Antimicrobial Stewardship (AMS) Bulletin

CDHB AMS Strategic Group and Hospital AMS Committee Contact: sharon.gardiner@cdhb.health.nz

### October 2021 034

# **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.

VS

- '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.

98% in 2017

- 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**

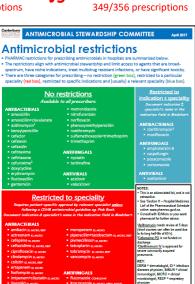
Canterbury District Health Board

Te Poari Hauora ō Waitaha

### ANTIMICROBIAL RESTRICTIONS COMPLIANCE

98% in 2020 381/387 prescriptions

- Our high compliance the PHARMAC with 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 161/387 prescriptions

28% in 2017 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  $\geq$  95%.
- **PRESCRIBERS**, please document the duration or review/stop date in antimicrobial prescriptions (see our CDHB AMS Policy).

## INDICATION DOCUMENTATION 20% in 2020 76/387 prescriptions Document the indication for antimicrobial use in the prescription ICROBIALS ARE A PRECIOUS RESOURCE eep an robials working by eaningful indication nication between he t of the 🛕 🔔 🕻 anticizer 🔤 📷 🐨 📥 🐺 📥 🧱 🗑 term - 🖬 🚾 🚓 🛲 🏧 📶 🖬 📶 👘 🛲

### ? in 2017 VS

not assessed

- On 05 November 2020, ~20% of antimicrobials indication had an 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%) postinitiative. 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).

• PRESCRIBERS, please ensure you document a meaningful indication in each prescription (see CDHB AMS Policy).

### SURGICAL PROPHYLAXIS STOPPING ≤ 24 HOURS

### 73% in 2020 83% in 2017 vs 30/41 prescriptions 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 welltimed effective dose of an antibiotic before incision. Postoperative 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

The information contained within this bulletin is provided on the understanding that although it may be used to assist in your final clinical decision, the Departments of Pharmacy, Clinical Pharmacology and Infectious Diseases at Christchurch Hospital do not accept any responsibility for such decisions.