Operational Overview of the Medicaid and NC Health Choice Programs for SFY 2018
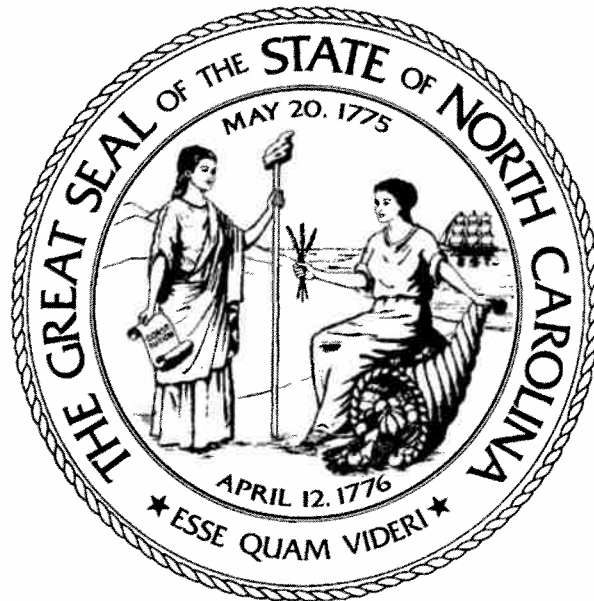
Session Law 2015-245, Section 13.(e).(8)

Report to the

Joint Legislative Oversight Committee on Medicaid and NC Health Choice

By

NC Department of Health and Human Services

January 24, 2018

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I. Introduction

The Department of Health and Human Services (DHHS), Division of Medical Assistance (DMA), presents the following forecast of expected changes to Medicaid and NC Health Choice enrollment by Program Aid Category (PAC) through State Fiscal Year (SFY) ending June 30, 2022. The forecasted enrollment contained in this report was developed based on enrollment as of November 2017, historical trends, and expected population changes and economic factors (see Appendix B for more information on methodology). DMA monitors actual enrollment on a monthly basis and updates its enrollment forecast throughout the year for purposes of budget setting and program monitoring.

This report was developed to meet the requirements of Session Law 2015-245, Section 13 (e)(8), which requires DHHS to:

> *Develop and present to the Joint Legislative Oversight Committee on Medicaid and NC Health Choice and the Office of State Budget and Management by January 1 of each year, beginning in 2017, the following information for the Medicaid and NC Health Choice programs:*
>
> a) *A detailed four-year forecast of expected changes to enrollment growth and enrollment mix.*
>
> b) *What program changes will be made by the Department in order to stay within the existing budget for the programs based on the next fiscal year's forecasted enrollment growth and enrollment mix.*
>
> c) *The cost to maintain the current level of services based on the next fiscal year's forecasted enrollment growth and enrollment mix.*

Overall, the Department expects enrollment to continue a trend of growth between 3% and 5% per year over the next four years. While overall enrollment is expected to continue growing as it has in recent years, changes in the current enrollment mix could mean that expenditures grow at a different rate than overall enrollment.

The Department expects that the Medicaid and NC Health Choice programs will finish SFY 2018 within the adopted budget, and the Department does not recommend any changes to services offered at this time in order to stay within the budget. Upon the finalization of SFY 2018-2019 biennium budget, the Department will continually monitor spending trends relative to budget and make adjustments and recommendations as needed in order to remain within budget.

Attached, you will find detailed enrollment forecasts for Medicaid and NC Health Choice as a total and by individual enrollment category, or program aid category (PAC), as well as explanations regarding program changes and the cost to maintain the current level of service in SFY 2019.

Total Medicaid & NC Health Choice Enrollment

Over the next 4 years, overall enrollment is projected to grow, starting at around 4% a year before leveling off to around 3% a year by SFY 2021. This growth is not evenly distributed, as the largest source of enrollment growth, Family Planning, is among the least expensive Program Aid Categories (PACs) on a per-member basis. This means that the budget is predicted to grow less aggressively- for example, a predicted 4.12% increase in enrollment from SFY 2017 to SFY 2018 corresponds with only **3.7%** projected growth in expenses.

To provide additional context for anticipated growth, the individual PACs are addressed in the subsequent pages with reference to the current average monthly per-member cost.

Enrollment Projections
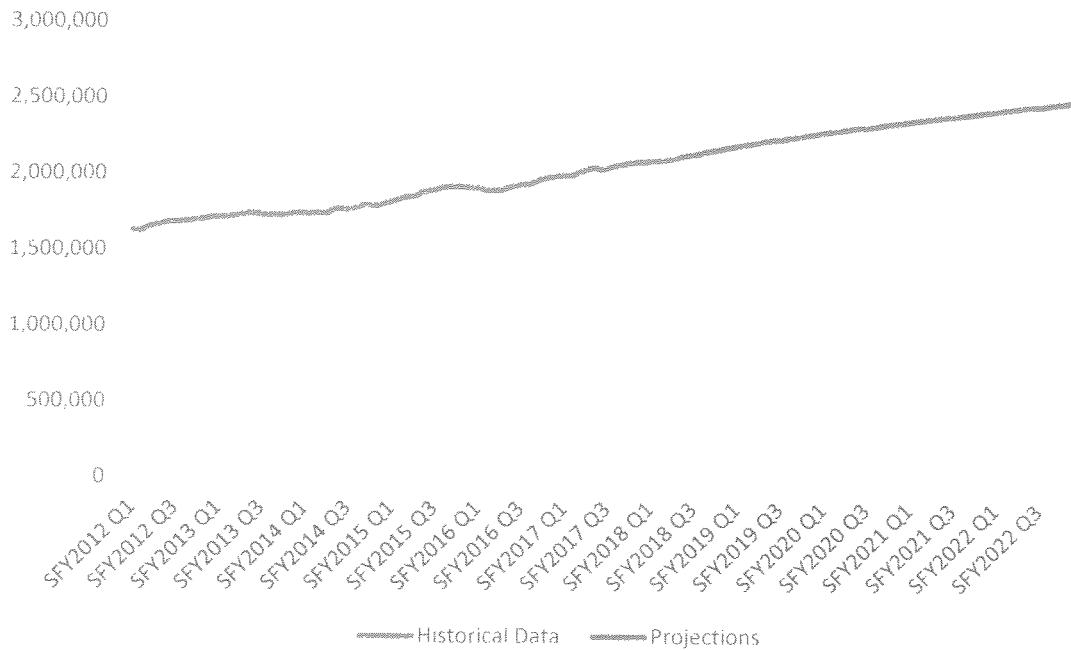
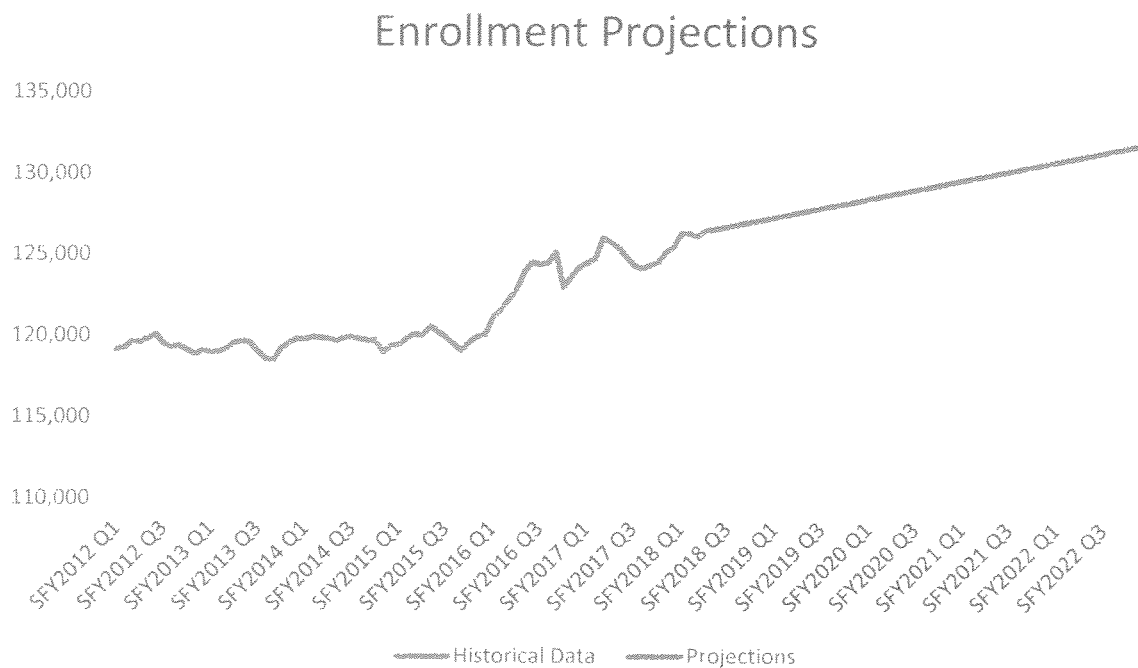|	SFY2017	SFY2018	SFY2019	SFY2020	SFY2021	SFY2022
Average Monthly Enroll	2,049,526	2,136,864	2,238,618	2,321,785	2,395,855	2,465,356

