The AMR Global Health Academy

AMR in Practice #9: Decision Point
"The ICU *Acinetobacter* Question"

Learning Pathway:
Healthcare-Associated Infections & Infection Prevention and Control (IPC)

The Scenario

A 42-year-old patient has been mechanically ventilated in the intensive care unit (ICU) for nine days following major surgery. A respiratory sample collected after an increase in airway secretions grows multidrug-resistant *Acinetobacter baumannii*.

The patient is clinically stable, with no new fever or deterioration in oxygenation. Although the positive culture does not establish an active infection, the organism raises concerns about transmission within the ICU.

Several patients require mechanical ventilation, healthcare workers care for multiple patients during each shift, and some equipment is shared between bed spaces. The ICU has limited single-room capacity, and the infection prevention team has not identified additional cases.

The Decision Point

Would you initiate enhanced infection prevention measures immediately — or wait for evidence of additional cases or confirmed transmission?

How To Think It Through

Multidrug-resistant *A. baumannii* can persist in healthcare environments and spread through contaminated surfaces, shared equipment, and contact with healthcare workers' hands.

A positive respiratory culture does not necessarily indicate active infection, but colonized patients may still contribute to transmission. Infection prevention decisions should therefore consider transmission risk independently of whether antibiotic treatment is indicated.

The immediate response should include notifying the infection prevention team, implementing contact precautions consistent with facility guidance and assessing appropriate patient placement, reinforcing hand hygiene, and ensuring thorough cleaning and disinfection of shared equipment and frequently touched surfaces.

Where single rooms are unavailable, the team should assess feasible alternatives, including dedicated equipment, appropriate cohorting when indicated, and measures to reduce cross-transmission between patients.

The team should also review recent microbiology results and surveillance data to identify possible additional cases. Broader screening or outbreak investigation may be warranted if epidemiological findings suggest transmission.

Waiting for additional infections before addressing identifiable transmission risks may expose vulnerable ICU patients to preventable harm.

Key Takeaway

A multidrug-resistant organism identified in an ICU patient can signal a transmission risk even without confirmed infection or an established outbreak. Initiate appropriate infection prevention measures promptly, guided by patient risk, available resources, and facility IPC protocols.

Why This Matters

ICUs are particularly vulnerable to transmission of multidrug-resistant organisms because patients often require invasive devices, prolonged hospitalization, and intensive hands-on care.

Preventing transmission requires coordinated action across clinical teams, microbiology laboratories, environmental services, and infection prevention personnel.

Early recognition of transmission risks, appropriate precautions, and consistent environmental and equipment hygiene can help prevent healthcare-associated infections before additional cases occur.

Effective infection prevention begins with managing transmission risk — not waiting for an outbreak to be confirmed.

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