

# Enhancing Telemedicine Integration: Unpacking Healthcare Professionals' Beliefs and Concerns



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## Background

Telemedicine offers the significant advantage of transcending spatial and temporal constraints (Weissenfeld et al., 2021). Although literature exploring the benefits, challenges, and factors contributing to the success of telemedicine is growing (Monaghesh et al., 2020), there remains a dearth of research focusing on comprehending healthcare professionals' (HCPs) perceptions concerning the impact and adjustments required by the incorporation of telemedicine into their clinical practice (Gomez et al., 2021). Given the substantial influence of technology adoption on workplace dynamics across diverse fields (Scholze & Hecker, 2023), understanding the impact of telemedicine integration on HCPs' practices is essential for optimizing its implementation and ensuring quality patient care in evolving healthcare landscapes.

## Aims and methods

- To explore HCPs' experiences with telemedicine adoption, a total of 262 HCPs participated in an online survey administered through the *Corriere Salute* website (*Study 1*).
- To investigate pediatricians' expectations regarding benefits, concerns, and changes related to the adoption of a telehomecare device aimed to telemonitoring children during post-hospital discharge, a total of 13 pediatricians participated in semi-structured interviews prior to their actual experience with the device (*Study 2*). A thematic approach was employed to analyze interview content using MAXQDA.

## Results – Study 1

Fig1. Distribution of HCPs that used telemedicine during the post-Covid period (2022).

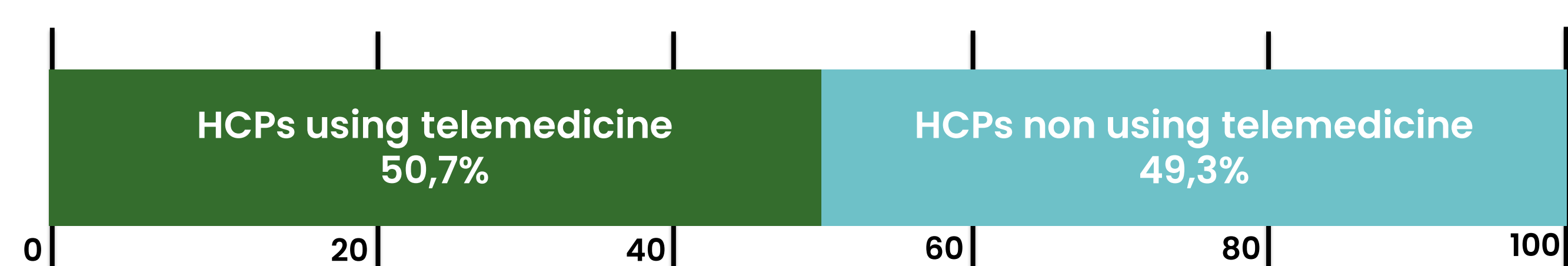


Fig2. Users: comparison of telemedicine experiences with standard care.

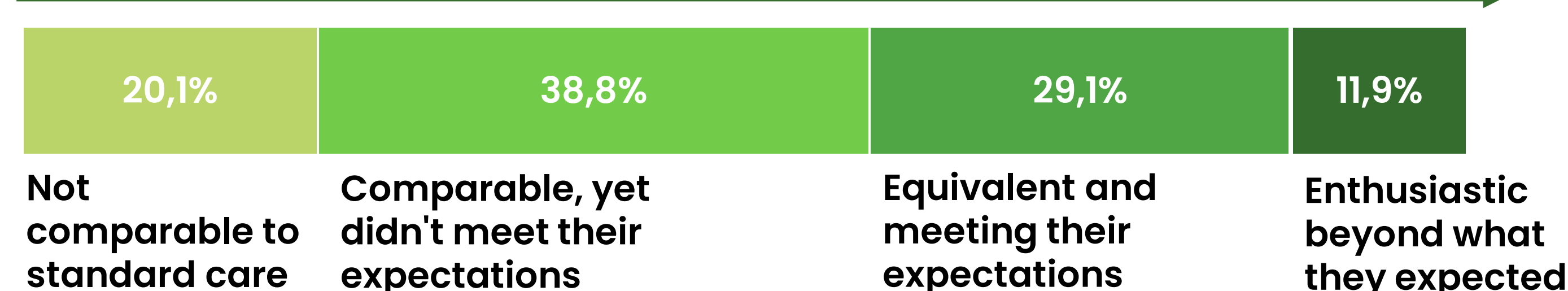
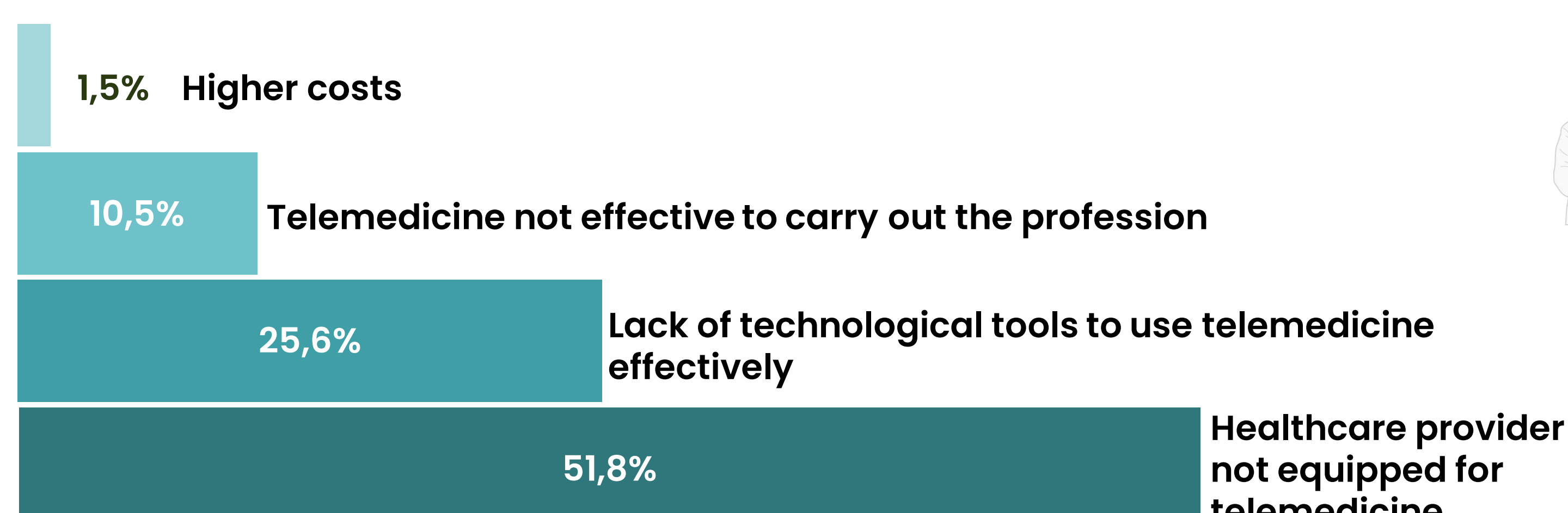


