Preparing patients for travel: A primary care perspective

Michael L Tong

Background
Most patients who seek travel health advice do so from their general practitioners (GPs). Travel medicine is recognised as a fundamental skill of Australian general practice, as reflected in The Royal Australian College of General Practitioners (RACGP) curriculum and syllabus.

Objective
The aim of this article is to show the natural fit of travel medicine within general practice, briefly outline the pre-travel consultation and suggest strategies for improving delivery of travel medicine in the context of general practice.

Discussion
'Oh, by the way, Doc, I'm going to Bali next week.' GPs are familiar with a passing comment that requires clinical assessment and advice. As with any other information presented during the consultation, the GP must decide how to discharge their professional responsibility to their patient.

TRAVEL MEDICINE is a multidisciplinary field that supports all aspects of a patient's health across the entirety of their journey.[1] This includes general practitioner (GP) management of long-term conditions, sometimes continued from a distance, as well as travel and itinerary-specific advice that can be delivered in the general practice setting.[1–5] Although travel medicine might be viewed as risk management,[6] much of travel medicine could also be viewed as primary care for the roaming patient.[1]

This perspective is both logical, given that the vast majority of issues travellers face are primary care or public health issues, and pragmatic, because most travelling patients seek advice from their primary care providers, if at all.[1,5,7,8]

Furthermore, GPs are familiar with discussing risk management, vaccinations and chemoprophylaxis. Travel health guidelines are available to assist with advice on prevention or management of exotic conditions. Indeed, in recent times, conditions traditionally considered as part of travel medicine, such as Japanese encephalitis, are now relevant in mainstream Australian general practice.[9]

The longitudinal therapeutic relationship and travel medicine

Perhaps the most advantageous aspect of GPs delivering travel medicine is their longitudinal therapeutic relationship whereby the GP is involved in the full spectrum of a patient's health. This includes knowledge of past medical history, vaccinations and allergies.[1–5,7,10] Leveraging this relationship, GPs can place a patient's travel plans in the context of their overall health and deliver patient-centred pre-travel advice from this holistic perspective.

On return, it is always fascinating to learn how a patient has managed their health during their travel. The GP is often the first port of call for a patient after travel for both acute and chronic issues. Considering the impact of travel on a patient's health may be critical to a correct diagnosis.

Patient continuity of care is improved when GPs deliver travel medicine.[1,11] Travel medicine is part of The Royal Australian College of General Practitioners (RACGP) syllabus, reflecting the standards expected of comprehensive general practice.[12] Nonetheless, standalone or hospital-based travel health services play an important part

© The Royal Australian College of General Practitioners 2025

when GPs need support to provide travel medicine adequately because of acuity, complexity, resources or access.[1,4,6,13,14]

The pre-travel consultation

The pre-travel consultation comprises a thorough risk assessment specific to the individual patient and their unique itinerary.[6,7,10,15–17] Checklists, such as the one shown in Box 1, can aid the practitioner to build an accurate risk profile.[15,16]

Risks associated with various destinations can be reliably found at the US Centers for Disease Control and Prevention (CDC), among other sources. Some activities may require specialised assessments (eg diving medicals must be performed by an appropriately trained doctor).

Flowing from the risk assessment, a management plan should be formulated. The RACGP curriculum, presented in Box 2, outlines a broad range of possible travel health issues to be considered.[12] Again, similar outlines can be found through the CDC and other resources.[6,7,12,15–18]

The list may appear overwhelming. However, in practice the common travel medicine topics can be divided into vaccine-preventable conditions, mosquito bite prevention and malaria prophylaxis, traveller's diarrhoea, people-related risks and environmental and safety risks.[13]

Preliminaries

Before addressing the finer details, a holistic perspective of the patient's health should be taken.

Fitness for travel

Impressions of fitness for travel are formed quickly when the GP is familiar with the patient. In general, if a chronic condition is stable, the patient is likely to be fit to travel.[19] Airlines have fitness-to-travel guidelines that should be adhered to if there is doubt. In some cases, the difficult conversation of advising a patient not to travel falls to the GP.

