North Carolina State Health Plan
FOR TEACHERS AND STATE EMPLOYEES
A Division of the Department of State Treasurer

STATE TREASURER OF NORTH CAROLINA
DALE R. FOLWELL, CPA

Financial Update

Board of Trustees

December 10, 2019

Financial Results: Actual vs. Budgeted
Fiscal Year to Date September 2019

Fiscal Year 2019	Actual thru SEP 2019	Authorized Budget (per Segal 6-17-19)	Variance Fav/(Unfav) Budget
Beginning Cash Balance	**$1.297b**	**$1.261b**	**$35.4m**
Plan Revenue	**$946.8m**	**$930.4m**	**$16.4m**
Net Claims Payments	$857.6m	$867.4m	$9.8m
Medicare Advantage Premiums	$40.9m	$43.7m	$2.8m
Net Administrative Expenses	$21.5m	$45.8m	$24.3m
Total Plan Expenses	**$919.9m**	**$956.9m**	**$37.0m**
Net Income/(Loss)	**$26.8m**	**($26.5m)**	**$53.4m**
Ending Cash Balance	**$1.324b**	**$1.235b**	**$88.8m**

Financial Results: Actual vs. Budgeted
Calendar Year to Date September 2019

Calendar Year 2019	Actual thru SEP 2019	Authorized Budget (per Segal 6-17-19)	Variance Fav/(Unfav) Budget
Beginning Cash Balance	**$1.118b**	**$1.118b**	**$0m**
Plan Revenue	**$2.778b**	**$2.750b**	**$27.4m**
Net Claims Payments	$2.358b	$2.402b	$43.5m
Medicare Advantage Premiums	$125.8m	$130.6m	$4.8m
Net Administrative Expenses	$87.6m	$181.8m	$94.2m
Total Plan Expenses	**$2.572b**	**$2.714b**	**$142.4 m**
Net Income/(Loss)	**$205.9m**	**$36.0m**	**$169.8m**
Ending Cash Balance	**$1.324b**	**$1.154b**	**$169.8m**

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State Health Plan
FOR TEACHERS AND STATE EMPLOYEES

2021 Benefits

Board of Trustees Meeting

December 10, 2019

Three-Year Strategy: Move Towards Medicare Based Reimbursement Rates

The Plan has taken the first step to move the network towards Medicare Based Reimbursements. In 2021, the Plan needs to further invest with the providers who agreed to join the network and look at other ways to reduce costs.

2019

- **Minimize Changes**
  - **80/20** - Simplify 80/20 OOP & Refine the Designated Provider Program
  - **70/30** – No changes
  - **HDHP** – Continues to be available to non-permanent employees only

2020

- **Move to two distinct plan design options with a new provider reimbursement model**
  - **80/20** – No change
  - **70/30 – Modify the plan design to differentiate it from the 80/20 Plan**
  - **HDHP** – Continues to be available to non-permanent employees only

2021

- **Add incentives for CPP providers, introduce pain management alternatives & continue to focus on high-cost members with chronic conditions**
  - PCP copay waiver
  - Specialist and Mid-Tier provider copay reductions
  - Provide more non-opioid pain management resources
  - Evaluate further cost-reductions for diabetic medications

CPP Provider Incentive

- Reward CPP providers by reimbursing a higher percentage of the copay.

Copay	70/30	80/20
PCP Copay	**$0 for CPP PCP on ID Card** $30 for non-CPP PCP on ID card $45 for any other PCP	**$0 for CPP PCP on ID Card** $10 for non-CPP PCP on ID card $25 for any other PCP
Specialist Copay	**$47 for CPP Specialist** $94 for other Specialists	**$40 for CPP Specialist** $80 for other Specialists
Speech, Occupational and Physical Therapy Copay	**$36 for CPP Providers** $72 for other Providers	**$26 for CPP Providers** $52 for other Providers

Offer Additional Non-Opioid Pain Management Options

- The Plan is continuing to explore ways to promote non-opioid pain management options.
- The following two opportunities would be a benefit change:
  - **Promote existing Physical Therapy Benefit**
    - By reducing the copay for CPP physical therapist, this benefit may become more affordable for some members
  - **Add dollar-limited coverage for Acupuncture**
    - Many self-funded plans already offer acupuncture to treat pain management
    - Some plans also cover it for the treatment of nausea and vomiting associated with surgery, chemotherapy or pregnancy.

