## Extended Abstract

### Background

Rural depopulation because of persistent out-migration, declining fertility and population ageing, has become a pressing societal issue in most demographically advanced countries, (Johnson and Lichter, 2019). Dispersal policies that direct incoming humanitarian migrants in non-metropolitan regions have been presented as a potential solution to address this issue. Example of such policies can be found in the United States, Sweden, Denmark and the United Kingdom (Stewart and Shaffer, 2015; de Hoon et al., 2021; Vogiazides and Mondani, 2021; Hagstrom and Pereira, 2023). A new approach to dispersal policy was introduced in 2005 (Australian Government Department of Immigration and Citizenship, 2009). As a result, the proportion of rural settled humanitarian migrants has increased from below 10% in the early 2000s to 45 % in the late 2010s (Hugo et al., 2019; Australian Government Department of Home Affairs, 2020).

One important policy consideration is whether humanitarian remain in rural areas after initial settlement. In many developed countries the retention rate of humanitarian migrants in metropolitan areas is higher than in non-metropolitan areas (Aslund 2005; Stewart and Shaffer, 2015; de Hoon et al., 2021; Vogiazides and Mondani, 2021). In Sweden, for example, about 18% humanitarian migrants leave rural regions within 8 years compared to less than 3% in major cities and 8% in large cities (Vogiazides and Mondani, 2021). Furthermore, in the Netherlands, of the 32% humanitarian migrants who settled in non-metropolitan areas, only 12% stayed in those areas after ten years (de Hoon et al., 2021). In large and sparsely populated countries like Australia, rural disadvantage is particularly pronounced because distances from population centres and services are greater (Edwards and Baxter, 2013). However, largely due to a historical scarcity of appropriate data, little is known about the efficacy of this policy approach.

### Study Aim, Data and Methods

The aim of this study is twofold. First, it establishes the level of retention across the urban hierarchies and compared the rural retention of humanitarian migrations to Australian citizens and other immigrants using Kaplan-Meier Survival analysis. Second, it identifies the determinants of rural retention - considering both individual-level determinants (such as unemployment status, age and sex, household structure), place-based characteristics, (including size of co-ethnic networks, unemployment rate, occupational diversity, median housing prices, General Practitioners (GPs) to population ratio, pre-school teacher to population ratio and remoteness status) and their cross-level interactions. To do so, we employ multi-level survival models.

To meet these aims, we leverage unique longitudinal administrative microdata from the Multi-Agency Data Integration Project (MADIP). MADIP is enabled through a series of partnership between multiple federal and state agencies and is managed by the Australian Bureau of Statistics. The dataset contains information on government payments, income and taxation and population demographics (Australian Bureau Statistics, n.d.). The combined location module and the visa granted module enable us to obtain information on the address histories and visa histories of all residents in Australia between 2006 and 2021. The various datasets are integrated based on a unique identifier that integrated three core datasets: (1) Medicare Consumer Directory held by Service Australia, (2) Centrelink administrative data from the Department of Social Services, and (3) Personal income tax maintained by the Australian Taxation Office. This also enables us to link census data to information on the place of residence resulting from the triangulation of the three data sources.

**Preliminary findings**

Preliminary findings from Kaplan-Meier survival analysis (Figure 1) indicate that the retention of humanitarian migrants in rural areas is the lowest among all permanent migrants in Australia (45%) after 10 years of their settlement in non-metropolitan areas, except for the compulsory rural settled skilled migrants, who overtake humanitarian migrants about 9 years after settlement. Moreover, the retention rate of humanitarian migrants in rural areas is lowest in the first 2 years of their settlement (~ 70%). However, there are regional differences both between and within non-metropolitan areas at the same level in urban hierarchy. Variations among rural areas underscore the critical significance of access to services, employment opportunities, and the presence of ethnic networks. While we observe the progressive development of co-ethnic communities in rural areas and an improvement in rural retention, the retention of humanitarian migrants in those areas remains persistently low. This prompt further investigation in the efficacy of dispersal policy in achieving its goals and how to improve the retention in rural areas.

