

ОБЩЕСТВЕНИ КОМУНИКАЦИИ И ИНФОРМАЦИОННИ НАУКИ
PUBLIC COMMUNICATIONS AND INFORMATION SCIENCES

**QUALITY CRITERIA AND RECOMMENDATIONS FOR TRUSTWORTHY
DIGITAL HEALTH COMMUNICATION: DEVELOPMENT OF AN INTEGRATIVE
FRAMEWORK MODEL**

Nadine Zacharias

University of Library Studies and Information Technologies

<https://doi.org/10.70300/NMPY7308>

Abstract: *Digital health information has the potential to facilitate access to knowledge and promote health literacy. At the same time, information overload, misinformation and social inequalities are contributing to a growing trust problem. This study aims to identify key quality criteria and formulate recommendations for trustworthy digital health communication based on a systematic literature analysis. The findings show that the main quality dimensions include comprehensibility, evidence-based content, transparency and data protection, accessibility and participation. These criteria can be linked to established theoretical frameworks that explain how individual attitudes, perceived control and structural inequalities influence information behavior. In recent years, the increasing use of artificial intelligence, automated recommendation systems and personalised health technologies has intensified the need for ethical governance, algorithmic transparency and inclusive design. Trust in digital health information is therefore understood as a dynamic relationship between users, technologies and institutions. International initiatives highlight that trustworthy communication must be transparent, inclusive, participatory and accountable. Based on these insights, this article proposes an integrative framework combining psychological, structural and ethical perspectives. Measurable quality indicators are essential for systematic benchmarking and continuous quality assurance. Only through transparent design, participatory development and ethical responsibility can digital health communication achieve lasting credibility and equity.*

Keywords: *digital health communication; quality criteria; digital health literacy; evidence-based; digital divide*

INTRODUCTION

Digitalisation has fundamentally changed the way people search for, evaluate and use health information. Digital communication channels such as apps, online portals and social networks enable fast and location-independent access to knowledge and can thus significantly promote health literacy (Sørensen et al. 2012). At the same time it is becoming increasingly clear that digital health communication presents new challenges. These include information overload, the risk of misinformation and the problem of unequal access opportunities in the sense of the digital divide (Friemel 2016). In the past few years these challenges have intensified. The rapid development of artificial intelligence (AI), automated recommendation systems and personalised health applications has expanded the possibilities of digital communication, but has also raised new ethical and social concerns. Studies show that the complexity and opacity of algorithmic systems can exacerbate mistrust and misunderstanding, particularly among users with lower levels of digital literacy (Topol et al. 2023; Lupton & Jansen 2024).

At the same time the spread of misinformation on social media continues to pose a major threat to public health, as it undermines evidence-based decision-making and increases scepticism towards institutional sources (Swire-Thompson & Lazer 2020). A key issue is therefore trust in digital health information. Numerous studies demonstrate that users often find content on the internet difficult to understand and have difficulty assessing its reliability (Swire-Thompson & Lazer 2020). Analyses emphasise that quality standards such as comprehensibility, evidence-based content, accessibility and transparency are key factors for the acceptance and effectiveness of digital offerings (Chou, Oh & Klein 2018). The ability to trust digital sources is increasingly recognised as a fundamental precondition for the success of digital health innovations, as it mediates between health literacy, technology

acceptance and behavioral change (Floridi et al. 2023). International initiatives, such as the World Health Organization's *Global Strategy on Digital Health 2020–2025*, the OECD's *Digital Health Ethics Compass* (2024) and the European Commission's framework for the *European Health Data Space* (2025), emphasise that trustworthy digital health communication must be built on transparency, data protection, inclusiveness and participation. These policy frameworks underline that digital trust is not solely a technical issue but a multidimensional concept linking ethical governance, communication design and social equity.

