Discussion

This report illustrates the geographical distribution of severe disability within Australian capital cities. It confirms that there is considerable variation in the rate of disability within cities and that, while disability is less common in metropolitan areas than regional and remote areas at a broad level (AIHW 2008a), some local areas within cities still have relatively high rates of severe disability.

A correlation analysis of Census data found a strong relationship between an SLA's rank on the Index of Economic Resources and its rank in terms of severe disability rates. That is, the most disadvantaged SLAs within a capital city tended to have the highest rates of severe disability, while the most advantaged SLAs tended to have the lowest rates. This indicates a strong social gradient underlying the geographical distribution of severe disability in the cities.

The existence of a social gradient is not sufficient to attribute a direction of causality to the relationship between disability and disadvantage. The relationship may be driven by disability-related factors to some extent. For example:

- Disability can reduce a person's ability to earn income and accumulate wealth, so disability can be a direct cause of economic disadvantage at the individual level. Family members of people with disability may also reduce or cease employment in order to care for them (ABS 2004).
- People or households whose income is reduced by disability may move to relatively more disadvantaged areas in order to access low-cost housing.
- People with severe disability may cluster in more disadvantaged areas if disability-related services or accessible transport are located nearby, even though they may not necessarily experience high socioeconomic disadvantage at a personal level.

Conversely, socioeconomic disadvantage may cause or exacerbate disability (Lustig and Strauser 2007). Some specific examples of the mechanisms by which this can occur include:

- Various risk factors to health, such as smoking, sedentary or low exercise levels, little or no fruit intake and overweight/obesity, are more common among people living in more disadvantaged areas. These contribute to a higher burden of potentially disabling chronic disease among socioeconomically disadvantaged people (AIHW 2008b: p.65).
- Occupational risk factors to health are often higher for people in lower-status jobs (Niedhammer et al. 2008).

- People living in some geographical areas may be exposed to higher than average environmental risks to their health, such as industrial pollution or high ambient noise, which can contribute to the development or exacerbation of disability (Evans and Kantrowitz 2002). Further, subjective neighbourhood factors including perceptions of safety, social networks and traffic have been shown to affect self-rated mental health (Leslie and Cerin 2008).
- Psychological stress associated with poverty and social exclusion can contribute to a higher burden of mental illness among disadvantaged groups (Reijneveld and Schene 1998; Kuruvilla and Jacob 2007; ABS 2008c).

Finally, the association may be driven by a combination of both factors, or by a third factor common to disability and socioeconomic status. For example:

- Disability is common among public housing tenants (AIHW 2007: Table A5.6). If the public housing stock in a given city is clustered rather than spread throughout the city, there will be areas with a higher than average rate of disability as well as higher rates of other socioeconomically disadvantaged groups, such as people who are unemployed, low-income households and one-parent families.

Whether any of these explanations contribute to the social gradient of disability in Australian capital cities has not been investigated here. Questions worth further consideration include:

- Does the social gradient of disability exist at the individual or household level as well as the population level?
- To what extent is the social gradient of disability driven by specific aspects of disadvantage, such as income and wealth, occupation, or social factors?
- How does the geographical distribution of disability within cities relate to the spread of housing costs, access to public transport and location of services?
- Do the internal migration (within Australia) patterns of households with a member with disability differ from the general population—are they more or less likely to move within or between areas?
- How does distance affect the social gradient of disability in rural areas?

This analysis could also be replicated for different age groups. For example, it is not known if the strength of the social gradient is different for children or older people compared to working age adults. The geographical distribution of disability among children and older people has important implications for schools and aged care services, respectively.