

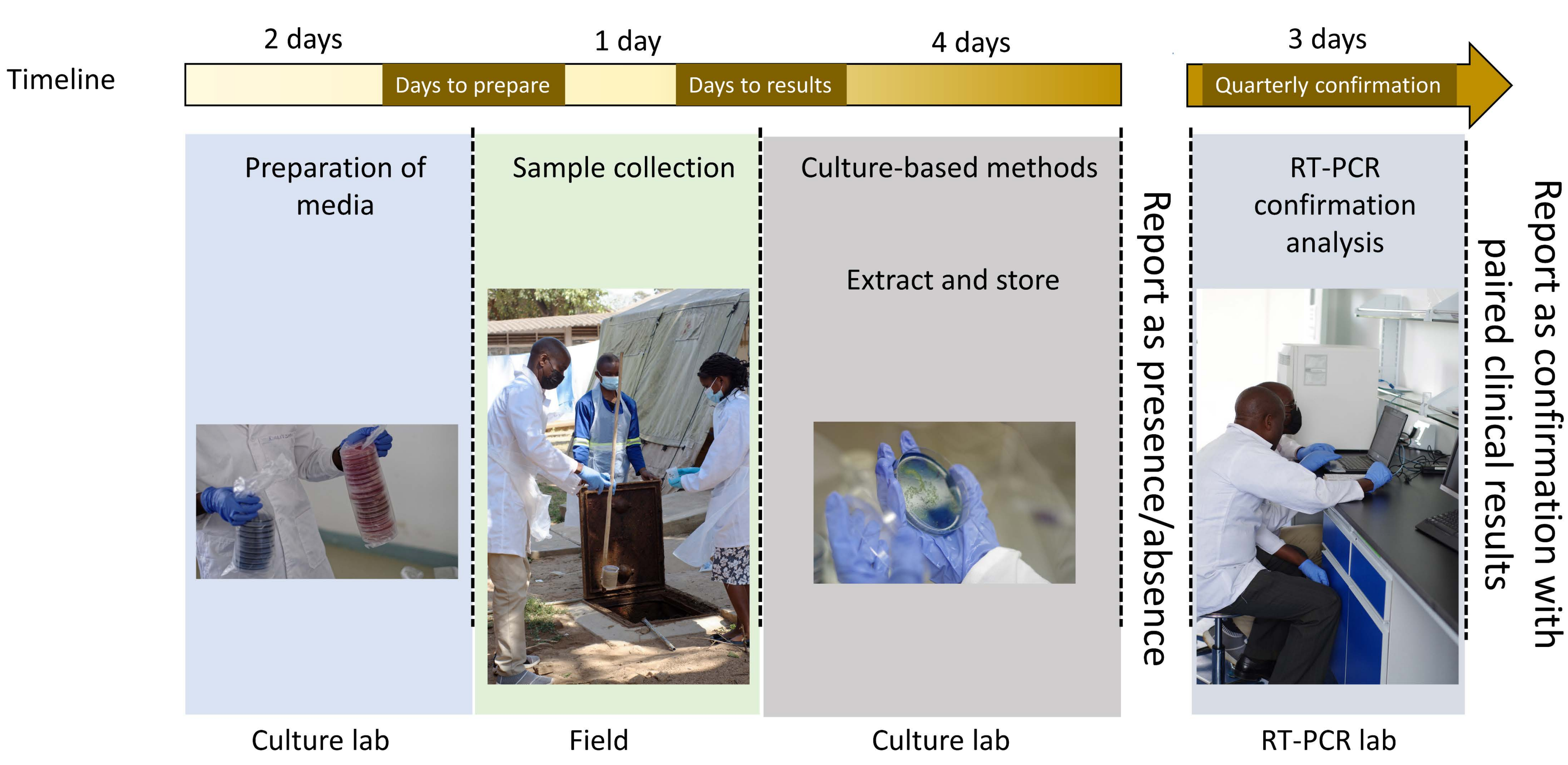
Wastewater and environmental surveillance in Malawi: Past precedent and future opportunities

