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Implementing ICOPE monitor digital for healthy longevity (intrinsic capacity) in clinical practice



The W.H.O. has designed the Icope program to maintain functions and enable healthy longevity [1]. The W.H.O. defines healthy longevity as the capacity to support our functions to continue to do what we value the most [1]. Our functions are the composite of our Intrinsic Capacity (IC) and our environment (architectural and social). At the W.H.O Collaborative Center for Frailty, Clinical Research & Geroscience, and Geriatric Training; IHU Health Age Toulouse, we have developed the Icope Monitor digital tool and platform to be able to monitor function over the years to enable healthy longevity [2,3]. The free app can be used for self-assessment or by health care professionals. Icope tele-nurses follow the subjects' intrinsic capacity and call them if they are worried by any alerts from the Icope step 1. A specific procedure has been written to instruct on interpreting the Icope step 1 alert and when step 2 or other interventions are needed.

As of April 5, 2025, we have used Icope Monitor digitally with up to 75,667 individuals. These subjects have a mean age of 74 ± 14 years, with 63.5 % women. Fifty thousand six hundred six had a follow-up step 1, and the total step 1 assessment today is 126,277. Each time we do step 1, we can assess the main subjects' functions and propose a preventive and public health intervention. For those with specific risks, we propose targeted interventions, and all others get general advice to maintain their functions

We have detected some weight loss in 8747 subjects (11.6 %) and appetite loss in 9440 (12.5 %). That would not have been possible without Icope. 24.5 % have some recent vision loss, and 27.2 % have recent hearing loss. More than 30 % had mild memory impairment, 11.5 % had difficulties recalling the MMSE 3 words, and 38 % had late recall. 27.8 % cannot stand up 5 times in less than 14 s and have some mobility risk for further impairment to be assessed. Finally, 24.7 % feel to have been sad and depressed in the past 2 weeks. Only 14 % have all the IC fines. When the alert at step 1 is already known, and an adequate intervention is already done, further assessment and interventions are unnecessary. Approximately 7700 had a step 2 following step 1. These individuals are older than 78, 65.9 % are women, and 42.8 % live alone. Comprehensive geriatric assessment appears to be needed for older persons, often alone at home. Twenty-three thousand six hundred thirteen participants had step 1 by self-assessment or with some help from family or caregiver.

These first data show the interest in Icope screening. We have found that those with more Icope step 1 alerts are more likely to become frail [4]. Moreover, we have been able to develop some references to follow one individual IC global score over time [5]. These composite score norms were first validated using the Icope step 2 but are now available with step 1, which is much easier to do (in press). Recent papers have

underlined the predictive value of Intrinsic capacity [6] and the potential interest of multi-domain interventions [7].

We have encountered strengths and resistance to implementing Icope, primarily in clinical practice. The strengths: For most healthcare professionals and senior citizens, it makes sense to maintain the functions that they want. The difficulties are changing habits and having something more to do regularly. It is why the French government is working on reimbursing it, but it's not the only solution. Everybody has to be concerned to bring his piece to the puzzle. Fifteen thousand four hundred twenty healthcare professionals have downloaded the Icope Monitor app, but not all use it. We have now developed a new version that is easier to use. Many other teams now use Icope in clinical practice, mainly in Asia [8,9]. In New Mexico, the implementation of the Medicaid program is ongoing. We need to promote self-assessment and educate the seniors on how to be part of their healthy longevity.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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