How can general practitioners support people who inject drugs to engage with direct-acting antiviral treatment for hepatitis C?

A qualitative study

CPD

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Background and objective
General practitioners (GPs) have an important role to play in increasing direct-acting antiviral (DAA) treatment for hepatitis C virus (HCV) among people who inject drugs (PWID). A stronger understanding of how GPs can support this group in the uptake and completion of DAA treatment is required.

Methods
A purposive sample of 27 patients (nine women and 18 men) with a history of HCV participated in semi-structured interviews capturing perspectives about the role of GPs in facilitating and supporting DAA treatment. Thematic analysis focused specifically on experiences of accessing treatment while continuing injecting drug use and how GPs can support uptake in PWID.

Results
GPs need to prioritise and initiate discussions about HCV treatment with PWID. It is important that GPs provide clear and consistent information about the treatment journey; address myths of ineligibility and feelings of guilt and apathy towards treatment; and facilitate blood sampling, particularly for those with difficult venous access.

Discussion
This study contributes to HCV prevention and treatment literature by providing insights into practical ways GPs can encourage uptake and completion of treatment with PWID.

PEOPLE WHO INJECT DRUGS (PWID) are a key target group in the elimination of hepatitis C virus (HCV).[1] In high-income countries including Australia, PWID are at highest risk of contracting and transmitting HCV, and treatment of those who are actively injecting will reduce transmission.[2,3] Research supports the promotion of direct-acting antiviral (DAA) treatment among PWID, as rates of adherence and response are similar to that of the broader population.[3–6] Despite encouraging uptake of HCV treatment since the introduction of DAAs to the Pharmaceutical Benefits Scheme (PBS) in 2016, by 2019 more than 35% of PWID in Australia were still yet to be treated.[7] Current challenges for PWID in accessing HCV treatment include complex health and social concerns that make HCV treatment a low priority, stigma associated with drug use experienced in healthcare settings, both guilt and apathy associated with accessing treatment while continuing to inject drugs, and difficult venous access making required blood collections painful.[2,8,9] There is a need to strengthen approaches to encouraging DAA uptake for PWID, particularly in community settings such as general practice.[4,10–12]

In Australia, the ability of experienced general practitioners (GPs) to prescribe DAAs and unrestricted, universal access to DAAs via the PBS creates an opportunity to significantly increase HCV treatment among PWID.[2,13,14] Research indicates general practice is a common and accessible setting for PWID to access HCV care and calls for GPs to promote HCV diagnosis, treatment and follow-up with PWID.[5,15] Boosting HCV diagnosis and treatment for PWID in general practice settings is essential if Australia is to reach the World Health Organization elimination goals.[16] There is a gap in understanding of how GPs can best achieve this and a need for qualitative research exploring the experiences and perspectives of PWID accessing HCV care, and DAA treatment in particular, in general practice settings to inform efforts to increase this uptake.[15,17] The aim of this study was to draw on the perspectives of PWID to provide insights into how GPs can better support uptake and completion of DAA treatment for PWID.

Methods

This study was located within a constructivist research paradigm, which posits that reality is socially constructed.[18] This is important because patients' perspectives and experiences are central to understanding how GPs can best support the uptake and completion of DAA treatment.[18] This article forms part of a larger study that aimed to explore patient and GP perspectives related to DAA uptake in general practice settings.[9] Heard et al provide a broad analysis exploring the enablers and barriers to DAA treatment in general practice settings from both GP and patient perspectives, including discussions related to system-level solutions.[9] In this article, the researchers draw on participant experiences and perspectives to provide insights into practical ways GPs can encourage and support PWID to complete the DAA treatment journey.

Given that Australian's universal DAA access scheme does not exclude current injecting drug users, and people can be treated again if re-infection occurs, participants were not asked specifically to expose their drug use status. Participants did discuss drug use throughout the interviews, and six spoke explicitly about their experiences completing the DAA treatment journey while injecting drugs. Others talked about implications of injecting drug use on prioritising and accessing HCV treatment more broadly. The current article draws on this particular aspect of the data, using patient experiences and perspectives to provide specific insights into how GPs can better support patients who currently inject drugs.

