Clinical Snippets May 2025

1. Fitness to Drive

(i) NZ Transport Agency Waka Kotahi (NZTA) wants to increase awareness that senior drivers can renew their licence as early as six months before it expires. Renewing early won't affect the new driver licence expiry date. Senior drivers are required to renew their driver licence at age 75, 80 and every two years after that, and need to present a medical certificate when renewing.

(ii) Just a reminder to make sure you are aware of the latest issue of Medical aspects of fitness to drive - A guide for health practitioners published six months ago. There is a helpful MPS discussion document accessible via a link on Health Pathways (Medical Protection – Is My Patient Fit to Drive) which discusses the medicolegal aspects of some of the changes in the new edition, particularly regarding expectations in relation to warning patients of conditions or medications that might affect their driving. The relevant clause in the guide is *When seeing a patient or prescribing medication, consider whether the patient drives and whether you should give them advice about the effect their medication or condition may have on their ability to drive. If you give advice about driving restrictions, record this in the notes and give the patient written advice, particularly if the consultation relates to driving certification.*

(iii) The MPS document also notes that the new guide helpfully clarifies the difference between an occupational therapist driving assessment and an on-road safety test and points out that the on-road safety test is not a medical assessment and should not be used if you have concerns around the patient's physical and cognitive ability to drive a vehicle safely. There is a useful chart in the guide which lays out the difference between these two assessments.

Occupational therapy driving assessment (OTDA)	On-road safety test (ORST) (generally 74 or older)
For patients where medical condition could affect their ability to drive.	For patients who are assessed as medically fit to drive
Purpose is to conduct a comprehensive assessment to assess driving competency in a range of situations. Provides feedback to patients.	Purpose is to determine if the patient meets the minimum safe driving standard. Either pass or fail.
Aim of the assessment is to determine medical fitness.	Aim of the test is to get a licence.
Off-road screening, an on-road assessment, and a debriefing.	Greeting and vehicle check, on-road test, and debrief of score and performance.
Report with recommendations will be sent to the health practitioner to assist in completing the DL9 medical certificate.	If a pass, the patient's licence renewal will be processed by a licensing agent (AA or VTNZ).

2. Drug driving

(i) In 2023, the Land Transport (Drug Driving) Amendment Act (LTAA) 2022 came into effect which lists 25 prescription medicines and illicit drugs (defined in the Act as Schedule 5) with highest risk for impairing driving. The Act also lists blood concentration levels for Schedule 5 substances that indicate impairment for offences related to drug driving. If a driver tests positive for a Schedule 5 substance, a medical defence is available to them if they have a valid prescription for that medicine and were taking it as prescribed.

(ii) An article published in the New Zealand Medical Journal (NZMJ) reviews the implications of the law change for prescribers and provides practical advice when discussing this situation with patients. The authors note that there is currently no guidance from regulatory bodies on this topic and that "... this article provides an outline of a what a reasonable prescriber might do. If adhered to, this advice [the NZMJ article] should provide a defensible position should a prescriber become the subject of an investigation or complaint related to the LTAA."

(iii) The article includes some practical tips for prescribers, summarized in a recent best practice Bulletin (122) as:

- If a patient is prescribed a Section 5 medicine that could impair driving, it is best practice to inform them of this and the LTAA legislation
- Advise patients that their medical defence may be invalidated if they consume alcohol and drive while also taking prescribed Schedule 5 medicines
- Consider whether referral for an occupational therapist driving assessment is appropriate if there is particular concern about a patient driving while taking their prescribed Schedule 5 medicine. Clinicians do not have to carry out driving suitability tests for patients during a consultation, e.g. reaction time testing.
- There is no clinical value in measuring blood concentration levels of Schedule 5 prescription medicines to assess a patient's suitability to drive
- It is good prescribing practice to document driving instructions in the patient's clinical notes and also on the prescription so the pharmacist can remind patients of the advice
- Patients should be advised not to drive if they feel sedated or feel like their driving is affected
- Sedation is a subjective feeling. Advise patients that their driving ability may still be affected even if the sedative feeling has worn off.
- Patients taking stable doses of one Schedule 5 prescription medicine and no other psychoactive substances should be informed of the LTAA legislation, but in most circumstances a clinician would not tell these patients that they could not drive

