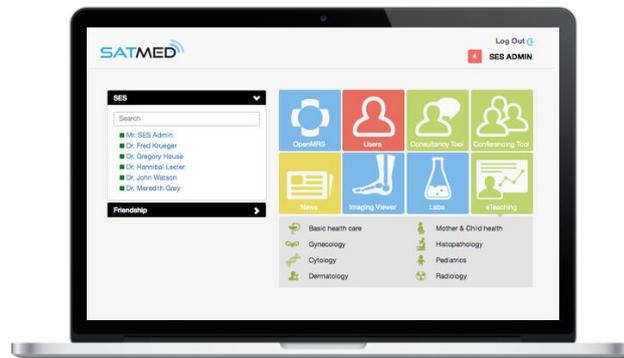


SATMED – an innovative e-health solution



- **What inspired the development of this product/service and how long has it been in action?**

E-Health is known to improve medical quality and facilitates the access to care and education. However, its use in Africa is still limited because of several barriers: High quality e-Health tools are often expensive and require reasonable resources for their implementation and maintenance and existing tools have poor interoperability.

In addition, e-Health is often needed in areas that do not have any internet connectivity, neither terrestrial, nor by mobile services. In these areas SATMED offers Satellite enhanced internet.

In summary, SATMED want to overcome these barriers of e-Health by improving accessibility (combining mobile and Satellite enhance internet), enhancing simplicity of use of e-health tools, makes e-Health affordable and improve interoperability and thus the quality of e-health.

- **How is this used specifically, why is it important and do you have any examples of this having changed someone's life or done something truly interesting?**

SATMED, an e-health platform conceived by SES and supported by the Luxembourg Government and the Ministry for Cooperation and Humanitarian Action is a satellite based communication solution aimed to improve public health in emerging and developing countries. The initial roll out of this platform in Africa took place in Sierra Leone in support of the fight against Ebola. SATMED is ought to be one of the first platforms that offer open-access to high quality e-Health tools. Moreover, SATMED integrates different tools into one single access platform. This single-access integration will be a breakthrough in user friendliness and interoperability between the different tools that cover a wide range of applications such as e-health records and picture archive, e-consultancy, e-learning, e-group and content management tools, e-surveillance and e-health financing. These tools are combined, in addition, with modern videoconferencing applications.

The cloud-based system will reduce the need for expensive on-the-ground ICT resources and their maintenance. For remote areas in which no internet is available, SATMED will provide Satellite enhanced internet access.

- **How expensive is the solution, can anyone use it and does it have wider implications across Africa and into rural areas?**

For the user SATMED makes e-Health for the first time affordable. Typical for web application, expensive acquisition of hard- and software are not required anymore. In addition, no local resources for building up IT infrastructure are needed.

- **Is the solution easy to use – can anyone use it? Does it require skilled staff?**

All SATMED tools are specifically designed to improve user-friendliness. This is because SATMED is addressing areas in which computer skills are limited. On the other hand side, SATMED takes advantage of the increasingly wide spread use of mobile telephones. SATMED adjusted its interfaces to application that are known in large parts of the population (like skype or WhatsApp).

Because of the simplicity of the tools, they are usable without any specific skills.

- **What are some of the cool technologies behind the product and how have they been harnessed to deliver this solution?**

SATMED value proposition covers the whole value chain including the VSAT network, globally satellite capacity, suite of open-access single sign-on e-Health and m-Health applications and conferencing capabilities provided as cloud service and adapted to all kind of devices, and secure hosting services with innovative encryption and pseudonimization techniques.

- **What makes this so extraordinary, in your view?**

With SATMED, it is possible to dramatically improve access to care and reduce economic barriers by combining state-of-the-art satellite connectivity and cloud computing. Patients can be remotely diagnosed by experts thousands of miles away, doctors and nurses can improve their knowledge through online courses or life sessions, and lives can be saved through easy access to necessary information available anywhere via the internet. Satellite technology can provide this internet connectivity to underdeveloped and not-connected areas.

- **Do you believe that technology is transforming healthcare in Africa? Can more be done? What implications does tech have for poorer communities with limited access to healthcare?**

As stated above, SATMED overcomes important access barriers to e-Health. The cloud approach makes SATMED readily available anytime anywhere in the world. They are open access and thus extremely cost efficient.

Therefore it can be expected that it will have a large impact on medical care and education in Africa. Of, course the SATMED concept is applicable in many other regions in the world like Central and East Asia or Latin America. We expect that SATMED will have also impact in industrialized countries.

The above can also be complemented by other SES services like, for example, the recently launched Fight Ebola channel which is an Ebola-focused education channel broadcast via satellite in West Africa. The channel aims at informing populations in affected areas about the nature and dangers of the disease and how to fight it and is available to both free-to-air TV viewers and Pay TV subscribers and transmitted from the ASTRA 2F satellite at 28.2 degrees East and from SES-5 at 5 degrees East

• How has your product/solution changed lives? If it has been used, how does it support the next step or guide people into making informed health decisions?

Part of West Africa is dealing with the worst Ebola outbreak in history. The Fight Ebola channel broadcasts content to millions of people that need to be informed on the risks of Ebola. The content on the channel comes from multiple sources endorsed by the Luxembourg Ministry of Health.

The Fight Ebola channel's message emphasizes the fact that Ebola is spreading, that there is a great need to protect oneself as well as families and the entire community. The objective of "Fight Ebola" is to create an understanding of the disease through the broadcast of educational and factual content. Through the channel we hope to further educate people.

On the other hand, SATMED is currently in the roll out phase in different countries, including West and East Africa. First experiences show tremendous value. For example in Sierra Leone SATMED helps to provide connectivity to hospitals that are otherwise completely isolated – even more due to the Ebola outbreak itself. Another example is Eritrea a quite closed country. SATMED helps to build bridges between physicians in Eritrea and Europe by e-learning for physicians and nurses. This helps to lead the medical health professional of Eritrea out of their isolation and to catch up with the international health community.