Health maintenance

How the patient will self-manage their chronic conditions (including mental health) while travelling should be considered. The patient should take a health summary and a sufficient supply of their routine medications

Box 1. Patient and travel details relevant to a travel risk assessment[16]

Health background

Past medical and immunisation history

- Age
- Sex
- Medical history and medications
- Allergies
- Breastfeeding or pregnancy
- Immune status
- Routine vaccines
- Travel vaccines

Prior travel experience

- High-elevation travel/mountain climbing
- Malaria chemoprophylaxis
- Prior travel-related illnesses

Travel risk assessment (trip details)

Itinerary

- Dates and time planned in each destination, including layovers
- Mode of transport of each leg of itinerary
- Transport at destinations
- Outbreaks at destinations
- Rural or urban destinations
- Accommodation
- Travel style (luxury/budget)
- Level of medical care at destinations
- Travel companions

Timing

- Season of travel
- Time of departure
- Trip duration

Reason for travel

- Business
- Leisure
- Family/friends

Special activities

- Animal interactions (including visiting farms, touring live animal markets)
- Cycling/motorbiking
- Disaster relief or other humanitarian aid
- Diving
- Extreme sports
- High-altitude travel
- Medical care (providing or receiving)
- Substance and psychoactive experiences (including illicit drugs)

Adapted from Chen LH, Bourque DL. The pre-travel consultation. In: Centers for Disease Control and Prevention yellow book 2026: Health information for international travel. Oxford University Press, 2026. This material is available on the agency website for no charge. Reference to specific commercial products, manufacturers, companies, or trademarks does not constitute its endorsement or recommendation by the U.S. Government, Department of Health and Human Services, or Centers for Disease Control and Prevention.

© The Royal Australian College of General Practitioners 2025

for the duration of their trip.[19,20] Educate patients to manage acute exacerbations of their diseases and provide written action plans to support them. Patient-initiated care may be needed, especially where access to quality medical services is a concern. Consider, also, whether planned minor procedures can be safely scheduled for after travel or should be performed prior to departure.

Box 2. Travel medicine contextual unit of The Royal Australian College of General Practitioners curriculum and syllabus[12]

Provide travel advice tailored to the individual, the destination and the planned activities.

Discuss general travel health education and prevention including:

- prevention of infectious diseases:
  - the need for routine, catch-up and destination-specific vaccinations
  - prevention of blood-borne and sexually transmissible infections
  - insect bite prevention
  - food and water hygiene
  - personal hygiene
- management of pre-existing conditions while travelling
- prevention of non-infectious illness and injury:
  - deep vein thrombosis prevention
  - jet lag management advice
  - advice about minimising risk, such as road traffic accidents or avoiding high-risk activities, such as extreme sports
  - advice about personal safety.

Provide destination-specific information and advice to reduce the risk of injury, illness or infection including from:

- current outbreaks
- risks to personal safety; for example, due to crime, war or political instability
- altitude-related illness
- ingestion of contaminated food or beverages:
  - hepatitis A
  - traveller's diarrhoea
  - typhoid
  - cholera
- insect-borne (particularly mosquito-borne) infections:
  - malaria (including risk minimisation and prophylactic medication)
  - dengue
  - Japanese encephalitis
  - tick-borne encephalitis
  - yellow fever
  - Zika virus
  - chikungunya virus
- aerosol and/or droplet transmission:
  - influenza
  - coronavirus infections
  - measles
  - tuberculosis
  - meningococcal infections

Box continued on the next page

Some patients may wish to contact their GPs while travelling. GPs must be careful about giving advice beyond Australian borders as they may not be medicolegally protected and patients will be ineligible for Medicare benefits.[6,21] The International Society of Travel Medicine (ISTM) has a global directory of contacts offering local medical support to travellers.

Travel insurance

Despite insurance not being a strictly clinical field, GPs are often asked about navigating healthcare systems. It is appropriate to remind patients to be adequately insured.[21] Insurance policies should explicitly cover anticipated activities and repatriation to return home.[22]

Common travel medicine topics

Vaccine-preventable infectious risks

Vaccines recommended for travellers are discussed in more detail in another paper in this issue of *AJGP* ('Protecting travellers from vaccine-preventable diseases').[23] In brief, vaccinations may be divided into routine (those on the national schedule), recommended and required for travel.[24]

The recent resurgence of measles globally illustrates the interface of primary care with travel medicine and that routine vaccinations should not be neglected.