A detailed description of the study methods is reported by Heard et al.[9] In summary, this qualitative study used semi-structured interviews with a purposive sample of 27 patients from four general practices across South East Queensland. A purposive sampling strategy was required to gather in-depth data related to experiences of accessing DAA treatment in general practice settings. General practices with a high HCV caseload were approached to recruit participants. They were identified through lists of GPs provided on the Hepatitis Queensland website, and by recommendation from Hepatitis Queensland and the Australian Society for HIV, Viral Hepatitis and Sexual Health Medicine. GPs were also informed about the study via relevant newsletters, including the Brisbane South Primary Health Network newsletter and the newsletter for Queensland GP opiate prescribers. GPs from four practices, including in low socioeconomic areas (areas with low income, low educational attainment and unemployment), identified potential participants and, with permission, provided their contact details to the research team. Three of these practices were also prescribers of opioid agonist therapy (OAT). Participants had to have a history of HCV; patients who had completed treatment, patients currently being treated and patients who were not pursuing treatment were all eligible to participate. Twenty interviews were conducted at the general practices; two were conducted at a pharmacy needle and syringe exchange facility, and six over the telephone. Interviews were conducted by LM, an experienced researcher trained in conducting qualitative interviews with diverse participants, including those from marginalised groups such as PWID. The broader team included researchers with experience in HCV research and qualitative research expertise; LS was previously a GP.

LS and LM wrote the interview guide. Consistent with the constructivist paradigm, interviews were designed to explore patients' experiences of HCV treatment and care in depth. Through open-ended questions, participants were asked about their experiences across the HCV treatment journey, including motivations for treatment and how GPs supported their diagnosis, treatment and follow-up. In accordance with ethical clearance obtained from the University of Queensland Human Research Ethics Committee (2017001387), all participants read or were read aloud an information sheet outlining the study details, including the ability to withdraw at any time, and gave written or verbal consent. Patients received $30 for their participation.

Interviews were conducted between March and June 2018, with at least one and up to 11 participants being recruited from each participating general practice. Interviews were approximately 45 minutes in length, with the majority lasting between 30 minutes and one hour. One interview was short (10 minutes) as this participant only provided very brief responses and did not respond to some interview questions. In this case, the interviewer reiterated the ability to stop the interview at any time and ensured that the participant was comfortable with their brief responses being included in the analysis. Interviews were audio-recorded and transcribed verbatim. Prior to analysis, one member of the research team read the transcripts while listening to the recording with the sole purpose of ensuring accuracy. Transcripts were de-identified prior to analysis, with each participant given a unique identifier.

Data analysis

Consistent with a constructivist research paradigm, EH and LM conducted initial inductive data-driven analysis to identify themes from the data using open coding.[18] Themes were compared to ensure inter-rater reliability, with both researchers identifying consistent overarching themes from the data; these themes were corroborated by a third researcher, LS. Transcripts were then re-read and coded to each theme.[19] Through this inductive approach to analysis, themes related to experiences and perspectives about treatment in a general practice setting while continuing injecting drug use were identified, including a set of subthemes related to ways GPs can support and enable PWID to access DAA. These subthemes were corroborated across the research team to ensure reliability[19] and are the focus of this article.

Results

The sample consisted of 27 participants aged between 33 and 65 years. Nine were women and 18 were men, and one identified as Aboriginal Australian. While participants were not directly asked about their drug use status, four participants revealed that they were currently injecting, and another two explicitly stated they had

completed DAA treatment while they were using injecting drugs. Thirteen participants stated they were on OAT at the time of the interview. All participants discussed their drug use in relation to accessing care at a general practice, and these experiences are the focus of this analysis. A summary of relevant participant characteristics is presented in Table 1.

The researchers identified four key themes related to how GPs can encourage HCV diagnosis and support patients who are currently injecting drugs to complete DAA treatment: prioritising HCV treatment with PWID; providing clear and consistent information about DAA treatment, including addressing common misconceptions and concerns; addressing myths surrounding ineligibility and feelings of guilt or apathy by emphasising the importance of treatment despite risks of re-infection; and facilitating blood sampling at the practice where possible.

