

# JAMMI

Journal of the Association of Medical Microbiology and Infectious Disease Canada  
Journal de l'Association pour la microbiologie médicale et l'infectiologie Canada



**AMMI CANADA – CACMID ANNUAL  
CONFERENCE 2025 CONFÉRENCE ANNUELLE**  
**APRIL 29–MAY 2 / 29 AVRIL–2 MAI**  
CALGARY TELUS CONVENTION CENTRE  
CALGARY, ALBERTA

## **CONFERENCE ABSTRACTS AND CASE REPORTS**

### **ORAL PRESENTATIONS**

**Wednesday, April 30**

Session A (A01–A04)

Session B (B01–B04)

**Thursday, May 1**

Session C (C01–C04)

Session D (D01–D04)

### **RAPID FIRE PRESENTATIONS**

**Wednesday, April 30**

Session A (RFA001–RFA012)

Session B (RFB001–RFB012)

**Thursday, May 1**

Session C (RFC001–RFC012)

Session D (RFD001–RFD012)

### **CASE REPORT SYMPOSIUM**

**Friday, May 2**

CR01–CR04

during influenza season with substantial delays in initiating therapy.

## P099

### Integrating AI into infection control: Evaluating the accuracy and consistency of four leading platforms across three regions

Julia Julkipli<sup>1,2</sup>, Yen Tsen Saw<sup>3</sup>, Ummu Afeera Zainulabid<sup>4</sup>, Johan Delport<sup>5</sup>, Ruchika Gupta<sup>5</sup>, Sameer Elsayed<sup>1</sup>, Michael S Silverman<sup>1</sup>, Fatimah AlMutawa<sup>5</sup>

<sup>1</sup>Division of Infectious Diseases, Western University, London, ON, Canada; <sup>2</sup>Division of Infectious Diseases, Queen Elizabeth 1 Hospital, Ministry of Health, Kota Kinabalu, Sabah, Malaysia; <sup>3</sup>Department of Infectious Diseases, North Manchester General Hospital, North Manchester, United Kingdom; <sup>4</sup>Department of Internal Medicine, Kulliyyah of Medicine, International Islamic University, Kuantan, Pahang, Malaysia; <sup>5</sup>Department of Pathology and Laboratory Medicine, Western University, London, ON, Canada

**OBJECTIVE:** The study aimed to assess the accuracy and consistency of AI responses on specific infection control measures, comparing them to CDC guidelines. It also assessed how AI platforms perform in dealing with complex infection control scenarios.

**METHOD:** A comparative analysis of four AI platforms (ChatGPT, Meta AI, OpenEvidence, Copilot) was conducted by presenting them with structured questions and clinical case scenarios on varicella and measles. AI responses were evaluated for accuracy based on alignment with CDC guidelines, while platform accessibility was tested from Canada, Malaysia, and the UK. Regional variations in AI responses were analyzed to assess the consistency of outputs across geographic locations.

**RESULTS:** All four AI platforms provided generally accurate information on infection control measures for varicella and measles, but discrepancies were noted. ChatGPT and Meta AI largely aligned with CDC recommendations while OpenEvidence and Copilot omitted key features like the epidemiological criteria for confirming varicella cases. Meta AI also lacked a complete explanation of the laboratory criterion for varicella. Regional differences emerged in post-exposure prophylaxis (PEP) and treatment recommendations for measles, with Copilot and OpenEvidence showing significant variations. Meta AI was unavailable in Malaysia. Additionally, response consistency varied, with ChatGPT showing inconsistencies in case definitions and treatment

guidance and Copilot displaying regional variations in PEP recommendations.

**CONCLUSION:** AI platforms demonstrate potential in supporting infection control but exhibit regional variability in responses, highlighting the need for standardized, region-specific protocols. These findings emphasize the importance of ongoing development and refinement of AI tools to ensure their global applicability and accuracy in health care. Consultation with an Infection Prevention and Control physician remains essential when dealing with complex infection control issues.

## P100

### How effective are continuous masking policies in reducing transmission of respiratory viral infections in hospitals? A systematic review

Qandeel Shafqat<sup>1,2</sup>, Elissa Rennert-May<sup>2,3,4,5,6</sup>, Stephanie W Smith<sup>7,8</sup>, Devika Dixit<sup>9,10</sup>, Connor Rutherford<sup>3</sup>, Jessalyn Almond<sup>3</sup>, Oscar Larios<sup>3,5,6</sup>, John Conly<sup>2,3,4</sup>, Jenine Leal<sup>2,3,4,5</sup>

<sup>1</sup>Undergraduate Medical Education, University of Calgary, Calgary, AB, Canada; <sup>2</sup>Department of Community Health Sciences, University of Calgary, Calgary, AB, Canada; <sup>3</sup>Infection Prevention and Control, Alberta Health Services, Calgary, AB, Canada; <sup>4</sup>O'Brien Institute for Public Health, University of Calgary, Calgary, AB, Canada; <sup>5</sup>Department of Microbiology, Immunology and Infectious Diseases, Calgary, AB, Canada; <sup>6</sup>Department of Medicine, University of Calgary, Calgary, AB, Canada; <sup>7</sup>Infection Prevention and Control, Alberta Health Services, Edmonton, AB, Canada; <sup>8</sup>Department of Medicine, University of Alberta, Edmonton, AB, Canada; <sup>9</sup>Department of Pediatrics, Division of Infectious Diseases, University of Calgary, Calgary, AB, Canada; <sup>10</sup>Workplace Health and Safety, Alberta Health Services, Calgary, AB, Canada

**OBJECTIVE:** There is a need for strategies to reduce respiratory viral infection (RVIs) transmission in hospitals. One proposal is the implementation of mandatory continuous masking policies. However, the effectiveness of such policies in mitigating the spread of RVIs is unclear. We conducted a systematic review of the literature to determine the effectiveness of continuous masking in reducing the incidence and transmission of RVIs amongst patients and health care workers (HCWs) in hospital settings.

**METHOD:** We systematically searched electronic databases for original articles. Two reviewers screened studies. One reviewer extracted the data from selected studies according to a predetermined data extraction form. Results