With the exception of rabies, vaccination schedules are straightforward. Patients should be educated on rabies-risk animal bite treatment and the challenges of sourcing rabies immunoglobulin. Every traveller should have a plan for animal bites, regardless of whether they take up pre-exposure prophylaxis vaccinations.[10,15]

Required vaccines currently include yellow fever in several countries in Africa and South America and meningococcal for travellers on pilgrimage to Mecca. Authoritative resources such as the CDC or World Health Organization should be consulted regarding vaccine requirements for specific countries, as these requirements may change from time to time.[24]

Vaccines, while expensive, should be viewed as long-term investments, often covering multiple journeys in the future.

© The Royal Australian College of General Practitioners 2025

Box 2. Travel medicine contextual unit of The Royal Australian College of General Practitioners curriculum and syllabus[12] (cont'd)

- blood-borne, body fluid and sexually transmitted infections
  - hepatitis B
  - hepatitis C
  - human immunodeficiency virus (HIV)
  - syphilis
  - gonorrhoea
  - Ebola
- exposure to other agents:
  - schistosomiasis
  - rabies
  - leptospirosis.

Provide specific advice for populations at higher risk or with specific circumstances, including:

- Aboriginal and Torres Strait Islander peoples
- travellers visiting friends and relatives overseas
- extended travel
- working or volunteering overseas
- travellers with occupational risk
- travellers attending mass gatherings
- children and infants
- pregnant travellers
- travellers with disability
- immunocompromised travellers
- older travellers
- travellers with pre-existing medical conditions
- medical tourism
- sex tourism.

Manage conditions and presentations in the returned traveller, such as fever, traveller's diarrhoea and other specific illnesses.

Provide routine, catch-up and travel-specific immunisations.

Reproduced from The Royal Australian College of General Practitioners (RACGP). Travel medicine. In: 2022 RACGP curriculum and syllabus for Australian general practice (6th edn). RACGP, 2022, with permission.

Mosquitos, ticks, arthropods and malaria

Bite-prevention strategies – including insect repellent, appropriate clothing and screening or bed netting in accommodation – should be discussed, as bite avoidance is the only means of prevention for some arboviruses. Strategies should be tailored to the types of insects likely to be encountered according to the patient's itinerary.[25]

Malaria chemoprophylaxis options are presented in Table 1.[26] Prescribers must be familiar with possible adverse affects and contraindications of each agent. Importantly, tafenoquine should only be prescribed after ruling out glucose-6-phosphate dehydrogenase deficiency. Illustrating the parasite life cycle helps patients understand why prophylaxis may not be 100% effective and the variations between medication regimens. Patients must be educated on the importance of completing chemoprophylaxis but also the possible risk of malaria, despite chemoprophylaxis, and advised to seek help if they become unwell.

Malaria maps should be consulted to guide the required length of chemoprophylaxis according to the patient's itinerary.

Traveller's diarrhoea

Traveller's diarrhoea is very common and ranges in severity from a nuisance to life threatening.[27,28] Preventive measures should be encouraged, but, as with mosquito bite precautions, it is difficult to rely on these entirely. Self-management is appropriate provided the traveller is educated and equipped with the means to do so.[27]

The ISTM has published guidelines for traveller-initiated management that strike a balance between the pragmatics of

Table 1. Malaria guidelines presented by Australasian College of Tropical Medicine[26]

Medication	Site of activity	Dosing	Start (before entering malarial area)	Cease (after leaving malarial area)
Atovaquone-proguanil	Blood and liver stage schizonts	Daily	1–2 days	7 days
Doxycycline	Blood stage schizonts	Daily	1–2 days	28 days
Mefloquine	Blood stage schizonts	Weekly	2–3 weeks	28 days
Tafenoquine	Liver stage schizonts and hypnozoites	Daily for 3 days before travel then weekly during travel	3 days	7 days after last during travel dose

Reproduced from McGuinness S, Lau C. Malaria prevention guideline. The Australasian College of Tropical Medicine, 2025, with permission.

