

# Scaling Artificial Intelligence in Health





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# Foreword

Artificial intelligence (AI) has the potential to transform how healthcare operates, is delivered, and is experienced by patients. Since 2019, the OECD has shown leadership in this area through the publication of its AI Principles and the creation of supporting initiatives such as the OECD.AI Policy Observatory, expert groups, and publications promoting the responsible use of AI. In 2024, OECD Health Ministers endorsed the *Declaration on Building Better Policies for More Resilient Health Systems*, which acknowledged, among other priorities, “the importance of adopting a sector-specific approach to developing appropriate policies around the use of artificial intelligence in health, while taking into account multi-sectoral contexts, such that the benefits in areas such as health system resilience can be realised fully.” This report – and its policy checklist – aims to support that objective.

This report goes on to review OECD Members’ progress in taking action to advance the responsible scale of AI in their health systems. It is clear that while progress is being made, there is still significant work to be done in areas of trust and capacity building; strengthening data quality, access, protection, and use; and leadership to guide and oversee action in the implementation of AI in Health.

This report was prepared by Eric Sutherland, Rachel Fellner and Yunona L’Heureux at the OECD Health Division within the Directorate for Employment, Labour and Social Affairs (ELS). This report is part of the OECD Horizontal Project on Thriving with AI: Empowering Economies and Societies. The authors would like to thank colleagues in OECD’s Science, Technology, and Innovation (STI) and Governance (GOV) directorates for their extensive comments, input and direction. A number of colleagues provided meaningful comments and direction, including Lucia Russo and Limor Schmerling-Magazanik (with STI), and Ricardo Zapata and Jamie Berryhill (with GOV). The authors would also like to thank colleagues from ELS including Francesca Colombo and Mark Pearson.

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The authors are also appreciative of the efforts of the OECD AI in Health Expert Group who were instrumental to the development of this checklist and the drafting process. Members of the expert group are included at the end of this document (see Annex A). The authors would also like to thank the GDHP, and Coalition for Health AI (CHAI) who offered helpful advice on the comprehensiveness and priority of the items in this checklist. The authors would also like to thank Sasa Jenko (European Commission), and Kathrin Cresswell and Robin Williams (University of Edinburgh) for their comments and suggestions to the document.

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The views expressed in this document are the views of the authors and not necessarily the views of any OECD country or individual expert.

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# Executive summary

Artificial Intelligence (AI) holds significant potential for the healthcare system. That potential is not being fully realised due to **fragmented data foundations, non-aligned policies and practices**, and **structural and governance barriers to scalability**. Although AI is universally used in administration across OECD Member countries (100%), **national-level scale-up remains limited**, (e.g. only 10% for medical imaging applications).

Today, there are well-documented **risks associated with the use of AI in healthcare**, such as skewed data, privacy and security risks, insufficient transparency or oversight, and the potential for job displacement and de-personalisation. While caution is necessary, **there is also risk in inaction**.

The opportunity from AI in health will be unleashed when we can **responsibly scale**. This requires a balance between market forces (that move fast), health culture (doing no harm), and reaching every person (through scale).

While AI is already being used in health across OECD Member countries, responsible and scalable adoption remains impacted by structural, regulatory, and governance gaps. OECD Member countries are undertaking initiatives to address these gaps:

- Establishing a strategy or action plan at the intersection of AI and health (18%),
- Establishing an oversight body for the use of AI in health (18%),
- Establishing a national approach to regulatory sandbox with a focus on AI in health (18%),
- Streamlining the national approach to health technology assessments to include AI (24%),
- Updating national procurement guidelines to account for AI in health (11%),
- Establishing national approach to improve the use of AI in the health workforce (29%), and
- Developing national legislation for AI in health (3%).

To help support these actions toward the responsible scale of AI in health, a coherent policy checklist was developed to guide decision making and prioritisation. The checklist is built on OECD AI principles and frameworks and developed in partnership with the Global Digital Health Partnership (GDHP) and Coalition for Health AI (CHAI) as well as the OECD AI in Health Expert Group.

This AI in Health Policy Checklist identifies policymaker, technologist, and health workforce actions to responsibly scale AI in health. **Critically, the checklist can be used to identify blind spots** in those actions. The checklist is not prescriptive; however, it provides a prompt for decision makers to consider a full range of action across relevant policy categories and areas.