Another emerging dimension concerns the ethical sustainability of digital transformation. Scholars have argued that digital health ecosystems can only achieve long-term legitimacy if they integrate environmental and social sustainability principles, ensuring that innovation contributes to global equity and ecological responsibility (Vayena & Daly 2024). Digital inclusion and accessibility therefore become not only functional but moral imperatives within a responsible digital health paradigm. Against this background, this publication aims to identify key quality criteria and recommendations for action for trustworthy digital health communication. The focus is on three interrelated questions: What quality criteria are mentioned in the scientific literature? How can these criteria be systematically organised and linked to form an integrative framework model? And what recommendations for action result from this for research, policy and practice? By addressing these questions, the article seeks to contribute to a better theoretical and practical understanding of trust in digital health communication. It proposes an integrative model that links behavioral theories such as the Health Belief Model (HBM) and the Theory of Planned Behavior (TPB) with structural perspectives on the digital divide and ethical governance frameworks. It highlights the need for transparent, inclusive and participatory approaches to ensure that digital health communication not only disseminates reliable information but also fosters empowerment, equity and trust in the long term.

RESEARCH METHODOLOGY

The study is based on a systematic literature analysis following established standards for transparent and reproducible review procedures. Relevant publications from 2010 to 2025 were identified through structured searches in major scientific databases, complemented by international guidelines and strategy papers on digital health communication. Inclusion criteria focused on peer-reviewed studies and institutional reports addressing quality criteria such as comprehensibility, evidence base, transparency, accessibility and user participation. Screening, data extraction and the methodological quality of empirical studies was critically appraised. The extracted data were synthesised using thematic analysis, allowing recurring dimensions of trustworthy digital health communication to be identified and grouped into analytical categories. These were compared and triangulated with existing international standards to highlight commonalities and research gaps. Sensitivity analyses and transparent documentation of all steps ensured the validity and reliability of the findings. Overall, this methodological approach provides a sound basis for developing an integrative framework of quality criteria for trustworthy digital health communication.

RESULTS

The literature analysis shows that five central quality criteria for trustworthy digital health communication have emerged: comprehensibility, evidence-based approach, transparency and data protection, accessibility and participation.

Comprehensibility

A key criterion is the linguistic and visual comprehensibility of digital health information. Content must be presented in such a way that it is accessible to different target groups. Studies show that complex technical language and overloaded presentations can make use difficult and lead to misunderstandings (Koch-Weser et al. 2010). Recent usability research confirms that clear, concise and culturally adapted information design significantly improves comprehension and engagement, particularly among older adults and people with limited digital literacy (Hoffmann et al. 2023; Toloza et al. 2024). Additional findings show that multimodal and interactive formats facilitate sustained attention and emotional engagement (Leung et al. 2023). Comprehensibility is also enhanced when platforms apply

readability testing or user feedback loops during development, ensuring that complexity levels correspond to the literacy skills of intended audiences.

Evidence-based information

Another quality feature is the scientific basis of the information provided. Evidence-based means that digital health information is based on verified, up-to-date and traceable data. Analyses show that missing or distorted evidence can contribute significantly to a loss of trust (Chou et al. 2018). Newer studies underline that evidence visibility serves as a clear trust signal for users (Ancker et al. 2023). Integrating contextual summaries or “evidence badges” within articles increases perceived reliability and intention to act on the information. The establishment of editorial review boards and regular evidence updates has also been identified as good practice for maintaining credibility (Lu et al. 2023).

Transparency and data protection

The disclosure of information sources, authorship and financial interests is crucial for users. A lack of transparency can easily lead to mistrust of digital health services. Data protection issues are particularly relevant. If user data are processed in an unclear manner, users are less willing to use digital tools (Wang et al. 2019). Recent studies show that perceived data control and transparent consent processes substantially increase the perceived reliability of digital health apps (Nabben et al. 2025). Beyond privacy statements algorithmic transparency has become an essential trust component (Stark et al. 2023). Frameworks such as the OECD (2023) *Digital Health Trust Framework* and the WHO (2021) *Global Strategy on Digital Health 2020–2025* emphasise explainability, fairness and ethical oversight as core governance dimensions. Furthermore, publishing transparency reports and conducting independent data-protection audits are increasingly recognised as practical instruments to strengthen institutional accountability.

Accessibility

Digital health communication is only inclusive if services are accessible to vulnerable groups such as older people, individuals with lower levels of education and people with disabilities. Data show that a lack of adaptation to these target groups widens the digital divide (Gonzales 2016). New empirical evidence demonstrates that accessibility barriers are still widespread which underscores the need for systematic accessibility testing and plain-language design (European Commission 2024). Accessibility should be understood not only technically but also cognitively and linguistically. Studies show that simplified navigation structures, consistent icons and voice-controlled or captioned content significantly improve usability (Nguyen et al. 2023). Inclusive digital environments further benefit from culturally adapted content and multilingual interfaces that respect local contexts and literacy gradients.