© The Royal Australian College of General Practitioners 2025

Table 2. Traveller's diarrhoea self-management recommendations[28]

Severity	International Society of Travel Medicine definition	Action to take
Mild	Not distressing, tolerable, does not interfere with planned activities	Rehydration Loperamide
Moderate	Distressing or interferes with planned activities	Rehydration Loperamide or antibiotic
Severe	Incapacitating or prevents planned activities, or blood in stools	Rehydration Antibiotic (with or without loperamide) Seek help

travelling when indisposed and not overusing antibiotics.[28] A simplified version (Table 2) of this guideline may facilitate the consultation.

People-related risks

Travellers should be reminded about the risks of sexual contact. Highlighting the spread of antibiotic-resistant infections and the risk of pregnancy may encourage safer sex practices.[29]

Tuberculosis can also be a risk for certain travellers, in particular children going to live in high-prevalence countries, and preventive strategies may be appropriate.[18]

Road trauma and personal safety awareness (including the risk of crime, scams, kidnapping and terrorism) should also be raised as public health concerns.[22]

Responsible travel respecting cultural norms and obeying local laws should be encouraged.

Environmental risks

Patients travelling to destinations above 2800 metres altitude need additional consultation time to be counselled on altitude sickness.[30] Therapeutic Guidelines contains printable advice.

Travel destinations may harbour many other environmental risks including bodies of fresh water (schistosomiasis), soil (helminths), forests (ticks) and accommodation (Chagas disease). A good grasp of geography aids the GP in explaining which serious risks are relevant to the traveller. Preventive strategies to avoid contact with the vectors are straightforward.

Integrating travel medicine into general practice

Logistics

Strategies to improve pre-travel consultation workflow include:

- booking the consultation as a long appointment several weeks in advance of travel. Enquiring about future travel plans during health assessments, chronic disease care planning or routine consultations can prompt a patient to organise a travel-specific appointment. Consider offering a post-travel consultation if chronic disease is likely to be affected by travel
- a proforma based on the risk assessment completed by the patient prior to the appointment. By preparing for the appointment in this way, patients become more engaged in their preparation, and the consultation is more efficient
- a consultation note template
- a printed document of travel medicine information, customised to the patient's travel plans. The essential topics, including the range of vaccinations, can be summarised into a few pages and reviewed with the patient
- a dedicated vaccine fridge holding the full range of travel vaccines
- an enthusiastic nurse.

GPs are encouraged to produce their own educational notes to help them communicate in their own styles to their patients.

A 'one-stop-shop' is ideal as both the patient and doctor can be certain that the vaccines agreed on are received and the cold chain is preserved. Practices and GPs should consider undergoing accreditation to be approved as yellow fever vaccine providers.

Travel consultations close to a trip ('last-minute travellers') still require GPs to provide patients with adequate information about travel risks and offer an appropriate plan. The challenge for GPs is managing the finite time and resources. GPs may need to document that they have offered all they can but that it is not possible to give comprehensive advice given the context.

Resources

Guidelines

Authoritative travel health sources include the CDC's Yellow Book, the National Travel Health Network and Centre (NaTHNaC, UK-based) and the Committee to Advise on Tropical Medicine and Travel (CATMAT, Canadian-based). Subscription travel health resources are available that efficiently compile itinerary-specific travel health advice. Similarly, free multi-destination advice can be produced via the 'Pre-travel Providers' Rapid Evaluation Portal' hosted on the CDC's webpage. The Australasian College of Tropical Medicine (ACTM) has started producing travel medicine guidelines from an Australian and New Zealand perspective. To date, guidelines are available online for rabies, malaria and Japanese encephalitis, including a decision aid.

Australian vaccination recommendations are contained in the Australian Immunisation Handbook, and medication regimens for travel conditions can be found in Therapeutic Guidelines.

Doctors should use these resources judiciously, keeping in mind the level at which the patient needs to understand the details for such a document to be useful. More important than giving an information download to the traveller is communicating the information well so that appropriate advice is taken up.

Meetings and networking

GPs wanting to extend their travel medicine skills may consider joining professional bodies. Locally, the ACTM hosts the Southern Cross Travel Medicine Conference annually. The RACGP Specific Interests group in travel medicine also provides collegial support.

