cases with complex needs were statistically significant at $p<0.05$ level. The proportion of cases with complex needs reached to 39.7% among beneficiaries whose claims were greater than $5,000 in a 12-month period (Figure 2).

The top mental health conditions among complex needs beneficiaries were depression (69.4%) and anxiety disorders (56.8%). Also, 16.2% had a drug use disorder and 15.4% had an alcohol use disorder. The top chronic physical conditions among beneficiaries with complex needs were hypertension (56.0%), rheumatoid arthritis/osteoarthritis (35.5%), and hyperlipidemia (33.7%). Figure 3 shows the proportion with specific mental health disorders in each of these categories.

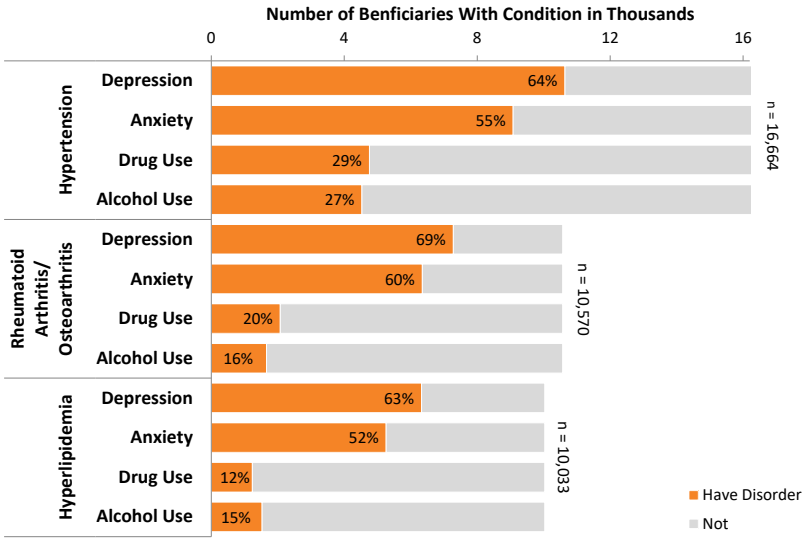
Among all census block groups, the median number of beneficiaries with high needs was 12 and the median prevalence was 17%. The highest prevalence quartile had 97 census blocks which totaled 7,250 beneficiaries with high needs. Census block group prevalence of beneficiaries with high needs in this quartile ranged from 21.8–63.0%. The six census blocks with the highest prevalence had no Medicaid covered mental health facilities.

In conclusion, we found that approximately one of five Utah Medicaid beneficiaries had physical and mental health needs. Our analysis found that areas with greater socioeconomic deprivation had a greater proportion of beneficiaries with complex needs; these areas also had a reduced number of mental health facilities. Development of programs to address both physical and mental health by integrating services, focusing on socioeconomically deprived areas may help address this need.

For additional information about this topic, contact Srimoyee Bose, 801-538-6214, sbose@utah.gov; or the Office of Public Health Assessment, Utah Department of Health, (801) 538-9191, chdata@utah.gov.

Complex Needs Medicaid Beneficiaries by Condition

Figure 3. Three most common chronic physical conditions among Medicaid beneficiaries with complex needs and the proportion of persons having a mental condition in each category, Utah, state fiscal year 2017



Source: Utah Medicaid Claims Database

1. Singh GK. Area Deprivation and Widening Inequalities in US Mortality, 1969–1998. Am J Public Health. 2003 Jul;93(7):1137–43.

UDOH ANNOUNCEMENT:

In 2018, the Utah Legislature passed the Utah Statewide Stroke and Cardiac Registry Act (S.B 150, Chapter 8d, section 26-8d-102). This legislation instructed the Utah Department of Health to establish statewide stroke and cardiac registries in order to analyze information on the incidence, severity, causes, outcomes, and rehabilitation of stroke and cardiac diseases; promote optimal care for these patients; alleviate unnecessary death and disability from stroke and cardiac diseases; encourage the efficient and effective continuum of patient care, including prevention, prehospital care, hospital care, and rehabilitative care; and to minimize the overall cost of stroke and cardiac diseases. To learn more, visit https://bemsp.utah.gov/operations-and-response/specialty-care-vulnerable-populations/.

