Projecting Medicaid Enrollment in Louisiana

Prepared for

Louisiana Department of Health*

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June 2019

Executive Summary

Monthly and quarterly data on Medicaid enrollees show noticeable variation on a monthly and quarterly basis. To properly project such variations will require close work with the Louisiana Department of Health to identify possible administrative and policy changes, as well as other factors that influence monthly and quarterly variation. Improving our understanding of the monthly and quarterly variations of Medicaid enrollees is critical to improving annual forecasts and multi-year projections of Medicaid enrollees.

Preliminary projections for Medicaid enrollees from calendar 2019 through calendar 2022 are as follows:

- Aged enrollees: projected to increase to almost 67,000 in 2022
- Blind and Disabled enrollees: projected to increase to just over 170,000 in 2022
- Children enrollees: projected to increase to around 700,000 in 2022
- Parent enrollees: projected to be around 107,000 in 2022
- Other enrollees: projected to be around 120,000 in 2022
- Medicaid Expansion enrollees: projected to increase to around 515,000 in 2022

These projections are based on estimated growth in the state's population in concert with what has occurred from 2016-2018; the proportion of the population that has been defined as being above 65 years of age; the proposition of the population defined as being children; the proportion of the population that has been defined as being blind and disabled; and, the proportion of the population that is below the federal poverty level. These are the independent factors underlying the potential Medicaid enrollment.

The projections for aged, blind and disabled, and children serve as a ceiling for projected Medicaid enrollees in those categories. The ceiling for Medicaid Expansion enrollment, based on information of persons being below the federal poverty index, is estimated to be close to 570,000 by 2022.

Preliminary projections for Medicaid enrollment are based on a minimal annual growth given the projections for basic causal factors such as population growth, the age distribution of the population, the proportion of blind and disabled persons in the population, and the number of persons falling below the federal poverty level. This study also highlights a number of items that should be further researched in conjunction with the Louisiana Department of Health. These include the following: (1) a definition of each category of enrollee and how this definition may vary within the Louisiana Department of Health, (2) information required for the Health and Social Services Estimating Conference to include a Medicaid Subcommittee and other uses of Medicaid enrollment in the planning functions of LDH, (3) changes in administrative, budgetary, or other processes that may influence the short-term enrollees count, and, (4) the ability to collect parish level data on a timely basis so that aggregated data can be enumerated by health district.

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Introduction and Purpose

Louisiana Act No. 586 of the 2016 Regular Session amended the Health and Social Services Estimating Conference to include a Medicaid Subcommittee. This Subcommittee is responsible for

> "developing forecasts and reviewing information related to the Medicaid Program, including but not limited to the number of Medicaid enrollees, the eligibility criteria under which individuals are enrolling, the rate of utilization of services and growth in the cost of services, provider reimbursement methodologies, and the factors considered in developing the per-member-per-month premiums paid to the Medicaid managed care companies."

This report focuses upon the number of Medicaid enrollees by exploring past enrollment trends and concluding with considerations of what is required to satisfactorily forecast Medicaid enrollment. These enrollment trends and projections can be used with working with the Health and Social Services Estimating Conference and with all other management and reporting activities associated with the Louisiana Department of Health. We base our analysis on the reported enrollment numbers distributed monthly by the Louisiana Department of Health.

Medicaid Enrollment Trends and Forecasting

The first consideration of forecasting enrollment is to consider past trends. Enrollment data is available through the LDH from June 2012 through the present. We look at state enrollment through March 2019 in this report and consider it on the basis of each category.

Medicaid Enrollment by Category

We divide Medicaid enrollment into five comprehensive categories: Aged, Blind, Disabled (ABD); Children; Parents; Other (examples include the GNOCHC program, which applied to the New Orleans area, the Take-Charge program for family planning, Buy-ins, and other special programs); and Adult 18-64. Figure 1 shows the total enrollment in Medicaid programs from June 2012 through March 2019. The largest program category for enrollment is Children, with roughly 700,000 persons enrolled in related programs. Enrollment in the programs categorized as Parents hovers between 100,00 and 130,000 persons over the period we consider, and enrollment in ABD programs is around 230,000 for the period. These three categories show relative stability of enrollment, though the variation is not negligible, as will be discussed below. At the level of total enrollment, the most obvious point of extreme change came with when the state implemented the expansion of Medicaid qualifications through the Patient Protection and Affordable Care Act. Enrollment in Other programs declined sharply. Many of those, one can reasonably infer, shifted their enrollment from Other programs into the Medicaid Expansion category, Adults 18-64. Since Medicaid was expanded in July 2016, the number of people enrolled in this expansion category has steadily risen.

Figure 1. Medicaid Enrollment by Category, June 2012 through March 2019
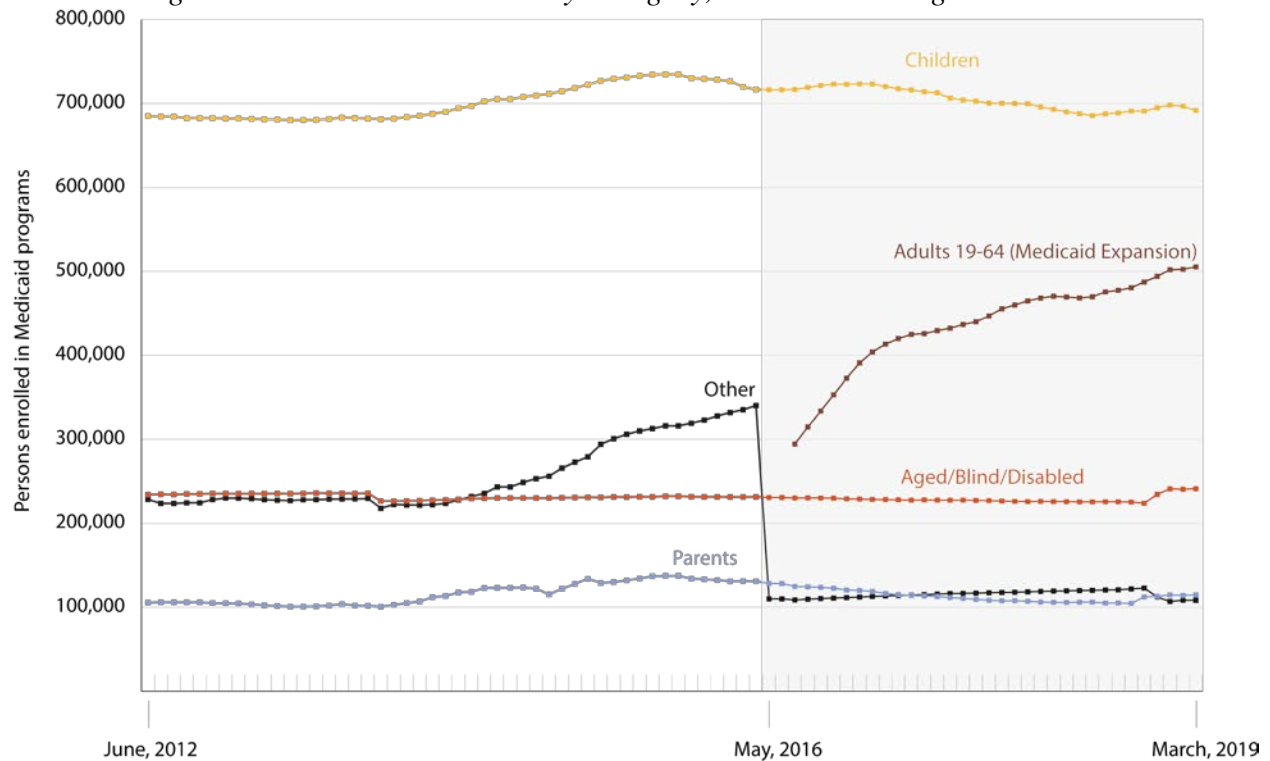
The expansion of Medicaid qualifications to adults aged 18-64 with wages and incomes less than 138% of the federal poverty level had a clear effect on the Other category, but a key question is what effect it had on total Medicaid enrollment. Figure 2 below shows the changes in enrollment for each category since the implementation of Medicaid Expansion. The total change in enrollment for Medicaid as a whole since Medicaid Expansion is less than the total change in enrollment for Adults 18-64. Enrollment in Parents and Children dropped before recovering in the past few months, but is still down roughly 10,000 and 25,0000 persons, respectively. Although enrollment in the Other category dropped substantially immediately upon implementation of Medicaid Expansion, since that drop enrollment increased rather steadily until November 2018, when it dropped, eliminating all of the gains in enrollment in one month.

