

# Impact of Insurance Churn on Young Adults with Schizophrenia

March 31, 2022



CENTER FOR IMPROVING



## Agenda

- Claims data that supported Janssen Scientific and their research
- Types of insurance churn that occur in young adults with schizophrenia
- Health care costs and resource utilization associated with schizophrenia before and after diagnosis.
- Questions/Feedback from Participants
- Housekeeping: Session is being recorded, questions via the chat box



## Presenters



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We strive to empower individuals, communities, and organizations through collaborative support services and health care information to advance the Triple Aim: Better Health, Better Care, Lower Cost

We are:

- Non-profit
- Independent
- Objective



## Who We Serve

## **Change Agents**

Individuals, communities, or organizations working to lower costs, improve care, and make Colorado healthier.



## What's in the CO APCD?

https://www.civhc.org/get-data/whats-in-the-co-apcd/ ٠

#### **Total Claims** 780,921,480 by Claim Type 426,186,390 Medical 328,987,580 Pharmacy 25,747,520 Dental **Number of Payers ONumber of People** 8,104,700 by Coverage Type by Coverage Type 6,535,200 Medical Pharmacy 6,406,680 Pharmacy Medical 5.889,540 Dental Dental

	by Claim Type		
Medical		5,562,900	
Pharmacy		4,682,580	
Dental	3	3,545,250	

\*Medicare FFS medical claims reflect data only through September 2020, and Medicare FFS pharmacy claims include data through December 2019.

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\*AllYears values do not include archived CO APCD data (prior to 2013)

by Claim Type

Medical

Pharmacy Dental

## CO APCD OVERVIEW

Select a Payer Type:

Medicare Advantage Medicare FFS\*

Select a Reporting Year:

O All Payers

O All Years

2020 2019

2018 2017 2016

2015 2014

2013

Commercial Medicaid

## How We Inform



#### Public CO APCD Data

Identify opportunities for improvement and to advance health care through public reports and publications



#### Non-Public CO APCD Data

Datasets and reports to address specific project needs aimed at better health, better care and lower costs Using Colorado All Payer Claims Data to Understand the Burden of Schizophrenia to Commercial Payers



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#### Background

#### **The Problem:**

- Schizophrenia (SCZ) is one of the costliest illnesses worldwide with prevalence 0.25 1.1%
- The average age of onset is generally late teens to the early 20s for men, late 20s to early 30s for women
- Roughly 87% of schizophrenia patients are covered by either Medicaid or Medicare [10]; the smaller segment that is commercially insured is often overlooked
- Many young persons with schizophrenia are diagnosed while commercially insured, yet little is known about how these patients "churn" across different insurance plans or between insured and uninsured states
- Insurance churn may lead to care disruptions in physician care, medication adherence, increased emergency department use, and worsening self-reported quality of care and health status in patients

#### **Research Aims**:

**Study 1:** Examine direct costs and healthcare resource utilization (HRU) among commercially insured young adults with schizophrenia in the state of Colorado

Study 2: Examine insurance churn among a young adult schizophrenia cohort



#### Why the CO APCD?

- Research questions support the Triple Aim
- Longitudinal and linkable
- Data elements needed
- Contribution of data across payers
- Straight-forward application process and support
- Cost of data
- Limitations: Absence of data on services provided through TriCare, the Veterans Administration, Indian Health Service, Federal Employee Health Benefits or other Federally sponsored programs (other than Medicare)
- Single state



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Jacqueline Pesa , Charmi Patel , David Rotter , Eros Papademetriou , Ravi Potluri, Carmela Benson

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#### Objective/Methods

- The objective was to examine direct costs and health resource utilization (HRU) among commercially insured young adults with schizophrenia in Colorado
- The Colorado All-Payer Claims Database, covering approximately 76% of the insured Colorado population was used. Members aged 18–34, with and without SCZ, having commercial insurance were included. All-cause, mental health related (MH) and non-MH related per patient per month (PPPM) costs and per 100 patients per month (PHPPM) HRU were compared between a SCZ cohort and a propensity score matched (PSM) non-SCZ cohort before and after index date up to 48 months.



# Results: Estimated per patient per month allowed commercial costs by service category and time period (n=3,011)

- In the year prior to index date, all-cause PPPM allowed costs were higher in the SCZ cohort vs non-SCZ cohort (\$1,021 PPPM vs. \$564 PPPM; p<.001)</p>
- Pre-index costs were primary driven by MH related costs with patients in the SCZ cohort averaging \$373 PPPM higher MH related costs (p<.001) in the pre-index period</li>
- Across all 48 months of follow-up, SCZ patients incurred \$1,687 PPPM (95% CI: \$1,365-\$2,008) more costs than non-SCZ patients
- Higher overall costs were driven by both non-MH and MH related components

#### A. Overall



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#### Results: Average PPPM commercial allowed costs in 6-month intervals (n=3,011)

- In the 48 months post index date, costs were consistently higher in the SCZ cohort vs non-SCZ in each 6-month interval (p<.001)</li>
- The peak difference was in the 0–6 months post index date (\$2,858 PPPM vs. \$457; p<.001), while the smallest difference was in the 43–48 months post index (\$1,362 PPPM vs. \$400; p<.001)</p>



Time frame (months from index date)

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[1] Data Source: Colorado All Payer Claims Database (CO APCD) 2012-2019.