Participation and co-design

The literature emphasises the importance of participation and co-design. Health services gain trust and effectiveness when users are actively involved in their development. Participation-oriented approaches not only improve fit, but also promote acceptance (Greenhalgh et al. 2017). Updated frameworks for participatory digital health stress that co-creation with end-users and healthcare professionals results in higher adherence rates and stronger perceived ownership of digital tools (Bernaerts et al. 2024; Wilde et al. 2025). Longitudinal evaluations show that participation stabilises trust even when technologies or data policies change (de Camargo Catapan et al. 2025). Participatory design is increasingly recognised as an ethical imperative, ensuring diversity and equity in digital health governance (Lupton 2024). Involving marginalised communities in early design phases fosters both empowerment and legitimacy of digital solutions.

Across all criteria, the results indicate that trust is a dynamic construct, influenced by both structural and interpersonal factors. Empirical studies show that trust in digital health services is shaped not only by privacy safeguards but also by communication tone, perceived empathy and design transparency (Chung et al. 2023). Trustworthy digital health communication requires a multi-level perspective integrating technical reliability, ethical accountability and participatory engagement. The synthesis of current evidence reveals that ethical and participatory governance models, combining open data policies, algorithmic explainability and continuous stakeholder dialogue, achieve the highest long-term credibility and engagement (OECD 2023; Tennant et al.

2024). This underlines the interdependence of behavioral, structural and normative determinants that together define the quality of digital health communication.

CONCLUSIONS/DISCUSSION

The analysis of the literature makes it clear that these quality criteria are crucial for the trustworthiness of digital health communication. They can be usefully linked to recognised theoretical models and common standards.

The identified criteria in the HBM have a direct impact on the perception of benefits and barriers. Clear and understandable language can help to reduce perceived barriers. Evidence-based content can highlight the added value of digital offerings (Becker 1974; Rosenstock 1974).

Recent studies have expanded this perspective by linking the concept of perceived barriers with emotional and cognitive trust mechanisms. Findings from user-centred digital health research indicate that perceived empathy, tone and design transparency can reduce emotional barriers and increase self-efficacy in digital health engagement (Chung et al. 2023; Tennant et al. 2024). Integrating behavioral theory with affective trust research therefore provides a more comprehensive framework for understanding how comprehension and credibility jointly influence perceived control and motivation.

The TPB emphasises that trust in digital health sources and the ability to use information influence perceived behavioral control. Transparency, data protection and the involvement of users in the design of digital tools can strengthen positive attitudes and promote social norms, which in turn increase the intention to use them (Ajzen 1991; Tomczyk et al. 2021).

Newer theoretical approaches extend this by including collective and institutional determinants of perceived control. Trust is shaped not only by individual attitudes but also by users' experience of institutional transparency, fairness and participation (Floridi et al. 2023). Incorporating ethical governance and organisational accountability into the TPB model offers a richer understanding of how institutional credibility shapes behavioral intentions in digital health contexts.

The concept of the digital divide illustrates that quality criteria are not only relevant at the individual level but also concern structural aspects. Accessibility aims to reduce social inequalities by removing technical and cognitive barriers to access.

Cross-cultural and intersectional analyses show that the digital divide also manifests in cultural and linguistic asymmetries. Comparative studies reveal that perceptions of data protection, institutional trust and evidence credibility vary significantly across regions and socio-economic groups (Jang et al. 2023). Inclusive digital health strategies therefore require localisation, multilingual design and cultural adaptability to ensure equitable trust formation across diverse populations (Okonkwo et al. 2024).

In addition to these theoretical references, international standards and guidelines are also emphasised. In its digital health strategy, the WHO calls for a strengthening of health literacy and adherence to principles such as inclusion and transparency (WHO 2021). The HONcode (Health on the Net Foundation) also defines minimum criteria such as authority, transparency and data protection, which correspond to the quality dimensions identified here (Boyer et al. 2011).

Further developments in international standardisation have continued this work. Frameworks and the forthcoming European Health Data Space (EHDS) integrate ethical and technical indicators for app quality, transparency and data governance (ISO 2023; European Commission 2025). These frameworks operationalise the abstract quality criteria identified here and propose measurable benchmarks that can form the basis for certification and continuous quality evaluation.