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Figure 2. Change in Enrollment by Category since May 2016 (as of March 2019)

Total Change in Enrollment since May 2016
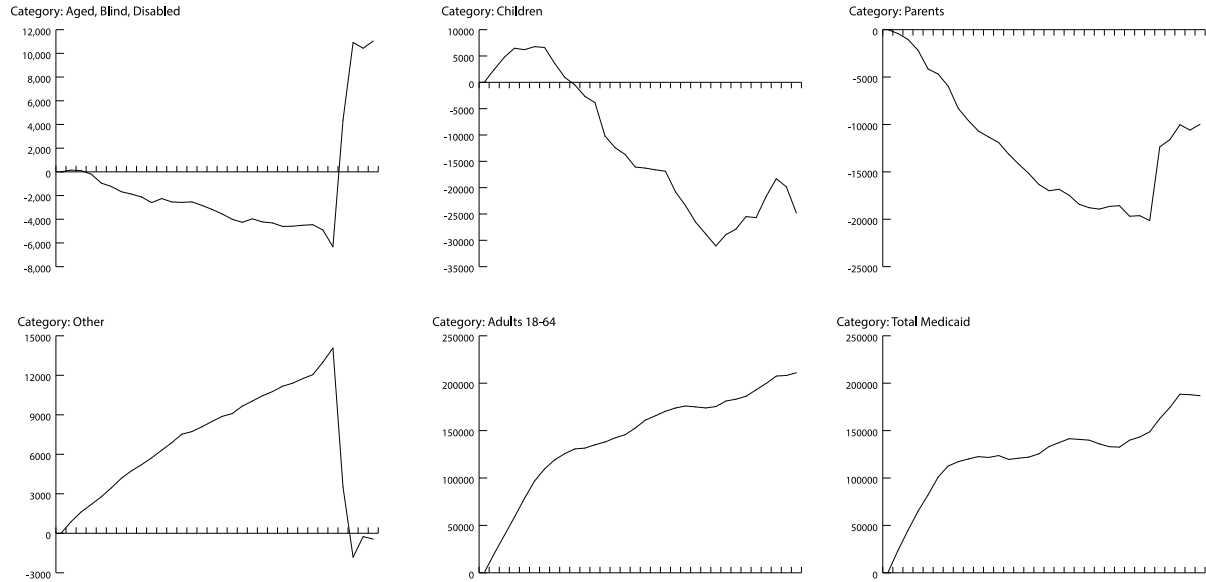
These factors present a simple indication of the difficulty in forecasting enrollment. In the next set of figures (Figures 3a through 3f), we present the monthly change from a rolling three-month average, starting in September 2012 and ending in March 2019. In effect, these graphics should allow us to see trends in each of these categories. A category with an easily predictable growth pattern would display a line with a slope of zero. In other words, the line across the graphic would be horizontal to the x-axis. Extreme peaks and valleys in the line suggest high levels of variation on a month-to-month basis, which makes for a difficult-to-predict situation.

As the figures show, however, there are no obvious trends upon which to base a forecast. Figure 3a shows some basic stability in category ABD, excepting two rather extreme periods of change. These extreme periods might be dealt with as outliers, except the changes are sustained for more than one month. Figure 3b, showing the changes in category Children, is an even more extreme example of variation. The monthly enrollment changes from three-month averages range from (–8,000) to 9,000 enrollees. One way to view this is to consider that the scale is modest, given that there are over 700,000 enrollees through the category Children. Nevertheless, these changes represent a substantial number of enrollees, and the trends show no obvious patterns. The same can be said for category Parents, shown in Figure 3c. Prior to Medicaid Expansion, changes in that category were somewhat erratic; after Expansion, there appears to be some stability until recently. This pattern also holds for the category Other: erratic changes prior to Expansion, followed by some stability until around November 2018. The change in enrollment through Medicaid Expansion is understandably extreme, given that the program is far-reaching and new. Still, however, the monthly changes are relatively extreme.

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Figure 3a. Change in Enrollment: Aged, Blind, Disabled

Change in Medicaid Enrollees
Classification: Aged, Blind, Disabled

Period of Medicaid Expansion

Monthly change from average of previous three months, September 2012 through March 2019

Source: LDH Medicaid by Parish
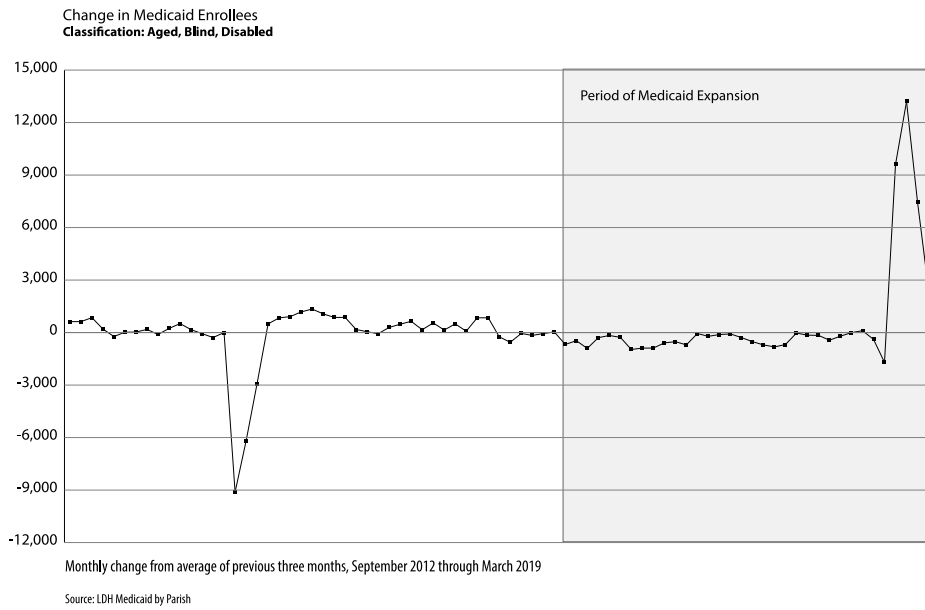
Figure 3b. Change in Enrollment: Children