Medications for Diabetics

- The Plan already has a pharmacy “diabetic supply” tier to eliminate any cost barriers to these supplies.
  - $5 on the 80/20 Plan
  - $10 on the 70/30
- Plan members are also protected from the high cost of insulin as they are only responsible for the Tier 2 copay when they utilize a preferred brand.
  - $30 on the 80/20 Plan
  - $47 on the 70/30 Plan
- The Plan is reviewing options to reduce the insulin copay even further to encourage medication adherence.

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2020 Open Enrollment Results

Board of Trustees Meeting

December 10, 2019

Open Enrollment Recap

- Open Enrollment (OE) was held November 2-19, 2019.
- All Active and Non-Medicare members were moved to the 70/30 Plan and needed to take action to enroll in the 80/20 Plan or to reduce their premium.
    - Non-Medicare members did not have to complete the tobacco attestation for the 70/30 Plan, as it will remain premium-free for eligible retirees.
- All Medicare members remained in their current plan and could choose to change plans if they desired. They were not auto-enrolled into a different plan.

2020 Open Enrollment Results: Non-Med Prime

- What happens to Non-Medicare primary subscribers who did not take action during Open Enrollment?
  - **Active Subscribers** will be enrolled in the 70/30 Plan for 2020.
  - They have missed the opportunity to:
    - Elect the 80/20 Plan
    - Drop coverage for themselves
    - Add or drop dependents
    - Reduce their premium by $60 per month by completing the tobacco attestation
  - **Non-Medicare Primary Subscribers** in the Retirement System will also be enrolled in the 70/30 Plan for 2020.
  - While they are not impacted by the tobacco attestation or the inability to drop coverage, they also missed opportunity to:
    - Elect the 80/20 Plan
    - Add dependents

Eligibility and Enrollment Support Center

- Given the shortened OE period, the Plan's Eligibility and Enrollment Support Center offered extended call center hours throughout OE.
- Extended hours included:
  - Monday-Friday, 8am-10pm
  - Saturday, 8am-5pm
  - Sunday, Noon-5pm

Open Enrollment Call Volume			
Week 1	Week 2	Week 3	Total
28,641	26,721	34,551	89,913

Last year the call center took 131,958 calls.

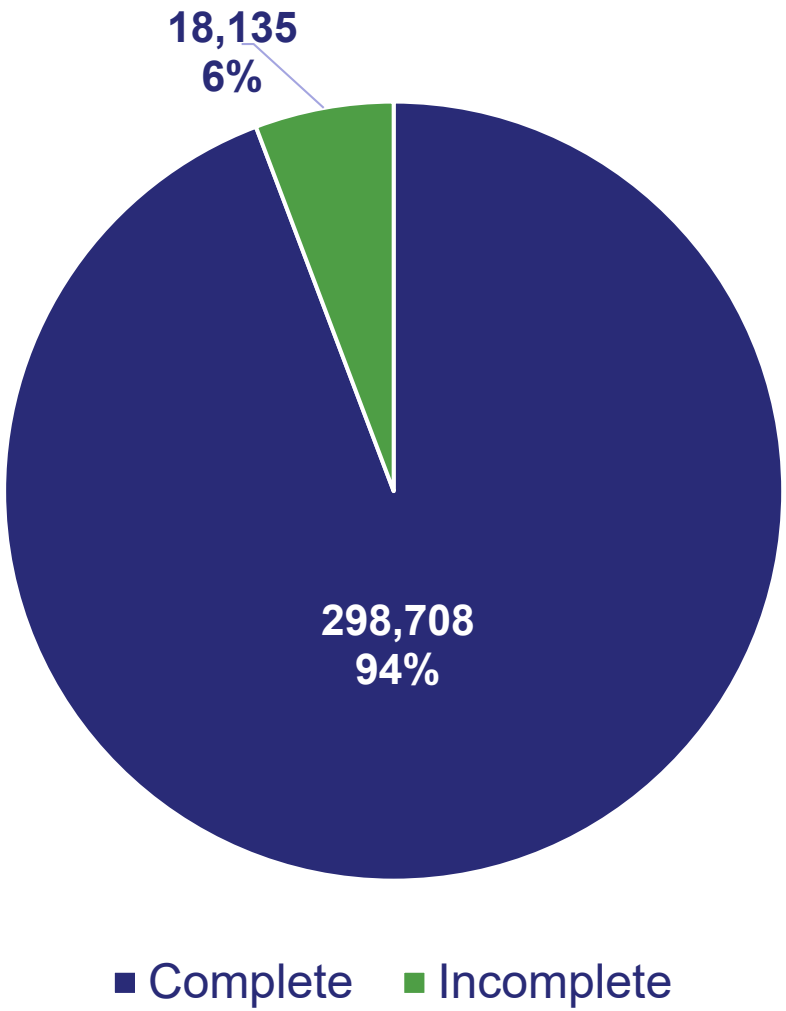
2020 Open Enrollment Results

- Open Enrollment by all accounts was successful.
- Online enrollments were similar in volume to last year.
- Call volume was down significantly, which may be the result of fewer Medicare members calling, the shortened OE period or fewer members needing assistance to complete their enrollment online.

