

Directorate of
e-health

Comparative Analysis 2023: National Health Portals in the Nordics

May 2023

sundhed.dk

H E L S e
n o r g E

1177

Kanta

Summary: Decline in portal visits as corona pandemic ends

Comparative Health Portal Analysis Denmark Finland Norway and Sweden

- After two years of corona driven use, usage of portals is reduced, but still higher than pre-pandemic levels.
- Portal **brands** stay **strong** across countries
- Underlying data shows increased usage of non-corona related services.
 - **More administrative tasks are done digitally**, as they become more available.
 - **Appointments, review of medication lists, renewing e-prescriptions and access to patient journal** are still some of the most used services across all countries
- **Visits and logins vary across countries** based the extent of services and information provided and whether access to information requires login or is available on open sites.
- There is a **broader tendency that national health portals are the citizens user interface to a broader health information ecosystem.**



Key information – Nordic National Health Portals

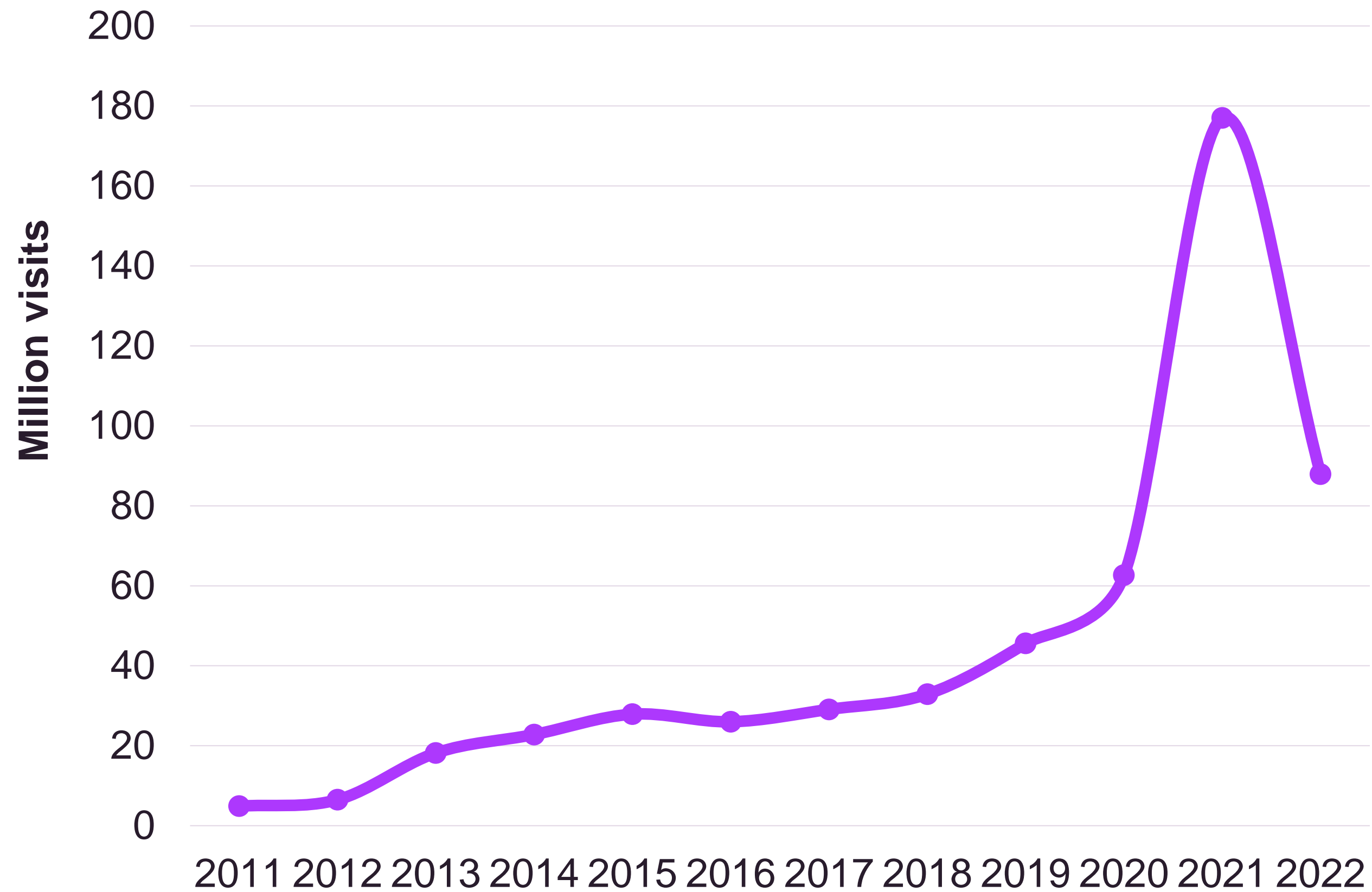
Comparison table (figures from 2022)

Services / content	Page:	Denmark	Finland	Norway	Sweden
Name of portal/URL	4-11	sundhed.dk	MyKanta/kanta.fi	Helsenorge	1177.se
Year started	-	2003	2007	2011	2013
Million visits 2022 (2021)	4-10, 13	87 (177)	38 (46)	116 (141)	208 (260)
Visits / logins per year per capita	13, 19	15 / 12	7 / 7	21 / 14	20 / 13
Portal as app	17	Yes	No	Yes	Yes
Net Promoter Score / brand awareness	18	21 (good)	SUS 72,7 (good)	41 (very good)	46 (very good)
Target group(s)	20	Residents/Healthcare	Residents	Residents	Residents
Interactive channels available	22	Chatbot/Video	-	Message/Chatbot/Video	Message/Chat/Video
Disease and treatment information	23	Yes	-	Yes	Yes
Medical record from hospital / GP	24	Yes/No	Yes/Yes	Yes (3:4 regions)/no	Yes/-
Organ donation / will expressions	25	Yes/Yes	Yes/Yes	Yes/-	-/-
Medication record (prescriptions)	26	Yes	Yes	Yes	Yes
Vaccines (immunizations)	26	Yes	Yes	Yes	Yes
Laboratory test results	26	Yes	Yes	Yes	Yes
View appointment for hospital or GP	27	Yes, only view	No	Yes, and partly change	Yes, also change



Sundhed.dk

Annual visits to sundhed.dk (millions)*

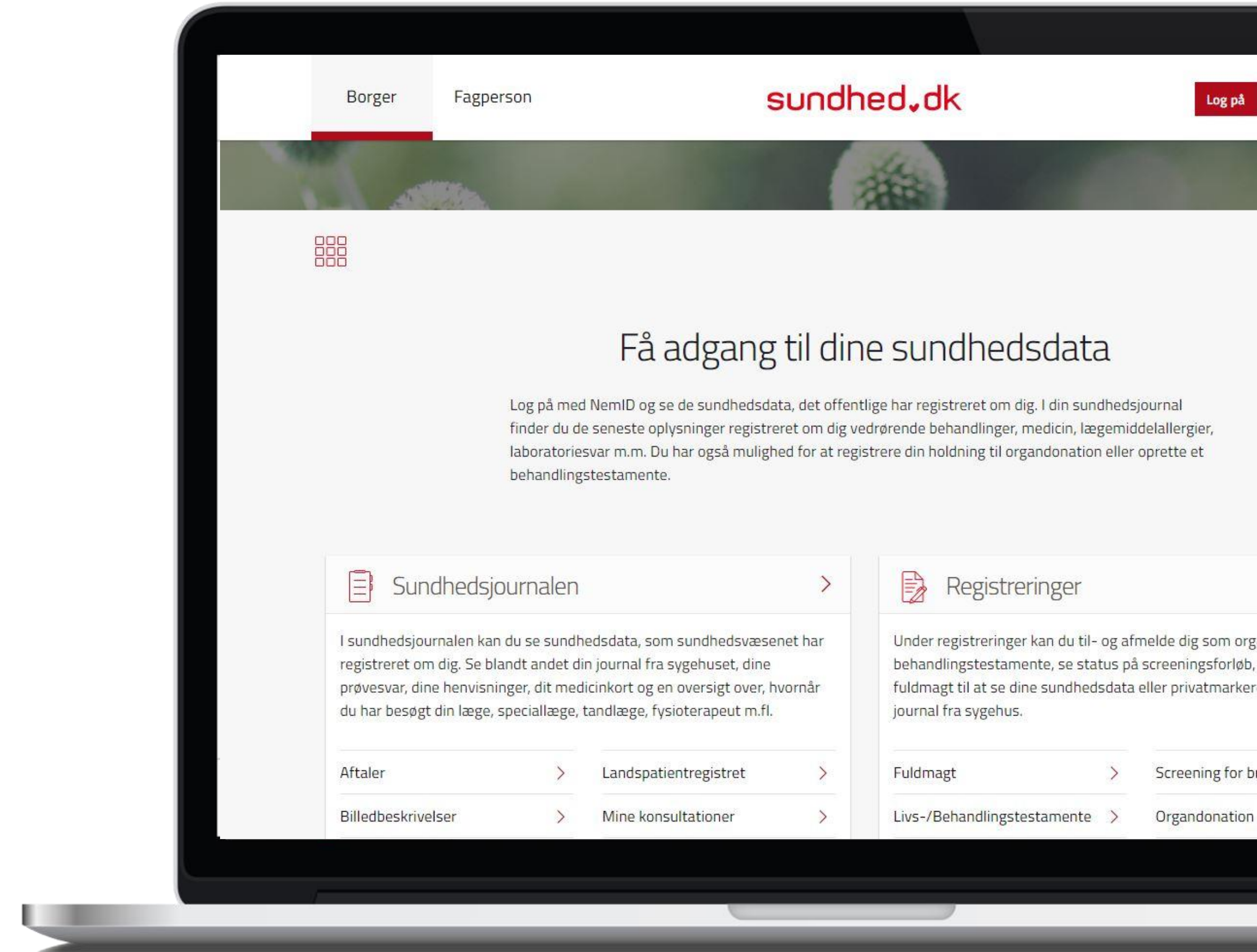
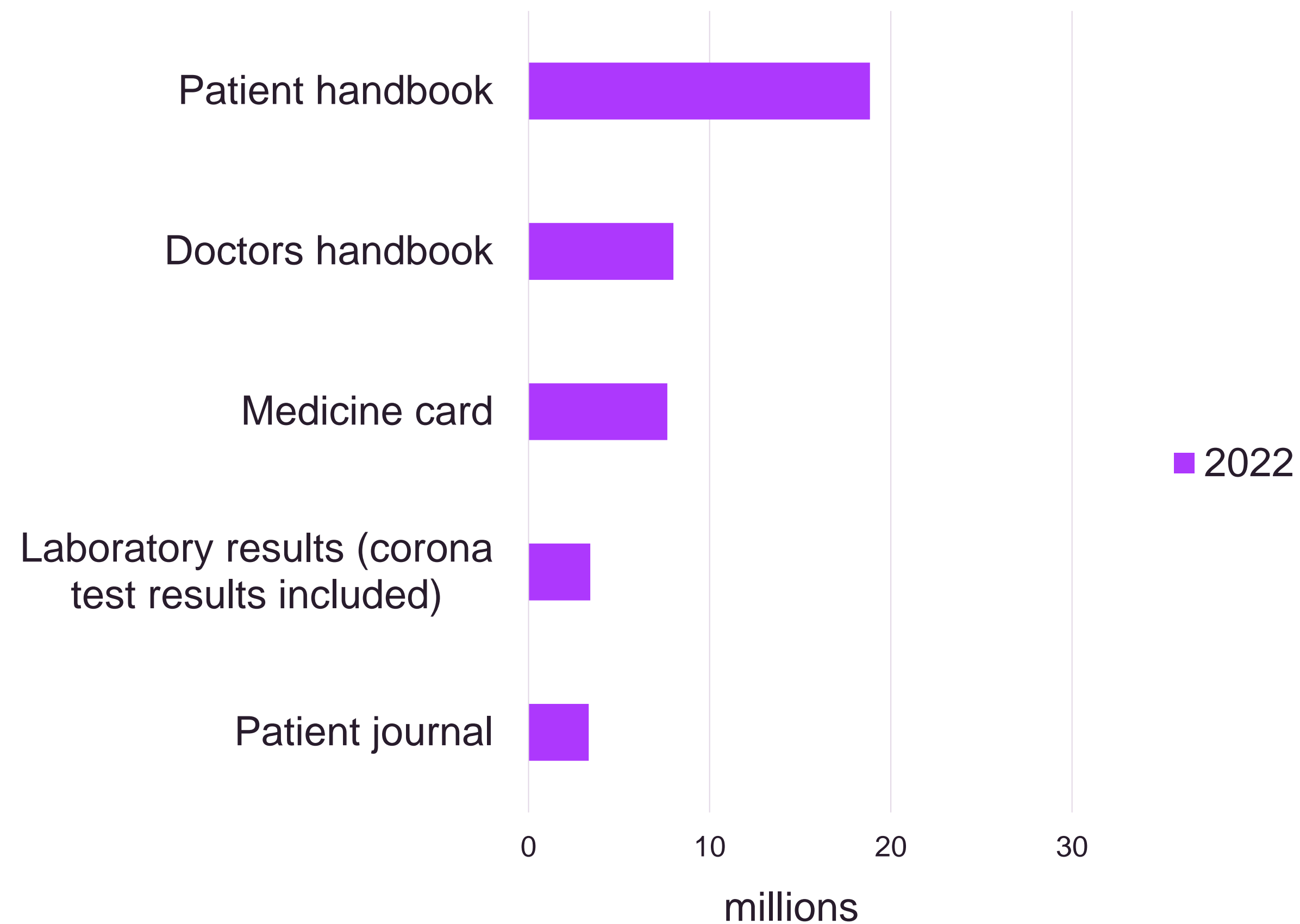