Change in Medicaid Enrollees
Classification: Children

Period of Medicaid Expansion

Monthly change from average of previous three months, September 2012 through March 2019

Source: LDH Medicaid by Parish
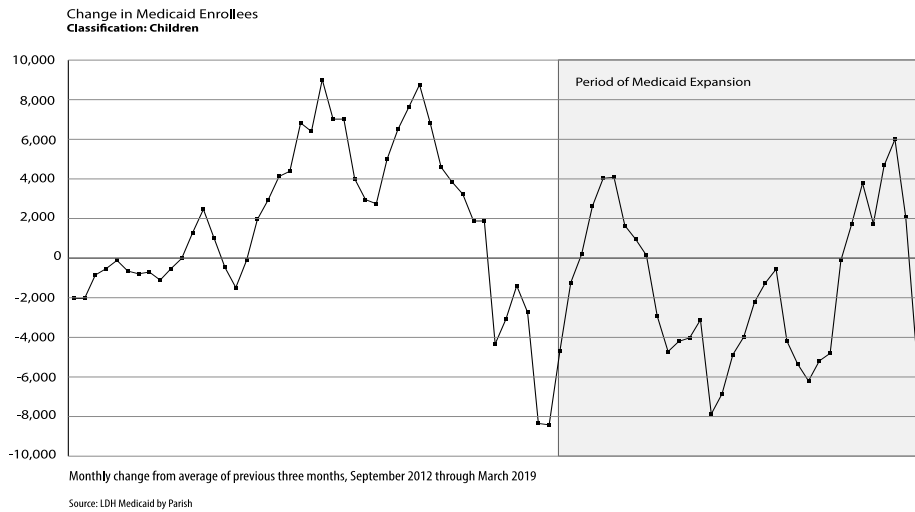
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Figure 3c. Change in Enrollment: Parents

Change in Medicaid Enrollees
Classification: Parents

Monthly change from average of previous three months, September 2012 through March 2019

Source: LDH Medicaid by Parish
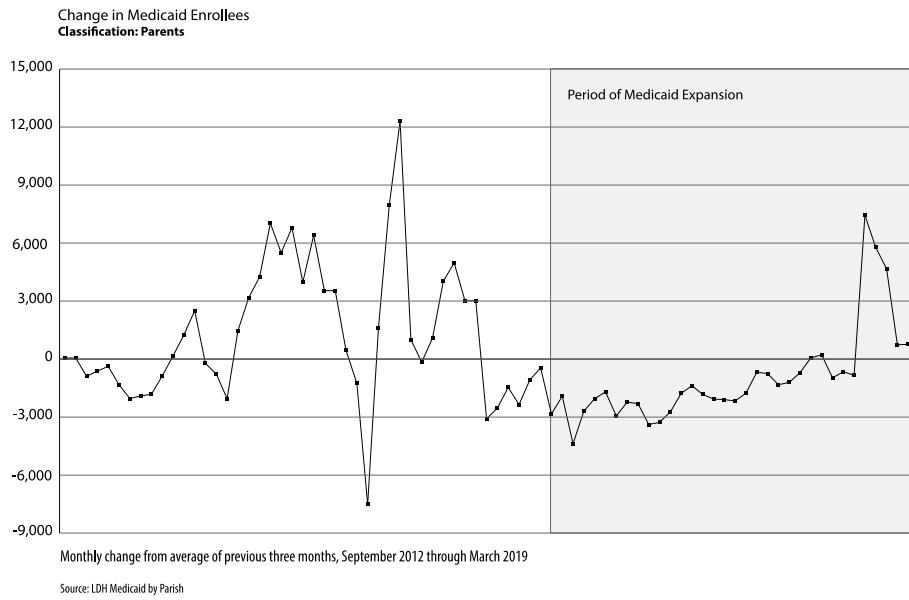
Figure 3d. Change in Enrollment: Other

Change in Medicaid Enrollees
Classification: Other (pre-Expansion and post-Expansion)

Monthly change from average of previous three months, September 2012 through March 2019

Source: LDH Medicaid by Parish

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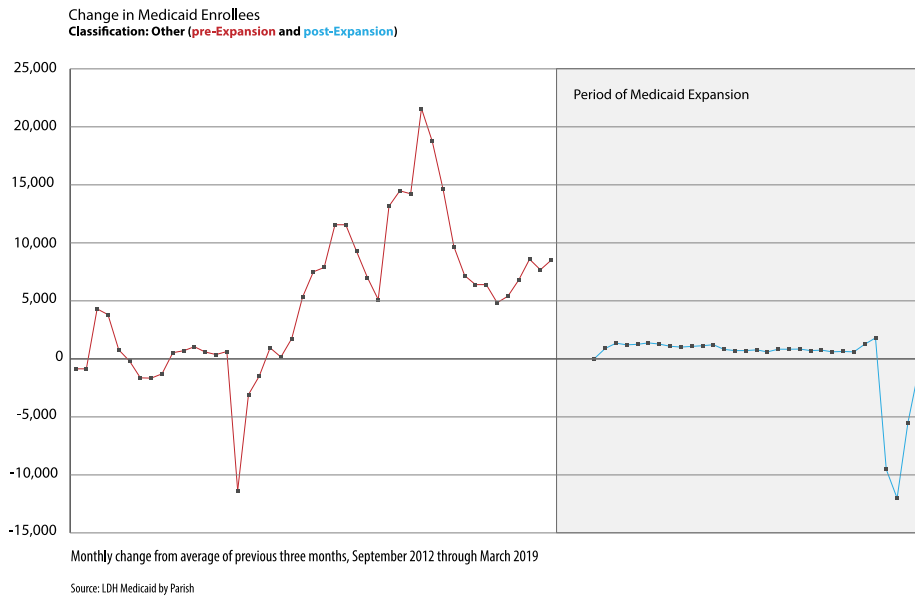
Figure 3e. Change in Enrollment: Adults 18-64

Change in Medicaid Enrollees
Classification: Adults 18-64 (Medicaid Expansion population)

Monthly change from average of previous three months, September 2012 through March 2019