Internationally, the ISTM and associated regional groups (eg the New Zealand Society of Travel Medicine and the Asia Pacific Travel Health Society) regularly hold

© The Royal Australian College of General Practitioners 2025

conferences across the globe. The ISTM has also recently launched its Primary Travel Doctor Professional Group with the goal of supporting community-based physicians.

Conclusion

With simple tools and some strategic organisation, GPs in mainstream practice can keep abreast of changes in travel medicine and be equipped to prepare their patients for travel. Patients appreciate their GPs delivering travel medicine, maintaining continuity of care and sharing their travel experiences on return.

Key points

- Travel medicine integrates well with and is expected to be delivered in mainstream general practice.
- The longitudinal therapeutic relationship between GPs and their patients assists GPs to appreciate travel risks specific to their individual patients.
- Travel health risk assessments require a detailed history, including medical history and travel details.
- Common topics include vaccine-preventable diseases, mosquitos and malaria, traveller's diarrhoea and personal and environmental risks.
- Organisation facilitates general practices to improve their workflow and enhance satisfaction of GPs and patients alike.

Author

Michael L Tong BSc (Hons), DipB&M, BMedSc (Hons), BMed, DTM&H, MPH&TM, FRACGP, General Practitioner, Consulting at Cavenagh Medical Centre, Darwin, NT

Competing interests: None.

Funding: None.

Provenance and peer review: Commissioned, externally peer reviewed.

AI declaration: The author confirms that there was no use of artificial intelligence (AI)-assisted technology for assisting in the writing or editing of the manuscript and no images were manipulated using AI.

Correspondence to:
michael.l.tong@gmail.com

Acknowledgments

The author thanks the Cavenagh Medical Centre staff for supporting the growth of travel medicine within mainstream general practice.