General practitioners prioritising HCV treatment

Participants reported difficulty addressing any health and wellbeing concerns while using drugs:

> *I know for a fact that when I use [injecting drugs], I'm unreliable. I'm unreliable with my mental health medication and I'm unreliable with anything. … I don't take care of myself.* [P213, female, completed DAA treatment while transitioning out of injecting drug use]

Yet, many discussed how they were able to overcome some of these obstacles when their GP initiated and prioritised discussions related to HCV treatment, encouraging patients to consider DAA treatment and providing support throughout the diagnosis, testing and treatment journey:

> *[My GP] being on me. Pushing me … every time I come in here [to the general practice], he's like, 'You know [you've] got to get this done'.* [P220, male, contemplating DAA treatment at the time of interview]

With encouragement and support from their GPs, many participants were able to prioritise HCV treatment despite injecting drug use and other health concerns. Participants highlighted that an ongoing and trusting relationship with their GP further facilitated treatment through support that had not been available in other treatment settings:

> *I'd gone to the … hep C clinic at the [hospital] and everything before, but I never took the next step for it because … I just, kind of wasn't helped along …*
>
> *[Then] my doctor said to me, because it was the same doctor I'd had for a while, he said, 'What about your hep C? Have you sorted that out? [There's] a new treatment … [Let's] get that sorted and help me out with it?' And I was like, 'Okay'. And we went from there.* [P327, male, completed DAA treatment while transitioning out of injecting drug use]

General practitioners providing clear and consistent information

For many participants, concerns about DAA treatment, commonly associated with personal or peer experiences with interferon-based treatment, were initially a barrier to considering treatment. Participants who had successfully completed DAA treatment in a general practice setting highlighted how clear and consistent information from their GPs about the treatment journey helped them feel at ease and complete treatment:

> *I found [out about DAA treatment] when the doctor brought it up. … The doctor told me, 'Not many side effects, alright. It's only one pill a day'. [As] soon as this doctor explained to me, telling me it was this one pill every morning around the same time, you know, I did it.* [P102, male, completed DAA treatment while transitioning out of injecting drug use]

Other pertinent information included simple, yet comprehensive, instructions about how to complete the blood and liver assessments required to begin DAA treatment. Further, participants acknowledged trusting their GPs and feeling confident in the information and care they would receive across the DAA treatment journey.

General practitioners' role in addressing myths of ineligibility and feelings of guilt or apathy

Participants expressed being unclear about eligibility while using drugs. Participants described previous experiences of stigma in healthcare settings, which fed a belief that health professionals do not want to treat people who are still using drugs. Further, participants expressed feelings of guilt associated with accessing treatment while using drugs and discussed not seeing the benefits of completing treatment while

Table 1. Summary of participant characteristics

Characteristic	Number of participants
DAA treatment status at time of interview	11 completed treatment, 9 undergoing treatment, 5 commenced initial testing and/or discussions with GP, 2 not pursuing treatment
Gender	18 men and 9 women
History of incarceration	14
Identified as homeless	1, with another 2 living in hostel accommodation
Unemployed	18 (including 5 on a disability pension)
Discussed comorbidity	20
Revealed on OAT at time of interview	13
Revealed injecting drug use while completing DAA	6

DAA, direct-acting antiviral; GP, general practitioner; OAT, opioid agonist therapy

using drugs. For example, the following participant discussed a belief that the risks of becoming re-infected with HCV outweighed the benefits of being treated while continuing to use injecting drugs:

> *If you're still using the drugs, I don't think there's any point. If you're still prepared to stick a needle in your arm, there's no point to get rid of hep C, that's the way I see it.* [P219, male, currently completing DAA treatment]

Participants highlighted the role that GPs can have in addressing the myth of ineligibility and encouraging the uptake of DAA treatment among PWID by highlighting the benefits of treatment to diminish feelings of guilt and apathy towards treatment. The following participant described feeling like they were 'cheating' by injecting drugs while completing DAA treatment and expressed concerns about being reinfected. With support from their GP, this participant successfully completed treatment and acknowledged that ensuring PWID are aware of their right to treatment is important for achieving elimination of HCV:

> *I think [for] a lot of people [not knowing you are eligible for DAA treatment despite continued drug use] might be what is stopping them … So maybe that might be something. People, if they're allowed to know that they can still be treated while [using drugs], cause if we still treat while they're using and get rid of it once, I said like before, eventually [HCV will] be gone.* [P101, female, completed DAA treatment while injecting drugs]

General practitioners facilitating blood sampling

Difficult venous access was a barrier to initiating DAA treatment for some participants. Participants discussed ways their GPs supported them to get the required blood tests, including by taking the blood samples at the general practice or allowing participants to take their own samples:

> *[Taking blood samples is] very difficult. I have to do it myself … [My GP] is always on standby in case I miss, which I generally don't but just in case. He [has] given … permission to let me [take the blood sample] myself.* [P104, female, currently completing DAA treatment while transitioning out of injecting drug use]

Participants highlighted that GPs can support PWID by facilitating blood sampling at the general practice and with skilled phlebotomists, and working with patients to take their own samples where appropriate.

