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Hospitals in rural or remote areas: An exploratory review of policies in 8 high-income countries☆

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ABSTRACT

Our study reviewed policies in 8 high-income countries (Australia, Canada, United States, Italy, Spain, United Kingdom, Croatia and Estonia) in Europe, Australasia and North America with regard to hospitals in rural or remote areas. We explored whether any specific policies on hospitals in rural or remote areas are in place, and, if not, how countries made sure that the population in remote or rural areas has access to acute inpatient services. We found that only one of the eight countries (Italy) had drawn up a national policy on hospitals in rural or remote areas. In the United States, although there is no singular comprehensive national plan or vision, federal levers have been used to promote access in rural or remote areas and provide context for state and local policy decisions. In Australia and Canada, intermittent policies have been developed at the sub-national level of states and provinces respectively. In those countries where access to hospital services in rural or remote areas is a concern, common challenges can be identified, including the financial sustainability of services, the importance of medical education and telemedicine and the provision of quick transport to more specialized services.

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1. Introduction

This article explores policies of 8 high-income countries (Australia, Canada, United States, Italy, Spain, United Kingdom, Croatia and Estonia) in Europe, Australasia and North America with regard to hospitals in rural or remote areas. This is a particular health policy problem in countries with vast geographical distances and low population density. Indeed, countries differ vastly in these respects. The population density of countries in Europe is shown in Fig. 1. It ranges widely, from 3 people per km^2 in Iceland in 2012 to 1327 people per km^2 in Malta. In comparison, Australia (3 inhabitants per km^2) and Canada (4 inhabitants per km^2) also have very low population densities, while the United States (35 inhabitants per km^2) is less densely populated than most European countries.

Where the population is more dispersed and distances are greater, access to hospital and emergency services may become problematic. Geographical distance could then lead to inequities in access and underutilization of emergency hospital services among populations in rural or remote areas [1]. Concern has therefore been raised about the existence of "medical deserts" even in more densely populated countries such as France [2].

At the same time, there have been pressures to downscale hospital infrastructure, centralize more specialized functions to ensure an appropriate volume of procedures and quality of care, and attempts to move services out of hospitals and into the community [3]. The financial sustainability of small hospitals in rural or remote areas has become a major concern in terms of both capital expenditure and running costs, while attracting highly skilled staff to rural or remote locations has posed a further challenge. Yet, the closure of hospitals is often highly politically charged and resisted by the local population. In these contexts, primary health care has gained in importance, either through preventing unnecessary hospitalizations or through providing basic emergency care, sometimes assisted by telemedicine [4].

Our study aimed to explore how the selected countries ensure that their population in rural or remote areas has access to acute inpatient services. It investigated whether there are national or sub-national policies on hospitals in rural or remote areas in place and, if yes, what they consist of. It also asked how emergency functions are divided between small hospitals in rural or remote areas and more specialized hospitals in more central locations.

2. Materials and methods

In order to review the policies of pertinent high-income countries with regard to hospitals in remote or rural areas, we contacted key experts in a selection of eight countries in Europe, North America and Australasia, drawing on the networks of the European Observatory on Health Systems and Policies, including the Health Systems and Policy Monitor [http://www.hspm.org/mainpage.aspx]. The experts were chosen on the basis of their previous experience and publication record with regard to health systems and policies in their countries, as well as their track record in responding quickly to requests for information and, where applicable, their proficiency in English. All experts we approached agreed to contribute to the study.

Countries were selected on the basis of geography, population density and the existence of ongoing reforms of hospital systems. We included the three Western high-income countries with the most pronounced challenges in terms of vast distances (Australia, Canada and the United States). We further added some conveniently sampled countries from different parts of Europe, including some of the major Western and Southern European countries (Italy, Spain and United Kingdom), a South-East European country that has a large number of islands (Croatia) and a post-Soviet country from Eastern Europe undergoing major hospital reforms (Estonia).

The country correspondents were asked to provide a description of their countries with regard to policies and practices on hospitals in rural or remote areas. They explored whether any national or sub-national policies on hospitals in rural or remote areas are in place, how countries made sure that the population in remote or rural areas has access to acute inpatient services, and how emergency functions are divided between different types of hospitals.

Information was collected in March 2015 and responses were received from all selected countries. The country reports were based on a review of national and sub-national policy and legislative documents, as well as the grey and academic literature on the respective country, using MEDLINE and Google Scholar and the search terms "remote" OR "rural" AND "hospital", in combination with the country names. Findings were summarized using a narrative synthesis approach. The reports provided the basis for a (selective) description of country-level policies and practices and a comparative analysis of cross-national differences and commonalities. The national and cross-national findings were validated by the country experts.

3. Results

We found that only one of the eight countries (Italy) had drawn up a national policy on hospitals in rural or remote areas (Table 1).

In the United States, although there is no singular comprehensive national plan, federal levers have been used to promote access in rural or remote areas and provide context for state and local policy decisions. In Australia and Canada, as in other areas of health care, policies have been developed at the sub-national level of states and provinces respectively.

Unsurprisingly, the challenge posed to governments in terms of ensuring access to hospital services in rural or remote areas differs vastly across countries (Table 2). In the United Kingdom, very few hospitals could be genuinely considered as "remote". Similarly, geographical access to hospitals is not considered a problem in Estonia. In Croatia a new hospital plan is currently being discussed that aims to maintain hospitals in rural or remote areas. In Spain public debates have revolved around primary health care in rural areas, including the provision of emergency services, although access to hospitals also reaches front-page news occasionally. In view of the pronounced