

Admission screening among high-risk patients in acute care to prevent *Candida auris* transmission



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The Pennsylvania Department of Health worked with a health care system to develop a protocol to screen newly admitted patients who meet specific criteria for *C. auris* colonization. The protocol resulted in identifying patients colonized with *C. auris* who previously would not have been detected. This resulted in protecting other patients, increased communication, and better patient outcomes.



The “What”

Candida auris is a multidrug-resistant yeast that causes healthcare-associated outbreaks in inpatient healthcare facilities among vulnerable patients. These patients often require frequent hospital stays or transfers between different levels of medical care. Patients can become colonized through exposure to contaminated healthcare personnel hands, medical equipment, or environmental surfaces. Negative consequences of colonization include long hospital stays, high medical costs, and increased mortality.

The Pennsylvania Department of Health (PA DOH), Bureau of Epidemiology, which receives funding through the Epidemiology and Laboratory Capacity for the Prevention and Control of Emerging Infectious Diseases (ELC) cooperative agreement, promotes the importance of partnerships among public health, healthcare facilities, and laboratories to prevent and control *C. auris*. As part of statewide containment strategy, PA DOH monitors epidemiologic trends and tracks movement of patients with *C. auris* between healthcare facilities.

After an experience with the admission of a patient with undetected *C. auris* colonization, one health system in southeastern Pennsylvania became interested in screening for *C. auris* upon admission. Due to PA DOH's outreach, the health system was inspired to collaborate with public health on a protocol to screen newly admitted patients with a higher risk for *C. auris* colonization.



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These include patients that were admitted from high acuity long-term care settings, those with recent hospital stays in facilities with known *C. auris*, or those with a history of colonization or infection with a carbapenemase-producing organism. Public health resources including laboratory assistance and specimen collection supplies were coordinated by PA DOH through the regional antimicrobial resistance laboratory to support this prevention activity.

The “So What”

During March 2022– March 2023, 86 high-risk patients were screened for *C. auris* at admission among two acute care facilities in a single health system. Ten (11.6%) patients were found to be colonized with *C. auris*. Eight of the 10 patients were entering the health system without any previous indication for transmission-based precautions. Colonized patients that are not managed on transmission-based precautions have great potential to

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transmit *C. auris* to other patients. Thus, early detection of *C. auris* on admission likely prevented transmission events and protected other patients. Furthermore, six of 10 patients had a prior negative result for *C. auris*. Negative results for this organism can be misleading because a patient can become colonized or infected with *C. auris* at any time. Healthcare facilities must continually review patient risk factors to determine the need for infection prevention measures.

In addition to preventing cases of this high-concern organism, other improvements were implemented as part of this prevention activity. This health system improved inter-facility communication by uploading *C. auris* transfer letters created by the PA DOH team. These communications were uploaded to their electronic medical record system which allowed automatic notification to occur when a patient with *C. auris* was transferred to another inpatient healthcare facility. Using that same technology within their electronic medical record system, an electronic flag was linked to the case-patient’s room for environmental services to ensure an enhanced terminal cleaning at discharge. The enhanced step includes an ultraviolet disinfection step, which is a supplementary approach to a standard terminal clean with recommended disinfectants. These added steps will further the health system’s goal to prevent and control *C. auris*.

The “Now What”

On a biweekly basis, the health system and state and local public health teams meet to discuss this prevention project and to review *C. auris* admission screening data. The coordination meetings strengthen this partnership and ensure the health system has the resources to continue this work. These meetings also allow for ongoing evaluation and troubleshooting of the screening procedure. As *C. auris* colonization screening expands in the Commonwealth, PA DOH plans to use this successful approach as a model for other influential

healthcare settings to further prevent and control *C. auris*.

This partnership and the associated *C. auris* admission screening project highlight that healthcare facilities are well-positioned to be proactive at preventing new introductions of multidrug-resistant organisms. Paired with the resources and subject matter expertise that public health can offer, high-concern organisms can be reduced, and patient outcomes can be improved.

Key contributors to this project include Pennsylvania Department of Health, Bureau of Epidemiology, Division of Healthcare Associated Infection Prevention.