

Chronic Care Management at South Main Clinic: A Retrospective Comparison of Calendar Years 2019 and 2020



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I. Background

South Main Clinic (SMC) is the only sliding scale health clinic in the University of Utah Health Systems and serves the South Salt Lake Community. It provides cost care based upon patient income and insurance coverage. SMC has implemented the Chronic Care Management Program (CCM) as a way to care for their patients with chronic diseases and as an additional means for collection of payments for services provided outside a face-to-face visit. This study is a retrospective data analysis of patient enrollment and the clinic's overall cost in paid time compared to its collection rates in relation to CCM.

II. Methods

- **Project Design:** retrospective examination of de-identified electronic medical records-South Main Clinic.
- **Outcomes:** CCM data comparison; patients enrolled and total billing collections from 2019 and 2020.
 - **Inclusion:** Adult consenting patients with 2+ chronic health conditions seen in the Family Medicine clinic at the SMC.
 - **Exclusion:** pediatric patients, patient seen outside of the Family Medicine Clinic.
- **Measurements and Analysis:** Paired t-test and linear regression performed

References

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Margie. History of Chronic Care Management - CCM Program for Providers. <https://chroniccaredirect.com/>. Accessed February 24, 2021. <https://chroniccaredirect.com/history-of-chronic-care-management/>

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III. Results

- 2019 total CCM enrollment: 248 patients. 2020 total CCM enrollment: 509 patients.
- Paired t-test results include statistically significant increase in CCM patient enrollment between years 2019 and 2020; $P < .0001$.
- Linear regression analysis for monthly sum of payments for CCM results for years 2019, 2020: R^2 value of .0063, R^2 value of .4558 prospectively.
- Total CCM income generated, 2019: \$1,623.15. Total 2019 expenses: \$2,310.2.
- Total CCM income generated, 2020: \$7,523. Total 2020 expenses: \$7,879.11.

IV. Conclusions

The CCM program and SMC represents a cohesive and comprehensive way to manage patients with two or more chronic care conditions while simultaneously reimbursing clinicians for patient care outside of the exam room. As it stands, the CCM program is operating with net financial loss. Despite an increase in patient enrollment, the reimbursement rate is not enough to cover the financial expenses of the program.

In spite of this finding, the program is still fulfilling its mission: monitoring and improving the health of their patients living with chronic medical conditions. CCM workflow adjustments may be a feasible option to improve the financial standing of the program.

Strengths of the study include: access to comprehensive enrollment and billing data, and direct insight into the program from our community partner, Leigh Elrod, the medical director at SMC and head of the local CCM program. Limitations include: the inability to determine the effects of COVID-19, as well as self-pay patients on CCM. The CCM enrollment process is time dependent, and patients who qualify may be left out due to clinician and clinical time constraints, reducing the economic potential of the CCM program.

