Projecting Medicaid Enrollment in Louisiana

Prepared for
Louisiana Department of Health*

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Executive Summary

Monthly and quarterly data on Medicaid enrollees show variation on a monthly and quarterly basis as noted in Figure ES.1. 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.

Figure ES.1. Medicaid Enrollment by Category, June 2012 through March 2019

Projections for Medicaid enrollment will be based on 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.
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 100,000 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.

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 25,000 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.
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.
Figure 3a. Change in Enrollment: Aged, Blind, Disabled

Change in Medicaid Enrollees
Classification: Aged, Blind, Disabled

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

Monthly change from average of previous three months, September 2012 through March 2019
Source: LDH Medicaid by Parish
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

Period of Medicaid Expansion

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

Figure 3f. Change in Enrollment: Total Medicaid
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, Aged, Children, and Poverty

Population growth from 2012 to 2018 and from 2016 to 2018 are illustrated in Figure 4. 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%. 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

![Population Growth Chart]

Source: U.S. American Community Survey

The variation of the population by aged and children among health districts as of 2018 is presented in Figure 5. Given the nature of the Medicaid program and the categorization of Medicaid enrollees by age, this information becomes the backdrop for providing projections of Medicaid enrollees. These factors become important components of any projection of Medicaid enrollees.
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 6. 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.
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 ensure compliance with the regulations as required by law. This is information that we will gather from the Louisiana Department of Health.

Summary and Conclusions

Projections of Medicaid enrollees will depend on data provided by LDH and descriptions of changes in administrative procedures that could affect the month to month enrollment counts and independent variables by parish. 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. Projections of Medicaid enrollees will represent the
methods and procedures of carrying out the enrollment process for Medicaid and the fundamental factors that determine the eligibility of enrollees as defined by state and federal law.

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.