

## INTRODUCTION:

This study examined the technical efficiency determinants of each Organisation for Economic Co-operation and Development (OECD) country's behavioral health system (BHS).

## METHODS:

The technical efficiency of each OECD country's BHS was analyzed through data envelopment analysis with model combinations ranging from 1–11 models, with each model constructed with different BHS input and output variable combinations. A decision tree was generated from the efficiency scores of the model with the highest mean technical efficiency score as a predictor variable. Data was obtained from 2013 OECD and Eurostat statistics.

## RESULTS:

Different model combinations indicated that the model with the highest mean technical efficiency score (.9214) for OECD countries included (i) input variables for smoking, alcohol consumption, daily fruit consumption, the number of psychiatrists, the percentage of live births of young mothers first children, and the time devoted to leisure and personal care and (ii) output variables for death rate by mental and behavioral disorders, diabetes hospital admissions in adults, and suicide rates. Among all model combinations, >45 percent of OECD countries have an efficient BHS. The decision tree graph shows that daily fruit consumption, smoking, and suicide rates are predictor variables of the technical efficiency of an OECD country's BHS.

## CONCLUSIONS:

The study results offer important insights regarding the development of BHS in OECD countries. Health policymakers must develop collaborative activities and implement comprehensive policies promoting internationally-oriented BHS in order to improve the health status of people worldwide and reduce health inequality.

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## VP174 Atlases of Quality: Assessing Integrated Care In Chronic Diseases

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### INTRODUCTION:

The Comprehensive Public Healthcare System of Catalonia (SISCAT) Atlases of Quality aim to evaluate the quality of care in relation to specific diseases or procedures in the Catalan territory with a focus on outcomes of care in order to promote best practices. The first Atlas of Quality aimed to assess the quality of integrated care for chronic patients.

### METHODS:

Methodology was articulated in four stages:(i) Establishment of a conceptual framework of reference specific for each intervention/technology being assessed, (ii) Definition and consensus of the assessment indicators, and (iii) Implementation of indicators using the Basic Health Areas (ABS) of Catalonia as a unit of analysis, comparing ABS with vs without the intervention (such as integrated care for chronicity). Indicators were obtained from the SISCAT databases and implemented through risk adjustment models. For performance assessment, we calculated the observed and expected indicator rates for each ABS, and for the benchmarking analysis, these ratios were represented in funnel plots (Confidence Interval, CI 95 percent and 99.8 percent for exclusion zones). (iv) Evaluation of the intervention and identification of specific success factors.

### RESULTS:

For the assessment of integrated care interventions for chronicity, the defined framework in stage 1 was based on the Kaiser Pyramid (population distribution), and the Porter and the Donabedian's approaches (structure, processes, outcomes) (1). In stage 2 more than 500 experts, using several qualitative techniques, considered 18 indicators as relevant and feasible for

the assessment (2). Ten of them were implemented in stage 3 for congestive heart failure and pulmonary obstructive chronic disease. Significant values were found both in ABS with and without chronicity care programmes (phase 3).

### CONCLUSIONS:

The subsequent analysis (phase 4) will allow identification of practices of each ABS that best explain these results. Some limitations must be considered such as the availability of the consensued indicators in the SISCAT databases.

### REFERENCES:

1. Grup de Treball d'Avaluació de la Cronicitat. Desenvolupament d'un marc conceptual i indicadors per avaluar l'atenció a la cronicitat. Primer informe. Barcelona: Agència de Qualitat i Avaluació Sanitàries de Catalunya. Departament de Salut. Generalitat de Catalunya; 2013.
2. Grup de Treball d'Avaluació de la Cronicitat. Desenvolupament d'un marc conceptual i indicadors per avaluar l'atenció a la cronicitat. Segon informe. Barcelona: Agència de Qualitat i Avaluació Sanitàries de Catalunya. Departament de Salut. Generalitat de Catalunya; 2013.

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## VP175 Validating Outcome Assessments For Health Technology Assessment In Ceroid Lipofuscinosis Neuronal 2 (CLN2), An Ultra-Rare Disease

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### INTRODUCTION:

Ceroid lipofuscinosis neuronal 2 (CLN2) disease, a form of Batten disease, is a rare, degenerative neurometabolic disorder. Disease onset around 2–4 years is followed by

rapid decline in motor and neurologic function and mortality in early teenage years (1). Disease burden is best captured using observer-reported outcomes. However, validation is challenging in ultra-orphan diseases, requiring flexible methods and reasonable acceptance of limitations related to participant access.

The study aim was to assess content validation of clinical trial measures (i) CLN2 Disease Based Quality of Life Assessment (Sponsor-developed), (ii) EQ-5D-5L, (iii) Pediatric Quality of Life Inventory (PedsQL); and (iv) PedsQL Family Impact Module.

### METHODS:

The Batten Disease Family Association recruited United Kingdom caregivers of a child with CLN2 disease (aged 3–7 years, non-participants in any CLN2 trial), to:

1. Focus groups with symptom elicitation
2. Cognitive interviews to assess measures.

### RESULTS:

The Focus group comprised eleven caregivers (eight female, three male) from six families. Three families were current caregivers and remainders bereaved. Symptom and disease impact elicited showed the majority of measures domains were relevant.

The interview sample comprised sixteen current caregivers (twelve female, four male) from ten families (caring for eleven children). Overall measures were relevant, easy to understand and answer. However several items were difficult to apply to children with advanced disease (for example, Euroqol, EQ-5D-5L “overall health”), when ability is lost (for example, PedsQL walking), with misinterpretation of “no difficulties” with eating where child feeds using gastrostomy (CLN2 QoL). Caregivers found it difficult to know how their uncommunicative child was feeling (PedsQL worrying, EQ-5D-5L depression). Some symptoms and impacts were missing (for example, constipation, working life).