

Adopting CEN-ISO/TS 82304-2 and a trusted EU mHealth label for a single market that enables patients, citizens, health professionals, systems and authorities to benefit from a healthy supply of useful apps.

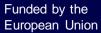
24 April 2023 10:00 - 11:30 CEST



Health apps from a healthcare professional perspective

LabelRoundtable Event Series













Webinar Housekeeping



Participants are muted by default. During the interactive parts of the webinar, organisers can unmute participants who wish to comment.



This is a recorded webinar. The recording will be published on the Label2Enable website.



Participants have two ways of interaction: by clicking on "raise hand" and waiting for the organisers to call on them, or by submitting a comment/question via the chat.



The recording and slide deck will be made available to participants after the event, via a follow-up email.





Timeslot	Title	Presenter
10:00-10:15	How can Label2Enable foster adoption and trust in the use of health and wellness apps in clinical practice through the label based of CEN- ISO/TS 82304-2?	Antanas Montvila (European Junior Doctors Association)
10:15-10:30	Medical professionals' views on using wellness and health apps in clinical practice - insights from a pan-European survey	Ieva Biliūnaitė (Leiden University Medical Center)
10:30-10:50	Health Technology Assessment in Digital Health. Comparing approaches for health apps and technologies: CEN-ISO/TS 82304-2 and the Finnish Digi-HTA	Jarno Suominen (Digi-HTA)
10:50-11:10	Clinical assessment and evaluation of clinical evidence of Digital Health Technologies. Introduction to the approach used by the Review of Care and Health Apps (ORCHA)	Adam McCabe, Tom Micklewright (ORCHA)
11.10 11.00		

11:10-11:30 Final discussion



Webinar Panelists



Antanas Montvila

Vice-president at European Junior Doctors Association



leva Biliūnaitė Post-doctoral Researcher at Leiden University Medical Center



Jarno Suominen Biomedical Engineering and life sciences



Adam McCabe and Dr. Tom Micklewright Senior Digital Health Reviewer



How can the Label2Enable project foster adoption and trust in the use of health and wellness apps in clinical practice through the label based on of CEN- ISO/ TS 82304-2 eHealth standard?

Antanas Montvila

Vice-president at European Junior Doctors Association



Adopting CEN-ISO/TS 82304-2 and a trusted EU mHealth label for a single market that enables patients, citizens, health professionals, systems and authorities to benefit from a healthy supply of useful apps.

Label2Enable

Labelroundtable #2

Why certification of medical apps is needed and how we can move forward?



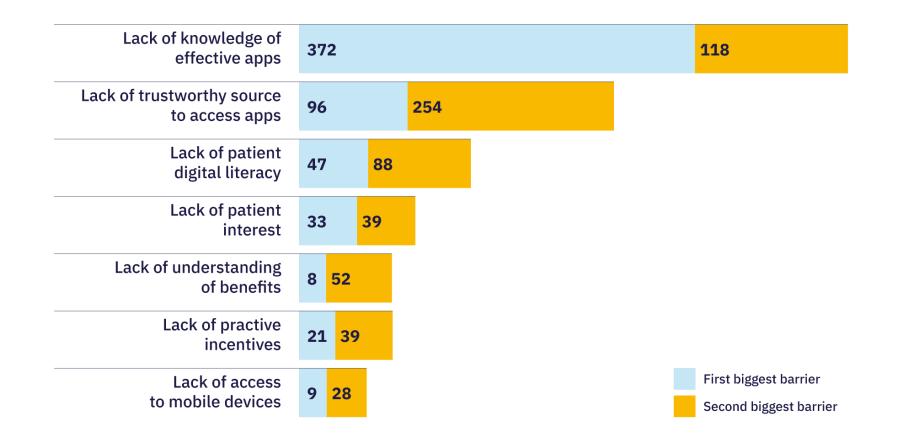
Choosing a 'good' health app is difficult

37%	The sheer number of health apps makes choosing them confusing
32%	I am not sure health apps will help me
31%	I prefer face-to-face consultations with doctor/nurse
30%	I know of no health apps relevant to me
27%	I am suspicious of health apps, because I don't know who makes them

Get-ehealth.eu (2015) What do patients and carers need in health apps – but are not getting? Global survey of 1,120 patients and carers



Choosing a 'good' health app is difficult



Byambasuren et al (2019) Current knowledge and adoption of mobile health apps among Australian General Practitioners: Survey study



LABEL2 W how to distinguish a "good" health app?