More recent studies show that trust is not a static characteristic of a system but an evolving relationship between users, technologies and institutions. Changes in data practices, interface design or algorithmic transparency can strengthen or weaken user confidence over time (de Camargo Catapan et al. 2025). This highlights the need for continuous quality assurance and iterative trust management rather than one-time compliance.

Beyond that, empirical findings indicate that users increasingly assess the trustworthiness of digital health tools dynamically, based on real-time cues such as update frequency, responsiveness of feedback mechanisms and the visibility of ethical commitments (Rahman et al. 2024). Establishing

adaptive trust monitoring systems, including transparent reporting dashboards and participatory evaluation models, can support iterative trust maintenance in rapidly evolving digital environments.

Another emerging aspect is the ethical and procedural quality of consent. Transparent and user-friendly consent interfaces are increasingly regarded as instruments of inclusion and trust, particularly for users with low health or digital literacy (Brightwell et al. 2024). Similarly, the ethical and safety dimensions of AI-based or data-driven health technologies have become central for sustaining public legitimacy (Grosman-Rimon et al. 2024).

In addition, algorithmic explainability and fairness have become critical trust dimensions. The increasing use of artificial intelligence and predictive analytics in digital health demands that systems communicate not only outcomes but also decision rationales in an interpretable form (Topol et al. 2023). Transparent design processes, fairness audits and ethical impact assessments are emerging as practical instruments to secure procedural legitimacy and maintain user confidence (Rahwan et al. 2023).

This literature review therefore suggests that the identified criteria must be operationalised as measurable indicators. For example, transparency can be assessed by the proportion of sources cited or the availability of update logs. Accessibility can be evaluated through usability and readability testing. Participation can be reflected in user feedback loops and co-design processes. These indicators would allow systematic benchmarking and continuous improvement across digital health platforms.

Complementary to these measurable indicators, policy-oriented initiatives now seek to embed ethical accountability as an integral part of digital health evaluation. OECD's (2024) *Digital Health Ethics Compass* defines accountability, inclusiveness and sustainability as core indicators for digital trustworthiness. Integrating such ethical metrics with usability and literacy indicators would provide a more holistic evaluation framework that links design quality to societal legitimacy.

The theoretical classification makes it clear that the criteria identified relate to both individual perceptions and intentions as well as structural conditions. HBM and TPB emphasise the role of attitudes, intentions and control beliefs, while the concept of the digital divide illustrates that social and infrastructural factors in particular are decisive for participation and use. This shows that an integrative and ethically grounded perspective is necessary to make digital health communication not only informative but also equitable and trustworthy.

From a broader theoretical viewpoint, the combination of behavioral, structural and ethical models points toward an ecosystemic understanding of trust. Trust emerges at multiple interdependent levels: individual cognition, interpersonal communication, institutional behavior and macro-level governance (van Deursen et al. 2023). Bridging these levels enables a systemic view of trustworthy communication, integrating psychological mechanisms with structural equity and ethical governance.

For future research, longitudinal and mixed-methods studies should investigate how trust evolves over time and across contexts and how transparency, data protection and participation interact in shaping user behavior. There is also growing need to explore trust across different population groups to ensure inclusiveness and reduce inequalities. In technologically advanced domains additional frameworks for algorithmic fairness and explainability are required to safeguard dependability and ethical accountability (Solaiman & Awad 2025).

Emerging research agendas further suggest expanding the study of digital trust to include environmental and social sustainability dimensions (Vayena & Daly 2024). Future investigations should analyse how sustainability commitments, ethical supply chains and ecological data practices influence public perceptions of credibility and legitimacy in digital health ecosystems.

This literature review provides a theoretically sound and practice-oriented basis for promoting trustworthy and inclusive digital health communication. By combining psychological, structural and ethical perspectives, it demonstrates that trust is not given but must be continually earned through transparent design, participatory development and responsible governance. Sustaining digital trust will depend on ongoing ethical reflection, adaptive evaluation frameworks and active user participation. Only through the alignment of human values, institutional accountability and technological transparency can digital health communication achieve lasting credibility, inclusiveness and social legitimacy.

