



Medicaid Innovation Accelerator Program



**Leveraging Data
Analytics for Long-Term
Services and Supports
Programs and
Populations**

August 22, 2019

3:00 – 4:30PM ET

Logistics

- All lines will be muted
- Use the chat box on your screen to ask a question or leave a comment
 - Note: chat box will not be seen in “full screen” mode
- Slides and a transcript will be posted online within a few weeks of the webinar
- Please complete the post-webinar survey at the conclusion of the webinar. We value your feedback!

Welcome & Overview

- Keith Branham
 - Research Analyst, Medicaid IAP Data Analytics Team, Data and Systems Group, Center for Medicaid and CHIP Services, Centers for Medicare & Medicaid Services

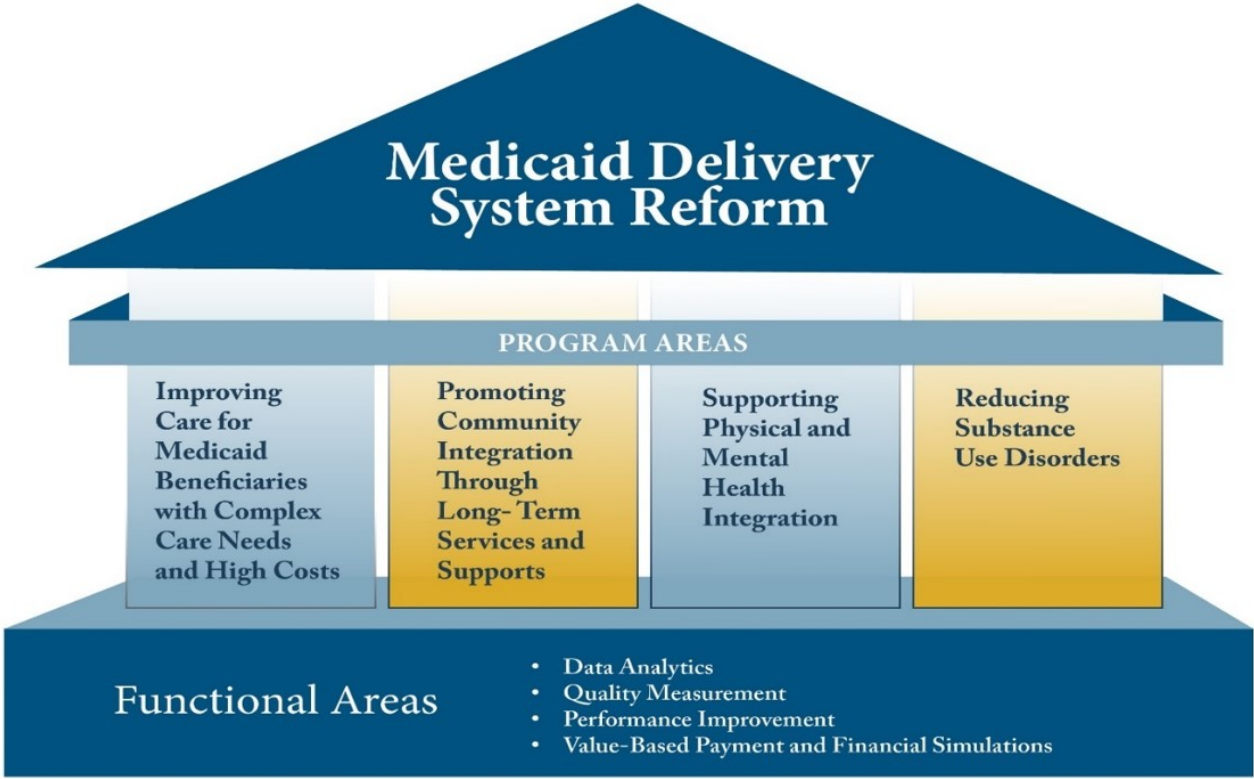
Agenda for Today's Webinar

- Introduction
- Overview of the Medicaid Innovation Accelerator Program
- Leveraging Data Analytics for Long-Term Services and Supports (LTSS) Programs and Populations
- State Examples of LTSS Analytic Approaches
 - **Massachusetts:** Quality Measurement and Value-Based Payment
 - **Virginia:** Commonwealth Coordinated Care Plus

Today's Speakers

- Beth Lewis
 - Senior Research Leader, IBM Watson Health
- Jill Morrow-Gorton
 - Acting Chief Medical Officer and Director of the Office of Clinical Affairs, MassHealth
- Jeanette Trestrail
 - Program Manager, Data, Encounter and Compliance, Integrated Care Division, Virginia Department of Medical Assistance Services

Medicaid Innovation Accelerator Program (IAP)



Goals for Today's Webinar

In this interactive webinar, participants will learn about:

- setting objectives to gather LTSS analytics
- challenges with LTSS data/data analytics
- state approaches to LTSS analytics
- lessons learned and looking ahead

Applying Data Analytics to Long-Term Services and Supports Programs

**Beth Lewis, Senior Research Leader, IBM
Watson Health**

What is LTSS?

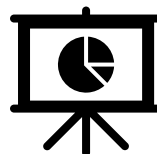
- LTSS refers to the long-term services and supports provided to Medicaid beneficiaries based on level of need
- LTSS services are provided in both institutional and non-institutional settings:
 - Nursing facilities, long-term care hospitals, and intermediate care facilities for individuals with developmental disabilities
 - Home and community-based services (HCBS) such as personal care attendants, homemaker or chore services, or home-delivered meals



- LTSS services are paid under both fee-for-service (FFS) as well as managed care delivery systems

Why is Data Analytics Important to LTSS?

- States can use data analytics to:
 - Measure program performance
 - Track and identify trends in expenditures
 - Share program information with interested stakeholders
 - Improve transparency



Challenges and Data Limitations

- **LTSS data can be difficult to collect**
 - Record reviews can be labor-intensive, especially if data is not collected electronically, as it is often the case in LTSS.
 - States juggle staff time, expertise and resources
- **LTSS populations vary across a range of factors**
 - Data needs will vary across populations
- **LTSS analytics are less developed than other health care analytics**
 - Predictive analytics is not yet in-place for LTSS
 - In general, states report more on the Medicaid population at-large or on health care metrics than on LTSS specifically

Approaches to Data Analytics Being Pursued by States

- States are pursuing varied goals:
 - Using analytics to monitor performance of managed care organizations (MCO) during the transition from fee-for-service (FFS) to managed care
 - Using data analytics to prepare public-facing dashboards or legislative reports to tell the story of the program
 - Using data to compare performance in order to apply value-based payment (VBP) incentives

State Considerations for Enhancing Data Analytics

- Complete data documentation
- Connect metrics with the identified goals of the program
- If delivering managed long-term services and supports (MLTSS), communicate expectations, and requirements for data collection to MCOs

Key Takeaways/Considerations for States



- Start small
- Plan to devote adequate time and resources
- Messages should be carefully crafted for reports and dashboards
- Find good partners to benefit from other states' lessons learned
- Constant evolution of data and analytic capacity



Massachusetts LTSS: Quality Measurement and Value-Based Payments

**Jill Morrow-Gorton MD MBA, Acting Chief
Medical Officer and Director of the Office of
Clinical Affairs, MassHealth**

Objectives

- Share the process that Massachusetts used to develop strategies for quality metrics and value-based payments for LTSS
- Highlight the role of IAP in their work
- Discuss lessons learned
- Outline next steps in implementation

