

Austrian Experience Transfer in the SRSS project

„Creation and implementation of the National eHealth Centre in the Czech Republic”

Christian Raming (aed Austria)

Petr Struk (NCeZ Czech Republic)

Project providers and beneficiary

Providers:

- SRSP - Structural Reform Support Programme is an EU programme that provides tailor-made support to all EU countries for their institutional, administrative and growth-enhancing reforms.
- aed Austria - Agency for Economic Cooperation and Development, Heiligenstädter Lände 29, 1190 Vienna
- EHTEL - multi-stakeholder organisation within Europe that brings together organisations and individuals engaged in all aspects of eHealth

Beneficiary:

Czech Ministry of Health

Project Team Leader

Christian Raming: c.raming@aon.at +43 (0)676 888 727 400

Different positions in healthcare since 35 years

Own company in Vienna since 2000

Involvement in eHealth projects in Austria and international

Team Leader of SRSS project in CR: Implementation of a NeHC

Aed – Agency for Economic Cooperation and Development, Vienna

Association - Austrian Ministries as Members

Partner of Czech MoH and SRSS

Domestic Project Co-ordinator

Petr Struk: pstruk@seznam.cz mobil: 731196656

Pediatrician, psychologist

Different positions in healthcare since 40 year

At present – co-ordinator of eHealth working group – Czech Medical Association J.E. Purkyně

Consultant to NeHC MoH

Involvement in eHealth projects in CR and international

Domestic Co-ordinator of SRSS Project in CR: Implementation of a NeHC

Project origin - complicated search for ways to implement eHealth system

Efforts to introduce eHealth tools and services systemically for about 20 years - very slow search and finding paths, e.g.

Identifier Netc@rds, VZP (2002-),

IZIP (2002-),

National eHealth Portal to be based on sundhed.dk model

eHealth readiness missions of WHO to the Czech Republic - 2007, 2008

National eHealth Strategy recommended to the Czech Republic

by the WHO project in 2011

Real milestones

- 2009 and 2012 – repeated unsuccessful attempts to launch the national eHealth system
- 2014 – eHealth experts' group initiative recommended to the MoH to elaborate the national eHealth strategy
- 2014 - 2016 - preparation and adoption of the National eHealth:
 - Strategy Key Point: Creation of a national eHealth Center

But...

there was no experience how to create the National eHealth Centre in the Czech Republic to fulfill the WHO recommendation

- 2017: SRSS offered MoH the possibility of a development project
- MoH proposes SRSS project “Creation and implementation of the National eHealth Centre in the Czech Republic“
- 2018: SRSS offered aed AUSTRIA as a project implementing organization and EHTEL as an eHealth expert organization

SRSS Project Czech Republic

- Development and Implementation of NeHC
- Start: March 2018
- End: March 2020
- Cooperation of Czech MoH and Austrian MoH - aed
- Austrian/ELGA – inspiration for National eHealth Strategy implementation

SRSS Project Czech Republic

- EU best - practice (EHTEL study)
- Site Visits: Denmark/Austria
- Discussed, adapted, harmonized with MoH Topmanagement
- Mandate and Structure
- Key-Project: Portal

SRSS Project Czech Republic

- October 2018: dedicated Team within MoH IT Departement
- January 2019: Own entitiy within MoH (Govenrtmental act)
- Communication Strategy/Delphi
- eHealth Board: Involvement of Key Stakeholders
- IHE technical framework

SRSS Project Czech Republic

- Action Plan of NeHC 2020/2021
- Implementation of technical framework/architecture
- Implementation of first solutions
- Consensus finding:
 - + Key Stakeholders (Board)
 - + Users/Partners (national eHealth Platform)
- Portal Content

Austria: Health Care System principle and National eHealth Strategy priorities

- Federalist structure: MoH, Social Insurance, 9 federal states, prof. associations
- The federal government is only responsible for enacting basic laws.
- Legislation on implementation and enforcement is in the responsibility of the federal states and the federal health funds (“Landesgesundheitsfonds”)
- Austria has started the work to foster electronic data exchange and eHealth services in the Austrian healthcare system in 2005
- A national eHealth strategy was officially unveiled in January 2007
- Legal basis for the standardized, electronic health data exchange in Austria in the ELGA Act in 2012, which constitutes an extension of the Health Telematics Act 2005

Role, Authority and responsibility of ELGA according to the strategy

- The ELGA GmbH has no official normative mandate but leads and coordinates the standardisation and harmonisation process in Austria.
- The most important tasks of the ELGA GmbH regarding the standardisation are:
 - Requirements engineering and demand management
 - Coordination of the technical and legal standardisation activities
 - Coordination of goals and milestone of the working groups
 - Leading and moderating the working groups
 - Editorial work
 - Order external experts to support the standardisation process

Governance principles for ELGA

The corporate bodies of the ELGA GmbH are:

- Management (with two managing directors) and
- General Assembly. (owners: MoH, 9 federal states, Social Insurance), financial management
- Two advisory boards
- Coordination Committee (all shareholders)
- User Advisory Board (Associations)

During the implementation period till the “go-live” of all ELGA affinity domains a slim **Strategic Steering Committee** was appointed to fasten the decision making and escalation process.

