OBJECTIVE
To estimate the hepatitis C patient caseload of general practitioners and explore their preferences regarding hepatitis C models of care.

METHOD
An anonymous reply paid postal questionnaire was sent to all GPs working in rural northern New South Wales in August 2000. Pretesting found including hepatitis C knowledge and attitude questions would detract from the focus on hepatitis C education and management.

RESULTS
Two hundred and ninety-two out of 634 GPs responded (response rate 46%). A few (22 GPs, 8%) saw 3566 (59%) of the 6048 hepatitis C patients in the previous 12 months. Eighty-eight percent of GPs preferred a multidisciplinary model with the GP as the principal coordinator of care.

CONCLUSION
Rural GPs see their role as important in hepatitis C care.

General practitioners have an important future role in the detection and management of hepatitis C in Australia. One percent of the Australian population is infected with hepatitis C, of which most are consequent on previous injecting drug use. A transition from specialist to primary care requires improved knowledge for GPs.

Shared care trials in urban areas of Australia demonstrate small benefits to socially disadvantaged patients with hepatitis C. However, these have not evaluated the more complex issues in rural areas arising from large distances, increased difficulty with confidentiality, and shortages of health professionals.

Little information is available about hepatitis C in rural general practice. Rural GPs have good knowledge about transmission and natural history, but a reluctance to refer to tertiary care, although in some settings they do share antiviral therapy with urban specialists. We investigated this further.

Method
We developed a draft questionnaire, based on previous research, and piloted it among a number of GPs and hepatitis C project workers. This preliminary work suggested the inclusion of knowledge and attitude questions would detract from the focus on hepatitis C education and management. The revised questionnaire focussed on management and education only. It was sent with a reply paid envelope in August 2000 to all GPs working in the Northern Rivers, Mid North Coast and New England Health Service areas through divisions of general practice to preserve GPs' confidentiality. We were therefore only able to send reminders to GPs and not telephone them.

Ethics committees from Northern Rivers, Mid North Coast and New England Health Service areas approved the study. Data were analysed using descriptive and Chi square statistics for association.

Results
Overall, 292 GPs out of 634 returned completed survey forms, a response rate of 46%. Demographic characteristics of responders and local GPs could not be made, because denominator data were not available.

The participating GPs had been in general practice for an average of 17 years (range: 6 months to 55 years) and saw a mean of 121 patients per week (range: 10 to 350 patients). All but one of the 288 GPs had tested at least one patient for hepatitis C (four GPs did not complete questions regarding caseload).

General practitioners saw a mean of 21 (median 6) hepatitis C patients (range: 0-500) in the previous 12 months. The distribution was highly skewed to the right:
• 13 GPs (4% of respondents) did not see any hepatitis C patients
• 171 GPs (59% of respondents) saw between 1-10 hepatitis C patients, and
• 22 GPs (8% of respondents) saw more than 50 hepatitis C patients

Figure 1. Number of hepatitis C patients seen during past 12 months

Figure 2. Preferred hepatitis C models of care
22 GPs who reported seeing more than 50 hepatitis C patients per year treated 59% of the reported 3566 out of 6048 hepatitis C patients (Figure 1). All but three of these GPs practised on the coast.

At least 85% of the GPs favoured a shared multidisciplinary model with the GP as the principal care giver, rather than management by medical specialists alone, drug and alcohol, or sexual health clinics (Figure 2).

Discussion
Rural patients with hepatitis C face a myriad of barriers including a lack of access to local treatment services.7-11 Intercurrent drug dependency and chronic fatigue limit their capacity to travel and access affordable care. Maintaining confidentiality in country towns is difficult with hepatitis C being linked with previous intravenous drug use.5,12

Patients with medically acquired hepatitis C may feel stigmatised if their hepatitis C management is coordinated through sexual health or drug and alcohol services.13 Faced with these problems, patients may decline assessment and antiviral treatments which may potentially prevent cirrhosis and disease progression. Decentralising services to provide non-judgmental shared care between urban specialists and local rural GPs can improve compliance. Rural GPs in this study support their role as a coordinator of hepatitis C health care and agree with the need to liaise with other multidisciplinary health professionals.13 This approach is supported by recent commonwealth initiatives supporting enhanced primary care in general practice.15 Guidelines produced by the RACGP support this model of shared care between specialist and GP.16

At present the study demonstrates that 8% of GP respondents manage the majority of hepatitis C patients in rural northern NSW.

We were unable to investigate the reasons for the uneven distribution of hepatitis C caseload. Perhaps it reflects a high prevalence of discrimination against hepatitis C by rural GPs.8,11 Our study relied on GPs recalling the numbers of patients seen retrospectively. This may cause recall bias and errors. A major limitation of this study is that we were unable to explore patient views on their present care and their preferences for improvement. The needs of doctors and patients are likely to differ markedly. The response rate was low (<50%), perhaps reflecting the preference of many rural GPs not to be involved with these patients.

The uneven workloads described here suggest a focus on GPs with a high caseload of hepatitis for antiviral prescribing rights. However, this may need modification in north western NSW because so few GPs had high caseloads.

General practitioners seem willing to accept a broader role in hepatitis C management. However, can GPs provide shared care to patients with hepatitis C with colleagues with special antiviral prescribing privileges? The key to developing this is to explore attitudes of GPs about hepatitis C.

Acknowledgment
This project was made possible by a grant from the New South Wales Health Department.

Implications of this study for general practice

- Rural GPs support an expanded role in hepatitis C management.
- 88% of rural GPs prefer a multidisciplinary model with the GP as the principal coordinator of care.
- Management by specialists, sexual health clinics and drug and alcohol clinics were deemed not suitable by at least 85% of responding GPs.
- At present 8% of GP respondents manage the majority of hepatitis C patients in rural northern NSW.
- Further research into the attitudes of GPs to patients with hepatitis C and patients’ views concerning their care is needed.

References

Correspondence
John Fraser
New England Area Rural Training Unit
Dean House
PO Box 83
Tamworth, NSW 2340
Email: tamworthrtu@racgp.org.au