Breaking News, March 2019

Utah Fish Consumption Advisories

Fish are an important part of a healthy diet and provide a valuable source of lean protein and nutrients. However, some fish from specific areas may contain heavy metals or chemicals that could pose health risks to people. The primary contaminant of concern for fish consumption is mercury in the form of methylmercury, which can harm the central nervous system. Children, pregnant women, and women who may become pregnant are typically the populations most sensitive to mercury exposure.

The Utah Departments of Health, Environmental Quality, and Natural Resources collaborate to protect human health by formulating consumption advisories for Utah sport fish. These advisories help Utahns make informed decisions about their diet and health. Most advisories recommend reduced, but not eliminated, consumption of certain fish with elevated levels of mercury from specific areas. Currently, fish consumption advisories have been issued for 34 Utah waterbodies. This is less than 10% of sampled waterbodies, which shows that the need for an advisory is relatively rare. The latest advisory was placed in December 2018 for largemouth bass at Kens Lake in San Juan County. Anglers who catch and consume fish should keep in mind that fish consumption advisories usually just advise limiting your intake of that specific fish from that specific body of water. Advisories are designed to help reduce mercury exposure while encouraging a healthy diet and enhancing enjoyment of outdoor recreation opportunities in Utah.

For more information and to see current fish consumption advisories, visit fishadvisories.utah.gov.

Community Health Spotlight, March 2019

Medicaid Preferred Drug List (PDL) Savings

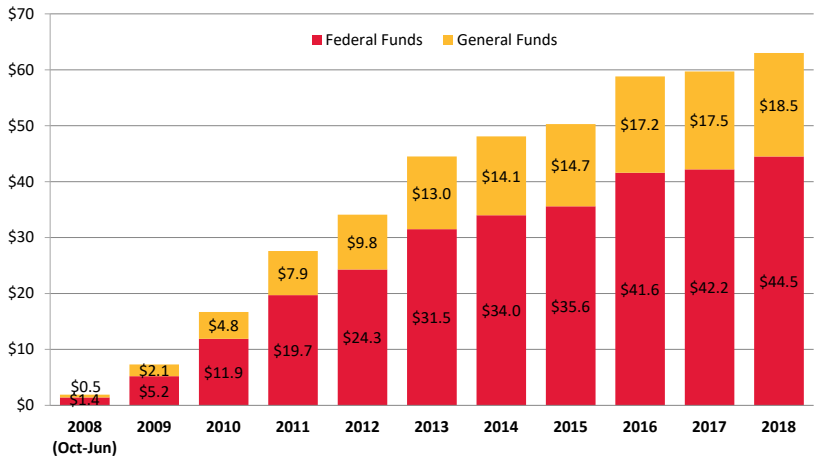
Since 2007, the Utah Department of Health (UDOH) Division of Medicaid and Health Financing has employed a Preferred Drug List (PDL) program with prior authorization requirements for non-preferred drugs. Following a determination of safety and efficacy by the Pharmacy and Therapeutics Committee, preferred drugs are selected based upon recommendations by the Committee and the net cost of the drugs. The UDOH achieves PDL savings by shifting utilization to less expensive drugs that are equally safe and efficacious, as well as from secondary rebates from drug manufacturers.

Beginning in state fiscal year 2017 (July 1, 2016 to June 30, 2017), behavioral health drugs were added to the PDL including, mood stabilizers, antidepressants, anti-anxiety, and attention deficit hyperactivity disorder stimulants. PDL savings from all psychotropic drug classes for the 2018 state fiscal year were $3,542,746 in General Fund monies.

