P-4: Validation of indicators to assess the effectiveness of digital health and social services

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Introduction

Digital services and patient portals provide patients with tools to better manage and understand their well-being and health status [1-2]. Utilizing good implementation practices builds health professionals' competence [2]. The development of digital services requires reliable ease of use indicators to support change. Here, we focus on the validity of indicators. Validity is defined as the extent to which an instrument measures what it purports to measure [3]. Validity is not a property of a test itself. Instead, validity is the extent to which interpretations of the results of a test are warranted, which depends on a test's intended use [3]. Content validity, which addresses how well items operationalize a construct, provides an adequate and representative sample of all items that might measure the construct of interest [4]. The goal of this study was to determine the validity used in the national Self-Care and Digital Value Services (ODA) Project. The aim was to use the findings to strengthen future measuring instruments.

Material and Methods

Measures used in the ODA Project's 38-development pilots were examined in this study. We created a checklist based on Van de Velde and colleagues' [5] report to validate the main indicator of each pilot project. The four domains of this checklist were: 1) the context, 2) the content, 3) the system and 4) the use of indicators. The potential indicators were validated using the Delphi method to collect expert opinions [4]. A multidisciplinary group spanning health management, health economics, and health and human services informatics discussed the importance of indicators and reached a consensus about what follow-up actions were required. There were six participants and two rounds of Delphi. The first round was carried out with documents, and the second round comprised consensus discussions.

Results

The Delphi panel reached consensus on the majority of domains. The panel agreed that all indicators were relevant in their context (1) and the content of indicators was evaluated practical, but they were rather narrow views (2). Electronic health and social records were commonly used, but the interoperability of information systems were low (3). Initiated measurements were remarkable in the ODA Project, and so by expanding the indicators and proportion information at regional and national level is important in future (4).

Discussion

Aging populations and increasing healthcare costs pose a challenge to digital health and social services initiatives, especially in regard to keeping clients at the center of healthcare services and improving their quality and availability while minimizing costs and working time [1-2]. Our findings suggested that the ODA Project has made a remarkable contribution to the development of digital services, especially in term of the indicators, it has used to show changes in action [3,4]. The multidisciplinary Delphi panel provided a rewarding basis for analytical discussions. Despite good progress of digital services, there are technical challenges, such as the interoperability of information systems [5].

References

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