*Figures are updated to include traffic through mobile app



Sundhed.dk – most popular services

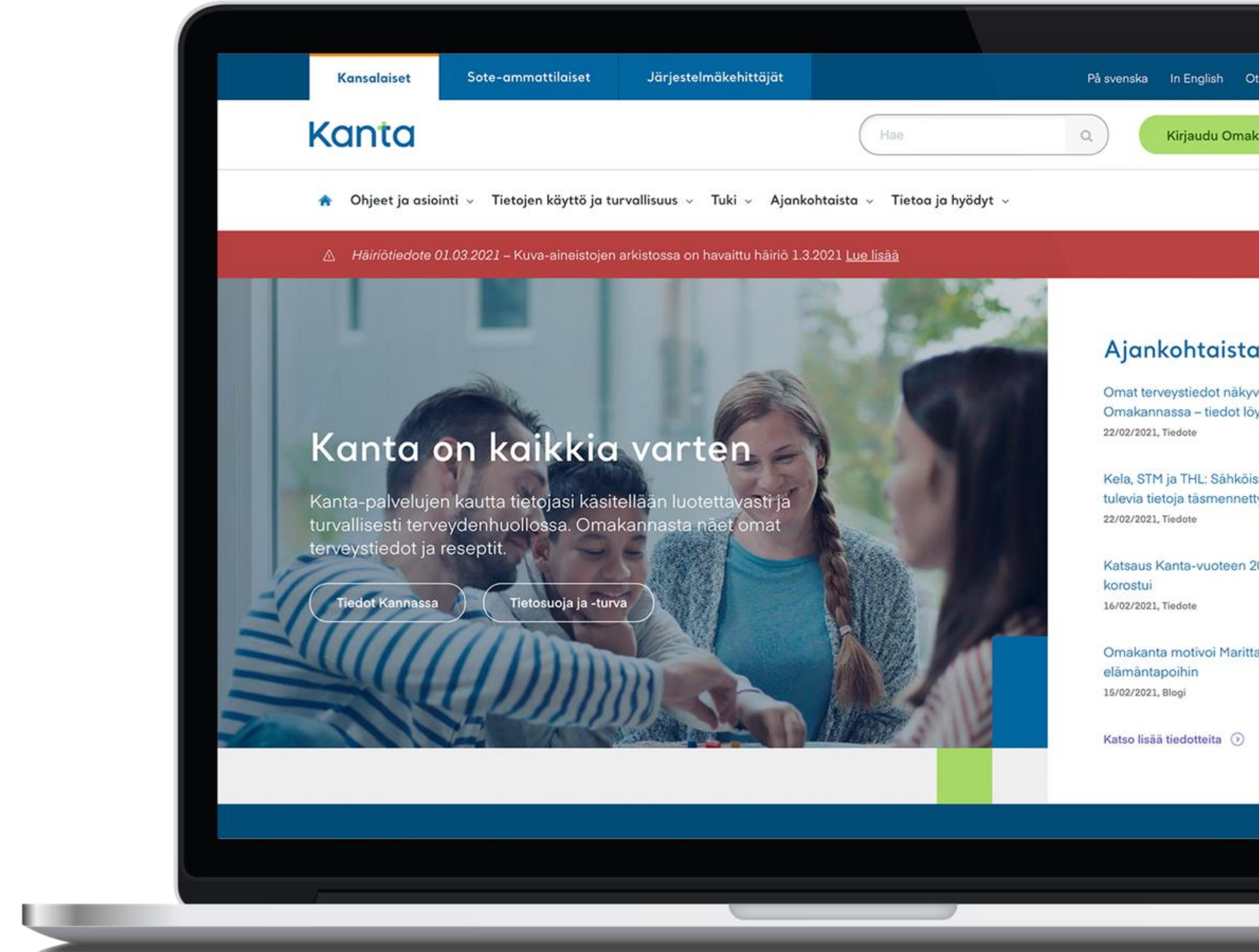
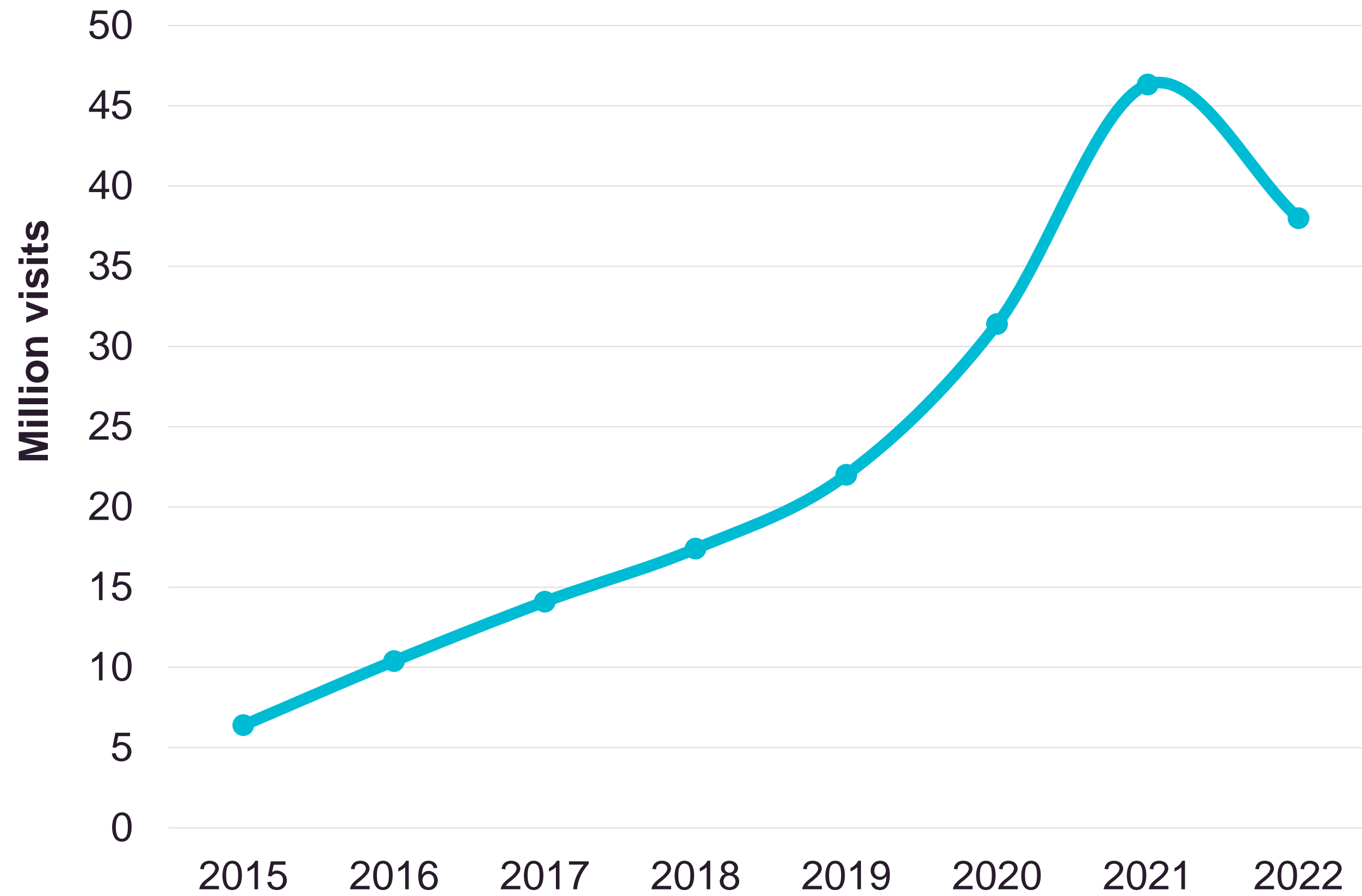
Sundhed.dk - the five most popular services in 2022





Kanta.fi

Annual visits* to Kanta (millions)

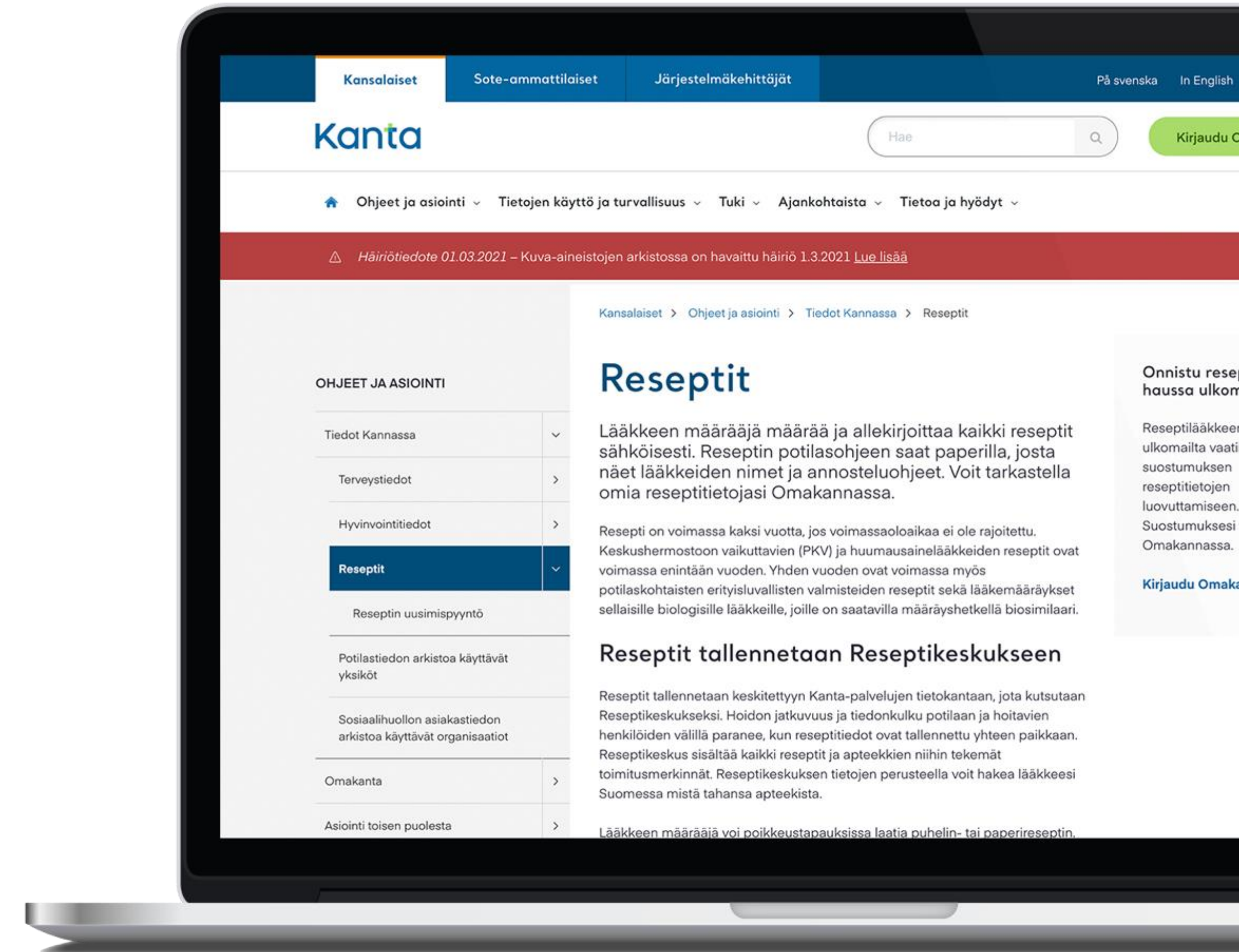
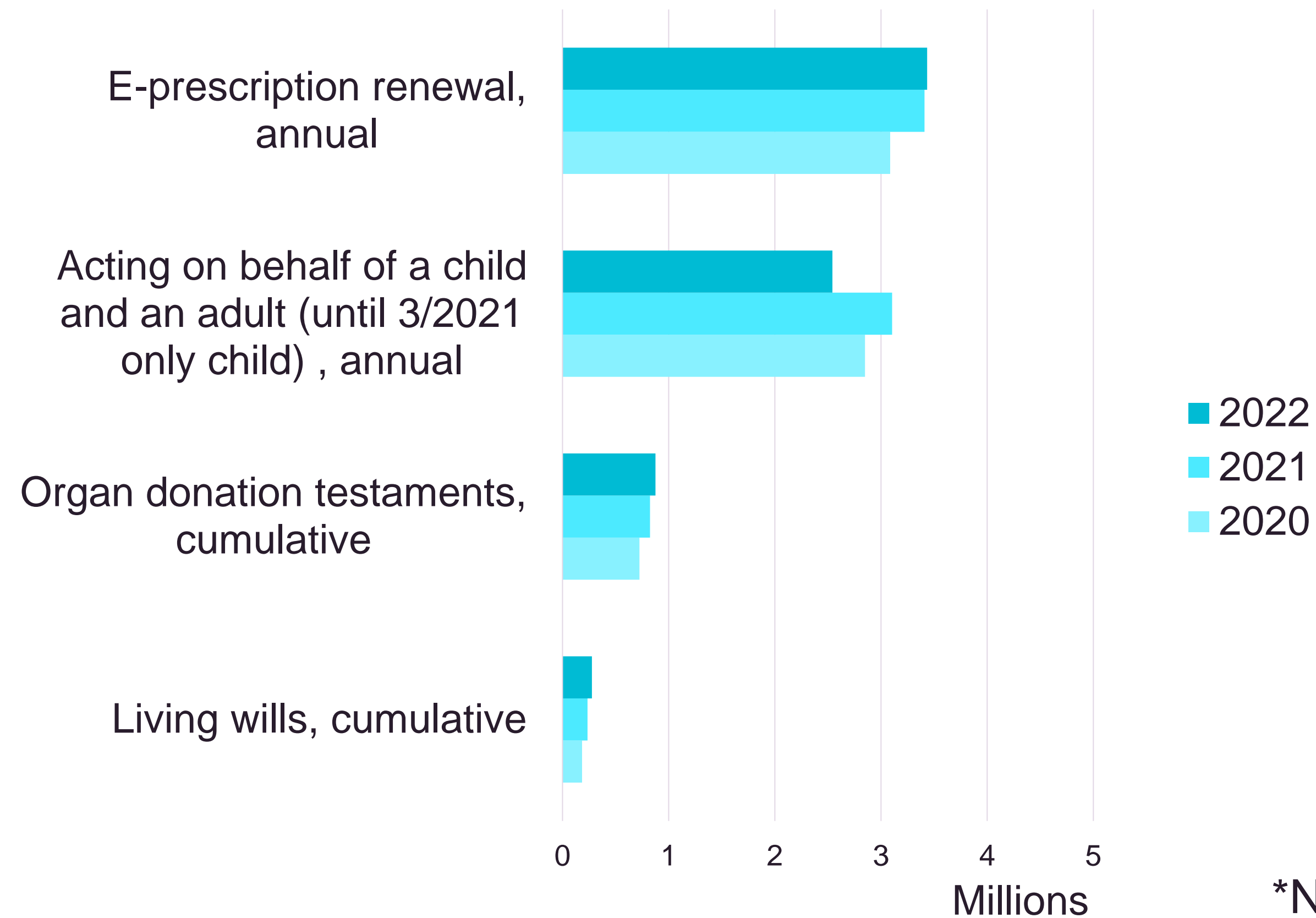


*The graph shows “visits” to Kanta.fi. Note that first “logins” were in 2011.



MyKanta – most used services*

Kanta - the most used services 2020 to 2022



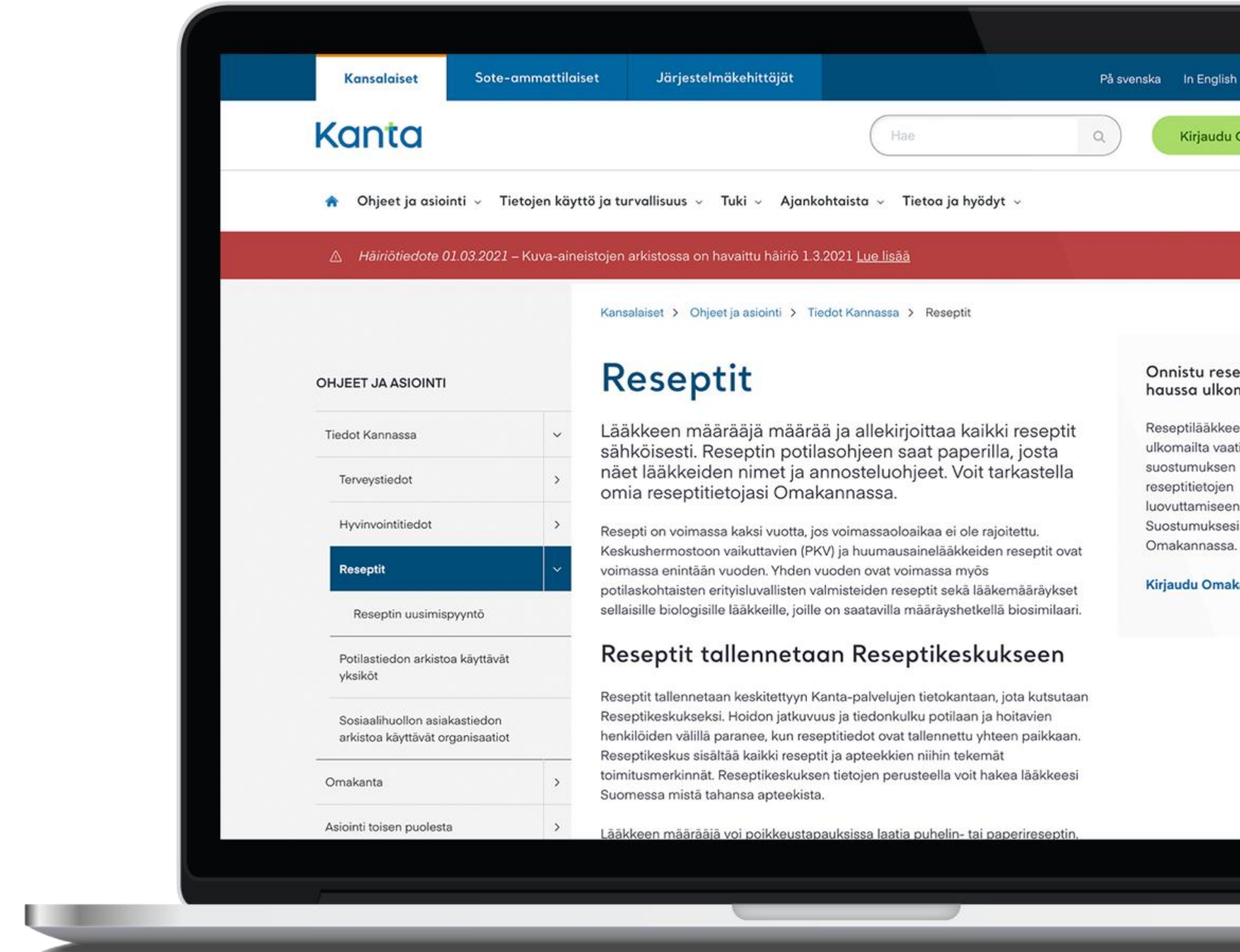
*Note: Based on active user input. Not cookies or traffic data.



