

## WORLD ANTIMICROBIAL AWARENESS WEEK: 18 – 24 NOVEMBER 2020

*Introducing a nationwide initiative to*

### Support judicious antimicrobial use via documentation of indications on antimicrobial prescriptions

- Antimicrobial resistance (AMR) is a “global crisis” that increases mortality, prolongs hospital stays, compromises medical advances such as major surgery and cancer chemotherapy, and increases healthcare costs.<sup>1</sup>
- It is a slower burning threat than COVID-19, but both are catastrophic for human health. COVID-19 has killed ~1.2 million people over its journey thus far.<sup>2</sup> Annual mortality from antimicrobial resistant infections is ~700,000 people currently but may swell to ~10 million by 2050 unless strong and effective action occurs now.<sup>3</sup>
- Two key strategies that human healthcare providers have to slow progression of AMR are effective [Infection Prevention and Control](#), and [Antimicrobial Stewardship](#) (AMS). The latter recognises that antimicrobial use, both appropriate and inappropriate, is a key driver of AMR.
- World Antimicrobial Awareness Week is an opportunity to focus on responsible antimicrobial use. The World Health Organisation theme for 2020 is “*United to preserve antimicrobials*”. Thus, it is fitting that all of our DHBs are working collaboratively on an AMS initiative to improve meaningful documentation of indications within antimicrobial prescriptions. This bulletin outlines the basis for this quality improvement initiative, and challenges prescribers to document a meaningful reason for antimicrobial use in the prescription as a positive step to support AMS.

#### ANTIMICROBIAL STEWARDSHIP

- Antimicrobial use, both appropriate and inappropriate, is a key driver of AMR.
- International<sup>4</sup> and local<sup>5</sup> studies indicate New Zealand has high antimicrobial use compared with many other countries, almost all (~95%) residing in the community.<sup>6</sup> Positively, a recent study showed a 14% decrease in antibacterial dispensings across 2015 to 2018. This downward trajectory is promising but our antimicrobial use remains much higher than countries like the United Kingdom, Denmark, Canada and Sweden indicating much work remains to be done.<sup>7</sup>
- AMS involves co-ordinated strategies designed to measure and support appropriate antimicrobial use. The overarching aims are to manage infections optimally, while minimising antimicrobial-related harms including AMR, toxicity and cost.
- Understanding the indication for antimicrobial use underpins all assessments of the quality (appropriateness) of antimicrobial prescribing, including guidelines compliance.

#### INDICATION DOCUMENTATION ON PRESCRIPTIONS

- Inclusion of a meaningful indication for antimicrobial use in the prescription is a key quality indicator for AMS as it:
  - Promotes thoughtful antimicrobial prescribing,
  - Facilitates communication between healthcare providers, and with patients,
  - Supports timely reassessment of the ongoing appropriateness of antimicrobial use,
  - Provides justification for non-guideline compliant prescribing,
  - Reduces patient harm from inappropriate antimicrobial use and prescription misinterpretation,
  - Assists quality improvement auditing.
- There is no nationally set target for this indicator, but the NZ AMS pharmacists network support a target rate of ≥95%.

#### UNITED TO PRESERVE ANTIMICROBIALS

- All DHBs now ask their prescribers to document a meaningful indication for antimicrobial use within the prescription.
- Be specific – meaningful does not mean writing a very general term like ‘infection’. For a urinary tract infection, please use terms like ‘cystitis’ or ‘pyelonephritis’.
- DHBs will monitor their own progress with this initiative. We hope that some ‘friendly’ competition might enable us all to lift our game.
- All prescribers, wherever they are in our healthcare system, are invited to participate in this AMS initiative.

#### INDICATION DOCUMENTATION AT CDHB

- Prescribers are asked to include a meaningful indication for antimicrobial use clearly on all prescriptions.
- The CDHB AMS Strategic Group set the target compliance with this quality marker as ≥ 95%. The current level of achievement is < 30% for most antimicrobials.
- MedChart and auditing data will be used to monitor progress with this initiative, which will be fed back to prescribers and to the Ministry of Health as part of CDHB’s commitment to slowing AMR.
- We all need to do our bit to support AMS, and slow progression of AMR.

#### REFERENCES

1. Chan, M. <https://www.who.int/dg/speeches/2016/antimicrobial-resistance-un/en/>
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4. Van Boeckel TP, et al. *Lancet Infect Dis* 2014; 14: 742-50.<sup>1</sup>
5. Williamson DA et al. [https://surv.esr.cri.nz/PDF\\_surveillance/AntibioticConsumption/2014/Antibiotic\\_Consumption\\_Report\\_Final.pdf](https://surv.esr.cri.nz/PDF_surveillance/AntibioticConsumption/2014/Antibiotic_Consumption_Report_Final.pdf).
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7. Thomas M et al. *N Z Med J* 2020; 133: 1518: 33-42.