Universidad LOYOLA

2nd Asia Pacific Conference on Integrated Care
11-13 November 2019
Melbourne, Australia

Achieving better value for people and populations

An international comparative analysis of the mental health care delivery system in remote areas:

the Kimberley (Australia), Nunavik (Canada) and Lapland (Finland)

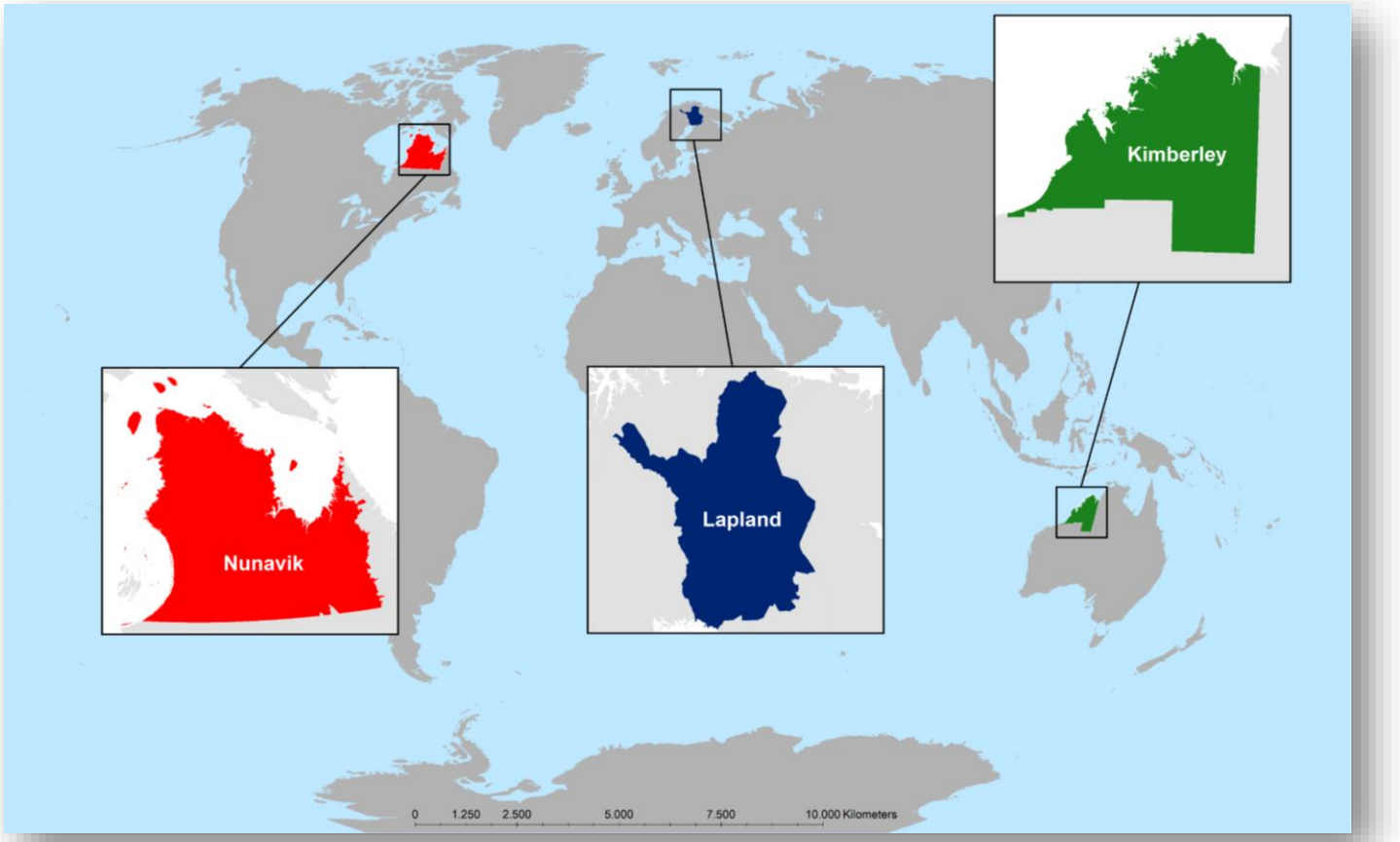
Jose A. Salinas-Perez. Mencia R. Gutierrez-Colosia, Petra Suontausta, Jacques Bertrand, Nerea Almeda, Mary Anne Furst, John Mendoza, Daniel Rock, Kristian Wahlbeck, Graça Cardoso, Luis Salvador-Carulla

