<table>
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<tr>
<th>Entry Title:</th>
<th>The GLOCAL Project (Global and Local Observation and mapping of CARE Levels) in Mental Health</th>
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<tr>
<td>Name of Applicant:</td>
<td>Luis Salvador-Carulla</td>
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<tr>
<td>Organisation:</td>
<td>Health Research Institute, University of Canberra</td>
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ALL ENTRIES MUST USE THEMHS ENTRY TEMPLATE AND ENTER INFORMATION IN THE RELEVANT SECTIONS TO BE ELIGIBLE FOR ENTRY. PLEASE UPLOAD AS A SINGLE PDF DOCUMENT.

Additional Information (up to 1 x A4 page)

Luis Salvador-Carulla is the professor of mental health and the Deputy Director of the Health Research Institute, University of Canberra. He is also honorary professor of the National Centre for Epidemiology and Population Health at the Australian National University and the Menzies Centre for Health Policy at the University of Sydney. He was professor of disability and mental health at the University of Sydney (2012-2017) and head of the Mental Health Policy Unit, at the Brain and Mind Centre of the University of Sydney (2014-2017). Previously to this appointment he was associate professor of Psychiatry at the University of Cadiz (Spain) between 1989 and 2012. His main field of interest is decision support tools for the analysis of complex health systems and policy in public health with a special focus on mental health, ageing, disability and intellectual developmental disorders. He is honour member of the World Psychiatry Association. Prof. Salvador-Carulla has intensively participated in the development of international networks in mental health, person centred medicine, bridging and knowledge transfer. He has been advisor to the Government of Catalonia (Spain), the Spanish Ministry of Health, the European Commission (EC) and the World Health Organisation (WHO). He coordinated the European Commission (EC) project eDESDE-LTC for the development of an European classification of services for long term and he participated as national coordinator in the EC project Refinement to develop a toolkit for the assessment of financing of mental health systems, and PECUNIA for producing standards units in costs analysis in Europe. He leads the GLOCAL project (Global and Local Observation and mapping of CAre Levels) that integrates the information gathered using the DESDE system in the world to support comparisons, gap analysis and evidence-informed policy in mental health. The DESDE tool has been used to develop Integrated Atlas of Mental Health and service directories in over 300 local areas and regions around the world. Luis chaired the WHO working group on the classification of intellectual disabilities at chapter V of the International Classification of Diseases. He received the Leon Eisenberg Award of the Harvard Medical School in 2012 for his contributions in the field of neurodevelopmental disorders.

Criteria (up to 10 x A4 pages)
Judges allocate marks to each criterion:

1. Evidence of contribution to, or potential impact on, mental health service improvement.

The tools developed by LSC and his team have had a significant international impact in evidence informed planning. The Description and Evaluation of Services and Directories (DESDE) is a tool for evaluation of services that has
been used in over 35 countries around the World. Apart from specific studies and analysis, this tool has been adopted as a decision support tool in several countries and regions in Europe, particularly in Finland and in Catalonia and the Basque Country (Spain) where this tool has become the standard for service evaluation and planning. LSC’s research is mainly focused in applied implementation in the real world. Therefore the analysis of impact in planning and policy is core to his work. In order to improve impact assessment, LSC and his team at the Health Research Institute (University of Canberra) have developed a novel tool for impact analytics with a consortium of key stakeholders, research and planners from Europe and Australia (GIAF- Global Impact Analytics Framework). The GIAF toolkit has been used for the analysis of public strategies to improve the collaboration between schools and community mental health services in Queensland (EdLINQ) (Salvador-Carulla et al, 2020), to analyse the impact of digital tools for mental health planning in Spain (DESDE-AND) Romero et al, 2021), and the analysis of the impact of the DESDE mapping in MH planning in several regions in Spain (Salinas et al, 2020). In Australia this planning tool has been used by the NSW MH Commission and by 12 PHNs for the analysis of MH service provision. Six PHNs have adopted it and run consecutive analysis of their care system (ACT, Western Sydney and WA PHNs). LSC contributed with the information and comparison of approaches to MH provision in Europe to the State of Victoria, Royal Commission into Victoria’s Mental Health System. The system has had a significant impact in MH planning and resource allocation in WA, Western Sydney and ACT.

2. Evidence of research excellence.

The ESMS/DESDE tools used in the GLOCAL project have produced over 75 papers published in scientific journals and over 40 technical and policy reports worldwide. This system for coding services has been adopted and used in 25 international projects mainly funded by the European Union. Over 50% of the research published on the system (ESMS/DESDE) has been published by groups other than the one involved in its development. To provide a comparison, only two papers have been published in scientific journals on the use of the Mental Health Service Planning Framework (MHSPF), the recommended tool for guiding planning and resource allocation in Australia, none of which produced by an independent group. It is important to note that the “scientific evidence’ should only refer to the evidence that has been formally published and peer reviewed, and that is available in a format that allows reproducibility and corroboration by independent groups. The information on the use of ESMS/DESDE has been summarised in a systematic review published in 2019 (Romero-Lopez-Alberca et al, 2019). An update of this review is currently under development.