MyKanta – four most useful functions

- Prescription renewal
- Viewing prescriptions
- Viewing test or examination results
- Viewing medical notes of my visit

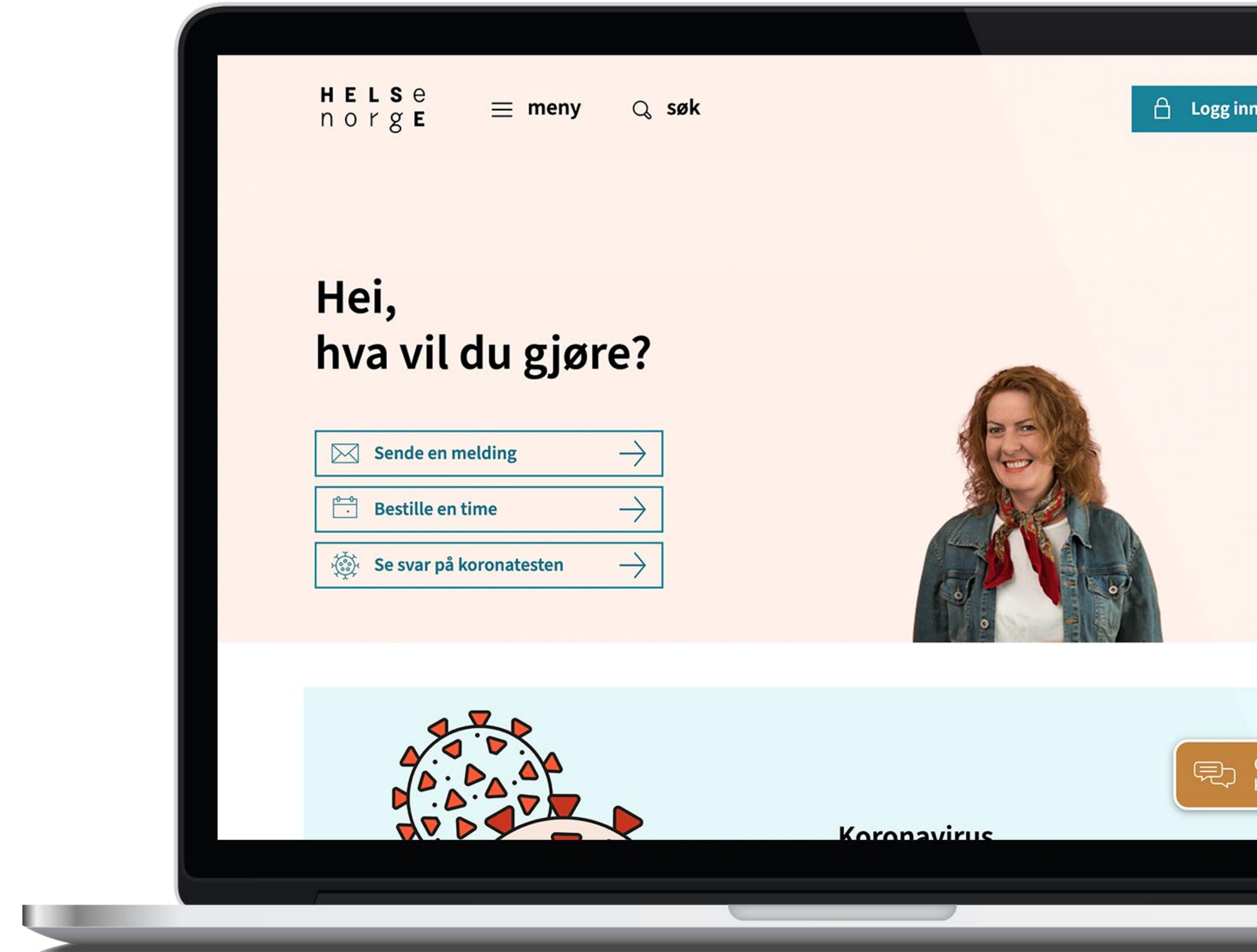
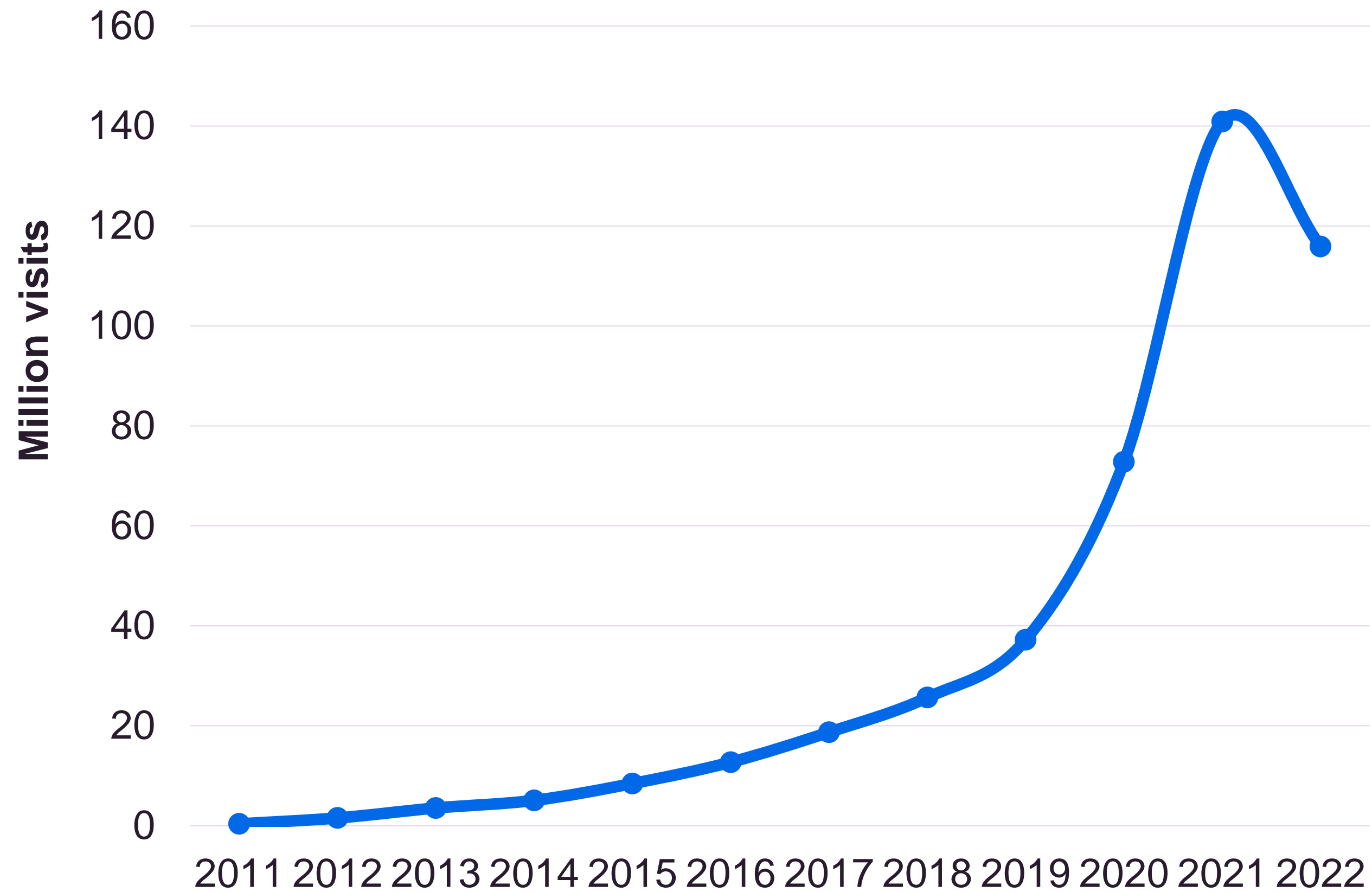
[Journal of Medical Internet Research - Patients' Experiences of Web-Based Access to Electronic Health Records in Finland: Cross-sectional Survey \(jmir.org\)](https://www.jmir.org/2017/02/e00000/)





Helsenorge

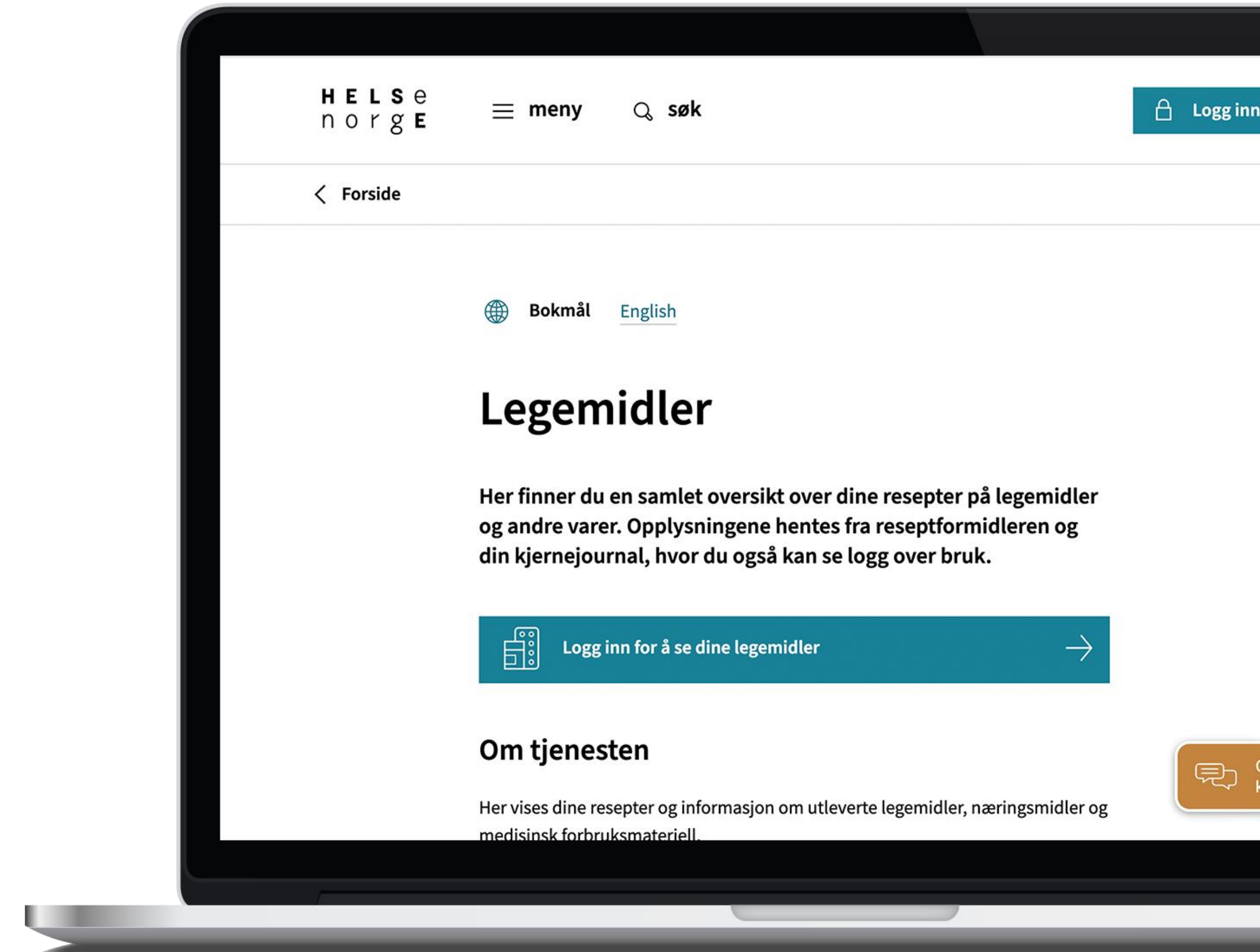
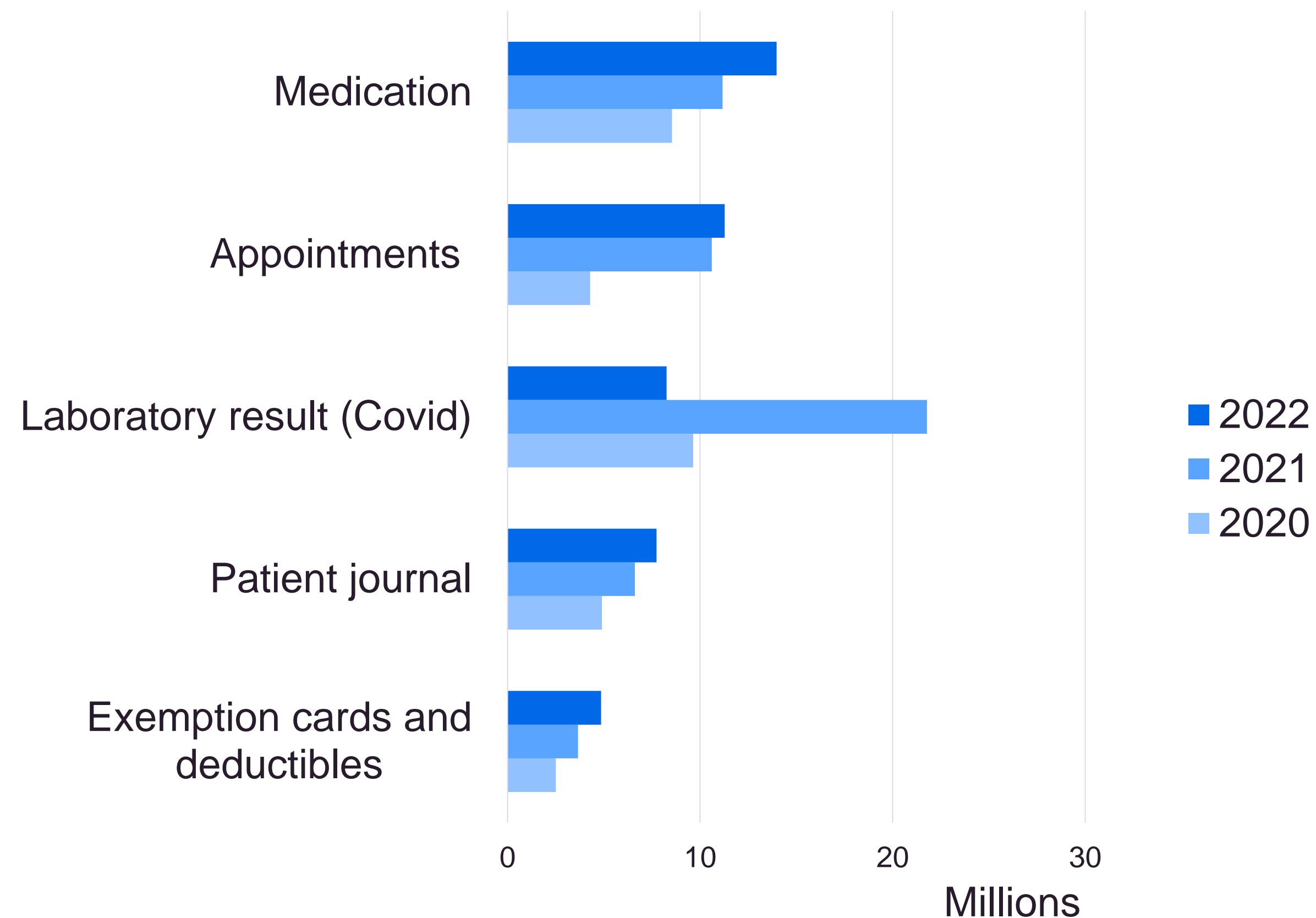
Annual visits to Helsenorge (millions)





