

QUALITY OF ANTIMICROBIAL PRESCRIBING AT CHRISTCHURCH HOSPITAL A point prevalence survey in adult inpatients (PART 2 of 2)

- Antimicrobials are a precious resource that are losing effectiveness.
- ‘Snapshot’ audits on the quality of antimicrobial use can inform AMS programs and track their effectiveness.
- In November 2020, a point prevalence survey on the quality of antimicrobial prescribing in adult inpatients was conducted at Christchurch Hospital. This was a repeat of work undertaken in 2017.
- This is the second of two bulletins summarising our performance against six quality markers for AMS.

Bulletin 1 (September 2021 #033):

Bulletin 2 (October 2021 #034):

- 1) guideline compliance, and 2) appropriateness of prescribing.
- 3) antimicrobial restrictions, 4) indication documented, 5) review/stop date documented, and 6) surgical prophylaxis ceasing within 24 hours post-operatively.

QUALITY MARKERS

ANTIMICROBIAL RESTRICTIONS COMPLIANCE

98% in 2020 vs **98% in 2017**
381/387 prescriptions vs 349/356 prescriptions

- Our high compliance with the [PHARMAC Hospital Medicines List](#) (98%) is great as the restrictions align with AMS principles and limit use of antimicrobials that are very broad spectrum, toxic or costly, or have niche indications.
- The six non-compliant prescriptions were for piperacillin+tazobactam or meropenem. In these cases, notes review identified no evidence of Infectious Diseases/Clinical Microbiology approval for use, which is required if these or other restricted agents like ciprofloxacin, clindamycin or vancomycin are used outside of our guidelines.
- **PRESCRIBERS**, please see our [poster](#), which summarises the restrictions and the [CDHB AMS Policy](#), which outlines your responsibilities to seek and document approval in the clinical record or (ideally) the prescription.

REVIEW/STOP DATE DOCUMENTATION

42% in 2020 vs **28% in 2017**
161/387 prescriptions vs 99/356 prescriptions

- All antimicrobial prescriptions should have the duration (or review or stop date) documented. This helps reduce harm from inappropriately long antimicrobial courses and facilitates timely decisions to de-escalate or change to targeted treatment.
- Our improvement in 2020 (42%) versus 2017 (28%) (p=0.0001) is good, but it is a long way to reach our target of ≥ 95%.
- **PRESCRIBERS**, please document the duration or review/stop date in antimicrobial prescriptions (see our [CDHB AMS Policy](#)).

INDICATION DOCUMENTATION

? 20% in 2020 vs **? in 2017**
76/387 prescriptions vs not assessed

- On 05 November 2020, ~20% of antimicrobials had an indication documented within the prescription (not audited in 2017). This audit predated our World Antimicrobial Awareness Week (18 – 24 Nov 2020) [initiative](#) supporting this approach.
- Subsequent auditing has shown a 2-fold increase in compliance (~40%) post-initiative. This is pleasing but is well short of our target of ≥95%.
- Clear communication of the indication has immense value for individual patient care and for AMS (see [bulletin](#) and [poster](#)).

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- **PRESCRIBERS**, please ensure you document a meaningful indication in each prescription (see [CDHB AMS Policy](#)).

SURGICAL PROPHYLAXIS STOPPING ≤ 24 HOURS

73% in 2020 vs **83% in 2017**
30/41 prescriptions vs 34/41 prescriptions

- In our audit, 73% of surgical prophylaxis regimens stopped within 24 hours of the procedure. This was less than in 2017 (83%) (p=0.3) and below our quality indicator target of 95%.
- Surgical prophylaxis, if given, usually only requires a single well-timed effective dose of an antibiotic before incision. Post-operative dosing in the absence of infection has little benefit.
- **PRESCRIBERS**, please review your practice to ensure prophylaxis does not continue for more than 24 hours post-operatively.

PRESCRIBERS, PLEASE DOCUMENT IN THE PRESCRIPTION:

- 1) indication for antimicrobial use,
- 2) review/stop date,
- 3) name of relevant specialist supporting use of restricted agents