Relationship with stakeholders

The implementation of ELGA in the Austrian healthcare system has a lot of contact points to several stakeholders besides of the owners.

Implementation partner (Core Components): each component was developed in an entire project (with an external project manager). The ELGA GmbH was responsible for the coordination of the projects.

Examples: Affinity Domains, User SW, Consulting external, eCard, eGovernment, prof. associations, Federal Economic Chamber, Standardisation etc.

Goals & objectives

The goals of the ELGA GmbH, as defined in the syndicate agreement “Syndikatsvertrag” are:

- Coordination and integration of all operative measures regarding the implementation of ELGA in Austria,
- Implementation of system components and support of pilot projects, and
- Quality- and acceptance management.

Projects:

National electronic health record

Pilot projects (e.g. e-medication)

Austrian EHR ELGA: Services

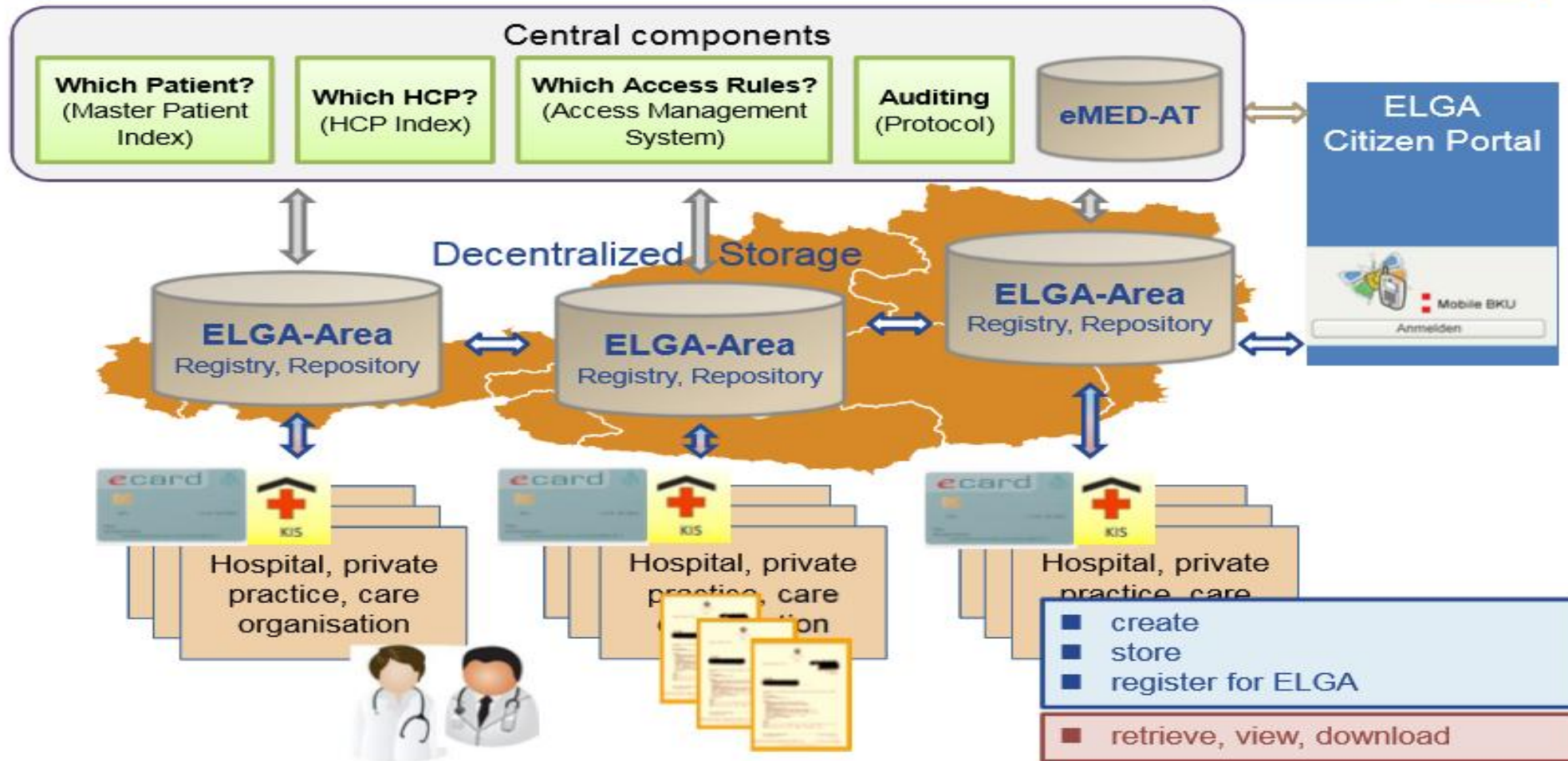
- Already available
 - Sharing Hospital Discharge Letters, Care Discharge Letters, Radiology and Lab Reports
 - Medication Record
- Coming
 - Immunisation record
- In Discussion
 - Telemonitoring for chronic diseases
 - Structured data export into medical registers
 - Cancer report, implant register
 - Ophtalmology report
 - ...