Introduction

- Rural and remote areas holds specific local and structural conditions that affect the **health care access**, such as geography, population characteristics and service provision.
- **Population has also special characteristics**, such as ageing, social relations and structures, morbidity and frequent presence of First Nations.
- **Health service provision** has additional matters, such as high shortage and/or turnover of clinical professionals, borderline service cost-effectiveness, large population thresholds at which each of the health services should be provided, and low use of specialist health services.
- The **integrated nature of mental health care** is especially hampered in rural and remote areas where services are usually scarce and fragmented.

Objectives

This study aims to analyse how this provision is in three representative remote and isolated areas across the world. Both the Kimberley (Australia), Nunavik (Canada) and Lapland (Finland) are regions of difficult and challenging mental health care delivery and planning.



Universidad LOYOLA

Study areas

Geographical, demographic and socioeconomic indicators

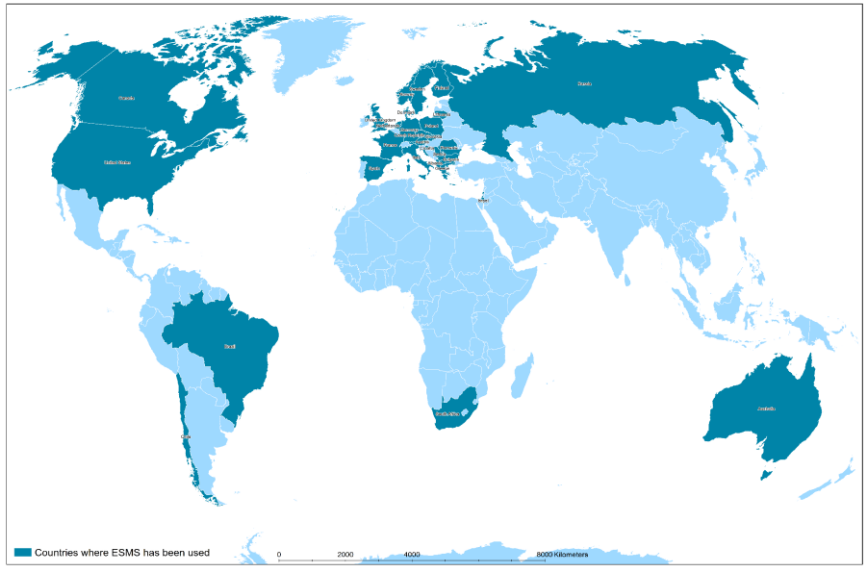
	Kimberley	Australia	Nunavik	Canada	Lapland	Finland
Area km²	419,557.9	7,741,220	443,132	8,965,589	91,733	390,905
Total population	34.279	23,401,891	13,188	35,151,728	117,703	5,503,297
Density ratio	0.08	3.02	0.02	3.9	1,37	18.11
Dependency ratio	44.23	52.35	59.40	50.37	60.4	59.1
Ageing index	25.38	84.24	11.20	101.65	154,0	128.6
Indigenous status (%)	46.19%	2.95%	91.38%	4.86%	4.00%	0.18%
Born overseas	13.70%	28.30%	1.14%	21.45%	2.69%	6.63%
Single parent families (%)	16,21%	7.83%	38.03%	16.39%	22.5%	21.6%
Living alone (%)	8.09%	8.65%	5.73%	11.29%	43.5%	42.6%
Persons with higher education qualifications (≥15)	14.02%	21.96%	7.93%	26.09%	26.4%	30.4%
Unemployment	8.62%	6.86%	15.4%	7.7%	10.7%[c]	8.8%
Suicide rate per 100,000	47.8 [b]	11.5 [b]	114.6[a]	11.2 [a]	18.7	14.3

Source: census data from 2016 except for: [a] 2011-2015; [b] 2011-2016
Suicide in Canada data (Kumar & Michael Tjepkema, 2019)
[c] Data for Lapland region.