Helsenorge – most popular services

Helsenorge - the five most popular services 2020 to 2022

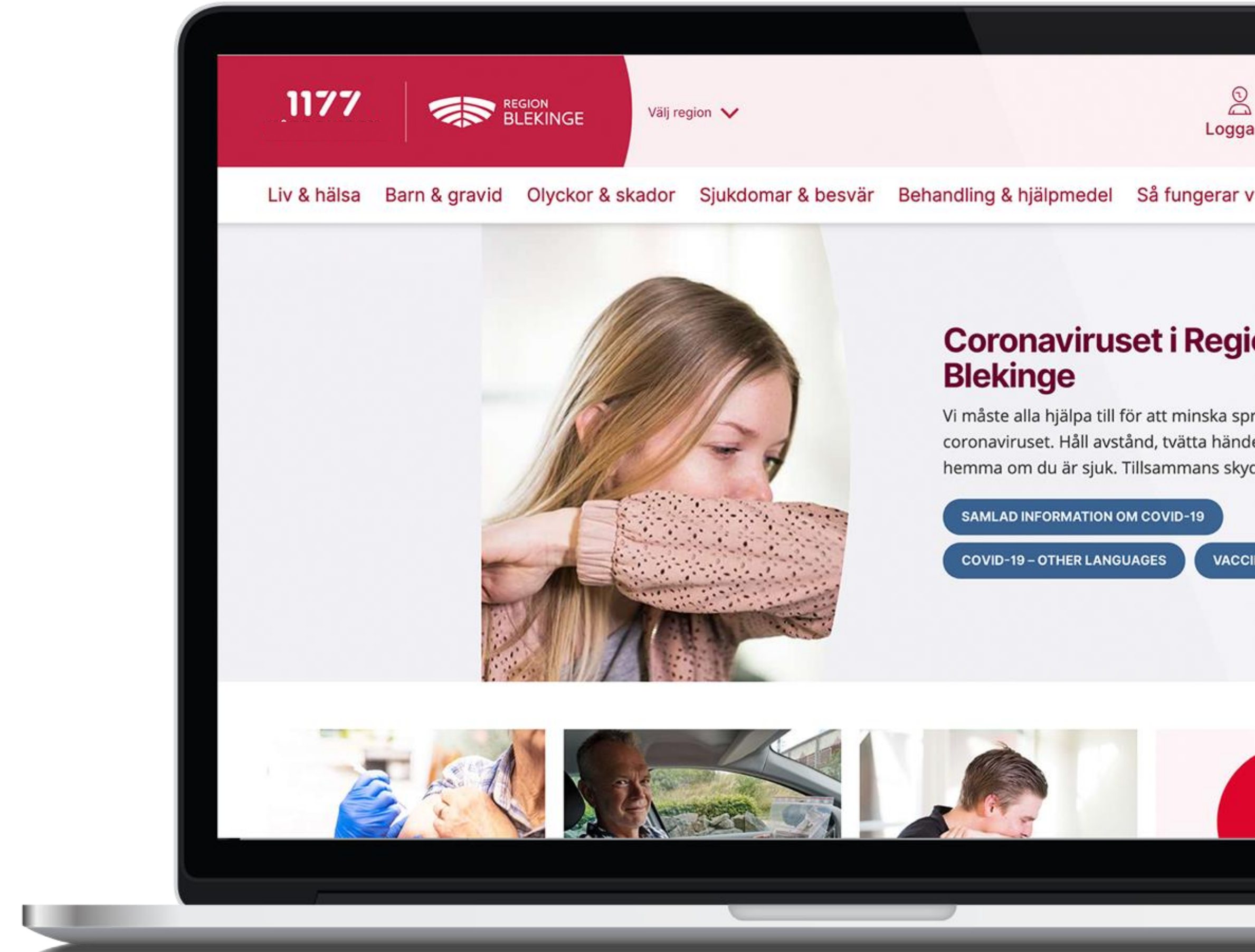
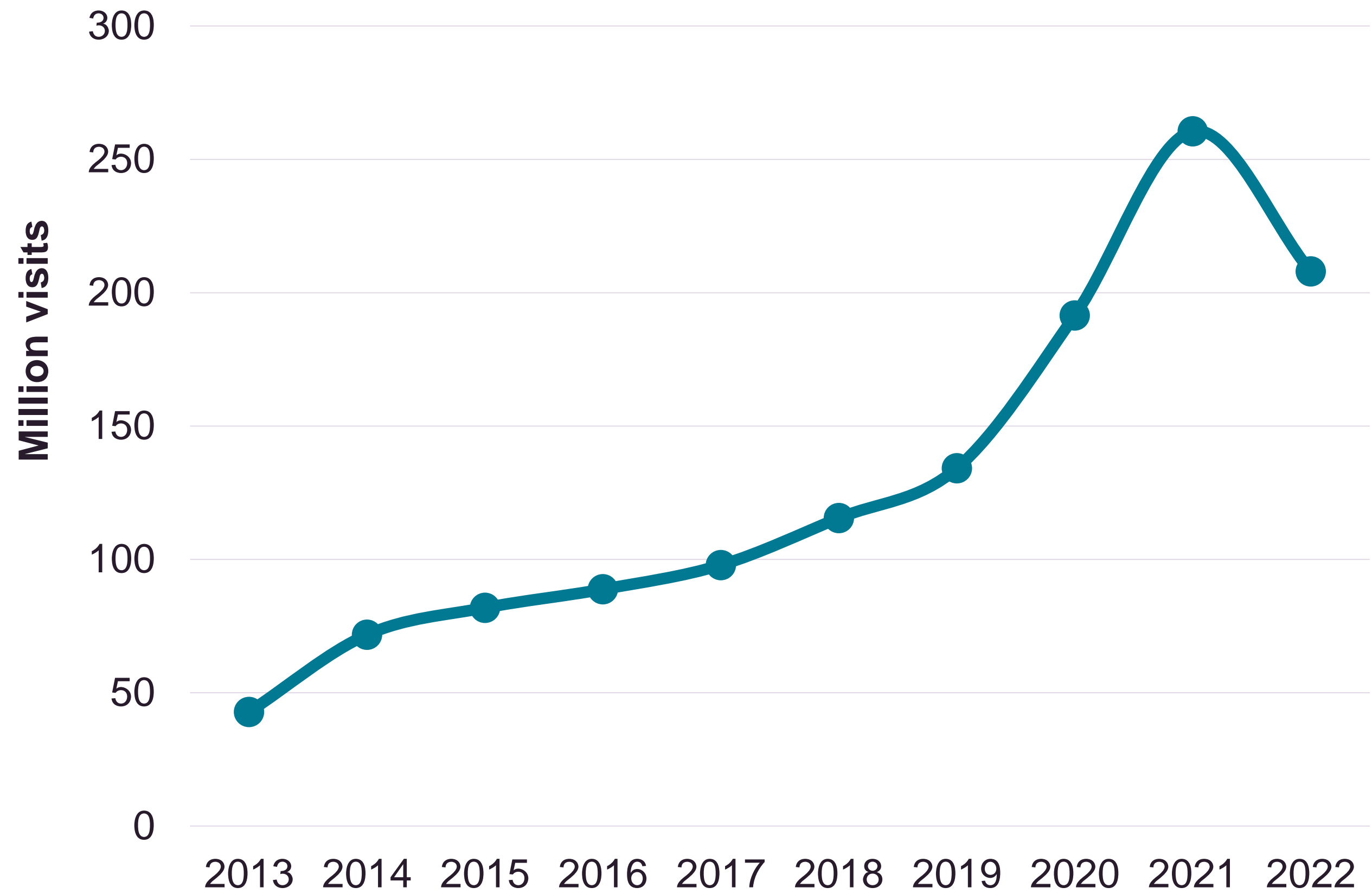


* "Messages" was not part of the 2020-report as a messages was not considered as a "service" in itself at that time. After a reconsideration we have decided to include it to show how this functionality develops over the years.



1177

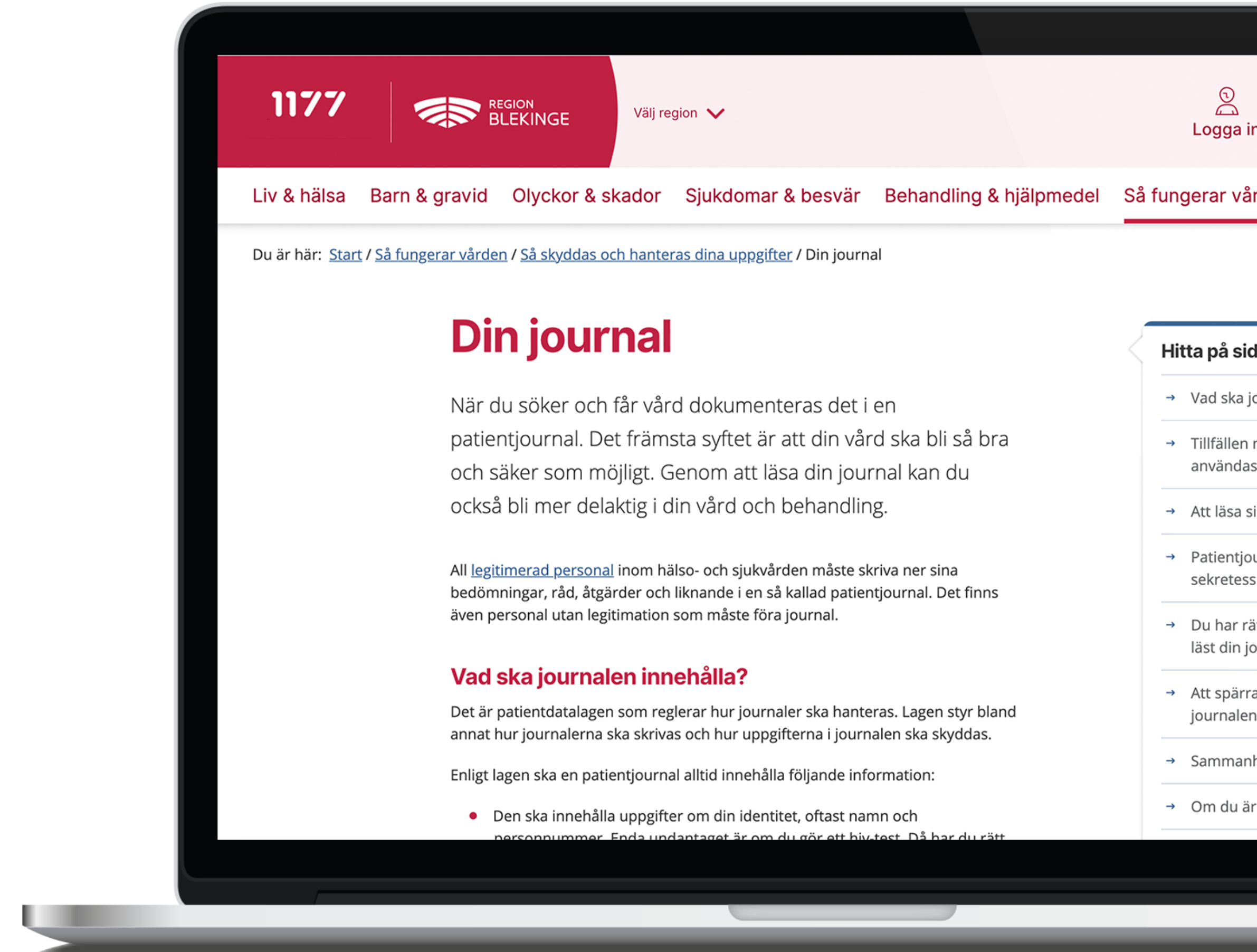
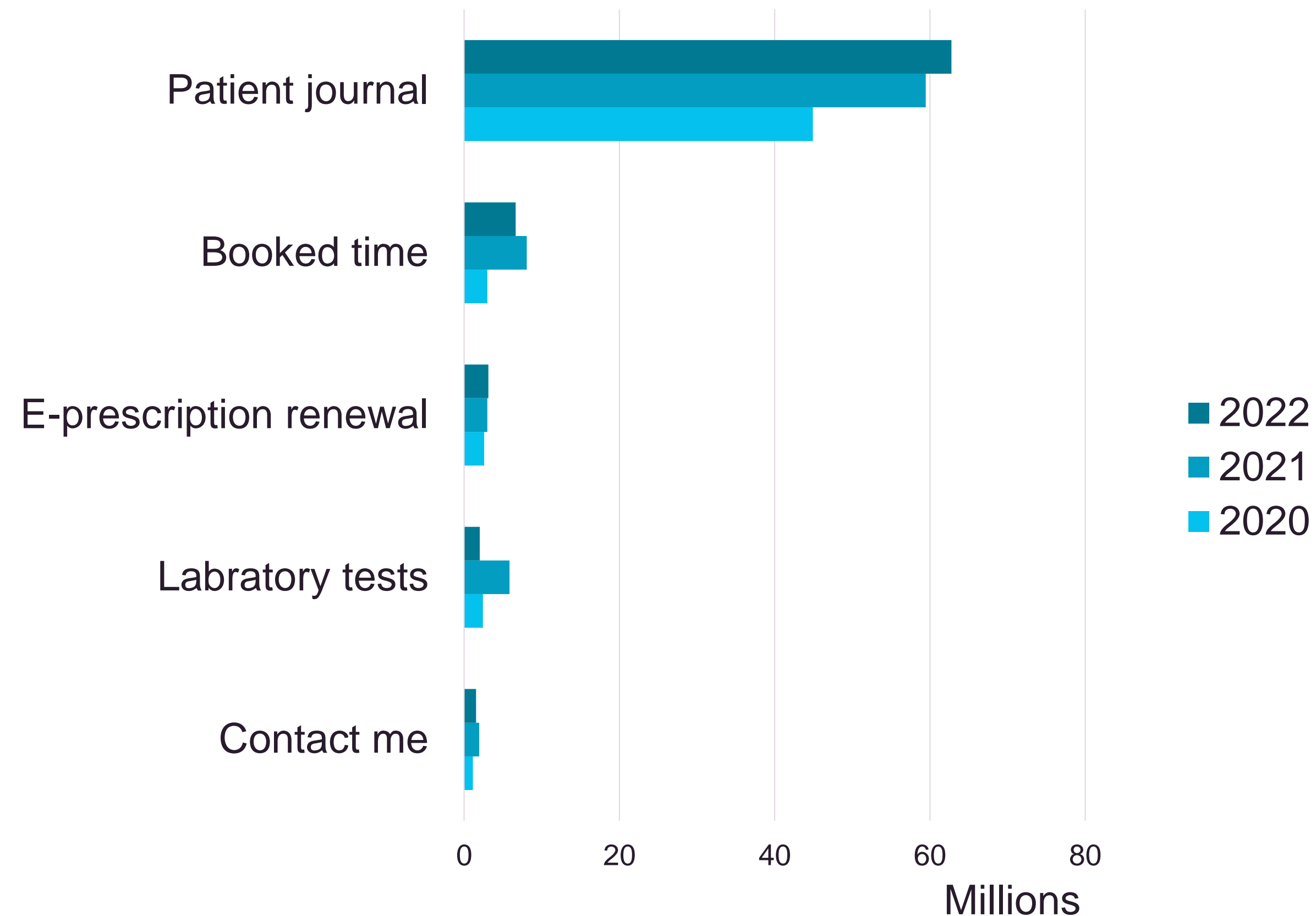
Annual visits to 1177 (millions)





1177 – most popular services

1177 - the five most popular services 2020 to 2022



In addition, there are about 3 000 articles on symptoms, diseases, treatments and proactive healthcare and information about your legal rights as a patient

