



To Dip or Not to Dip Facilitator Guide

For facilitators delivering
case-based education

Version 2.0 January 2024



Australian Government
Aged Care Quality and Safety Commission



Better use
of antibiotics

Background information

1. To Dip or Not to Dip (TDONTD) Quality Improvement intervention

Antimicrobial resistance (AMR) is a global threat that is a national priority. In 2017, the proportion of antibiotic resistant methicillin-resistant *S. aureus* (MRSA) and *E. coli* (a common cause of urinary tract infections) was higher in aged care services than in the community or hospital settings.¹ National data trends suggest a progressive increase in antibiotic use in Australian aged care services between 2005 and 2016, with 70% of residents receiving at least one systemic antibiotic annually.² The 2019 Aged Care National Antimicrobial Prescribing Survey (AC NAPS)³ reported that the prevalence of residents on at least one antimicrobial was 8.2%, with prescribing for suspected infection making up 3.1% and with the most common site for prescribing being for the urinary tract. This survey also identified that 20% of prescriptions were for prophylaxis (prevention) with the most common site also being the urinary tract.

The Aged Care Quality and Safety Commission (the Commission) has developed To Dip or Not to Dip (TDONTD), a quality improvement intervention for Australian aged care services undertaking continuous improvement in Antimicrobial Stewardship (AMS), focused on improving resident antibiotic prescribing for UTI by changing urine dipstick testing practice.

Considerations for facilitators preparing to deliver TDONTD case-based education session

- Familiarity with TDONTD implementation guide that provides background on how TDONTD was developed, evaluated and shown to be able to reduce antibiotic prescribing for UTI by changing nurse and personal carer behaviour; and describes the other activities in the intervention including this case-based education session.
- Familiarity with the case-based education tool including the notes section on powerpoint slides that flag key concepts to be raised.
- Familiarity with frequently asked questions which supports facilitators in preparing responses to common questions. This is included in the implementation guide and the notes section in the powerpoint presentation.
- Familiarity with the TDONTD Clinical Pathway User Guide where there is detailed content on the use of the clinical pathway for residents with cognitive impairment.
- Take the dipstick test – this can be offered by session facilitators to key staff (e.g. nurse influencers, facility manager, IPC Lead, TDONTD champion) prior to the session engage them in TDONTD.
- Encourage key staff (e.g. nurse influencers, facility manager, IPC Lead, TDONTD champion) to attend and contribute to the session by to facilitating discussion in a positive manner.

- The session works best if the TDONTD video is shown during the session. If it is not shown during the session, those attending the session should be asked to view the TDONTD video (16 minutes) prior to the session, or after the session.
- There are several options presented to remove slides if video is being used that will reduce presentation time by 5 or more minutes.
- The video is embedded into the powerpoint slide deck. It does not require internet connectivity. Facilitators should have a back-up where the video can be downloaded from [this link](#) onto a USB stick.
- The session can also be run without use of the video if no audio-visual equipment is available or the facilitator's strong preference.
- The session is most effective when 45 to 60 minutes are set aside as it is important that there is time for the facilitator to encourage discussion. A session where the facilitator is doing most, or all, of the talking may be less effective in encouraging participants to change behaviour.

2. Target audience for session

Facilitators: Pharmacists, nurses

Target audience: Nurses (involved in assessing clinical change, initiating urine dipstick testing, communicating to GPs and families) and personal carers (involved in identifying clinical change in residents, some involved in performing BP or temperature testing, involved in initiating urine dipstick testing)

Key participants: Where possible, a senior clinician should be present to support responses to clinical questions. This person should be someone who works in the facility, is supportive of TDONTD and well-known and regarded by staff as having clinical expertise.

3. Key messages to deliver in the session

- TDONTD has been shown to be a safe and effective intervention in reducing antibiotic use for UTI
- TDONTD has achieved this by
 - changing urine dipstick testing behaviour in facility nurses and personal carers
 - facility leaders reviewing and updating policies and processes around urine dipstick testing to align with current best practice.
- TDONTD has been effective in
 - stopping urine dipstick testing for residents with no symptoms or signs by providing education on ASB and discouraging routine testing of urine after antibiotic course for UTI completed
 - discouraging urine dipstick testing as first test when assessing residents with falls, acute behaviour change and encouraging a person-centered approach by assessing resident for all possible causes of clinical change (not just focused on UTI)
 - changing urine dipstick behaviour. This is by encouraging assessment of residents using a clinical pathway instead of performing a dipstick test
 - improving communication and reliability of information provided at clinical handover and to GPs with use of the clinical pathway.
- TDONTD can be applied to the majority of residents, including those with cognitive impairment.
- TDONTD does not apply to residents who are unwell with suspected sepsis, including urosepsis or pyelonephritis.
 - Local escalation processes should be used, not TDONTD. These include deteriorating resident care pathways or sepsis pathways.