App Store Preview



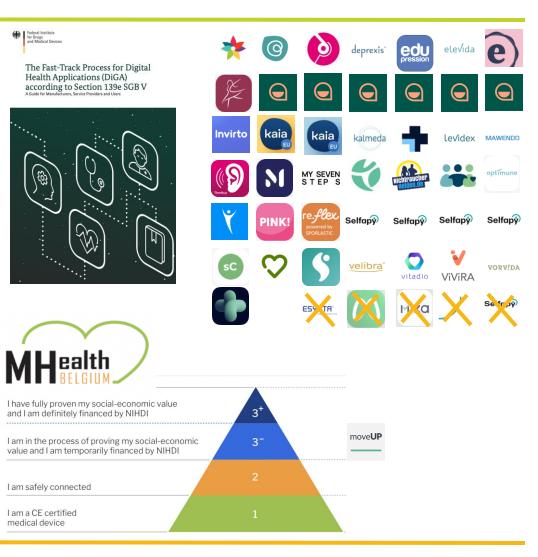
Wyatt (2018) How can clinicians, specialty societies, and others evaluate and improve the quality of apps for patient use?

Larsen et al. (2019) Using science to sell apps: Evaluation of mental health app store quality claims Singh et al. (2016) Many health apps target high-need, high-cost populations, but gaps remain



LABEL2 U Delivering a 'good' health app is difficult







Feb 24, 2023

LABEL2 Reviewing a 'good' health app is difficult too

npj | digital medicine

Health app policy:

- Belgium
- Denmark
- England
- Germany
- Netherlands
- Norway
- Sweden
- Singapore
- United States

"There is great interest in the use of apps in all the countries evaluated, but even Belgium, Germany and the UK, which are relatively far along in their operationalization of frameworks, are struggling with efficient implementation.

Cross-national efforts are needed around regulation and for countries to realize the benefits of these technologies."



LABEL2 **EU policy context**

The EU moves towards a common transparent assessment of health apps:

- The *Green Paper on mobile health* (2014) addresses the potential benefits and risks of health apps, questioning how to verify or ensure the efficacy of health apps (e.g. certification schemes) and how to better **inform users** on the quality and safety of these apps
- The Communication on enabling the digital transformation of health and care in the Digital Single Market (2018) highlights "digital tools and data for citizen empowerment and person-centred care" as a key priority and proposes **common principles and certification** to facilitate supply of these tools, also by Small and Medium-sized Enterprises
- CEN-ISO/TS 82304-2:2021 (health and wellness apps quality and reliability), an assignment from the European Commission to the European Committee for Standardization (CEN), International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC), delivers a common health app assessment framework and label
- The Proposal for a Regulation on the European Health Data Space (2022) calls for voluntary labelling of wellness apps (Article 31) and a cascading effect in medical devices that aim to be interoperable with **Electronic Health Record systems**
- Horizon Europe project Label2Enable creates ISO 17065 EU certification scheme for CEN-ISO/TS 82304-2 aligned with EU values and EU legislation, enabling accredited app assessors (third party assessment) to issue trusted CEN-ISO/TS 82304-2 health app guality labels, scores and reports