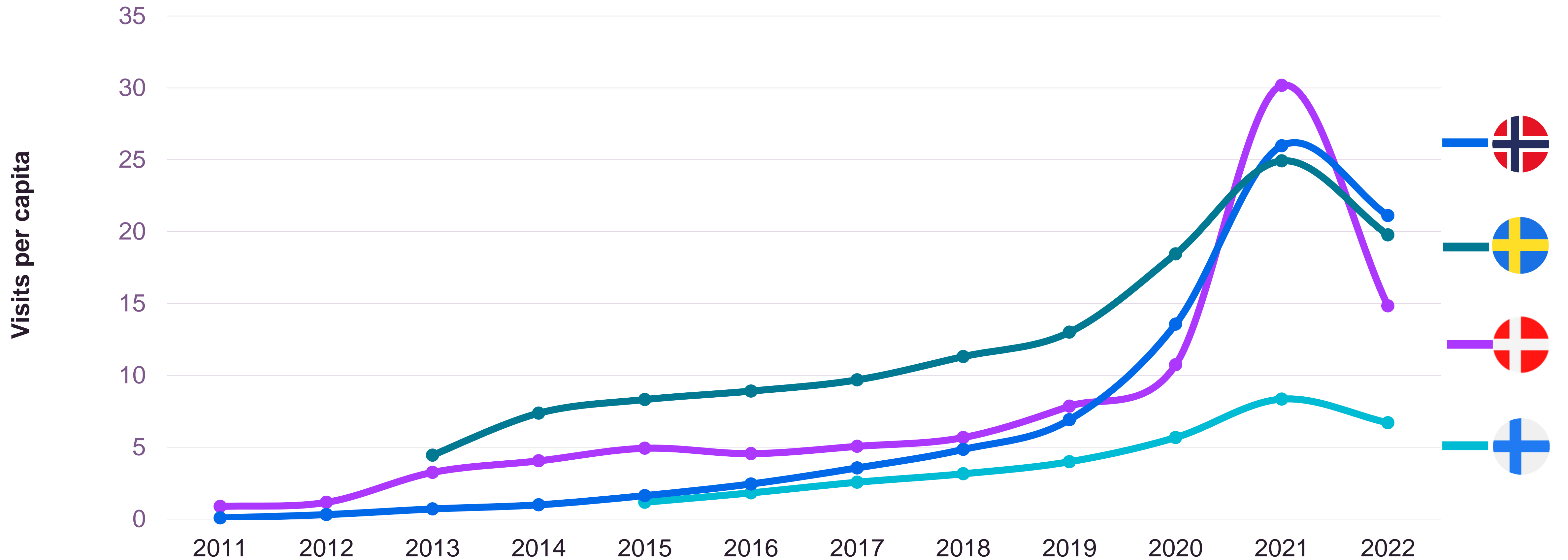
Decline in portal visits as corona pandemic ends

There are many different drivers to the visits going forward. Some of these can be:

- Still strong focus on keeping portals relevant and up to date through new functionality and increased access for citizens to new groups of health professionals.
- The end of the corona pandemic leads to reduced usage of corona related services such as Covid self-test, chatbots, checking their lab results, Covid certificate and self-service booking of vaccination.
- E-consultations still being used
- web traffic, work with search engine optimization, UI adaption etc.
- Brand management and tracking across countries
- User satisfaction and recommendations (see Net Promoter Scores later in this report)
- Still strong Government support for portals
- Healthcare staff refer patients to their respective countries' portals for healthcare-related information
- As before, portal developers continue to monitor

Decline in annual visits after new record in 2021 in all countries

Annual visits to national health portals per capita*



*Figures for Denmark are updated to include traffic through mobile app

2022: Portal timelines and analysis



Requirements for corona passport and tests were discontinued in January, which resulted in a drop in visits and logins. Visits and logins were still higher than pre-corona – especially in the MinSundhed app.



The use of Covid certificates was temporarily restricted in January. Regional restrictions and restaurant restrictions due to the Covid pandemic ending in March and therefore the use of a Covid certificates ended in practice in spring (basis of the law 31st of May 2022). Number of logins stabilized on a significantly higher level than pre-Covid.

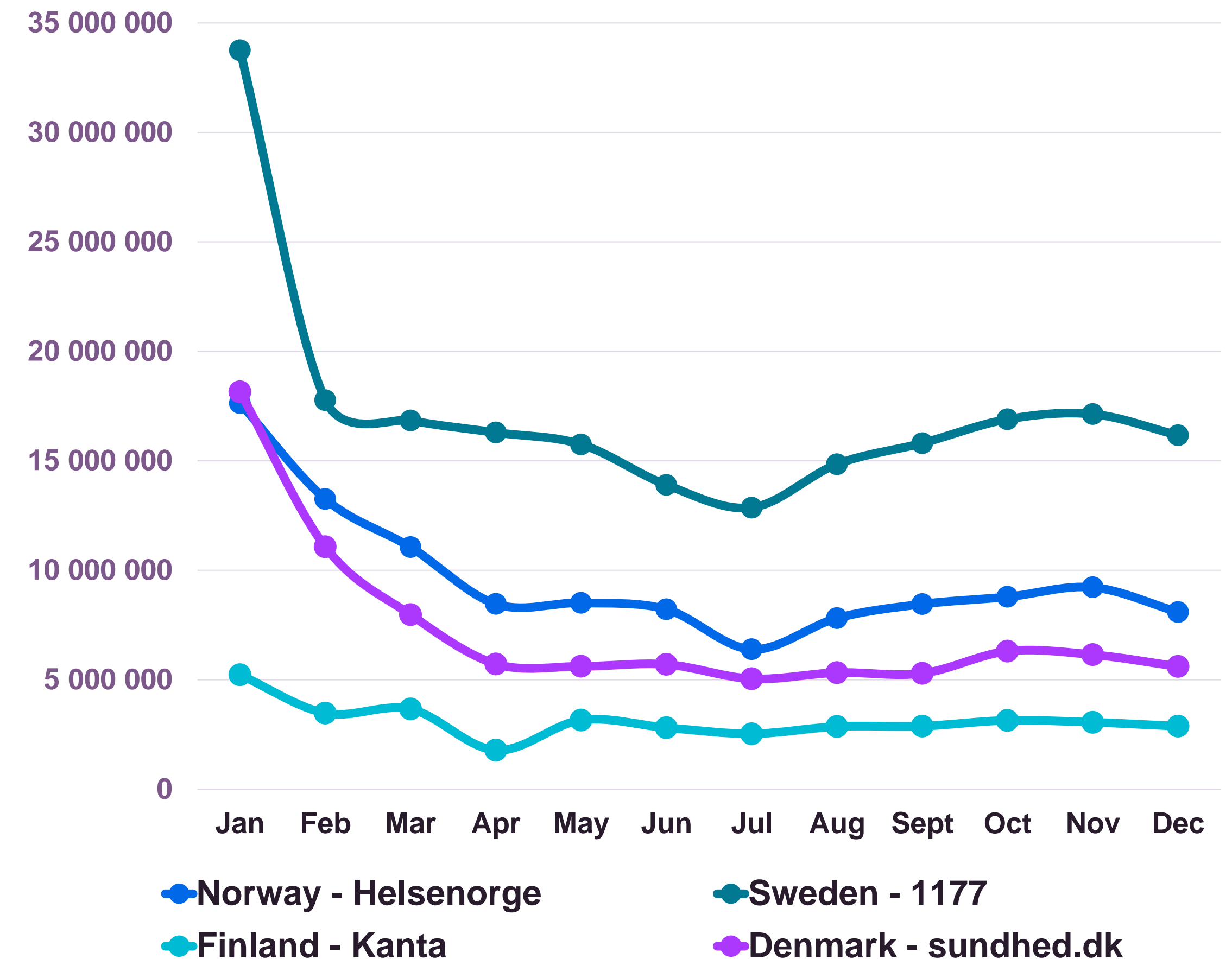


After mandatory covid testing was discontinued in February, both visits and logins on Helsenorge dropped. Still on a higher level than before the pandemic. A new increase through the autumn linked to seasonal cold and annual influenza. Back to more normal variations in usage of Helsenorge.



A sharp decrease appeared after the third vaccination in the end of 2021/beginning of 2022. Since then the number of visits has stabilized on a lower level, but still clearly higher than pre-Covid. The seasonal differences are normal during rest of 2022.

Portal visits per month 2022



Population



HELS
norge
5,5 Million



Kanta
5,6 Million

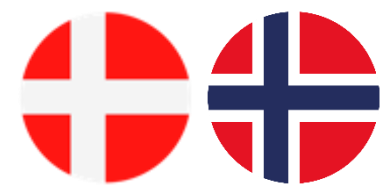


sundhed.dk
5,9 Million



1177
10,5 Million

Denmark, Finland, Norway and Sweden all have national health portals



Denmark and Norway primarily have national services available through the portals, although there are some regional differences in Norway.



Sweden has an extensive national content of knowledge information with the option to add regional information. The available services through the portal differ between the regions, since they have the autonomy to choose which services they want to prioritize for their residents through 1177 or elsewhere on their regional web.



In Finland, MyKanta is the national health portal which serves citizens across sector and municipal borders. The data is available even if the healthcare provider or place of residence changes. Most wellbeing services counties and private service providers also have their own portals via which residents can access service directories, book services etc.

Denmark, Norway and Sweden also have apps with various functionality

Denmark

- App has a different interface and many functions found on portal
- Separate colonoscopy (TarmTjek) and Muscle / skeleton pain (TrænSmertenVæk) apps

Finland

- No MyKanta app available, but portal is mobile scalable
- 3rd party apps allowed to retrieve and insert data in Kanta PHR solution

Norway

- App has similar interface and all functions found on portal

Sweden

- App has similar interface and all functions found on portal
- No services outside login system (for security reasons)
- Decision has been made on developing a more advanced mobile app.



How well known are the portals?

Denmark

- Citizens perception: **Good** (NPS*: 21(2023))
- 96% has heard of sundhed.dk (2022)

Finland

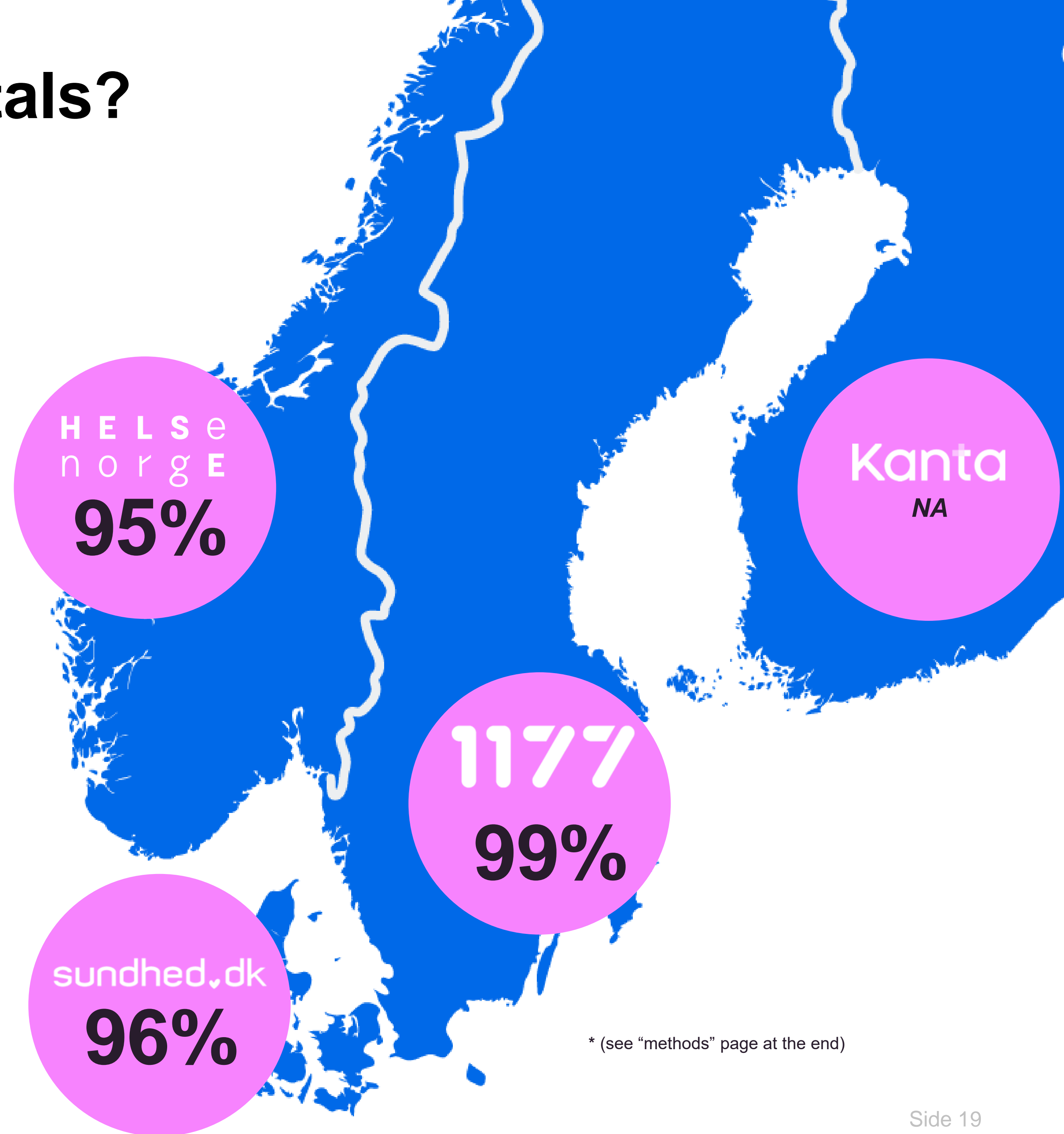
- Citizens perception: **Good** (SUS* 72,7/100 (2021))
- 83% of adults used MyKanta 2022 (92 % 2021)

Norway

- Citizens perception: **Very good** (NPS: 41 (2022))
- 95% has heard of Helsenorge (2022)

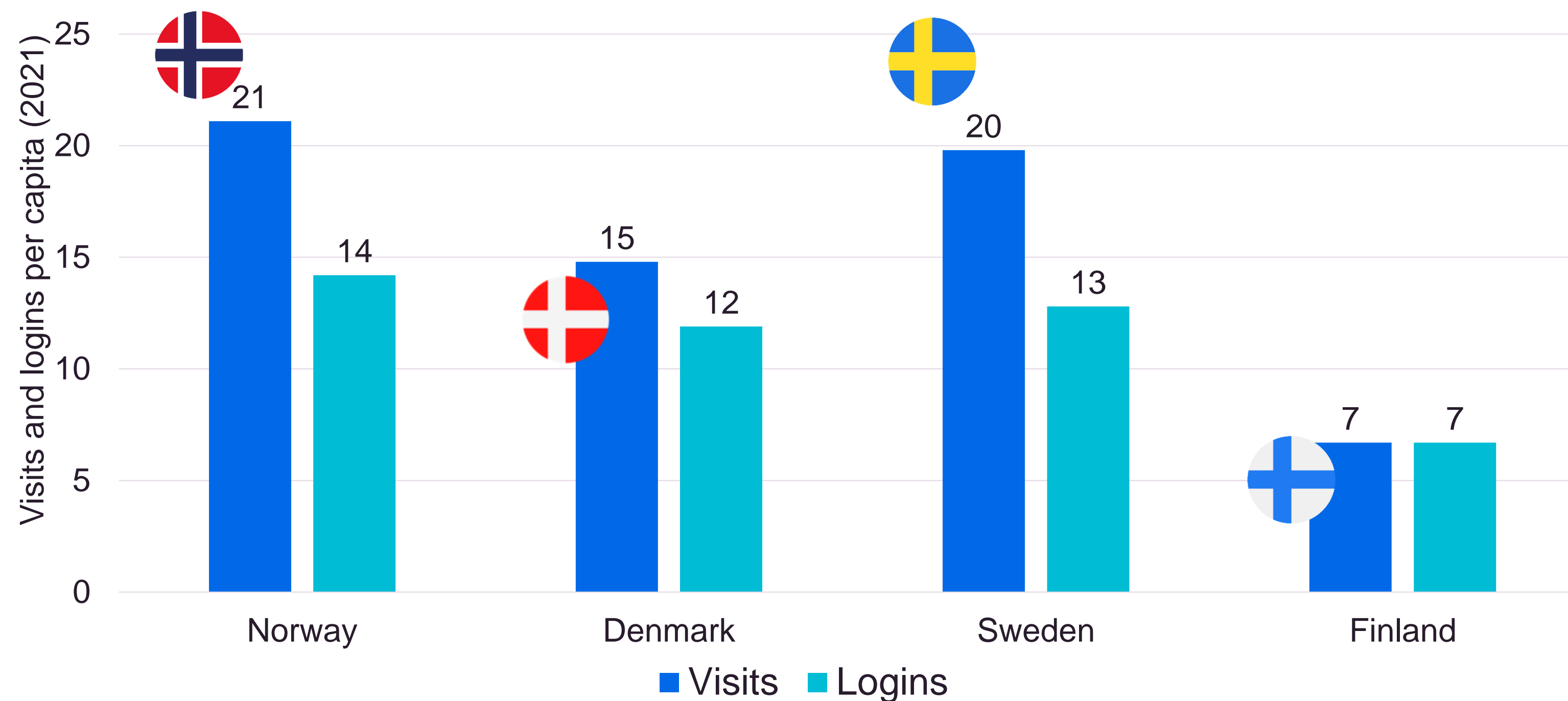
Sweden

- Citizens perception: **Very good** (NPS: 46 (2022))
- 99.2% has “heard of 1177» (2022)



* (see “methods” page at the end)

Visits per capita is similar between countries with similar health portals (Norway, Denmark and Sweden)



The countries use different methods for counting visits and logins, but the numbers give an indication of usage. Portal structures in different countries produce differences.

