



Trends in Emergency Crohn's Disease Admissions, Costs, and Length of Stay: A 10-Year Retrospective Cohort Study

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INTRODUCTION

- Despite increasing use of advanced therapies in Crohn's disease (CD), the impact on acute healthcare utilisation and costs remains unclear.
- We examined temporal trends in emergency CD-related admissions, length of stay (LOS), and hospital costs over 10 years at an Australian tertiary centre.

METHODS

- A retrospective review of emergency CD-related admissions was performed across the 2014–15 to 2023–24 financial years, restricted to gastroenterology, surgical, and short-stay units.
- Costs were derived from itemised episode-level data and inflation-adjusted using Australian Consumer Price Index values to 2023–24 Australian dollars.
- Gamma generalised linear models with patient-clustered robust standard errors accounted for repeated admissions.
- Annual admissions, LOS, inflation-adjusted costs, and cost components were analysed.

RESULTS

- There were 710 admissions among 447 patients (48.7% female, median age 41 years).
- Admissions increased more than twofold, from 43 in 2014–15 to 103 in 2023–24.
- Of 447 patients, 303 (68%) had one admission; 144 (32%) had two or more, including one patient with 10.
- Median inflation-adjusted admission costs were highest in 2021–22 (\$16,420) and 2022–23 (\$14,392), declining to \$11,345 in 2023–24 (figure 1).
- Total inflation-adjusted costs rose from \$443,756 in 2014–15 to \$1,585,445 in 2023–24, a greater than threefold increase.
- Nursing and medical non-surgical costs were the largest cost contributors.
- Median LOS remained stable at 3–4 days throughout the study period.
- COVID-related costs peaked in 2022–23 and resolved by 2023–24.
- Adjusted cost per admission day was significantly higher in 2021–22 and 2022–23 (cost ratio 1.36, 95% CI 1.25–1.48, $p<0.001$), indicating greater care intensity rather than prolonged admission

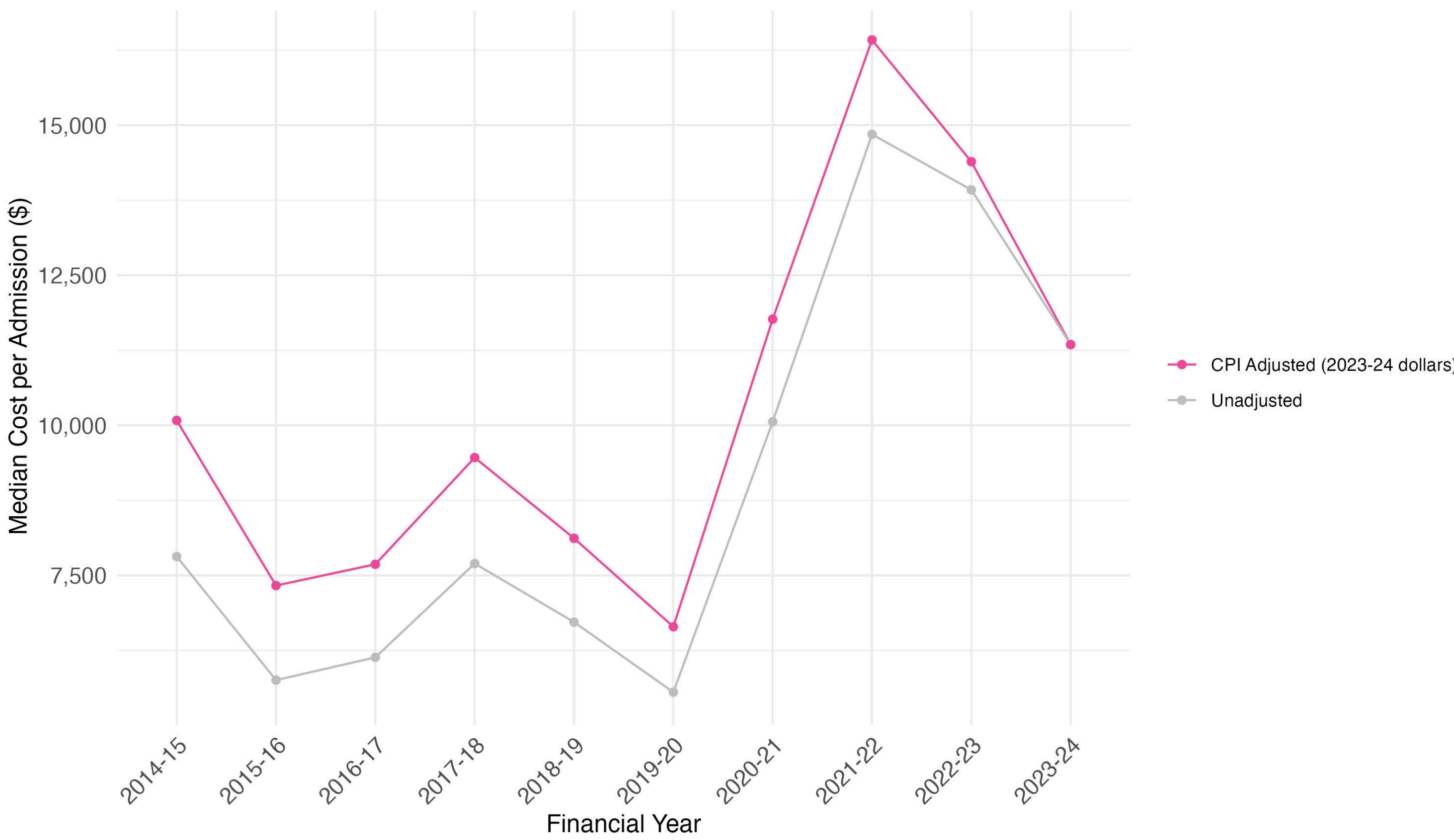


Figure 1. Trends in total inflation-adjusted costs of emergency Crohn's disease admissions per financial year, 2014–15 to 2023–24.

CONCLUSIONS

- Emergency CD admissions and hospital costs increased substantially over 10 years, despite stable LOS, reflecting rising care intensity rather than longer admissions.
- These findings highlight a growing inpatient economic burden of CD despite increasing access to advanced therapies.