

Antibiotic Prescribing Patterns for Sinusitis Within a Direct-to-Consumer Virtual Urgent Care

Abstract:

Background: Direct-to-consumer virtual visits are increasingly popular across both for-profit and nonprofit healthcare systems.

Introduction: Virtual visits offer a convenient affordable way for patients to obtain medical care for simple conditions such as sinusitis and uncomplicated urinary tract infections. However, virtual visits have been associated with increased antibiotic utilization when compared with traditional in-person care.

Methods: In this retrospective cohort study, antibiotic utilization for acute sinusitis was compared between patients treated through a direct-to-consumer virtual urgent care versus a matched cohort treated through traditional urgent care.

Results: Fifty-seven patients were treated for acute sinusitis within the virtual care cohort, whereas 100 patients were treated in the traditional care arm. Antibiotic utilization for acute sinusitis was lower when care was delivered virtually using live-interactive video (67%) than when using traditional urgent care (92%) ($p < 0.001$). When care was delivered virtually, age, gender, and care delivery modality (telephone vs. video) were not associated with antibiotic utilization for acute sinusitis.

Discussion: Concerns have been raised that care delivered virtually does not meet expected quality standards when compared with traditional care. Antibiotic utilization has been used as an example of this quality gap. In this study, we demonstrate that antibiotic utilization was lower in a virtual care cohort than when care was delivered by emergency medicine physicians based in an academic setting. This suggests that awareness and sensitivity to prescribing guidelines may be more important than care delivery modality as it relates to antibiotic utilization.

Conclusions: It is possible to deliver care virtually for acute sinusitis without increasing antibiotic utilization.