

IPC in the Wild: Making Community Infection Risks Visible Through Surveillance

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Background

Complex healthcare is increasingly delivered in homes by community healthcare professionals; infection prevention and control (IPC) must adapt infection surveillance to this environment.

Unlike acute inpatient care, community settings often lack structured IPC surveillance, and therefore there is limited visibility of infection risks and outcomes. This creates a gap between IPC practice and the ability to monitor outcomes.

Aim

To develop and implement an IPC surveillance approach that reflects the realities of home-based care, supports improving practice and meets the requirements of Ngā Paerewa Health and Disability Services Standard NZS 8134:2021.

Surveillance aims to improve the consistency and visibility of infection reporting, therefore enabling identification of infections in the community.

Method

Literature was reviewed to identify a suitable community-based infection surveillance tool. The McGeer surveillance (Stone et al., 2012) criteria were selected and adapted for use in community care.

A key challenge identified was that the McGeer criteria were developed primarily for long-term care facilities rather than care delivered in people's homes. Some criteria rely on clinical observations, diagnostic testing, or information that may be more readily available in facility-based settings. In community care, staff have intermittent contact with clients, may have limited access to clinical information and test results, and often rely on clients, whānau, or other healthcare providers to report symptoms. This can make consistent application of surveillance definitions difficult and may result in infections being under-reported or identified later.

To address these limitations, surveillance was focused on infections most relevant to care delivery, particularly infections associated with indwelling devices accessed or managed by staff. Surveillance measures relevant and practical for community care were defined, and standardised documentation and reporting processes were integrated into existing workflows.

Surveillance data was combined with staff feedback and observational insights to provide a broader understanding of common IPC challenges within home environments, recognising that surveillance data alone may not capture all infection risks or events occurring in the community.

Clear communication and guidance was provided to staff regarding surveillance expectations, including which infections and indicators to report, how to document them, and the appropriate reporting pathway. This supported greater consistency in reporting while acknowledging the practical limitations of applying facility-based surveillance criteria within a community healthcare setting.

Results

The surveillance data show an increase in infection reporting over the monitoring period; however, overall numbers remain low. At this stage, the increase should not be interpreted as an increase in infection incidence. Rather, it is likely to reflect improved staff awareness, recognition and reporting of infections through the incident management system.

