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# The costs of delivering health care access in rural areas in the United Kingdom

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# Background

Research summary October 2018

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**Rethinking acute me** 

care in smaller hospi

Core principles for redesigning acute medicine in smaller hospitals, e.g.

- 1. There needs to be a shift from the 'all or nothing' understanding of acute service provision to one that is more 'modular'.
  - 2. Small hospitals need to be part of a wider system, with strong links to local services and support from other hospitals in particular specialist centres.
  - 3. Smaller hospitals will need to be able to deal with all types of emergency medical cases.
  - 4. Working arrangements should be inter-disciplinary, team-based and calibrated at 'wholehospital level' to meet the needs of the local population.

#### Patien Lords Select Committee deal fr Access to heal f share of the church ORGANISATION FOR ECONOMIC CO-OPERATION

ORGANISATION DE COOPÉRATION ET DE DÉVELOPPEMENT É C O N O M I Q U E S

Initiation Workshop: Understanding Present and Future Public Service Delivery Costs 28ª June, 2019 Madrid, Spain

AND DEVELOPMENT

Delivering health, education and other services of general interest to inhabitants of rural and urban areas is a mandate for governments around the world. Many OECD countries have an explicit constitutional commitment to mantain equitable living standards across their territories, thus making this issue a priority. However, meeting this mandate is becoming more challenging in many countries in recent years because of tight fixed budgets in the aftermath of the 2006 financial crisis, demographic pressures of ageing societies, and increased public spending on social services and health care. Here, geography also matters. It is generally deld that the cost of public service provision increases with the degree of remoteness and sparsity due to transportation costs, loss of economies of scope and economies of scale, and greater difficulty in attracting and retaining professionals (e.g., health care professionals).

The link between cost of service provision and density levels suggests the need for a differentiated policy strategy with a clear spatial approach. However, existing data on the cost of delivering services by geographic location is extremely limited and there is no country comparative data on this topic. The project understanding present and finare public service delivery constraints to provide a better understanding of present and future service provision in Europe by estimating costs of provision by clusters of grid cells that can be aggregated at different geographic scales, in order to help assess the benefits and viability of thegrated and flexible service provision models. The initiation workshop will present the broad objectives of the project, discuss with experts and policy makers relevant lesions for the project and learn from various approaches to service provision across OECD countries.



Parliament TV: Rural E Select Committee on th

Witnesses

Tuesday 18 December in

18 December 2018

Rural areas are ul At 9.45am

A News

Research report J

Rural h

A rapid rev

of rurality

delivering

Report prepared for

National Centre for

Billy Palmer, John App

#### Nigel Edwards, Chief E: Billy Palmer, Senior Fel Professor Richard Paris

9:45 - 10:00	Opening remarks (host)
10:00-10:30	Lewis Dijkstra (DG-REGIO, European Commission); Carlo Lavalle
	(European Commission's Joint Research Centre, Ispra); Jose Enrique
	Garcilazo (OECD): Presentation of project
10:30-11:15	William Palmer (Nuffield Trust): Cost of delivering health access in rural
	areas in the UK
11.15-11:30	Coffee break and networking
11.30-12:15	Prof. Markku Tykkyläinen (University of Eastern Finland): Geospatial
	costs of delivering health in Finland
12:15-13:00	Expert presentation on delivering education (TBC)
13:00-14:30	Lunch - Core team meeting (closed to core project team)
14:30-15:15	Policy exchanges for service delivery in regions (I)
15:15-16:00	Policy exchanges for service delivery in regions (II)
16:00-16:15	Coffee break and networking
16:15-17:00	Policy exchanges for service delivery in regions (III)
17:00-17:15	Wrap up and final reflections (Alain Dupeyras, OECD)

#### It is generally held that the cost of public service provision increases with the degree of remoteness and sparsity due

to transportation costs, loss of economies of scope and economies of scale, and greater difficulty in attracting and retaining professionals (e.g., health care professionals). The link between cost of service provision and density levels suggests the need for a differentiated policy strategy with a clear spatial approach. However, existing data on the cost of delivering services by geographic location is extremely limited

## Performance comparison

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Average (mean) performance across key performance measures for trusts with unavoidably small hospitals due to remoteness compared to other trusts



## What the literature suggests on COSTS...

#### Workforce Staff retention \_



- Recruitment (Rechel et al -2016)
- **Overall staffing costs** -
- Access to resources
- 'Market access' for training, telecommunications, consultancy and other support

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- Unproductive staff time
- **Reimbursing patients?** \_

Size	-	Economies of scale,
		and fixed and sunk
トノ		costs (ACRA 2016, NHS
K Y		Improvement 2018)



- Patient need -Rural populations are older, with 24% of the population being over 65, compared with 16% in urban areas (DEFRA 2018)
  - Patients may be sicker when they access health care services (Campbell et al 2001)
  - Urban bias in measures of health need (Asthana et al 2003)

### Fixed costs



Size of ward

More nurses per patient

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### Unavoidable smallness

The conditions used to identify remote hospitals were that they are:

- Small with a catchment of fewer than 200,000 people
- **Remote** with more than 10% of its catchment population more than 60 minutes from the second closest provider
- Major with provision of 24/7 major (tier 1) A&E facilities

In 2016/17, it applied to seven commissioners – covering eight remote hospitals that they commission from – received an uplift of £31.2 million.

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### Specialised services

Figure 5: The impact of weighted capitation needs and other adjustments on rural and urban CCG specialised services allocations





### Hospital reimbursement

### "Trickle-down economics"

 and the case of Wye Valley and York

# Sustainability and transformation fund

 the 7 trusts received, in total, just 1.7% (£30m / £1,783m) in 2017-18.

### Local modifications

• £20-25m to Morecambe Bay; £0 to other 16 trusts.

### Market forces factor

• and the change for 2019-20

### Not the only approach

- Scotland include: primary care funding component relating to economies of scale for a limited number of practices.
- Wales' rural cost adjustment is applied to community services expenditure (7.5% of the total)

— Northern Ireland developed a rurality cost adjustment in 2000, and an economies of scale adjustment in 2004.

Australia attempt to correct for unavoidable costs at the patient level, as well as at a hospital level. Some block funding adjustments are made at a provider level for around 400 smaller hospitals.

- New Zealand includes adjustments for diseconomies of scale relating to rurality, overseas visitors and unmet need. The New Zealand funding formula takes unproductive travel time into account for funding for district nursing.
- Canada (Alberta) include, for inpatient services, a cost adjustment factor is applied based on a number of factors including patient remoteness.
- USA (Medicare) where hospitals are assigned a 'wage index' and can appeal for exceptions on the basis of, for example, **population density.** Also use 45 minutes' **drive time** from another hospital and fewer than **200 discharges** to have increased funding.

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### Recent developments in England



"develop a standard model of delivery in smaller acute hospitals who serve rural populations."

"accelerate the shift from a dominance of highly specialised roles to a better balance with more generalist ones."

NHS	
Interim NHS People Plan	

"establish a national programme board to address geographic and specialty shortages in doctors, including developing new staffing models for rural and coastal hospitals"

"review current models of multidisciplinary working... [to] meet the needs of providers of different sizes in different geographies. The first stage ... will focus on ... smaller acute trusts and general practice serving rural or coastal populations, which often face marked recruitment and retention challenges.