4. Content covered in the session

- Explanation of terms AMR and ASB (and how this is different from UTI). The [Aged Care IPC Lead webinar](#)⁴ covers important concepts and common questions that may be asked during the session.
- ASB, how it is defined, natural history and outcomes with or without antibiotic treatment.
- Antibiotics and their side-effects, risks and benefits of use to resident and environment including antimicrobial resistance.
- Cases to illustrate principles and invite discussion
 - Case 1:
 - how a UTI is clinically diagnosed (symptoms and signs are required)
 - how to evaluate non-specific symptoms e.g., acute confusion
 - Case 2:
 - using a resident who presents with symptoms and signs of suspected UTI to demonstrate use of a clinical pathway
 - how the clinical pathway can support clinically consistent, best practice around UTI assessment and management
 - discuss how the clinical pathway can be used as a tool to communicate with doctors (e.g. when phoning to request resident review)
 - Case 3:
 - Ideas on communication strategies nursing staff can practice and use when residents or their families request urine dipstick testing and/ or antibiotic prescribing outside of best practice guidelines.

- Local case scenarios and data can be used to enhance impact of session but must cover the learning points.

5. Process

- This multidisciplinary case-based education provides an opportunity to share knowledge, identify knowledge gaps, and have robust discussions to challenge beliefs
- The session will take 45-60 minutes to optimally deliver all aspects
- Use of TDONTD video during the session supports reinforcement of key concepts
- The powerpoint slides have notes to support the facilitator in delivery of the session
 - The notes include prompts on key concepts for discussion and answers to FAQ
- Participants should have access to
 - Copies of clinical pathway (without catheter) to complete in session
 - Be able to see paper copies of User guide to Clinical Pathway so they know it will be available for them to refer to in their clinical areas
 - Be able to see paper copies of the Consumer brochure “Do I need antibiotics?” so they know it will be available for them to print out from the ACQSC website and provide to consumers

6. To Dip or Not To Dip - Facilitator Prompt Sheet

Timing	Content
<p>Recommended</p> <p>Option</p>	<p>45 to 60-minute Case-based education for small groups of nursing, personal carer staff and other interested health professionals</p> <p>Duration can be reduced by 5 minutes or more by referring to the Option sections</p>
<p>Introductions and icebreaker</p> <p>15 minutes</p>	<p><i>Introduction</i></p> <p>As participants arrive, welcome, make introductions as needed.</p> <p>Say urine dipstick testing can influence decision-making around diagnosis of UTI and whether antibiotics are prescribed.</p> <p>Ask the group why they think antibiotic overuse and misuse is an important area to focus on in aged care?</p> <p>Explain AMR organisms is a concern in aged care. Ask them to guess resistance rates for MRSA and E. coli cefalexin resistance. (Use powerpoint notes for response prompts)</p> <p>Ask the group what they think are pros and cons of antibiotics.</p> <p>Present slides 3,4,5 and 6.</p> <p>Slide 7 has embedded video link. Play the video to 00:00 to 11:14. https://www.agedcarequality.gov.au/antimicrobial-stewardship/clinician-resources#to-dip-or-not-to-dip</p> <p>(Option if less time available: You can elect to remove slides 3, 4, 5 and 6 but only if playing the video)</p>
<p>Case 1</p> <p>10 minutes</p>	<p>Present Slide 8.</p> <p>Present and invite discussion on Case 1 using slides 9 and 10, and clinical prompts on the slides and in the slide notes.</p> <p>Ask participants to fill out the clinical pathway for the Case 1.</p> <p>Show Slide 11. Confirm they have completed key sections correctly. Invite discussion on “how do they seem themselves as using the clinical pathway?”. Mention key points on how to use the clinical pathway in the slide notes.</p> <p>Present Slide 12.</p> <p>(Option: You can elect to remove slide 12 if you feel this has been covered in discussion)</p>