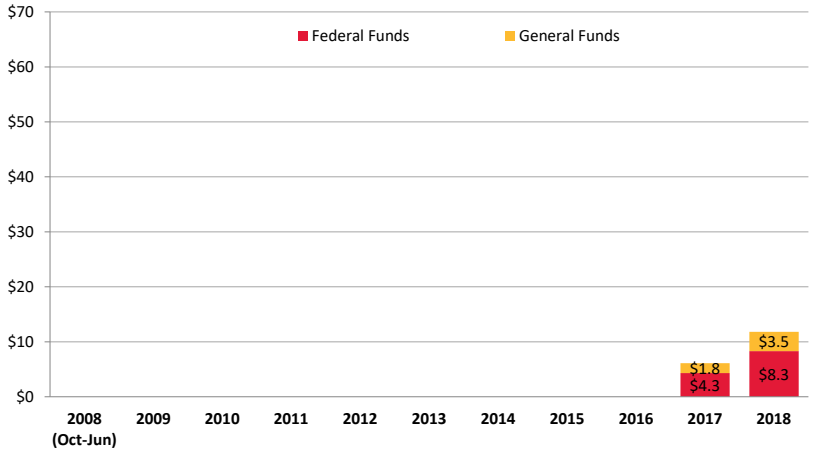
Further, the UDOH is required to determine whether care provider compliance with the preferred drug list is at least 65 percent of prescriptions by July 1, 2018. Compliance with the PDL at the completion of state fiscal year 2018 was 83 percent.

The Medicaid Preferred Drug List continues to expand on a monthly basis. The PDL is not an all-inclusive list of Utah Medicaid covered outpatient pharmaceutical agents. Products not listed may or may not be subject to clinical prior authorization requirements or other coverage limitations.

Utah Medicaid Preferred Drug List Savings History (in millions), Non-psychotropic Drugs



Utah Medicaid Preferred Drug List Savings History (in millions), Psychotropic Drugs



Monthly Health Indicators Report

(Data Through January 2019)

Monthly Report of Notifiable Diseases, January 2019	Current Month # Cases	Current Month # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
Campylobacteriosis (*Campylobacter*)	29	31	29	31	0.9
Shiga toxin-producing *Escherichia coli* (*E. coli*)	9	2	9	2	4.1
Hepatitis A (infectious hepatitis)	0	7	0	7	0.0
Hepatitis B, acute infections (serum hepatitis)	1	0	1	0	2.5
Influenza*	Weekly updates at http://health.utah.gov/epi/diseases/influenza				
Meningococcal Disease	0	0	0	0	--
Pertussis (Whooping Cough)	7	45	7	45	0.2
Salmonellosis (*Salmonella*)	18	24	18	24	0.7
Shigellosis (*Shigella*)	5	4	5	4	1.3
Varicella (Chickenpox)	23	28	23	28	0.8
Quarterly Report of Notifiable Diseases, 4th Qtr 2018	**Current Quarter # Cases**	**Current Quarter # Expected Cases (5-yr average)**	**# Cases YTD**	**# Expected YTD (5-yr average)**	**YTD Standard Morbidity Ratio (obs/exp)**
HIV/AIDS†	15	30	115	121	0.9
Chlamydia	2,616	2,135	10,534	8,784	1.2
Gonorrhea	692	396	2,863	1,718	1.7
Syphilis	44	19	161	81	2.0
Tuberculosis	3	8	18	30	0.6
Medicaid Expenditures (in Millions) for the Month of January 2019	**Current Month**	**Expected/ Budgeted for Month**	**Fiscal YTD**	**Budgeted Fiscal YTD**	**Variance - over (under) budget**
Mental Health Services	$ 11.7	$ 12.2	$ 89.4	$ 91.0	$ (1.6)
Inpatient Hospital Services	$ 41.3	$ 41.2	$ 132.8	$ 134.4	$ (1.7)
Outpatient Hospital Services	$ 3.2	$ 3.2	$ 23.5	$ 24.2	$ (0.8)
Nursing Home Services	$ 16.5	$ 16.4	$ 136.0	$ 137.2	$ (1.1)
Pharmacy Services	$ 10.8	$ 10.9	$ 75.1	$ 76.8	$ (1.7)
Physician/Osteo Services‡	$ 7.7	$ 7.7	$ 35.2	$ 35.6	$ (0.4)
Medicaid Expansion Services	$ 7.1	$ 7.9	$ 53.3	$ 55.7	$ (2.4)
TOTAL MEDICAID	$ 237.0	$ 234.0	$ 1,513.5	$ 1,515.0	$ (1.5)

* Influenza activity increased in January 2019 with moderate season severity. 563 influenza-associated hospitalizations have been confirmed from September 30, 2018 to January 31, 2019. More information and weekly reports can be found at http://health.utah.gov/epi/diseases/influenza/surveillance/2018-2019/Utah_Weekly_Influenza_Report.html.