Discussion

GPs can play a significant part in increasing uptake and completion of DAA treatment among PWID and contribute to Australia achieving HCV elimination goals.[5,16,20–22] This study highlights practical ways GPs can support PWID to access and complete DAA treatment. First, this study suggests that GPs can play an important part in helping PWID to prioritise HCV treatment by initiating discussions related to DAA treatment and facilitating initial testing. Consistent with findings from this study, literature has highlighted that solely curing HCV may not be a strong motivator for PWID to seek treatment, particularly people who are actively injecting.[23] In initial discussions it is important for GPs to discuss broader outcomes that arise from treating HCV, such as improved quality of life and self-esteem, reduced internalised stigma and, in some cases, reduction or cessation of drug use with patients who are current injecting drug users, as these may provide stronger motivators.[24–26] Framing HCV treatment from a broader health and wellbeing perspective with PWID could encourage uptake.[27] Results from this study build on a growing body of literature suggesting that GPs can play a part in prioritising HCV treatment with PWID, and doing so using an improved quality-of-life and wellbeing perspective may prove useful.

Barriers to HCV treatment in the era of DAA treatment include a lack of understanding about the treatment and concerns related to past personal or peer experiences with interferon-based treatments.[28] This study shows that GPs can address these barriers for PWID through the provision of clear and consistent information. Consistent with broader literature, this study also suggests that myths about the ineligibility of injecting drug users to access DAA treatment and feelings of both guilt and apathy surrounding accessing treatment while using drugs continue to affect uptake among PWID.[26,29,30] Through ongoing and trusting relationships with patients, GPs can address these myths and misconceptions. Recent literature suggests that ensuring patients are heard and feel valued is an important step for building patient trust and confidence in HCV treatment.[30]

Literature indicates that despite DAA treatment adherence and response for PWID being similar to that of other groups, some health practitioners continue to question the capacity of PWID to complete treatment.[29–31] This was reflected by participants of this study, as they expressed concern that healthcare practitioners did not want to treat them while they continued to inject drugs. Consistent with international guidelines, Australia's DAA treatment policy does not restrict access to treatment for injecting drug use or re-treatment if re-infection occurs. Results of this study suggest that to increase uptake and completion of the DAA treatment journey, GPs must work to ensure PWID are aware of their eligibility and feel supported despite continued drug use.[14,26,32]

Finally, results support growing evidence that difficult venous access continues to be a barrier to treatment for PWID in the DAA era.[20,25] This may remain a barrier for confirming a sustained viral response at 12 weeks post-treatment.[33] The results draw attention to some practical examples of ways GPs can support PWID to overcome this barrier, such as conducting blood sampling at the practice where possible and facilitating access to skilled phlebotomists.[20]

The relatively small sample size may limit the generalisability of these results. Many participants of this study were taking OAT and were already engaged with healthcare services. While PWID who

are less engaged with healthcare services may present different barriers, this study provides unique insights that GPs can draw on to support PWID to complete HCV treatment.

Increasing uptake and completion of DAA treatment among PWID is essential if Australia is to eliminate HCV.[16] General practice, including but not only practices that are also OAT providers, is a common and accessible setting for PWID to access HCV treatment.[15] This qualitative analysis provides important insights into ways GPs can promote and facilitate the completion of DAA treatment with PWID. This includes through: prioritising HCV treatment with PWID; sharing clear and comprehensive information about the DAA treatment journey, addressing eligibility and focusing on right to treatment; and facilitating blood sampling where possible.