Timing	Content
<p>Case 2 15 minutes</p>	<p>Present Case 2 using Slide 13. Seek comments using Slide 12 prompts.</p> <p>Ask participants to fill out the clinical pathway for the Case 2.</p> <p>Present Slide 14.</p> <p>Ask participants, do they think a urine dipstick test would help? Use response prompts in powerpoint notes section.</p> <p>Present Slide 15 to check if participants completed the clinical pathway correctly.</p> <p>Show participants paper copies of accompanying “user guide to clinical pathway” that provides detailed information on urine culture and antibiotic prescribing.</p> <p>Present Slide 16 and follow question prompts. Use response prompts in powerpoint notes section.</p> <p>Present Slide 17 and follow question prompts. Use response prompts in powerpoint notes section.</p>
<p>Case 3 10 minutes</p>	<p>Present Case 3 - Slides 18 and 19.</p> <p>Explain this is a situation where UTI is not the most likely diagnosis and a positive dipstick would likely be related to ASB rather than UTI.</p> <p>Ask participants what they would do if speaking to Simon and responding to his concerns about his father?</p> <p>Present Slides 20 and 21. Ask “is this something that you can include in your everyday practice?”</p>
<p>Wrap-up 3-5 minutes</p>	<p>Present Slides 22 to 23.</p> <p>Ask them what they thought of TDONTD and will it change what they do when they walk out the door? If so, what?</p> <p>Remind participants that they can watch the full video after this session (only 16 minutes, on Youtube. Look for ACQSC and “To dip or not to dip video”).</p>
<p>Optional Out of session video viewing</p>	<p><i>To Dip or Not to Dip video</i></p> <p>This video is part of the educational activity.</p> <p>An option is for the facilitator to determine if this video should be presented during the session or either before or after the session).</p> <p>https://www.agedcarequality.gov.au/antimicrobial-stewardship/clinician-resources#to-dip-or-not-to-dip</p> <p>Explain that this video summarises the concepts that were discussed today around To Dip or Not to Dip; use of dipstick testing in aged care homes.</p>

Timing	Content
<p>Optional Replacing case study with real-life case study</p>	<p>Using real-life resident case studies can be more effective in facilitating discussion. Facilitators can choose to replace Case Studies with their own examples.</p> <p>Case studies should capture the key principles</p> <p>Case study 1 – resident presenting with non-specific symptoms.</p> <p>Case study 2 – resident presenting with UTI symptoms, however this turns out to be not a UTI. A urine culture cannot diagnose a UTI, only confirm it if there are symptoms and signs.</p> <p>Case study 3 – resident with asymptomatic bacteriuria (approach if dipstick testing requested by family).</p>

5. Resources

Aged Care Quality and Safety Commission Antimicrobial Stewardship resources

<https://www.agedcarequality.gov.au/providers/clinical-governance/medication-management>

Australian Government. AMR information for aged care

<https://www.amr.gov.au/what-you-can-do/aged-care>

2020 Aged Care National Antimicrobial Prescribing Survey

<https://www.amr.gov.au/resources/antimicrobial-prescribing-australian-residential-aged-care-facilities-results-2020-aged-care-national-antimicrobial-prescribing-survey>

Australian Commission on Safety and Quality in Health Care

<https://www.safetyandquality.gov.au/our-work/antimicrobial-stewardship/antimicrobial-stewardship-aged-care>

AURA 2023 Highlights for Aged Care

<https://www.safetyandquality.gov.au/publications-and-resources/resource-library/aura-2023-highlights-aged-care>

References

1. ACQSC. Australian Passive Antimicrobial Resistance Surveillance (APAS) First Report: Multi-resistant organisms. 2018. <https://www.safetyandquality.gov.au/publications-and-resources/resource-library/australian-passive-antimicrobial-resistance-surveillance-apas-first-report-multi-resistant-organisms>
2. Sluggett JK, Moldovan M, Lynn DJ et al. National trends in antibiotic use in Australian residential aged care facilities 2005-2016. Clin Infect Dis 2020; doi: 10.1093/cid/ciaa436.
3. ACQSHC. 2019 Aged Care National Antimicrobial Prescribing Survey Report. 2020. <https://www.safetyandquality.gov.au/publications-and-resources/resource-library/2019-aged-care-national-antimicrobial-prescribing-survey-report-ac-naps>
4. Webinar "Approaches to improve UTI management in Australian residential Aged Care Services_28.08.21" <https://www.youtube.com/watch?v=PM7l8TdQ2QQ>



The Aged Care Quality and Safety Commission acknowledges the traditional owners of country throughout Australia, and their continuing connection to land, sea and community. We pay our respects to them and their cultures, and to elders both past and present.

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