POLICY MAPPING ON eHEALTH POLICIES AND INITIATIVES (INCLUDING ON CANCER CARE) IN **LUXEMBOURG**

This Country Factsheet was prepared for the eCAN Joint Action. It is prefilled with publicly available information and was sent for review to country experts on eHealth and cancer care. The Country Factsheet serves as the basis for the preparation of an overview of eCAN relevant policies and initiatives in all EU and EEA countries.

eCAN is a Joint Action (JA) of 16 partners in EU-Member States on 'Strengthening eHealth including telemedicine and remote monitoring for health care systems for cancer prevention and care'. eCAN aims to bring the benefits of eHealth to all citizens and patients across EU-Member States (MS) focusing on cancer prevention and care. There is a need to harmonize telemedicine regulations and to explore the efficacy of teleconsultation programs and telemonitoring in the cancer field.

This country factsheet has been pre-filled with publicly available information by

- Linda Justi, Region Syddanmark, The Region of Southern Denmark, Denmark

The pre-filled country factsheet was reviewed by contacted country experts

- Guy Weber, Head of Epidemiology and Statistics Unit, Directorate of Health, Luxembourg
- Nikolai Goncharenko, Director, Institut National du Cancer (INC), Luxembourg
- Frédéric Markus, National eHealth Agency (Agence eSanté), Luxembourg
- Claudine Backes, Scientific Director, National Cancer Registry (Registre National du Cancer), Luxembourg

The country factsheet includes chapters on:

1 definition

2 governance

3 strategies/policies

4 legislation

5 cancer specific eHealth solutions

Any questions? – Please get in touch via ecan@goeg.at.

Co-funded by
the European Union

POLICY MAPPING ON EHEALTH POLICIES AND INITIATIVES (INCLUDING ON CANCER CARE) IN **LUXEMBOURG**

1 DEFINITIONS

Table 1 : Deviations in the use of international definitions for eHealth terms - Luxembourg

Term	Definition	Deviation
eHealth	The WHO defines eHealth as « the use of information and communication technologies (ICT) for health ». It also says that « eHealth is the transfer of health resources and healthcare by electronic means. »[1]	No deviation from definition.
mHealth	« Mobile health (mHealth) is defined by the World Health Organization's (WHO) Global Observatory for eHealth as « medical and public health practice supported by mobile devices, such as mobile phones, patient monitoring devices, personal digital assistants (PDAs), and other wireless devices ».[2]	No deviation from definition.
dHealth	The EU defines digital health (dHealth) and care as referring to « tools and services that use information and communication technologies (ICTs) to improve prevention, diagnosis, treatment, monitoring and management of health-related issues and to monitor and manage lifestyle-habits that impact health ». [3] The WHO defines digital health as « the field of knowledge and practice associated with the development and use of digital technologies to improve health. Digital health expands the concept of eHealth to include digital consumers, with a wider range of smart-devices and connected equipment. It also encompasses other uses of digital technologies for health such as the Internet of things, artificial intelligence, big data, and robotics. »[4]	No deviation from definition.
telehealth	The WHO defines telehealth broader than telemedicine « as it includes computer-assisted telecommunications to support management, surveillance, literature, and access to medical knowledge. »[5]	It seems that the terms telehealth and telemedicine are used randomly.
telemedicine	The EU Commission defines telemedicine as follows (EU Commission definition, COM(2008)689) : « Telemedicine is the provision of health care services, through the use of ICT, in situations where the health professional and the patient (or two health professionals) are not in the same location. It involves the secure transmission of medical data and information, through text, sound, images, or other forms needed for the prevention, diagnosis, treatment, and follow-up of patients. »[6]	No deviation from definition.

---

[1] https://www.euro.who.int/__data/assets/pdf_file/0010/261694/6.-eHealth,-Factsheet-for-European-Parliament.pdf

[2] World Health Organization *Frequently asked questions on Global Task Force on digital health for TB and its work.* [2017-02-27]. http://www.who.int/tb/areas-of-work/digital-health/faq/en/ webcite. In mHealth Assessment: Conceptualization of a Global Framework - PMC (nih.gov)

[3] Events - Smart4Health

[4] Digital health EURO (who.int)

[5] Telehealth – DigitalHealthEurope

[6] Telemedicine – DigitalHealthEurope

Term	Definition	Deviation
teleconsultation	PAHO describes teleconsultation (also sometimes referred to as remote consultation or telehealth), as « interactions that happen between a clinician and a patient for the purpose of providing diagnostic or therapeutic advice through electronic means. »[7]	Yes, some deviation.[8]
health app	Essén et al. 2022 define health apps as « a computer program or software application (designed to run on a mobile device) "intended to be used specifically for managing, maintaining, or improving the health of individual persons, or the delivery of care" (ISO https://www.iso.org/standard/78182.html (2021), p 5). »	Not explained directly in laws or regulations.