Steps in Process

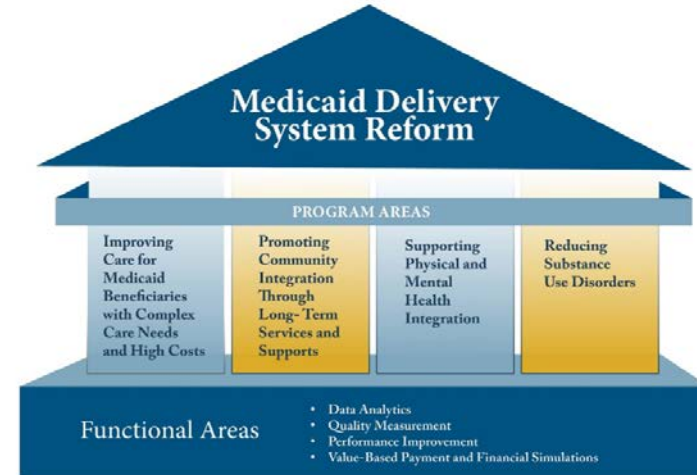
- Outline the development of a quality measure set for LTSS FFS providers
- Evaluate the viability of quality measures based on data stability
- Benchmark data
- Frame the financial simulation model process for value-based payments
- Apply provider scorecard concept to quality measures using benchmarks and simulations
- Employ value-based payments based on scorecards

Office of LTSS (OLTSS) System Organization

Community Based Programs 28%	Home Based Programs 13%	Institutional Programs 29%	Coordinated Care 30%
667 Providers	1643 Providers	493 Providers	14 Providers
86,836 members	111,070 members	46,917 members	67,613 members
SERVICES			
Personal Care	Oxygen and Respiratory	Nursing Facilities	Senior Care Options
Day Habilitation	Hospice	Chronic Disease and Rehabilitation Hospitals	Program of All-inclusive Care for the Elderly (PACE)
Adult Day Health	Orthotics	Rest Homes	
Adult Foster Care	Prosthetics		
Group Adult Foster Care	Home Health, Shift Nursing and Therapies		
Early Intervention	Community Case Management		
Targeted Case Management	Durable Medical Equipment		

Quality Measure Set Identification

- **Quality goals to create a core set of measures that are aligned with and apply across:**
 - A range of LTSS services
 - Broad cross-disability populations
 - Multiple payment types (FFS, Senior Care Options (SCO), Program of All-Inclusive Care for the Elderly (PACE), etc.)
 - MassHealth’s payment reform initiatives (Accountable Care Organizations (ACOs))



- **CMS IAP Incentivizing Quality and Outcomes (IQO)**
 - Technical assistance and support
 - National groups and resources (NQF, AHRQ, NASUAD, and others)
 - States (NJ, WA, TN)

Potential Massachusetts Scorecard Performance Measures

Measures	What are they?
30 Day All Cause Hospital Readmission - NQF	Readmission rate for members who were hospitalized and experienced an unplanned readmission for any cause within 30 days of discharge
Potentially Preventable ED Visits - NYU	Uses an algorithm to categorize whether an ED visit could have been prevented. Eligible ED visits fit into 1 of 3 categories: non-emergent, emergent primary care treatable, and emergent ED care needed, but could have been prevented with timely ambulatory care
Hospital Admission for Ambulatory Care Sensitive Conditions - AHRQ	Identify whether members have been hospitalized due to conditions for which good outpatient care could potentially prevent the need for hospitalization, or for which early intervention could prevent complications or more severe disease
Community Tenure	Measure the time spent in the community between hospital or other facility admissions as a measure of clinical and quality of life improvement and risk reduction

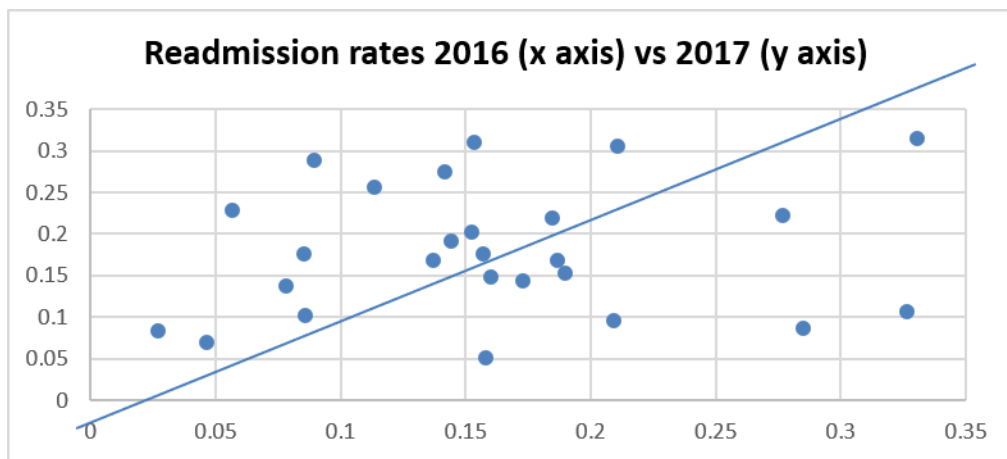
Data Stability and Benchmarks

- **Impacts on Data Stability**

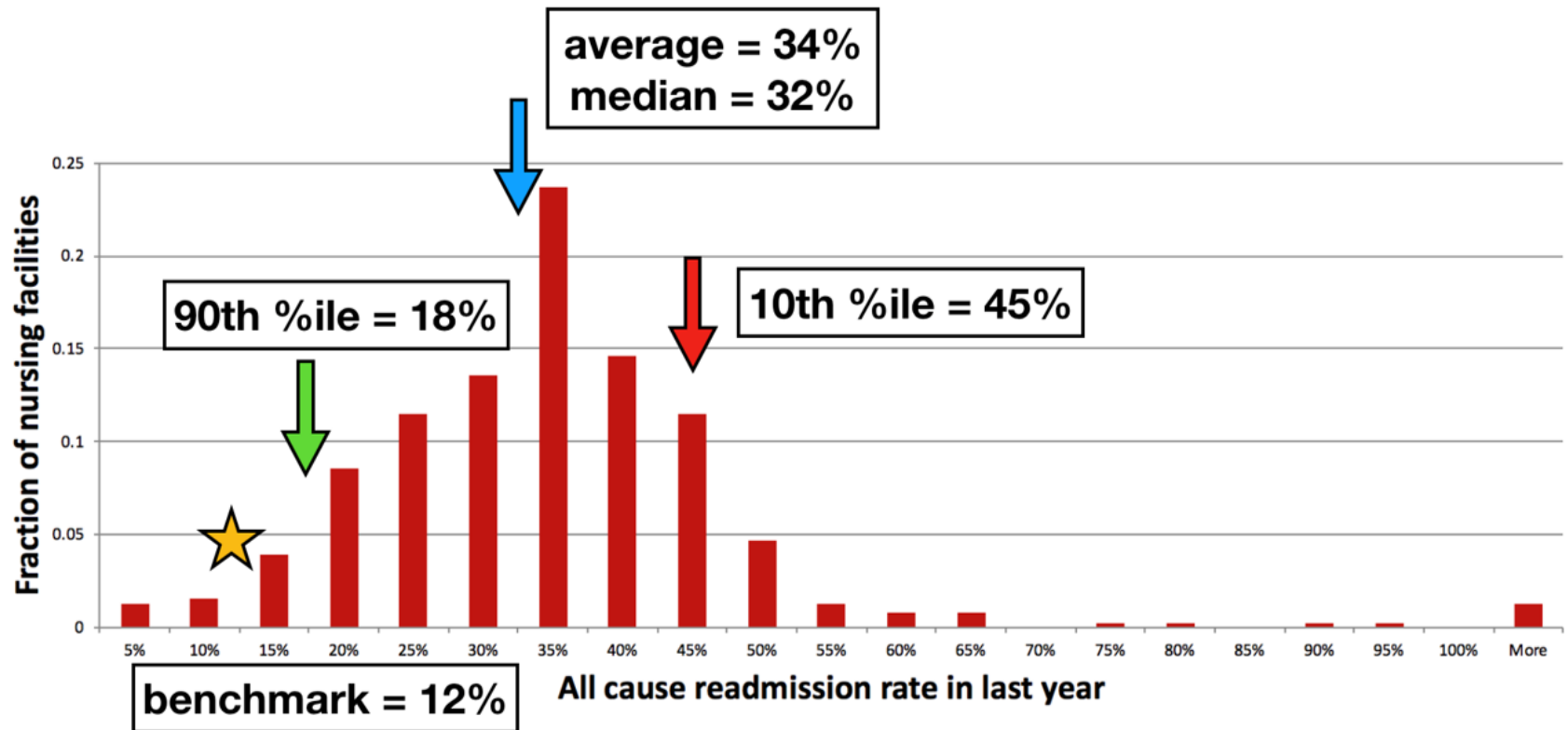
- Rare events such as readmissions
- Half of providers serve <80 members

