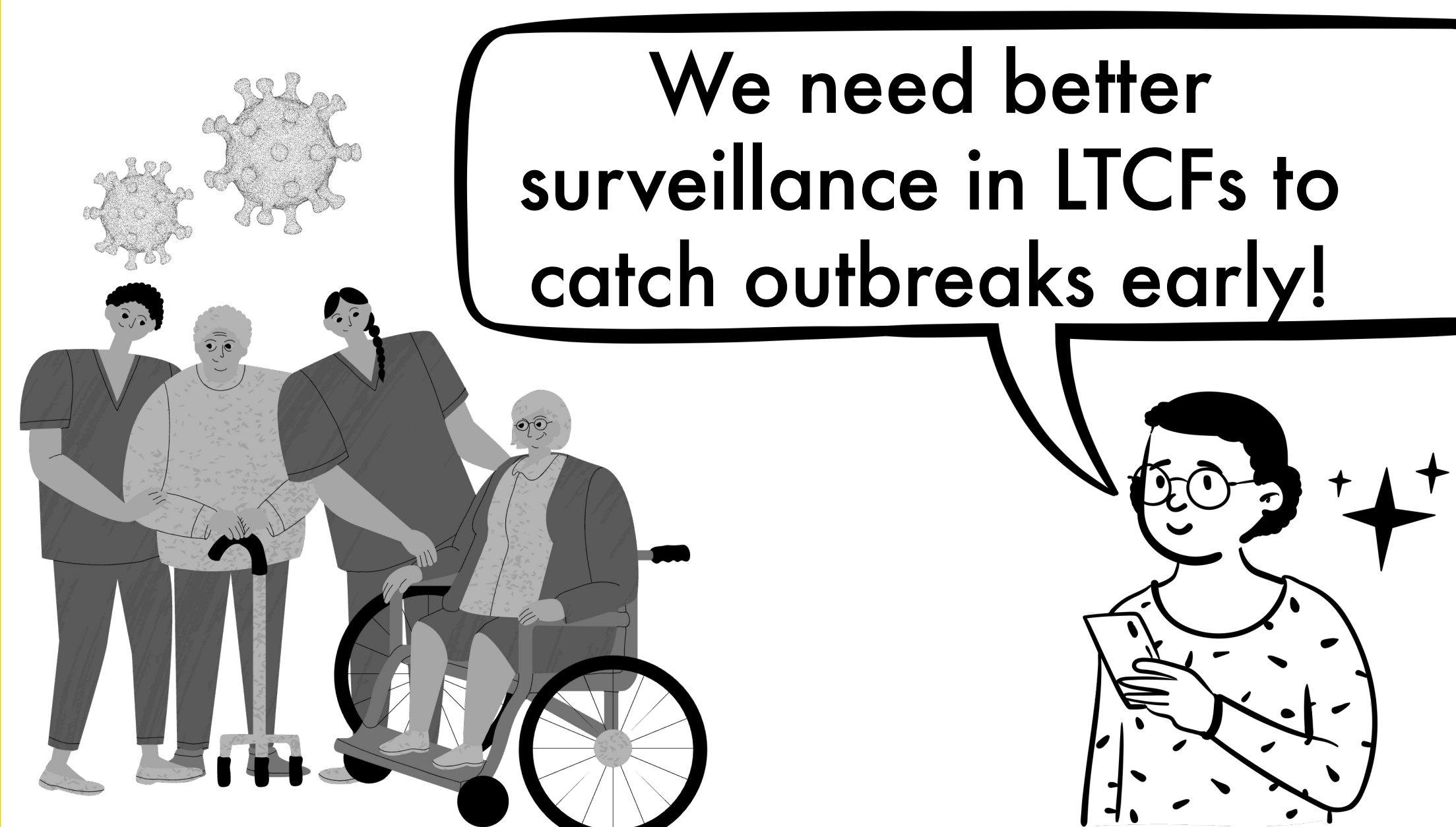


Stakeholder Engagement in the Economic Evaluation of Site-Specific Wastewater-Based Surveillance for Preventing COVID-19 Outbreaks in Long-Term Care Facilities



Jiabi Wen, Lisa A. Wozniak, Bonita E Lee, Michael Y Li, Xiao-Li Pang, Arto Ohinmaa

COVID-19 spread fast in long-term care facilities (LTCFs). Residents were especially vulnerable.



