

A1 Table. Qualitative content analysis result

The qualitative content analysis resulted in 78 codes, 33 subcategories, 7 categories, 1 central theme. Replicated from Frisinger et al. March 2023 [27], code numbers added in first column.

#	Code	Subcategory	Category	Central theme
1.1	No time to learn and use – it is just disturbing	The value is experienced as low compared to the effort spent	Barriers to change in healthcare	Introduction of digital CDSS in primary healthcare requires a multidimensional perspective and handling
1.2	Bad solution - not meeting the needs or not supporting current way of working			
1.3	Bad communication and introduction			
1.4	Someone else decided – we were not involved	Not involved in the change process		
1.5	Not invented here – sceptic to new	Scepticism to new		
1.6	Procurement process is delaying successful pilots to be deployed	Change resistance and lack of inspiration		
1.7	No reason to change, it works well if more budget is added			
1.8	Lack inspiration			
2.1	Motivation due to a clear benefit and common interest	Motivate people to commit	Success factors for change in healthcare	
2.2	Motivation due to forced need			
2.3	A clinical culture driving change	Healthcare culture for change		
2.4	Need to run a pilot	Pilot to evaluate		
2.5	Leadership and role model	Leadership for change		
2.6	Communication and support	Communicate to understand		
2.7	Share success stories			
2.8	Involve the people/end users	Involve people in the frontline		
2.9	A solution that supports the business	Strategy for digitalization and integration		
2.10	Digital strategy alignment			
2.11	Use of combined skills			
2.12	See it as an investment to drive future value	See it as an investment		
3.1	Political governance	The governance and the organization	Healthcare differentiators to consider	
3.2	High IT security (as an example of rules and regulations to consider)			
3.3	Primary healthcare does not work like a factory			
3.4	Culture in healthcare slow and conservative			
3.5	Experienced as non-commercial / not market driven	The view of the market and the client		
3.6	Patient satisfaction and care in focus			
3.7	Provides services commissioned by someone else			

3.8	Service is prioritized based on the need			
3.9	Patient is vulnerable and dependent on doctor			
3.10	Modernize doctor's role			
3.11	Trust scientific study evidence only (or follow senior doctor)	The medical practitioners		
3.12	Well educated, loyal, dedicated practitioners in the frontline			
3.13	Difficult to measure health quality	The difficulty to measure and follow up		
3.14	Patient focus and physical meetings is a strength			
3.15	Continuity with patient is a strength			
3.16	Clear mission is a strength	Specific strengths in primary healthcare		
3.17	Change under pressure or within comfort zone is a strength			
3.18	Loyal staff, high medical skills in frontline is a strength			
3.19	High workload is a weakness			
3.20	Digital / IT not fully utilized is a weakness			
3.21	Incompatible systems, lack of coordination is a weakness			
3.22	Digital patient meeting experiences, a weakness	Specific weaknesses in primary healthcare		
3.23	System of medical records is a weakness			
3.24	Ineffectiveness is a weakness			
3.25	Diverse and incompatible IT systems			
3.26	Digitalization is an opportunity	Specific opportunities for primary healthcare		
3.27	Patient empowerment through digitalization is an opportunity			
3.28	Digital actors - a threat			
3.29	Compensation model and governance – a threat	Specific threats to primary healthcare		
3.30	Unequal rules private vs public – a threat			
3.31	Less power to the doctor through digitalization – a threat	Specific threats to primary healthcare		
4.1	IT maturity Low			
4.2	IT maturity Medium	The level of IT maturity	The level of IT maturity and quality management maturity in healthcare	
4.3	IT maturity High			
4.4	Quality improvement maturity Low			
4.5	Quality improvement maturity Medium	The level of quality improvement maturity		
5.1	Limited capacity for dermatological evaluation			
5.2	Dependent on a few doctors	Restricted capacity	Melanoma diagnosis problems with current solution	
5.3	Process / patient-flow can be improved			

5.4	Present system not 100% safe and accurate	Safety		
5.5	Cost for equipment	The cost aspect		
5.6	Cost for sending referrals			
5.7	Not standardized process			
6.1	Validated and safe medical device with high accuracy	Safety and validity	Challenges and prerequisites when introducing a digital CDSS for malignant melanoma	
6.2	Tested in a pilot and certified			
6.3	Impact on operating model with AI decision	Operating model		
6.4	IT security of a mobile application	IT security		
6.5	Product ownership and services delivery commitments	Product origin, ownership, and liability		
6.6	Legal aspect is clear (e.g., liability)			
6.7	Introduction package is necessary	The investment		
6.8	Affordable			
6.9	Easy to use	Integrate and support the business		
6.10	Integrated to current systems			
6.11	Support business and strategy			
7.1	Commitment from the board/ regional managers: enthusiastic-indifferent	Stakeholders' commitment	Primary healthcare stakeholders' commitment to use a digital CDSS solution	
7.2	Commitment from the Primary healthcare leaders: enthusiastic – helpful			
7.3	Commitment from the doctors: helpful - opposed			
7.4	Patients trust and compliance to technology	Patients' trust		