

# The Challenge of Telemedicine – Using SWOT Methodology and Value-Based Assessment to Analyze Barriers, Incentives and Opportunities: Opening the Digital Doors to Expand Access and Health Equity

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**Objective:** Telemedicine can enhance efficiency and accessibility to high-quality care. Moreover, it can improve satisfaction by increasing the responsiveness of medical professionals, expert consultation and multidisciplinary meetings, especially in an era of a pandemic. During 2020, ambulatory care was dramatically reduced, and while telemedicine emerged as the only method of delivering care, we witnessed variability among physicians in the implementation of telemedicine. In order to identify leading themes to assess the successful implementation of telemedicine, we used SWOT (strengths, weaknesses, opportunities and threats) methodology that enables management of positions on the assimilation of technology.

**Materials and Methods:** A structured questionnaire was distributed in a controlled manner to all the teams that were involved in hospital ambulatory clinics (HAC).

**Results:** Out of 306 workers directly involved in HAC telemedicine, 146 replied (48% response rate). The professional distribution of the responders was: 75 physicians (56% specialists, 40% medical directors), 51 nurses (51% of them in managerial positions) and 20 administrators. Using SWOT analysis, we identified that the most positive influential factor to telemedicine implementation was improving accessibility, and the main barrier was the lack of sufficient physical examination. Nurses and administrators scored higher on telemedicine opportunities ( $P=0.048$ ), threats ( $P<0.001$ ) and technological added value ( $P=0.001$ ). The multivariable model showed that when the participant was more experienced, telemedicine was less perceived as a weakness and considered less threatening.

**Conclusions:** We found significant differences in perceptions toward telemedicine regarding threats and opportunities. Improving access to care, bridging the digital technology gap and preventing infections were all scored as the most important factors to accelerate implementation. SWOT analysis offers a wise methodology to assess the impact of change while many factors and stakeholders are involved. Additional analysis by value-based assessment elements (VBAE) revealed that more than 40% of the users declared that improving "professionalism" was a major principle that added value and incentive to favor telemedicine.