what: the EU Energy label but then for health apps

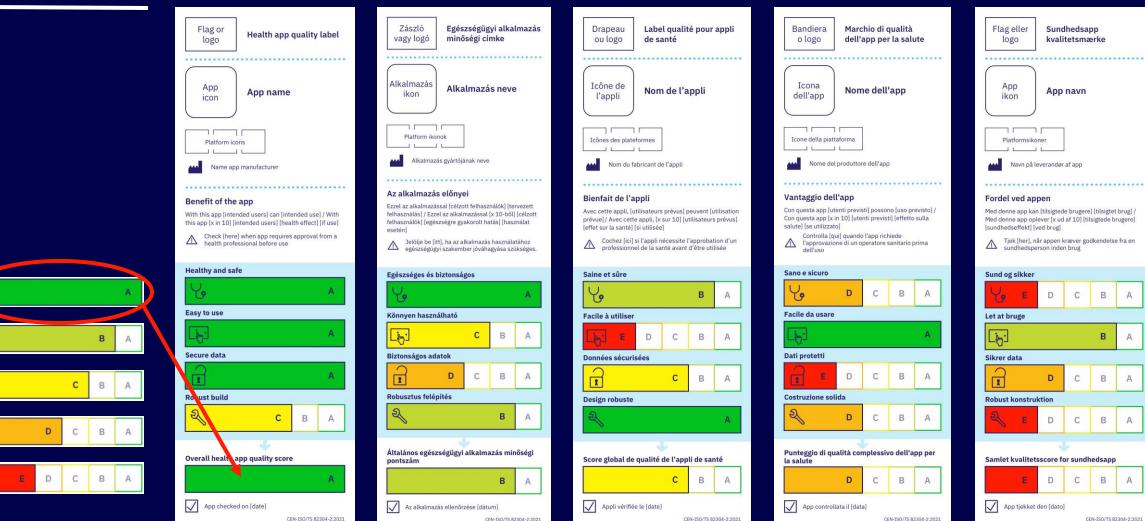
В A

В А

В A

В A

В A





LABEL2 U the EU Energy score



********* (91) Siemens WM14N295NL iQ300 extraKlasse wasmachine





★★★★★ (1) Whirlpool FFDBE 9638 BCEV F wasmachine

497,- Adviesprijs 629,- ✓ Op voorraad

At D

- Energieklasse D
- Vulgewicht 9 kg
- max. 1600 toeren
- 85 dB centrifugeren

Vergelijk product



★★★★★ (84) AEG L8FEN96CAD OKOMix AutoDose wasmachine

866,- Adviesprijs 1.329,- ✓ Op voorraad



- Energieklasse A
- Vulgewicht 9 kg
- max. 1600 toeren
- 76 dB centrifugeren

📃 Vergelijk product



Miele WED 174 WPS wasmachine

1.379,- ✓ Op voorraad



- Energieklasse A
- Vulgewicht 9 kg
- max. 1400 toeren
- 70 dB centrifugeren

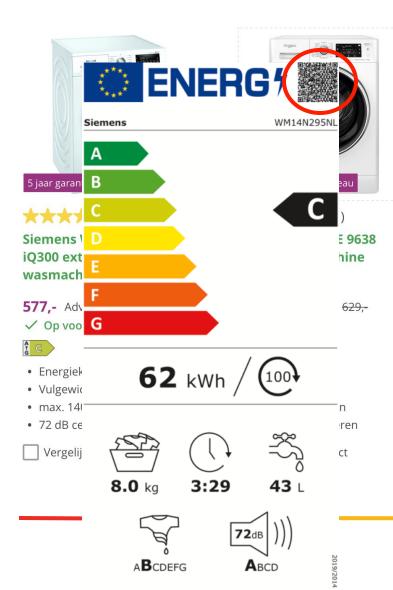
🗌 Vergelijk product



LABEL2 U the EU Energy label

Funded by the

European Union





AEG L8FEN96CAD OKOMix AutoDose wasmachine

866,- Adviesprijs 1.329,- ✓ Op voorraad

- A S
- Energieklasse AVulgewicht 9 kg
- max. 1600 toeren
- 76 dB centrifugeren

🔲 Vergelijk product



Miele WED 174 WPS wasmachine





- Energieklasse A
- Vulgewicht 9 kg
- max. 1400 toeren
- 70 dB centrifugeren

🗌 Vergelijk product

LABEL2 U the EU Energy product information sheet

An official website o	of the European Union	How do you know? 🗸				
		pean mission			🗊 Englist	٦
	EPREL - Eu	ropean Product Registry for	Energy Labelling			
	Home > Washing ma	chines > 335652				
	Siemens WM14N295	GATED REGULATION (EU) 2019/2014 with rega	ard to energy labelling of househ	old washin	g machines and household washer-dryers	6
	— General i	nformation			ENERG [*]	
	C A	Overall dimensions 85 (H	Height) x 60 (Width) x 63 (Depth) cm	Siemens WM14N295NL	
		Energy efficiency Index (EEI)		68,6	B	
	(SP)	Washing efficiency index		1,04	C C	
	8 Kg	Rinsing effectiveness	4,5	g/kg		
		Energy consumption [per cycle, eco 40-60 progr	ramme] 0,624	kWh	F	
		Weighted energy consumption [per 100 cycles,	eco 40-60 programme] 62	kWh	G	
		Water consumption [per cycle, eco 40-60 progra	amme] 43	litres	62 kWh / 100	
		Maximum temperature inside the treated textile	(Rated capacity)	4 °C		
		Maximum temperature inside the treated textile	(Half)	7 °C		
		Maximum temperature inside the treated textile	(Quarter)	3 °C	8,0 kg 3:29 43 L	
		Weighted remaining moisture content		52 %		
		Snin sneed (Rated canacity)	1 40	rom	72 dB)))	



how: CEN-ISO/TS 82304-2:2021 helps choose apps

Flag or logo Health app quality label	Comprehensive	For wellness and medical device apps, not duplicating the work of notified bodies
App icon App name	Evidence-informed	Inspired by the EU energy label: used by 85% EU consumers and in 59 non-EU countries
Platform icons	Inclusive	Label tested with people with low health literacy
Name app manufacturer	Informative Score, labe	el and report communicate quality in a glance to the needed detail
Benefit of the app With this app [intended users] can [intended use] / With this app [x in 10] [intended users] [health effect] [if use] M Check [here] when app requires approval from a health professional before use	Proportionate	At most 81 questions, of which at most 67 score-impacting yes/no questions
Healthy and safe	Testable	Yes-answers require evidence to be assessed by accredited app assessors
Easy to use	Relevant	Assessment framework founded in a Delphi study with 83 experts from 8 stakeholder groups
Secure data Image: Constraint of the secure data Image: Constraint of the secure data Robust build	Maintained	CENELEC ISO IEC.
Overall health app quality score C B A Image: App checked on [date] Image: App checked on [date] Image: App checked on [date]		

https://ec.europa.eu/commission/presscorner/detail/en/MEMO_19_1596



CEN-ISO/TS 82304-2:2021

CEN-ISO/TS 82304-2:2021 content ABLE

Accessibility, Usability

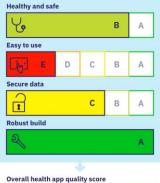
Privacy, Security

Flag or logo	Health app quality label	Healthy and safe
App icon	App name	Easy to use
Platform i	pp manufacturer	Secure data