- **Benchmarking**

- Evaluated different ways to calculate
- Graphed the data
- Set the benchmark
- Varied by provider type and measure
 - Small providers
 - Small numbers of events
 - Distribution of measure

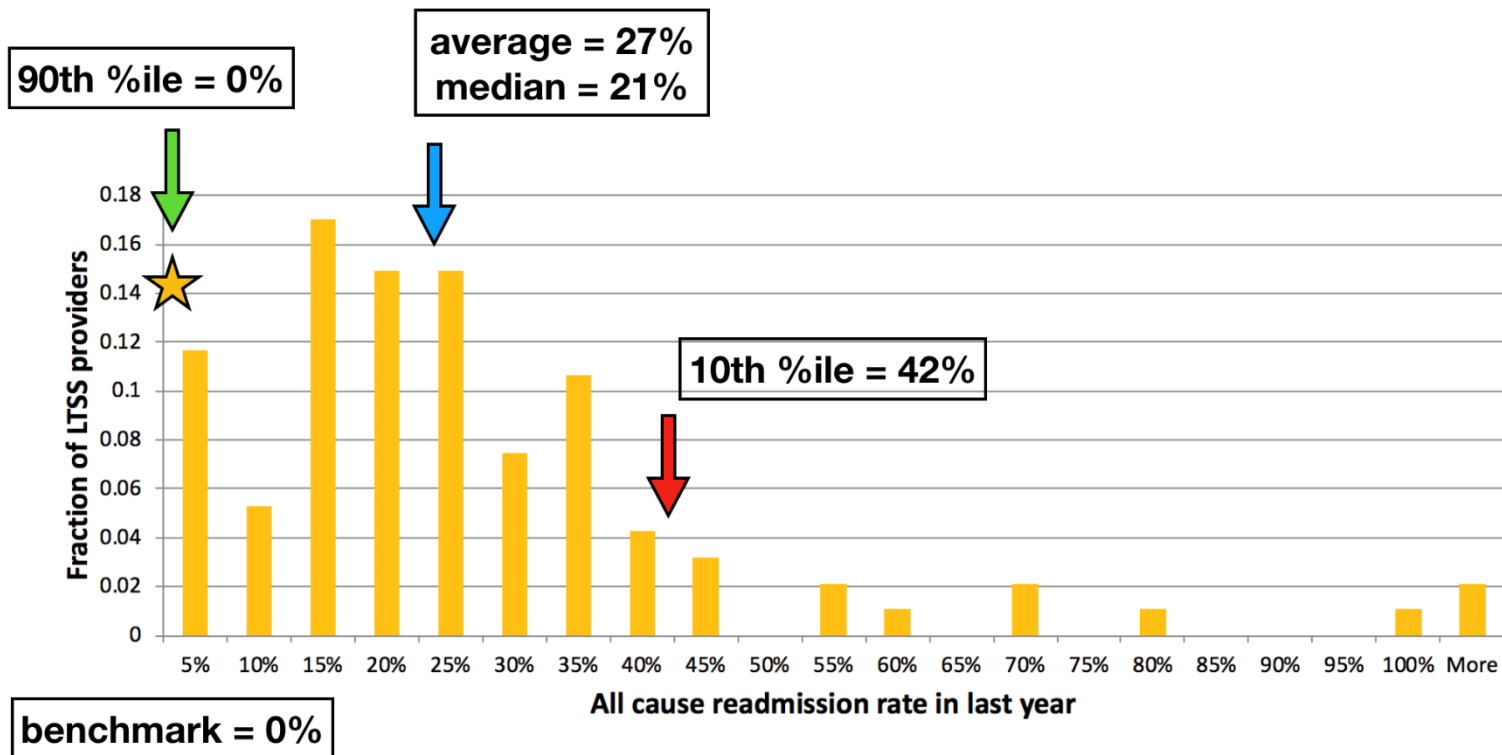


Benchmarking Model



Benchmarking Model

Readmission rates from Adult day



Source data: Optum ***does not match Cognos***

Benchmarking and MA Scorecard

Provider Name: ABC Agency, Inc.

Provider Type: Adult Foster Care

Provider ID: 5555555-55

Total number of members served: 83

Total number of duals served: 27

Total number of non-duals served: 56

Metric	Provider FFS Results	All Provider Mean	Benchmark 50% Percentile	Above or Below Benchmark	Score
Preventable ED Visits Per 1,000 Members	125	299	296	Below	Green
30 Day All Cause Readmission Rate	15%	8%	14%	Above	Red
Inpatient Admissions for Ambulatory Care Sensitive Conditions Per 1,000 Members	13	44	35.4	Below	Green
Community Tenure	99%	99%	99%	At	Green

Financial Simulation

Simulation Metric	Provider A	Provider B	Provider C
Number of measures	3	4	4
Weighted points	8 (12)	3 (12)	10 (12)
Percentage of maximum weights	67%	25%	83%
Program expenditures	\$1,750,591	\$1,750,591	\$1,750,591
Withhold 1%	\$17,506	\$17,506	\$17,506
\$ Withheld	\$5,777	\$13,129	\$2,976
% Expenditure	0.33%	0.75%	0.17%
Withhold 5%	\$87,530	\$87,530	\$87,530
\$ Withheld	\$28,885	\$65,647	\$14,880
% Expenditure	1.6%	3.75%	0.85%

Next Steps

- Re-engage stakeholders to:
 - Show measure results and scorecard
 - Illustrate the VBP model and how could be used
 - Get feedback
- Implementation of VBP
 - Set benchmarks
 - Determine magnitude of the amount of the % withhold
 - Identify exclusions based on # people served or # events
- Pursue provider population risk-adjustment

Summary

- Measure set with administrative data and meaningful for LTSS providers
- Built a basic, flexible, and modifiable VBP financial model using points and weights
- Provider scorecard strategy shows provider in comparison to all providers

Lessons Learned

- Lack of well validated measures for many LTSS/HCBS services (e.g. shared living, adult day programs)
- Small providers and small numbers of events (e.g. readmissions) makes data less stable