➤ See: <https://elga.gv.at>

Summary

In summary, the electronic health record “ELGA” was set up for a federalist structure on the basis of state-of-the art technologies, international standards, the Austrian eGovernment infrastructure, and in accordance with the generally accepted European Interoperability Framework. The ELGA GmbH was also an indispensable institution for the coordination of interests.

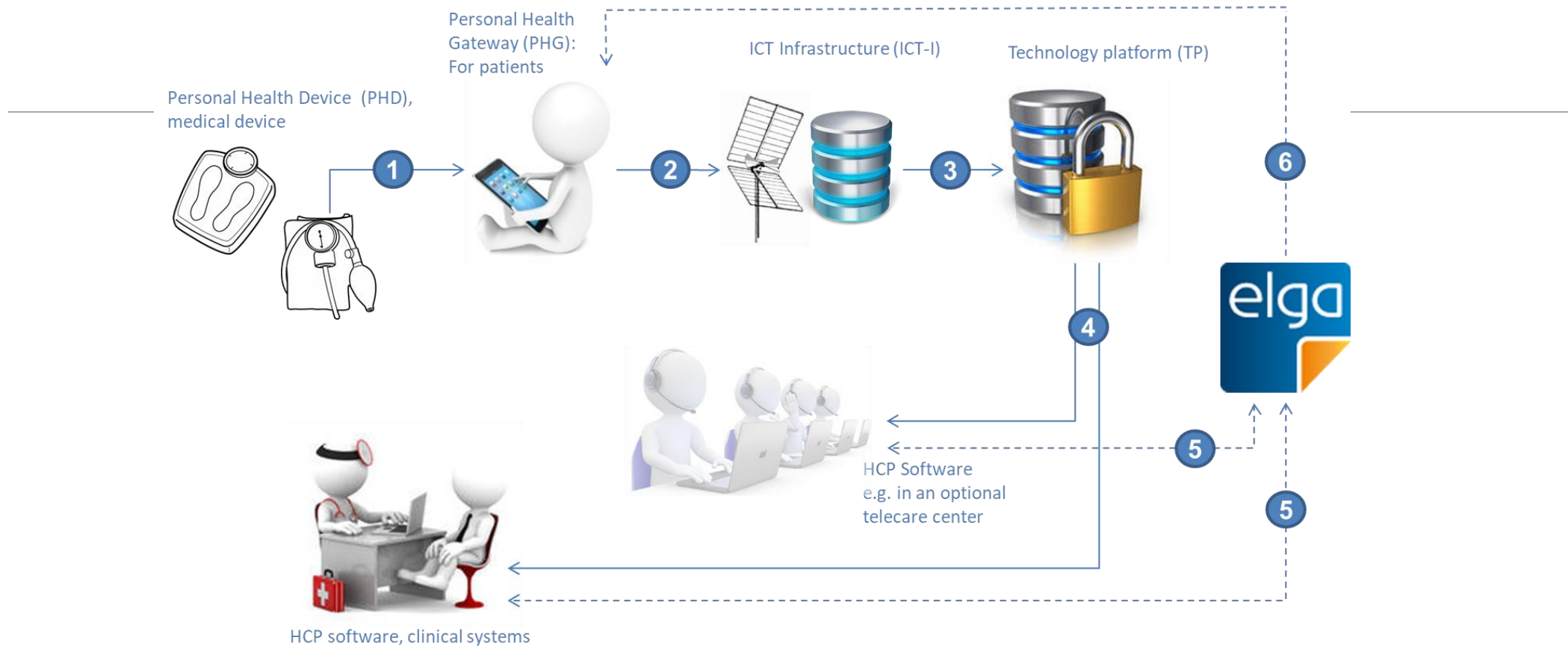
ELGA Overview architecture



June 7, 2016

4

Telemedicine: The incoming data flow, device to doctor



1
Continua
PHD
Interface:
Bluetooth,
USB, NFC,
Zigbee, ...

2
Continua
Services
Interface:
Funk, Kabel
zB ADSL,
UMTS, LTE, ...

3
IHE ITI 41
Transaction

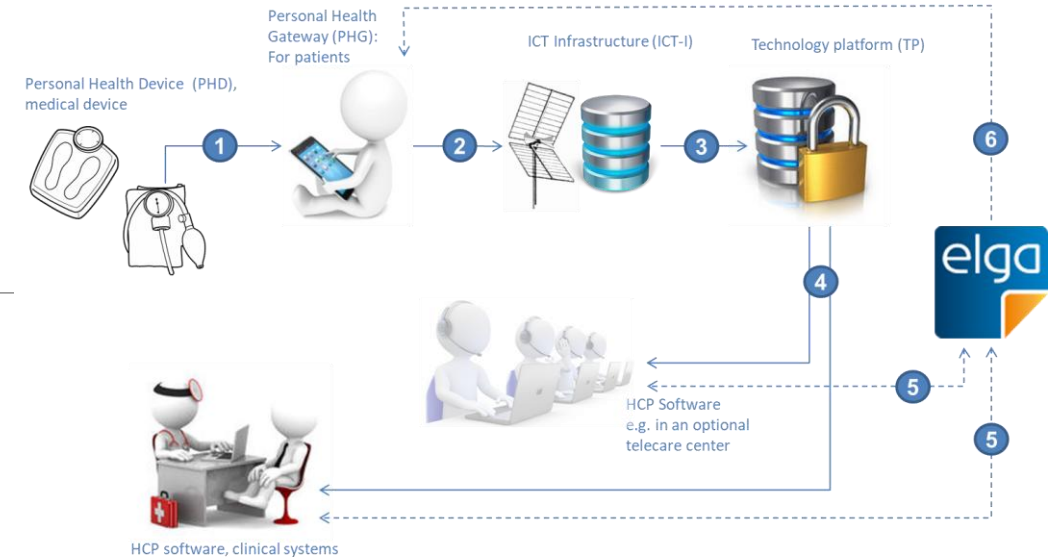
4
IHE IT 18,43
Transaction
(recommend
on demand
option)

5
ELGA:
Based on IHE
XDS

6
Patients
access their
data
e.g. via a
portal

Will make use of results of 2018