Benefit of the app

With this app [intended users] can [intended use] / With this app [x in 10] [intended users] [health effect] [if use]

Check [here] when app requires approval from a \triangle health professional before use





asy to use	
ecure data	

Robust build

Technical robustness, Interoperability

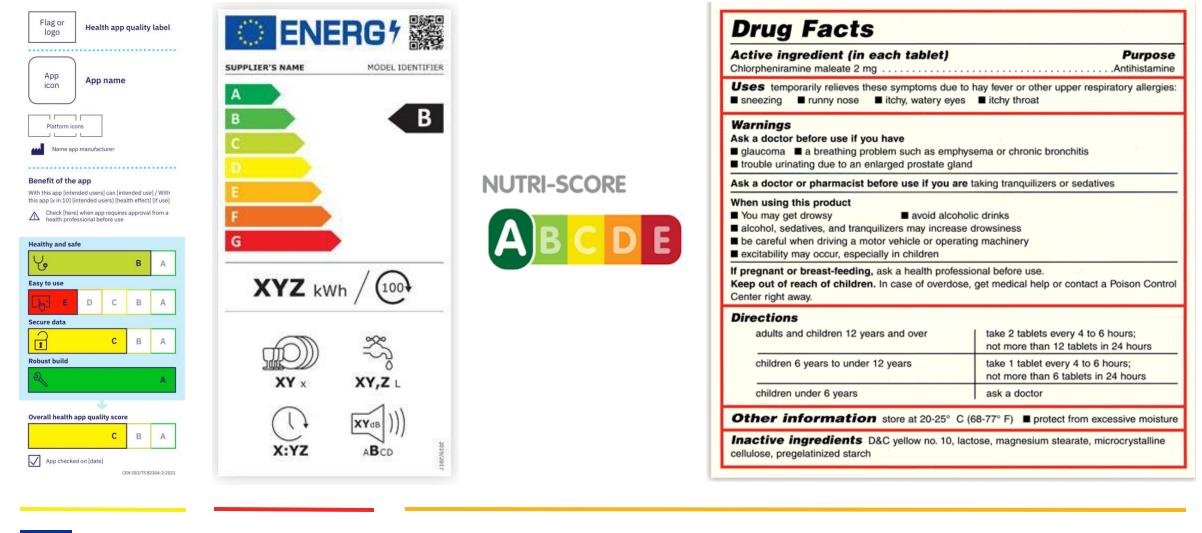
Original Paper

What Makes a Quality Health App—Developing a Global Research-Based Health App Quality Assessment Framework for CEN-ISO/TS 82304-2: Delphi Study

Health requirements, Health risks, Ethics, Health benefit, Societal benefit



LABEL2 C CEN-ISO/TS 82304-2:2021 label inspirators



LABEL2 **Project pillars: trust, use and adoption** ARI

TRUST Test handbook for accredited health app assessors

Co-create the trusted EU certification scheme (handbook for accredited health app assessment):

- Test scheme with 24 manufacturers and 5 app assessment organisations for consistency and efficiency
- Align assessment methods and pass / fail with EU legislation, EU values and stakeholder trust
- Analyse **business models** for app assessment and existing label legislations for applicability

USE Addressing citizens' and health care professionals' needs

Co-create the communication citizens and health care professionals need:

- Survey whose recommendations on health apps citizens trust and what health professionals need to recommend health apps
- Test how to introduce the label with people with limited health literacy
- Propose level of detail health app quality report
- Test **label display** in app stores, app libraries and trusted sources

