Mind Care Lab: A Powerful Digital Tool for Early Detection of Cognitive Impairment

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Background, Problem and Solution
Currently, the global cost of dementia is US $ ~900 billion, by 2030 it will be US $ 2 trillion. Dementia is the fourth cause of death worldwide Today, this disease has no cure, so the only alternative is prevention, and early detection. In Chile, only 2% of the population is evaluated by a specialist. Currently there is no screening of the population mental status. The evaluations are done only by specialist, this make the process slow and expensive.

Mind Care Lab is a digital platform that performs screening of the mental health of the population. The screening process is done in a digital platform, all information is recorded in digital form, so doctors have access to information anytime anywhere. The patients can repeat the tests, enabling doctors follow the evolution of patients. MCL include a Datalab that allows users/doctors to visualize and analyze data. This is a powerful tool for institutions and managers that make sanitary planning.

Mind Care Lab is a web-based platform, where the tests are deployed. MCL ensures the anonymization of patient data. The Datalab use machine learning models allowing managers and institutions to make fact-based decisions. MCL use technologies that will easily scaled up for new customers and can expands to LATAM countries.

The cost of dementia in Chile is US $ 17,559 person/year and by 2020, the cost for the health system in Chile will be US $ 4,593,012,984. There are currently 1,800 primary health care centers in Chile that will benefit from the use of MCL, by an early detection of dementia.

Hypothesis
Mind Care Lab will reduce the economic cost of dementia in Chile and LATAM by an early detection, improving knowledge management of specialist and speed up the evaluation process by using a digital platform, that records data in digital format for tracking and analysis. That allows data-based improvements.

Objectives
Validate the Mind Care Lab tool as a screening method to detect mild / dementia cognitive impairment.
(1) Optimize high valuable time of mental health specialists.
(2) Speed up the pre-evaluation process.
(3) Record patient's data and test results in digital format.
(4) Generating knowledge through science data on the mental health of the country.
(5) Evaluate and improve users experience/feeling when using the platform.

Expected Results and Outlooks
Detect cognitive impairment early, will allow to install non-pharmacological prevention measures, this will help reduce the increase in dementia in Chile.
Help institutions and managers to make knowledge-based improvement in mental health care by using MCL Datalab.

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