[2] Results from a GEE gamma model with a log link, clustered on the patient level with robust standard errors. 95% confidence intervals are presented.[3] PPPM - Per Patient Per Month.

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#### **Conclusions & Implications**

 Commercially insured, young adults with SCZ in CO used more healthcare resources and incurred higher costs (5x higher overall PPPM costs), both before and after SCZ diagnosis, vs matched controls. These differences were due to increased utilization and costs from both mental health related and nonmental health related services.

• The largest increases were in the first six months after diagnosis, driven by hospitalizations associated with an acute health service event (e.g., a psychotic episode) leading to the initial SCZ diagnosis.

- A substantial proportion of young adults diagnosed with SCZ while commercially insured remain on commercial insurance for up to four years. These patients' costs and HRU are significantly more burdensome to commercial payers than matched patients, both before and after an official SCZ diagnosis.
- These findings highlight the need for interventions with evidence-based care for this vulnerable, challenging, and costly patient population.

Real-world analysis of insurance churn among young adults with schizophrenia using the Colorado All-Payer Claims Database

Jacqueline Pesa , Charmi Patel , David Rotter , Eros Papademetriou , Ravi Potluri and Carmela Benson

J Manag Care Spec Pharm. 2022;28(1):26-38





#### **Objective/Methods**

- The objective was to examine the frequency, rapidity, and type of insurance churn events among young adults with SCZ and commercial insurance coverage at the time of diagnosis.
- The Colorado All-Payer Claims Database was used for the study. Eligible patients were required to have at least one inpatient or two outpatient claims for SCZ, age 18–34 years at index, have prior insurance coverage for 12 consecutive months, and have commercial insurance at diagnosis. These patients were 1:5 PSM with non-SCZ members. Percentages of members on different insurance types were calculated monthly to assess churn events. Cohorts were compared using descriptive statistics, Cox proportional hazards, and GEE models.

### Results: Insurance Status by Month From 12 Months Before Index to 48 Months After Index: (A) SCZ Cohort; (B) Matched Non-SCZ Cohort (N = 3,011)

- At 1-year, 22.9% of the SCZ cohort were publicly insured vs 6.9% of the non-SCZ cohort; by 2-yrs, the percentage changed to 33.8% vs 6.4%; at 4-years 52.4% vs 10.7%
- Notably, 40.7% of the SCZ cohort were still on commercial insurance 48 months after diagnosis
- The proportion uninsured/unknown at 12 months was 6.6% for SCZ vs 6.1% for non-SCZ; by 24 and 48 months, 7.8% vs 10.0% and 6.6% vs 8.5% for the SCZ and non-SCZ cohorts, respectively



<sup>o</sup>An individual may have more than on insurance status in any given month. In cases where individuals are listed as having commercial and public insurance in the same month we gave priority to commercial insurance when designating their insurance status.

#### **Results: Time to First Churn Event and Churn Event Rate**



- The Cox regression adjusted median time to first churn event was significantly shorter in the SCZ cohort (16 months) than the non-SCZ cohort (23 months; *P* < 0.001)
- The SCZ cohort had significantly higher unadjusted and adjusted rates of churn events per 1,000 members per month (P1KMPM) in the first and second 6-month periods compared with members in the matched non-SCZ cohort

#### **Conclusions & Implications**

- Although the overall prevalence of schizophrenia is relatively low among commercial insurers in the United States, commercial payers should be concerned about the cost of this population
- Almost half (46%) of the members of the schizophrenia cohort in this study had dependent status, suggesting that the ACA requirement for commercial insurers to cover dependents until the age of 26 may be increasing the number of young adults with schizophrenia covered by commercial insurance.
- The results of this study support the importance of stronger policies for commercial insurers to minimize churn events and protect patients with schizophrenia who experience churn events. Both aspects will help ensure that these patients get the treatment continuity needed, particularly in the first 12 months after diagnosis—a time most crucial to patient outcomes

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## **Questions and Feedback**



Reach out to info@civhc.org

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Recording will be posted here: <u>www.civhc.org/about-civhc/news-and-events/event-resources/</u> **Upcoming Webinars** 

## April 21<sup>st</sup>, 12-1MT

## Protecting Patients from Surprise Bills: Colorado's Outof-Network Law

