

Impact of Covid-19 on Medicaid and CHIP Enrollments

Interactive analysis using R shiny

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Data Source:

- The dataset used in this project is *State Medicaid and CHIP Applications, Eligibility Determinations, and Enrollment Data* provided by **the centers for Medicare and Medicaid Services (CMS)**.
- This [dataset](#) contains monthly state-level information about Medicaid and CHIP applications, eligibility determinations and enrollment counts reported by individual states.

What are Medicaid and CHIP?

- **Medicaid** - Public health insurance for low income adults, children, pregnant women, elderly and individuals with disabilities.
- **CHIP (Children's Health Insurance Program)** - Covers Uninsured Children in families with incomes too high for medicaid eligibility.
- Medicaid and CHIP provide coverage to millions of Americans.
- Due to large size, During COVID-19 federal policy change had significant National Impact.

Covid-19 Continuous Enrollment Policy

- In March 2020, the federal government implemented a Continuous Enrollment Provision under the Families First Coronavirus Response act.
- States were not allowed to disenroll Medicaid beneficiaries.
- Coverage continued even if income changed or paperwork was incomplete.
- This Policy remained in effect until March 2023 and increase enrollment levels Nationwide.

Objectives :

This Study Analyzes:

- Enrollment trends before, during and after the covid
- Changes in Application volume
- Changes in eligibility determination volume
- Processing time performance
- Seasonal enrollment pattern

Using Interactive R shiny dashboards

Data Overview:

- State name
- Reporting period (monthly)
- Total medicaid and chip enrollment
- Total applications for financial assistance
- Total medicaid and chip eligibility determinations
- Processing time categories (<24Hrs, 1-7 days, >45 days etc.)

Time Periods compared:

To better understand impact, enrollment was grouped into:

- **Pre-Covid:** Before March 2020
- **Covid Period:** March 2020 to March 2023
- **Post- Covid:** From April 2023

Interactive Dashboard feature

Dashboard allows users to :

- Select specific State or National data
- Filter Results by time period
- Compare seasonal trends across time phases

Medicaid and CHIP Enrollment trends

- Enrollment stable pre-COVID
- Significant increase during COVID
- During Covid exceeded to 90 million beneficiaries
- Decline began post-policy expiration

Application VS Eligibility Determination

- Compares incoming applications with eligibility determinations
- Application Indicates demand for coverage
- Eligibility Determinations helps assess administrative responsiveness
- Average monthly applications declined during COVID.
- Continuous enrollment reduced the need for renewals and new applications.
- Applications increased sharply after the policy ended due to redeterminations.

Enrollment across Time Phases

Monthly Enrollment by Phase:

- Higher During covid Period.
- Structural expansion observed.

Eligibility Determination Processing Time Distribution

- Shows share of determinations by processing time
- Identifies administrative delays
- Compares efficiency across time phases

Seasonal Enrollment Patterns

- Examines average monthly enrollment
- Identifies recurring seasonal patterns
- Evaluates stability across time periods

Conclusion:

- Continuous enrollment policy significantly increased total Medicaid/CHIP enrollment.
- Medicaid and CHIP enrollment increased significantly during COVID-19.
- Post-COVID unwinding triggered a surge in eligibility determinations.
- Administrative processing times varied across time phases and states.
- State-level variation suggests important policy and operational differences.

Thank You

Any Questions/Suggestions?