Fig3. Non-users: reasons for not using telemedicine.



## Discussion

- The adoption of telemedicine among HCPs remains limited, although individuals who have employed telemedicine systems express satisfaction with their functionality. Among non-users HCPs, the main reason is that their healthcare provider was not equipped for telemedicine.
- Qualitative insights indicate that pediatricians acknowledge the advantages of telemedicine, such as enhanced patient experience, but harbor apprehensions regarding potential challenges faced by parents in utilizing the device and the potential loss of clinical information.
- The integration of telemedicine into clinical practice alters professional routines, resulting in work intensification and an increased need for learning efforts. Support from colleagues emerges as a pivotal professional resource for the adoption of the new technology.

## Impact

- *Study 1* contributes to defining the diffusion of telemedicine devices among HCPs in Northern Italy during the post-Covid period.
- *Study 2* contributes to identifying the expectations of HCPs before their actual experience with a telehomecare device.
- Taken together, the results suggest that, given the significant shift in daily routines, there is a need to plan tailored interventions to facilitate a successful integration of telemedicine, thereby fostering value co-creation processes.

## Results – Study 2

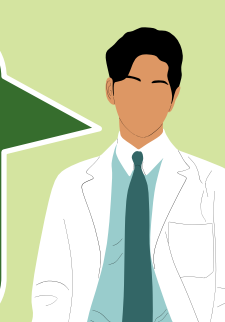
### Expected benefits of adopting the telehomecare device

- Enhance patients' experience
- Enhance the quality of care
- Provide assurance and support to families
- Save time for families
- Enhance clinicians' confidence
- Obtain more patients information
- Reduce overcrowding
- Improve bed allocation management
- Reduce costs



"In my opinion, parents feel more at ease knowing that the hospital has discharged the child, but there still remains a connection through telemedicine." (Participant 4)

"This would also lead to a reduction in overcrowding in the wards." (Participant 7)



### Expected concerns about using the telehomecare device

- Difficulties for parents in using the device
- Inadequacy of the device for post-hospital discharge follow-up
- Risk of losing key clinical information
- Difficulties for HCPs in using technologies
- Not suitable for complex cases
- Misconception about telemedicine as a substitute for in-person visits
- Need for specific human resources
- Technical issues
- Legal and professional risks



"I believe not all parents will be able to interact easily. Many will face technical difficulties (...) in these cases, using Tytocare will be a source of stress rather than a help." (Participant 6)

"It's not suitable for managing emergencies and acute patients." (Participant 3)



### Expected impacts of the telehomecare device on work practices

- Work intensification
- Paradigm shift in patient discharge
- Rising demands for learning
- Lack of involvement in technology adoption
- Loss of control in delegating to parents
- Difficulties in explaining how to use the device to parents
- Colleagues' support in familiarizing with the device
- Personal innovativeness
- Telemedicine useful for improving the quality of work
- Making work easier



"One concern I have is that while I'll be monitoring a patient with Tytocare at home, in the ward, another patient will come in. So, the visits I'll conduct with Tytocare are additional." (Participant 8)

"I personally didn't have the idea of telemedicine, but I had to accept it with the team." (Participant 10)



### Expected changes in the relationship between patients and physicians

- Loss in professional trust of physicians
- Difficulties in creating trusting relationships
- Hoping telemedicine can improve relationship with patients
- Ability to engage and assure patients and families



"It's possible that patients may be skeptical about a remote visit conducted by the doctor, therefore less trusting of the clinician's opinion." (Participant 3)

"I would like it to be a tool to get closer to patients in their daily lives because that's sometimes lost in the hustle of our work." (Participant 1)



## Next steps

*Study 1* and *2* have served as the basis for formulating the research protocol aimed at investigating the implementation of the *Healthentia app*, a telemonitoring tool designed for heart failure management (MUSA, tasks 2.6 & 2.7).

Scan for the poster with references!