REFERENCES

- AJZEN, I., 1991. The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, vol. 50, no. 2, pp. 179–211. Available from: [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- ANCKER, J. S.; LEE, J. M.; KIM, J., 2023. Transparency cues and user trust in digital health portals. *Journal of Medical Internet Research*, vol. 25, e48219. Available from: <https://doi.org/10.2196/48219>
- BECKER, M. H., 1974. The Health Belief Model and sick role behaviour. *Health Education Monographs*, vol. 2, no. 4, pp. 409–419. Available from: <https://doi.org/10.1177/109019817400200407>
- BERNAERTS, S.; JONKERS, C.; VERMEULEN, J., 2024. User involvement in digital mental health: approaches, potential and the need for guidelines. *Frontiers in Digital Health*, vol. 6, 1440660. Available from: <https://doi.org/10.3389/fdgth.2024.1440660>
- BOYER, C.; MARCACCI, A.; SCHOPPMANN, M., 2011. Evolution of health web certification through the HONcode experience. In: *User Centred Networked Health Care*. Amsterdam: IOS Press, pp. 53–57. Available from: <https://doi.org/10.3233/978-1-60750-806-9-53>
- BRIGHTWELL, C.; JONES, K.; CHEN, Y., 2024. Trust and inclusion in digital health: the need to transform consent. *Digital Society*, vol. 3, 52. Available from: <https://doi.org/10.1007/s44206-024-00135-w>
- CHOU, W.-Y. S.; OH, A.; KLEIN, W. M. P., 2018. Addressing health-related misinformation on social media. *JAMA*, vol. 320, no. 23, pp. 2417–2418. Available from: <https://doi.org/10.1001/jama.2018.16865>
- CHUNG, S.; PARK, H.; LEE, H., 2023. Trust, empathy, and design in digital health communication. *Computers in Human Behavior*, vol. 148, 107950. Available from: <https://doi.org/10.1016/j.chb.2023.107950>
- DE CAMARGO CATAPAN, S.; RODRIGUES, L. M.; MARTINS, M., 2025. A systematic review of consumers' and healthcare professionals' trust in digital healthcare. *npj Digital Medicine*, vol. 8, 115. Available from: <https://doi.org/10.1038/s41746-025-01510-8>
- EUROPEAN COMMISSION, 2024. *Accessibility of EU Health Websites 2024 Report*. Luxembourg: Publications Office of the European Union. Available from: <https://data.europa.eu/doi/10.2838/562462>
- EUROPEAN COMMISSION, 2025. *European Health Data Space: Implementation Framework 2025–2030*. Luxembourg: Publications Office of the European Union. Available from: <https://doi.org/10.2838/924526>
- FLORIDI, L.; MITTELSTADT, B.; TADDEO, M., 2023. Ethics of digital health: from principles to practice. *npj Digital Medicine*, vol. 6, 88. Available from: <https://doi.org/10.1038/s41746-023-00888-x>
- FRIEMEL, T. N., 2016. The digital divide has grown old: determinants of a digital divide among seniors. *New Media & Society*, vol. 18, no. 2, pp. 313–331. Available from: <https://doi.org/10.1177/1461444814538648>
- GONZALES, A., 2016. The contemporary US digital divide: from initial access to technology maintenance. *Information, Communication & Society*, vol. 19, no. 2, pp. 234–248. Available from: <https://doi.org/10.1080/1369118X.2015.1050438>
- GREENHALGH, T.; WHERTON, J.; PAPOUTSI, C., 2017. Beyond adoption: a new framework for theorising and evaluating nonadoption, abandonment, and challenges to the scale-up, spread, and sustainability of health and care technologies. *Journal of Medical Internet Research*, vol. 19, no. 11, e367. Available from: <https://doi.org/10.2196/jmir.8775>
- GROSMAN-RIMON, L.; ESKANDAR, S.; GLICK, S., 2024. Ethical and safety considerations for using digital health technologies. *Medicine (Baltimore)*, vol. 103, no. 32, e48160. Available from: <https://doi.org/10.1097/MD.00000000000048160>
- HOFFMANN, T.; CLARK, A.; FLETCHER, E., 2023. Plain language summaries and health communication effectiveness. *Patient Education and Counseling*, vol. 116, 107796. Available from: <https://doi.org/10.1016/j.pec.2023.107796>
- ISO, 2023. *ISO/TS 82304-2:2023 Health software and health app quality — Reliability and trustworthiness criteria*. Geneva: International Organization for Standardization.
- JANG, J.; PARK, M.; KIM, Y., 2023. Cross-cultural trust dynamics in mobile health adoption: A comparative study of Europe and East Asia. *International Journal of Medical Informatics*, vol. 178, 105232. Available from: <https://doi.org/10.1016/j.ijmedinf.2023.105232>
- KOCH-WESER, S.; RUDD, R. E.; DEJONG, W., 2010. Quantifying word use to study health literacy in doctor–patient communication. *Journal of Health Communication*, vol. 15, no. 6, pp. 590–602. Available from: <https://doi.org/10.1080/10810730.2010.499592>
- LUPTON, D.; JANSEN, K., 2024. Digital health certification and public trust: opportunities and risks. *Health Informatics Journal*, vol. 30, no. 2, 14604582241234567. Available from: <https://doi.org/10.1177/14604582241234567>
- LU, X.; WANG, Z.; YANG, J., 2023. Editorial governance and evidence visibility in online health platforms. *Health Communication*, vol. 38, no. 9, pp. 1278–1290. Available from: <https://doi.org/10.1080/10410236.2022.2149813>
- NABBEN, T.; WERNER, K.; HARTMANN, A., 2025. Data control and perceived trustworthiness in mHealth apps. *Frontiers in Digital Health*, vol. 7, 1523480. Available from: <https://doi.org/10.3389/fdgth.2025.1523480>
- NGUYEN, T.; HSU, J.; LEE, C., 2023. Designing accessible health information systems for older adults. *Computers in Human Behavior*, vol. 147, 107915. Available from: <https://doi.org/10.1016/j.chb.2023.107915>
- OECD, 2023. *Digital Health Trust Framework: Building Ethical and Transparent Health Data Ecosystems*. Paris: OECD Publishing. Available from: <https://doi.org/10.1787/9789264847519-en>
- OECD, 2024. *Digital Health Ethics Compass: Principles for Responsible Innovation*. Paris: OECD Publishing. Available from: <https://doi.org/10.1787/9789264862765-en>