LSC has made a wide contribution to MH service and policy research. This includes over 400 publications. The impact is summarised in the following performance indicators (Google scholar):

<table>
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<td>h-index</td>
<td>51</td>
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Out of these papers, 86 are directly related to the GLOCAL project including the mapping of MH care, the policy implications and its conceptual and theoretical background. LSC has coordinated most of this researcher being the last author of most of these papers (see Appendix – support material)

3. Evidence of participation of mental health consumers in the planning, implementation and evaluation. There may be exceptions to the involvement of mental health consumers. If so, please address this when responding to this criterion.

Co-design is critical to all our work at the Mental Health Policy Unit. The contribution of MH consumers is essential for the GLOCAL project and for the use of DESDE in MH planning. The DESDE system was originally developed in collaboration with consumer’s organisations on MH and on Disabilities in Europe. The procedure for producing local or regional atlases of MH care always involves the participation of key consumers and consumer organisations that participate in the whole process. Key contacts are identified by the PHNs and the planning is presented to them. Consecutive meetings are organised to update the experts (including consumer) on the development of the Atlas. Once a first draft is completed it is presented to the core expert group including local consumers for revision and amendments. Then a version of the local/regional atlas is presented to the community and released for revision by community members and stakeholders before producing a final version. A key aspect of our work is to make the information open access and fully publicly available. Up to 11 atlases out of the 12 produced in Australia are available in the GLOCAL project webpages of ANU (https://nceph.anu.edu.au/research/projects/glocal-global-and-local-observation-and-mapping-care-levels) and University of Canberra (to be released in July 2022)

4. Evidence of Partnerships and Linkages (collaboration for continuity between organisations).

We have developed an extensive partnership world wide and in Australia with major organisations in the MH sector including projects funded by the Department of Health, the Queensland and the NSW MH Commissions, 12 PHNs and 3 LHDs as well as other partners such as MH Australia, the MH Foundation and Community MH Australia among many others. The international network of collaboration is available at the GLOCAL webpage: https://nceph.anu.edu.au/research/projects/glocal-global-and-local-observation-and-mapping-care-levels

A graphical representation of the international partnerships is shown in Figure 1.
5. Verification and Evaluation of the research effectiveness in achieving the goals of the investigation(s).

A comparative effectiveness of the research conducted with DESDE could be conducted with the research output and the costs of similar instruments in Australia such as the MHSPF. While MHSPF has had a cost over 20 million dollars and has not produced any significant research output to this date, the overall cost of the use of DESDE in Australia has been less than 2 million and has produced 20 Atlases of Regional and Local care and 14 scientific publications and 22 technical reports, most of them available on-line at the GLOCAL webpage. These two systems are highly complementary and its combined use could significantly improve the information needed for health planning as NMHSPF focuses on the (ideal) capability of the system and DESDE on the (real) capacity of its care provision network. The characteristics of both approaches and its complementarity was revised in Rosen et al, 2020:
The GLOCAL repository includes studies of effectiveness in several areas. The DESDE information on service provision has been used for the analysis of regional and local effectiveness of the care systems mainly in Spain, Finland and the UK. The use in Australia was analysed in a proof of concept study funded by Bupa Foundation in ACT (see appendix).

**Conclusion** (up to 1/2 x A4 page)

Over the last 30 years LSC has worked on the improvement of classification and evaluation of mental health services. His work is based in the seminal contribution made by Walter Leginski in the US in the late 1980s (Salvador-carulla et al, 2006), and in the work produced by M Tansella and G Thornicroft a decade later. LSC introduced the healthcare ecosystem research in mental health service research and his tool DESDE has been applied in the atlases of MH care in 12 PHNs of Australia. A recent work is the analysis of the patterns of care in remote areas in Australia, Lapland and Nunavik (Canada), and the application of his tools to the first standard description of service for social and emotional wellbeing in the Yarrabah and Carins.
region in Northern Queensland, the first comparative analysis of service provision using the holistic/whole-system approach.

**Referees** (up to 1/2 x A4 page)
Nominate two referees.

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**Appendix of Support Material (up to 8 x A4 pages)**
e.g. back up material such as research abstracts, publications, data charts, news clippings, feedback and photographs.

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1.- **MAIN RESEARCH ABSTRACTS:**

*Conceptual framework: Healthcare ecosystem approach*


Mental health ecosystems research is an emerging discipline which takes a whole-systems approach to mental healthcare, facilitating analysis of the complex environment and context of mental health systems, and translation of this knowledge into policy and practice. Evidence from the local context is needed in the analysis of complex interventions and of geographic variations in the outcomes of care. Technical tools and support have been developed to gather and interpret evidence from the local context and translate it in a meaningful and relevant manner for planners and policy makers to guide their decision-making.