Source: LDH Medicaid by Parish
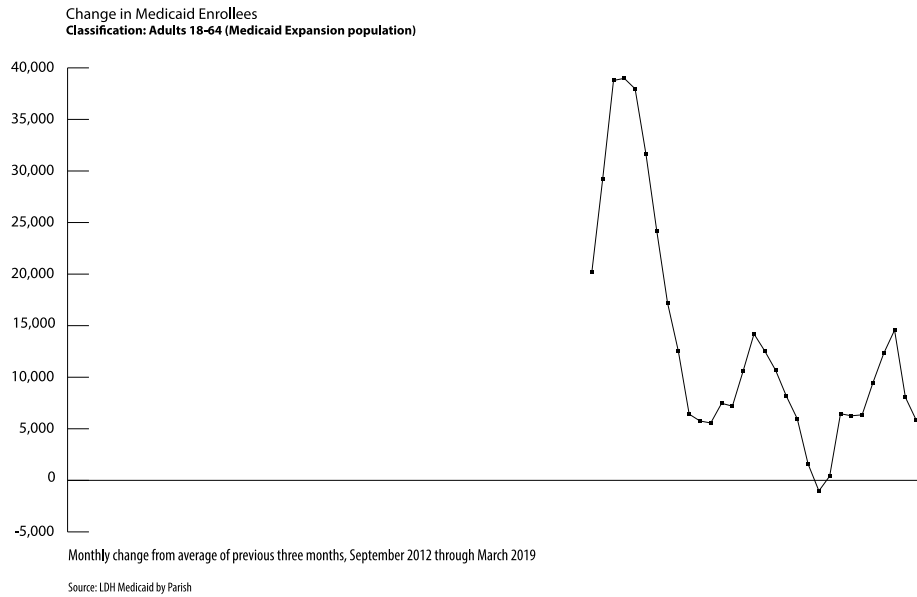
Figure 3f. Change in Enrollment: Total Medicaid

Change in Medicaid Enrollees
Classification: Total Medicaid

Monthly change from average of previous three months, September 2012 through March 2019

Source: LDH Medicaid by Parish

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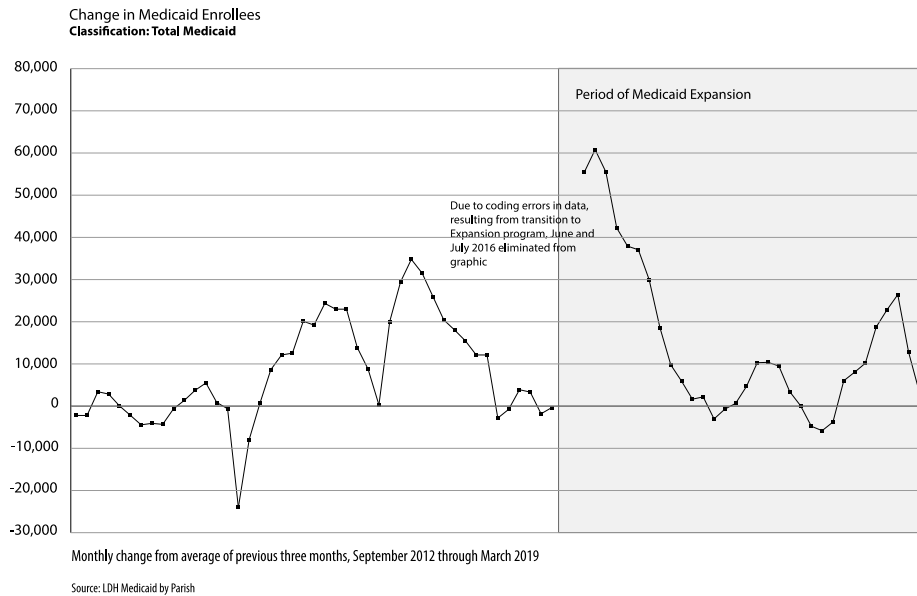Figure 3f reflects the erratic nature of enrollment displayed by category. There are some details that must be considered. In those categories where some stability prevailed for periods of time, something occurred in November 2018 leading to atypically extreme changes. This could be due to some kind of programmatic change or policy change, and our attempts to forecast must be properly attuned to such administrative matters. This will be discussed more below.

Medicaid enrollment has risen since the implementation of Medicaid Expansion, as noted above, and much of that change can be attributed to enrollment through the Expansion program itself. Since Expansion, many of the categories have seen declining enrollment. In the case of the category Children, this decline cannot be attributed primarily to the Expansion program.

Forecasting

Our ability to make reliable forecasts on the basis of just past enrollment trends is clearly limited. We acknowledge that this is the result of factors that any forecast model must accommodate.

First, enrollment is policy-dependent. New policies, pilot efforts in districts, and administrative changes can each influence the monthly enrollment numbers. For example, how LDH manages qualifications and the timing of their disqualification notices are likely to have substantial effects on enrollment. This has recently been the case. As these changes are stabilized into long-term practices, forecasting will become increasingly more reliable. Without a good basis number, however, forecasts will not be able to absorb the errors produced by such changes.

Second, programs are designed to effectively have an enrollment ceiling. This is the case, quite obviously, for a program such as Medicaid Expansion. Knowing approximately how many people in the state qualify for Medicaid provides some context in the potential enrollment. The ceiling, to be clear, is not a firm one. Two things might impact enrollment in the case of qualification. First, people may not enroll until they need services. Medicaid can also be applied retroactively; thus, a person may not be aware of her/his status when getting health care, only to then require enrollment and retroactive payment. Second, economic conditions will affect the number of potential enrollees. This is another important consideration in a forecast model, and the third point we must consider.

It is clearly not the case that the only predictor of enrollment is past enrollment. Indeed, the charts above indicate that this is likely not a good predictor at all. A forecast model must incorporate the proper independent inputs for making predictive claims about future events, and this is imperative to a model of enrollment.

Independent Factors in Influencing Medicaid Enrollees and Preliminary Projections

Factors affecting the Louisiana economy and the Medicaid program are anticipated to include changes in the population, the age distribution of the population, the degree of poverty in the state, alternative healthcare opportunities, and other such variables.

Population

Population growth from 2012 to 2018 and from 2016 to 2018 are illustrated in Figure 4 by state administrative health districts. District 1 includes Jefferson, Orleans, Plaquemines, and St. Bernard parishes; District 2 includes Ascension, East Baton Rouge, East Feliciana, Iberville, Pointe Coupee, West Baton Rouge, and West Feliciana parishes; District 3 includes Assumption, Lafourche, St. Charles, St. James, St. John, St. Mary, and Terrebonne; District 4 includes Acadia, Evangeline, Iberia, Lafayette, St. Landry, St. Martin, and Vermilion parishes; District 5 includes Allen, Beauregard, Calcasieu, Cameron, and Jefferson Davis; District 6 includes Avoyelles, Catahoula, Concordia, Grant, LaSalle, Rapides, Vernon, and Winn; District 7 includes Bienville, Bossier, Caddo, Claiborne, DeSoto, Natchitoches, Red River, Sabine, and Webster; District 8 includes Caldwell, East Carroll, Franklin, Jackson, Lincoln, Madison, Morehouse, Ouachita, Richland, Tensas, Union, and West Carroll; and, District 9 includes Livingston, St. Helena, St. Tammany, Tangipahoa, and Washington.