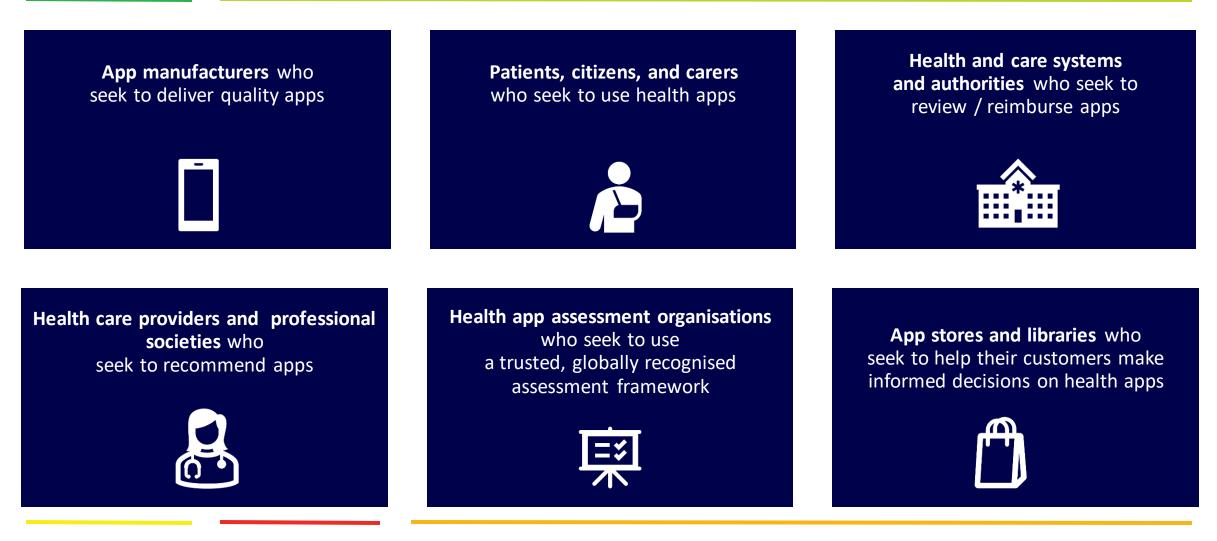
ADOPTION Promoting uptake by health care authorities and systems

Co-create a single market (cross country recognition of EU certification scheme):

- Involve relevant stakeholders through various channels
- Document 'use stories' of pilots with CEN-ISO/TS 82304-2 in Italy, Catalonia, the Netherlands, Norway, ...
- Explore with health insurers and health technology assessment bodies how the ISO assessment framework can help in decision-making on reimbursement of health apps



LABEL2 who can benefit from CEN-ISO/TS 82304-2:2021?







- Title •
- Duration
- Instrument
- Type
- **Grant Agreement number**
- Budget
- **Partners**

Adopting CEN-ISO/TS 82304-2 and a trusted EU mHealth label for a single market that enables patients, citizens, health professionals, systems and authorities to benefit from a healthy supply of useful apps.

- June 2022 May 2024
- Horizon Europe
 - Coordination and Support Action
- 101057522
 - 1,999.957.50 EUR









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LinkedIn	linkedin.com/company/label2enable
Facebook	facebook.com/label2enable



Medical professional's views on using wellness and health apps in clinical practice insights from a pan-European survey

leva Biliūnaitė Post-doctoral Researcher at Leiden University Medical Center Slides not shared at the request of the author – final results will be published soon



Health Technology Assessment in Digital Health. Comparing approaches to assessing digital health apps and technologies: CEN-ISO/TS 82304-2 (Label2Enable) and the Finnish Digi-HTA.

Jarno Suominen Biomedical Engineering and life sciences





Finnish Coordinating Center for Health Technology Assessment

Health Technology Assessment in Digital Health

Comparing approaches for health apps and technologies: CEN-ISO/TS 82304-2 and the Finnish Digi-HTA

Jarno Suominen Senior Planning Officer, FinCCHTA

Trend in Digital Health

- Digital healthcare technologies are evolving rapidly.
 - Digital Medicine and Wellness technologies
- Need for fast assessment methods to support clinical decision making and health policy on required time frame.



Health Technology Assessment (HTA)

- Health Technology Assessment HTA is a multidisciplinary process that uses explicit methods to determine the value of a health technology at different points in its lifecycle.
- The purpose is to inform decision-making in order to promote an equitable, efficient, and high-quality health system.

Source: <u>HTA Glossary.net</u>

The best available information is combined to support health policy and clinical decision making:

- Assessment is reliable, transparent and impartial
- Assessment includes new technologies and technologies that are already in use
 - Medicines, devices
 - Preventive, therapeutic and diagnostic interventions
 - Decision Support Systems (DSS)