Could wastewater surveillance help?



What's that exactly?

LTCF-specific wastewater surveillance (WBS) spots virus shed by residents and staff in sewage before cases are confirmed.



WBS is non-invasive and samples everyone at once. It could be cost-effective.

Cool! An economic evaluation could tell its value for money!

PLAN

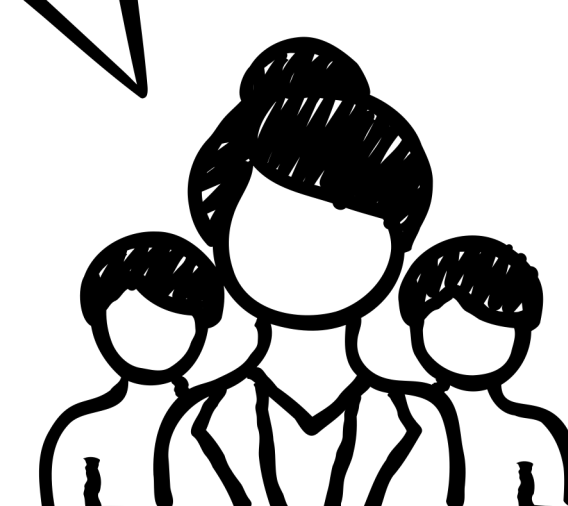
...



We work across Alberta's health system. We'd like to be your stakeholders.

Snowball sampling

"Information power" - sample size



Two rounds of one-on-one Zoom interviews with 9 stakeholders

Exploratory round

Confirmatory round

Knowledge translation

Jun 2023

Jun 2024

Jun 2025



Stakeholders saw potential but emphasized data accuracy, timeliness, and practical integration.

It's helpful...part of the ongoing picture presented at sites.



But how fast can we act on WBS results?

We need stronger evidence before relying on it.



WBS is a piece of info; not the sole basis.

WBS made sense early on; less clear as COVID became endemic.

Stakeholders preferred low-burden responses when signals appeared and emphasized context-specific decisions.

If we aim to catch every case, wastewater signals mean stricter actions.

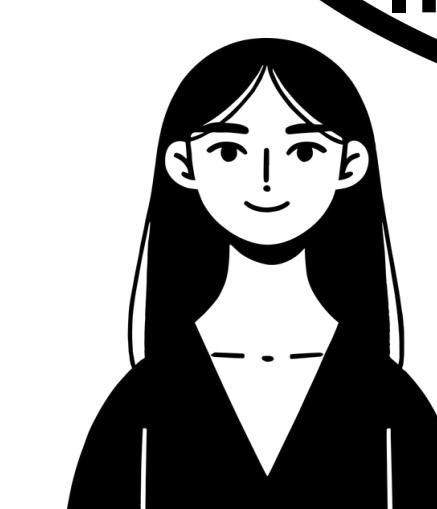


Testing everyone? Only if community risk is high.



Otherwise, extra symptom checks or enhanced cleaning make more sense.

During an outbreak, we already follow strict protocols. WBS adds little new information.



Stakeholders confirmed model assumptions and helped define relevant costs, outcomes, and willingness-to-pay factors.

Based on your inputs, here's our draft evaluation plan. What do you think?

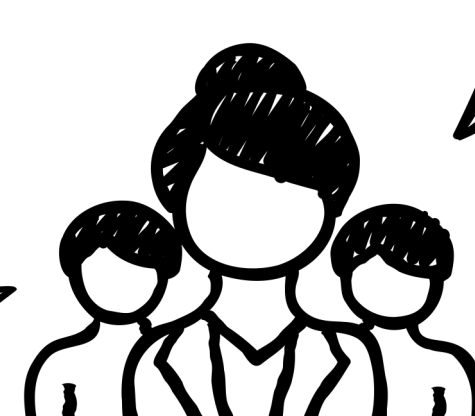
Overall, it's solid!

You might need to fine-tune your assumption about following infection protocols

You may not capture it all. The benefits go beyond individual health effects

For costs, skip long-COVID.

For outcomes: cases, hospitalizations, and deaths.



Stakeholder engagement made the evaluation credible, useful, and ready for policy.

Interested in the evaluation results? Check EE695 @ Poster session 5



THE END