Effects of COVID-19 on Health Care Costs at End-of-Life in Colorado, 2020-2021

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CIVHC CENTER FOR IMPROVING

\$16,597

\$4,884

Payers Between 2020 and 2021

2020 PMPM COVID-19 Cause of Death

To access the full EOL abstract and to learn more about public and non-public CO APCD data, visit civhc.org or view the QR code.

PMPM Costs for COVID-Related Deaths Increased for all

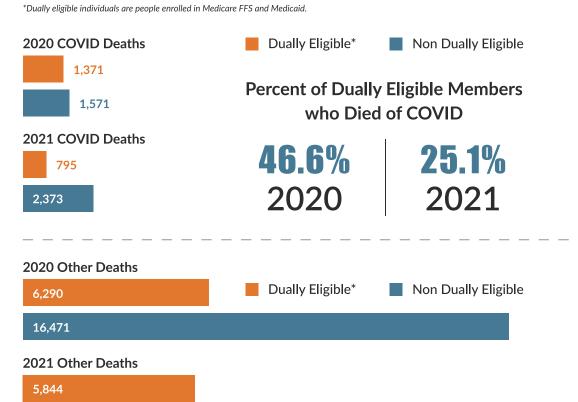
Commercia

Medicare Advantage



Medicaid

Medicare FFS



In 2020, nearly half of all COVID deaths were for dually eligible

people, compared to only 25% in 2021

16.844



Member Health Care Coverage Months

2-4 avg.

Analysis Revealed

Months of coverage for **Commercially insured members**

Months of coverage for Medicaid, Medicare FFS, and Medicare Advantage

9-11 avg.

Background and Research Objective

What we know

Even before COVID-19, end-of-life (EOL) care showed inequities in care intensity and hospice care by insurance type.¹

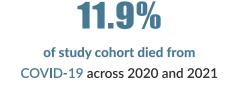
Racial disparities in advance care planning (ACP), palliative, and EOL care are substantial, and likely further tested during the pandemic.^{2,3}

Most EOL studies have been conducted with a single insurance type, which does not allow for analysis across all insurance types and member paver movements over time.

What we want to know

We want to understand variation in EOL health care utilization and associated costs (medical and pharmacy) among different demographics for Coloradans with a primary cause of death of COVID-19 vs. non-COVID-19.

Principle Findings



2020 and 2021

0.6% 0.8%

American Indian

or Alaskan Native

11.5% to 12.3% **Percent of deaths from COVID rose**

slightly between 2020 and 2021

3.5% 4.0%

Native Hawaiian

or other Pacific

more races or other race

Percent of COVID-19 Deaths Changed Significantly

3.7% 3.5%

\$3.4%

55-65

241

476

for Some Race and Ethnicity Groups Between

2020 % COVID Deaths 2021 % COVID Deaths

In 2020 the oldest population was dying

most frequently from COVID-19 but in

2021 people under 65 were dying from

143.5%

45-55

215

2.8%

COVID-19 at a higher rate.

2020 COVID Deaths

2021 COVID Deaths

1 319.4%

Under 45

140

↑ Positive Percent Change

6.110 COVID-19 from 2020 and 2021

26.2%

♦ 16.5%

75-85

871

12.8% 13.6%

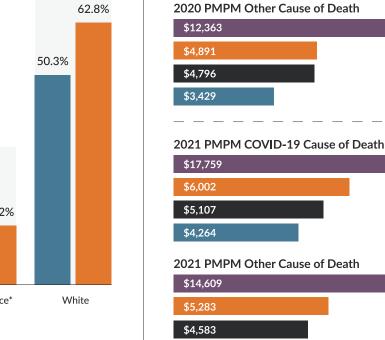
Latino Any Race

1 24.4%

621

65-75

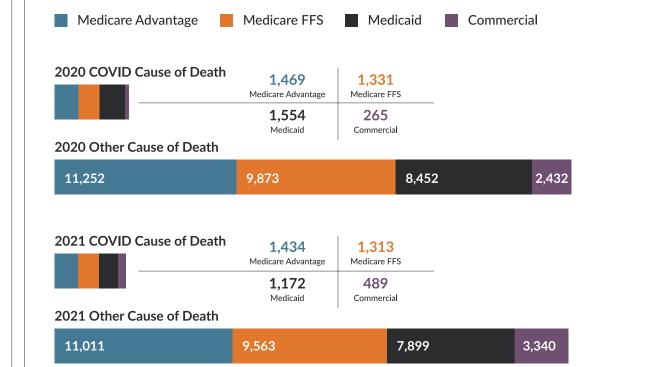
832



★ 41.0%

Above 85

Number of deaths related to COVID Varied by Payer Type and Across Years



Study Design

Medical and pharmacy claims data was sourced from the Colorado All Payer Claims Database and used for a retrospective analysis of EOL utilization patterns among deceased members spanning the years 2020 and 2021.

A visual representation of the cohort design is below. Vertica SQL and SAS v 9.4 were employed for data analysis.

Cohort Design

Matching CO APCD and death registry data*, identified 123,792 people over 18 (as of 1/2018) who died in 2020 or 2021

Final Study Cohort People

Excluded

- Traumatic deaths
- People with claims after they died
- People without six-months of eligibility prior to death

*CO Department of Public Health and Environment death record information was used to identify members in the CO APCD

Conclusion

This analysis highlights the complex impact of COVID-19 on end-of-life health care utilization and costs in Colorado. Understanding demographic variations in mortality rates, age distribution changes, and insurance differences is crucial for targeted interventions and resource allocation.

Next Steps and Takeaways

- For future pandemics, more resources are needed for end-of-life care that can be dedicated to addressing the specific and varying needs of different populations.
- More research is needed to further understand factors that may be influencing disparities in volume and cost between payers and populations.

References

1, Yang, Annie, et al. "Racial disparities in health care utilization at the end of life among New Jersey Medicaid beneficiaries with advanced cancer." JCO oncology practice 16.6 (2020): e538-e548

- 2. Bazargan M, Bazargan-Hejazi S. Disparities in Palliative and Hospice Care and Completion of Advance Care Planning and Directives Among Non-Hispanic Blacks: A Scoping Review of Recent Literature. American Journal of Hospice and Palliative Medicine®. 2021;38(6):688-718. doi:10.1177/1049909120966585
- 3. Panattoni, Laura E., et al. "Effect of the COVID-19 pandemic on place of death among Medicaid and commercially insured patients with cancer in Washington State." Journal of Clinical Oncology 41.8 (2023): 1610-1617