Usability and accessibility

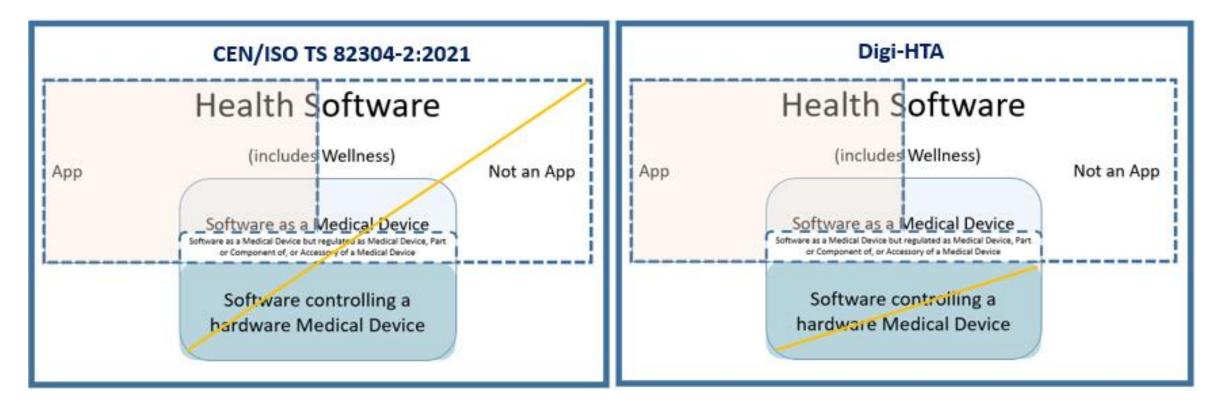
- Method is developed by the FinCCHTA and the University of Oulu as the Ministry of Social Affairs and Health of Finland commissioned it.
- Published Digi-HTA recommendations can be found on FinCCHTA website: <u>www.digi-hta.fi</u>
- The assessment of data security and protection uses the criteria which is developed in the National Emergency Supply Agency's Cyber Health project.

Key assessment areas:	Other assessment areas:	
 Effectiveness 	 Interoperability 	L CV2 🛞
 Safety 	 Technical stability 	
 Costs 	 Artificial intelligence 	OF OULU NATIONAL EMERGENCY SUPPLY
 Data security and protection 	 Robotics 	Digi 🖌 HTA

*Haverinen J, Keränen N, Falkenbach P, Maijala M, Kolehmainen T, Reponen J. (2019) Digi-HTA: Health technology assessment framework for digital healthcare services. Finnish Journal of eHealth and eWelfare, 11(4), 326-341. https://doi.org/10.23996/fjhw.82538



Comparison between the scope of criteria



Digital Health solutions, including Digital Medicine and Wellness technologies

*Adapted from Värri, A 2021. SFS. What Health Apps ISO/TS 82304-2 specification contains. Available online: https://urly.fi/37R6



25.4.2023

Digi-HTA Jarno Suominen

Comparison between criteria

CEN/ISO TS 82304-2:2021



Digi-HTA

Areas of assessment	
Effectiveness: Promising, but more evidence is needed	~
Safety: Sufficient	~
Costs: Reasonable	~
Data security and protection: Sufficient	~
Usability and accessibility: Sufficient	~
Other things to consider when using the product	~
References	~
Assessment team	~

25.4.2023

Digi-HTA Jarno Suominen

Baseline between the criteria

Cross-tabulated characteristics, criteria and requirements	ISO/TS 82304-2:2021	Digi-HTA	Ex int
Publication year	2021	2019	
Region	Global	National: Finland	
Readiness level and aplication	Standardization criterias published 2021, assessment process under implementation	In production since 2020	
Assesment level/Zooming	Emphasis especially end users point of view. The evaluation process is based on materials provided by the vendor providing the product or service.		
Suitable for evaluating medical devices	All classes	All classes	
Suitable for evaluating non-medical devices			
Suitable for evaluating digital health products in the form of native apps, web apps or websites			

xplanations for table nterpretation Includes

- Includes partially
- Doesn't include



Similarities within the criteria

Cross-tabulated characteristics, criteria and requirements	ISO/TS 82304-2:2021	Digi-HTA	Explanations for table interpretation
Effectiveness/Clinical evidence patient and			Includes
end-user point of views			Includes partially
Effectiveness organizational point of view			Doesn't include
Country of origin of evidence	Not specified	Not specified. Will be evaluated case by	
		case. The results of studies conducted in	
		other countries must be transferable to	
		the Finnish health care context.	
Safety			_
	Describes when the health app requires approval from a health professional before use	The company must have processes and responsible person available to ensure product safety. Includes national references for safety supervision	
Usability			
	Evidence about end-user testing. Concideres	Evidence about end-user testing.	
	if the app is age-approriate		
Accessibility			_
	WCAG 2.1. AA or AAA quidelines. Doesn't	WCAG 2.1. AA and AAA quidelines.	
	require published accessibility statement.	Requires published accessibility	
		statement.	•
Technical stability			FINCCHTA

Differences between the criteria

Cross-tabulated characteristics, criteria and requirements	ISO/TS 82304-2:2021	Digi-HTA	Explanations for table interpretation
Cost-utility/Cost effectiveness	Information about cost for end user for using the product	Costs for the organization and end-user for using the product assessed. Consideres if the costs are reasonable and aline with the benefits of the solution when compared to the standard of care or comparable solution.	 Includes Includes partially Doesn't include
Artificial Intelligent (AI) and Robotics			
Ethics	Conciders if ethical challenges of the health app are assessed with intended users and health professionals	Doesn't include separate ethical aspect	

Suominen, J., Veikkolainen, P., Kaksonen, R., Voutilainen, M., Haverinen, J. FinCCHTA. 2023. Comparison report of Digi-HTA and CEN/ISO TS 82304-2:2021. https://urly.fi/32CZ



The importance of harmonization of Digital Health assessment

I. On regulatory basis, the safety, performance, risks and benefits of medical devices are strongly regulated before market access



Strong regulation-based approach can create the impression that market penetrated solutions are uniformly applicable. However, market access in itself does not guarantee the effectiveness or applicability of the device.