OE Statistics at a Glance	
Online Enrollment	337,425
Telephonic Enrollment	44,818
Total Enrollments	382,243
Distinct Subscribers	325,921 (96%)

338,480 subscribers *should have* completed OE.

Tobacco Attestation Completion Rate (Active Members)



2020 Open Enrollment Results: Active Employees

- Active employees are the most impacted if they do not complete OE. Fortunately, 94% (298,708) of our Active employees completed Open Enrollment.

Entity	Total Employees that Took Action	Percentage of Employees that Took Action
State Agencies	63,747	95%
Charter Schools	4,894	94%
Community Colleges	14,764	97%
Local Governments	10,677	95%
Public Schools	151,720	93%
Universities	52,906	95%

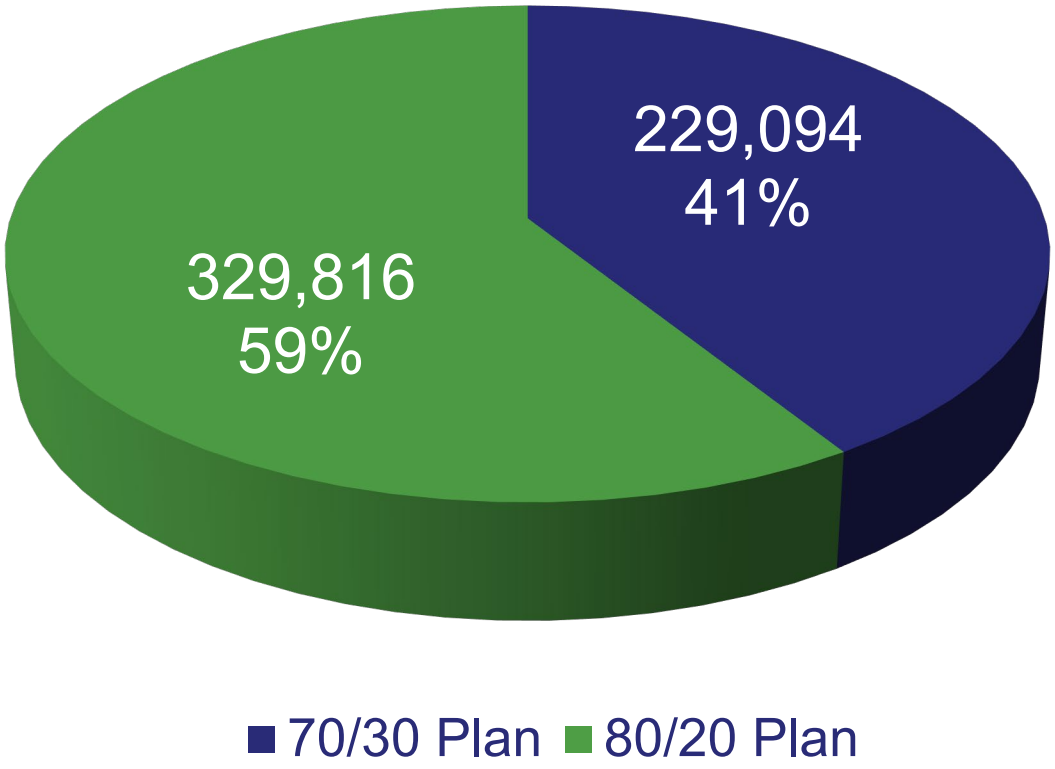
2020 Open Enrollment Results: 100% Participation

- Several employing units had 100% participation! Listed below are a few that were able to accomplish this:

Town of Forest City
Western Piedmont Community College
Gates County Schools
Franklin Academy
Catawba Community College
Yancy County Schools
Town of Sunset Beach
Pamlico County Schools

Newton Conover City Schools
Onslow Water and Sewer Authority
Martin Community College
County of Bladen
Coastal Carolina Community College
Town of Spindale
Roanoke Chowan Community College
Lake Lure Classical Academy