Rochelle H. Holm and Petros Chigwechokha

BACKGROUND

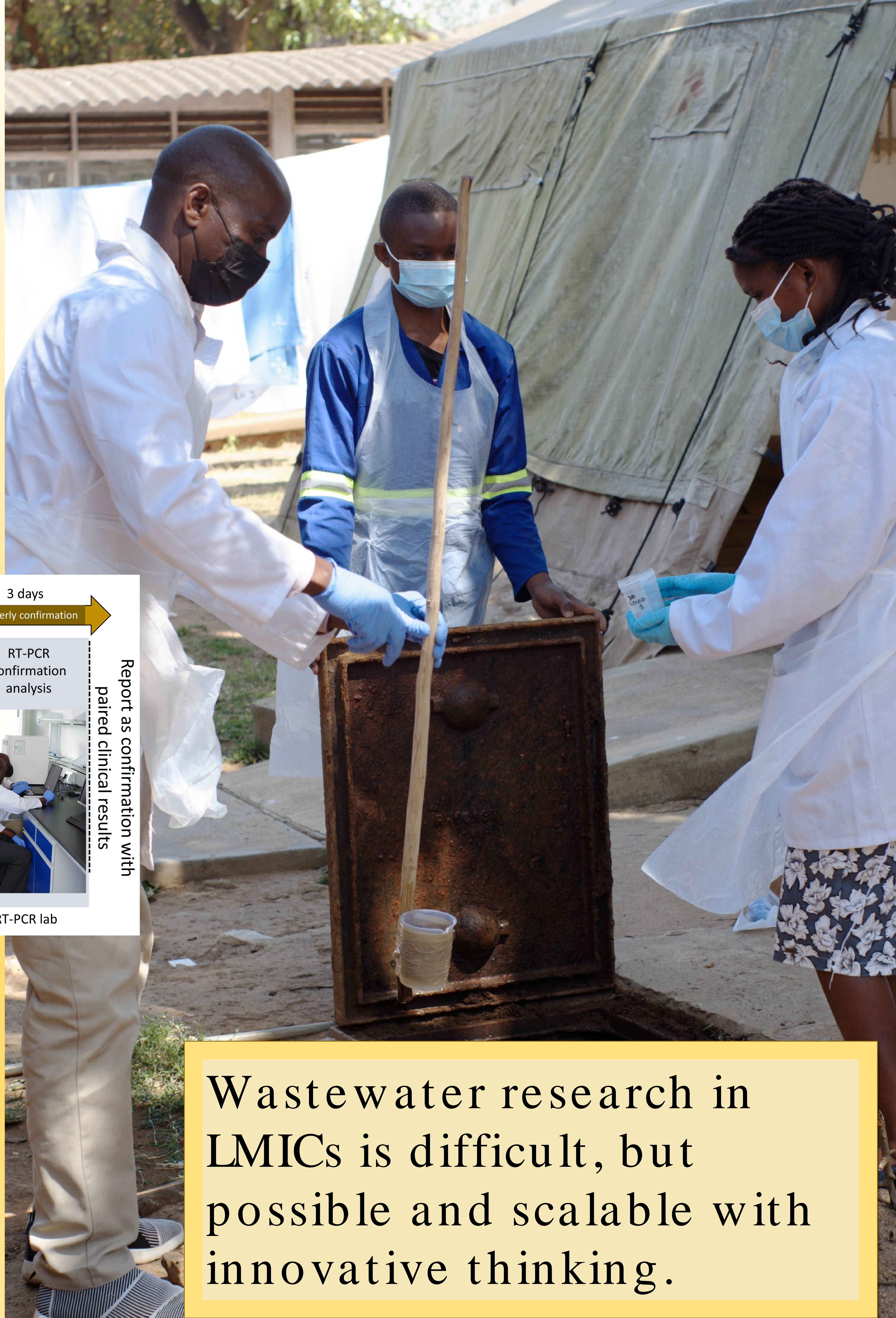
Wastewater and environmental surveillance (WES) in low-resource settings is difficult.

METHODS



RESULTS

- Bacterial counts ranged from up to 10^6 colony-forming units/mL for *V. cholerae* and up to 10^7 colony-forming units/mL for *S. Typhi*.
- RT-PCR of the isolates showed that the available culture-based medical diagnostic methods were successful in detecting *V. cholerae* but were less accurate for *S. Typhi*.



Key messages for WES laboratory setup in resource-limited settings

1. Focus pathogens
2. Human resources matter
3. Site coverage to public spaces
4. Use method equipment and supplies that are available or partner
5. Finance externally
6. Regulation may not exist
7. How will data be used?
8. Check ethics

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Wastewater research in LMICs is difficult, but possible and scalable with innovative thinking.