Data was sourced from the Monthly Medicaid Enrollment report and was adjusted using supplementary reporting from NC FAST in order to ensure accurate reporting of historical data.

Aged

The Aged PAC is composed of Individuals over age 65 and below NC established income threshold.

Enrollment in aged has experienced growth since SFY2012 though such growth has not been even, there are no consistent trends among the data between periods of rapid growth, slow growth, and decrease. As such the long term projectition of 1% growth a year must be cautionied with the understanding that the actual growth will vary up and down somewhat unpredictably.

SFY2018 Monthly Average Member Spending* (through 10/16): $1,216

Enrollment Projections

Historical Data   Projections

	SFY2017	SFY2018	SFY2019	SFY2020	SFY2021	SFY2022
Average Monthly Enrollment	124,989	126,737	127,889	129,049	130,209	131,369

*"Monthly Average Member Spending" includes claims and premiums paid through NC Tracks, and does not include certain categories of expense, including Medicare premiums and non-emergency medical transportation.

Data was sourced from the Monthly Medicaid Enrollment report and was adjusted using supplementary reporting from NC FAST in order to ensure accurate reporting of historical data.
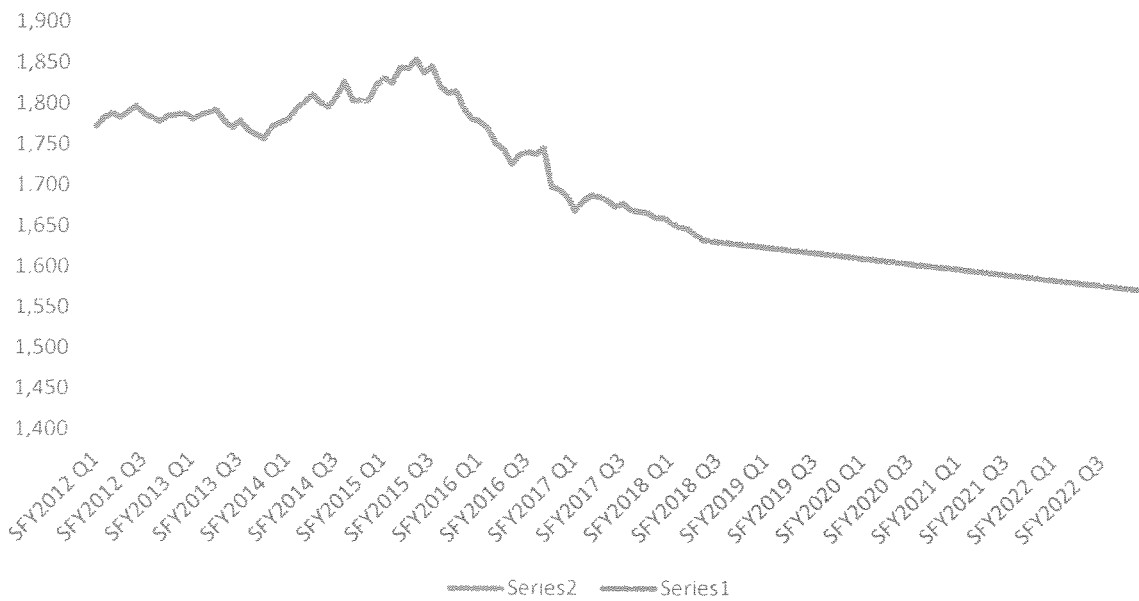
Blind

The Blind PAC is composed of individuals considered legally blind based on Social Security standards and below NC established income threshold.

Enrollment in the Blind PAC has declined in recent history, this decline is projected to continue with a slight leveling off. Though the Blind PAC has one of the highest cost-per-enrollee figures, the population is small and represents a correspondingly small portion of the expense for DMA.

SFY2018 Monthly Average Member Spending* (through 10/16): $1,324

Enrollment Projections

Series2   Series1

	SFY2017	SFY2018	SFY2019	SFY2020	SFY2021	SFY2022
Average Monthly Enrollment	1,675	1,636	1,620	1,607	1,594	1,581

Data was sourced from the Monthly Medicaid Enrollment report and was adjusted using supplementary reporting from NC FAST in order to ensure accurate reporting of historical data.

Disabled

The Disabled PAC is composed of individuals considered disabled based on Social Security standards and below NC established income threshold.

Growth in the Disabled PAC has been relatively predictable, holding a average of a little over 2% a year for over 10 years. This growth rate is projected to continue. This PAC contains both the second highest cost-per-enrollee figures and the largest enrolled population, and as such represents the single largest source of expense for DMA (currently, Disabled costs account for 46% of the total PAC assigned expenses in SFY 2018).

SFY2018 Monthly Average Member Spending* (through 10/16): $1,568

Enrollment Projections

Historical Data   Projections
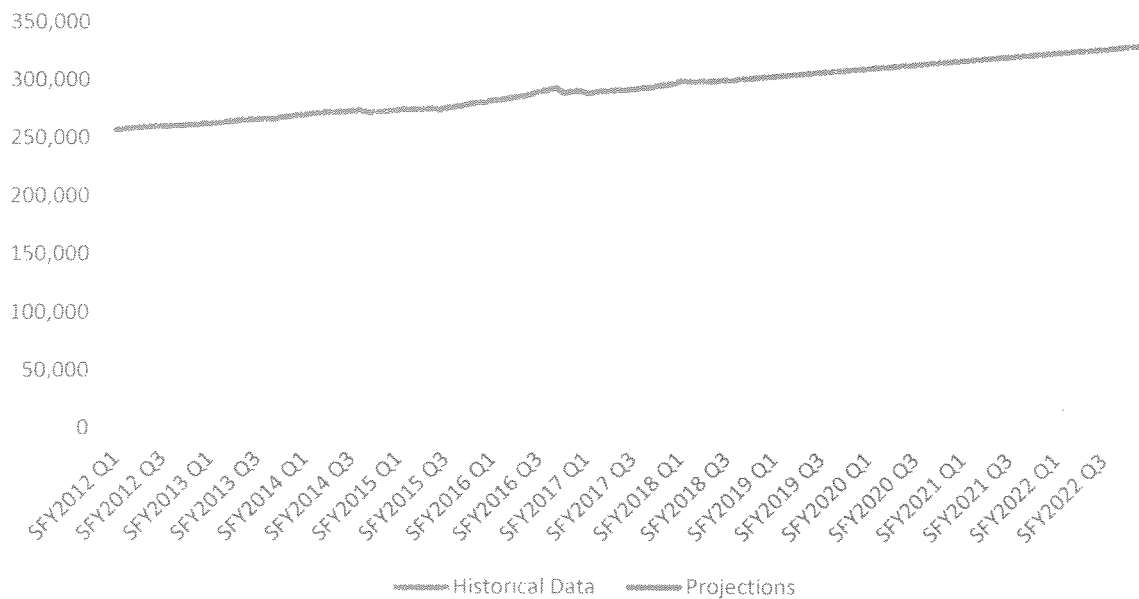
	SFY2017	SFY2018	SFY2019	SFY2020	SFY2021	SFY2022
Average Monthly Enrollment	293,637	301,673	308,132	315,184	322,236	329,288

Data was sourced from the Monthly Medicaid Enrollment report and was adjusted using supplementary reporting from NC FAST in order to ensure accurate reporting of historical data.