The same applies to wellness technology, in which regulation is clearly at a lower level compared to medical devices.

II. With harmonized assessment of Digital Health solutions, including Digital Medicine and Wellness technologies, it is possible to support health policy and clinical decision-making in evolving health care by producing objective information of safe and effective interventions.

$ \rightarrow $

The assessment criteria should not siloe innovations or research but support them to ensure quality on high standard. Nevertheless, It has been recognized that the criteria for reimbursement can remain at the national level.



Thank you!

fincchta.fi twitter.com/fincchta



Clinical assessment and evaluation of clinical evidence of Digital Health Technologies. Introduction to the approach used by the Review of Care and Health Apps (ORCHA).

Adam McCabe and Dr. Tom Micklewright Senior Digital Health Reviewer



The ORCHA Baseline Review and Clinical Assessment

Dr Tom Micklewright and Adam McCabe 24th April 2023



THE ORCHA BASELINE REVIEW PROCESS



A revolutionary approach to technology assessment

Auto Filtering

We filter out apps not available in relevant languages and apps that haven't been updated for over 18 months. We auto-categorise those remaining Apps into over 250 condition and category areas.

Developer Checks

We notify developers of our review findings ahead of publication and allow them 10 days to challenge any area of the review.



Weekly Monitoring

We monitor all of the apps in this space on a weekly basis to identify new apps, apps that have new releases and apps that have become out of date.

350 Point Evaluation PLUS

Our reviewers analyse each app through a 350+ point evaluation which assesses an app's compliance with relevant standards, regulations and best practice.

Publication & Further Monitoring

Following the developer check period, the review is published on all relevant platforms and we start to gather further information for our 'Advanced Review' phase.

DATA PRIVACY







Privacy Policy

When writing a privacy policy the more transparent the better!

Data Use

Thinking about the data you are collecting next consider how it is used & shared

Serious about information security?

GDPR UK General Data Protection Regulations

Other Considerations Best practice for all users data protection

USABILITY & ACCESSIBILITY



Design & Development Application of standards & user involvement

Accessibility Consideration of all users regardless of need

Usability Ensuring positive user experience

Support How can users contact you effectively



PROFESSIONAL ASSURANCE



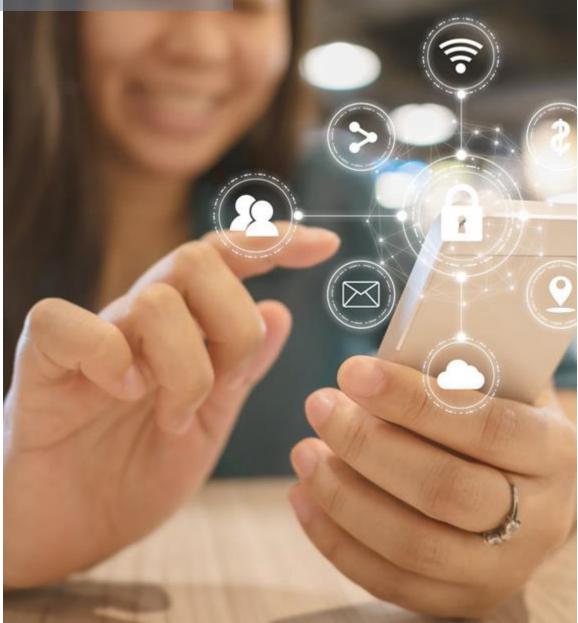


Registration Requirements Consideration of services you will provide

Medical Devices Ensuring safety and quality

Professional Backing Establishing credibility

Effectiveness & Impact Essential for products within healthcare





THE CHALLENGE

NOT ALL HEALTH APPS ARE THE SAME

THE ORCHA Baseline Review

THE CHALLENGE: NOT ALL APPS ARE THE SAME

OBR is intelligent, adapting to the wide nature of health apps, from the simple to the complex. This slightly changes the scoring makeup, with section weightings differing depending on functionality