2 GOVERNANCE

Table 2 : Overview on eHealth governance - Luxembourg

Question	Answer	Comments/Experience
Is there a Ministry or State Secretariat explicitly in charge of eHealth/dHealth? If so, which Ministry ?	Yes	The Ministry of Health and the Ministry of Social Security oversee eHealth matters.[9] The national eHealth Agency 'Agence e-Santé' (see also further below) *is subject to the joint authority of the ministers responsible for health and social security. Each year, it submits to the relevant ministers the IT master plan [...], its annual report, [and] a multi-year budget forecast, together with the accounts for the previous year.'[10]*
Does the Ministry who oversees health care also have a specific Department or Unit in charge of eHealth/dHealth	Yes	The Ministry of Health has a specific unit called 'santé digitale' (digital health). In the organigram of Ministry of Health, the « Digital Health » unit fulfills inter alia the following mission: Participation in European cooperation initiatives in the field of Digital Medical Devices.
Is there a national eHealth governance board?	Yes	In Luxembourg, the eHealth Agency (see below) is organised in the form of an eHealth governance board including several members of governmental institution.
Is there a public eHealth agency such as Elga GmbH in Austria or ANS in France? At which level (national, regional)? Which functions does this agency cover?	Yes	The 'Agence eSanté' (eHealth Agency)[11] aims to ensure a better use of information in the health sector and the medico-social sector to ensure better coordinated patient care by • developing and implementing the national eHealth strategy, • managing the national health information exchange, • developing and implementing digital health services, • providing technical support and training, and • ensuring data privacy and security.
Are dHealth / eHealth tools in the outpatient sector publicly paid or	(Yes)	The use of dHealth/eHealth tools in the outpatient sector is generally not covered by the national health insurance system (CNS), with the exceptions of

---

[7] https://www3.paho.org/ish/images/docs/covid-19-teleconsultations-en.pdf?ua=1

[8] Résultats de recherche (esante.lu)

[9] https://msan.gouvernement.lu/de.html

[10] Loi du 17 décembre 2010 portant réforme du système de soins de santé et modifiant: 1. le Code de la sécurité sociale; 2. la loi modifiée du 28 août 1998 sur les établissements hospitaliers. - Legilux (public.lu). See article 60.

[11] Agence eSanté (esante.lu)

Question	Answer	Comments/Experience
covered in your benefits package (e.g. by sickness fund or national health service). If yes, please describe how.		certain teleconsultations and telemonitoring services. Also, some health apps may be reimbursed by the CNS if they have been prescribed by a healthcare professional and if they are used to manage a chronic medical condition, such as diabetes or hypertension.
Are dHealth / eHealth tools in the inpatient sector automatically covered in your benefits package or do you need to pay extra (e.g. for telehealth consultations or telereha) compared to standard treatments?	(Yes)	Since the COVID-19 pandemic, a health insurance code was implemented for oncology follow-up consultation via telehealth (covered by the National Health Insurance).[12]
Are there any comprehensive cancer centres focussing on eHealth or telehealth treatments? If yes, which ones and for which specific fields?	No	Luxembourg currently participates in the JA CraNE, CSAa CCI4EU, and ECHOS, which aim to address overall definitions and questions of structuring CCC and other cancer infrastructures. The forthcoming JAs EUnetCCC and JANE-2 foresee the implementation of a CCC-like structure in Luxembourg. Thus, the needs and specific eHealth or telehealth solutions will be assessed in that context.