Other Child

The Other Child PAC is composed of individuals currently or formerly in foster care from birth to age 25. Though the Other Child PAC experienced rapid growth in SFY 2014-2015, this was preceded by decline in the preceding years. Such rapid growth in recent years can be viewed as a "return to base" in historical context. Enrollment in this PAC is predicted to grow at around 3% a year through the next 4 years. (The decrease in 2017 was due to foster children being moved to other PACS, this was reversed and not pojected to have any effect on future growth projections). Data shows that the percentage of children entering foster care in which Parental Drug Use is listed as a contributory factor increased from 30.7% of all entries in SFY 2011-12 to 38.1% of all entries in SFY 2016-17

SFY2018 Monthly Average Member Spending* (through 10/16): $974

Enrollment Projections

— Historical Data   — Projections
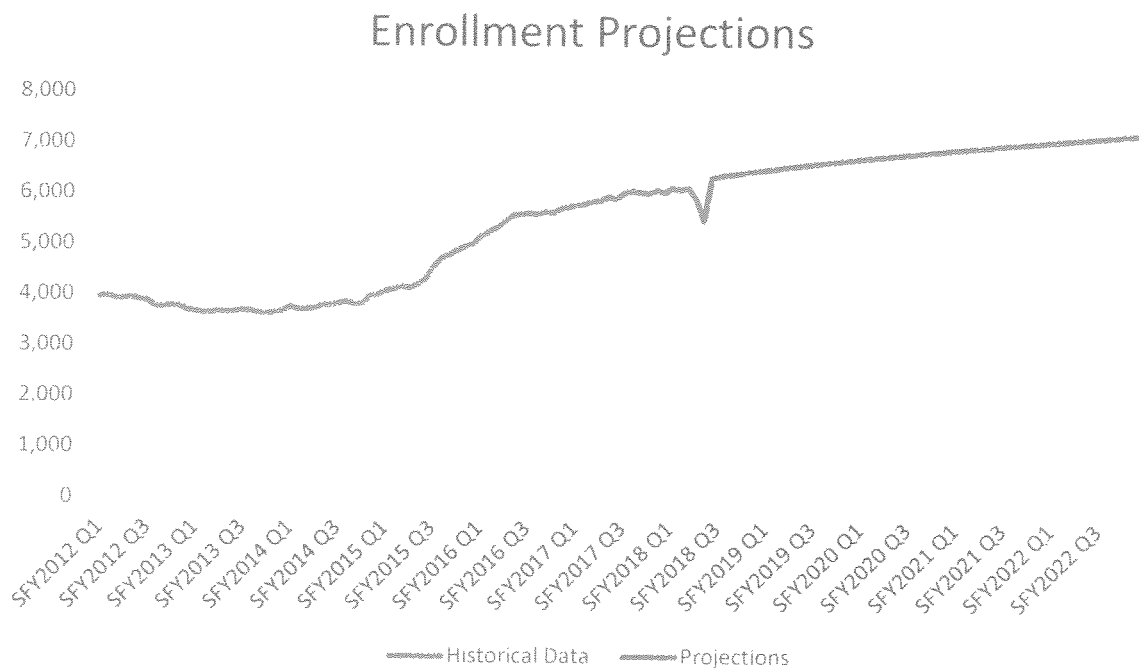
	SFY2017	SFY2018	SFY2019	SFY2020	SFY2021	SFY2022
Average Monthly Enrollment	5,960	6,224	6,607	6,812	6,989	7,151

Data was sourced from the Monthly Medicaid Enrollment report and was adjusted using supplementary reporting from NC FAST in order to ensure accurate reporting of historical data.

Family Planning

The Family Planning PAC is composed of individuals up to 195% of Federal Poverty Level, but not meeting eligibility standards for full Medicaid coverage. These beneficiaries are eligible for family planning exams and services, screenings and treatment for sexually transmitted infections, screenings for HIV, and sterilizations.

Due to a system change utilizing an automated enrollment system, the Family Planning PAC has experienced rapid growth in recent years, as much as a 41% increase in enrollment from SFY 2017-SFY 2018. Even accounting for the current growth, OSBM estimates that Family Planning is nowhere near any potential population constraints, and growth is expected to continue (with some slowdown). Though the enrollment numbers are large, this growth is not predicted to have a major impact on the budget, due to the low average cost of individual enrollees in the Family Planning group (the lowest of any PAC that is not also qualified for Medicare), under $6 per month, or just $65 per year.

SFY2018 Monthly Average Member Spending* (through 10/16): $5.46

Enrollment Projections

Historical Data ———Projections
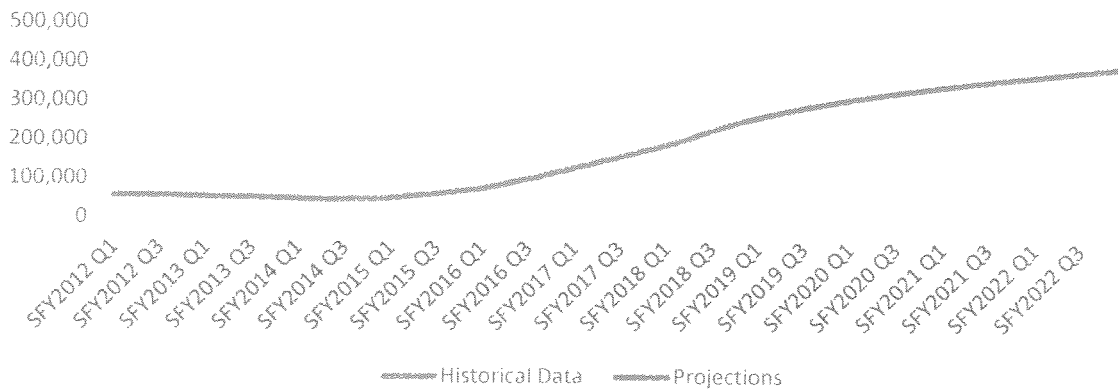
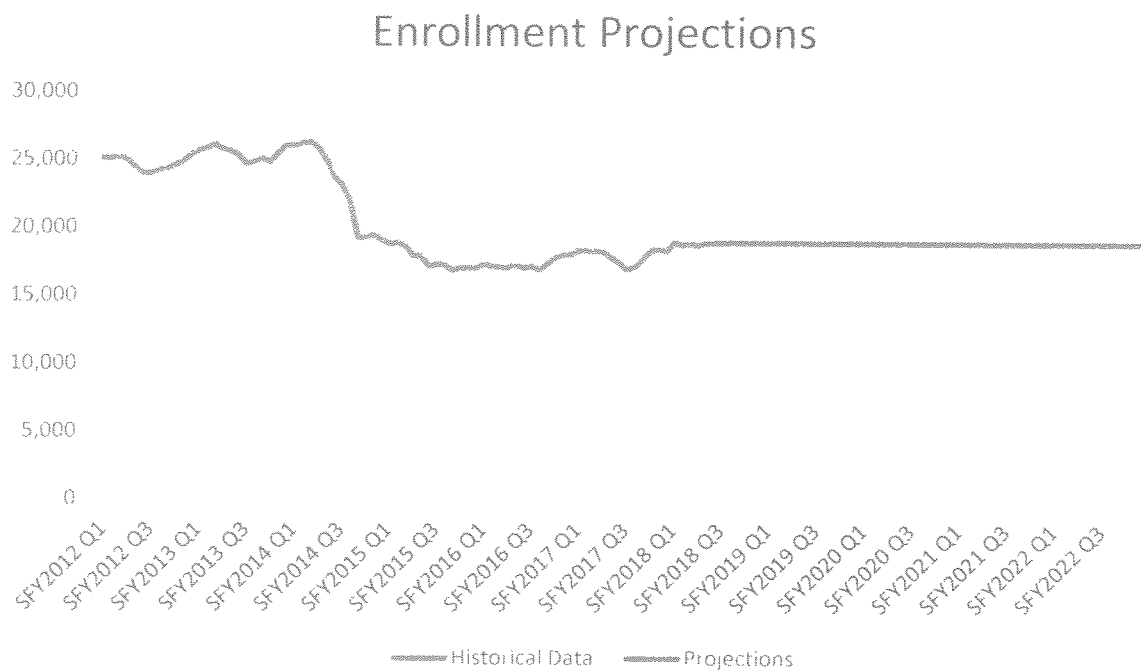|	SFY2017	SFY2018	SFY2019	SFY2020	SFY2021	SFY2022
Average Monthly Enrollment	157,766	223,636	283,593	323,490	353,650	379,219