Preventative or Independent of pathway

Pathway Replacement



Integrated pathway support



Administrative support



PROFESSIONAL ASSURANCE





ORCHA's Adapted ESF

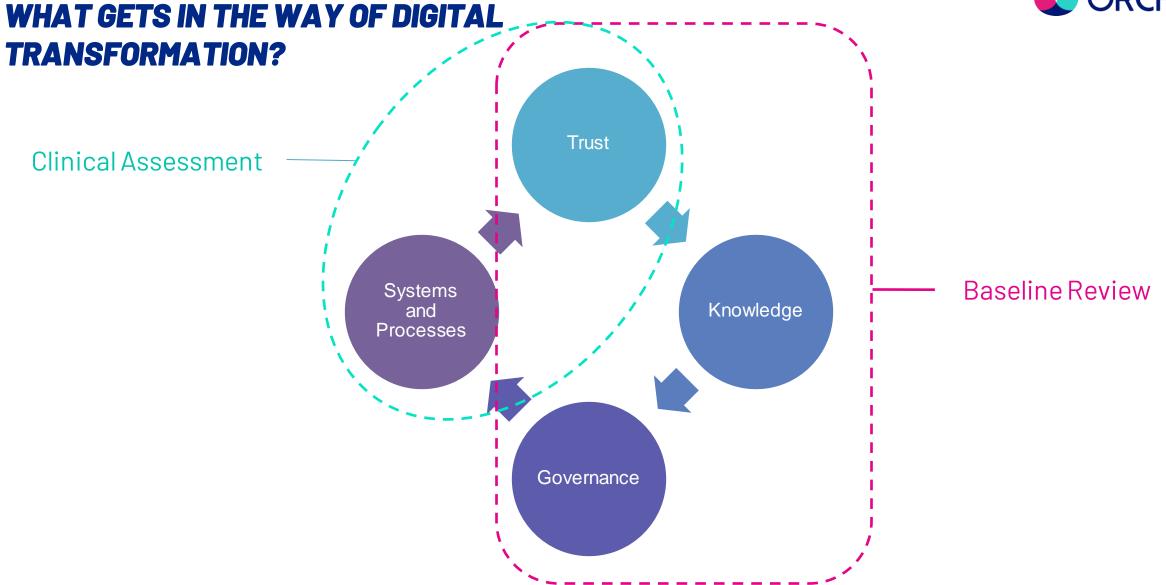
To pull together the professional backing, and the effectiveness information around the app, we apply our adapted ESF

Scoring Outcomes

Meeting requirements will be reflected in the score. Failure to meet requirements will have a noticeable impact on the section and overall score.







ORCHA CLINICAL ASSESSMENT





"Health apps were most likely to be prescribed to patients if they had an NHS stamp of approval or if they were recommended by another HCP"

> JMIR Mhealth Uhealth. 2020 Jul 6;8(7):e17704. doi: 10.2196/17704.

Barriers and Facilitators to the Adoption of Mobile Health Among Health Care Professionals From the United Kingdom: Discrete Choice Experiment

Simon Leigh ¹, Liz Ashall-Payne ¹, Tim Andrews ¹

ORCHA CLINICAL ASSESSMENT



Systems and Processes

- Indications
- Contra-indications
- Clinical cautions
- Pathway targets
- Limitations

Supports **real-world**, clinical decision making and the digital transformation of clinical pathways

ORCHA CLINICAL ASSESSMENT





Clinical Use Case

Intended patients. Pathway integration. 'Contra-indications'. Impact on marginalised patient groups.

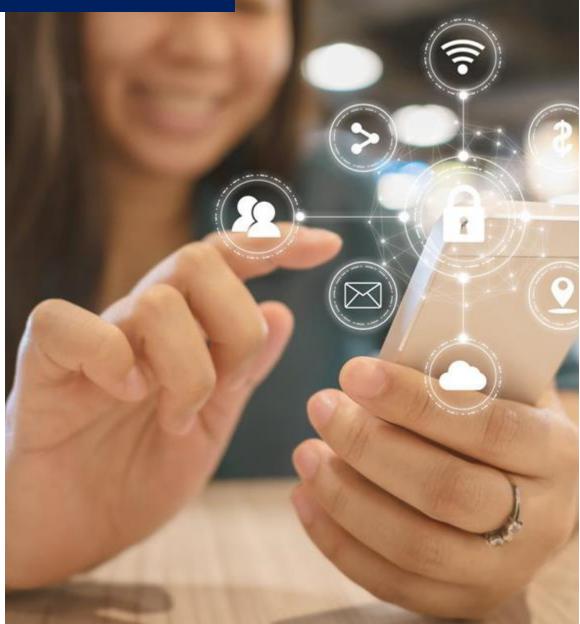
Clinical Validity

Alignment with national guidelines or recognised best practice.

Clinical Risk

What risks are apparent? What mitigations are in place?

High Complexity Products (Tier 3)





THANK YOU ANY QUESTIONS?

Email: hello@orchahealth.com



@OrchaHealth



in

@Orcha

@Orcha





Adopting CEN-ISO/TS 82304-2 and a trusted EU mHealth label for a single market that enables patients, citizens, health professionals, systems and authorities to benefit from a healthy supply of useful apps.

Thank you for your attention

More information info@label2enable.eu

Website label2enable.eu



ie 02.03.2023

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