Population in Louisiana has slowed down in every district except for Districts 5 and 9 as we compare the growth from 2012 to 2018 to the growth from 2016 to 2018. The annual average growth from 2012 to 2018 was 0.47% for the state and from 2016 to 2018 it was 0.25%. In looking ahead to the next four years, we projected that the population growth would remain in the 2016-2018 range for each district. We maintained the above population growth in Districts 5 and 9 since these are communities that have accelerated their growth over the past three years. There were no factors suggesting that Districts 3, 6, 7, and 8 would suddenly increase their populations. These population estimates are just a guide to what the future may look like, but it provides a framework for examining what might happen to Medicaid enrollment. Population changes is an independent factor, but not the only factor, in determining the potential changes in public policy issues such as healthcare.

Figure 4. Population Growth for State Health Districts
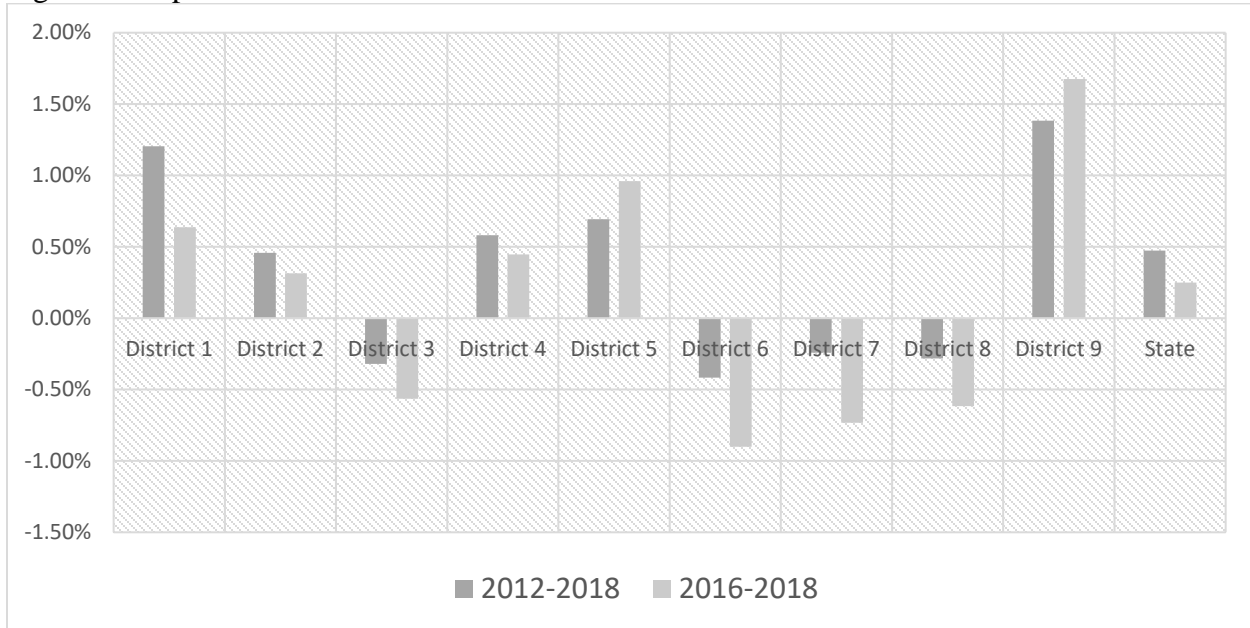
Source: U.S. American Community Survey

The projection of the state's population for calendar 2019 through calendar 2022 is listed in Table 1. The state's population growth is projected to be 0.3% per year which is in line with the state's population growth from 2016 through 2018. Each district's population growth is in line with what happened in the individual district over this same time period. District 5 (Lake Charles) is projected to grow about 1% per year which is in line with the continued capital-intensive projects for LNG facilities and the opening of several major chemical facilities. District 9 (Northshore) is projected to continue its growth of 1.7% per year, a trend that started in 2016 after having a positive growth of 1.1% from 2012 to 2016. District 1 (New Orleans), District 2 (Baton Rouge), and District 4 (Lafayette) are also projected to continue their population growth in line with their growth from 2016 through 2018.

Table 1. Population Projections by Health Districts and the State of Louisiana, 2019-2022

Health Districts	2018	2019	2020	2021	2022
District 1	895,188	900,899	906,646	912,429	918,250
District 2	681,481	683,625	685,775	687,932	690,096
District 3	398,310	396,060	393,823	391,599	389,387
District 4	605,571	608,277	610,996	613,727	616,470
District 5	304,520	307,440	310,388	313,365	316,370
District 6	300,597	297,890	295,208	292,550	289,916
District 7	536,761	532,833	528,933	525,062	521,220
District 8	349,251	347,099	344,961	342,836	340,724
District 9	588,299	598,148	608,162	618,343	628,695
State	4,659,978	4,672,272	4,684,893	4,697,844	4,711,127

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We project population declines in Districts 3, 6, 7, and 8. These are modest declines for any one year, but over time the declines become fairly significant. This is a good reason why any projections have to be continuously examined and possibly adjusted. These population changes are based on the most recent examination of what has occurred in the last three years. Future population projections will be tested against economic forecasts, population projections by other state and federal agencies if available, and any major developments that we believe are significant events to be incorporated into population changes.

Age of Population

The population in Louisiana is graying as indicated by changes in the ratio of persons 65 and over to the total population. In 2012 for the state this ratio was 12.3% while in 2018 this ratio is 14.8%. This trend is true in every health district. District 7 (Shreveport) has the largest ratio of 65 and over to total population of 16.5% while District 2 (Baton Rouge) has the lowest ratio at 13.0%. The growth in the 65 and over age group is based on the average growth from 2012 to 2018. This estimate may be low since the rate of growth of this age category has increased over the past six years. Projections of the 65 and over age group is presented in Table 2.

Children make up about 24% of the population and this has remained relatively stable over the last six years. Children make up a large component of Medicaid enrollees with around 70% of the children in District 1 (New Orleans) and District 8 (Monroe) are Medicaid enrollees. The lowest percentage of children as part of the Medicaid population is in District 9 (Northshore). Projections of children in the Louisiana population are presented in Table 3.