- Framework guidelines for the IT infrastructure for telemonitoring applications
- Published January 2018
- Recommendations on standards for sharing data measured with medical devices
- Refers to IEEE 11073 standards series
- Diabetes Mellitus Type II
- Heart failure
- Implant follow up
- COPD next candidate
- Support patients with multimorbidities



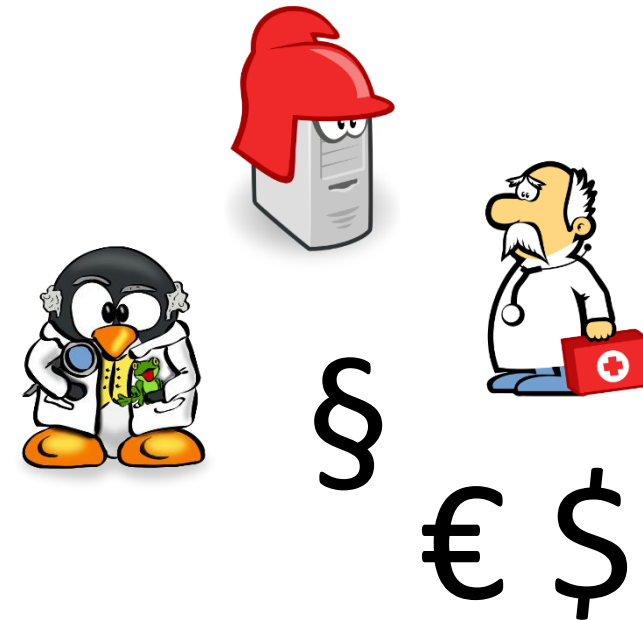
- | | | | | | |
|------------------------------------|--|--------------------------------|--|-----------------------------------|---|
| 1 Continua PHD Interface: | 2 Continua Services Interface: Funk, Kabel | 3 IHE ITI 41 Transaction | 4 IHE IT 18,43 Transaction (recommend on demand option) | 5 ELGA: Based on IHE XDS | 6 Patients access their data e.g. via a portal |
|------------------------------------|--|--------------------------------|--|-----------------------------------|---|