Open Enrollment Results: Non-Medicare Primary Plan Selections

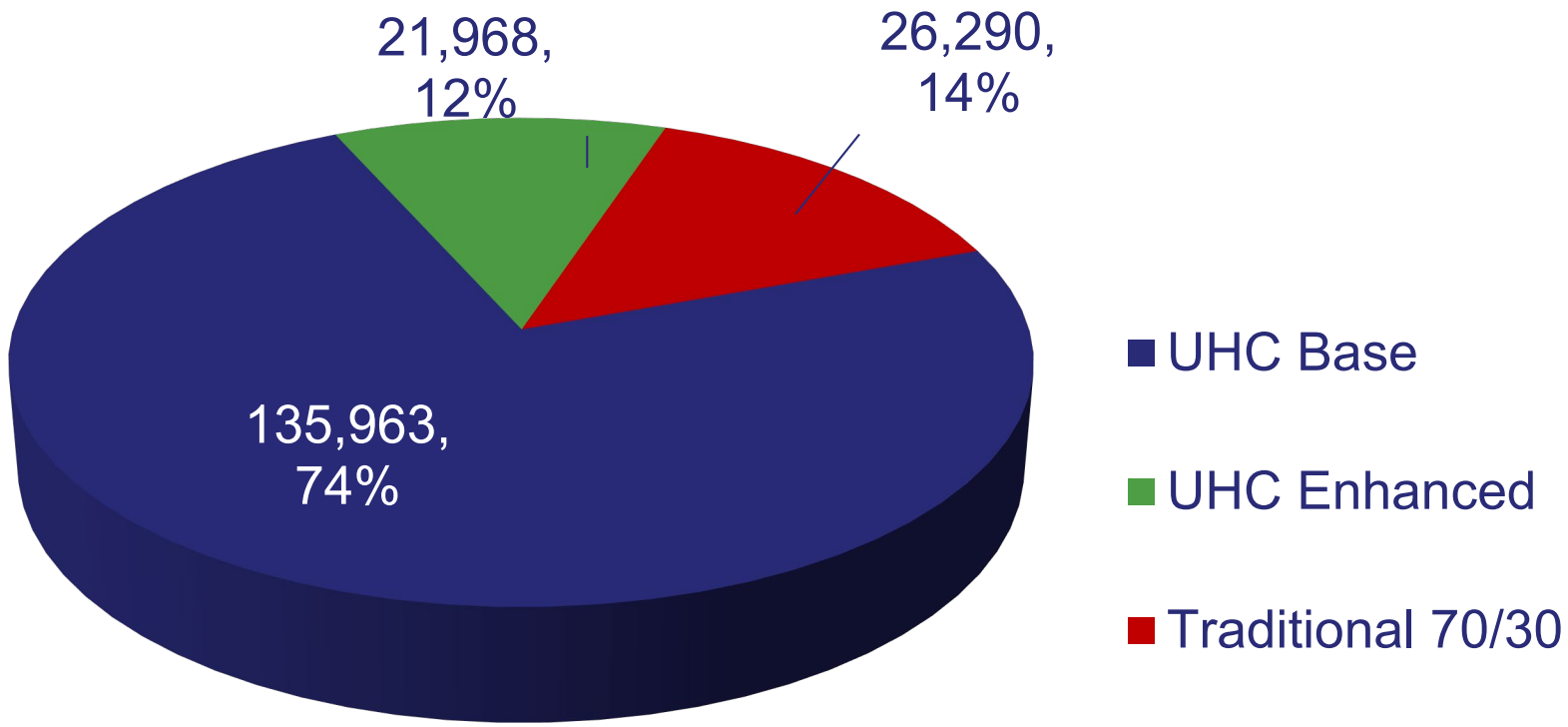


80/20 Subscribers – 222,023 80/20 Dependents – 107,793 Total – 329,816	70/30 Subscribers – 138,868 70/30 Dependents – 90,226 Total – 229,094

2020 Open Enrollment Results: Medicare Primary

- Medicare Primary members may have a second opportunity to make changes.
- **Medicare Advantage Open Enrollment Period** will run from January 1 – March 31, 2019.
  - Plan members enrolled in a Medicare Advantage Plan will be able to make one change during this period
  - Plan members enrolled in the 70/30 Plan will not be able to change plans

Open Enrollment Results: Medicare Primary Plan Selections



- 184,221 Medicare Members
- Counts are based on the last day of Open Enrollment.
- The final enrollment results will not be available until the end of the Medicare Advantage Open Enrollment Period.

2020 Open Enrollment – Next Steps

- 2020 ID Cards will be dropping in the mail soon.
- 2020 premium invoices will generate this week for employing units.
- OE exceptions are under way!
  - To date, Plan staff have already processed about 817 OE exceptions, with 74 pending review.