The four pillars of the checklist focus on **establishing enablers** (for **data foundations, assuring and scaling AI**, and **capacity building**); **implementing guardrails** (to **oversee** and **monitor** progress towards **agreed objectives**); **engaging meaningfully** with the **public, providers, and industry**; and **deploying trustworthy AI**. Across the four pillars, nine main policy categories and 42 questions have emerged as critical for responsibly scaling the benefits of AI in health:

## Establishing Enablers

- **Better use of data** – Without data, AI solutions cannot function effectively. Considerations for data in healthcare include that they are findable, accessible, interoperable, and reusable (FAIR), along with being representative of the population for both primary and analytic uses. Emerging leading practice includes the establishment of country-led health data authorities (e.g. across Europe) of equivalent governance structures to ensure compliance with data protection laws while also facilitating AI adoption using secure and quality datasets.
- **Guidance to enable scale of AI** – To support industry (developers) and implementers (governments, health workforce, public) to move AI from pilot to widespread deployment, tailored policy guidance is needed. An emerging leading practice includes the development of model cards (e.g. from the Coalition for Health AI), which certify compliance, transparency, and accountability of AI solution when applied to real-worlds settings.

## Capacity and capability

- **People capacity** – A skilled and knowledgeable health workforce is essential for the uptake and sustained use of AI solutions in healthcare. Emerging leading practices include proactive planning and workforce upskilling across both frontline and back-end health roles (e.g. the United Kingdom Digital and Data Professional Capability Framework).
- **Technical capacity** – A secure, interoperable and adaptive technical infrastructure (e.g. computing capacity, data storage, connectivity) is a cornerstone for deploying and scaling AI solutions from local to cross-national levels. Robust infrastructure ensures that AI tools can process large, complex datasets in real time, integrate across diverse health information systems, and operate safely and reliably to support both primary and analytic use of health data.

## Implementing Guardrails

- **Agreeing upon common objectives** – Support the development of common guardrails, strategies, and collective activities, which ensure the streamlined development and implementation of AI in health. An emerging leading practice includes the development of a national strategy that addresses the unique aspects of AI development, deployment and use in healthcare. Such strategies have been developed by seven OECD countries with several under development.
- **Oversight, measurement and monitoring** – Given the rapid advancements of AI technologies, it is necessary to understand the potential benefits and risks while taking action to optimise benefit while protecting from harms. Emerging leading practices include the development of indicators to assess clinical effectiveness and economic impact of AI at scale.

## Engaging Meaningfully

- **Public** – It is critical to engage and educate the public to foster trust in AI in health and increasingly empower their active participation. An emerging leading practice includes the establishment of public assemblies to integrate public voice into the work on AI in Health (e.g. The French citizen's assembly for digital health).
- **Healthcare providers** – Many AI solutions in health are used by both front and back-end healthcare workers. An emerging leading practice includes mandating education on AI within the curriculum of health professionals (e.g. in Korea and others).

- **Industry** – Active engagement and collaboration with industry to support literacy, common understanding, and alignment in AI solutions. Emerging leading practices include developing collaborative and transparent processes for industry to engage with governments to test, validate, and support the integration of AI solutions (e.g. the United Kingdom NHS AI Lab).

## Trustworthy

- **Trustworthy use of AI** – Trust underpins the use of AI in health. There is an imperative to ensure that humans, and health promotion are at the core of any AI solution brought into the health ecosystem, while doing no harm. Emerging leading practices include the development and use of ethical impact assessments for AI solutions in health (e.g. New Zealand’s checklist embedding ethics in tool evaluation).

While many countries are making individual progress, there is strategic opportunity for multi-lateral collaboration to **reduce the unnecessary barriers to scale**. A shared recognition is emerging: **coherent, cross-border compatible policies are essential to balance innovation with safety, and economic opportunity with building public trust**.

# 1 Responsible scale of AI in health

Interest in artificial intelligence (AI),<sup>1</sup> is exponentially growing in healthcare. While the main developments to date have been predominantly made in medical imaging and automating administrative tasks, advancements in other fields will likely follow and become an integral part of healthcare (OECD, forthcoming workforce publication, 2026), (Secinaro et al., 2021<sup>[1]</sup>). Today, AI is used in health systems across all OECD countries (100% of those interviewed. However **national-level scale-up remains limited; only 10% of medical imaging applications being used on a national scale** (OECD, forthcoming workforce publication, 2026).