 Federal Ministry
Labour, Social Affairs, Health
and Consumer Protection

IHE contributes substantially

- Well defined use cases
 - So we have sound things to discuss
- Technical frameworks for implementing services
 - happy engineers build great software
- Connectathon for onboarding
 - To bring newcomers up to speed
- Evidence from Connectathon results
 - To show the dynamics of adoption
- Testing services
 - To improve the quality in the field



Preliminary conclusions and necessary further steps

- The execution of the full range of activities of the NeHC is fundamentally limited by the lack of highly experienced professionals and the lack of wide-ranging involvement of stakeholders.
- These crucial problems and risky situation should be prevented by efficient communication and maximal utilization and mobilization of existing capacities, not only in the Czech Republic.

Further progress should be based on proved competent expertise of EU and its best practices for the project:

- supporting efficient governance,
- reinforcing networking capacities,
- communication structure as well as
- the technical implementation of the NeHC

The National Healthcare Digitization Platform vision

The National Healthcare Digitization Platform – should be a coordinated and cultivated community of stakeholders - would collaborate as an implementation base for launching of new eHealth projects and NeHC's action plans attainment.

The platform could be open to:

- National eHealth Contact Point located in the Region of Vysočina (EU project NIXZD),
- National Telemedicine Centre of University Hospital Olomouc (recently confirmed as the ministerial reference site for telemedicine in Sept. 2019)
- Postgraduate Medical School – Dpt. of eHealth Education (= Institute in the MoH competence).
- Partnerships with IHE CZ and Europe have been ready to be implemented.
- Czech Medical Association – working group for eHealth
- ...

Thanks for attention!

Christian Raming

Petr Struk

The official Austrian Health Portal

The screenshot displays the homepage of the Austrian Health Portal. At the top, the logo for 'GESUNDHEIT.GV.AT' is visible, along with navigation links for 'Aktuelles', 'Über uns', and 'Login'. Below this is a main navigation bar with categories such as 'Gesund leben', 'Krankheiten', 'Diagnose & Labor', 'Gesundheitsleistungen', 'Services', 'Professional', and 'ELGA'. The featured article, titled 'Wenn die Leber krank ist', includes an anatomical illustration of the liver and text explaining its functions and potential health risks. Below the article is a 'Mein Wegweiser' (My Guide) section with eight circular icons representing different health topics: 'Ich möchte gesund bleiben', 'Ich fühle mich krank', 'Ich fühle mich psychisch nicht wohl', 'Wir erwarten ein Kind', 'Mein Kind ist krank', 'Ich bin jung', 'Ich möchte gesund älter werden', and 'Alle Lebenslagen'.

www.gesundheit.gv.at

Facts & Figures

- Project on behalf of the Federal Ministry Labour, Social Affairs, Health and Consumer Protection
- Editorial department: Gesundheit Österreich GmbH
- Technical support: Bundesrechenzentrum
- Launch: January 2010
- Relaunch 2016 including responsive design
- December 2018: approx. 6.000 pages online
- Continuous enlargement and updating

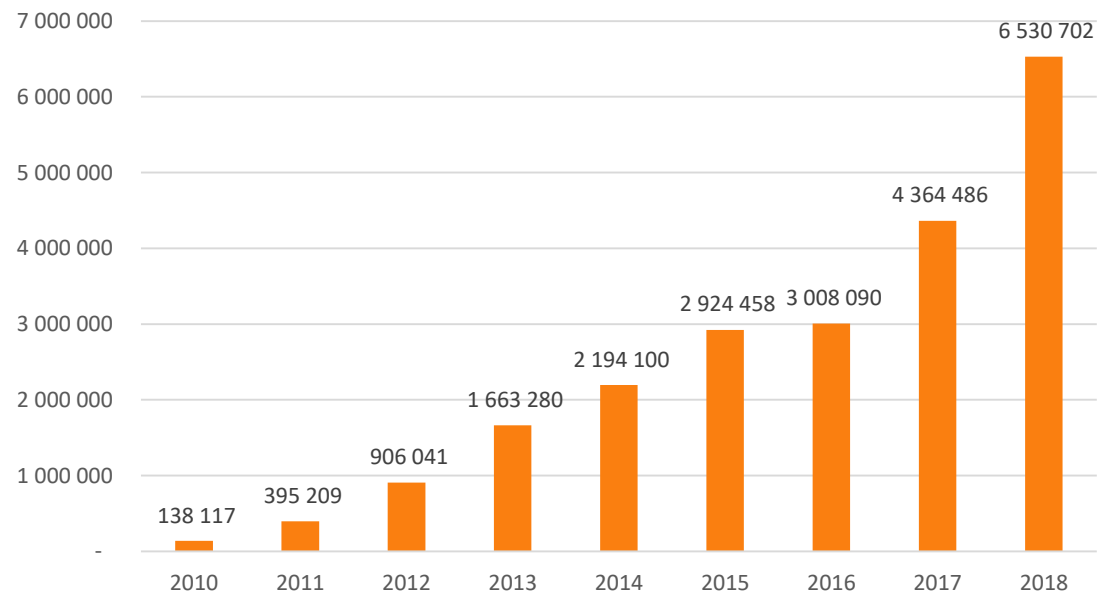
 Federal Ministry
Labour, Social Affairs, Health
and Consumer Protection