Table 2. Population Projections by 65 and Over by Health Districts and the State of Louisiana, 2019-2022

Health Districts	2018	2019	2020	2021	2022
District 1	134,933	141,028	147,399	154,057	161,016
District 2	88,726	92,421	96,271	100,280	104,457
District 3	58,064	59,889	61,772	63,714	65,717
District 4	84,487	87,276	90,157	93,134	96,208
District 5	44,966	46,293	47,659	49,065	50,513
District 6	46,411	47,447	48,507	49,590	50,697
District 7	88,404	90,680	93,015	95,409	97,865
District 8	55,001	56,187	57,398	58,636	59,900
District 9	88,649	93,279	98,151	103,277	108,671
State	689,641	714,500	740,327	767,160	795,043

Table 3. Population Projections by Children by Health Districts and the State of Louisiana, 2019-2022

Health Districts	2018	2019	2020	2021	2022
District 1	192,187	196,795	198,050	199,313	200,585
District 2	152,958	156,070	156,561	157,054	157,548
District 3	96,866	98,784	98,226	97,671	97,119

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District 4	152,166	155,369	156,064	156,761	157,462
District 5	75,177	76,571	77,306	78,047	78,795
District 6	72,186	73,601	72,939	72,282	71,631
District 7	128,356	129,361	128,415	127,475	126,542
District 8	82,962	84,365	83,845	83,329	82,815
District 9	144,741	150,837	153,362	155,929	158,540
State	1,097,599	1,121,753	1,124,766	1,127,861	1,131,037

The 65 and over and children population categories are moving in opposite directions in Louisiana. From 2012 to 2018 the 65 and over category increased consistently each and every year with the average increase being 21,783. For children the population rose from 2012 to 2013 by 798, but declined in each subsequent year with the average reduction being 1,997. From 2017 to 2018 the 65 and over population in Louisiana increased by 37,997 while the children population declined by 10,075. These are significant changes that may affect Medicaid enrollment.

Poverty and Population

The American Community Survey provides estimates of the percent of persons who are defined as being below the poverty level by parish. The poverty level is based on the Federal Poverty Level which is used as a base in defining eligibility for Medicaid programs. We illustrate the average poverty level from 2012 to 2018 by Health District in Figure 5. We note that the poverty index ranges from a low of 15.4% in District 9 (Northshore) to 26.6% in District 8 (Monroe). The percent of persons in poverty in Louisiana in 2018 was 19.7%. The three health districts in central and northern Louisiana all had poverty indices above 20%. The two lowest poverty indices were in District 5 (Lake Charles) and District 9 (Northshore). The other indicator is to note that the only districts in which the poverty index has declined since 2012 are District 5 and District 9. In every other district the poverty index is higher in 2018 than it was in 2012. This trend started in 2013 and has continued through 2018.

This is a critical input since Medicaid enrollees are determined in part by how the family's income compares to the Federal Poverty Level. Medicaid programs can provide individuals and families in certain classifications whose income is above the FPL with healthcare assistance, but the FPL is still an important instrument in determining if the individual or family is eligible. The FPL is the starting point in identifying a person's possible eligibility for Medicaid. Poverty status affects all Medicaid categories and was implicit in the number of aged and children Medicaid enrollees.

Figure 5. Average Poverty Index by Health Districts, 2012-2018

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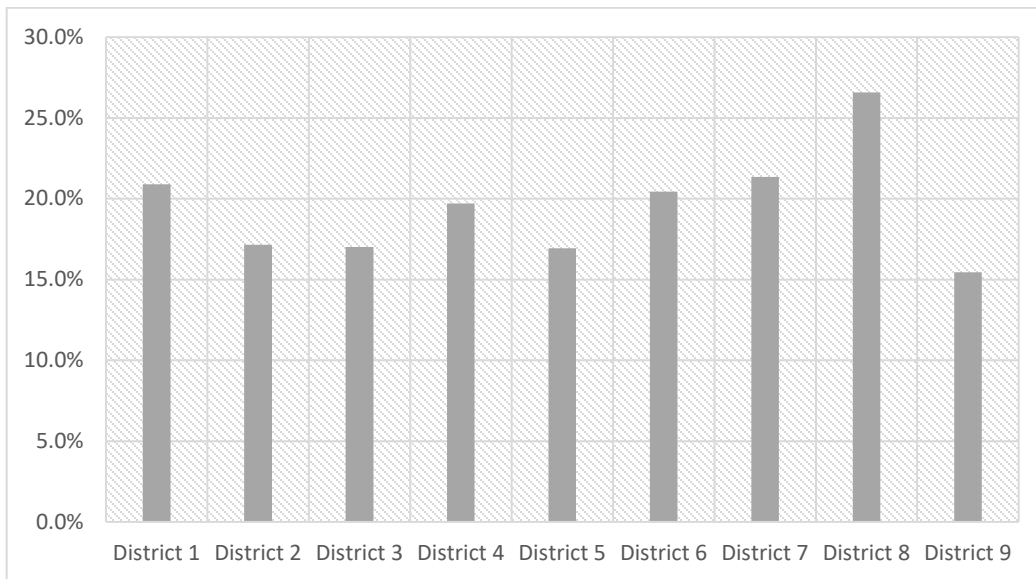
Other Independent Factors Affecting Medicaid Enrollment

We have highlighted three major influences on the number of potential Medicaid enrollees with this including the overall population, the distribution of the population among aged and children, and the poverty indices across the state. As we proceed we will need to retrieve background materials on different income characteristics such as those making less than 138% FPL, those making between 100% and 138% FPL, further breakdown of those making higher percentage of the FPL with children, and so on. We will gather information on the disabled to see if further data are available to use in projecting the number of disabled persons who are eligible for Medicaid. We focused on what we consider to be three prominent factors influencing Medicaid enrollment over the next four to five years. As we extend the projection project, we will focus on other factors affecting Medicaid enrollment in concert with the Louisiana Department of Health. Another independent factor that will be crucial to short and long-term projections will be internal changes in administering the program in order to insure compliance with the regulations as required by law. This is information that we will gather from the Louisiana Department of Health.

Preliminary Annual Estimates for Categories of Medicaid Enrollees

Preliminary estimates are provided for the following categories of Medicaid Enrollees for 2019 through 2022: (1) aged, (2) blind and disabled, (3) children, (4) parent, (5) other, and (6) Medicaid Expansion. These preliminary projections are based on the population projections, projections regarding the population being 65 and over and for those being 18 or younger, and the overall poverty level in each health district.

Projections for the Aged category of Medicaid enrollees and Children who receive Medicaid support are listed in Tables 4 and 5. In Table 4 the projections are based on what had occurred in each district on average from 2012 through 2018 in terms of the number of persons in the 65 and over category. We used the average for the entire period to estimate the population of persons 65

and the estimate of the Medicaid enrollees in this group. The fraction of the aged population that qualifies for Medicaid has remained at about 8.3%.