Universidad LOYOLA

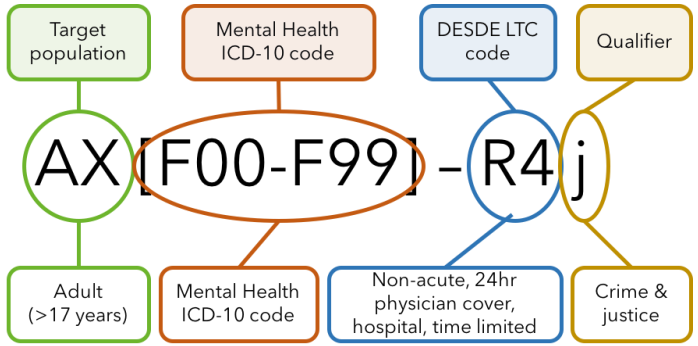
Standard description of MH services

- Difficulties for service comparisons: terminological variability (different names to name similar services or vice versa) and commensurability (different units of analysis).
- Use of the DESDE-LTC (Description and Evaluation of Services and DirectoriEs for Long Term Care) system for standard description and classification of services.
- DESDE-LTC has been used internationally and it has been validated. More than 70 studies and 30 countries.



Universidad LOYOLA

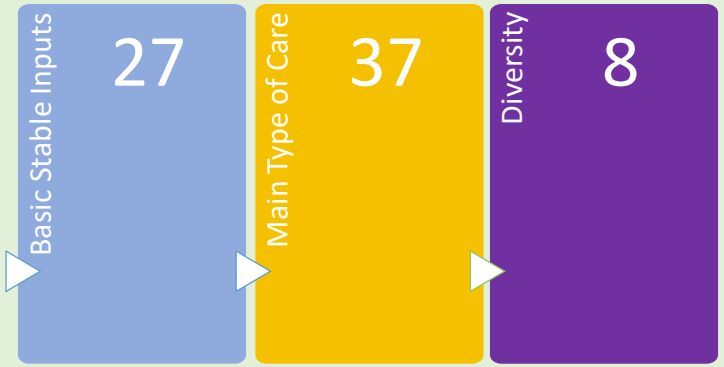
- Inclusion criteria: specialised and stable mental health services for adults and universal access.
- The unit of analysis are the care teams called Basic Stable Inputs of care (BSIC).
- The specific type of care delivers by a BSIC is described with a coding system.
  - **ACESSIBILITY:** access to care WITHOUT direct provision of care related to needs *(e.g. access to employment)*
  - **OUTPATIENT:** contact with the person in a limited period of time *(eg. visit with the GP).*
  - **DAY CARE:** the person spends the day at the facility *(e.g. day hospital or social club)*
  - **RESIDENTIAL:** the person sleeps at the facility *(eg. acute unit -hostel)*
  - **SELF CARE/VOLUNTARY:** non-paid staff *(e.g. Alcoholic anonymous)*
  - **INFORMATION:** guidance/ assessment/ information WITHOUT follow up *(e.g. information about availability of services)*