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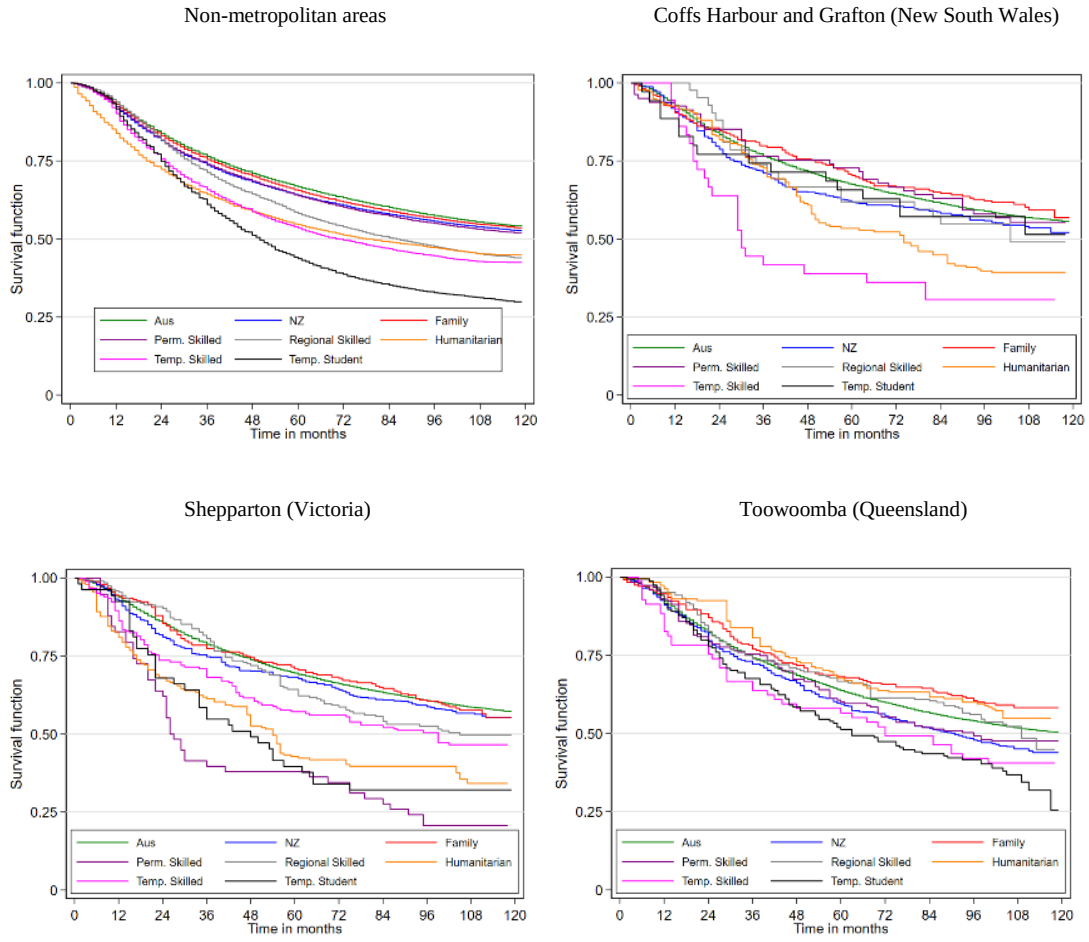
Figure 1. Retention by visa subclass and region for residents in Australia between 2010 and 2011




Note: this is for migrants who arrived to Australia between the 1st of January 2010 and the 9th of August 2011 (census day) and located outside Sydney, Melbourne and Brisbane or Australian residents who relocated to a region outside Sydney, Melbourne and Brisbane during the same period.

Source: Data from the location module and visa module of the Multi-Agency Data Integration Project (MADIP)