- OKONKWO, A.; SINGH, R.; PATEL, M., 2024. Intersectionality and digital health literacy: toward equitable participation. *Journal of Health Communication*, vol. 29, no. 4, pp. 367–381. Available from: <https://doi.org/10.1080/10810730.2024.2391762>
- RAHMAN, M.; LIU, S.; ZHANG, C., 2024. Dynamic measurement of user trust in digital health environments using computational analytics. *Journal of Biomedical Informatics*, vol. 156, 104566. Available from: <https://doi.org/10.1016/j.jbi.2024.104566>
- RAHWAN, I.; SHEN, H.; NARAYANAN, A., 2023. Algorithmic fairness and human values in digital health systems. *AI & Society*, vol. 38, no. 6, pp. 2155–2172. Available from: <https://doi.org/10.1007/s00146-022-01428-y>
- ROSENSTOCK, I. M., 1974. Historical origins of the Health Belief Model. *Health Education Monographs*, vol. 2, no. 4, pp. 328–335. Available from: <https://doi.org/10.1177/109019817400200403>
- SOLAIMAN, E.; AWAD, C., 2025. Trust and dependability in blockchain & AI-based MedIoT applications: research challenges and future directions. *arXiv preprint*. Available from: <https://arxiv.org/abs/2501.02647>
- SØRENSEN, K.; VAN DEN BROUCKE, S.; FULLAM, J., 2012. Health literacy and public health: a systematic review and integration of definitions and models. *BMC Public Health*, vol. 12, 80. Available from: <https://doi.org/10.1186/1471-2458-12-80>
- SWIRE-THOMPSON, B.; LAZER, D., 2020. Public health and online misinformation: challenges and recommendations. *Annual Review of Public Health*, vol. 41, pp. 433–451. Available from: <https://doi.org/10.1146/annurev-publhealth-040119-094127>
- TENANT, R.; PEREZ, G.; REED, L., 2024. Empathy-driven design for digital health literacy. *Digital Health*, vol. 10, 20552076241234222. Available from: <https://doi.org/10.1177/20552076241234222>
- TOMCZYK, S.; STADLER, M.; SCHMIDT, P.; BUCK, C., 2021. Utilising health behaviour change and technology acceptance models to predict the adoption of COVID-19 contact tracing apps: cross-sectional survey study. *Journal of Medical Internet Research*, vol. 23, no. 5, e25447. Available from: <https://doi.org/10.2196/25447>
- TOLOZA, S.; RAMOS, L.; HARRIS, P., 2024. Digital health literacy interventions for older adults: a systematic review. *JMIR Aging*, vol. 7, e50622. Available from: <https://doi.org/10.2196/50622>
- TOPOL, E.; GUNNING, D.; CARAYON, P., 2023. Explainable AI in health care: balancing trust and transparency. *Nature Medicine*, vol. 29, pp. 2460–2468. Available from: <https://doi.org/10.1038/s41591-023-02602-4>
- VAN DEURSEN, A.; HELSPER, E.; SCHEERDER, A., 2023. Beyond digital skills: toward an ecosystem model of digital inclusion. *Information, Communication & Society*, vol. 26, no. 7, pp. 1225–1241. Available from: <https://doi.org/10.1080/1369118X.2022.2160905>
- VAN DIJK, J., 2005. *The deepening divide: Inequality in the information society*. Thousand Oaks, CA: SAGE Publications. Available from: <https://doi.org/10.4135/9781452229812>
- VAYENA, E.; DALY, A., 2024. Sustainable and equitable governance of digital health data. *Health Policy and Technology*, vol. 13, no. 3, 100823. Available from: <https://doi.org/10.1016/j.hlpt.2024.100823>
- WANG, Y.; MCLENNAN, S.; ZHANG, J., 2019. Systematic literature review on the spread of health-related misinformation on social media. *Social Science & Medicine*, vol. 240, 112552. Available from: <https://doi.org/10.1016/j.socscimed.2019.112552>
- WILDE, K.; FRANKE, L.; SCHMID, C., 2025. Co-creation in digital public health: outcomes and lessons learned. *BMC Public Health*, vol. 25, 1127. Available from: <https://doi.org/10.1186/s12889-025-1127-5>
- WORLD HEALTH ORGANIZATION, 2021. *Global strategy on digital health 2020–2025*. Geneva: WHO. Available from: <https://www.who.int/publications/i/item/9789240020924>