Lessons Learned, continued

- The diversity and specific characteristics of LTSS programs, providers, and beneficiary populations require careful consideration in quality measurement
- Data use agreements, data analysis, and building the model take a long time and require program-analytics partnership

Data Analytics in LTSS: Commonwealth of Virginia



**Jeanette Trestrail, Encounters and
Compliance Manager, Department of Medical
Assistance Services (DMAS)**

The Role of Data

“Most of the world will make decisions by either guessing or using their gut. **They will be either lucky or wrong.**” – *Suhail Doshi, chief executive officer, Mixpanel.*

“The goal is to turn data into information and **information into insight.**” – *Carly Fiorina, former chief executive officer, Hewlett Packard.*

Objectives

- Present the Commonwealth Coordinated Care Plus (CCC Plus) Program
- Define encounters and types
- Introduce the Encounter Processing Solution (EPS)
- Measuring Payment Timeliness
- Measuring Reasonableness
- Focus on Diagnosis
- Display Expenditures by Service

Commonwealth Coordinated Care Plus

Participation is mandatory for eligible members
238,000

6 MCOs
Across 6 Regions

All members receive care coordination

MLTSS (facility and community based)

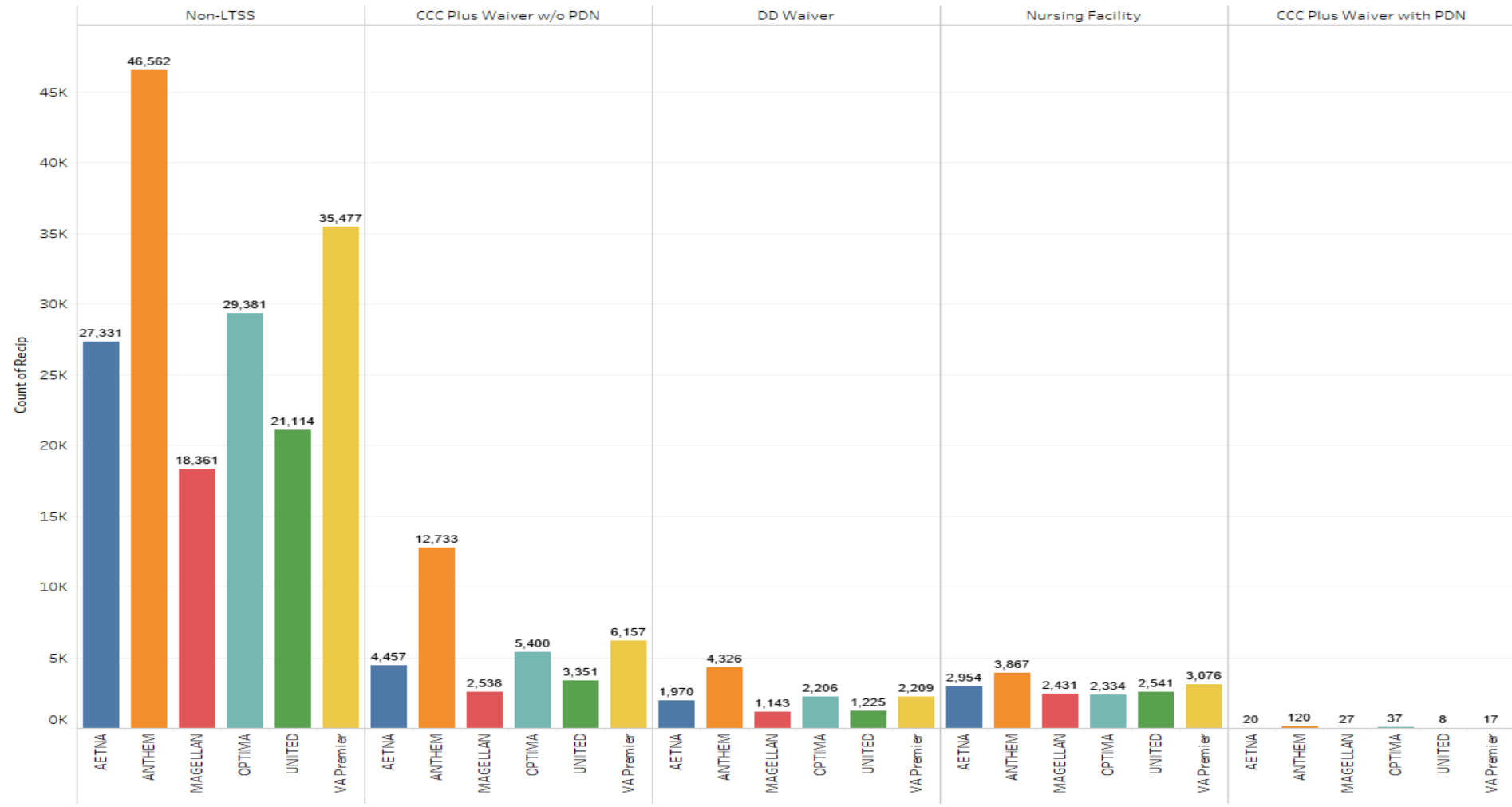
Includes dual and non-dual individuals

Promotes innovation and value-based payment strategies

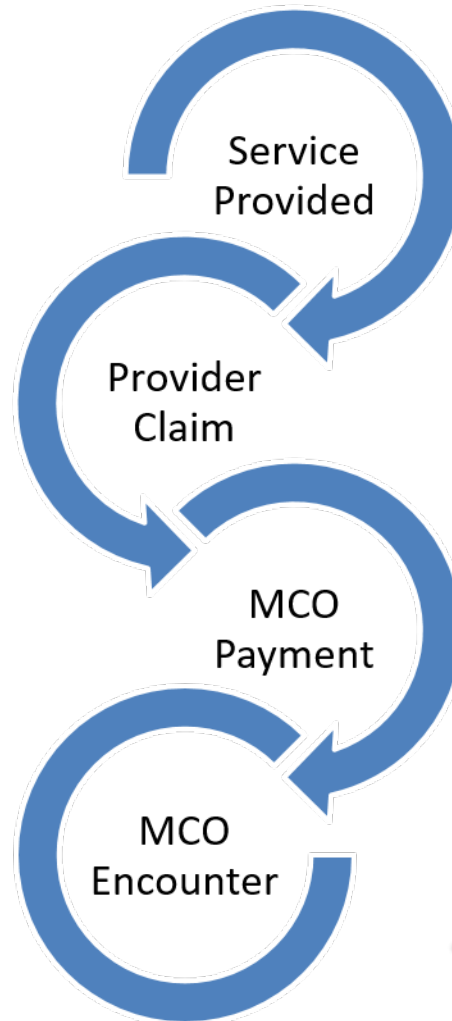
Primary focus is to improve quality, access and efficiency

Enrollment by Benefit Plans

Benefit By Plan



Encounter 101



Encounter Types

Professional (837P)

- Professional health care providers
- Waiver Providers
- Clinics
- Transportation

Institutional (837I)

- Hospitals and urgent care facilities
- Nursing Facilities

Dental (837D)

Pharmacy (NCPDP)