Data was sourced from the Monthly Medicaid Enrollment report and was adjusted using supplementary reporting from NC FAST in order to ensure accurate reporting of historical data.

Pregnant Women

The Pregnant Women (MPW) PAC consists of women who are pregnant and individuals up to 196% of Federal Poverty Level to help pay for conditions that affect pregnancy.

Following a rapid drop in SFY 2014, likely associated with many woman or childbearing age gaining coverage through the Affordable Care Act, the MPW PAC has settled at a fairly steady enrollment average of around 17,000. Brief increases and decreased always tend to move back to the base and this PAC is predicted is not predicted to vary significantly.

SFY2018 Monthly Average Member Spending* (through 10/16): $786

Enrollment Projections

Historical Data ——— Projections

	SFY2017	SFY2018	SFY2019	SFY2020	SFY2021	SFY2022
Average Monthly Enrollment	18,036	18,981	19,043	19,043	19,043	19,043

Data was sourced from the Monthly Medicaid Enrollment report and was adjusted using supplementary reporting from NC FAST in order to ensure accurate reporting of historical data.
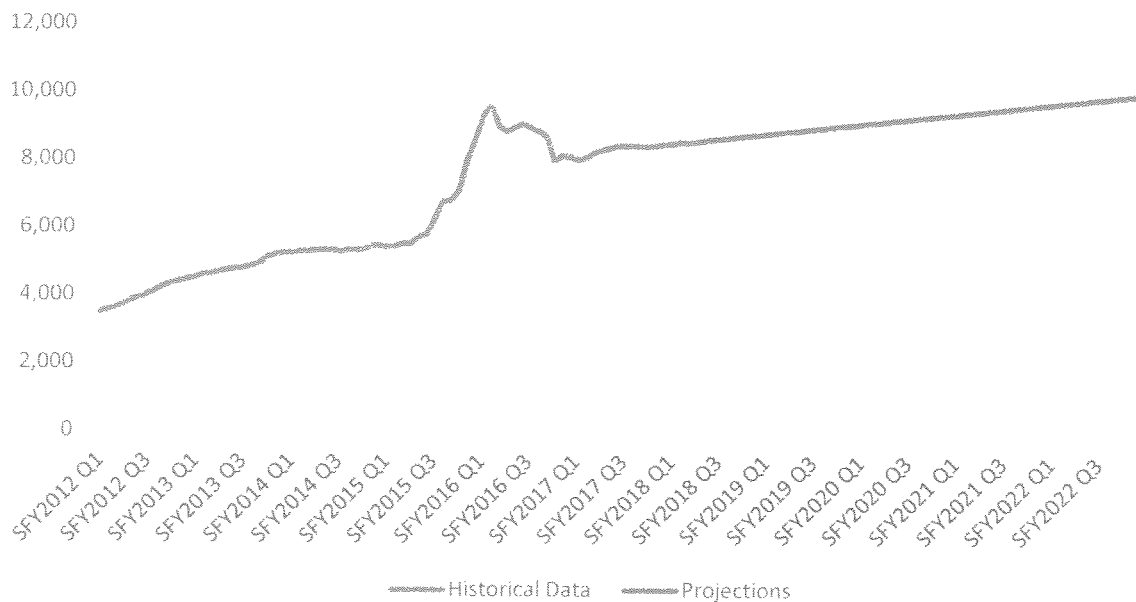
Qualified Medicare Beneficiaries (MQB-Q)

The Qualified Medicare Beneficiaries (MQB-Q) PAC is composed of individuals entitled to Medicare Parts A & B and up to 100% of the Federal Poverty Level, and not otherwise entitled to full Medicaid benefits, for example, in the aged or disabled categories. Medicaid helps individuals in this PAC pay for Medicare premiums, deductibles, and co-insurance charges for Medicare covered services.

MQB-Q enrollment has maintained a continuous growth since SFY 2003. While there was a bump in SFY16, this returned to normal, and does not appear to be representative of long term growth. Currently growth is expected to continue at a rate of approximately 3.5% a year.

SFY2018 Monthly Average Member Spending* (through 10/16):   *Not available due to refunds*

Enrollment Projections

	SFY2017	SFY2018	SFY2019	SFY2020	SFY2021	SFY2022
Average Monthly Enrollment	8,344	8,643	8,948	9,252	9,555	9,859

Data was sourced from the Monthly Medicaid Enrollment report and was adjusted using supplementary reporting from NC FAST in order to ensure accurate reporting of historical data.

# Specified Low Income Medicare Beneficiaries (MQB-B)

The Specified Low Income Medicare Beneficiaries (MQB-B) PAC is composed of individuals entitled to free Medicare Part A and between 100% - 120% of the Federal Poverty Leve. Individuals in this PAC receive assistance with Medicare Part B premiums.

The MQB-B PAC has experienced continuous but uneven growth since 1993. This growth is expected to continue at a rate of approximately 2%.

SFY2018 Monthly Average Member Spending* (through 10/16):   *Not eligible for claims spending*