- Patients with complex prescribing (e.g. taking multiple Schedule 5 medicines or taking other psychoactive substances) should have their suitability to drive discussed with a colleague, e.g. peer group, mental health pharmacist. In some circumstances, patients may need to be advised not to drive, or referral for an occupational therapist driving assessment may be appropriate.
- A practical rule for patients taking Schedule 5 prescription medicines short-term or as needed is to wait until at least two half-lives have passed before driving, i.e. ~75% of the medicine has been cleared. For example, codeine has a half-life of 3 – 4 hours, therefore, as part of good prescribing practices, patients may be advised to wait at least eight hours after taking the medicine before driving (For approximate half-lives of commonly prescribed Schedule 5 medicines, see Appendix Table 1 in the NZMJ article)
- A longer stand-down period before driving (i.e. four half-lives) is appropriate in certain situations, such as patients with renal or hepatic impairment, who are older, who are taking higher than standard doses or multiple psychoactive medicines, patients who take "as needed" medicines more than two to three times weekly (driving may be more impaired because they do not develop tolerance as much as someone who takes the medicine daily) or any other situation identified by the prescriber

3. Shingles vaccine and dementia

(i) When Zostavax was rolled out in the US in 2006, several studies found lower rates of dementia in people who received the shots although most studies compared vaccinated with unvaccinated cohorts, a design prone to selection bias, including healthy-vaccinee bias, meaning that individuals who decide to get vaccinated are generally healthier than those who choose not to. The latest study published in Nature last month took advantage of a vaccination rollout that was undertaken in Wales more than a decade ago. Public health policy dictated that from 1 September 2013, people born on or after 2 September 1933 became eligible for the Zostavax shot, while those who were older missed out. Groups either side of the cutoff date were compared (percentage of adults who received the vaccine increased from 0.01% among patients who were merely 1 week too old to be eligible, to 47.2% among those who were just 1 week younger). Receiving the zoster vaccine reduced the probability of a new dementia diagnosis over a follow-up period of 7 years by 3.5 percentage points corresponding to a 20.0% relative reduction. This protective effect was stronger among women than men.

(iii) Possibly of more interest to us with the availability of Shingrix is a study published last year in Nature Medicine that involved review of the health records of more than 200,000 US citizens vaccinated for shingles, about half of whom received Shingrix rather

than Zostavax. Over the next six years, the risk of dementia was 17% lower in those who received Shingrix compared with Zostavax. For those who went on to develop dementia, that amounts to an extra 164 days, or nearly six months, lived without the condition. The effect was stronger in women, at 22%, than in men at 13%.

(iv) It is unclear how shingles vaccines might protect against dementia, but one theory is that they reduce inflammation in the nervous system by preventing reactivation of the virus. Another theory is that the vaccines induce broader changes in the immune system that are protective. These wider effects are seen more often in women, potentially explaining the sex differences in the studies.

4. Denosumab for osteoporosis

(i) Pharmac has widened access to denosumab for osteoporosis and people with high calcium levels associated with cancer. The Prolia brand is available for osteoporosis treatment as a subcutaneous injection given once every six months. It is available on special authority from any relevant practitioner for patients with established osteoporosis (see SA form for criteria) and:

- Bisphosphonates are contraindicated because the patient's creatinine clearance or eGFR is less than 35 mL/min; OR
- The patient has experienced at least two symptomatic new fractures or a BMD loss greater than 2% per year, after at least 12 months' continuous therapy with a funded antiresorptive agent; OR
- Bisphosphonates result in intolerable side effects; OR
- Intravenous bisphosphonates cannot be administered due to logistical or technical reasons

(ii) Health Pathways notes that any delay in subsequent doses, or cessation of denosumab can result in rapid loss of bone mass, roughly equivalent to what was gained on the medication. This results in an increased fracture risk and is an important consideration before starting treatment – essentially you need to have a backup plan in the event of need for cessation of denosumab. The current recommendations is that you seek endocrinology advice before prescribing if considering using denosumab .

(iii) ONZ & FLNNZ have published a very handy Summary of Denosumab Recommendations which covers all aspects of use of the medication and is worth downloading for rapid reference. The advice reiterates that patients must understand and commit to ongoing injections every six months to avoid rapid bone loss and 'rebound' vertebral fractures. Denosumab should not be stopped abruptly due to the risk of

rebound fractures. If discontinuation is necessary, a bisphosphonate (e.g., IV zoledronate) should be initiated six months after the last dose to prevent rapid bone loss.

5. Practical hints

(i) Treating bacterial vaginosis (BV) as an STI could improve outcomes. An Australian study published in NEJM and available as a 1-page summary document looked at 164 adult heterosexual couples who were in a monogamous relationship and where the female partner had BV. The women were treated with standard first—line antimicrobials and half the male partners were treated concurrently (oral metronidazole and 2% clindamycin cream to the penile skin) while the other half received no treatment. The primary efficacy outcome was recurrence of BV within 12 weeks. The trial was stopped early when clear inferiority of treating only the female partner was demonstrated on interim analysis. The recurrence rate with both partners treated was 1.6 per person/year compared with 4.2 per person/year when only the female was treated. No suitable topical clindamycin cream seems to be available in NZ although a 2% vaginal cream is awaiting a decision re funding from Pharmac. Current NZ guidelines do not yet reflect these research findings.