Table 4. Projections for Aged Enrollees in Medicaid by Health Districts and the State of Louisiana, 2019-2022

Health Districts	2018	2019	2020	2021	2022
District 1	11,281	11,940	12,638	13,376	14,157
District 2	7,167	7,531	7,914	8,317	8,740
District 3	4,040	4,199	4,363	4,535	4,713
District 4	8,349	8,588	8,834	9,088	9,348
District 5	2,989	3,080	3,174	3,270	3,370
District 6	4,662	4,779	4,899	5,023	5,149
District 7	7,799	8,047	8,303	8,567	8,839
District 8	5,741	5,921	6,107	6,298	6,496
District 9	5,352	5,607	5,873	6,153	6,446
State	57,380	59,692	62,106	64,626	67,257

Projections for Children Medicaid enrollees are listed in Table 5. Changes in children enrollees have varied absolutely and relatively from 2012 through 2018 across districts and within districts. We have utilized the growth inputs: the overall population estimate, the percentage of the 2018 population identified as children, and the percent of children who were Medicaid enrollees from 2015 through 2018. This is an estimate that will have to be closely observed on a monthly/quarterly basis.

Table 5. Projections for Children Medicaid Enrollees by Health Districts and the State of Louisiana, 2019-2022

Health Districts	2018	2019	2020	2021	2022
District 1	132,251	132,172	133,015	133,864	134,718
District 2	91,270	92,626	92,917	93,210	93,503
District 3	59,407	57,726	57,400	57,076	56,753
District 4	95,567	95,695	96,122	96,552	96,984
District 5	45,296	47,695	48,152	48,614	49,080
District 6	47,581	46,045	45,630	45,219	44,812
District 7	81,101	80,512	79,922	79,338	78,757
District 8	60,336	59,813	59,444	59,078	58,714

District 9	79,249	81,550	82,915	84,304	85,715
State	692,058	693,833	695,519	697,253	699,035

The projections for blind and disabled Medicaid enrollees are presented in Table 6. These annual projections are based on what has occurred from 2012 through 2018 per health district. The ratio of blind and disabled to overall population has been relatively stable throughout this time period. The major factor in the projections will be the population projection and the ratio of blind and disable to population by each health district. This ratio of blind and disabled to the state's population ranges from a low of 2.9% in District 9 to a high of 4.5% in District 6.

Table 6. Projections for Blind and Disabled Medicaid Enrollees by Health Districts and the State of Louisiana, 2019-2022

Health Districts	2018	2019	2020	2021	2022
District 1	32,979	34,310	34,529	34,749	34,971
District 2	20,271	21,446	21,514	21,581	21,649
District 3	14,438	14,247	14,166	14,086	14,007
District 4	21,662	21,796	21,893	21,991	22,089
District 5	9,154	9,464	9,554	9,646	9,738
District 6	13,765	13,493	13,371	13,251	13,131
District 7	24,394	22,973	22,805	22,638	22,473
District 8	15,847	15,153	15,060	14,967	14,875
District 9	15,969	16,939	17,222	17,510	17,804
State	168,479	169,820	170,115	170,421	170,737

The projections for parents and Others are based on the fraction of the population that have been enrolled in a Medicaid program with this fraction hovering around 2% of the total population for parents and 2.65% of the population for Others. These proportions vary among districts and they have varied over the 2012-2018 time period.

The projections for parents are illustrated in Table 7. For parents, districts 3, 6, and 8 have the largest percentage of their population qualifying for Medicaid support as a parent with these percentages being around 2.5% of the population. These estimates will vary with the variation in population projections. Projected population increases and reductions in the health district will influence estimates of parents being Medicaid enrollees through 2022.

We also note that parents increased from 2012 to 2016 by over 35,000 enrollees and has now moved down by approximately 20,000 enrollees. This change coincided with the development of Medicaid Expansion so we are establishing a new norm. Our projections are based on this new norm being predictable. This is an issue we will need to explore further with the Louisiana Department of Health in order to quantify any factor recognizing the migration of parents to Medicaid Expansion.

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Table 7. Projections for Parent Medicaid Enrollees by Health Districts and the State of Louisiana, 2019-2022

Health Districts	2018	2019	2020	2021	2022
District 1	20,657	20,789	20,921	21,055	21,189
District 2	13,616	13,659	13,702	13,745	13,788
District 3	10,134	10,077	10,020	9,964	9,907
District 4	14,432	14,496	14,561	14,626	14,692
District 5	6,986	7,053	7,121	7,189	7,258
District 6	7,449	7,382	7,316	7,250	7,184
District 7	11,587	11,503	11,418	11,335	11,252
District 8	9,136	9,080	9,024	8,969	8,913
District 9	12,127	12,330	12,536	12,746	12,959
State	106,125	106,369	106,619	106,878	107,143

The Other category was a summary of many individual categories of Medicaid enrollees and it was averaging over 115,322 in calendar 2017 and down from the calendar 2016 average of 202,590 and the calendar 2015 average of 269,396. By 2018 it had dropped to 118,485 primarily because many of the persons were transferred to the Medicaid Expansion program. There are still persons in other categories that are not eligible for Medicaid Expansion and they are not in the aged, disabled, children, or parent category. They will be put in this generic category. The Other projections are illustrated in Table 8. This projection is based on the population estimate times the percent of the population in 2018 that were classified as Other.

Table 8. Projections for Other Medicaid Enrollees by Health Districts and the State of Louisiana, 2019-2022

Health Districts	2018	2019	2020	2021	2022
District 1	25,510	25,673	25,837	26,002	26,168
District 2	14,071	14,115	14,159	14,204	14,248
District 3	10,822	10,761	10,700	10,640	10,580
District 4	14,432	14,496	14,561	14,626	14,692
District 5	7,122	7,191	7,260	7,329	7,400
District 6	8,999	8,918	8,838	8,758	8,679
District 7	13,988	13,885	13,784	13,683	13,583
District 8	10,210	10,147	10,085	10,022	9,961
District 9	13,331	13,554	13,781	14,011	14,246
State	118,485	118,740	119,004	119,276	119,555

The preliminary projections on parents and Other is based on the following assumption: namely, the present readjustment from parents, other, and all other possible categories to Medicaid Expansion has occurred. This suggests that we are now starting with a base number that will not be adjusted for wholesale movement into another Medicaid program. This is also why we have referred to these projections as preliminary since there may be still adjustments occurring that may not be fully incorporated into the data. These future adjustments will need to be fully incorporated in the long-term forecasting data.

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We now turn to projections for the Medicaid Expansion program with a focus on calendar year forecasts. The first step is to establish a ceiling based on the non-elderly adults that are classified as below the 138% FPL. In Table 9 we estimate the ceiling for the Medicaid Expansion program but this does not include persons in the 100% to 138% FPL category since we, at this time, do not have the estimate of the number of persons in the 100% to 138% FPL category. The projection includes the estimate of the population, the estimate of the fraction of the population identified as non-elderly adults, and the estimate of the fraction of the persons who will be classified as earning less than the FPL. In 2018, the ceiling was estimated to be 562,110, substantially more than existing enrollment count. These estimates include a calendar 2019 ceiling of 567,965 and this ceiling grows to 571,368 by 2022. As additional information is collected regarding the number of non-elderly adults in the 100% to 138% FPL category, these estimates will need to be updated.