3 STRATEGIES/POLICIES

Table 3 : Overview on strategies and policies for eHealth and cancer care - Luxembourg

Question	Answer	Comments/Experience
Is there a national eHealth strategy?	Yes, but outdated	Luxembourg has a detailed eHealth Action Plan from 2006.[13] The updated plan set to launch in January 2012 is no longer in play.[14] Recently, in May 2023, the Government Council adopted the Health Minister's proposal for a strategy for the digitalization of the national healthcare system (Health Information System Luxembourg (HISL)).[15]
If yes, which stakeholder groups have been included in drafting the national eHealth strategy?	Several	Several actors were included in the development of the 2006 strategy.[16] For the future 'Health Information System Luxembourg – HISL' (see above), an inter-ministerial working group including members of the Ministry of Health, the Ministry of Social Security, the Ministry of Digitization, the Directorate of health and the CNS, has proposed a strategy for setting up national governance for the digitization of the healthcare system and a single national IT system for the inpatient and outpatient sectors.[15]
Are there regional eHealth strategies? If so, can you indicate whether in all regions or only some? Can you provide some (examplary) documents ?	Not applicable	There are no subnational territorial units (regions) in the Grand-Duchy of Luxembourg.

---

[12] https://www.rnc.lu/Portals/5/Publications/Articles%20scientifiques/Backes%20C-2020_Lessons%20learned%20from%20COVID-19%20lockdown%20for%20cancer%20care.pdf?ver=2021-03-01-135835-507

[13] LU: eHealth Action Plan | Joinup (europa.eu)

[14] http://www.sante.public.lu/fr/systeme-sante/programme-esante/index.html and https://www.ehealth-strategies.eu/database/documents/Luxembourg_CountryBrief_eHStrategies.pdf

[15] https://sante.public.lu/fr/actualites/2023/06/hisl-communique.html

[16] https://joinup.ec.europa.eu/collection/ehealth/document/lu-ehealth-action-plan

Question	Answer	Comments/Experience
If yes, which stakeholder groups have been included in drafting such regional strategy/ies?	Not applicable	
Are there strategy/ies explicitly referring to / including eHealth cancer care?	Yes	There is a national Cancer Plan for Luxembourg (2020-2024) in place.[17] The Axis 2 covers eHealth activities. The pathways are developed as paper solutions initially.
If not, are there discussions ongoing to develop a national eHealth strategy?	Yes	A dedicated chapter on eHealth and digitization is planned to be included in the next National Cancer Report of Luxembourg (expected 2026). To this end, the National Cancer Institute (Institut National du Cancer, INC) is currently establishing a thematic workgroup to review the eHealth environment and develop possible scenarios for future development.
Is there a National Cancer Plan? And does it refer to eHealth?	Yes	There is a national Cancer Plan for Luxembourg (2020-2024) in place.[18] The Axis 2 covers eHealth activities. The pathways are developed as paper solutions initially.
In the light of the EU „Beating Cancer Plan" – are there any recent plans to update or modify existing plans? If yes, what is the timeline?	Yes	Considering the forthcoming participation of Luxembourg in two new JAs (Network of CCI/C and Network of Expertise), additional elements of policy and associated solutions may be developed.
Are there any indicators in eHealth policy or national programmes on cancer care measuring the progress of the use of eHealth in cancer care?	No	No further information available.
Are there any other cancer care specific eHealth initiatives, such as by other stakeholders than policy makers / public authorities?	Yes	The LIH (Luxembourg Institute of Health) is carrying out the RELIANCE study, including an e-health questionnaire for breast cancer survivors to provide important insights into the associated risk factors for breast cancer and to investigate the barriers to and facilitators of returning to work in Luxembourg after a breast cancer diagnosis.[19] Luxembourg also joined the PaRIS survey, commissioned by the Organisation for Economic Co-operation and Development (OECD).[20]

Further information:

One of the strategic priorities in the 'Health National Plan 2023' is to reinforce the digitalization of the healthcare system, in general and in the field of cancer care in particular. More information is available on pages 29 and 58.[21]

---

[17] Plan national cancer 2020-2024 (gouvernement.lu)
[18] Plan national cancer 2020-2024 (gouvernement.lu)
[19] https://www.lih.lu/en/reliance-breast-cancer-study/
[20] https://www.oecd.org/health/paris/, https://www.lih.lu/en/paris-survey/
[21] b6de21_c05646a1c66e4e44a5a4e31c5838fa41.pdf (gesondheetsdesch.lu)