(ii) Tools for Practice #388 looked at the use of topical tranexamic acid for nose bleeds. Tranexamic acid intravenous solution applied to a cotton pledget increases the proportion of patients who stop bleeding within 10 minutes from 55% (saline) to 82%. Another randomized controlled trial showed tranexamic acid may be better than vasoconstrictors (ie. phenylephrine-lidocaine) with 90% stopping bleeding at 10 minutes versus 14% (vasoconstrictors). However, efficacy of combining agents is unclear. Epistaxis is listed in NZF as an indication for oral administration of tranexamic acid while control of oral mucosal bleeding using the IV solution as a mouthwash is listed as an unapproved indication. The price listed in the NZ Pharmaceutical schedule for the 100m/mL 5mL amps is $5.39 for five amps.

6. Resources

(i) The Antibiotic Conservation Aotearoa website has been set up by a dedicated group of researchers passionate about promoting responsible antibiotic use and antibiotic stewardship that benefits our whānau. It includes a resource hub with videos, webinars and infographics which can be used for both prescriber and patient education. An infographic example can be found here.

(ii) An excellent resource for helping you decide whether your patient is fit to undertake a recreational dive medicine course can be found in the on-line document Diving Medical Guidance to the Physician produced by the Diving Medical Screen Committee as part of a new medical screening system for divers set up in 2020. The guidance looks at various commonly encountered conditions by system and grades them as severe risk, relative risk and temporary risk (and why) which enables you to have an informed discussion with the patient regarding your recommendations.

7. Drug updates

(i) Pharmac has announced the FreeStyle Libre 2 Plus continuous glucose monitor is to be funded from 1 May 2025 for patients with type 1 or type 3c diabetes (due to damage or dysfunction of the pancreas, either from disease or surgery). The new monitor is an upgraded model of the currently funded FreeStyle Libre 2, which will be discontinued in 2026. It can be worn for an additional day (15 instead of 14), and is considered more accurate than the FreeStyle Libre 2. Patients will need a new prescription for this CGM; up to 28 FreeStyle Libre 2 Plus CGMs will be funded each year, or six per prescription.

(ii) Pharmac has announced that from 1st May, 2025, insulin degludec and insulin aspart (Ryzodeg) will be funded without restriction for patients with type 1 and type 2 diabetes. Ryzodeg is an insulin co-formulation which combines the ultralong-acting insulin degludec (70%) with the rapid-acting insulin aspart (30%). It can reduce the number of insulin injections required for some patients and may improve blood glucose stability. Ryzodeg may also be an appropriate alternative for patients prescribed NovoMix 30 FlexPen, which is being discontinued (supplies expected to run out by mid-2026).

See the latest Best Practice Bulletin for further details.

8. Ig Nobel award contenders?

(i) A recent Medscape update reported findings of an observational study (125 patients undergoing screening colonoscopy given a questionnaire - 43% had hemorrhoids visualized on colonoscopy) that links smartphone use on the toilet with presence of haemorrhoids. The takeaway points included:

- Overall, 66% of respondents used smartphones while on the toilet; 93% of those used a smartphone on the toilet at least one to two times per week or more, and more than half (55.4%) used it most of the time.
- Smartphone use on the toilet was associated with a 46% increased risk for hemorrhoids after adjustment for age, sex, body mass index, exercise activity, and fiber intake.

- Participants who used smartphones on the toilet spent significantly more time there than those who did not; 37.3% of them spent more than 6 minutes per visit on the toilet compared with 7.1% of nonusers, and 35% said they believed they spent more time on the toilet because of their smartphone use.
- The most common activity performed while on the toilet was reading "news" (54.3%), followed by "social media" (44.4%), and email/texting (30.5%)

(ii) Another recent study reported in Medscape looked at that vexed question *Can Sharing a Kiss Lead to Gluten Transfer?* It was a small study (10 couples) with the non-coeliac member receiving a gluten load and providing a saliva sample at fixed periods following ingestion, and following a glass of water. There were two protocols to test gluten transfer via kissing: Waiting 5 minutes after gluten ingestion and then kissing and drinking 125 mL of water after gluten ingestion and then kissing without waiting. The couples were instructed to kiss with an open mouth for at least 1 minute, involving the tongue and saliva transfer. saliva was collected from the partner with celiac disease immediately after the kiss and urine was tested for gluten absorption each evening and the morning after each kissing exposure. Gluten was detectable in the saliva of the partner without celiac disease in all protocols, though not at worrisome levels, according to the authors. The concluding practice point: *Patients with celiac disease can be more relaxed, knowing that the risk of gluten cross-contact through kissing a partner who has consumed gluten can be brought down to safe levels if food is followed by a small glass of water.*