AGEING AND LONG-TERM CARE

Classification, assessment and comparison of European LTC services
Development of an integrated system

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Summary: It is important that a common coding system and classification standardised system for assessing long-term care (LTC) services is used to help facilitate meaningful comparisons across and within countries. This article describes the development and piloting of such a classification system – the eDESDE-LTC tool, now available in six European languages.

Key words: Long-term care, Europe, service classification, information systems

Health services are very difficult to compare across different territories, particularly when they are aimed at the long-term care (LTC) needs of people living with complex conditions. Previous service comparison studies in Europe have often failed to provide useful information for health planning in areas as diverse as mental health, ageing or services for functional dependency. There are many potential reasons for this including the influence of historical and contextual factors in the development and organisation of services, as well as the increasing complexity in integrated care arrangements. One major reason is that services with the same name in different jurisdictions can perform very different activities and functions. This terminological variation appears across all levels of complexity in care settings, from day centres to rehabilitation and hospital units. We even lack a common definition for ‘hospital’ and ‘service’.

Access to services across Europe is hampered by an inadequate framework and knowledge of available resources. The development of a common coding and assessment system can also help in the better allocation of resources for the population. As an increasing number of databases in Europe are linked in order to help address this information gap, it is important to facilitate a greater degree of ‘semantic interoperability’, that is the development of a common language that can be used across different information systems and databases. A common coding system, using a standardised method of assessment, may help overcome these challenges and enable better comparisons of data to inform policy and practice. The development of such a system was the objective of the EC funded eDESDE-LTC (Description and Evaluation of Services and Directories in Europe For Long-Term Care) project.

Led by the PSICOST Research Association and the Catalunya-Caixa Foundation in Spain, eDESDE-LTC brought together a core group of partners in six European countries with further input from experts in the development of service mapping systems, health agencies at national, regional and municipal levels, and academic specialists in semantics, ontology and health care decision support systems.

Approach
A starting point for this mapping system was work previously undertaken to help classify and standardise the mapping of mental health services and the context in which those services were delivered in Europe. The eDESDE-LTC instrument was also informed by a review of existing coding and classification instruments, not only in respect of mental health, most notably the European Service Mapping Schedule (ESMS), but also building on the original DESDE instrument used to map services for people with disabilities.

The eDESDE-LTC instrument was developed iteratively, informed by feedback from sessions with expert nominal groups in six countries. Usability of the instrument was assessed in relation to a series of quality domains: feasibility and relevance; consistency; inter-rater reliability; and validity.

The final eDESDE-LTC Toolkit incorporated the instrument, coding system, training, and evaluation packages (see http://www.edesdeproject.eu). This toolkit, we believe, is unique in being able to assess the availability and use of services for LTC, both in small health areas and at regional and national levels. The hierarchy of the instrument has been arranged as a

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Figure 1: eDESDE-LTC tree structure of main and secondary branches

The instrument can be used to highlight differences in the availability and distribution of key services. Geographical mapping software, for instance, can be used to plot hot spots where services are concentrated in both cities. In Sofia there appears to be a heavy reliance on the provision of care within formal long-stay institutions; while in Madrid the mix of services and the availability of places for these services suggests that the LTC system relies to a much greater extent on the provision of support to enable individuals to remain living independently in the community.

Careful interpretation of findings is however required; it is important to understand the context in which services are delivered. For instance, the absence of a specific type of service in an eDESDE-LTC analysis could signal the fact that no provision of that type exists in a locality, but it could also mean that these functions are provided as part of a non specialist service.

In addition to work in piloting the instrument, feedback from potential users of the instrument in different countries has been positive. eDESDE-LTC is regarded as a very useful and promising instrument, although more could be done to improve clarity and ease of use so as to make
Figure 2: Principal characteristics of the DESDE-LTC classification system

![Diagram of the DESDE-LTC classification system]

Figure 3: Availability of main service types for long-term care target groups in Madrid and Sofia

![Graph showing availability per 100,000 population for different services in Madrid and Sofia]

Training is complex. Currently, training requires a face-to-face intensive course conducted by experienced trainers. The written eDESDE-LTC training package is a useful complementary tool but it is not a substitute for this face-to-face training. In addition, guidance might in future be provided on data collection and interpretation; the latter might be aided by a context checklist to help in the interpretation of results. Another future objective is to move to a fully computerised version of the questionnaire and coding system using structured algorithms. A more simplistic front end, negating any need to see any of the detailed coding structure, would help expedite training and facilitate use of the instrument.

Further impact
In Spain, in addition to piloting work undertaken in the city of Madrid, the eDESDE instrument and coding system have subsequently been used to map services in three of the country’s seventeen regions: Cantabria, Catalonia and Madrid. Awareness of the instrument has also been strengthened by citation in version 2.0 of the International System of Health Accounts and the mapping tool is also now being used to inform a new European Seventh Framework funded project (REFINEMENT) analysing the financing, efficiency and quality of mental health systems in Europe.

Conclusions
The eDESDE-LTC instrument and coding system has been designed to be ontologically consistent and semantically interoperable, with the intention of improve linkages between different relevant information systems. It can aid in meaningful service comparison, which in turn is an important consideration for the future planning of LTC services within specific geographical catchment areas. In future it might also be used as a tool to aid in equity impact assessments, where the focus is on eligibility, availability, accessibility and use of services within and across different geographical catchment areas.

REFERENCES


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