Beyond imaging, AI is enhancing analytical capabilities, diagnostic accuracy, patient monitoring, health system administration, drug discovery, and workflow efficiency. Other areas, such as predictive medicine, personalised medicine and health literacy can also meaningfully benefit from advances in AI, resulting in more human-centred care.

At the same time, the adoption of AI adds risks due to potential workforce displacement, concerns over data protection and security, the application of AI trained on skewed data, and unequal access to the benefits from AI solutions.

Many of these risks arise from the challenge of scalability of AI solutions across institutions, regions, countries and populations. Consider the time it took to reach 40% consumer adoption of previous technologies across sectors: 64 years for the telephone, 45 years for electricity, 23 years for computers, 16 years for mobile phones, and 13 years for the internet (DeGuttsa, 2012<sup>[2]</sup>). The question remains, “How long will it take AI to scale, when considering the societal acceptance and ethical debate for AI in healthcare?”. In some cases, the barriers to AI adoption are justified, given the concerns about the current state of safety of these systems in the health sector. In other cases, barriers to scaling arise from the lack of robust policy; fragmented data and digital infrastructure; minimal co-ordination across the AI in health ecosystem; governance frameworks that fail to incentivise safe and scalable solutions; and previous efforts that eroded trust among both patients and healthcare professionals.

The difficulty to scale AI solutions in health undermines its potential economic and health benefits. The inability to scale leads to duplicative investments and poor-quality solutions based on data that are not representative of target populations. Without action, the benefits of AI will not be distributed evenly, and the reach of innovation will be limited. This disparity is already evident, with wealthier institutions able to invest in the necessary technical infrastructure, financial resources and skilled personnel to implement and sustain AI solutions whereas less affluent institutions lack the people, data, or infrastructure to design, develop, implement, sustain, and evolve these AI solutions. A fragmented approach leads to AI solutions that are more expensive and generate sub-optimal results with limited reach.

A collective approach to AI in health – where governments partner with stakeholders to act on their role as stewards of the health system – is necessary to foster safety, privacy, and innovation. This approach can enable governments to proactively shape the integration of AI into health systems while ensuring alignment with public interest objectives.

To that end, in January 2024, OECD Health Ministers, in the *Declaration on Building Better Policies for More Resilient Health Systems* (<https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0500>) outlined several key objectives related to the use of AI in the health sector:

*“assist in our efforts to harness the transformative potential of new technologies for health such as genomics and genetics, and **artificial intelligence**, while ensuring that their application delivers **better health outcomes** by tracking and assessing the health and health systems implications including on health spending of these developments”;*

*“assess and make **policy recommendations** on the implications of using artificial intelligence in health systems”;*

*“develop a **sector-specific framework for AI in health**, that is aligned with existing multi-sectorial frameworks, to encourage responsible use of artificial intelligence, exploiting cross-sectoral synergies to promote fairness, transparency and accountability, **while ensuring consistency across policy domains**”.*

Based on the Declaration, the OECD established a time-bound AI in Health Expert Group within the OECD.AI Network of Experts in May 2024 (OECD, 2024<sup>[3]</sup>). This Expert Group involves individuals from 27 countries, representatives from leading organisations (e.g. World Health Organization, Coalition for Health AI, HealthAI), and members of civil society. Aligned with the 2024 Health Ministerial Declaration, and building on the OECD Recommendation for Health Data Governance (OECD, 2016<sup>[4]</sup>) and OECD AI Principles (OECD, 2024<sup>[5]</sup>), the Expert Group was focussed on addressing the challenge of scalability for AI in Health. To that end, the experts focussed their efforts on developing an AI in Health Policy Checklist for the responsible scale of AI in health, considering both within jurisdictions and across borders. In total, the group has met six times to develop the checklist.

This report is structured around three core components: the rationale for a sector-specific approach; the “AI in Health Checklist”; and its application to assess readiness for the responsible scale of AI in health:

1. **Rationale for the responsible scale of AI in health (Why):** The case for leadership and policy clarity at the intersection of AI and health, outlining why a formalised approach is beneficial to guide safe and responsible scale (remainder of Chapter 1).
2. **AI in Health Policy Checklist (What):** A tailored AI in Health Policy Checklist, developed through expert consultations and review of existing evidence and structured around the pillars of Enablers, Guardrails, Engagement, and Trustworthiness. (Chapter 2).
3. **Current state of implementation of AI in health across OECD Members (How):** OECD countries are advancing the implementation of AI in health systems across legislation, governance, technical infrastructure and capacity. Leveraging the AI in Health Policy Checklist, an analysis of the current state of implementation is structured around core components of checklist (Chapter 3).

