Australia is in the midst of significant health reform, of which equity and access and the role of primary health care is of priority. Current measures to address workforce maldistribution are determined geographically. This fails to recognise the diversity of need and inequity within areas. Nationally and internationally there is growing expertise in and evidence of the power of geographical information systems (GIS) in primary health care policy development, service delivery and evaluation. This study sought to examine whether measures of remoteness areas adequately reveal high need populations, measured against socioeconomic disadvantage and physician to population ratios using GIS methodology.

**KEY FINDINGS**

- The percentage of small areas and populations within the most socioeconomically disadvantaged quintile rose with increasing remoteness. However, 12.8 per cent of small areas within major cities and 40.7 per cent of outer regional areas were also within the lowest socioeconomic quintile.

- A composite score of deprivation was developed using measures of socioeconomic disadvantage, rurality and physician supply. There was a strong relationship between our composite score of deprivation and avoidable mortality, risk rate, diabetes rate and the percentage of indigenous people within an area.

- A single measure based on our composite score can be assigned to each small area that can then be mapped and visually displayed to allow areas of greatest need to be readily identified.

- Early regression analysis examined the relationship between each element of the composite score and health outcomes. This revealed a clear interaction between the percentage of an indigenous population within an area and remoteness areas.

For more details, go to the three page report.