



European Momentum for Mainstreaming Telemedicine Deployment in Daily Practice
(Grant Agreement No 297320)

List of critical success factors dated 6th May 2014

1. Check that there is cultural readiness towards telemedicine.
2. Ensure leadership through a champion.
3. Identify a compelling need.
4. Put together the resources needed for deployment and sustainability.
5. Address the needs of the primary client(s).
6. Involve health care professionals and decision-makers.
7. Prepare and implement a business plan.
8. Prepare and implement a change management plan.
9. Put the patient at the centre of the service.
10. Establish that the service is legal.
11. Ask advice from legal, ethical, privacy and security experts.
12. Apply relevant legal and security guidelines.
13. Ensure that telemedicine doers and users have “privacy awareness”
14. Ensure that the IT and eHealth infrastructures needed are in place.
15. Ensure that the technology is user-friendly.
16. Monitor the service.
17. Maintain good practices in vendor relations.
18. Guarantee that the technology has the potential for scale-up (i.e., “think big”).

See over for more details on each of the different critical success factors.

More detail on the list of critical success factors dated 6th May 2014

Critical success factors relating to strategy and management

1. Check that there is cultural readiness towards telemedicine

Cultural readiness within a healthcare system/organisation is a set of beliefs and perceptions that influence establishment of priorities; attitudes that determine behaviour including decisions, ideas and practices that determine how a person, organisation, society will respond to the environment; and challenges that determine whether telemedicine will be viewed positively or negatively, and will be embraced, rejected or just ignored.

2. Ensure leadership through a champion

A champion is a person who is committed to the telemedicine idea/initiative/service and is willing to put himself/herself on the line to make it happen, has the ability to enlist others to the cause, can secure the commitment of the leadership (of the organisation or the system), and has the ability to mobilise resources to make it happen including other people who can be operational leaders.

3. Identify a compelling need

A compelling need is a sufficiently high level "problem" (i.e., shortage of healthcare professionals, excessive use of resources, wastage, or other) for which a telemedicine service can supply a solution. There may be a single compelling need or there may be a set or combination of compelling needs.

4. Put together the resources needed for deployment and sustainability

Resources refer to the means needed to develop and deploy the telemedicine service, as well as to ensure its sustainability. There are essentially four major types of resources:

- Financing at a sufficient level to develop and support the service (which may include, grants, investments subsidies, or income from the sale of services).
- People/human resources with specific attributes and expertise (ideas, concepts and know-how), in appropriate positions who have the appropriate availability, and/or people with potential who can achieve the requisite level of know-how with appropriate training.
- Information (e.g., on what is going on politically, socially, organisationally, technologically, including business intelligence).
- Time (having the time to do it; at the right time) or making time available to/for the critical people involved by establishing priorities, setting deadlines, appropriate phasing and staging.

Critical success factors relating to organisation and management

5. Address the needs of the primary client(s)

A primary client is a person, specialty group or organisation who has clear incentive(s) to set up the service.

6. Involve health care professionals and decision-makers

This is the process of engaging healthcare professionals who are affected by the new telemedicine service. This process includes actions that help healthcare professionals to define and accept modifications in their usual way of delivering care as a result of a new service, and encourages them to act as advocates of the innovation. Depending on the telemedicine service, the targeted healthcare professionals could vary i.e., they could be physicians, nurses, or specific groups of professionals.

7. Prepare and implement a business plan

A business plan is a written document which results from careful analysis of available data. It describes the planned telemedicine service, its sales and marketing strategy, and its financial background. It also contains a projected profit-and-loss statement. A business plan for the new service has to be in place even when the telemedicine service is provided by a non-profit or a governmental organisation.

8. Prepare and implement a change management plan

A change management plan may need to cover various phases of the implementation process that supports the introduction of the telemedicine service. This action may include a range of potential activities, such as:

- Prepare a plan for change management.
- Add extra resources during the initial deployment phase.
- Develop a communications strategy, and explain the reasons for the change taking place.
- Support the telemedicine service to form part of an existing care pathway or counteract any challenges that prevent its seamless implementation into the existing workflow.
- Identify training and capacity-building needs.

9. Put the patient at the centre of the service

Patient-centredness means developing the service with the patients' perspective in mind. It takes into account the values of the culture, the personal and social needs of the users, and the users' comfort level, with the different forms of interaction – face-to-face and virtual. It strengthens the human relationship and does not depersonalise it.

Critical success factors relating to legal, regulatory and safety issues

10. Establish that telemedicine is legal

Find out whether either (a) the telemedicine service at stake is authorised by public authorities or (b) the service is authorised by other bodies which have the competence to do this, ensuring that it enables a legitimate way to practise medicine. Make sure that telemedicine is not inhibited by law or is not considered to be in conflict with the requirements for best practice in medicine.

11. Ask advice from legal, ethical, privacy and security experts

Legal, ethical, privacy and security experts should have knowledge of regulations relevant to telemedicine at all levels, internationally, nationally and locally.

12. Apply relevant legal and security guidelines

There are guidelines for specific countries and for professional groups – such as doctors – that codify legislative and security measures as well as ethical and policy considerations.

13. Ensure that telemedicine doers and users have “privacy awareness”

“Privacy awareness” is knowledge about appropriate practice when it comes to privacy and security behaviours. It is based on current ethical and legal principles.

Critical success factors relating to technical and infrastructural issues

14. Ensure that the IT and eHealth infrastructures needed are in place

This two forms of infrastructure include:

- **IT infrastructure:** An IT infrastructure is in place that ensures successful deployment and good functioning of the telemedicine communication system.
- **eHealth infrastructure:** Health information systems – such as electronic health records and patient health records – are in place that capture, store and distribute clinical data across different levels of care, and among health providers and patients,

Exchanging health data may require interoperable health information systems.

15. Ensure that the technology is user-friendly

Ensure that the technology is simple and user-friendly: think about usability and the actual technology

- **Usability:** means that the technology must be easy-to-use and have a user-friendly design.
- **Technology:** means using technology standards and avoiding specific technology dependencies.

16. Monitor the service

Monitor the service operations to ensure that they run smoothly. Consider the needs of the users. Identify possible refinements to the service. Consider outlining specifications for each of these aspects of the service operation.

17. Maintain good practices in vendor relations

The deployment requires a partnership between the doers and the industry at all sorts of phases of the deployment. Good practices in vendor relations are based on a transparent, straightforward service level agreement signed by the contracting parties. Service level agreements and contracts need to be underwritten that clearly define what is expected from both parties, and what are the rights and liabilities of engagement.

18. Guarantee that the technology has the potential for scale-up (i.e., "think big").

Consider that it may be important to grow and extend the telemedicine service to a larger scale. Therefore, choose the appropriate vendor and technology. The potential for scale-up can be achieved by using either standard technologies or technologies that are similar and yet are produced/offered by a range of suppliers.