The report closes by summarising the report and identifying possible future actions for policy work at the intersection of health and AI (Chapter 4).

## Rationale for formalising an approach at the intersection of AI and health

The transformative potential of AI in health is clear, but so are the risks. Without a coherent comprehensive AI in Health Policy Checklist, countries face fragmented adoption, uneven guardrails, and unclear return on investment. This may lead to challenges of trust or unsustainable return on investment. This is exacerbated in countries with a federated governance structure – such as Germany, Australia or Canada – where the accountability for health is at the state or provincial level can cause further fragmentation. A checklist could help regional health authorities align their activities for collective benefit while enabling local delivery of health services.

To further reinforce the case for an AI in Health Policy Checklist, key concerns related to **privacy**, **safety**, **validation** and **value** have been identified. These interconnected areas exhibit challenges that are significant considerations in the health sector due to concerns about the potential for human harm and the

opportunity for human benefit. Without a focus on policies that address these concerns, there is risk that decisions are delayed or inconsistent. The OECD AI in Health Policy Checklist aims to help policymakers identify key challenge areas and provide insights into emerging practices for actionable steps. The following sections provide context on these concerns and the benefit of a collaborative approach.

### ***Health data access, use, privacy, and security***

The OECD Recommendation on Health Data Governance (OECD, 2016<sup>[4]</sup>) provides guidance in several areas related to health data access, use, privacy, and security. The Recommendation provides considerations for protecting privacy and security of individual health data, while also supporting the use of data for purposes of direct patient care, health system management, public health, and innovation (the latter three of which are considered examples of analytic data use).

This will be especially important for amplifying the benefits and addressing the risks of emerging technologies and capabilities such as quantum computing (OECD, 2025<sup>[6]</sup>) and genomics (OECD, 2021<sup>[7]</sup>).

Consistency in this practice fosters trust of the public and providers while enabling an efficient foundation on which AI solutions are built and being prepared to adapt to future opportunities and risks. A checklist will help avoid blind spots in establishing that consistency.

### ***Health safety, quality and equity***

If health technologies fail, they can have long-lasting and profound consequences on trust among health providers and the public. Likewise, failure to leverage the advanced capabilities of AI in the provision of health can also cause harms from inaction. As opportunities to improve healthcare quality emerge – due to the use of technology including AI – the standards of healthcare quality and safety will evolve.

If solutions are not designed to scale, reaching the quality-of-care standards will become more difficult for low-resource or hard-to-reach settings to achieve. This includes supporting health in remote and rural areas, supporting those with poor health and data literacy, and assuring indigenous data sovereignty (where applicable).

Enabling responsible scale of solutions will help the benefits of AI reach every person. A checklist will help identify blind spots for barriers to scale the benefits of AI while assuring safety.

### ***Validating innovation for use in health***

Emerging studies indicate that 75% of AI in health solutions evaluated through randomised control trials demonstrate a positive impact (Han et al., 2024<sup>[8]</sup>). For emerging innovators, particularly small and medium enterprises (SMEs), there is a risk that the fragmented patchwork of policies and related processes slow down innovation and competitiveness.

While variation in policies and processes is expected across jurisdictions and countries, unnecessary variation can add significant costs (e.g. financial, time) for researchers and innovators without commensurate value of increased protection for the jurisdiction or the public. The unintended cost of variation includes lack of clarity for how approvals will operate. For emerging capabilities, such as adaptive and agentic AI<sup>2</sup> systems<sup>3</sup>, the health system has been slow to clarify their approach across medical device approvals and health technology assessments among other areas.

Enabling a consistent approach will support capacity and capability building toward a robust innovation ecosystem across delivery, approvals, and scale. A checklist will help to identify blind spots in establishing that ecosystem that accelerates innovation for all.

## Value dynamics of healthcare

The evaluation of AI initiatives in health mirror those in the existing landscape of health system valuation, which considers a wide range of indicators – generally aligning with the quintuple aim for healthcare improvement (Nundy, Cooper and Mate, 2022<sup>[9]</sup>). Benefits from AI in health could translate to better health outcomes (e.g. using AI in medical imaging to improve accuracy diagnosis and treatment), healthcare experience (e.g. optimising and reducing waiting time), provider experience (e.g. reduced administration leading to more time to patient care), improved equitability (e.g. identifying populations that would benefit from a targeted health intervention), and reduced cost (e.g. reducing redundant testing, optimisation of sparse resources, improvements to productivity). For example, evidence from the American Medical Association (AMA) shows that Ambient Voice Technology reduced documentation time by 85.8%, saving an average of 5.27 minutes per case compared to manual typing (Karavassilis et al., 2025<sup>[10]</sup>).

