Basic support decision tools for mental health system improvement: The Integrated Atlases of Mental Health Care (DESDE-LTC / GIS)

Luis Salvador-Carulla

Unit of Mental Health Policy.

BRAIN AND MIND RESEARCH INSTITUTE.

UNIVERSITY OF SYDNEY





Context is everything!



Perspectives on context

A selection of essays considering the role of context in successful quality improvement



Figure 3: Explaining variance between District Health Authorities²⁴

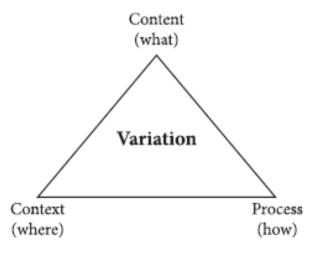
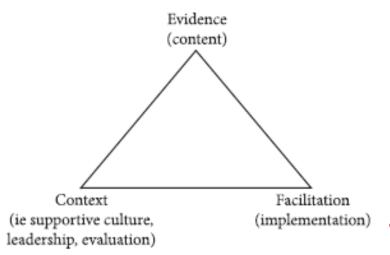


Figure 4: Functions of successful implementation of evidence





NEW CHALLENGES OF THE MENTAL HEALTH REFORM

- Re-institutionalisation & cohercive interventions
- **❖Balance of Care & Implementation of eHealth**
- Moving from fragmentation to integrated care
- Personalised Med. & People-centred care
- Choice between capitation & individual budgets
- Shift to local competition, ABF, market-driven
- Decision support systems for Evid-inf. Policy



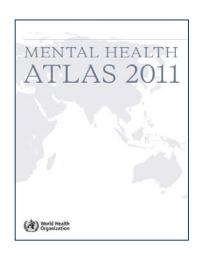
NEW DECISION SUPPORT TOOLS

- *GEOGRAPHIC INFORMATION SYSTEMS (GIS)
- *TAXONOMY OF INTEGRATED CARE (DESDE-LTC)
 - Availability
 - Capacity: Placement and Workforce
 - Care Interventions (ICHI)
- **❖ TECHNICAL EFFICIENCY AND BENCHMARKING**
- **❖ HOT-SPOT AND OTHER SPATIAL ANALYSIS**
- * ACCESSIBILITY
- **❖ BETTER INFORMATION FOR CONSUMERS**

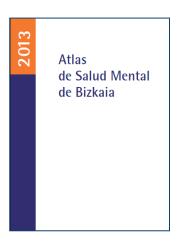


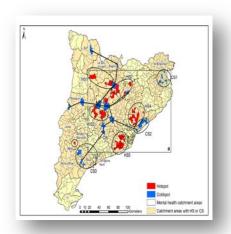
ATLASES OF MH FOR EVIDENCE-INFORMED POLICY

- Population-based top-down atlases using general health care indicators
- Population-based atlases which incorporate Geographical Information Systems and eventually geocoding of services identified by their names at local level
- 3) Integrated Atlases combining multiple health information sources (population, system indicators, traditional listing of services), standard classification of services, and different visualization techniques including dynamic spatial analysis.











MAIN PROBLEMS IN THE ASSESSMENT of HEALTH SERVICES

- Transferability and terminological variability



- Day care Same day admission.
 - Other Day care
- Outpatient Non admitted
- Rehabilitation Subacute
- Hospital Day Hospital "Home hospital"

Commensurability: Diff. units of analysis, lack of comparison like-with-like



- Service providers
- Service delivery
- Modalities of care
- Interventions
- Activities
- Philosophy of care



