As in 2016, the 2017 Aged Care National Antimicrobial Prescribing Survey identified key issues that can inform targets for quality improvement in antimicrobial prescribing (see box below). Antimicrobial resistance (AMR) is a natural phenomenon but an accumulation of factors, including poor infection control practices and inappropriate antimicrobial use, has transformed AMR into a serious worldwide threat to public health.

### 2017 acNAPS Results

- 293 Aged Care Homes (ACHs) participated during the official timeframe (June 19th to Sept 1st)
- 12,344 permanent, respite or transitional care residents were reviewed.
- Most ACHs were located in Victoria (67.6%), classified as inner regional (43.7%) and State Government operated (67.9%).
- On the survey day, the prevalence of residents with signs and/or symptoms of infection was 2.9%.
- 1,348 residents were prescribed 1,561 antimicrobials.
- On the survey day, the prevalence of residents prescribed at least one antimicrobial was 8.9%. If all topical antimicrobials were excluded the prevalence was 6.2%.
- Skin or soft tissue (31.7%), urinary tract (26.7%), and respiratory tract (20.8%) infections were the three most common indications for prescribing antimicrobials.
- Cephalexin (20.0%) was the most commonly prescribed antimicrobial.

### Issues targeted for quality improvement interventions included:

#### The prescription of antimicrobials for ‘unconfirmed’ infections
- About one third (33.2%) of recently prescribed* antimicrobials were for residents with no signs and/or symptoms of suspected infection in the one week prior to the antimicrobial start date.
- 51.6% of the suspected infections did not meet the McGeer et al criteria (a set of widely referenced, internationally recognized infection definitions that have been specifically developed for use in ACHs).

#### Prolonged duration of antimicrobial prescriptions
- The antimicrobial start date was greater than six months prior to the survey date for 21.8% of prescriptions.

#### Widespread use of topical antimicrobials
- About one third (29.5%) of antimicrobial prescriptions was for topical use.
- The second most commonly prescribed antimicrobial was clotrimazole (17.4%).

#### Incomplete documentation of key prescribing elements
- The antimicrobial start date was unknown for 3.8% prescriptions.
- The indication for the antimicrobial was not documented for 22.1% prescriptions.
- The review or stop date was not documented for 49.3% prescriptions.

*Recent prescriptions were those antimicrobials where the start date was known and were prescribed within 6 months prior to the survey date.

Note: This results has been prepared from information provided by participating aged care homes and every effort has been made to ensure it is correct at the time of publication. Subsequent reports will be updated if data is entered retrospectively.
In 2017, participating ACHs conducted a single-day survey between June 19th and September 1st. On the survey day, nurses, pharmacists and infection control practitioners collected data about residents who had signs and symptoms of infection and/or who were prescribed an antimicrobial. To increase their sample size, some also chose to collect data about the antimicrobial courses prescribed and completed in the month prior to the survey day. Data were collected from different sources such as resident histories and medication charts and were submitted to the National Centre for Antimicrobial Stewardship via the online data entry portal.

Participating ACHs are encouraged to report their results to residents and their carers, administrative and clinical staff, off-site General Practitioners and pharmacists. On completing their data entry, each ACH can generate customised reports and examine their local issues. The underlying assumption is that these reports act as a platform to educate ACH residents and staff about appropriate antimicrobial use. They also provide an incentive to make clinical policy and practice changes and can be presented to accreditation organisations as evidence of quality improvement initiatives. Considered together, these approaches are anticipated to yield better outcomes for residents.

For further details or to register for the Aged Care National Antimicrobial Prescribing Survey visit naps.org.au, email support@naps.org.au or phone (03) 9342 9415.

acNAPS is a collaborative project between the National Centre for Antimicrobial Stewardship (NCAS), the Guidance Group, Victorian Healthcare Associated Infection Surveillance System (VICNISS) Coordinating Centre and the participating ACHs. It is supported by funding from the Australian Commission on Safety and Quality in Health Care (the Commission) under the Antimicrobial Use and Resistance in Australian (AURA) project.