Finland: Kanta Services offers primarily services that require logging in (MyKanta) and offers limited open information pages (kanta.fi) compared to the other portals.

Denmark: Traffic from mobile app requires log in.

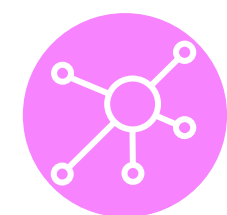
The portals' main target group is residents, but Denmark also targets other groups



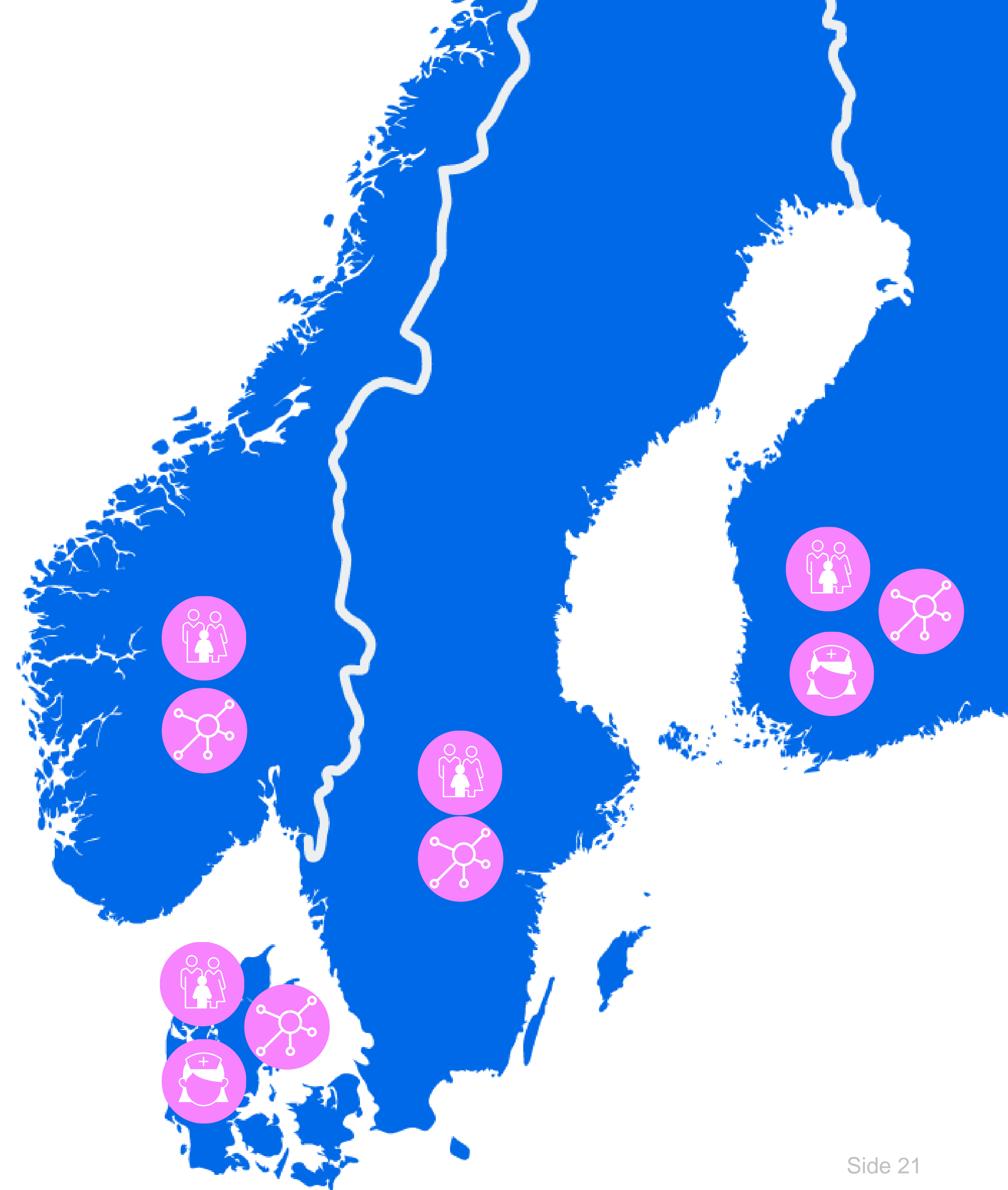
The national health portals are primarily aimed at serving the countries' residents.




In Denmark, there are also services for healthcare professionals, such as access to journal documents and information about diseases and treatment (Doctor's Handbook).





There is a broader tendency that national health portals are the citizens user interface to a broader health information ecosystem used by an increasing number of health professionals and processes within the health sector in each country.

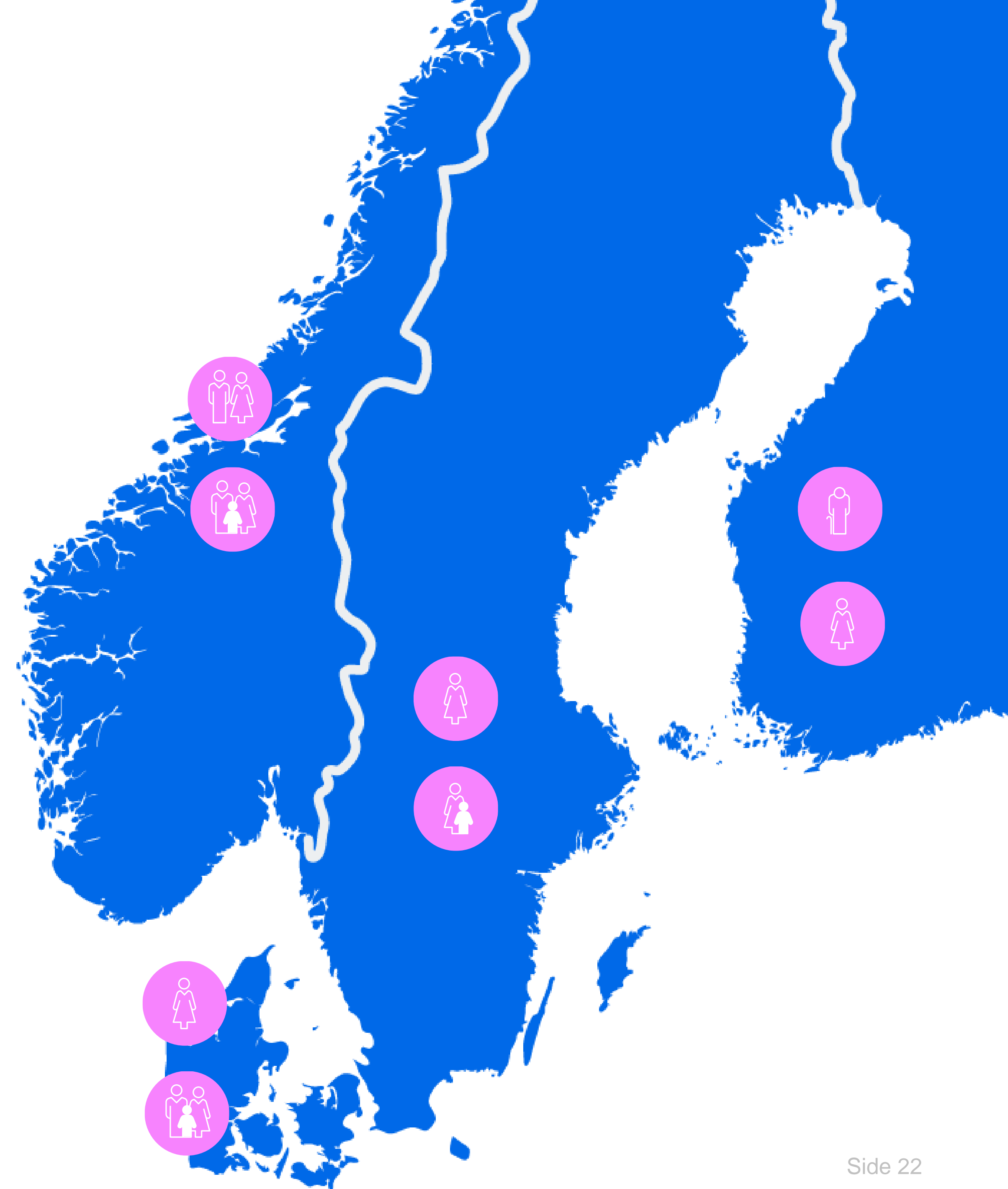


Women use the portals the most, and the open information pages are the most visited

 In Finland, Sweden, and Denmark, women are the most frequent users of the portals. In Norway, there are no major gender differences.

 In Sweden, younger and middle-aged female residents use the services the most, while in Finland the services are used more by the young and middle-aged (age 18 – 65). In Denmark the services are used mostly by the middle-aged and elderly.

 In Norway, there are no major differences in usage between age groups.



Use of interactive channels of communication with healthcare professionals is increasing



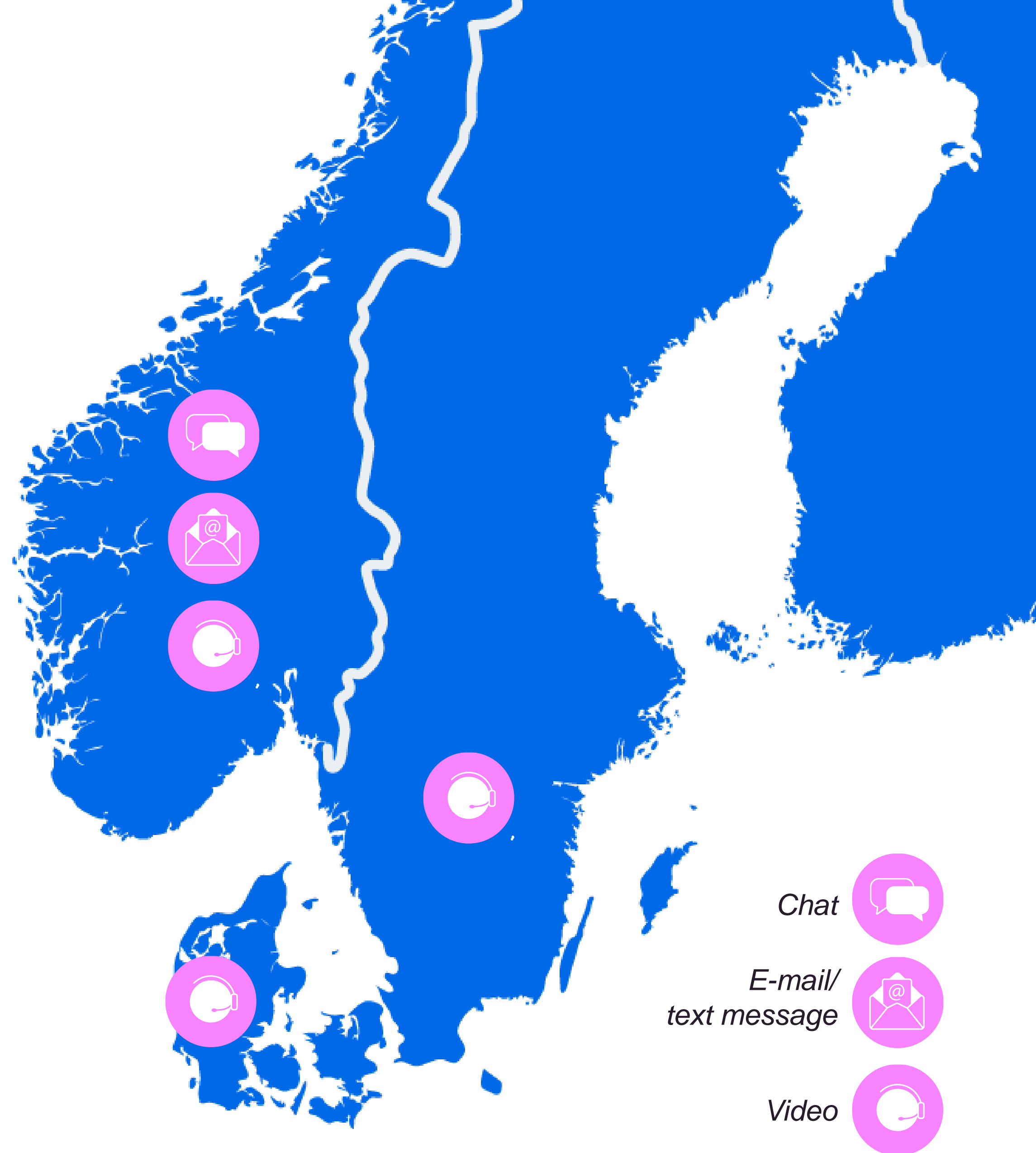
In Norway, Helsenorge offers a platform for asynchronous communication with GPs and other entities. Strong focus on enabling citizens to communicate with health professionals in municipalities.



In Sweden, a brand-new service within the 1177 family was launched in 2023. Through the 1177 direct service (177 direkt), the resident starts an automated chat dialogue and receives recommendations based on an extensive database of individual requests. There is also the option to chat or video chat with a nurse or doctor. The resident can also request a physical appointment if needed.



In Denmark, during the corona pandemic, video consultation functionality to cover psychologist, chiropractor, physiotherapist and dental hygienist has been developed. Video to own doctor is covered outside sundhed.dk (MinLæge).



Chat

E-mail/
text message

Video

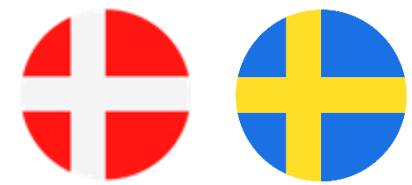
*Asynchronous communication = e-mail, text message

**Synchronous communication = video, telephone, direct chat messaging

Denmark, Norway and Sweden's portals provide **informational pages** on disease and treatment



The portals provide information about diseases, symptoms and treatment. They are the most visited portal pages in Denmark, Norway and Sweden.



Denmark and Sweden provide a list of treatment providers, while Norway only partially offers this.



Kanta in Finland does not have information about diseases or treatment.



Denmark, Norway and Sweden also provide information about patient rights on their portals.

Some of the portals also include lifestyle advice on how to stay healthy.



All countries now offer citizens access to their patient journals



In Denmark, patient journals are available from public and most private hospitals. Journals from specialists are expected to be available in 2023.