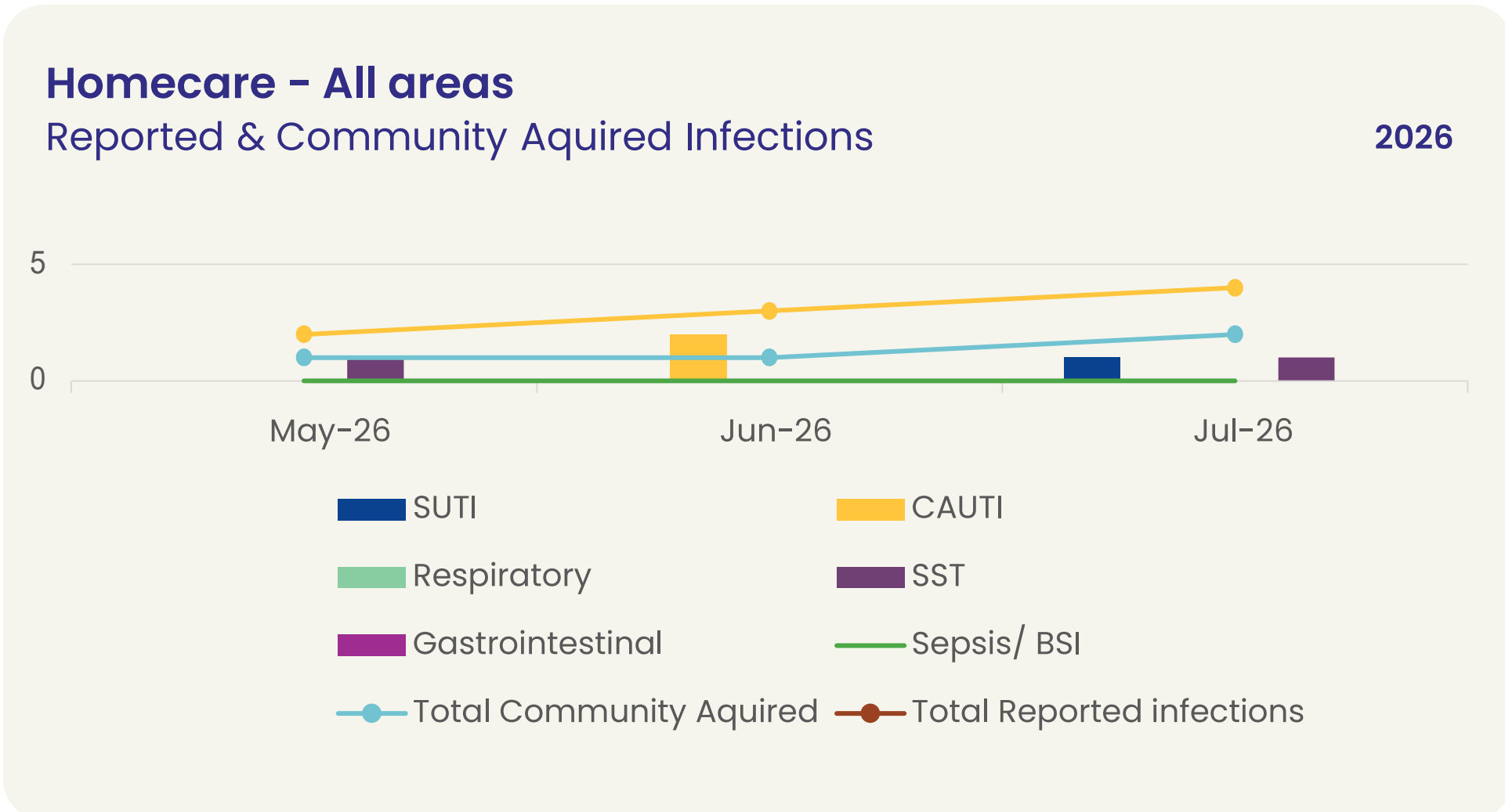
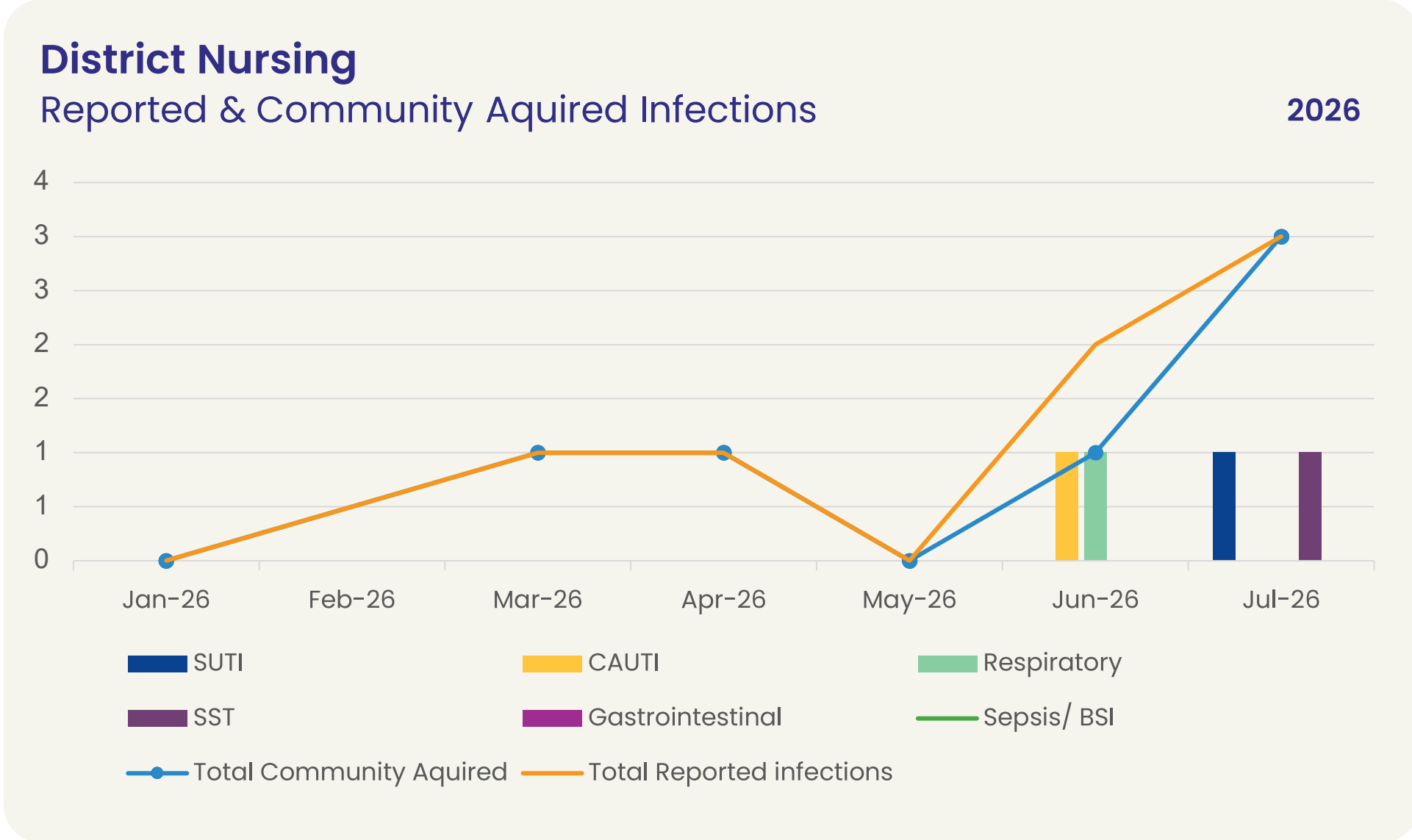
Variability in reporting practices, staff knowledge and confidence, and the challenges of applying standardised surveillance criteria such as McGeer within community and home care settings continue to influence the data.