642	**CVS MinuteClinic Exceptions – for members who live more than 25 miles from a MinuteClinic. They will receive a waiver of the MinuteClinic tobacco cessation visit requirement. *44 exceptions were denied for members that did live within 25 miles of a MinuteClinic**
94	Took no action during OE – Evenly split between retirees and active subscribers.
37	Completed OE, but did something wrong.

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Pharmacy/Health Care Support Program Update

Board of Trustees Meeting

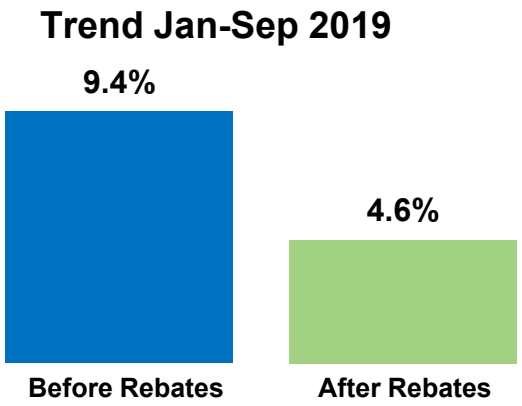
December 10, 2019

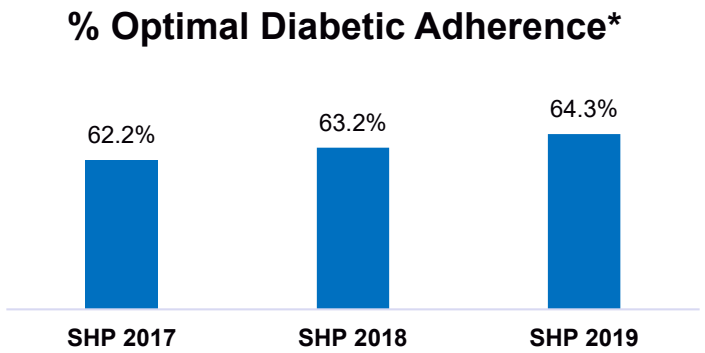
Pharmacy Updates

- **The Plan's contract requires CVS Caremark to pass 100% of all rebates and pharmaceutical manufacturer payments back to the Plan.**
- Rebates significantly reduced trend, driving it down from 9.4% **to 4.6%** for 2019.
- January – September 2019:

  Gross Cost = $866M

  Rebates = $230M (up from $190M over same period in 2018)
- The Plan has also seen a steady rise in adherence in the diabetic population since the beginning of the CVS Caremark contract. The Plan will continue to look for ways to build on this.





* % Optimal member has ≥ 80% Medication Possession Ratio, meaning they have prescriptions filled 80% of the days in a six-month period

Health Care Support Program – Year-to-Date Results

10,371
members were targeted for nurse interventions

43.5%
of eligible members successfully engaged with a nurse

464
members are using the Wellframe app to interact with their care team

96%
Member satisfaction among engaged members

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Data Analytics Program Update

Board of Trustees

December 10, 2019

Data Analytics Team

Employees

Ravi Chinnaraj, Data Analytics Manager. Master's in Software Engineering from Central Michigan University. Ravi was the Manager of the Business Intelligence area at UNC Health Care and has worked with the Ford Motor Company and Kroger.

Lou Pica, Business Intelligence Developer. Master's degree in Health informatics from Duke University Fuqua School of business. Lou has worked as a data and systems analyst at Quintiles designing and developing data warehouses and analytical solutions.

Mara Larson, Business Intelligence Developer. Master's degree in Public Health from The George Washington University. Mara has worked as an Epidemiologist with the North Carolina Division of Public Health.

Gerald Belton, Business Intelligence Developer. Master's in Statistics from North Carolina State University. Gerald has worked as a data analyst for the NC Department of Health and Human Services. Gerald teaches data analytics as an Adjunct Instructor at Wake Tech Community College.

Nuzhat Chowdhury, Business Intelligence Developer. Bachelor's degree in Statistics from the University of Illinois. Nuzhat has worked as a data analyst at IRI, Intel Corporation, and at Nike.

Reshma Patel, Business Intelligence Developer. Master's degree in Computer Science from Virginia Commonwealth University. Reshma has worked as a data analyst at Revlon.

Contractors

Frank DeVita, Program Director. Master's degree in International Finance from Fairleigh Dickinson University. Frank has over 30 years experience performing business improvement through operations and process re-engineering, technology and business intelligence implementations, and organizational change. Frank has previous experience with NC DHB and NC DHHS, and many Fortune 1000 companies.