4 LEGISLATION

Table 4 : Overview on eHealth and cancer legislation - Luxembourg

Question	Answer	Comments/Experience
How would you evaluate the current state of legislation of eHealth in your country in general?	As defined in the article 35ter of the Status of CNS: *'Within the framework of any measures enacted by the Ministry of Health relating to the Coronavirus (COVID-19) epidemic, health insurance covers teleconsultation at the rate of one hundred percent (100%).* [22]	
Is there legislation on how to use telemedicine in general?	Yes	Luxembourg has implemented legislation on the use of telemedicine. The country passed the Law of 28 July 2017 on the exercise of certain rights of patients in the field of telemedicine, which provides a legal framework for the provision of telemedicine services in Luxembourg (so far, only in the frame of the COVID-19 pandemic. Otherwise, teleconsultation is not allowed in Luxembourg).
Is there legislation explicitly referring to cancer prevention?	N/A	No further information available.
Is there legislation explicitly referring to / including eHealth cancer care?	Yes	Mostly in a broader perspective, not on cancer care specifically. One law is about the collection, storage, and use of health data, including data related to cancer care and another to do with exercise of certain rights of patients in the field of telemedicine, which provides a legal framework for the provision of telemedicine services in Luxembourg. The Grand-Ducal Regulation of 18 August 2011, covering certain activities of the tumour boards ('RCP') in oncology, specifically permitting the use of videoconferencing for enabling the participation of pathology and radiotherapy specialists.
If yes, which of these legislation(s) do you consider most important in the context of eHealth and cancer care? And why?	N/A	No further information available.
If no, are there any reasons or barriers to the fact that there is no or only limited cancer specific eHealth legislation (i.e., discussions still ongoing, conflicting opinions or other).	N/A	No further information available.
What could be improved or would need to be done to improve these legislation for eHealth in cancer care in your country?	N/A	No further information available.

---

[22] https://www.legilux.public.lu/eli/etat/leg/code/securite_sociale/20230101

5 CANCER SPECIFIC EHEALTH SOLUTIONS

Table 5 : Overview on cancer specific eHealth solutions in use – Luxembourg

Area of application/ type of solutions	Login Websites	Apps	Webinars	Multi-disciplinary teleconferences (HCP-HPC)	Teleconsultation (HCP-patient)	Telemonitoring via devices	Other, please specify
Ecosystem	Yes, eSanté portal (access to personal health data/record, medical prescription insights, data for science etc.), government-driven health portal for citizens, HCPs, Observatory (Observatoire)	Yes, for example, the Ministry of Health has developed a mobile app called 'MyHealth/MyDPS' that allows patients to access their medical records, view their test results, and communicate with healthcare providers securely.	-	No	-	-	-
Prevention of Cancer	Yes, national cancer registry	-	-	No	-	-	-
Treatment of Cancer	-	Yes, a pilot project using NOONA software for patients undergoing radiotherapy at the National Radiotherapy Centre (Centre François Baclesse). The pilot has been completed.	-	Yes, 1) for tumour boards ("RCP") for rare cancers / complex situations, 2) for local /hospital TB (specifically for radiotherapy and pathology)	-	-	Yes, e.g., during pandemic years 2020 and 2021, the 'Broschtkriibslaaf' (Run for breast cancer) was organized on a virtual mode; Another important event 'Relais pour la vie' also offers a virtual way to participate.
'Living with cancer'	-	-	-	No	-	-	
Rehabilitation from Cancer	-	-	-	No	-	-	-
Palliative Cancer Care	-	-	-	No	-	-	-

Table 6 : Number of eHealth solutions available and in use – Luxembourg

Question	Answer	Comments/Experience
How many eHealth solutions (in the sense of medical devices and thus 'authority approved/certified') solutions are existing currently in your country in the context of cancer care/treatment?	N/A	No further information available.
Is there a website or other information on solutions that are recommended to the public for use (e.g. a selection of health apps that are recommended to cancer patients or in general)?	Yes	The Agence eSanté has developed an internet website[23] with secured log-in process that gives access to • the DSP (Dossier de soins partagé), which is a free, personal, and secure electronic health record that centralizes essential patient health data in a unique location, • the recently implemented and deployed electronical immunization card (eCV – carnet de vaccination électronique), including vaccination against HPV against cervical cancer.
Can you give an estimation on how the split between private and public apps are available? Give an estimate percentage of public solutions.	N/A	No further information available.
How can providers and patients assess if the apps are reliable? Is there a certification or quality approval procedure in place? If yes, which kind of procedure?	N/A	No further information available.
How many Health Care Providers use such solutions? Which sector uses rather which types of solutions?	N/A	No further information available.

---

[23] https://sante.public.lu/fr/campagnes/2020/myDsp.html