Given the small number of reported infections and the relatively short surveillance period, no significant trends or conclusions can yet be drawn. Continued surveillance and monitoring are required to establish a reliable baseline and accumulate sufficient data to identify meaningful trends over time.

Staff are increasingly identifying and reporting infections through the incident management system.

However, several challenges remain, including:

- ❗ Inconsistent reporting practices
- ❗ Variability in staff knowledge and confidence in identifying infections
- ❗ Difficulties applying surveillance guidelines within home care settings



Conclusion

Delivering IPC “in the wild” requires systems that make infection risks visible. Integrating surveillance into community care supports data-informed decision-making and strengthens IPC beyond hospital walls is essential for improving patient safety and embedding sustainable IPC practices across home-based care.

Implications for Practice

Community-specific surveillance systems are essential for improving patient safety and embedding sustainable IPC practices across home-based care. There are exciting opportunities to harness technology for community infection surveillance, using syndromic / symptom approaches and routine clinical data to identify emerging infections, trends, and clusters earlier.

McGeer Surveillance Tool

The McGeer criteria are an evidence-based tool used to define and classify healthcare associated infections. The tool has been adapted for community use to support consistent identification and reporting of:

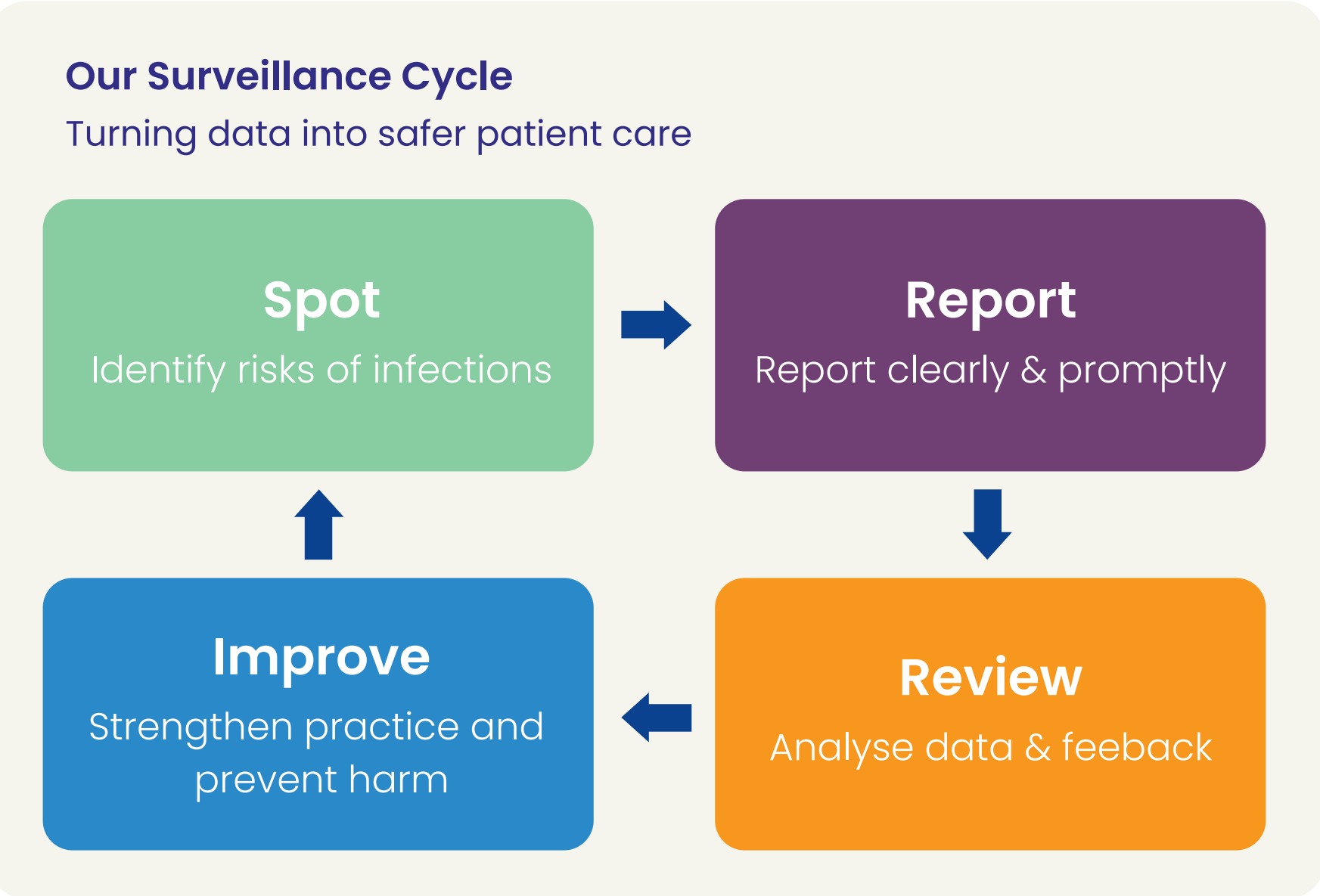
- ✔ Urinary tract infections (UTI)
- ✔ Respiratory tract infections (RTI)
- ✔ Skin and soft tissue infections (SST)
- ✔ Bloodstream infections (BSI)

This supports reliable, comparable and meaningful data for improving care.

Education Provided

Education has been provided to encourage community reporting of infections - especially in relation to invasive devices such as lines, catheters and drains that Nurse Maude staff are managing.

When in doubt, report it.



References

Shang, J., Larson, E., Liu, J., & Stone, P. (2015). Infection in home health care: Results from national Outcome and Assessment Information Set data. *American Journal of Infection Control*, 43(5), 454–459. doi.org/10.1016/j.ajic.2014.12.017

Stone et al. (2012). Surveillance definitions of infections in long-term care facilities: revisiting the McGeer criteria. *Infect Control Hosp Epidemiol*. 33(10):965–77. doi: 10.1086/667743