Enrollment Projections

Historical Data   Projections
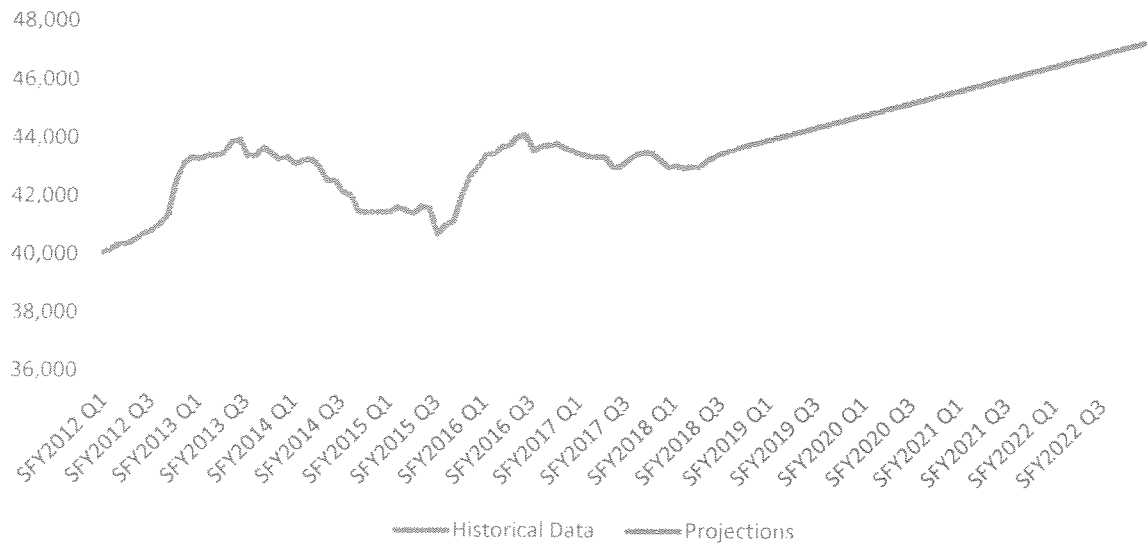
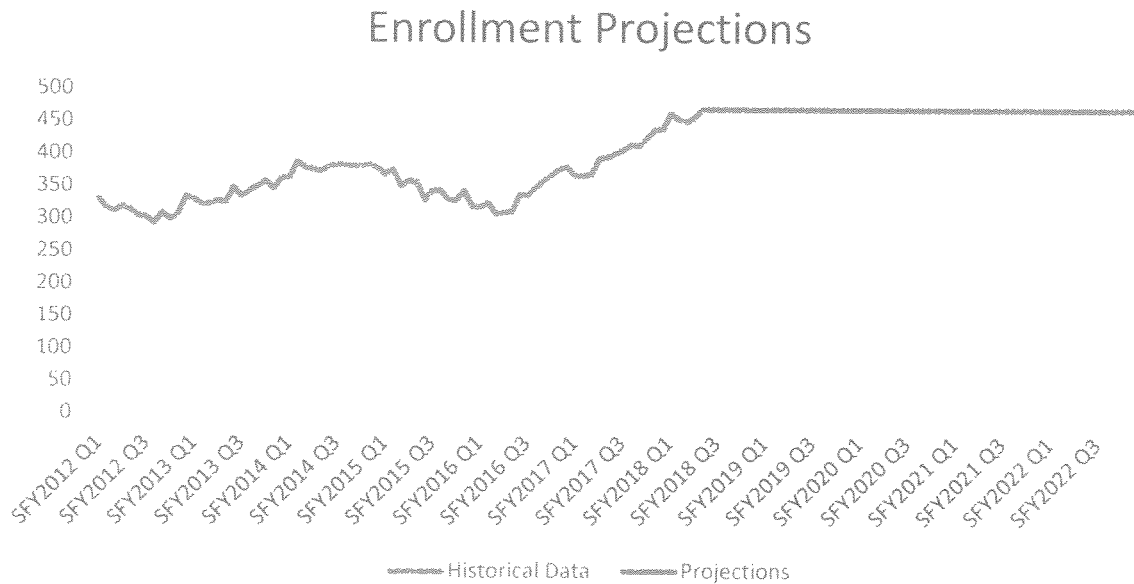|	SFY2017	SFY2018	SFY2019	SFY2020	SFY2021	SFY2022
Average Monthly Enrollment	43,360	43,484	44,440	45,308	46,177	47,046

Data was sourced from the Monthly Medicaid Enrollment report and was adjusted using supplementary reporting from NC FAST in order to ensure accurate reporting of historical data.

Breast and Cervical Cancer

The Breast and Cervical Cancer Medicaid (BCC) PAC is composed of women ages 18 through 64, screened and enrolled in the NC Breast & Cervical Cancer Control Program, and below NC established income threshold.

Though the Breast and Cervical Cancer PAC has experienced historical growth in enrollment, recent trends show a slowdown in the growth rate over the past few years. As such, enrollment in this PAC is projected to remain at current levels. While this is the most expensive PAC on a per-member basis, this PAC also shows the lowest enrollment of any PAC, meaning this PAC ultimately represents a relatively small portion of the Medicaid budget.

SFY2018 Monthly Average Member Spending* (through 10/16): $2,661

Enrollment Projections

| SFY2017 | SFY2018 | SFY2019 | SFY2020 | SFY2021 | SFY2022 |

Data was sourced from the Monthly Medicaid Enrollment report and was adjusted using supplementary reporting from NC FAST in order to ensure accurate reporting of historical data.

Temporary Assistance for Needy Families (TANF) Over 20

The Temporary Assistance for Needy Families (TANF) Over 20 PAC is composed of individuals over the age of 20 and eligible for TANF.

Enrollment in the TANF>20 PAC is historically more volatile than for other PACs, and accounting for such volatility is difficult in making future projections. However, recent years have had more stable enrollment figures and the forecast assumes continued stability. Currently, an increase of around 2% a year is predicted.

SFY2018 Monthly Average Member Spending* (through 10/16): $ 565

Enrollment Projections

Historical Data   Projections
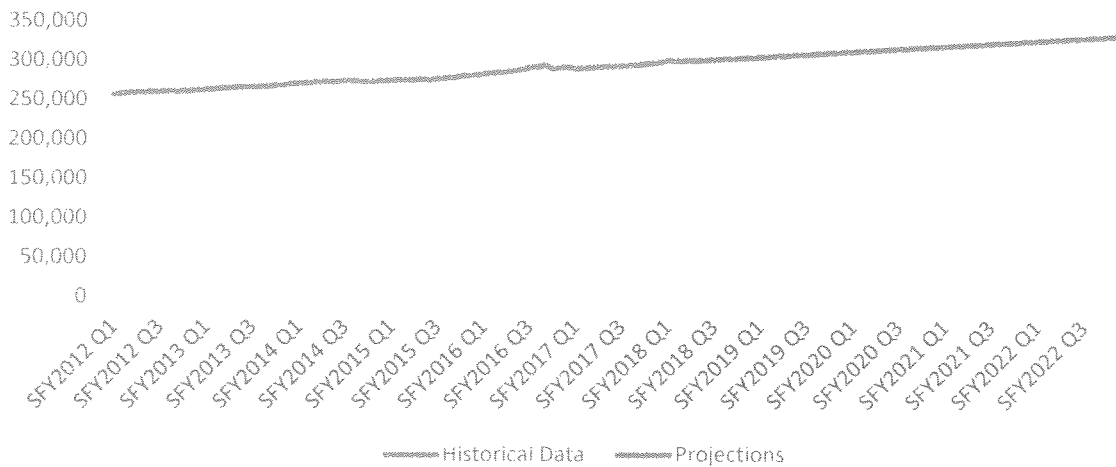
	SFY2017	SFY2018	SFY2019	SFY2020	SFY2021	SFY2022
Average Monthly Enrollment	199,387	187,880	187,114	187,114	187,114	187,114

Data was sourced from the Monthly Medicaid Enrollment report and was adjusted using supplementary reporting from NC FAST in order to ensure accurate reporting of historical data.

Legal Aliens

The Legal Aliens PAC is composed of individuals living in the US with proper documentation as qualified non-citizens and below NC established income requirements who have completed a five-year waiting period.

Since SFY 2014, enrollment in the Legal Aliens PAC has grown steadily. This growth is expected to continue at a rate of approximately 12% annually in future years.

