

---

# E-HEALTH IN AUSTRALIA AND SWEDEN

A REPORT FOR E-HEALTH MISSION 2019

**PREPARED BY**  
EMBASSY OF SWEDEN  
JUNE 2018



Embassy of Sweden

# ABOUT

Sweden and Australia have longstanding bilateral relations. Sweden and Swedish businesses were among the first to establish a presence and international relations with Australia and still today, the Swedish-Australian business relations continue to grow. This gives many opportunities for collaboration, both within research and business. Within the healthcare sector, the two countries share many similar challenges through demographic changes with rising expenditures for healthcare, as well as an increasing demand for more advanced and costly treatments. This puts pressure on the healthcare system and creates a need for more resource efficient ways of delivering care. With both countries having a well-developed digital infrastructure with widespread internet connection even in rural areas, the foundation for digital health is laid. However, the journey has only just begun.

---

SWEDEN AND  
AUSTRALIA SHARE  
MANY SIMILAR  
CHALLENGES

---

# WHERE WE ARE TODAY

Never before has technology offered such opportunities to manage, use and communicate data and information so effectively. In many areas of society, digitisation has already generated radical changes. Digital health is described as a paradigm shift in healthcare. Any forward-thinking healthcare organisation creating services for the future that do not compromise quality or safety are placing digitalisation at the core of that transformation. The digital healthcare industry also offers great potential for international knowledge exchange to discuss key issues affecting both the urban and regional healthcare development, not least in Sweden and Australia. In February 2018, Swedish representatives visited Australia for the inaugural Global Digital Health Partnership meeting in Canberra.

Whilst health and healthcare is at the top of the political agenda in most countries, including in Sweden and Australia, it is not just a national concern. The global challenges like the spread of antibiotic resistant bacteria, cancer care, increase in life style related diseases and a growing ageing population are putting increasing pressure on healthcare budgets. Health spending in Sweden (excluding investment expenditure in the health sector) was 11.0% of GDP in 2017 and 10.3 % in Australia. Since 2000, the cost for healthcare in Sweden has increased with an average of 4.2 percent per year, 1.1 percent comes from population growth, 3.1 percent is from an increase in demands. If this trend continues, the demands on care could lead to increased administrative burden and lead to a poor work environment for the employees and long waiting times for patients in need of care.

To address these challenges there is a solid foundation for Sweden and Australia to collaborate on developing national cost saving and efficient healthcare solutions across the ecosystem, as well as finding ways to tackle global health challenges.

---

# E-HEALTH IN AUSTRALIA



Australia has a universal healthcare system that co-exists with private healthcare. The Australian Government looks after national health policy, with key elements operated by state governments. In 2016, The Australian Digital Health Agency was established by the government of Australia to lead the development of the National Digital Health Strategy and its implementation. This has so far resulted in a strategy with the purpose to evolve healthcare to meet the needs of modern Australia.

The Australian National Digital Health Strategy builds on Australia as one of the world's front figures in digital healthcare and outlines strategic priorities for digital health in Australia, including the shift to the electronic My Health Record. My Health Record is the Australian government's digital health record system and contains a summary record copy of an individual's health information, such as medicines they are taking, any allergies they may have and treatments they have received. Individuals can access their record online, and have control over access rights to their personal health information. With the patient's consent, doctors, hospitals and other healthcare providers, such as rural homecare nurses, are able to access the patient's My Health Record whenever and wherever it is needed.

Every Australian will by the end of 2018 automatically have a My Health Record created for them, unless they choose not to. By 2022 every healthcare provider will have the ability to communicate with other professionals and their patients via secure digital channels.

Australia will not just benefit from digital health via the My Health Record and the use of collected information. For instance, a common theme in digital health development is not just improved ease of usage of information, but greatly improved performance of smart devices, especially in the aged care sector. The Australian Government's Aged Care Reforms – Living Longer Living Better, is prioritising more care to the home in shifting resources to help the aged live at home for longer. Patients are already expected to monitor their own health in various ways, but the ability to use smart phones and wearable devices provides greater opportunities for remote monitoring than has previously been possible. Integrating new technology in the aged care sector gives smoother processes and better care. It will help the aged live at home for longer and have greater choice and autonomy over their treatment.

The development of online technologies such as video conferencing provides significant opportunities to address medical access issues across rural and remote areas. For acute stroke prevention and acute stroke treatment, time is of importance. The time critical nature of treatment places rural and regional stroke patients at significant disadvantage as specialist stroke services are not locally available. Access to more specialised medical or allied health expertise may be facilitated with digital health.

Digital health services applied to stroke is called telestroke and has been used widely in Australia for both acute and rehabilitation stroke care. Many stroke survivors who complete inpatient rehabilitation have restricted access to outpatient rehabilitation services, especially those who reside in rural locations. Telestroke rehabilitation has the potential to provide timely and efficient post acute care for stroke patients beyond the hospital and into an individual's home. It enables clinicians to monitor the patient's health status and to identify conditions that need improvement before complications or adverse complications ensue, eventually improving patient function while reducing long-term disability and costs.

With personal healthcare information in digital channels comes a need for security control. The Australian Digital Health Agency has recognised that healthcare information is some of the most private information and that digital health innovation is reliant on secure digital operations. Therefore, the Australian Digital Health Agency has established the Digital Health Cyber Security Centre with its primary purpose to protect national digital health systems and personal health information of Australians from cyber threats.

