Crushing *Candida auris* in the ICU

THE UNIVERSITY OF CHICAGO UChicago Medicine | Center for Healthcare Delivery Science and Innovation

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AT THE FOREFRONT UChicago Medicine | Infection Prevention and Control

Problem

- *Candida auris* (*C. auris*) is a resistant yeast that mostly affects patients with severe underlying medical conditions, those requiring complex medical care, or with an invasive medical device.
- *C. auris* can spread easily within hospitals and long-term care facilities when appropriate infection prevention standards are missed.
- In March 2025, an un-isolated patient in the ICU tested positive for *Candida auris* from a clinical specimen.
- Point prevalence (PP) investigation launched to determine potential spread from lack of isolation.
- For 3 months, 19 additional patients were identified during the weekly PP indicating possible transmission within the unit.
- Whole Genome Sequencing (WGS) confirmed relatedness between isolates.
- Outbreak declared over in mid May 2025.
- Outbreaks divert resources from routine operations and result in patient harm, which directly undermines patient safety goals – an essential metric tied to annual operating goals.

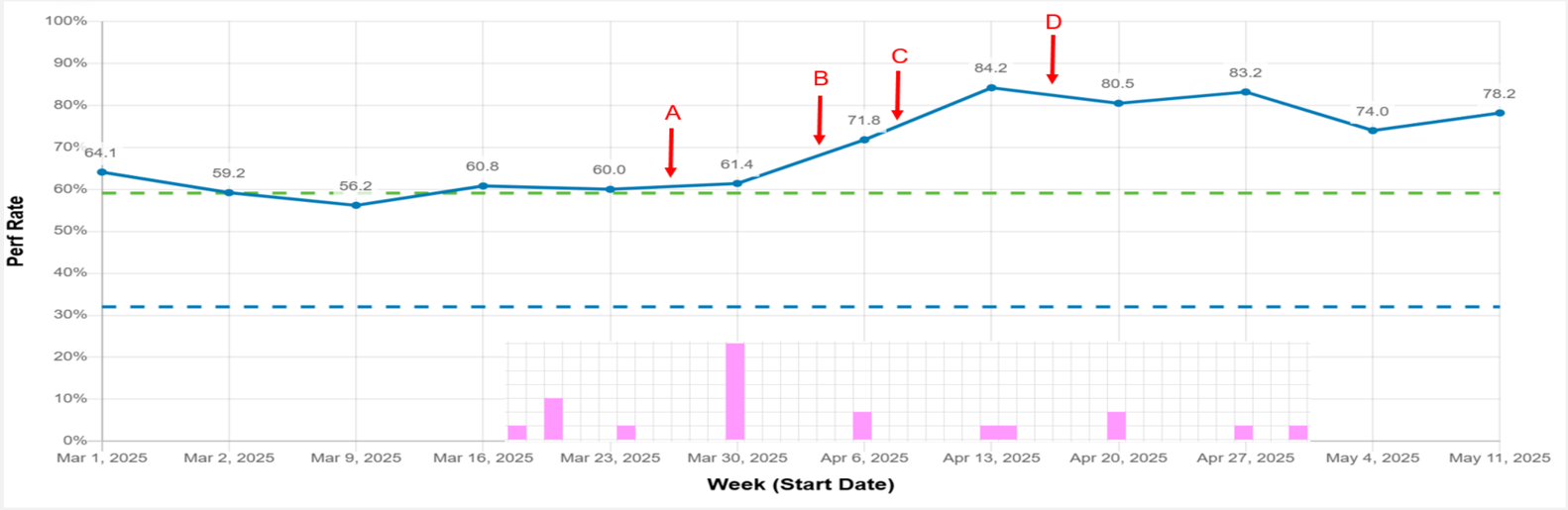
Goals

- Prevent future outbreaks and patient harm by developing, implementing, and maintaining sound infection prevention and control practices.

Contributing Factors

- **Delayed isolation** of colonized patients due to absent admission screening process and slow turn-around times from send-out testing
- **Poor hand hygiene habits** observed consistently, necessitating Just In Time coaching.
- **Isolation Gaps:** Inconsistent application of Contact precautions and wide-spread limited awareness necessitating re-education.
- **Environmental Cleaning Deficiencies:** Insufficient daily and terminal cleaning, particularly near bed spaces, increased contamination risk.
- **Equipment Cleaning Lapses**: Inconsistent disinfection of shared equipment enabled cross-transmission opportunities.

Implementation of Interventions



Outbreak Interventions

- A: Universal contact precautions implemented across unit and Cross-Transmission Cleaning Protocol initiated
- B: Supervised terminal room cleans with UV-C disinfection
- C: IPC daily rounds on both shifts for hand hygiene (HH) and PPE compliance
- D: 24/7 monitors outside of rooms enforced HH and PPE compliance
- C. auris case
- Hand hygiene compliance (%)
- Unit's hand hygiene goal

Acknowledgements

Thank you to the hardworking staff and leaders of CCD 4, Environmental Services, Laboratory Service Center, Clinical Microbiology Laboratory, Supply Chain, and partners at the Chicago Department of Public Health.

IPC Recommendations

Bring *C. auris* testing in house to decrease turnaround time, reduce cost, and minimize sample loss.

Implement house-wide, high risk patient admission screening for *C. auris* to minimize transmission risk from colonized patients.

Ensure daily and terminal cleaning meet established standards through attentive management supervision with special focus on bed space.

Reinforce staff knowledge and skills on isolation procedures, PPE usage, hand hygiene, and cleaning of shared equipment.

Promote stronger leadership accountability for infection prevention practices by embedding expectations within annual operating plan goals, metrics, etc.

Upgrade hand hygiene system to an individual automated monitoring to encourage individual accountability.