In Finland, the entire journal is available through the portal from public and private health care.



In Norway, hospital journals are available in three out of four health regions through national portal.



In Sweden, journals are available, but each region decides what information is shown, and therefore the content varies from region to region.



Donor cards are available in Denmark, Finland and Norway



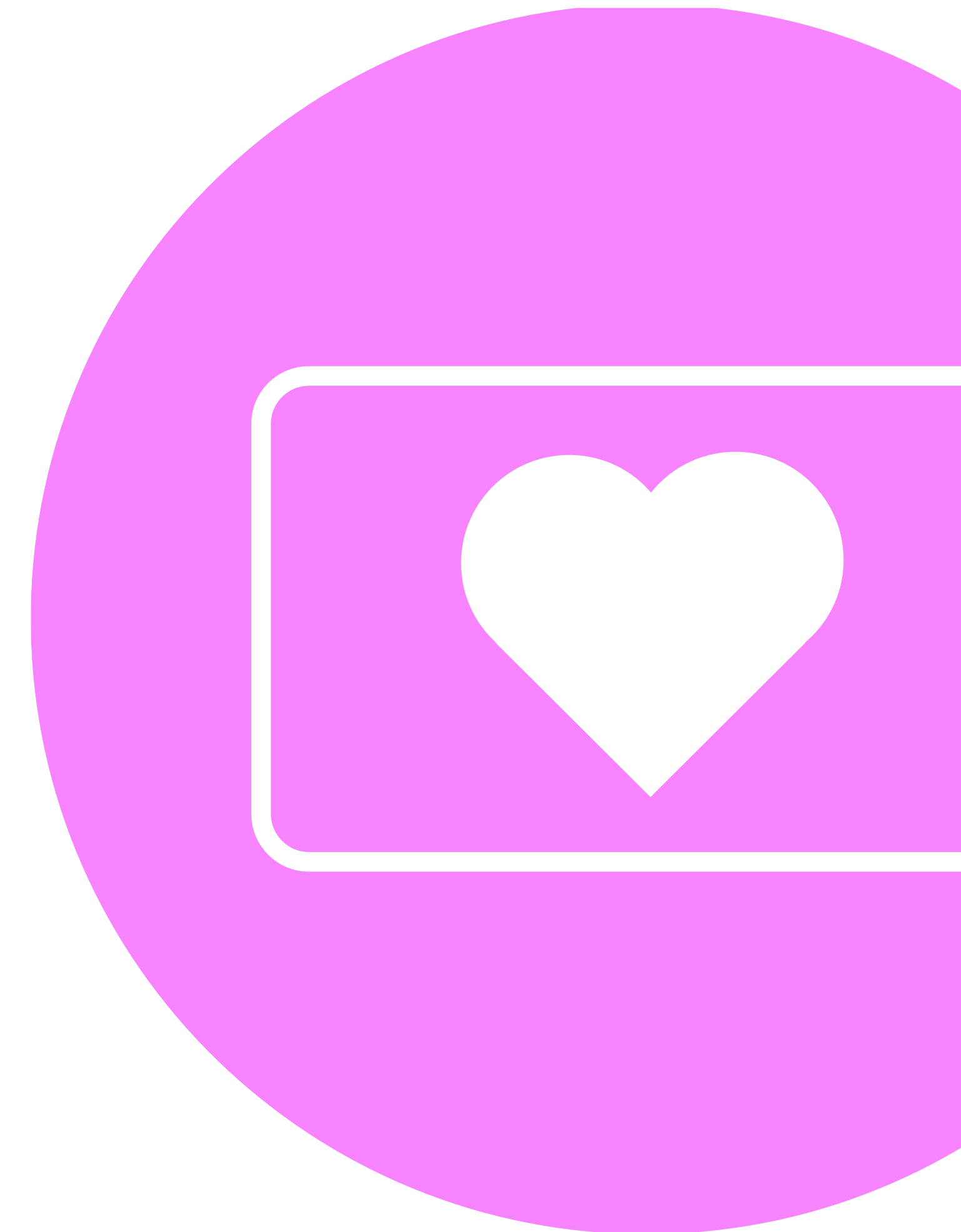
Donor cards are available in Denmark, Finland and Norway.










In Sweden, 1177 links to Swedish National Donor Register.



Denmark and Finland also provide documentation of advance directives, which allow residents to decide in advance whether they want to receive life-prolonging treatment or resuscitation in the event of cardiac arrest.



Information about prescriptions is available in all countries. Overviews of medications and vaccines vary

Medication 	Vaccines 	Laboratory 
 <p>Overview of prescribed medication, prescribed treatments, and prescriptions two years back in time available. Prescription renewal available.</p>	<p>Vaccination status is available. Residents can self-register vaccines, for example vaccines taken abroad but not approved by health care professionals.</p>	<p>Yes</p>
 <p>Prescription renewal and an overview medication is available.</p>	<p>Vaccination status is available.</p>	<p>Yes</p>
 <p>Overview of prescriptions available, but not a complete overview of medications. Prescription renewal available.</p>	<p>Vaccination status is available.</p>	<p>Yes</p>
 <p>Overview of selected prescriptions for all regions available. Prescription renewal available.</p>	<p>Vaccination status is now available in 19 of 21 regions.</p>	<p>Yes</p>



Overview of appointments with health services is partially available in Denmark, Sweden and Norway



Overview of booked appointments with GPs, specialists and public hospitals. Appointments with municipal health care available in some municipalities – more will be gradually added during 2023.



Overview of booked appointments or possibility to book appointments not available.



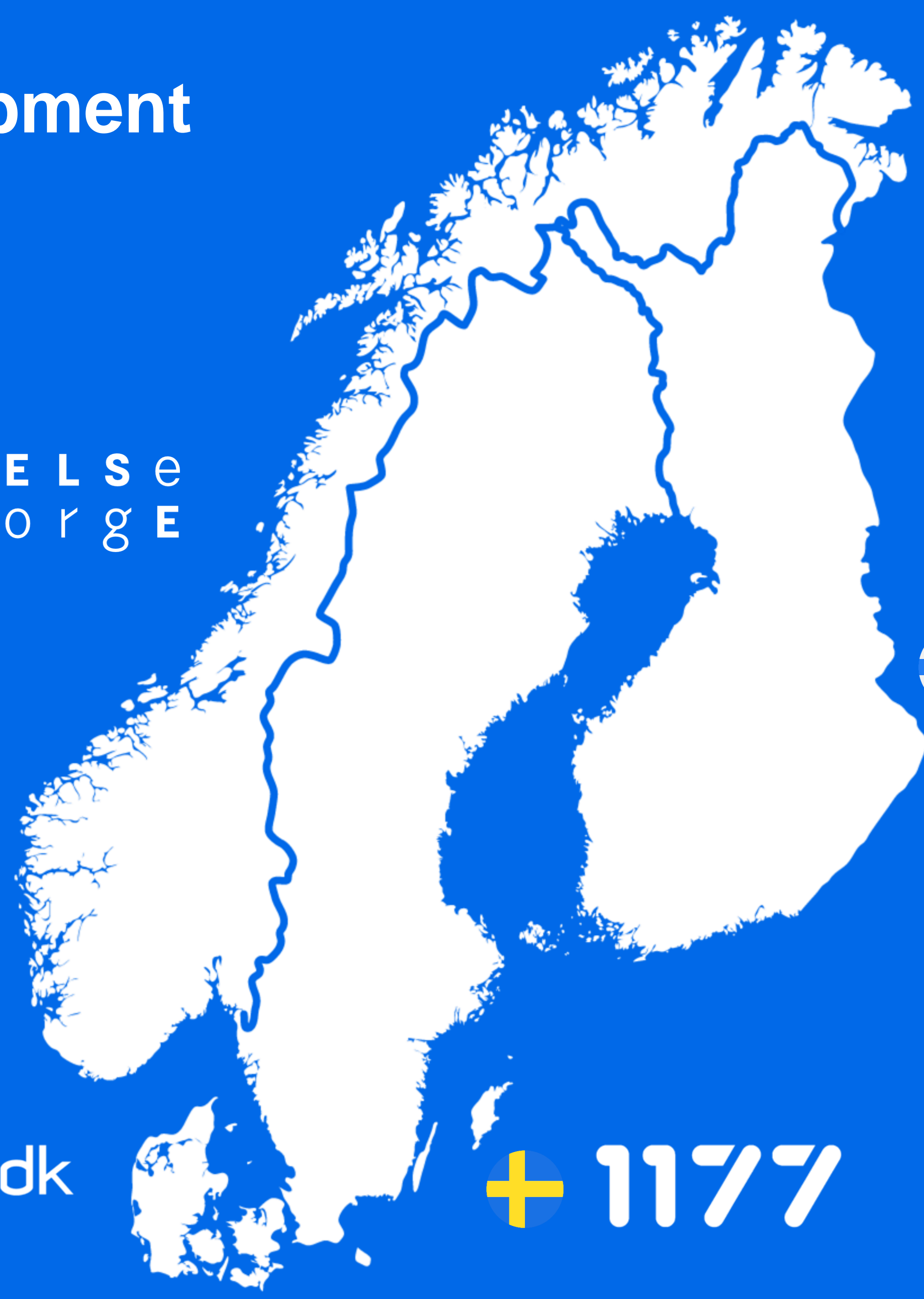
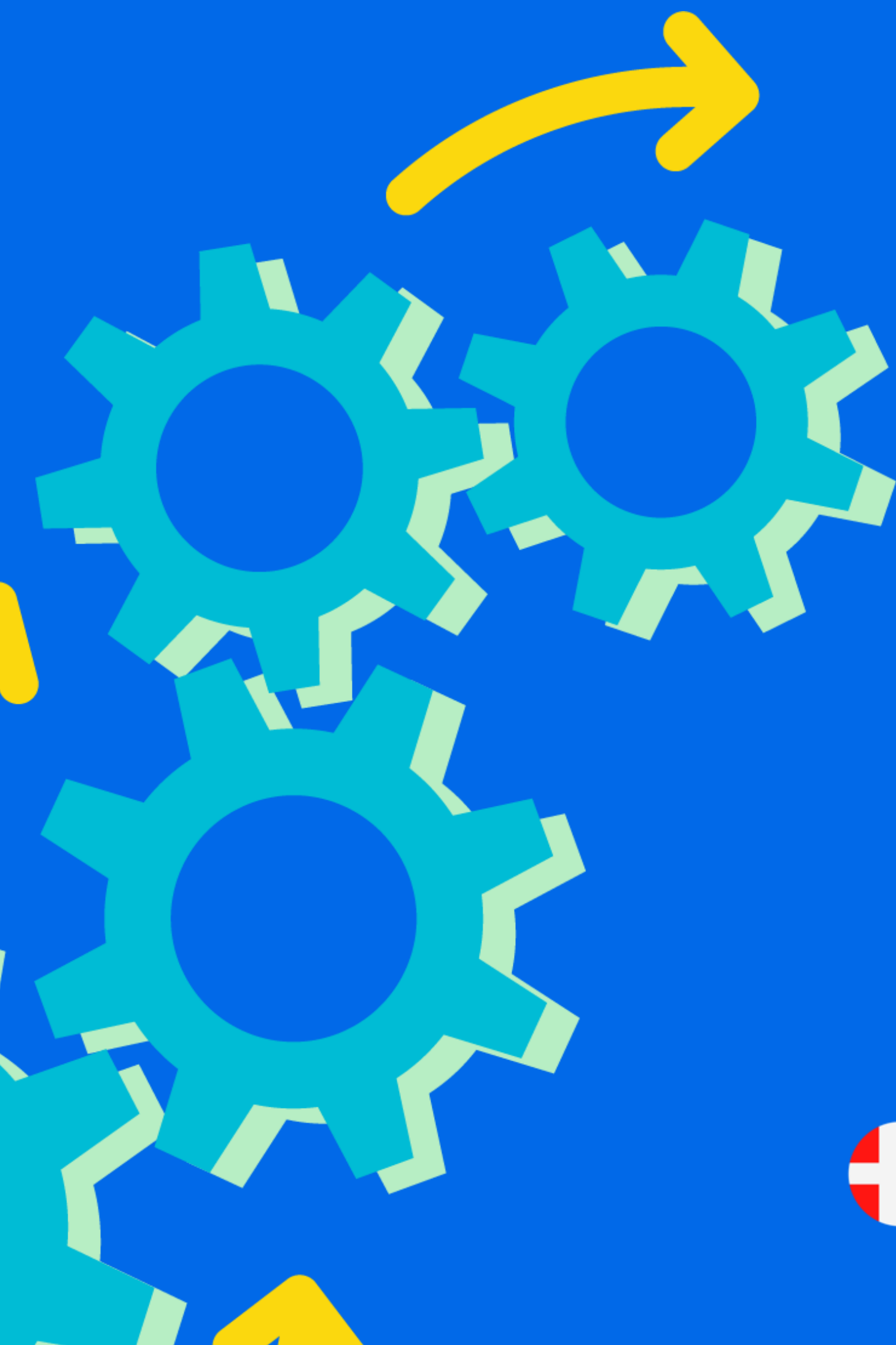
Overview of booked appointments available in some parts of the health services and some health regions. Possibility to change certain types of appointments in these regions available.



Access to and possibility to change booked appointments available, but only at some health receptions, as each reception decides what services they want to offer through 1177.



Further plans and development



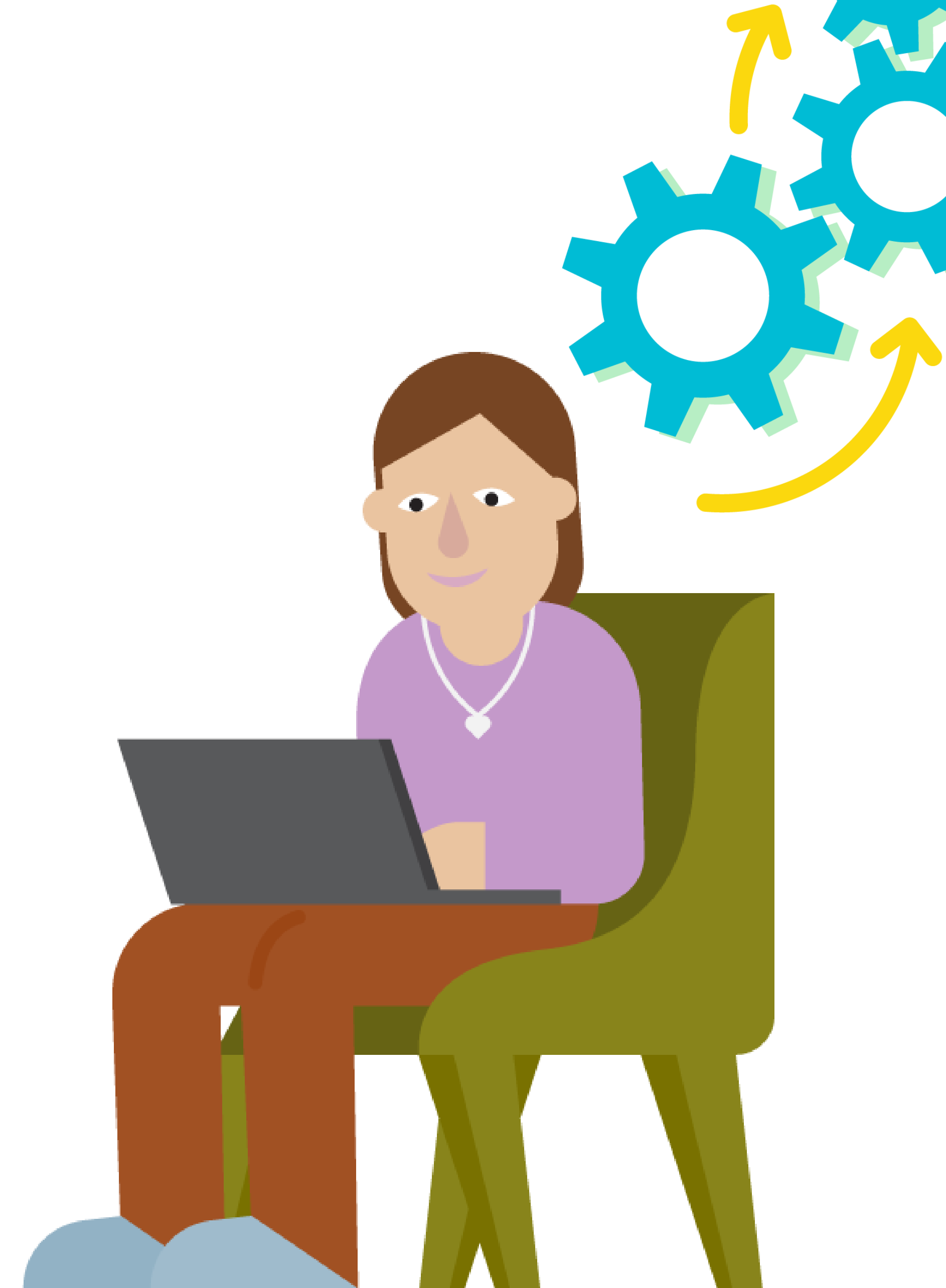
Further development



Sundhed.dk have added new functionality for hearing impaired residents and will add access for health professionals in 2023.