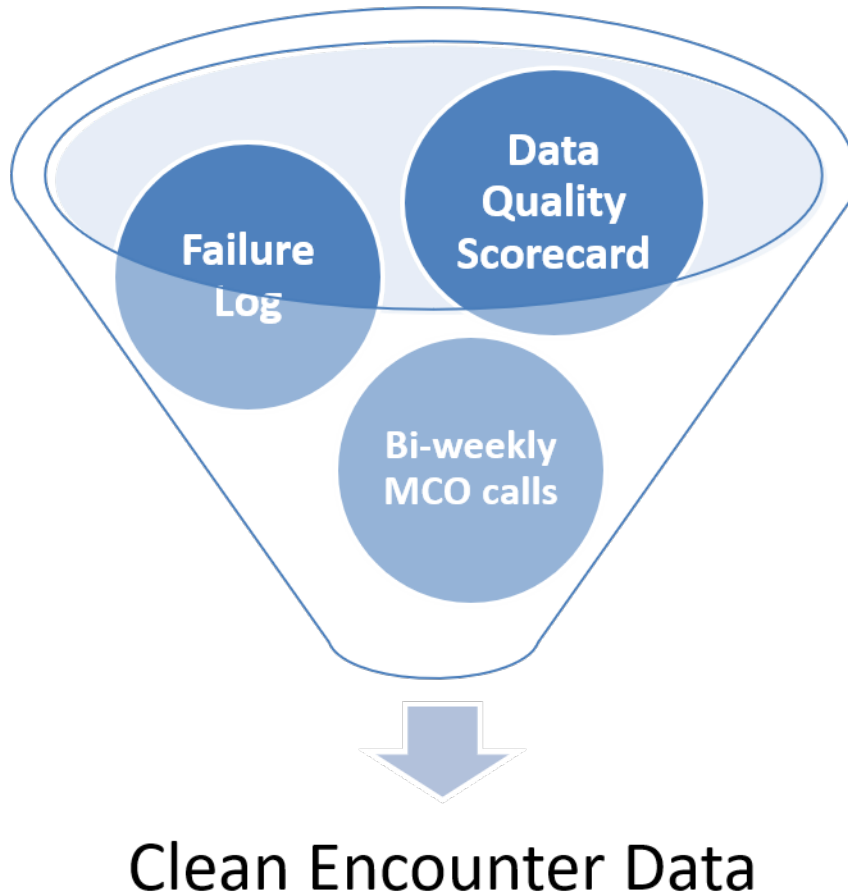
Non-Emergency Medical Transportation (NEMT)

Encounter Processing Solution (EPS) Overview

- CMS certified system that applies DMAS' business requirements via a series of data validation edits
- Interfaces with other data systems that track such data as, but not limited to:
 - Member demographics, eligibility, and enrollment
 - Provider demographics, taxonomy, and enrollment
 - Medicaid Pharmacy Benefit Manager (PBM) contractor for collection of pharmacy rebates



Encounter Data Use



- Service utilization & trends
- Determine & monitor costs
- Measure timeframes
- Confirm provider networks
- Rate setting

Critical Claim and Encounter Dates

Provider

- Date(s) of Service
- Submitted claim date to health plan (not on the encounter)

MCO

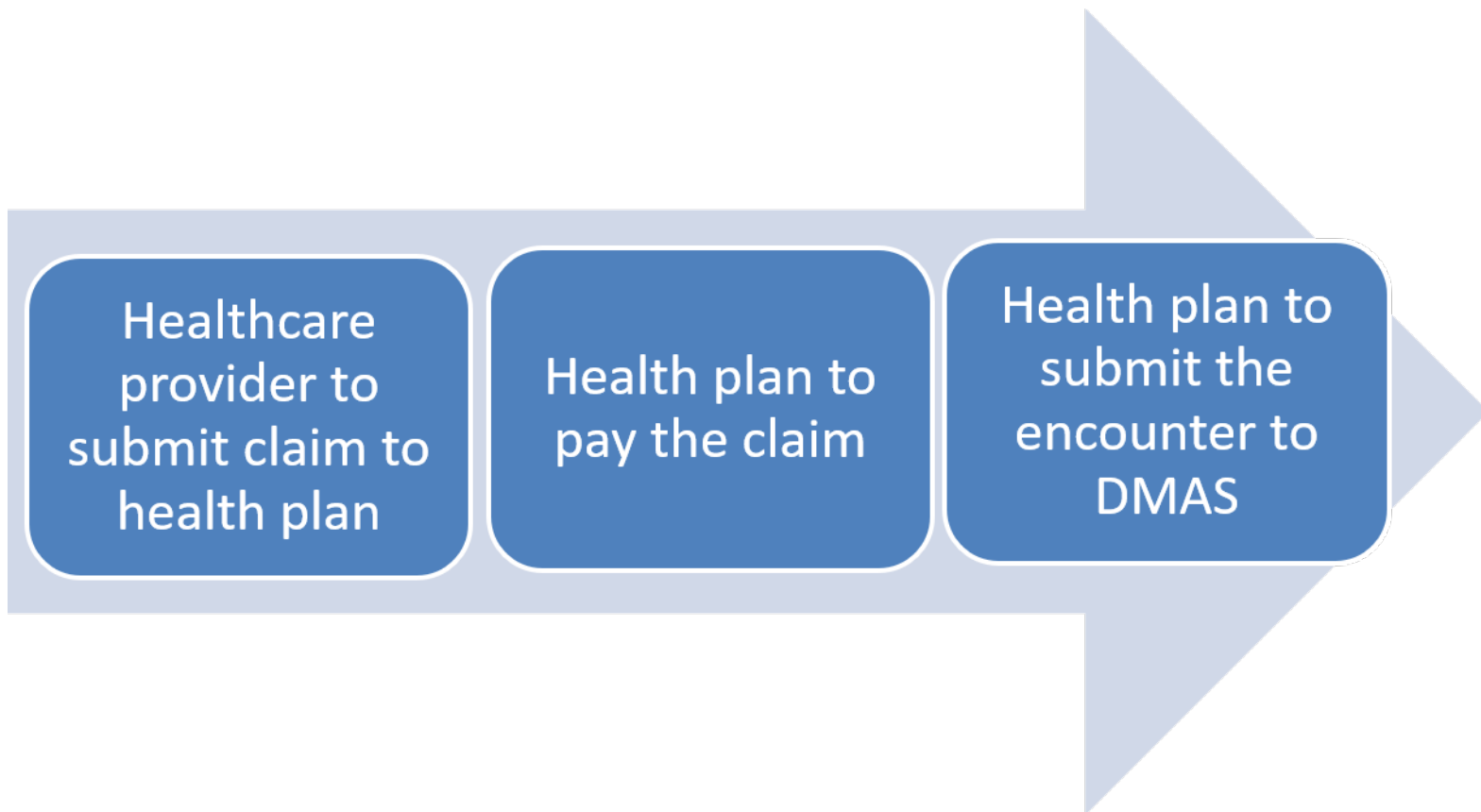
- Date of Receipt (DREC) = Date that the Payer received the transaction from the provider
- Date of Adjudication (DADJ) = Date that the Payer adjudicated the transaction
- Date of Payment (DPYM) = Payment cycle date in which the transaction is processed
- Payment Status (PYMS) = Payment status will reflect whether the Payer's adjudication process considers the claim to be paid or denied