References

1. Al-Dahshan A, Ahmed S, Joudeh A, Kehyayan V. Exploring primary care physicians' role in travel medicine: A scoping review of knowledge, practices, and training. Trop Dis Travel Med Vaccines 2025;11(1):4. doi: 10.1186/s40794-024-00233-0.
2. Bayram C, Pan Y, Miller G. Management of travel related problems in general practice. Aust Fam Physician 2007;36(5):298–99.
3. Heywood AE, Watkins RE, Iamsirithaworn S, Nilvarangkul K, MacIntyre CR. A cross-sectional study of pre-travel health-seeking practices among travelers departing Sydney and Bangkok airports. BMC Public Health 2012;12(1):321. doi: 10.1186/1471-2458-12-321.
4. Morgan S, Henderson KM, Tapley A, et al. Travel medicine encounters of Australian general practice trainees – A cross-sectional study. J Travel Med 2015;22(6):375–82. doi: 10.1111/jtm.12216.
5. Zwar NA. Travel and immunosuppressant medication. Aust J Gen Pract 2020;49(3):88–92. doi: 10.31128/AJGP-11-19-5146.
6. Gherardin T. The pre-travel consultation – An overview. Aust Fam Physician 2007;36(5):300–03.
7. Leder K, Steffen R, Cramer JP, Greenaway C. Risk assessment in travel medicine: How to obtain, interpret, and use risk data for informing pre-travel advice. J Travel Med 2015;22(1):13–20. doi: 10.1111/jtm.12170.
8. McGuinness SL, Eades O, Seale H, Cheng AC, Leder K. Pre-travel vaccine information needs, attitudes, drivers of uptake and the role for decision aids in travel medicine. J Travel Med 2023;30(4):1–9. doi: 10.1093/jtm/taad056.
9. Zwar NA, Leggat PA. International travel in the pandemic era: Implications for health advice. Aust J Gen Pract 2022;51(11):879–83. doi: 10.31128/AJGP-05-22-6441.
10. Flaherty GT, Chen B, Avalos G. Individual traveller health priorities and the pre-travel health consultation. J Travel Med 2017;24(6):1–4. doi: 10.1093/jtm/tax059.
11. Wright M, Mainous AG 3rd. Can continuity of care in primary care be sustained in the modern health system? Aust J Gen Pract 2018;47(10):667–69. doi: 10.31128/AJGP-06-18-4618.
12. The Royal Australian College of General Practitioners (RACGP). Travel medicine. In: 2022 RACGP curriculum and syllabus for Australian general practice (6th edn). RACGP, 2022. Available at www.racgp.org.au/education/education-providers/curriculum/curriculum-and-syllabus/units/travel-medicine [Accessed 11 May 2025].
13. Rosenman JR Jr, Fischer PR. Travel clinics in pediatric and adolescent travel. Pediatr Ann 2011;40(7):371–75. doi: 10.3928/00904481-20110615-10.
14. Aw B, Boraston S, Botten D, et al. Travel medicine: What's involved? When to refer? Can Fam Physician 2014;60(12):1091–103.
15. Torresi J, McGuinness S, Leder K, et al. Manual of travel medicine. 4th edn. Springer, 2019. doi: 10.1007/978-981-13-7252-0.
16. Chen LH, Bourque DL. The pretravel consultation. In: Centers for Disease Control and Prevention yellow book 2026: Health information for international travel. Oxford University Press, 2026. Available at wwwnc.cdc.gov/travel/yellowbook/2020/preparing-international-travelers/the-pretravel-consultation [Accessed 11 May 2025].
17. Kamata K, Birrer RB, Tokuda Y. Travel medicine: Part 1 – The basics. J Gen Fam Med 2017;18(2):52–55. doi: 10.1002/jgf2.39.
18. Charan S, Prakash A, Medhi B. Travel medicine – A comprehensive guide to safe world travel. Indian J Pharmacol 2023;55(6):351–55. doi: 10.4103/ijp.ijp_532_23.
19. Fenner P. Fitness to travel – Assessment in the elderly and medically impaired. Aust Fam Physician 2007;36(5):312–15.
20. Kamata K, Birrer RB, Tokuda Y. Travel medicine: Part 2 – Special situations. J Gen Fam Med 2017;18(3):114–17. doi: 10.1002/jgf2.40.
21. Kennedy KM, Flaherty GT. Medico-legal risk, clinical negligence and the practice of travel medicine. J Travel Med 2016;23(5):taw048. doi: 10.1093/jtm/taw048.
22. Wadhwaniya S, Hyder AA. Pre-travel consultation without injury prevention is incomplete. J Travel Med 2013;20(4):217–20. doi: 10.1111/jtm.12041.
23. McGuinness SL, Leder K, Starr M. Protecting travellers from vaccine-preventable diseases. Aust J Gen Pract 2025;54(10):691–97. doi: 10.31128/AJGP-05-25-7685.
24. Australian Government Department of Health and Aged Care. Australian immunisation handbook: Vaccination for international travellers. Australian Government Department of Health and Aged Care, 2022. Available at https://immunisationhandbook.health.gov.au/contents/vaccination-for-special-risk-groups/vaccination-for-international-travellers [Accessed 14 May 2025].
25. Connelly CR, Gimnig JE. Mosquitoes, ticks and other arthropods. In: Centers for Disease Control and Prevention yellow book 2026: Health information for international travel. Oxford University Press, 2026. Available at www.cdc.gov/yellow-book/hcp/environmental-hazards-risks/mosquitoes-ticks-and-other-arthropods.html [Accessed 11 May 2025].
26. McGuinness S, Lau C. Malaria prevention guideline. The Australasian College of Tropical Medicine, 2025. Available at www.tropmed.org/malaria-prevention-guidelines [Accessed 11 May 2025].
27. Leder K. Advising travellers about management of travellers' diarrhoea. Aust Fam Physician 2015;44(1–2):34–37.
28. Riddle MS, Connor BA, Beeching NJ, et al. Guidelines for the prevention and treatment of travelers' diarrhea: A graded expert panel report. J Travel Med 2017;24(Suppl_1):S57–74. doi: 10.1093/jtm/tax060.
29. Caumes E. Travel and sex: Addressing the spread of sexually transmitted infections. J Travel Med 2024;31(4):1–3. doi: 10.1093/jtm/taae066.
30. Parise I. Travelling safely to places at high altitude – Understanding and preventing altitude illness. Aust Fam Physician 2017;46(6):380–84.

correspondence **ajgp@racgp.org.au**

© The Royal Australian College of General Practitioners 2025