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References

1. Scott N, Doyle JS, Wilson DP, et al. Reaching hepatitis C virus elimination targets requires health system interventions to enhance the care cascade. Int J Drug Policy 2017;47:107–16. doi: 10.1016/j.drugpo.2017.07.006.
2. Grebely J, Dore GJ, Morin S, Rockstroh JK, Klein MB. Elimination of HCV as a public health concern among people who inject drugs by 2030 – What will it take to get there? J Int AIDS Soc 2017;20(1):22146. doi: 10.7448/IAS.20.1.22146.
3. Akiyama MJ, Norton BL, Arnsten JH, Agyemang L, Heo M, Litwin AH. Intensive models of hepatitis C care for people who inject drugs receiving opioid agonist therapy: A randomized controlled trial. Ann Intern Med 2019;170(9):594–603. doi: 10.7326/M18-1715.
4. Chronister KJ, Lothian R, Gilliver R, Kearley J, Read P. Feasibility and acceptability of adherence support for direct acting antiviral therapy for hepatitis C in a low-threshold primary health-care opioid agonist treatment program. Drug Alcohol Rev 2019;38(2):185–89. doi: 10.1111/dar.12903.
5. Kapadia SN, Marks KM. Hepatitis C management simplification from test to cure: A framework for primary care providers. Clin Ther 2018;40(8):1234–45. doi: 10.1016/j.clinthera.2018.05.010.
6. Robaeys G, Grebely J, Mauss S, et al. Recommendations for the management of hepatitis C virus infection among people who inject drugs. Clin Infect Dis 2013;57 Suppl 2:S129–37. doi: 10.1093/cid/cit302.
7. Heard S, Iversen J, Geddes L, Maher L. Australian NSP Survey 25 year national data report 1995–2019: Prevalence of HIV, HCV and injecting and sexual behaviour among NSP attendees. Sydney, NSW: The Kirby Institute, 2020. Available at kirby.unsw.edu.au/report-type/australian-nsp-survey-national-data-report [Accessed 8 June 2021].
8. Madden A, Hopwood M, Neale J, Treloar C. Beyond interferon side effects: What residual barriers exist to DAA hepatitis C treatment for people who inject drugs? PLoS One 2018;13(11):e0207226. doi: 10.1371/journal.pone.0207226.
9. Heard E, Massi L, Smirnov A, Selvey LA. Prescribing direct-acting antivirals to treat hepatitis C virus in a general practice setting in Australia: 'So why not do it'? Intern Med J 2020;50(9):1053–58. doi: 10.1111/imj.14648.
10. Bajis S, Grebely J, Hajarizadeh B, et al. Hepatitis C virus testing, liver disease assessment and treatment uptake among people who inject drugs pre- and post-universal access to direct-acting antiviral treatment in Australia: The LiveRLife study. J Viral Hepat 2020;27(3):281–93. doi: 10.1111/jvh.13233.
11. Morris L, Selvey L, Williams O, Gilks C, Kvassy A, Smirnov A. Hepatitis C cascade of care at an integrated community facility for people who inject drugs. J Subst Abuse Treat 2020;114:108025. doi: 10.1016/j.jsat.2020.108025.
12. Radley A, Robinson E, Aspinall EJ, Angus K, Tan L, Dillon JF. A systematic review and meta-analysis of community and primary-care-based hepatitis C testing and treatment services that employ direct acting antiviral drug treatments. BMC Health Serv Res 2019;19(1):765. doi: 10.1186/s12913-019-4635-7.
13. Cooke GS, Andrieux-Meyer I, Applegate TL, et al. Accelerating the elimination of viral hepatitis: A Lancet Gastroenterology & Hepatology Commission. Lancet Gastroenterol Hepatol 2019;4(2):135–84. doi: 10.1016/S2468-1253(18)30270-X.
14. Australian Government Department of Health. The Pharmaceutical Benefits Scheme general statement for drugs for the treatment of hepatitis C. Canberra, ACT: Department of Health, 2018. Available at www.pbs.gov.au/info/healthpro/explanatory-notes/general-statement-hep-c [Accessed 6 June 2021].
15. Butler K, Day C, Sutherland R, et al. Hepatitis C testing in general practice settings: A cross-sectional study of people who inject drugs in Australia. Int J Drug Policy 2017;47:102–06. doi: 10.1016/j.drugpo.2017.07.008.
16. World Health Organization. Global Health Sector Strategy on viral hepatitis 2016–2021. Towards ending viral hepatitis. Geneva, CH: WHO, 2016.