Other ways that Australia will benefit from digital health are mobile based apps for cancer treatment, recently developed by Australian doctors. The purpose of the app is to make cancer treatment simpler for Australian patients. The app helps patients navigate their medical journey by providing personalised information on their condition, tools for logging their symptoms and managing their appointment schedule. This provides a particularly useful service for rural cancer patients who may not have the opportunity to visit their doctor as often as those in urban areas. Instead, the patient can electronically share their log with doctors between appointments, or record their progress in certain tasks or goals set by their doctor.

Another tool, designed by Queensland researchers, lets people check their risk of developing melanoma using an online test. Australia has the highest incidence of melanoma in the world. On average, 30 Australians will be diagnosed with melanoma every day and more than 1,200 will die from the disease each year. The online risk predictor, based on data from nearly 42,000 people aged from their forties to seventies, will help identify people with the highest likelihood of developing melanoma. With the information from this risk predictor tool, patients and their doctors can decide how to best manage the patient's risk.

---

# E-HEALTH IN SWEDEN



The Swedish healthcare system is in many ways similar to the Australian, with universal healthcare coexisting with private healthcare, the difference being Swedish healthcare is decentralised with 20 independent regions. Sweden has, for a long time, had a comprehensive system of social welfare with public healthcare provision at its core. With its ranking as one of the world's most innovative countries, and home to several tech startups Sweden has the power to challenge traditional industries. Sweden is also, as well as Australia, a very connected society. The country has a great digital infrastructure with widespread high-speed internet connections (93 percent of Swedes had internet access in 2015). This helped to rewrite the rules for digital delivery of music and banking services, and soon healthcare.

Like Australia, 2016 was a big year for digital healthcare in Sweden. In 2016, The Swedish Association of Local Authorities and Regions stated that in 2025, Sweden will be best in the world at using the opportunities offered by digitalisation and digital health to make it easier for people to achieve good and equal health and welfare, and to develop and strengthen their own resources for increased independence and participation in the life of society. To reach this goal, an action plan was implemented that specifies how efforts to achieve the vision will be carried out in 2017–2019.

Many digital solutions to help streamline healthcare already exists in Sweden. For example, digital appointments are allowing patients to have a first consultation via an app rather than travelling to a physical doctor's office and wait in line. The solution depends in part on the Swedish BankID system, originally developed to facilitate secure transactions for online banking. This solution saves time for patients and makes the first doctor visit easier, increasing chances that minor medical issues can be uncovered before they become more serious, and more costly. In Australia, an individual healthcare identifier (IHI) is the technique used instead. An IHI is a unique 16 digit number used to identify individuals under the My Health Record system.

That the major part of the funding comes from the government is an advantage for the Swedish and Australian healthcare organisations. When the government is the owner of the majority of the organisation, it is easier to redistribute the resources as needed, for example preventive healthcare, in comparison to an organisation where whole parts of the healthcare system are owned and run independently from each other. Although, the 20 independent regions which manage care in Sweden create challenges for tech procurement and implementing systems that can facilitate coordination and patient information flow like the Australian My Health Record. The Swedish Association of Local Authorities and Regions provides a digital platform, 1177 Vårdguiden digital services, where the separate regions can offer digital services to individuals, including a digital health record where information can be stored and viewed by both patients and doctors. However, an individual's record can only be used by the healthcare providers in the region where the patient is resident. Sharing of information is possible, but this requires that a request for shared information has been done before the patient goes into care in another region. A situation where this can be an issue is if a patient would need emergency healthcare in another region than where the individual is resident. The individual's health information such as medicines, allergies or previous diagnoses would in this situation not be accessible by the health care provider.



Major investments, structural changes, and a clearer division of responsibility would be needed to realise the full potential of digital health. Although, the long-term benefits in cost savings, efficiency, personalization and safety should make those investments pay off. A common IT-infrastructure would most certainly bring savings and improve patient satisfaction making it easier to secure, manage and use the massive amounts of data currently collected in the healthcare system.

It's easy to see how patients can benefit from digital health. A Swedish initiative, located in Sydney, provides Swedish hospitals overnight access to radiology reports made by Swedish radiologists working in Australia during standard working hours, leveraging the time difference to create a unique business model. This highlights that there are plenty of opportunities for Swedish and Australian businesses to collaborate within the digital healthcare sector.

# WHERE WE ARE GOING

The use of digital health offers great opportunities for future social services, health and care. Modern information and communication technologies make it easier for individuals to be involved in their own health and care and will support healthcare providers with more efficient support systems. Every visit to a hospital, or another medical facility, results in important information. Digital health will allow this information to be much more easily shared between the healthcare providers involved. Digital information can transform the quality and sustainability of health and care and reduce the healthcare provider's administrative burden giving more time for patients. Used effectively, digital information can help save lives, improve health and wellbeing and support a sustainable health system that delivers safe, high quality and effective health services for an increasing population.

## GOT ANY QUESTIONS?

E-MAIL US AT  
[AMBASSADEN.CANBERRA@GOV.SE](mailto:AMBASSADEN.CANBERRA@GOV.SE)



**Embassy of Sweden**

**E-HEALTH MISSION 2019**