Focus in 2023 will primarily be on maintenance and improving stability over developing new services.

sundhed.dk



Further development



In Finland, the content of the patient data archive is continuously expanded (e.g. oral healthcare and imaging studies).

Social services data will be available 2023.

Self-registering of measurement data (weight, blood pressure, blood sugar, pulse) will also be possible soon.

New MyKanta user interface will be introduced in stages from the end of 2023.

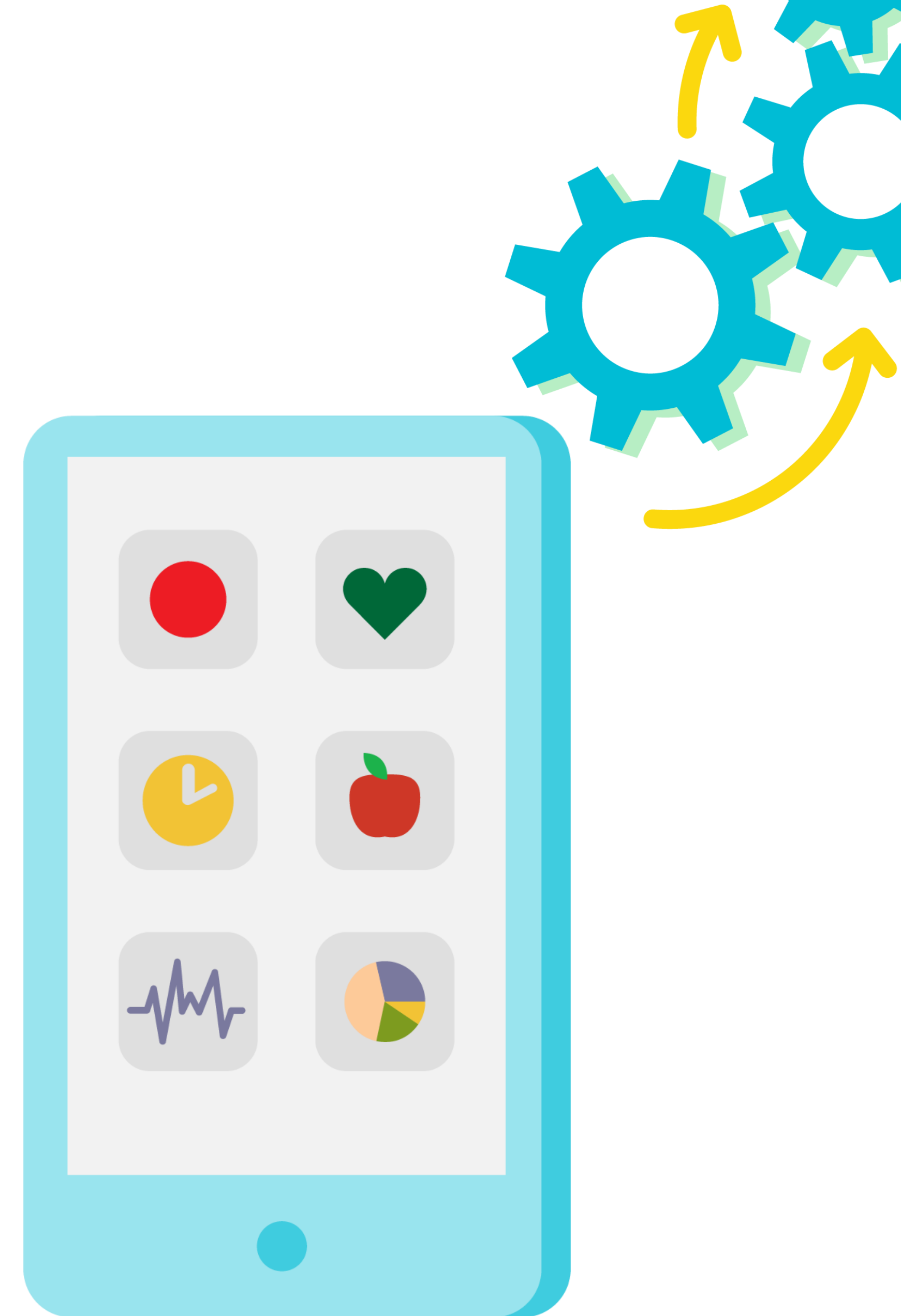
Kanta



Further development



Helsenorge will be used as the communication platform between citizens and new groups of health professionals in the municipalities, e.g. community health centres and care institutions. Already existing functionality will be used to send and receive messages, get an overview of appointments, receive notifications and access relevant information.

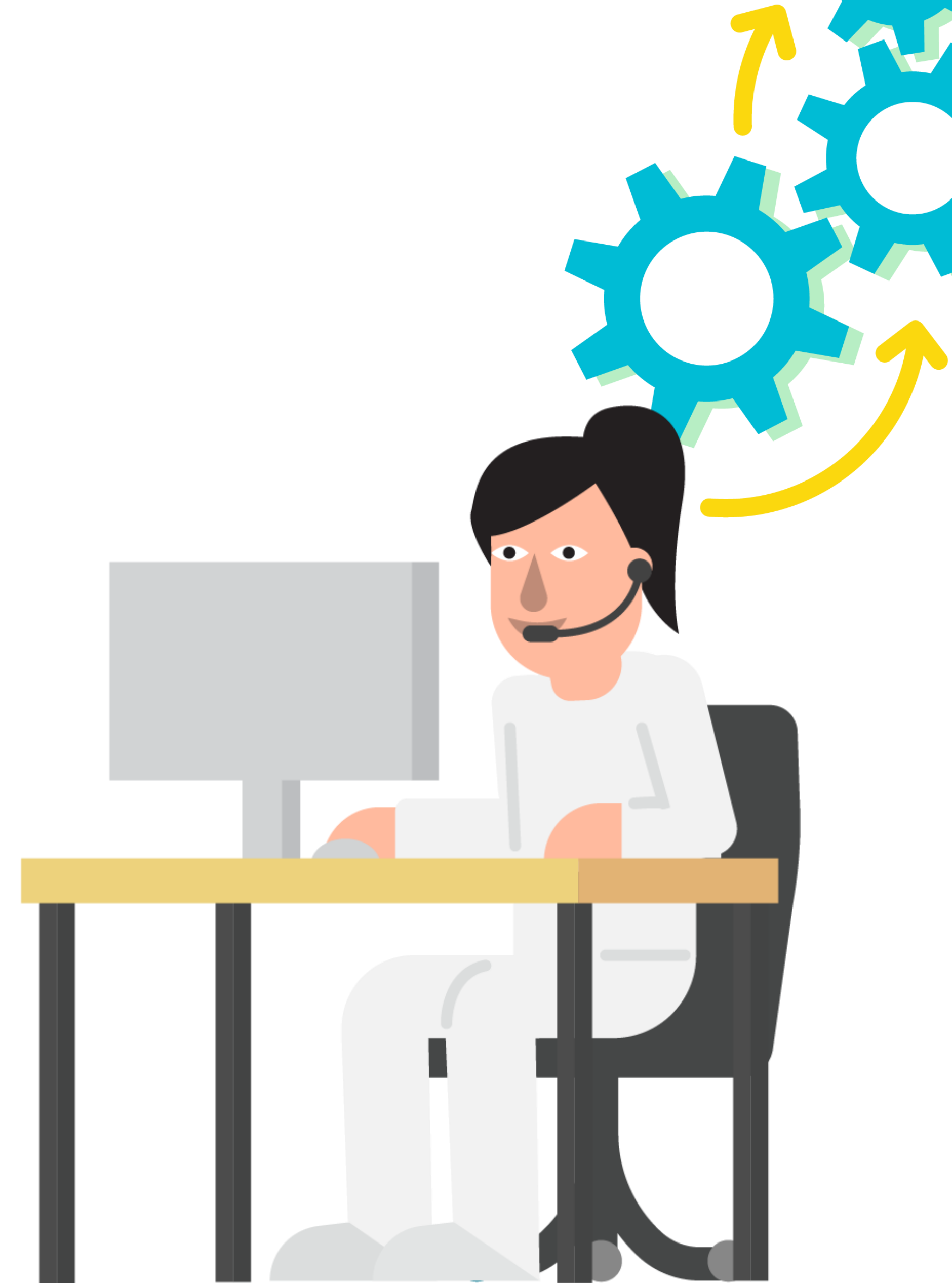


Further development



In Sweden, a brand-new service within the 1177 family was launched in 2023. Through the 1177 direct service (1177 direkt), the resident starts an automated chat dialogue and receives recommendations based on an extensive database of individual requests. There is also the option to chat or video chat with a nurse or doctor. The resident can also request a physical appointment if needed.

1177



Explain text, method

- This page contains background explanations to methods used in the report.

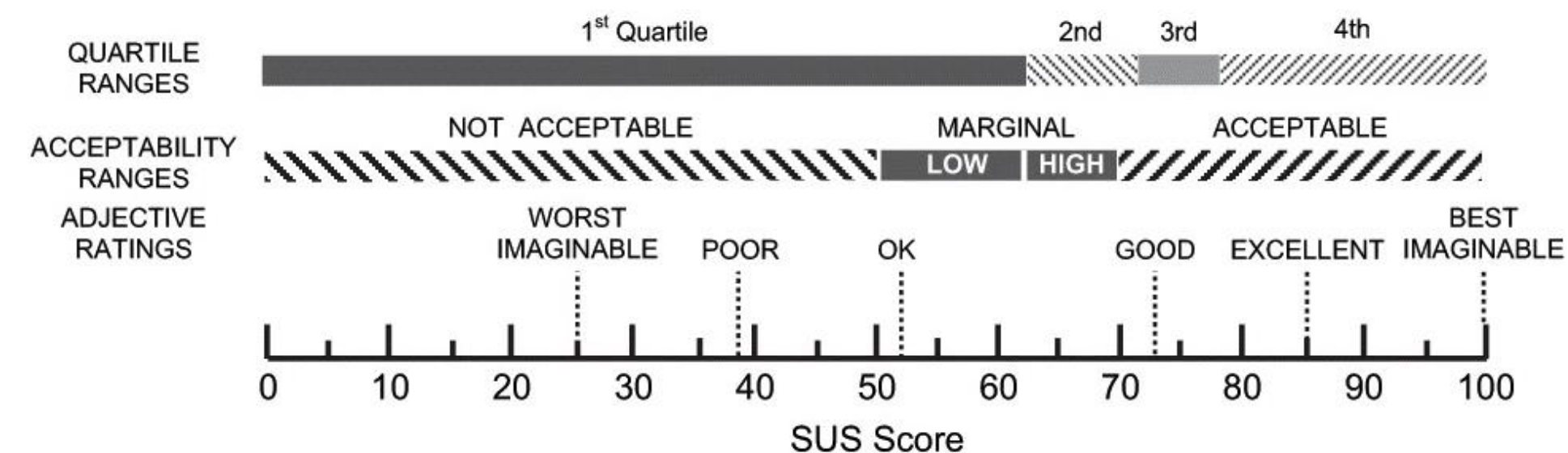
Different methods are used to measure user experience linked to portals:

Net Promoter Score (NPS):

- Net Promoter Scores are measured inside the portal (see NPS figures earlier) Net Promoter Score (NPS) is a tool to measure customers likelihood to recommend a company, a product, or a service to a friend or colleague.
- (-100-0) : Bad
- (0-30) : Good
- (30-70) : Very good
- (70-100) : Excellent

SYSTEM USABILITY SCALE (SUS) 0 - 100:

The System Usability Scale is the most frequently used questionnaire for measuring the subjective usability of eHealth apps. In Finland patients received an invitation to complete the questionnaire when they logged out of the MyKanta. Adjective rating scale according Bangor et al. [Full article: An Empirical Evaluation of the System Usability Scale \(tandfonline.com\)](https://doi.org/10.1080/10447310600571446)



Cookie policy:

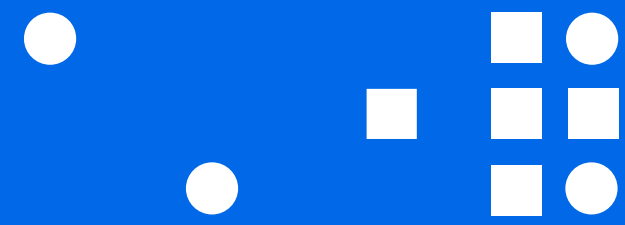
- **Sundhed.dk** uses cookies to collect visitor statistics. GDPR compliant in which the user actively have to give consent, default to no to tracking. Around 50 % of the users accept the use of statistical cookies. Logins numbers are not affected by cookie, only aggregated count of numbers of logins.
- **Kanta.fi**: Cookies are used for collecting information about how and when the openly accessible kanta.fi web service is used. The MyKanta service gathers data about the number of logins and logouts. The personal identification data of the person logging in to the service is not gathered. Information about a person's behaviour or browsing history in MyKanta is not gathered, either.

Explain text, method

- This page contains background explanations to methods used in the report.

To secure comparison across the countries we describe the different metrics definitions here:

	Definition of «visits»	Definition of «Logins»
Norway	A visit (session) is the period of time during which a user actively uses Helsenorge. The session starts when the user opens the first page and ends when the page closes or when the user has been inactive for 30 minutes.	A login is counted every time a person logs in to Helsenorge. The person can log in several times during the same visit, and this is then counted as separate logins.
Sweden	A visit (session) is the period of time during which a user actively uses 1177.se. The session starts when the user opens the first page and ends when the page closes or when the user has been inactive.	A login is counted every time a person logs in to 1177.se. The person can log in several times during the same visit, and this is then counted as separate logins.
Denmark	A visit (session) is the period of time during which a user actively uses sundhed.dk. The visit starts when the user opens the first page, and ends when the user has been inactive for 30 minutes. If a user exit and returns to the site within 30 minutes, it will still count as one visit. Based on cookie consent, so only tracks the visits of users who actively consent to the use of statistical cookie. Note that traffic through mobile app requires log in and cookie consent.	A login is counted every time a person logs in to sundhed.dk. The person can log in several times during the same visit, and this is then counted as separate logins. Note that traffic through mobile app requires log in.
Finland	A visit (session) is the period of time during which a user actively uses kanta.fi (openly accessible web service). The session starts when the user opens the first page, and ends when the page closes or when the user has been inactive for 30 minutes.	A login is counted every time a person logs in to MyKanta to see personal data. The person can log in several times during the same visit, and this is then counted as separate logins.



Directorate of
e-health

Comparative analysis 2022: National Health Portals in the Nordics

Published: May 2023

Contact information: Mihai Dumitrescu – mihai.dumitrescu@ehelse.no
Jarle Hersvik – jarle.hersvik@ehelse.no
Andreas Leifsson - andreas.leifsson@inera.se
Frederik V. B. Lauridsen - fvl@sundhed.dk
Mari Holmroos - mari.holmroos@kela.fi