SFY2018 Monthly Average Member Spending* (through 10/16): $283

Enrollment Projections

─── Historical Data   ─── Projections
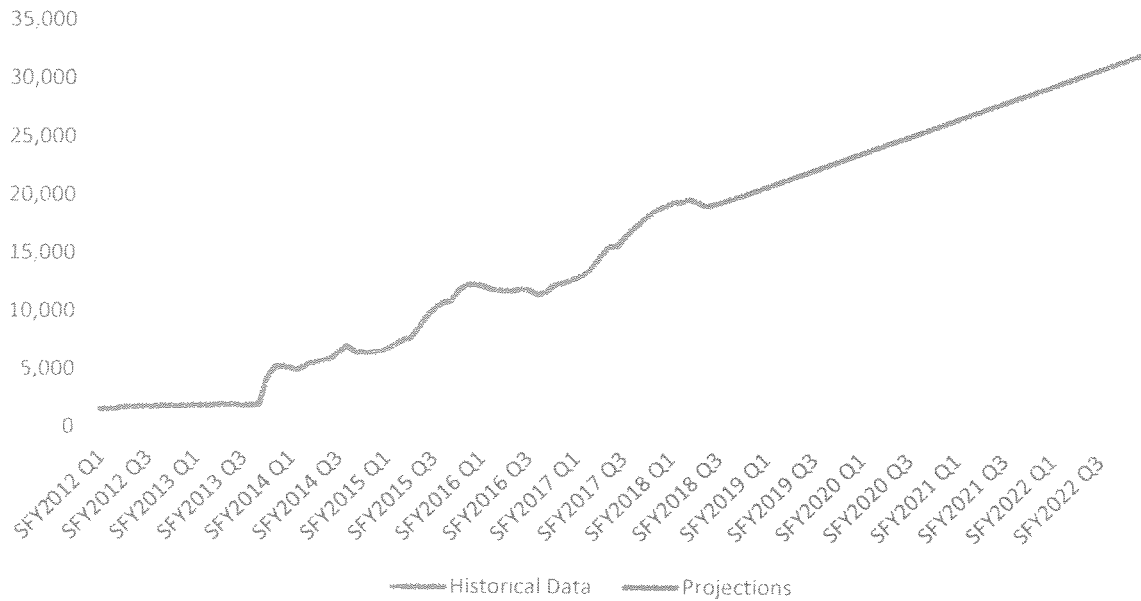
	SFY2017	SFY2018	SFY2019	SFY2020	SFY2021	SFY2022
Average Monthly Enrollment	16,247	19,782	22,284	25,237	28,189	31,141

Data was sourced from the Monthly Medicaid Enrollment report and was adjusted using supplementary reporting from NC FAST in order to ensure accurate reporting of historical data.

Refugees

The Refugees PAC is composed of individuals with proper immigration status and documentation and below NC established income threshold. These beneficiaries are covered fully by federal funding during the first eight months the refugee resides in the US.

The Refugees PAC experiences a naturally high level of volatility, and as such, projections must be made with a note of caution. Due to current federal policy, this PAC is predicted to remain largely stagnant, though given the responsiveness of this to disasters, all predictions must be treated with caution.

SFY2018 Monthly Average Member Spending* (through 10/16): $447

Enrollment Projections

Historical Data   Projections
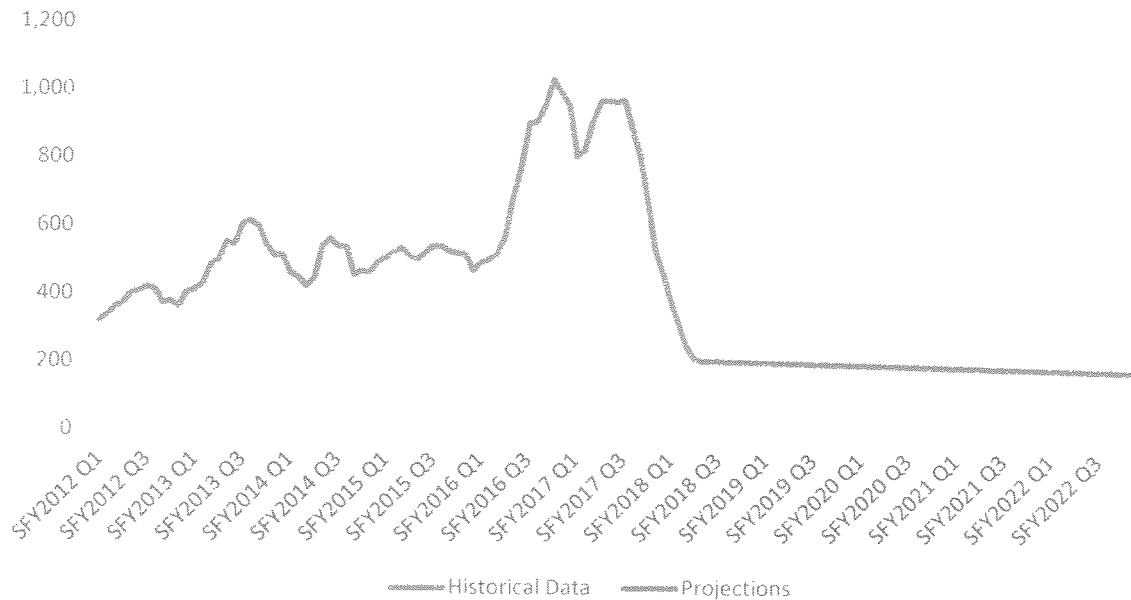
	SFY2017	SFY2018	SFY2019	SFY2020	SFY2021	SFY2022
Average Monthly Enrollment	815	231	197	191	184	177

Data was sourced from the Monthly Medicaid Enrollment report and was adjusted using supplementary reporting from NC FAST in order to ensure accurate reporting of historical data.

Qualified Individuals (MQB-E)

The Qualified Individuals (MQB-E) PAC is composed of individuals entitled to free Medicare Part A and between 120% - 135% Federal Poverty Level. Medicaid helps these beneficiaries pay for Medicare Part B premiums.

Historically, the MQB-E program has required enrollees to re-enroll at the start of each calendar year, leading to a very predictable drop each January, rapid growth over the course of the year, and a drop the next January. This PAC is predicted remain largely stagnant, with a consistent drop and re-integration every January.

SFY2018 Monthly Average Member Spending* (through 10/16):   *Not eligible for claims spending*

Enrollment Projections

Historical Data   Projections
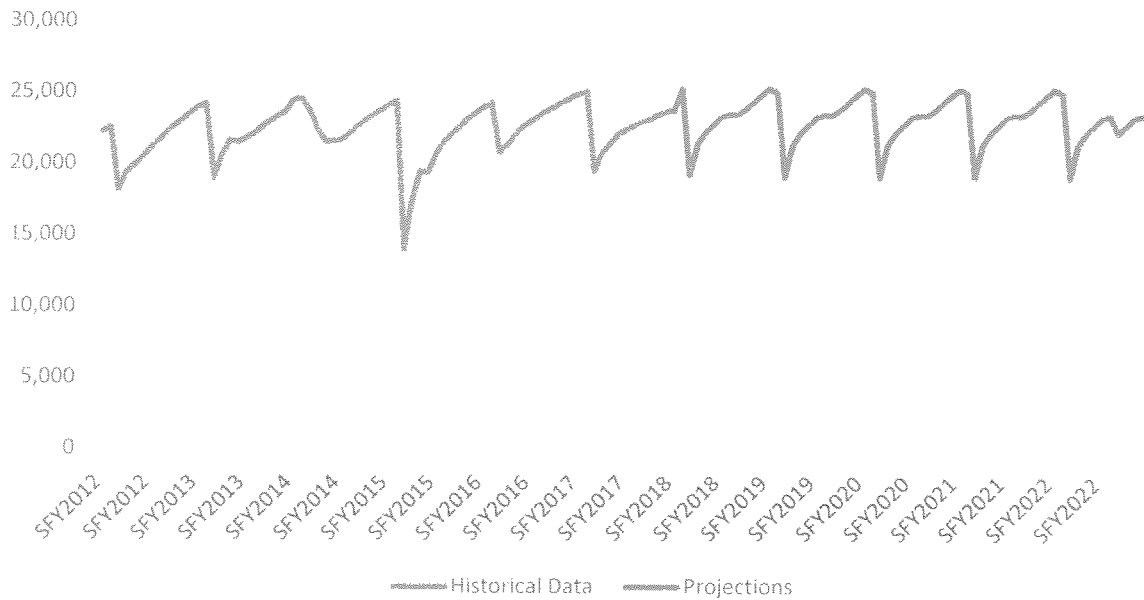
	SFY2017	SFY2018	SFY2019	SFY2020	SFY2021	SFY2022
Average Monthly Enrollment	22,731	15,836	23,288	23,288	23,288	22,897

Data was sourced from the Monthly Medicaid Enrollment report and was adjusted using supplementary reporting from NC FAST in order to ensure accurate reporting of historical data.