Universidad LOYOLA

Results

Kimberley



Balance of care:
78.4% health care
21.6% other care

68.6% of the outpatient care is mobile

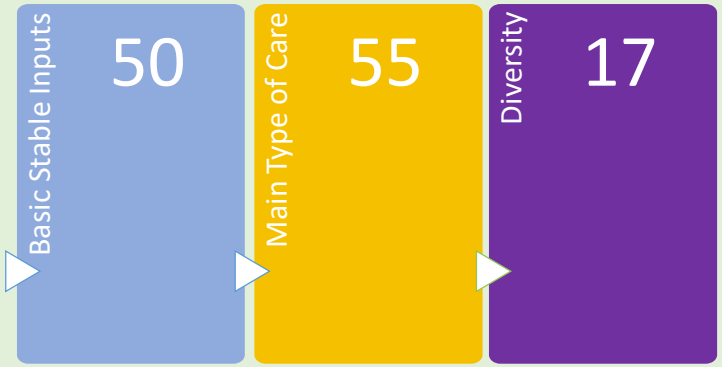
Specilised services for ATSI

Nunavik

Balance of care:
46.2% health care
53.8% other care

0% outpatient care

Lapland



Balance of care:
47.3% health care
52.7% other care

23.8% of the outpatient care is mobile

Preliminary

Universidad LOYOLA

Mental health service provision by main type of care group

Care group	Kimberley	Nunavik	Lapland
Residential care			
Acute Hospital (i.e. acute ward)	2 (13 beds)	2 (2 beds)	1 (14 beds)
Non-Acute Hospital (i.e. subacute ward)	0	0	2 (32 beds)
Acute Non-Hospital (i.e. acute crisis home)	0	2 (6 bed)*	0
Non-Acute Non-Hospital (i.e. non-acute crisis home)	0	0	0
High Intensity Non-Hospital (i.e. hostel)	0	1 (9 beds)	6 (100 beds)
Other Non-Hospital (i.e. supported accommodation, group home)	0	5 (*)	13 (133 beds*)
Day care			
Acute Health (i.e. day hospital)	0	0	0
Health Non-Acute (i.e. day health centre)	0	0	3
Work Related (i.e. social firm)	0	0	1
Other (i.e. social club)	0	0	6

* Missing data

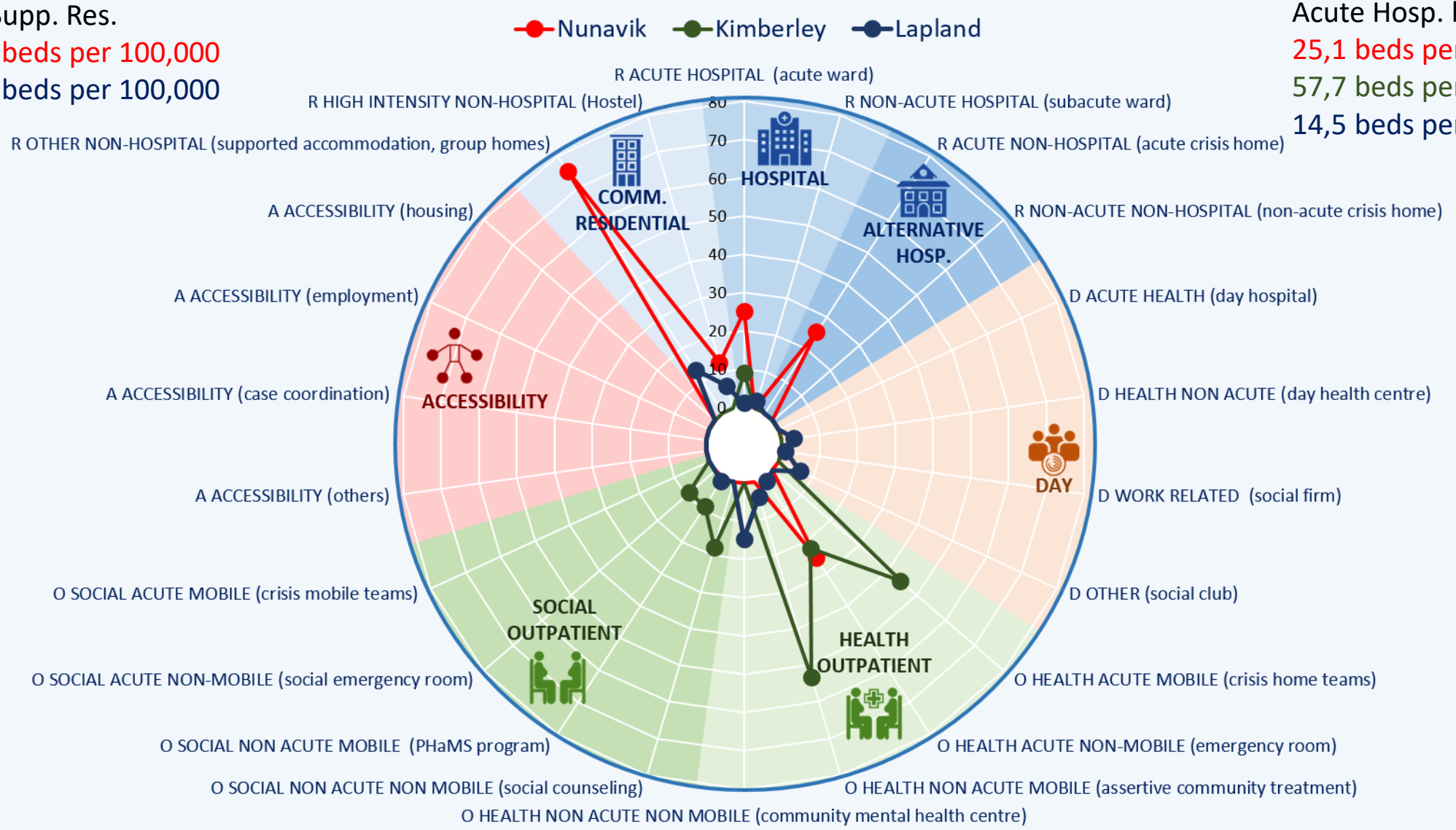
Mental health service provision by main type of care group