Gesundheit Österreich
GmbH 

 BUNDESRECHENZENTRUM
BRZ

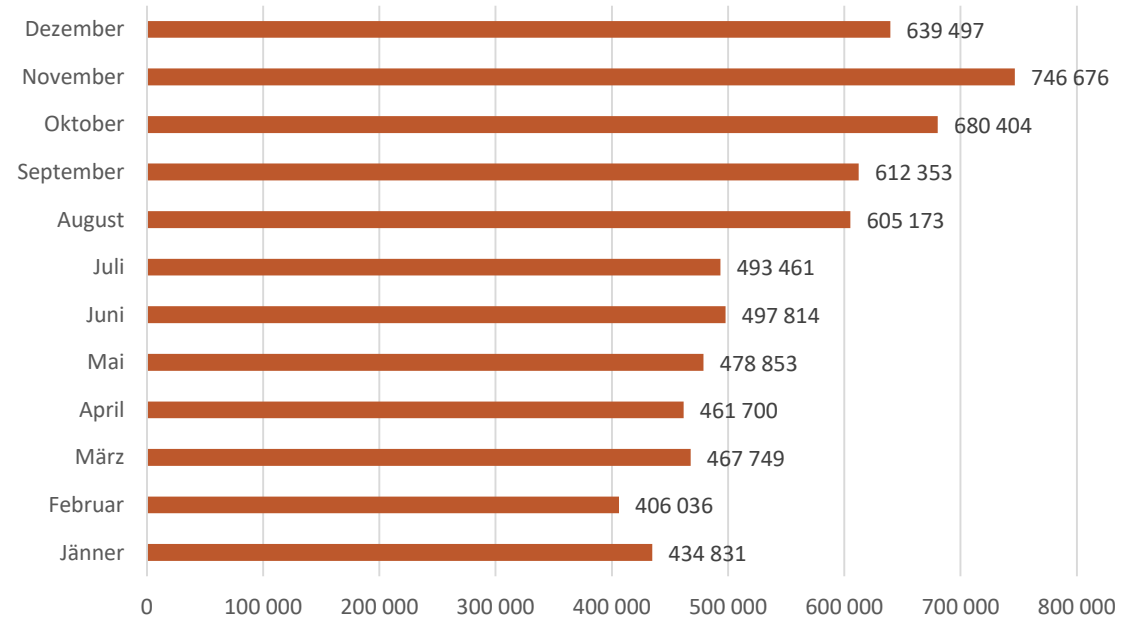
History of the Numbers of Users

Since the launch in 2010 the numbers of users (unique-user) increased continuously



Letztstand: 14.02.2019

Development of Unique-User 2018



Letztstand: 31.12.2018

Top-Content

- **Healthy living:** e.g. nutrition, physical activity & sports, mental health etc.
- **Diseases:** mostly the topics musculoskeletal system, infections & immune system, brain & nerves
- **Laboratory diagnostic:** Explanations of laboratory-analysed values (with interaction to ELGA – laboratory report)
- **Health services and offerings:** Prescriptions, applications (e.g. rehabilitation)
- **Services:** Searches and lists, e.g. physicians, hospitals, other health professionals, emergency calls etc.
- **Lexicon:** mouseover in the factsheets to explain in a short cut difficult medical terms
- **ELGA**

Image of the Health Portal

Before the launch in 2010 a usability test had been conducted. The health portal had been rated a very high **credibility** because of the following facts:

- Free of **advertisements**
- Independency
- Reliability
- Ministry is seen to guarantee quality (seal of quality)



Goals & Tasks

- Providing quality proved content (quality assurance) for the topics health, diseases, health system in Austria and health services for the goal to increase the health literacy of the Austrian population (patient empowerment).
- Guidance through the Austrian health system.
- Central login to the electronic health data record (ELGA).
- Structured quality assurance and methodical process for the content production.
- Cooperation with stakeholders of the public health system.



