

## Planning integrated outreach: service patterns from the metropolitan and rural hubs

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**Background:** In Australia, outreach is a key strategy to promote access to medical specialist services to residents in rural and remote areas. Around one in five Australian medical specialists participate in rural outreach work but we lack information about the patterns of outreach by metropolitan and rural-based specialists and how they vary. This information is important to plan accessible and integrated services.

**Aim:** Explore differences in the patterns of rural outreach by specialist doctors based in metropolitan versus rural locations.

**Methods:** This paper reports on specialist doctors who travelled to provide services in at least one rural location (ASGC-RA>1) as part of the MABEL (Medicine in Australia: Balancing Employment and Life) study, 2008. Each specialist could report up to three rural locations they travelled to. Firstly, five outreach models were defined (drive-in, drive-out; fly-in, fly-out; hub and spoke; multiple distant; and mixed) according to the distance travelled from the specialist's residence (<300km or >300km) and the number of rural locations visited (1 or 2+). Logistic regression examined the association between specialist base location and model of outreach. Cross-sectional weights were applied.

**Results:** Of 4,596 specialist doctors, 902 who provided a total of 1401 rural outreach services were included in this analysis. The most common model of service was drive-in, drive-out (n=379, 42%), followed by fly-in, fly-out (n=168, 20%), hub and spoke (n=183, 19%), mixed (n=94, 10%) and a multiple distant model (n=78, 9%). Compared with rural specialists (n=286), metropolitan specialists (n=616) were significantly more likely to provide fly-in, fly-out (OR 4.15, 2.32-7.42) or multiple distant (OR 3.60, 1.79-7.24) and less likely to provide outreach via hub and spoke models (OR 0.31, 0.21-0.46).

**Conclusion and policy implications:** Models of outreach differ between specialists based in metropolitan and rural areas. Metropolitan specialists are more likely to provide fly-in, fly-out models and less likely to provide hub and spoke services. Fly-in, fly-out models of service, overcome large distances and promote the national distribution of services given most specialists live in the city. However, the utility of this model depends on strong planning to integrate services from different locations and match them to regional priorities. This is easier where 1) regional outreach priorities and service gaps are clearly defined, 2) local health providers, hospital and health centre staff is aware of a predictable schedule of services coming and going and 3) specialists develop outreach services that are efficient, equitable and sustainable.