Care group	Kimberley	Nunavik	Lapland
Outpatient care			
Health Acute Mobile (i.e. crisis home teams)	10	0	0
Health Acute Non-Mobile (i.e. emergency room)	5	2	1
Health Non-Acute Mobile (i.e. assertive community Treatment)	12	0	4
Health Non-Acute Non-Mobile (i.e. community mental health centre)	0	0	14
Social Non-Acute Non-Mobile (i.e. social counselling)	4	0	0
Social Non-Acute Mobile (i.e. PHaMs program)	2	0	1
Social Acute Non-Mobile (i.e. social emergency Room)	2	0	0
Social Acute Mobile (i.e. crisis mobile teams)	0	0	0
Accessibility to care	0	0	0
Self-Help Care	0	1	3
Information for care	0	0	0
Total	37	13	55

THE MENTAL HEALTH PATTERN OF CARE FOR ADULTS
Availability of MTCs per 100,000 residents (>17 y.o.)

High Supp. Res.
112,9 beds per 100,000
103,4 beds per 100,000

Acute Hosp. beds
25,1 beds per 100,000
57,7 beds per 100,000
14,5 beds per 100,000



Universidad LOYOLA

Conclusions

- We found a high disparity in mental health service provision in remote areas with the highest levels of indigenous population in three OECD countries (Australia, Canada and Finland).

- KIMBERLEY: A high service availability with low level of diversity. The balance of care is characterised by the predominance of health-related care. Services operate in highly fragmented system. A gap in day and residential care.

- NUNAVIK: This area has the highest service availability rate due to its very low population density. A gap in day and outpatient care.

- LAPLAND: Services are more similar to standard generic community care provision with a higher level of balance of care and service diversity. They operate in a context of high integration and strong public primary care.

- These experiences may provide decision-makers with useful knowledge for supporting evidence-informed remote mental health planning.

Thank you for your attention

Jose A. Salinas-Perez, Ph.D.
Associate professor
Department of Quantitative Methods
Universidad Loyola Andalucía
jsalinas@uloyola.es

Visiting fellow
Centre for Mental Health Research
Australian National University

www.researchgate.net/profile/Jose_A_Salinas-Perez