

BRIEF ARTICLE

Telemedicine and training: what could we improve?

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Abstract

Operator safety and reducing the spread of any highly contagious infectious disease represent a challenge for the future and telemedicine has shown great support in this process, but the lack of knowledge should stimulate discussion and research on this important topic. The present document is a commentary developed in the simed group training site, a group of simulated training who highlighted the lack of evidence about training projects aimed at building a common knowledge on telemedicine.

Brief Article

In the last years, there's been an increase in the use of territorial Emergency Systems (EMS) and Emergency Departments (EDs) by citizens [1,2]. This phenomenon is due to several factors, such as frequent users [3] and an aging population [3,4]. In addition, the management of noncritical patients by EMS systems, related to non-urgent territorial clinical needs, is increasing [2].

This phenomenon has been compounded by the pandemic caused by Covid 19, which has exacerbated the issues, greatly impacting EDs [5] and EMS [6,8], especially changing time-dependent disease networks [6].

Due to the subversion of the EU system, telemedicine models have been implemented in ERs [9], aimed at ensuring the safety of operators [9] and

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ensuring a reduction in the use of PPE [10-12]. These two aspects are very relevant, especially in reducing the spread of infectious diseases, which is catalyzed by departments such as the ED or through 118. Operator safety and reducing the spread of any highly contagious infectious disease remains a challenge for the future and telemedicine has shown great support in this process [13,14]. In addition, telemedicine tools have been shown to be safe for patients [15] even though there has been an increased use of clinical examinations [15]. This phenomenon may be due to the lack of unambiguous standards and guidelines on telemedicine [13], so more work needs to be done in future years.

Telemedicine has spread rapidly. Academia and experts agree on the future usefulness of telemedicine [16,17]. This view is also shared with patients, who have shown satisfaction [18].

The best utility of the EU system seems to be related to time-dependent diseases; in fact, it is of excellent support in the network between hub and spoke hospitals and as a support tool between specialists [16,19]. Indeed, telemedicine has been shown to be effective in time-dependent disease networks reducing the time needed to centralize or start procedures in Stroke and STEMI patients [20-22]. In addition, it has ensured an improvement in the appropriateness of secondary transports to hub facilities [23]. Despite this, the use of telemedicine in several settings has been shown to be irrelevant, such as in the follow-up of post-surgical patients [18]. In some studies, the difficulty of physicians and patients to use the devices [12] led physicians, especially from rural areas, to prefer the regular visit [12,16]. This evidence supports the importance of experimentation in new fields.

The lack of clearness about the clinical benefit and of usefulness of telemedicine in different fields could expose the patient to risks, which must be carefully evaluated. Above all, the lack of knowledge should stimulate discussion and research on this important topic with the aim of developing shared guidelines [13,24].

In fact, the term telemedicine remains very broad and generic and behind it are hidden technologies and organizational models undergoing experimentation, which is why there are so many processes under development, whose true usefulness is still doubtful and underdiscussion [25]. In addition, the studies currently present are focused on clinical elements [26], which are still useful and necessary to define patient

safety, but do not help to define organizational systems [27], an essential element to ensure the process of integration with the NHS desired by all the stakeholders of the system [27].

For this reason, SIMED, an Italian society of scientific disclosure, hopes for a rapid implementation of further studies and divulgation and, above all, the development of training projects aimed at building a common knowledge on telemedicine and that can be built with clear definitions for all stakeholders, from clinicians to medical directors.

Conclusion

Training is a necessary tool to help healthcare professionals for use new technologies. Nowadays, telemedicine is spreading rapidly, but there aren't specific courses, standards training and clear guidelines. Therefore, all training stakeholders must quickly build specific courses and training courses to ensure high standards and shared skills. This process will have to happen quickly because the spread of technologies is much faster than the development of training courses.

Conflict of Interest

Each author declares that he or she has no commercial associations (e.g. consultancies, stock ownership, equity interest, patent/licensing arrangement etc.) that might pose a conflict of interest in connection with the submitted article.

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