Prabha Dinasarapu, Business Intelligence Developer. Master's degree in Organic Chemistry from Osmania University and is a Certified SAS Programmer. Prabha has worked as a SAS Developer and SAS Analyst and as a Junior Scientist at Dr. Reddy's Laborites Ltd.

Data Warehouse Goals

- Single source of truth for membership, provider, utilization and claims financial data
- Provide direct insight into the Plan's business operations and results
- Enable business analysts to focus on value-add reporting and analysis rather than data preparation activities
- Reduce / eliminate reliance on vendor reports and raw data
- Deliver cross vendor reporting rather than vendor silo reporting
- Improve operational processes through automation of vendor data reconciliations
- Limit PHI/ PII data distributed

Data Driven State Health Plan Roadmap

Foundation activities
Development activities
Usage activities

Prior Efforts

2011 - 2016

2011

- NextGen project defined to activate Business Intelligence tools with GDAC / SAS, and begin acquiring data from vendors

- 2014
  - SHP implements document management system (Documentum) in GDAC / SAS environment to acquire initial data

- 2016
  - Approximately 60 analytic requests performed using untreated vendor data
  - Assessment conducted comparing Truven Health Analytics Suite and Custom SAS HCDM

Note: These prior efforts never achieved clean data, or data that could be readily consumed by business analysts or the data analytics team

Current Efforts

2017

Approve & Design

- Nov 2016: Plan BOT authorizes development of custom HCDM
- Initial HCDM design and build

2018 – 2019

Build & Implement

- Develop strategy and plans to achieve objectives
- Design and implement Plan information governance charter and team
- Hire new data analytics team
- Complete initial HCDM
- Load > 350 million coverage, claims and provider records
- **Identify original design errors & deficiencies**
- Acquire & test > 100 Reference Code sets to interpret the data
- Design and Develop > 800 data quality checks, dashboard, and repair process
- **Repair original design errors**
- Deliver > 35 data and analytic requests
- Create Member table
- Create Medicare Primary/ Secondary ID

2020 – 2021

Operate, Maintain, and Deliver

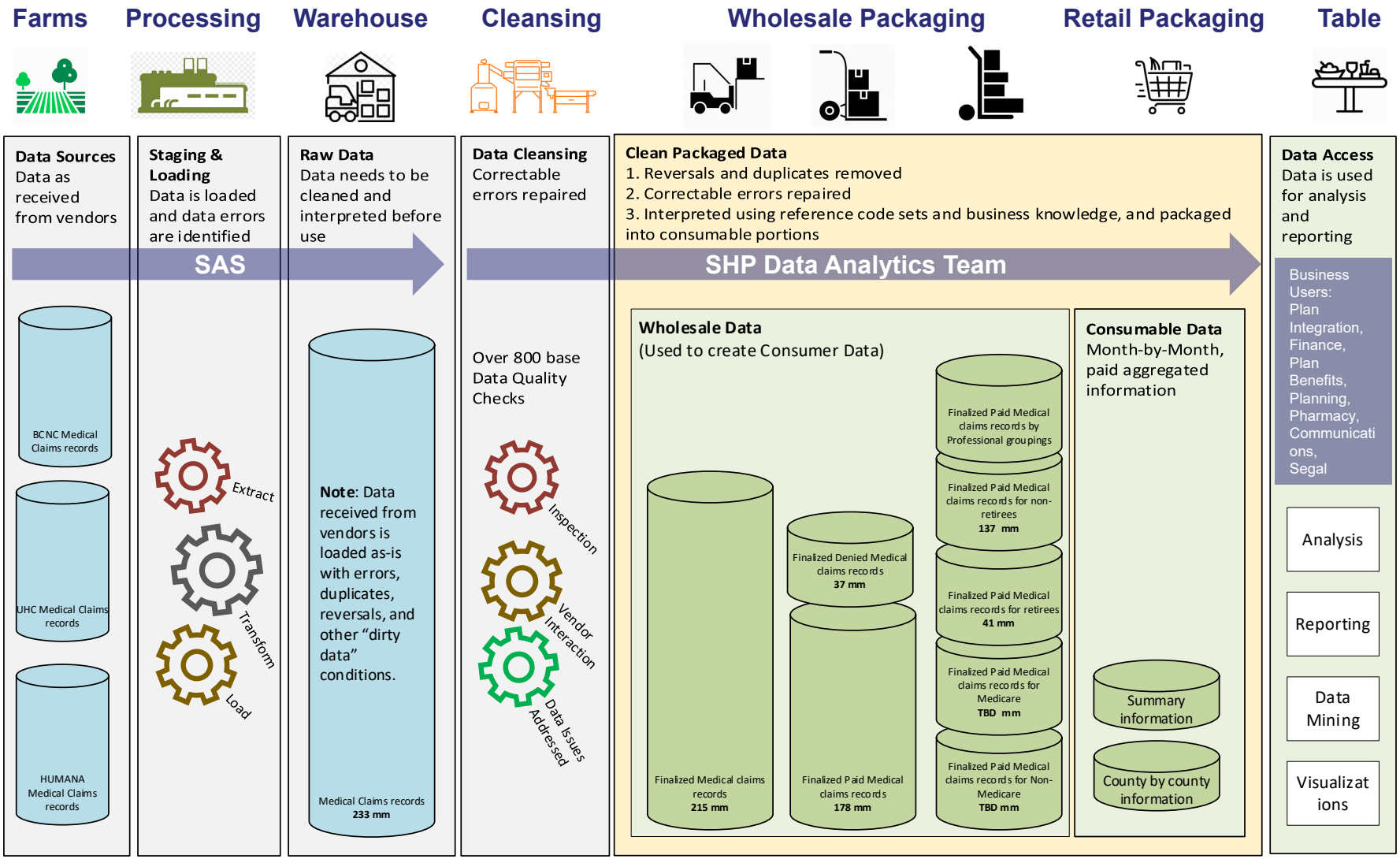
- Implement Self Service Analysis and Visualizations
- Implement TPA datasets
- Add additional reference and vendor data
- Design & create additional DataMarts for Business Analysts
- Begin What Happened analysis
- Begin Why Did It Happen analysis
- Begin Fraud, Waste & Abuse analysis
- Begin What Will Happen analysis