Fotolia © PR Image Factory

Quality Assuranced Process & Updating of Content

- **References:** medical literature, ebm-guidelines, evidence-based secondary literature (clinical decision support resources, high credible health portals)
- **Expert review** by members of the medical advisory board of the ministry, medical associations, medical staff of university hospitals, public health organizations, physicians etc. ...
- In progress: **methodical handbook**
- Regular **update interval 2 years.**
- Certain topics **annual update or as required**, e.g. topics like vaccinations, flu, health prevention examinations (screening programs) etc.

The screenshot displays the website 'GESUNDHEIT.GV.AT' (Öffentliches Gesundheitsportal Österreichs). The main navigation bar includes 'Gesund leben', 'Krankheiten', 'Diagnose & Labor', 'Gesundheitsleistungen', 'Services', 'Professional', 'ELGA', and a search icon. The page title is 'Qualitätskriterien'. A left sidebar contains a 'Navigation' menu with items like 'Impressum', 'Qualitätskriterien', 'Gesundheit.gv.at – Qualitätskriterien', 'Nutzungsorientierung', 'Transparenz und Ehrlichkeit', 'Verantwortlichkeit', 'Vertraulichkeit und Datenschutz', 'Datenschutzerklärung', 'Portaledaktion', 'Experten & Kooperationen', 'Kontakt', 'Quellenverzeichnis', and 'Sitemap'. The main content area features a sub-header 'Qualitätskriterien' and a brief introduction. Below this, there are six criteria, each with an image and a short description:

- Gesundheit.gv.at – Qualitätskriterien:** Erfahren Sie mehr zum Qualitätszertifizierungsprozess des Gesundheitsportals. (Image: hand pointing to stars)
- Nutzungsorientierung:** Erfahren Sie mehr über Zugänglichkeit, Bedienungs-freundlichkeit sowie Interaktionsmöglichkeiten mit der Redaktion. (Image: hand holding a checklist)
- Transparenz und Ehrlichkeit:** Erfahren Sie mehr zu den angebotenen Informationen und Leistungen sowie zur Finanzierung und den Zielen des Herausgebers. (Image: hand holding a glowing cube)
- Verantwortlichkeit:** Erfahren Sie mehr zu Herausgeber, Portaledaktion sowie Technik und Betrieb. (Image: stethoscope on a smartphone)
- Vertraulichkeit und Datenschutz:** Erfahren Sie mehr zu Datenschutz und den Umgang mit personenbezogenen Daten. (Image: hand holding a shield with a lock icon)
- Datenschutzerklärung:** Erfahren Sie, welche Daten im Zuge der Nutzung von gesundheit.gv.at erhoben und für welche Zwecke sie verwendet werden. (Image: keyboard with a red 'Datenschutz' key)

Results of the user survey in 2014

The Austrian Health Portal **addresses nearly all population groups**, especially middle-aged persons, mostly women, but also older people.

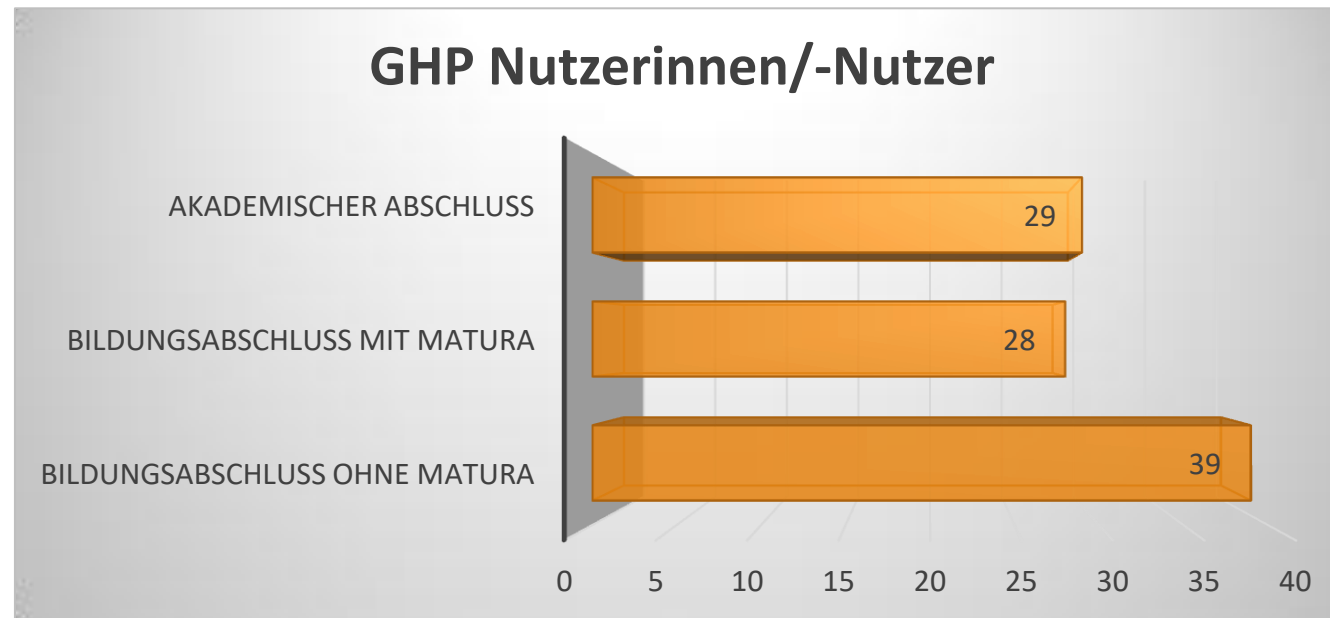
- **2.235 participants** of the survey.
- Mostly people between **30 und 60 years** (62,1%).
- More **women** (56,1%) than **men** (43,9%).
- Few very young people under the age of 15 (1,3%).