DMAS

- Encounter submittal date
- "Passed" encounter processed date

Measuring Encounter Timeliness

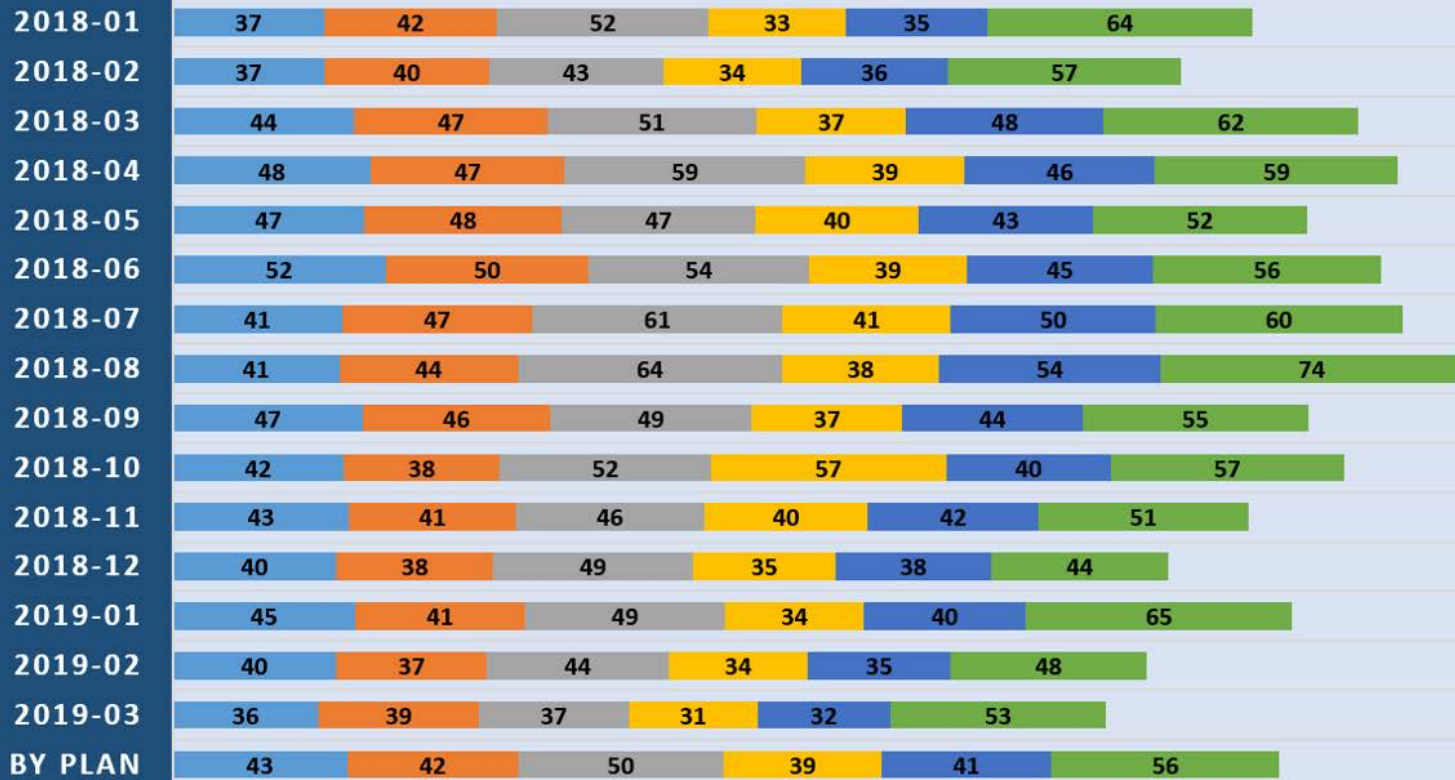
The amount of time it takes to complete the following:



Provider

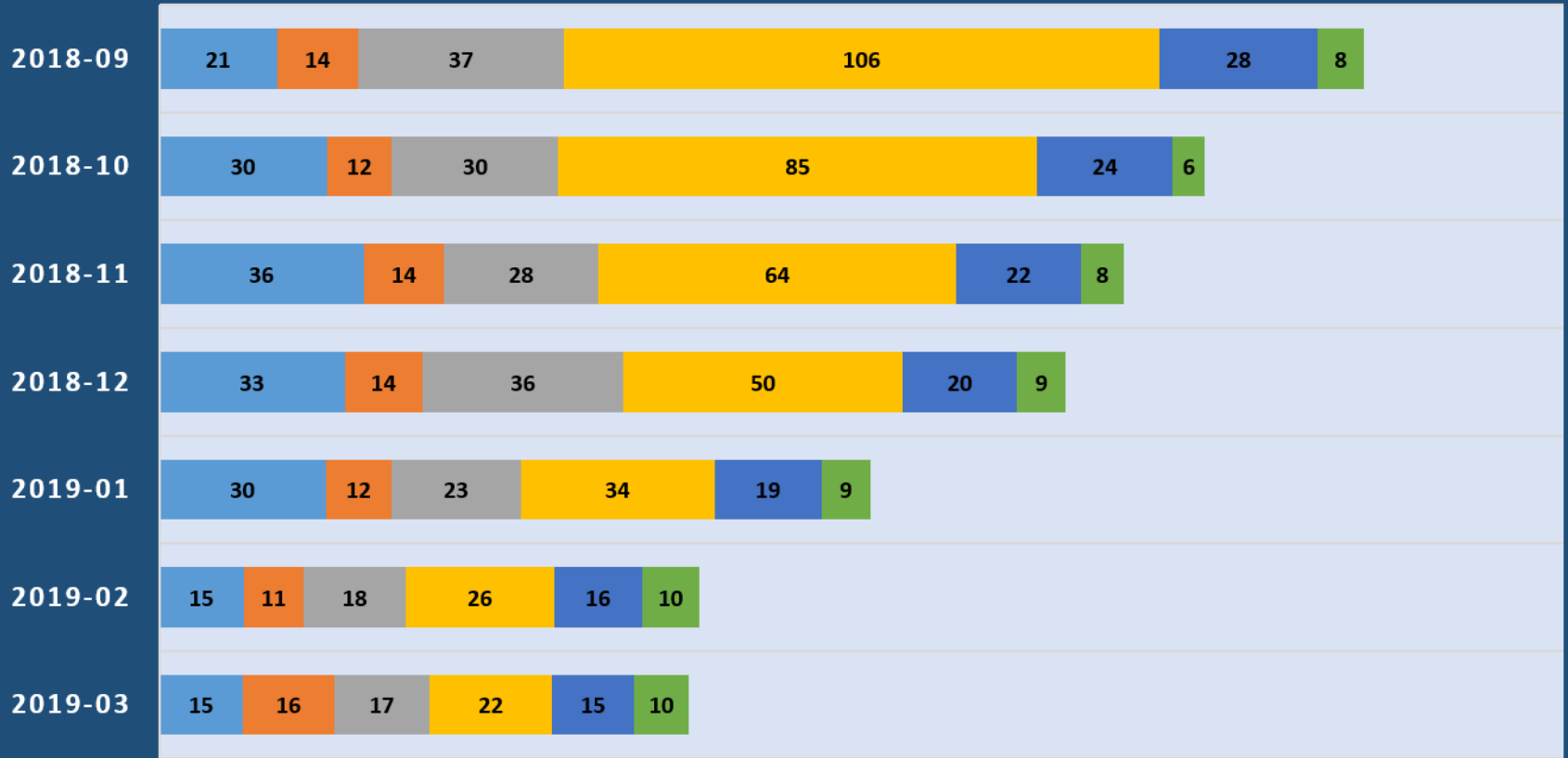
Health Plan

HOSPITAL INPATIENT CLAIMS PROCESSING TIME FROM SERVICE DATE TO PLAN RECEIVED DATE BY MONTH



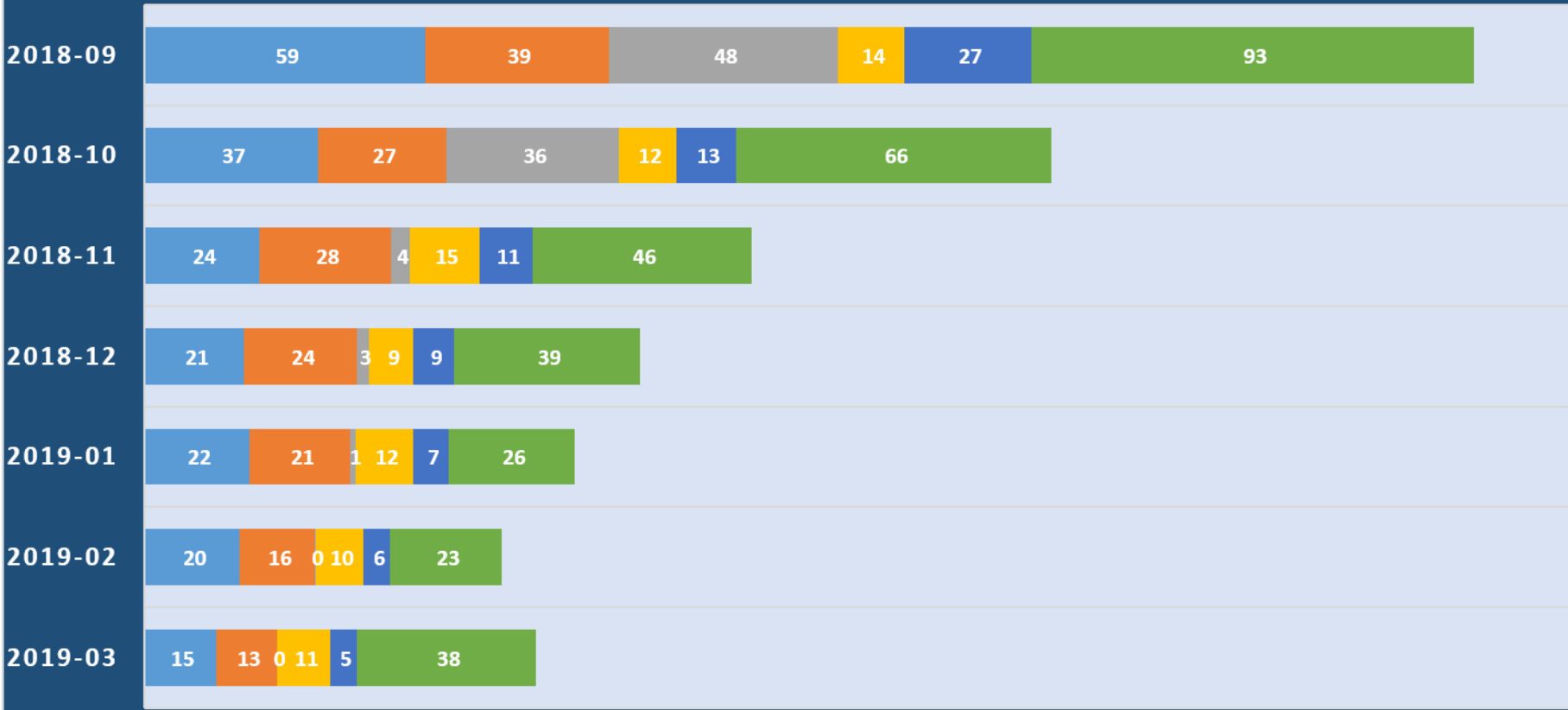


HOSPITAL INPATIENT CLAIMS PROCESSING TIME FROM PLAN RECEIVED DATE TO PAID DATE BY MONTH





HOSPITAL INPATIENT CLAIMS TIME FROM PAID DATE TO EPS SUBMISSION DATE BY MONTH



Nursing Facility (NF) Measure

- Considerations
 - Determine how many distinct NF members enrolled with each plan
 - Individuals with a benefit plan indicating NF
 - Count the number of distinct NF encounters by plan
 - Assume that each NF submits a monthly claim per member
 - Allow for discharges, benefit plan changes and hospitalizations
- We can determine if the health plans are submitting encounters within the range expected based on enrollment

Nursing Facility (NF) Encounters

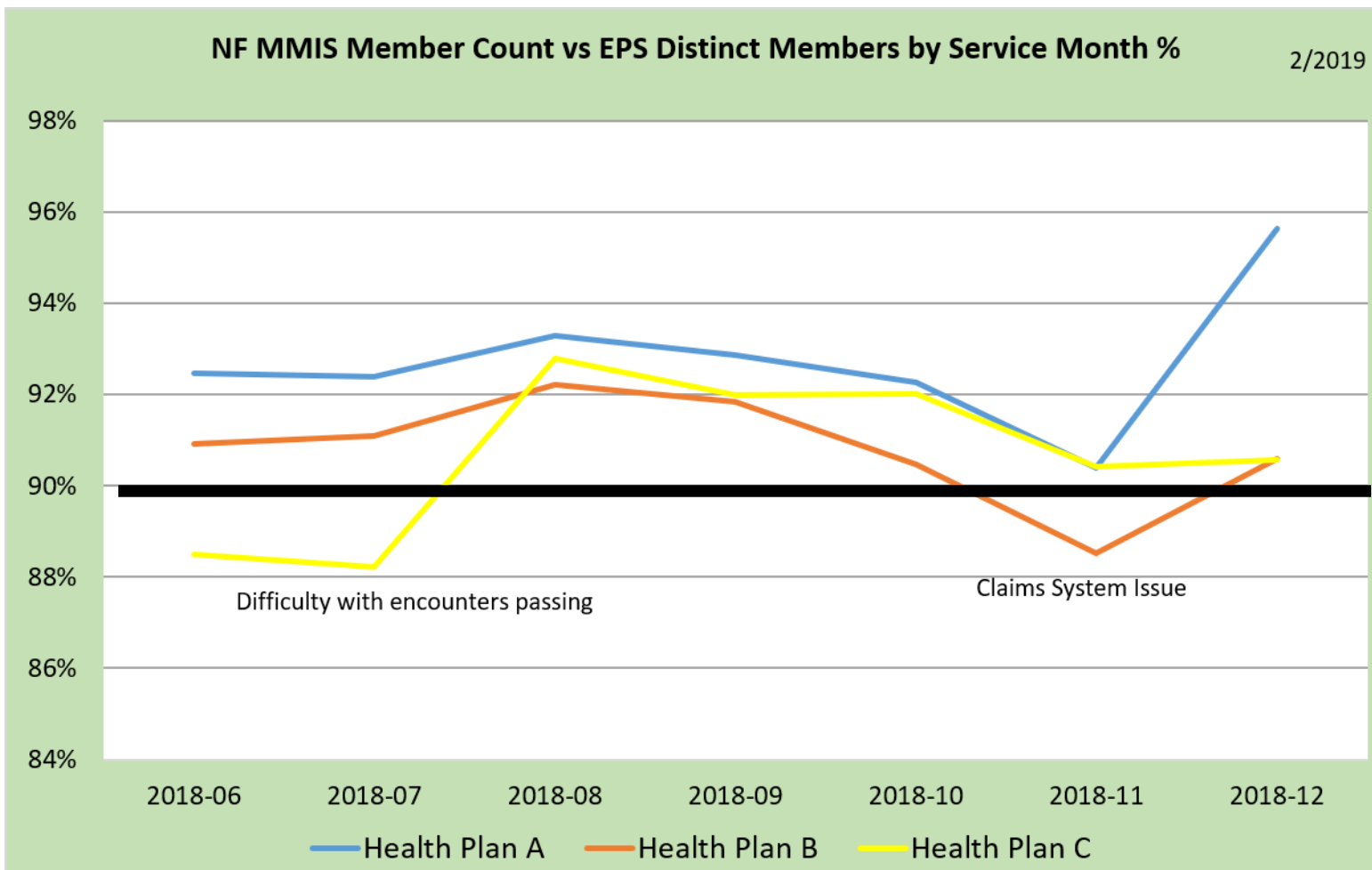
Enrollment – Number of Distinct Members with NF Exception Indicator