NC Health Choice and MCHIP

The NC Health Choice (Children's Health Insurance Program (CHIP)) PAC is composed of children from ages 6 through 18 and assigned Federal Poverty level based on age. Beneficiaries in this PAC are subject to service exclusions, including long-term care, early and periodic screening, diagnostic and treatment services, non-emergency medical transportation and full dental benefits. The MCHIP (Medicaid-Children's Health Insurance Program) is composed of children from birth through age 18 and below any NC established income threshold.

In SFY 2015, a large number of NC Health Choice enrollees were transferred to the MCHIP PAC. Though this resulted in a dramatic shift in enrollment for both PACs, the combined total remained steady, and as such represents a better metric for projecting historical enrollment trends than reporting the PACs individually. The transfer between these programs appears to have completed, and it is currently projected both PACs will remained at the current ratio of beneficiaries relative to each other, with moderate growth in the combined total of the two PACs.

SFY2018 Monthly Average Member Spending* (MCHIP, through 10/16): $179
SFY2018 Monthly Average Member Spending* (NCHC, through 10/16): $190

Enrollment Projections

Legend: Data Health Choice, Projection Health Choice, Data MChip, Projection MCHIP, Total Data, Total Projection
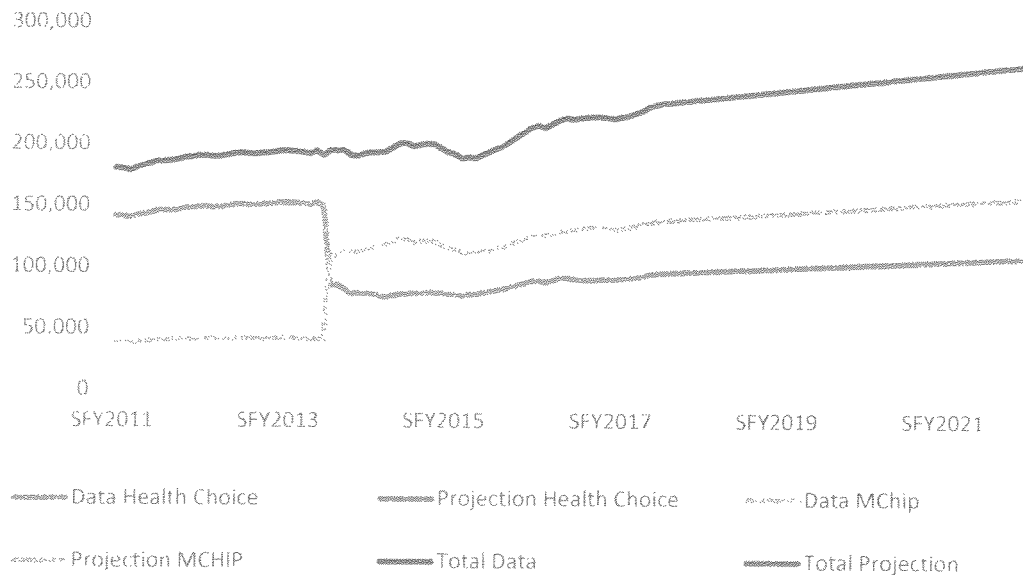
	SFY2017	SFY2018	SFY2019	SFY2020	SFY2021	SFY2022
Average Monthly Enrollment	220,132	211,258	240,878	248,151	255,423	262,695

Data was sourced from the Monthly Medicaid Enrollment report and was adjusted using supplementary reporting from NC FAST in order to ensure accurate reporting of historical data.

Temporary Assistance for Needy Families (TANF) Under 21 and Medicaid for Infants and Children

The TANF Under 21 PAC is composed of individuals under age 21 and eligible for TANF. The Infants and Children PAC (MIC) is composed of individuals from birth through age 18 and below NC established income threshold.

The TANF<21 and MIC PACs are best understood together, as they represent a similar population of enrollees. Starting in SFY 2015, a large number of MIC beneficiaries transferred to TANF<21. Though this resulted in a dramatic shift in enrollment for both PACs, the combined total has remained steady, and as such represents a better metric for projecting historical enrollment trends than reporting the PACs individually. The transfer between these PACs appears to have leveled off, and it is currently projected that both PACs will remain at their current ratio of beneficiaries relative to each other while the combined total continues a trend of approximately 2% annual growth.

SFY2018 Monthly Average Member Spending* (TANF<21, through 10/16): $243
SFY2018 Monthly Average Member Spending* (MIC, through 10/16): $227

Enrollment Projections

Legend: Data AFDCU21 — Projection AFDCU21 — Data MIC — Projection MIC — Total Data — Total Projection
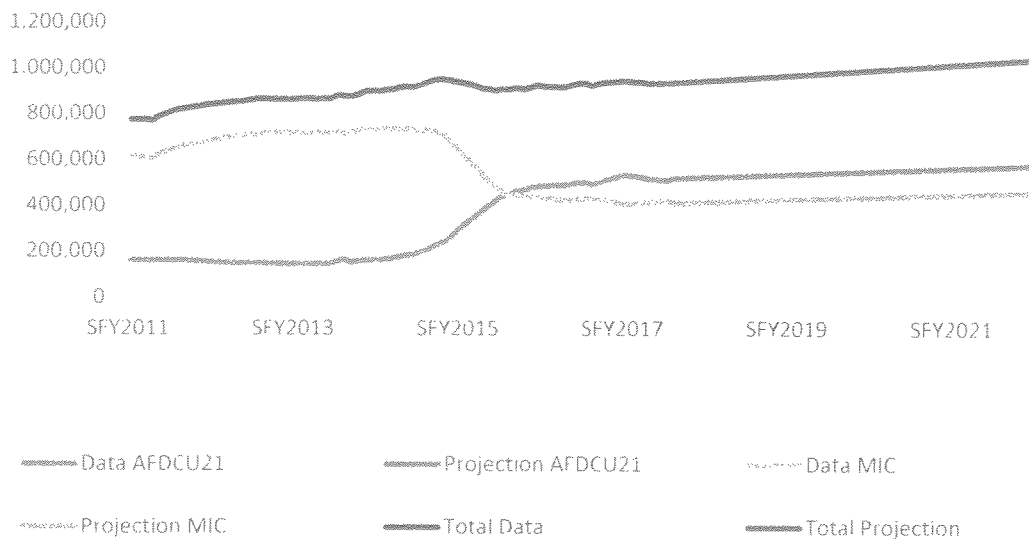
	SFY2017	SFY2018	SFY2019	SFY2020	SFY2021	SFY2022
Average Monthly Enrollment	931,340	941,689	959,670	983,022	1,007,074	1,031,303

Data was sourced from the Monthly Medicaid Enrollment report and was adjusted using supplementary reporting from NC FAST in order to ensure accurate reporting of historical data.

III. SFY 2018 Budget Expectations

Based on current enrollment, utilization, and spending trends, the Department anticipates that the Medicaid and NC Health Choice programs will finish SFY 2018 within the adopted budget, and is not recommending any program or reimbursement changes at this time. The Department is, however, constantly reviewing operations of the Medicaid and NC Health Choice programs to ensure they will operate within their respective budgets.

IV. SFY 2019 Budget Expectations

Based upon our current projections for the SFY 2019 budget year, the Department is no recommending any program or reimbursement changes since we are projecting that the Medicaid and the NC Health Choice programs will operate within the approved SFY 2019 budget. The Department is, however, constantly reviewing operation of the Medicaid and NC Health Choice programs.

The authorized SFY 2019 budget is based on North Carolina's prior year FMAP. In September 2017, the federal government updated the FMAP for all states based on changing economic conditions, and North Carolina saw a small decrease in its Title XIX (Medicaid) FMAP associated with an improving economy. Further, given Congress's failure to reauthorize CHIP to date, it is unclear whether there may be changes in the Title XXI (CHIP) FMAP for the coming fiscal year. The Department will continue to assess FMAP changes to determine any potential funding requests in the SFY 2019 budget.