*Systematic Review on the international use of DESDE (2019)*
Background: Evidence-informed planning and interpretation of research results both require standardised description of local care delivery context. Such context analysis descriptions should be comparable across regions and countries to allow benchmarking and organizational learning, and for research findings to be interpreted in context. The European Service Mapping Schedule (ESMS) is a classification of adult mental health services that was later adapted for the assessment of health and social systems research (Description and Evaluation of Services and Directories - DESDE). The aim of the study was to review the diffusion and use of the ESMS/DESDE system in health and social care and its impact in health policy and decision-making. Method: We conducted a systematic review following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (1997–2018). Results: Out of 155 papers mentioning ESMS/DESDE, 71 have used it for service research and planning. The classification has been translated into eight languages and has been used by seven international research networks. Since 2000, it has originated 11 instruments for health system research with extensive analysis of their metric properties. The ESMS/DESDE coding system has been used in 585 catchment areas in 34 countries for description of services delivery at local, regional and national levels. Conclusions: The ESMS/DESDE system provides a common terminology, a classification of care services, and a set of tools allowing a variety of aims to be addressed in healthcare and health systems research. It facilitates comparisons across and within countries for evidence-informed planning.

2.- PUBLICATIONS: (only publication directly related to mental health service research and mental health policy are included here)

2.1. Papers in scientific journals (Clarivate-SCI, SSCI, Medline, PubMed)


45. Serrano-Blanco A, Rubio-Valera M, Aznar-Lou I, Baladón Higuera L, Gibert K, Gracia Canales A, Kaskens L, Ortiz JM, Salvador-Carulla L. In-patient costs of


Sanitaris, Generalitat de Catalunya; 2013. (Dipòsit legal: B. 1570-2014) http://www20.gencat.cat/portal/site/canalsalut/menuitem.af261f715269a25d48af8968b0c0e1a0/?vgnextoid=a9d46557203da210VgnVCM1000008d0c1e0aRCRD&vgnextchannel=a9d46557203da210VgnVCM1000008d0c1e0aRCRD&vgnextfmt=default#div_03


23. Salvador-Carulla L, Dimitrov H, Poole M et al. PILOT STUDY: Comparison of the availability of services for long-term care in Madrid (Spain) and Sofia (Bulgaria) [Internet]. Jerez (Cadiz): PSICOST and Telnet, 2011. Available from: http://www.edesdeproject.eu.


3.- Research projects: (only research projects directly related to mental health service research and mental health policy are included here)

AUSTRALIA
Funds Provider(s): CQ University Australia Project Id: 35372. (Extension of the Project: System-level integration to promote the mental health of Indigenous children: A community-driven mixed methods approach. CQ University Australia Project, NHMRC GNT1164251). May 2021-April 2022. $18,118


3. Title: “MHCC ACT Community Mental Health Pathways Project”. Lead Chief Investigator Sebastian Rosenberg
Funds Provider(s): Mental Health Community Coalition ACT
Project Id: 33980 Project Name: MHCC ACT Community Mental Health Pathways Project
College/School/Department: ANU College of Health and Medicine/Research School of Population Health. CIs Sebastian Rosenberg, Luis Salvador-Caruulla, MaryAnne Furst. $50,000 - July 2020 – June 2021


6. Title: Real-world Evidence for Comparative Effectiveness of Interventional Procedures. CIA Blanca Gallego. AI: L Salvador-Carulla. 020/ETH02539 / 2020.84


9. Title: Youth navigation portal scoping and analysis. Chief investigator B (CIA A/Prof A Calear). Funding ACT Health, Category 2 grant. 2020. Total Budget $180,753

10. Title: Analysis and mapping of service availability and pattern of care for Multiple Sclerosis in the ACT region. Multiple Sclerosis Incubator Grant. Funding: MS Research Australia,. Chief Investigator B. 2019-2021: Category 1 grant, $ 25,000


13. Title: Technical efficiency analysis and benchmarking of the mental health care system in the ACT. Provider: Capital Health Network. Ref GLC: QPH40007. CIA L Salvador-Carulla. Budget $150,000


15. Title: Integrated Mental Health Atlas Project – Australia. On-going collaboration with public health agencies (Primary Health Networks) to map the mental health care system. Funding source: Primary Health Networks. CIA: Luis Salvador-Carulla (ANU). Collaborators: Nasser Bagheri & Maryanne Furst (ANU), James Gillespie (Centre for Health Policy, University of Sydney), Jose Alberto Salinas (University Loyola Andalucia) John Mendoza (ConNetica). Dates January 2015 – on-going. Budget: $1,318,400 AUD. Projects carried out in ACT, Cairns, Western NSW, Western Sydney, South Western Sydney, Sydney (LHD), Central Eastern Sydney, North Sydney, Eastern Melbourne, South Eastern Melbourne, Western Australia, North Brisbane.

EUROPEAN UNION (EUROPEAN COMMISSION) (* this funding refers only to the amount awarded to my research unit in international coordinated projects and not to the whole project)


3. Title: REFINEMENT (Financing systems’ effects on the Quality of Mental health care in Europe) European Commission: 7th Framework Programme Ref 261459 (FP-/Health-2010-Single-Stage) National coordinator (Spain) intnl project: F Amaddeo) €1,110,000