17. Hopwood M, Treloar C. Under the watchful eye of 'a benevolent dictator' – General practitioner and patient experiences of hepatitis C treatment initiation and shared-care in general practice. Aust Fam Physician 2013;42(12):900–03.
18. Braun V, Clarke V. What can 'thematic analysis' offer health and wellbeing researchers? Int J Qual Stud Health Well-being 2014;9:26152. doi: 10.3402/qhw.v9.26152.
19. Kitto SC, Chesters J, Grbich C. Quality in qualitative research. Med J Aust 2008;188(4):243–46. doi: 10.5694/j.1326-5377.2008.tb01595.x.
20. Marshall AD, Grebely J, Dore GJ, Treloar C. Barriers and facilitators to engaging in hepatitis C management and DAA therapy among general practitioners and drug and alcohol specialists – The practitioner experience. Drug Alcohol Depend 2020;206:107705. doi: 10.1016/j.drugalcdep.2019.107705.
21. Chidwick K, Kiss D, Gray R, Yoo J, Aufgang M, Zekry A. Insights into the management of chronic hepatitis C in primary care using MedicineInsight. Aust J Gen Pract 2018;47(9):639–45. doi: 10.31128/AJGP-02-18-4482.
22. Traeger MW, Pedrana AE, van Santen DK, et al. The impact of universal access to direct-acting antiviral therapy on the hepatitis C cascade of care among individuals attending primary and community health services. PLoS One 2020;15(6):e0235445. doi: 10.1371/journal.pone.0235445.
23. Wright C, Cogger S, Hsieh K, Goutzamanis S, Hellard M, Higgs P. 'I'm obviously not dying so it's not something I need to sort out today': Considering hepatitis C treatment in the era of direct acting antivirals. Infect Dis Health 2019;24(2):58–66. doi: 10.1016/j.idh.2018.10.006.
24. Richmond JA, Ellard J, Wallace J, et al. Achieving a hepatitis C cure: A qualitative exploration of the experiences and meanings of achieving a hepatitis C cure using the direct acting antivirals in Australia. Hepatol Med Policy 2018;3:8. doi: 10.1186/s41124-018-0036-5.
25. Madden A, Hopwood M, Neale J, Treloar C. Beyond cure: Patient reported outcomes of hepatitis C treatment among people who inject drugs in Australia. Harm Reduct J 2018;15(1):42. doi: 10.1186/s12954-018-0248-4.
26. Rhodes T, Harris M, Martin A. Negotiating access to medical treatment and the making of patient citizenship: The case of hepatitis C treatment. Sociol Health Illn 2013;35(7):1023–44. doi: 10.1111/1467-9566.12018.
27. Goutzamanis S, Doyle J, Higgs P, Hellard M. Improving hepatitis C direct-acting antiviral access and uptake: A role for patient-reported outcomes and lived experience. J Viral Hepat 2019;26(2):218–23. doi: 10.1111/jvh.13020.
28. Valerio H, McAuley A, Innes H, et al. Determinants of hepatitis C antiviral effectiveness awareness among people who inject drugs in the direct-acting antiviral era. Int J Drug Policy 2018;52:115–22. doi: 10.1016/j.drugpo.2017.12.014.
29. Robaeys G, Grebely J, Mauss S, et al. Recommendations for the management of hepatitis C virus infection among people who inject drugs. Clin Infect Dis 2013;57 Suppl 2:S129–37. doi: 10.1093/cid/cit302.
30. Pourmarzi D, Smirnov A, Hall L, Thompson H, FitzGerald G, Rahman T. Enablers and barriers for the provision of community-based HCV treatment: A case study of a real-world practice. J Viral Hepat 2020;27(5):484–96. doi: 10.1111/jvh.13259.
31. Crawford S, Bath N. Peer support models for people with a history of injecting drug use undertaking assessment and treatment for hepatitis C virus infection. Clin Infect Dis 2013;57 Suppl 2:S75–79. doi: 10.1093/cid/cit297.

32. Read P, Lothian R, Chronister K, et al. Delivering direct acting antiviral therapy for hepatitis C to highly marginalised and current drug injecting populations in a targeted primary health care setting. Int J Drug Policy 2017;47:209–15. doi: 10.1016/j.drugpo.2017.05.032.
33. Hepatitis C Virus Infection Consensus Statement Working Group. Australian recommendations for the management of hepatitis C virus infection: A consensus statement (June 2020). Melbourne, Vic: Gastroenterological Society of Australia, 2020.

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