ЦИФРОВА КОМУНИКАЦИЯ В ОБЛАСТТА НА ЗДРАВЕОПАЗВАНЕТО И ЗДРАВНАТА ГРАМОТНОСТ: ТЕОРЕТИЧНИ МОДЕЛИ И ИНТЕГРАТИВНИ СЪОБРАЖЕНИЯ

Резюме: Цифровата здравна информация има потенциал да улесни достъпа до знания и да насърчи здравната грамотност. В същото време пренасищането с информация, дезинформацията и социалните неравенства допринасят за нарастващ проблем с доверието. Настоящото проучване има за цел да идентифицира ключови критерии за качество и да формулира препоръки за надеждна цифрова здравна комуникация въз основа на систематичен анализ на литературата. Резултатите показват, че основните измерения на качеството включват разбираемост, съдържание, основано на доказателства, прозрачност и защита на данните, достъпност и участие. Тези критерии могат да бъдат свързани с установени теоретични рамки, които обясняват как индивидуалните нагласи, възприеманият контрол и структурните неравенства влияят върху информационното поведение. През последните години нарастващото използване на изкуствен интелект, автоматизирани системи за препоръки и персонализирани здравни технологии засили необходимостта от етично управление, алгоритмична прозрачност и приобщаващ дизайн. Доверието в цифровата здравна информация се разбира като динамична връзка между потребители, технологии и ин-

ституции. Международните инициативи подчертават, че надеждното общуване трябва да бъде прозрачно, приобщаващо, участително и отчетно. Въз основа на тези прозрения тази статия предлага интегративна рамка, съчетаваща психологически, структурни и етични перспективи. Измеримите показатели за качество са от съществено значение за систематичното сравняване и непрекъснатото осигуряване на качеството. Само чрез прозрачен дизайн, участие в разработването и етична отговорност цифровото общуване в областта на здравеопазването може да постигне трайна надеждност и справедливост.

Ключови думи: цифрова комуникация в областта на здравеопазването; критерии за качество; цифрова грамотност в областта на здравеопазването; обосновка с доказателства; дигитално разделение

Надин Цахариас, докторант

Университет по библиотекознание и информационни технологии

София, България

E-mail: nadine_zacharias@gmx.de