Program Enrollment for the Month of January 2019	Current Month	Previous Month	% Change§ From Previous Month	1 Year Ago	% Change§ From 1 Year Ago
Medicaid	265,830	265,150	+0.3%	279,522	-4.9%
PCN (Primary Care Network)	17,704	17,914	-1.2%	12,730	+39.1%
CHIP (Children's Health Ins. Plan)	17,945	18,054	-0.6%	19,277	-6.9%
	Annual Visits			Annual Charges	
Health Care System Measures# (Year)	**Number of Events**	**Visits per 1,000 Utahns**	**% Change§ From Previous Year**	**Total Charges in Millions**	**% Change§ From Previous Year**
Overall Hospitalizations (2017)	288,787	86.3	+2.9%	$ 9,046.2	+4.5%
Non-maternity Hospitalizations (2017)	190,185	55.4	+1.9%	$ 7,809.6	+5.0%
Emergency Department Encounters** (2017)	736,146	224.0	+7.4%	$ 2,436.0	+6.5%
Outpatient Surgery (2017)	513,707	156.1	+5.1%	$ 3,595.0	+12.0%
Annual Community Health Measures	**Current Data Year**	**Number Affected**	**Percent/ Rate**	**% Change§ From Previous Year**	**State Rank†† (1 is best)**
Obesity (Adults 18+)	2017	548,100	25.2%	-0.4%	7 (2017)
Cigarette Smoking (Adults 18+)	2017	193,600	8.9%	+1.1%	1 (2017)
Influenza Immunization (Adults 65+)	2017	187,900	56.0%	+2.0%	40 (2017)
Health Insurance Coverage (Uninsured)	2017	304,000	9.8%	+12.6%	n/a
Motor Vehicle Traffic Crash Injury Deaths	2017	280	9.0 / 100,000	+6.9%	14 (2017)
Poisoning Deaths	2017	714	23.0 / 100,000	-0.3%	29 (2017)
Suicide Deaths	2017	663	21.4 / 100,000	+6.3%	46 (2017)
Diabetes Prevalence (Adults 18+)	2017	154,400	7.1%	-1.4%	6 (2017)
Poor Mental Health (Adults 18+)	2017	395,900	18.2%	+7.1%	22 (2017)
Coronary Heart Disease Deaths	2017	1,692	54.5 / 100,000	+1.8%	5 (2017)
All Cancer Deaths	2017	3,160	101.9 / 100,000	-0.4%	1 (2017)
Stroke Deaths	2017	888	28.6 / 100,000	-6.0%	21 (2017)
Births to Adolescents (Ages 15-17)	2017	420	5.8 / 1,000	-7.6%	13 (2017)
Early Prenatal Care	2017	37,395	77.0%	+2.3%	n/a
Infant Mortality	2017	282	5.8 / 1,000	+7.0%	15 (2016)
Childhood Immunization (4:3:1:3:3:1)	2017	35,600	70.2%	-4.6%	46 (2017)

† Diagnosed HIV infections, regardless of AIDS diagnosis.
‡ Medicaid payments reported under Physician/Osteo Services does not include enhanced physician payments.
§ Relative percent change. Percent change could be due to random variation.
# Health Care System Measures should not be compared to previous years; a different method was used to determine year of service.
** Treat and release only.
†† State rank based on age-adjusted rates where applicable.
Notes: Data for notifiable diseases are preliminary and subject to change upon the completion of ongoing disease investigations. Active surveillance for West Nile Virus will start in June for the 2019 season.