HCDM= Health Care Data Model

Reliable Analysis

What Happened	Why Did It Happen	What Will Happen	Fraud, Waste & Abuse
Health Care and Insurance Data Knowledgeable Data Team			
Clean, standardized, usable data			
• Medical Claims Data • Retail Pharmacy Claims Data • Members • Members Coverage data • BCNC Providers	• Medical Claims DataMart • Retail Pharmacy DataMart • Members DataMart • Members Coverage DataMart • BCNC Provider DataMart	• Additional code sets and knowledge • Member Medical Insights	• Medical Unlikely Edits • Performance Guarantees • Incorrect diagnoses and procedure coding • Once in a lifetime procedures • Upcoding • Physician and Outpatient Facility Unbundling • Provider Peer Group Analysis • False claims
Monthly claims and member information by Plan Type, Groups, County, Subscriber/ Dependent Relationship Type, Medicare, Retiree, and Vendor.		Financials, provider and member information by diagnoses and procedure conditions across the treatment lifecycle	• TBD

Clean, Standardized Financial Claims



Health Care Data Model Costs and Comparisons

Build & Implement

Item	Contractor and Hosting Amount	Notes
Projected HCDM Build Spend	$ 6,964,541	
Actuals		
2016	$ 1,056,406	
2017	$ 2,788,867	
2018	$ 1,068,250	Program Director change at end of 2017
2019	$ 1,255,109	
Actual Build Spend	$ 6,168,632	
Savings against Projection	$ 795,909	

Operate & Maintain

Item	SHP	COTS Estimate
Anticipated Annual Maintenance		
Contractors	$840,000	$ 844,800
Hosting & Reference Datasets	$ 50,000	$ 1,567,717
Total	$890,000	$ 2,412,517

Deliver

SAS Estimated Costs	Hours	Rate	Quantity	Estimated Cost	Practical Adjustment	Practical Estimate	Notes
Visual Analytics Dashboards	815	$200.00	7	$ 1,141,000	2.0	$ 2,282,000	
Predictive Modeling Reports	815	$200.00	5	$ 815,000	2.0	$ 1,630,000	
Total				$ 1,956,000		$ 3,912,000	
SHP In-House Estimated Costs			**Quantity**	**Estimated Cost**	**Practical Adjustment**	**Practical Estimate**	**Notes**
MS Power BI Dashboards	815	$ 62.50	7	$ 356,563	1	$ 356,563	SHP Healthcare Data SME's
Predictive Modeling Reports	815	$ 62.50	5	$ 254,688	1	$ 254,688	SHP Healthcare Data SME's
Total				$ 611,250		$ 611,250	
Savings				$ 1,344,750		$ 3,300,750	