Table 9 provides estimates of who might be eligible for Medicaid Expansion based on population estimates and the fraction of the population that has income less than the FPL. The number of non-elderly adults who have income less than the FPL is substantial, amounting to almost 20% of the non-elderly adult population. This percentage varies from health district to health district. The estimates in Table 9 represent the ceiling and not the number of persons who have enrolled in the Medicaid Expansion program as of 2019.

Table 9. Projection of Ceiling for Medicaid Expansion Enrollees by Health Districts and the State of Louisiana, 2019-2022

Health Districts	2018	2019	2020	2021	2022
District 1	120,197	120,182	120,949	121,720	122,497
District 2	75,722	76,356	76,596	76,837	77,079
District 3	42,253	42,609	42,368	42,129	41,891
District 4	74,957	74,568	74,901	75,236	75,572
District 5	28,228	31,021	31,318	31,619	31,922
District 6	38,619	38,091	37,748	37,408	37,071
District 7	76,132	73,152	72,617	72,085	71,558
District 8	55,107	56,556	56,207	55,861	55,517
District 9	50,896	55,431	56,359	57,303	58,262
State	562,110	567,965	569,063	570,197	571,368

The projections of non-elderly adults who have and may become eligible for the Medicaid Expansion program for 2019-2022 is presented in Table 10. These estimates are based on what occurred in 2017 and 2018 in terms of the percentage of the persons who make up the ceiling who actually enrolled in the Medicaid Expansion program. In 2018 the percentage of persons actually enrolling in the program was 83.4%. For 2019 through 2022 we assumed that Medicaid Expansion enrollees would be at 89.4% of the ceiling given the activity in Medicaid Expansion in late 2018 and the early months of 2019. This is an assumption based upon the data we have access to at this time. These are estimates that will need to be monitored and adjusted as needed. These estimates will also be affected by administrative adjustments as were made in November 2018 and the coordination between LDH and the Louisiana Workforce Commission in evaluating eligibility of Medicaid applicants.

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These projections suggest what we expect to observe under the assumption the program has been fully implemented, that potential enrollees have been made aware of the program and the administrative process will remain constant. This suggests that Medicaid Expansion enrollment will be near 515,000 by 2022. However, it can become substantially higher given that the ceiling by 2022, based on our estimates, is over 571,000.

Table 10. Projections for Medicaid Expansion Enrollees by Health Districts and the State of Louisiana, 2019-2022

Health Districts	2018	2019	2020	2021	2022
District 1	107,398	110,444	111,148	111,858	112,571
District 2	56,902	64,320	64,523	64,726	64,929
District 3	39,689	40,023	39,797	39,572	39,349
District 4	62,278	67,941	68,245	68,550	68,856
District 5	27,302	30,003	30,291	30,581	30,875
District 6	29,793	34,427	34,117	33,809	33,505
District 7	52,599	54,610	54,211	53,814	53,420
District 8	43,965	53,200	52,873	52,547	52,223
District 9	50,641	55,154	56,077	57,016	57,970
State	470,567	512,142	513,301	514,494	515,721

The projection of the ceiling for Medicaid Expansion enrollment is significant for a number of reasons. First, the other Medicaid categories, especially the aged, blind and disabled, and children, have a longer enrollment history to suggest that their projections can also be treated as ceilings. The Parents and Other categories are connected to changes in Medicaid Expansion. Hence, projections for Parents and Other are ultimately related to what is happening in the Medicaid Expansion category. Second, for administrative and budgeting purposes, the Louisiana Department of Health needs an estimate Medicaid Expansion enrollment. The ceiling projections in Table 9 provide a preliminary snapshot of Medicaid Expansion enrollment under maximum participation. The ceiling estimates for Medicaid Expansion have not taken into account estimates for enrollment in the Parents and Other categories. This will require coordination with the Louisiana Department of Health in defining the possibilities of such transfers.

The projections for all Medicaid enrollees by Health Districts and for the state are summarized in Table 11. These estimates are the summation of projections in the various categories. It is projected that by calendar 2022 the estimated Medicaid enrollees will be 1,673,150. Based on population growth, by 2022, Medicaid enrollees will represent about 36% of the population compared to 24% in 2012, 27% in 2015, and 35% in 2018. This increase in the proportion of the population covered by Medicaid coincides with the reduction in the uninsured rate from 17% in 2012 to 8% in 2017, as provided by the Kaiser Family Foundation. For non-elderly adults the uninsured rate has declined from 25% in 2012 to 13% in 2017.

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Table 11. Projection of All Medicaid Enrollees by Health Districts and the State of Louisiana, 2019-2022

Health Districts	2018	2019	2020	2021	2022
District 1	330,076	335,328	338,089	340,903	343,774
District 2	203,296	213,698	214,729	215,782	216,857
District 3	138,530	137,032	136,447	135,872	135,308
District 4	216,720	223,013	224,217	225,433	226,660
District 5	98,850	104,485	105,551	106,630	107,720
District 6	112,249	115,043	114,171	113,310	112,461
District 7	191,468	191,530	190,443	189,375	188,324
District 8	145,235	153,314	152,592	151,881	151,182
District 9	176,668	185,133	188,405	191,740	195,140
State	1,613,092	1,658,577	1,664,644	1,670,925	1,677,427

Summary and Conclusions

We have projected Medicaid enrollees by calendar years from calendar 2019 through calendar 2022. We have made the following projections for Medicaid enrollees:

- Aged enrollees: projected to increase to over 67,000 in 2022
- Blind and Disabled enrollees: projected to increase to about 171,000 in 2022
- Children enrollees: projected to increase to around 700,000 in 2022
- Parent enrollees: projected to be around 107,000 in 2022
- Other enrollees: projected to be around 120,000 in 2022
- Medicaid Expansion enrollees: projected to be around 516,000 in 2022

The projections for aged, blind and disabled, and children serve as a ceiling for projected Medicaid enrollees in those categories. For Medicaid Expansion, we estimate the ceiling, based on currently available information, to be just over to 571,000 by 2022. This ceiling estimate is based on the number of persons in the less than FPL category that have not registered for Medicaid Expansion presently.

We have illustrated the noticeable variation for Medicaid enrollees for all categories in monthly and quarterly data. To properly project such variations will require close work with the Louisiana Department of Health to identify possible administrative and policy changes impacting enrollment, as well as a closer examination of the economic and social determinants by parish.

This study has also highlighted a number of items that should be further researched in conjunction with the Louisiana Department of Health. These include the following: (1) a definition of each category of enrollee and how this definition may vary within the Louisiana Department of Health, (2) information required for the Health and Social Services Estimating Conference to include a Medicaid Subcommittee and for other uses by LDH, (3) changes in

administrative, budgetary, or other processes that may influence the short-term enrollees count, and, (4) the ability to collect parish level data on a timely basis so that aggregated data can be enumerated by health district.

Finally, the researchers will work with the Louisiana Department of Health and other state units to enhance and upgrade the projections of independent economic and social variables that ultimately drive the long-term forecasts of Medicaid enrollment.