An Episode-Based Analysis in a Medicare Advantage Population to Identify the Cost Impact of Virtual-First Care for Common Acute Conditions

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Background

- The potential of virtual care as an alternative to in-person visits is promising, yet its economic impact is insufficiently understood owing to limitations with traditional encounter-based cost analyses.

Objective

- To conduct an episode-based, cost-of-illness analysis of virtual-first versus in-person first care to treat the most prevalent acute conditions among Medicare Advantage members of a large national payor.

Methods

- Retrospective episodes-of-care and claims analyses of members enrolled for ≥ 6 months prior to the episode start date identified resolved acute primary care episodes (N=141,034) starting between 1/1/2022–6/30/2022.
- Episodes with inpatient services and/or emergency department-first visits were excluded.
- Propensity score weighting estimated % difference in healthcare costs between virtual-first episodes (N=10,820) and an adjusted cohort of in-person-first episodes (N=130,214).

Results

- On average, the virtual-first population was comprised of 10,820 male (34%) and female (66%) older adults (mean age: 70.9 ± 9.6 years) residing across rural (43.8%), urban (31.1%), and suburban (25.1%) locations.
- Among most prevalent acute care episodes, 7.6% (range: 0.7-24.8%) were treated with virtual-first care.
- Compared to in-person-first, cost-of-illness was 10-24% less than virtual-first care (Figure), which was primarily driven by decreased spend for primary care, specialist care, and ancillary services.

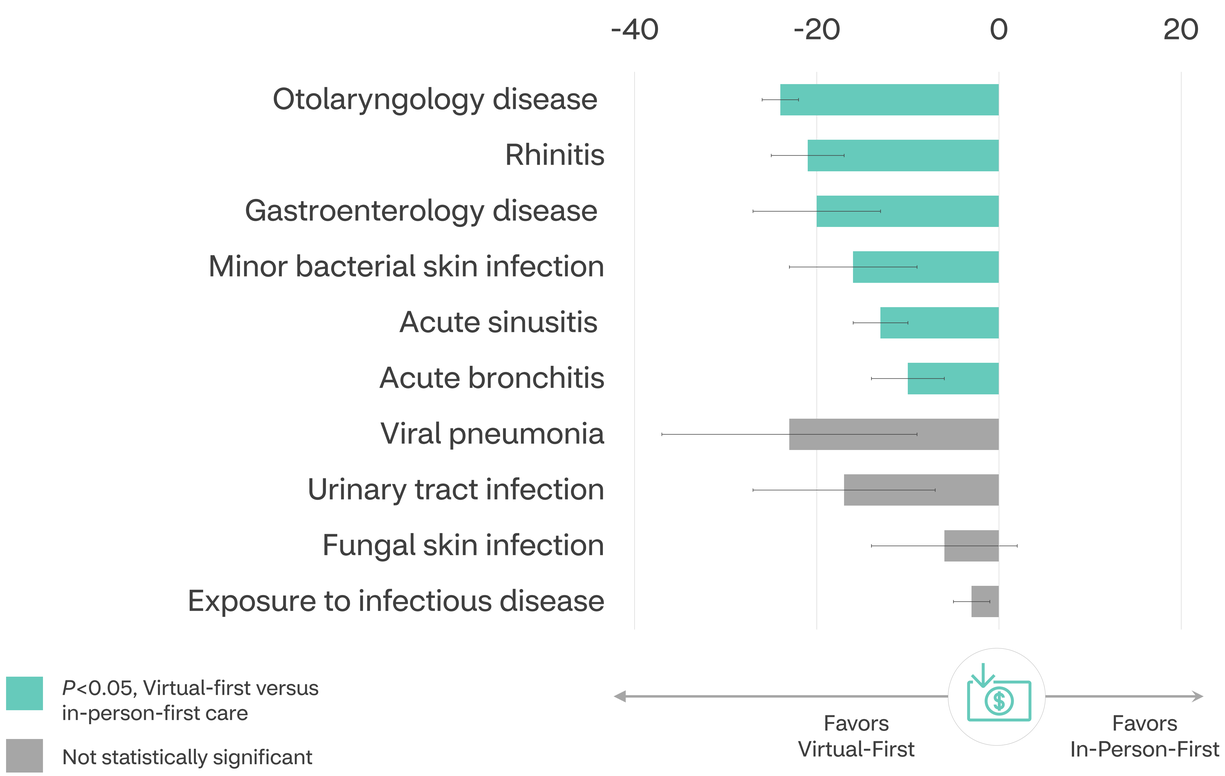
Conclusions

- This real-world study demonstrates the potential of virtual-first care as a cost-effective modality to resolve acute conditions in a large sample of Medicare Advantage members across the nation.
- The use of episode-based analytical tools enhances the significance of these findings by enabling a proxy for clinical outcomes and quality.

Key Takeaway

In this study, virtual-first care was 10 – 24% **less costly** than in-person-first care to treat and resolve many top prevalent acute primary care episodes.

Figure. Between-Group Difference (%) in Healthcare Costs for Acute Episodes



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