Importantly, these benefits may be achieved over both a long-time horizon and broad population. Within the private sector and pharmaceutical research and development, AI also offers promise to improve the discovery, development and supply chain delivery of new therapies (Sanofi, 2023<sup>[11]</sup>).

The benefits of AI in health can be well understood, but analysis is needed to evaluate the social and economic impact of AI solutions. A checklist will help avoid blind spots that prevent understanding and evaluating those benefits across populations and geographies.

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## Notes

<sup>1</sup> Defined as “a machine-based system that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments. Different AI systems vary in their levels of autonomy and adaptiveness after deployment” (OECD, 2025<sub>[12]</sub>).

<sup>2</sup> Agentic AI are systems of co-ordinated agents that can break down tasks, work together over extended periods, and use external tools to achieve complex goals. These systems are designed to operate in more open-ended, less predictable environments and often require less human supervision than individual AI agents (OECD, 2026<sub>[13]</sub>).

<sup>3</sup> Artificial intelligence system is a machine-based system that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations or decisions that can influence physical or virtual environments. Different AI systems vary in their levels of autonomy and adaptiveness after deployment (OECD, 2025<sub>[12]</sub>).

# 2 AI in Health Policy Checklist

Adopting AI solutions in healthcare needs pace, focus, and buy-in to ensure that health systems can **scale fast while doing no harm**. This approach must create space for vision, alignment, multi-stakeholder collaboration and collective impact. Health is a fundamental pillar of society, yet in this domain, harm can be irreversible – even fatal – raising the stakes for responsible adoption of AI.

Much of the challenge in health stems from needing to balance several forces at the same time – advancing science and innovation, doing no harm, and providing equitable outcomes for all. As discussed in Chapter 1, the use of AI in Health simultaneously comes with significant opportunities and significant risks. Many health systems – and individual institutions – have tried to find this balance point in isolated siloes. While delivering against local objectives, this has the potential to harm advancement for the health system as a whole – delivering sub-optimal outcomes for individuals and populations.

Other industries have learned that collaboration on data infrastructure and digital foundations not only reduces operational costs – it also enables targeted investments in areas that offer long-term strategic value and improve customer experience. For example, co-operation in the financial sector enables individuals to withdraw cash from bank machines and move funds around the world. Similarly, co-operation among airlines simplifies the ability for consumers to book flights themselves and for airplanes to fly safely across the globe. These industries have collaborated to align on data and technical foundations while competing on design and implementation of advanced practices. This led to improved services, lower overall cost, and innovation that thrives.

In health, the lack of alignment on policy, data, and technical foundations prevents health institutions from collaborating easily. Fragmentation in foundations acts as a barrier to innovation and inhibits the ability of health systems to move toward person-centric health systems that improve outcomes. A lack of effective AI governance and cross-border compatibility in policy inhibits the potential of AI to scale in the digitalised health ecosystem. This increases costs and degrades outcomes. This checklist seeks to help policymakers by identifying potential blind spots so policy action can support AI solutions that could scale efficiently and enable better health outcomes for all.