SFY19 Projection	Budget	Forecast
Requirements	$14,685	$14,731
Receipts	10,873	10,920
Appropriations	$3,811	$3,811

Summary
DMA has forecasted appropriations need of $3.81 billion for the second year of the 2018-2019 biennium. This is nearly identical to the current authorized budget for SFY19.

This forecast assumes CHIP is funded in its current form with the 23-point bonus match through the end of SFY19. Current federal legislation to reauthorize the CHIP (Title XXI) funds include provision to extend the 23-bonus match for the first two years of the five-year reauthorization period.

Forecast is from appropriations model M-68 which is the basis for DMA's Q1 forecast update, with the addition of new internal enrollment projections detailed in this report.

Because there is minimal variance between current outlook and the authorized budget for the SFY 2019 budget, we have not itemized the variances.

Appendix A: Data Source

Enrollment data was sourced from the Monthly Medicaid Enrollment report and was adjusted using supplementary reporting from NC FAST in order to ensure accurate reporting of historical data.

Expenditure data was sourced from the DMA Budget Program Expenditure Report and combined with enrollment information to compile the Monthly Average Member Spending by PAC metrics. For the purpose of reporting the historical monthly spending calculations, this data only includes claims and premiums paid through NC Tracks and does not include certain expenditures, including Medicare premium payments, non-emergency medical transportation expenses, and non-claims expenditures.

Appendix B: Methodology

The forecast uses ARIMA (Autoregressive Integrated Moving Average) models. ARIMA models are a flexible tool for forecasting time series data because they account for a wide range of possible scenarios. For instance, ARIMA models can be appropriate for characterizing all of the following dynamics:

A. Enrollment is growing steadily
B. Enrollment is not growing
C. Enrollment grew rapidly but appears to be stabilizing
D. Enrollment has grown at different rates over time

The primary challenge in implementing an ARIMA framework is that because the individual models are so diverse, selecting the best model requires careful attention.

Each PAC was considered separately with two exceptions. TANF<21 + MIC and MCHIP + NCHC were combined due to historical transfers between the PACs that complicate the projection of the groups individually. The combined projections offer greater accuracy when compared to the individual projections. 28 models were tested for each PAC in order to identify the best one (see appendix C for detailed list). In addition, certain PACs experienced dramatic expansions or contractions, typically due to changes in eligibility criteria. In those cases, a term was added to treat the years before and after the shift separately. The inclusion of this term was tested for its performance impact. The most accurate model for each PAC was then used to produce a corresponding forecast (see appendix D for final model selections).

DMA's framework defines "accuracy" as out-of-sample fit. Out-of-sample fitness is a realistic performance test that simulates the conditions under which real forecasts would have been made. That is, the models must make forecasts for periods they haven't "looked at" yet.
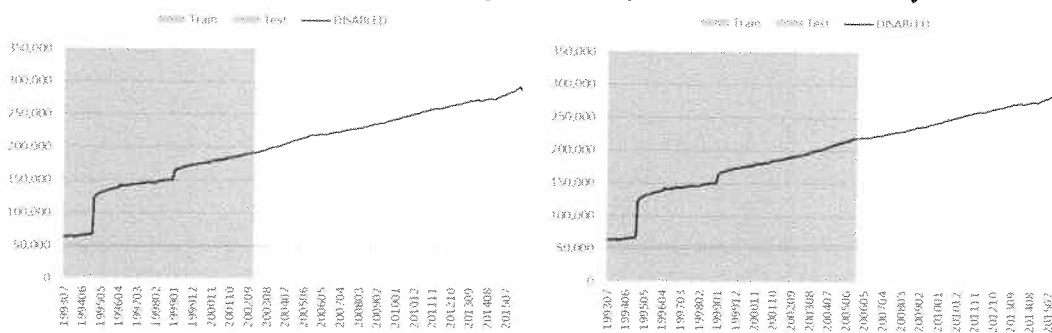
Above, left: Step 1 in a hypothetical example of the validation algorithm
Above, right: Step 36 in the same example

In the example above, each of the 28 candidate models is "trained" on the data shaded in green. That "training" data is used to come up with a forecast for the following 36 months. This forecast is then compared to the actual outcome (called the "testing" data). The models are trained *only* on the green region and do not have any information about the blue region. The model selection algorithm will save the performance of each candidate model on this test, then repeat, adding more data to the training period and asking for forecasts on a different test window. This strategy is called "rolling cross validation" and allows for maximum amount of out-of-sample training on a limited dataset.

The output of the model is then reviewed against expectations for growth and adjustments are made to reflect changes in eligibility criteria.

With the forecast update for the SFY2017 data, the methodology was updated. Due to a temporary transfer of foster children from other child, the data from SFY2017 was not considered valid and instead the SFY2016 predictions remained in effect. MQBQ and MQBB both experienced shifts in predictions with no shifts in the underlying models, and given the magnitude a cautious approach chose to blend the SFY2017 projections with the previous SFY2016 projections. Finally, MQBE had a manual "month effect" added to account for the January drops.

Appendix C: Tested Models

1. (0,0,0) S(s,0,0,0)
2. (0,1,0) S(s,0,0,0)
3. (0,0,1) S(s,0,0,0)
4. (1,0,0) S(s,0,0,0)
5. (0,1,1) S(s,0,0,0)
6. (1,0,1) S(s,0,0,0)
7. (1,1,0) S(s,0,0,0)
8. (1,1,1) S(s,0,0,0)
9. (1,2,1) S(s,0,0,0)
10. (1,1,2) S(s,0,0,0)
11. (,1,1) S(s,0,0,12)
12. (1,1,0) S(s,12,0,0)
13. (1,1,1) S(s,0,0,12)
14. (1,1,1) S(s,12,0,0)

Note: Models are expressed in a (p,d,q) S(p,d,q) format where p is the order of the autoregressive model, d is the degree of differencing and q is the order of the moving average model. The S() denotes seasonal terms. Models were tested with and without a constant factor, for a total of 28 models.

Appendix D: Final Models

Name	Criteria	Notes
Refugees	(0,1,2), S(0,0,0)	Constant included
Other Child	(1,1,2), S(0,0,0)	Constant included – Old data used due to transfer issue
MQB-B	(1,1,0), S(0,0,0)	Constant included – Blend of SFY2016 and SFY2017 predictions
MQB-Q	(1,2,1), S(0,0,0)	No constant, Data before calendar 1995 is treated differently, as is data after calendar year 1998
MPW	(1,1,1), S(12,0,0)	No Constant
MQB-E	(0,1,1), S(0,0,0)	Constant included- Monthly Adjust
MCHIP + HC	(1,1,0), S(0,0,0)	Constant included
Family Planning	(1,1,0), S(0,0,0)	Constant included
Blind	(0,1,1), S(0,0,0)	Constant included- Data starts at SFY 2010
BCC	(1,1,0), S(12,0,0)	No Constant
Aliens Legal	(1,2,1), S(0,0,0)	No Constant
AFDC>20	(1,1,2), S(0,0,0)	199307, Data before SFY 2009 is treated differently
Aged	(1,1,0), S(0,0,0)	Constant included, Data before calendar 1995 is treated differently,
AFDC<21 + MIC	(1,1,0), S(0,0,0)	Constant included- A lagged monthly unemployment is a factor in predictions
Disabled	(1,1,2), S(0,0,0)	Constant included, Data before calendar 1995 is treated differently, as is data after calendar year 1998

Note: Models are expressed in a (p,d,q) S(p,d,q) format where p is the order of the autoregressive model, d is the degree of differencing and q is the order of the moving average model. The S() denotes seasonal terms. Models were tested with and without a constant factor, for a total of 28 models.