INTERNATIONAL CLASSIFICATION OF HEALTH **DESDE-LTC**



MICROORGANISATION OF CARE

Time & organisational stability



BSIC

BASIC STABLE INPUTS OF CARE



MTC

MAIN TYPES OF CARE

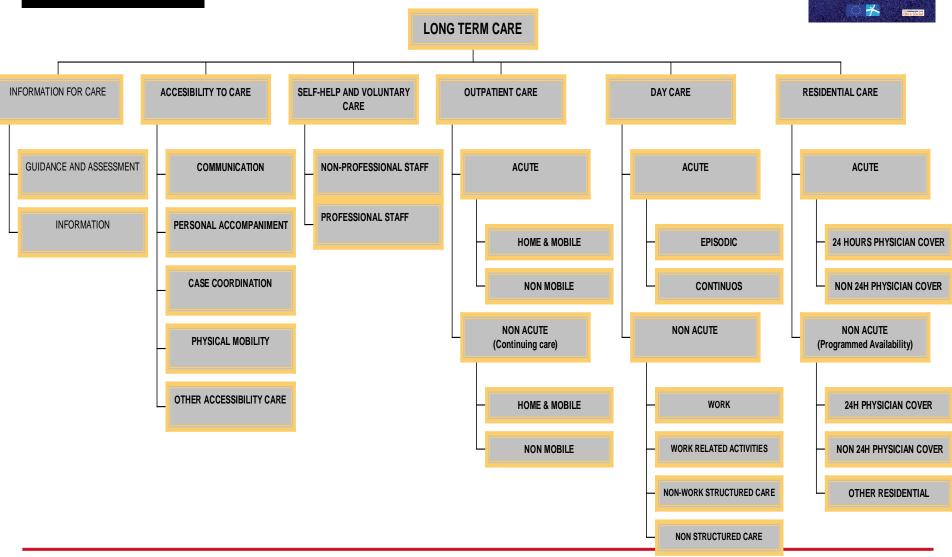
MAIN ACTIVITY

BSIC: Area (H) / Target (ICD/ICF) / MTC / Qualifier



ESMS/DESDE-LTC Tree taxonomy - 91 codes



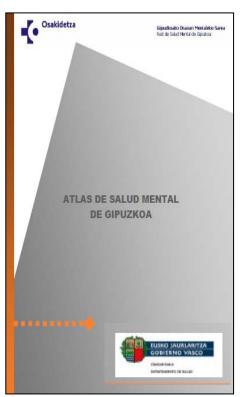


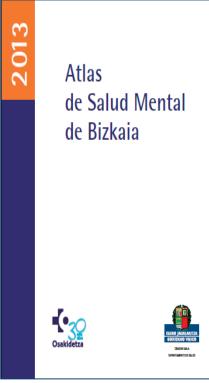


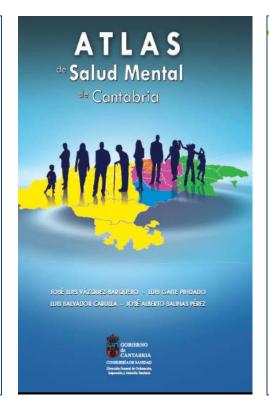
Scientific publications: Severe Mental Illness

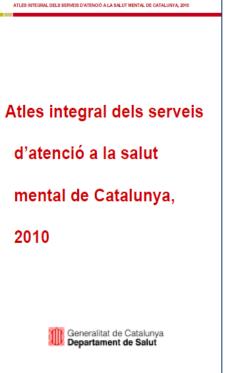
USE OF AN INTEGRATED ATLAS OF MENTAL HEALTH CARE FOR EVIDENCE INFORMED POLICY IN CATALONIA (SPAIN)