Appendix

Completed HCDM Business Analysis Requests

	Business Requested Project	Business Purpose	Business Impact
1	All county analysis	Identify market size (members and spend) by NC county; members, members with claims, # of claims per member, # claims per provider.	CPP initiative. In response to the general inquires being submitted by providers, SHP published this analysis on the Plan's website.
2	Open Enrollment 2018 Medicare Advantage Migrations	Strategically analyze Medicare member movement for the UHC plan for CY 2018.	UHC said this MA population would likely be more costly. This analysis disproved this concern and potentially saved the Plan premium dollars.
3	BenefitFocus BMF006 report re-creation	Provide Segal and Finance with Member level coverage details.	Report no longer available from Benefitfocus, used by multiple user groups, both internal and external.
4	CCPN PCP Selection Report	Identify how many members selected a CCPN provider, and how many CCPN providers have opted into the CPP network.	CPP initiative. CCPN is operating as an intermediary for contracting purposes, therefore it is necessary to be able to list the participating practices.
5	Chiropractic Analysis	Requested by the Chiropractic Association	The Association wanted to make the case that chiropractic services should be expanded as a benefit to curb spending on opioids, ER visits and surgeries for low back pain.
6	Claims Recovery Review	# of members who were directly reimbursed for claims > $10K between January 1, 2015 and current	Recoveries
7	Critical Access Rural Hospitals	Identify NC Critical Access Rural Hospitals	CPP initiative related.
8	CVS Tier Check	Automate the Drug Tier reconciliation currently manually performed by Pharmacy team.	Directly reduced hours spent on reconciling.
9	Data Quality Initiative	Automate the reconciliation of data submitted to the Plan by the Vendors. 75% complete.	Identify adjudication problems, and enable future identification of waste and abuse.
10	Death Claims Incurred After Analysis	What claims were incurred after members deaths.	Recoveries
11	Dependent count by age stratification	Create membership members by 5-year age stratifications.	Set the baseline for evaluating if the Plan should make family tiers more favorable by attracting dependents.
12	Facility Fees, Clinic Fees, and EOB analysis	What is the State Health Plan paying for facility fees, clinic fees, and how transparent are these fees on the Explanation of Benefits (EOB).	Modify the EOB. The Plan needs to know the true impact of facility fees across the system. These fees impact Plan members in a big way, and may not be appropriate in some/many situations.

Completed Business Analysis Requests

	Business Requested Project	Business Purpose	Business Impact
13	Financial Triangulation Report	Automate the reconciling of UHC paid versus incurred claims to validate premiums and charges.	Directly reduced hours spent on reconciling
14	Guilford Tech Community College flu analysis	Number of employees/subscribers with the flu by week and month for the 2016/ 2017 school year.	Member's health outcomes
15	Johnston County Flu shots	Analyze the ratio of employees that got the flu shot billed on the 80/20 plan and the 70/30 plan in 2017.	Johnston County Request
16	Medicare Advantage Repricing RFP	Create data files for Medicare, COBRA, and Direct Bill Members for MA RFP bidders to use to underwrite bid quotes.	Provide Segal with data to be able to review and score the MA RFP submissions.
17	Medical Drug Spend	Analyze the total members medical drug spend for commercial medical and Medicare Part B.	Required for federal information gathering.
18	Medicare Part B - Phantom	Analyze Medicare Part B eligible Rx claims paid by SHP that should have been paid as Phantom B.	Identified that the Plan did not significantly spend on Phantom B.
19	New Hanover County Analysis	Analyze CY 2018 claims data for New Hanover Regional Medical Center costs.	Review to understand how the pending sale of NHRMC might impact the Plan and its members.
20	Orthotics Claims Analysis	Claims per member where the plan paid for more than one orthotic.	Recoveries
21	Peanut Allergy	Members between the age of 4 and 17 who have peanut allergy.	To forecast Plan spend on new peanut allergy drug.
22	Retiree Drug Subsidy 2017, 2018, and 2019	Audit CVS Retiree Drug Subsidy submissions to CMS.	Identified approximately $2,202,200 in additional subsidy due to the Plan.
23	Top 70 shoppable codes	Average plan paid amount per each of the 70 shoppable procedure codes - BCBS only.	Recoveries
24	UNC Data Sharing	Provide UNC with research data.	Re-implement the data sharing relationship with UNC SHEPS center.
25	Vaccine Spend Analysis	Analyze BCBS active member's vaccine spend for 2016, 2017, 2018, and 2019 for the Provider Reimbursement Strategy.	CPP initiative