PLAN	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12
Health Plan A	2,192	2,195	2,192	2,200	2,251	2,261	2,251
Health Plan B	2,865	2,839	2,825	2,816	2,803	2,820	2,771
Health Plan C	3,178	3,125	3,096	3,062	3,040	3,056	3,020
TOTAL	8,235	8,159	8,113	8,078	8,094	8,137	8,042

EPS Encounter – Number of Distinct Members by Service Month

PLAN	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12
Health Plan A	2,027	2,028	2,045	2,043	2,077	2,044	2,153
Health Plan B	2,605	2,586	2,605	2,586	2,536	2,496	2,510
Health Plan C	2,812	2,757	2,873	2,817	2,797	2,763	2,735
TOTAL	7,444	7,371	7,523	7,446	7,410	7,303	7,398

Data Reasonableness



Comparison of Specific Diagnosis

- Determined the population to be studied
 - CCC Plus Waiver individuals with a diagnosis of either diabetes or hypertension
 - Utilized enrollment data to gather members
- Defined the procedure codes to be included
- Developed a program to collect all members and procedure codes matching the requirements

Use of Primary and Preventive Care Services

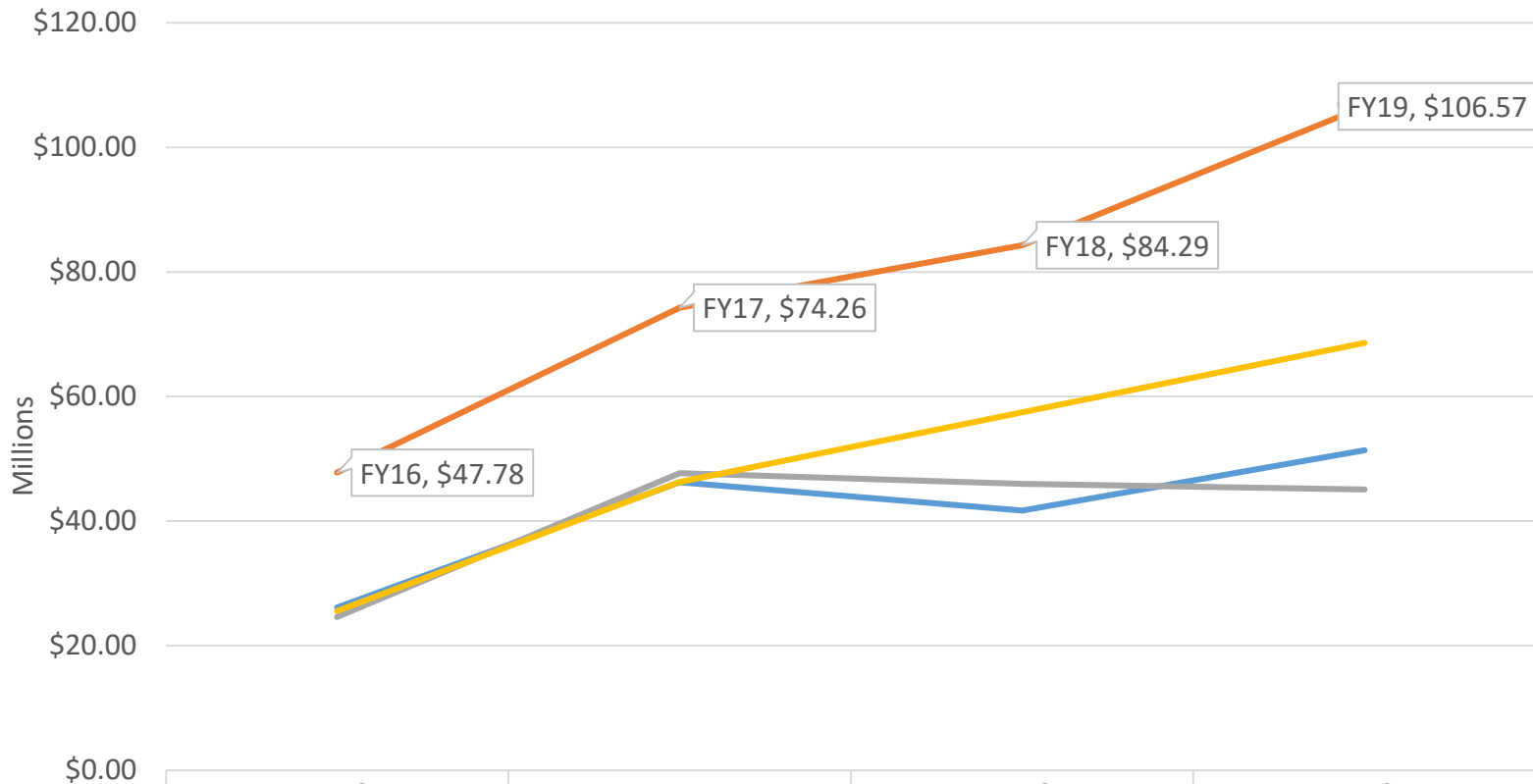
Membership limited to individuals utilizing CCC Plus Waiver services and have a diagnosis of diabetes or hypertension

CCC Plus Waiver	2017	2018	Change
Percent received any ambulatory or preventive care			
All members	27.6%	82.2%	54.6%
Member with any diagnosis of diabetes	1.4%	12.0%	10.6%
Member with any diagnosis of hypertension	2.0%	16.1%	14.1%
Percent with preventive or new patient service			
All members	6.5%	28.2%	21.7%
Member with any diagnosis of diabetes	0.2%	1.5%	1.3%
Member with any diagnosis of hypertension	0.3%	1.7%	1.4%
Percent that had breast cancer screenings (women ages 40 and over)	0.2%	4.7%	4.5%
Percent with colon cancer screenings (ages 50 and over)	0.2%	3.1%	2.9%

Expenditures

- Defined the procedure codes to be included
- Determined the timeframe
- Decide which date field to use for the report
 - Dates of service
 - Health plan received date
 - Remittance date
- Developed a program to collect procedure codes matching the requirements

Selected Services Spend Over Time



	FY16	FY17	FY18	FY19
Intensive In Home	\$26.11	\$46.22	\$41.72	\$51.37
ADHC	\$47.78	\$74.26	\$84.29	\$106.57
Respite	\$24.64	\$47.69	\$45.99	\$45.06
Private Duty Nursing	\$25.58	\$46.27	\$57.49	\$68.59

Discussion & Questions



Today's Takeaways

- States should start small and plan to devote adequate staff, time, and resources to pursue meaningful analytics.
- States should be prepared to be agile since metrics are updated often.
- The diversity and specific characteristics of LTSS programs and beneficiary populations require careful consideration in quality measurement.

Thank You!

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Please take a moment to complete
the post-webinar survey.

We appreciate your feedback!

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