Epidemiology and Psychiatric Sciences,









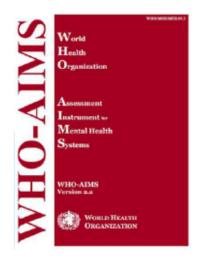


REFINEMENT PROJECT WP6 - REMAST



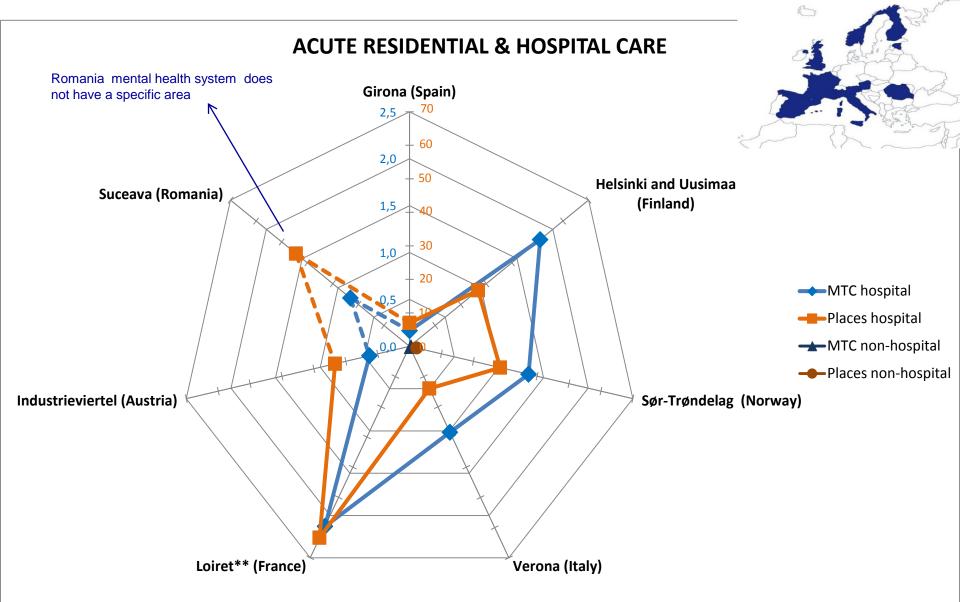
The parts of the Remast toolkit





- Services Inventory (DESDE-LTC)
- Policies and Description
- SES Index
- Geographical Information





Includes DESDE-LTC codes:

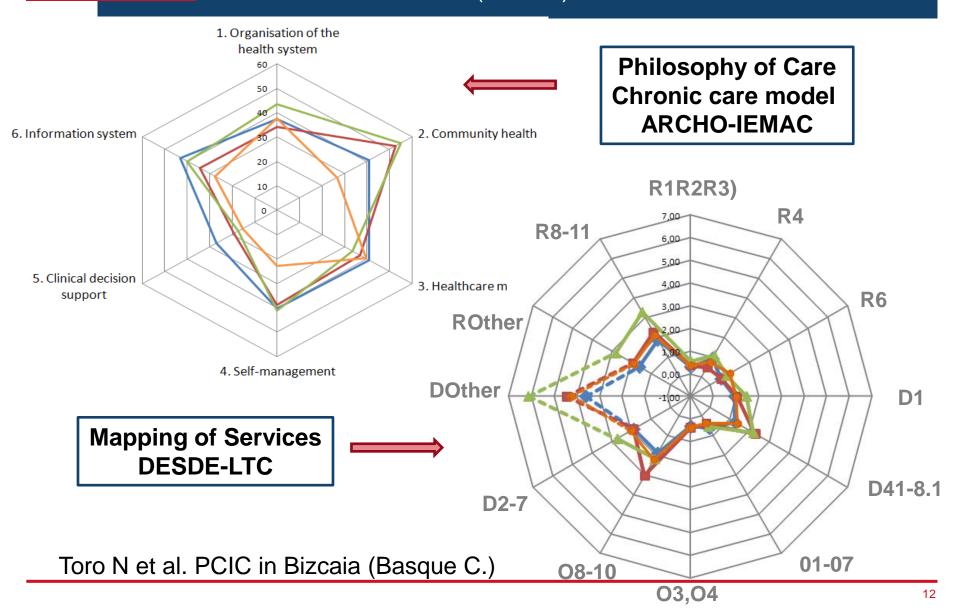
- Hospital: R1 R2 R3.0

- Non-hospital: RO R3.1.1

** Hospital Georges Daumezon: 7 psychiatric sectors



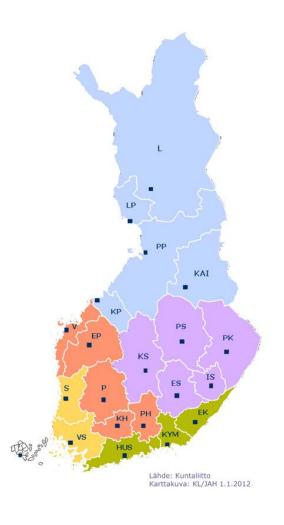
INTEGRATED ATLASES OF MH CARE: BASQUE COUNTRY (SPAIN)





Case FINLAND: local impact of research





- In 2013, service mapping results were actively communicated to local decision makers
- In September 2013, the hospital district board organised a hearing of REFINEMENT experts and decided re-allocate resources and to close three psychiatric hospitals
- In the future, two psychiatric hospitals will provide specialised care with psychiatrists on-site 24 hours
- Acute residential care for mental disorders will also be provided in small acute units located at general hospitals, supported by community care teams



Implementation Impact Scale (IIS)

AXES

- A. Level of Impact [I]
- B. Number of target agencies [T]
- C. Geographical level [G]



IMPACT CODE: [I4. T1.G3]



LEVELS

- 1. Awareness
- 2. Assimilation
- 3. Traslation
- 4. Allocation
- 5. Provision
- 6. Monitoring

	Level	Definition
0	No impact	The project has no impact in the target organization (the target organization does not know anything on the project)
1	Awareness	The target organization and specific decision makers within the organization are cognizant of the topic, have taken action to improve its knowledge on the topic and have received and provided feedback on the information delivered.
2	Assimilation	There is evidence that the target organization and specific decision makers within the organization have incorporated the information into their own existing knowledge-base and organizational strategy
3	Translation	The target organization has transferred the new knowledge into legislation, plans, programs, regulatory norms, and/or official indicators).
4	Allocation	The translation of the new knowledge has had an impact on financing, budgeting, funding, and/or resource allocation in the target environment
5	Provision	Care delivery, including services, interventions and/or technologies directly related to the new knowledge has been made available and it is used by the target population in the target environment
6	Monitoring	The target organization has incorporated the new knowledge into its own assessment, surveillance and monitoring systems.



Integrated Atlas of MH Care

We reviewed the information the Departments are using and asked the decision makers how they are using the Atlas

Regions	Level of Implementation	Grade	Publication	Collaboration
Andalusia	Assimilation	2	Yes (2005)	Low
Balearic Islands	Awareness	1	No	Low
Basque Country*	Monitoring	6	Yes (2013)	Very High
Cantabria	Assimilation	2	Yes (2010)	Very High
Catalonia	Monitoring	6	Yes (2013)	Very High
Castilla la Mancha	Awareness	2	No	Medium
Madrid	Assimilation	2	No	High
Murcia	Awareness	1	No	Low
Navarre	Awareness	1	No	Low



USE OF INTEGRATED ATLASES OF MH CARE

- A high disparity in the impact on policy and practice was observed in the utilisation of IAMH for evidence-informed policy
- Main factors were:
 - Extent of cooperation with the regional and national MH planning agencies
 - Transparency within the organizations
 - Level of collaboration across the different departments in the regional public care system.

IAMH are key tools for supporting and guiding evidence-informed policy and for understanding the context of care.

The design and collaboration with local and regional agencies has a significant impact in the implementation of these visualisation techniques in health policy.

What is next?: Usability in Chile and Australia



WESTERN SYDNEY LHDs - PIR





BMRI - MENTAL HEALTH POLICY UNIT

http://sydney.edu.au/bmri/research-units/mental-health-policy/index.php luis.salvador-carulla@sydney.edu.au