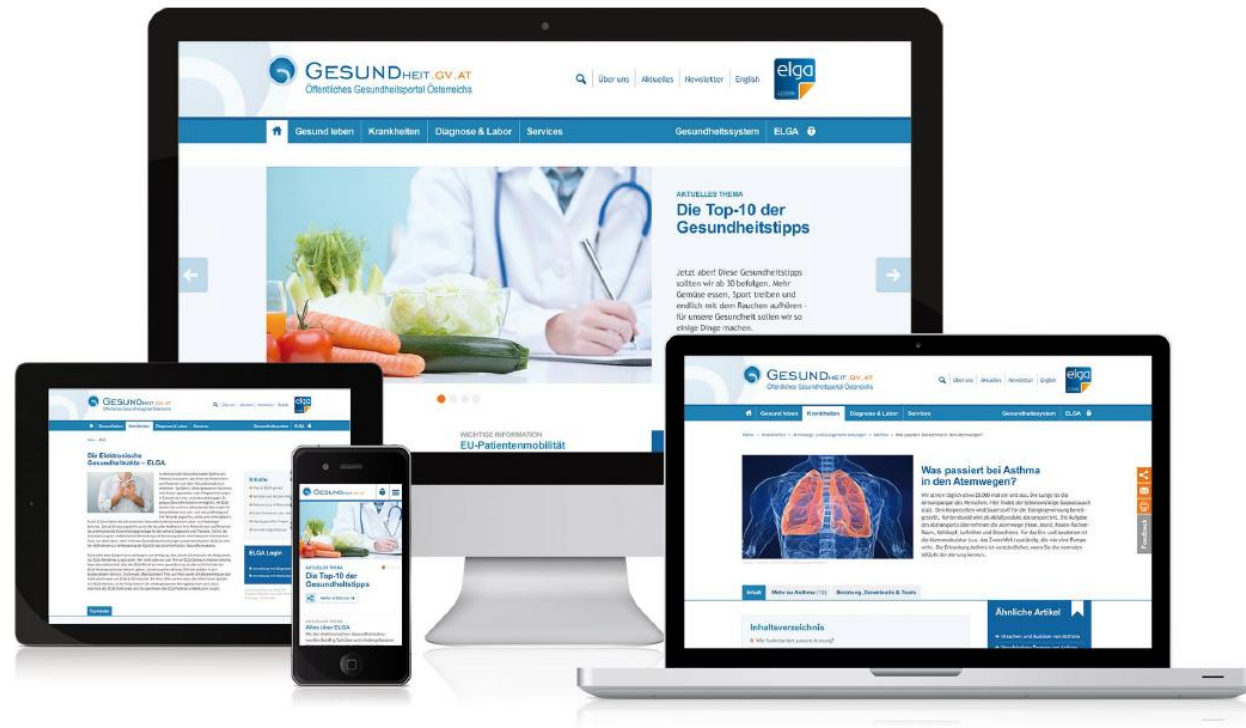


Fotolia © wwwebmeister

Results of the user survey in 2014

The Austrian Health Portal addresses persons with different education level.





Thank you!

www.gesundheit.gv.at

Öffentliches Gesundheitsportal Österreichs

Mag. Gabriele Soyel, Mag. Stephan Fousek