## Advancing an AI in Health Policy Checklist

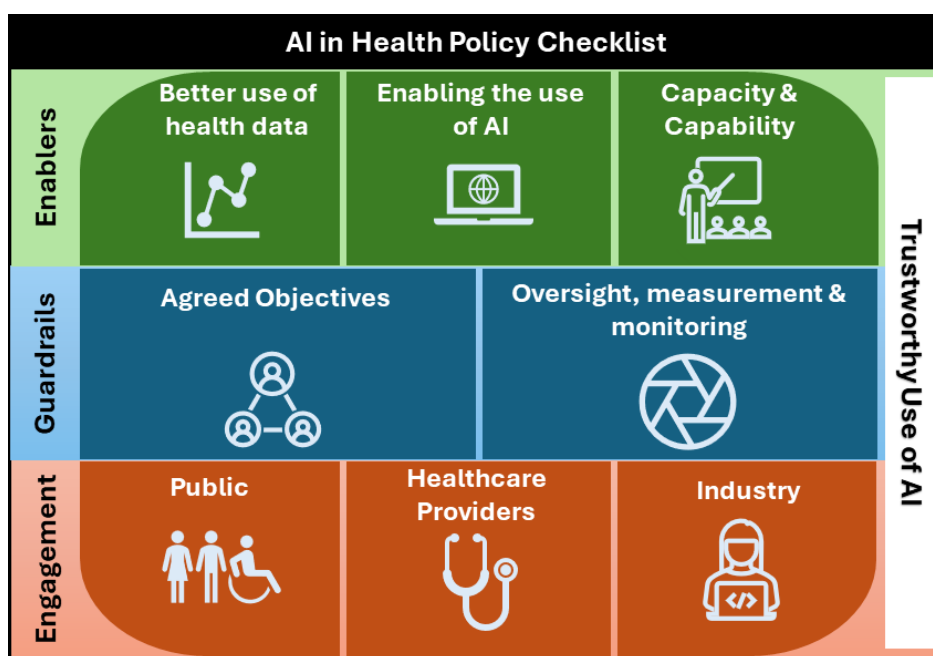
As AI becomes increasingly embedded in health systems, there is growing recognition of the need for a co-operative approach to guide responsible scale of AI in health. While general AI principles offer valuable high-level direction, the complexity of health systems – which seek to meet the quintuple aim for healthcare while respecting the sensitivity of health data – demand guidance rooted in real world implementation needs (Nundy, Cooper and Mate, 2022<sup>[1]</sup>). The AI in Health Policy Checklist provides guidance on a co-operative approach.

The purpose of the AI in Health Policy Checklist is to identify the foundational policy areas that support the responsible scale of AI and to understand countries' readiness in their adoption of AI. This can help policymakers deliver a consistent and sustainable approach. Countries can also work together to identify how to address the compatibility of policy areas across borders. That compatibility will accelerate the scale of innovation to optimise both human and economic benefits. This checklist does not distinguish between

specific AI modalities. Rather it provides guidance for ensuring that AI integration into health systems is ethically grounded, operationally efficient and clinically effective. Future work for this checklist could examine challenges with specific modalities (such as Agentic AI) or applications (such as in public health).

The checklist is anchored in cross-border collaboration and practical relevance. The process of development drew on desk research, surveys, international partnerships and iterative consultation to identify key policy areas. Key policy areas were identified to support the responsible scale of AI in health across core policy areas. To translate these policy areas into actionable elements, the process drew on the OECD’s Integrated Digital Health Ecosystem Policy Checklist (OECD, 2023<sup>[2]</sup>) and the OECD’s Framework for Trustworthy AI in Government (OECD, 2024<sup>[3]</sup>). These tools provided a foundation for categorising key concepts under the thematic pillars of **enablers**, **guardrails**, **engagement**, and **trustworthiness** (See Figure 2.1).

Figure 2.1. Policy checklist to support responsible scale and scale of AI in health



### Four thematic pillars of an AI in Health Policy Checklist

An AI in Health Policy Checklist emphasises the following areas, building on OECD Governing with Artificial Intelligence (OECD, 2024<sup>[3]</sup>).

**Enablers** for AI in health develop strong data and digital foundations to support timely and interoperable health data across the health sector and government services. Data are then accessible for use in the development, testing, implementation, and evolution of AI solutions while ensuring continuous safety of those solutions. Processes are streamlined to review, validate, approve, deploy, and evolve AI in health solutions, with sufficient and sustainable human and technical capacity.

**Guardrails** support the safe and responsible deployment of AI solutions. The guardrails utilise agreed upon common objectives for an AI in Health programme across all stakeholders and allow all parts of the health system to work together toward agreed goals. The guardrails also establish governance structures that put incentives in place to deliver those objectives. Procedures are put in place to measure, monitor, and address issues with the effectiveness of the AI in Health program. Ultimately, this establishes clear

responsibilities across the AI lifecycle, including who is accountable for doing what with which controls, and establishing the implications for issues as they arise in the interest of enabling efficient and effective value of AI while protecting from harm.

**Engagement** for AI in health relates to the involvement of key stakeholders in the responsible scale of AI. Key stakeholders include the public, healthcare providers, and other enabling partners. Engagement involves building the capacity and capability to engage with the AI in Health program. A key outcome of engagement is enabling trustworthiness to accelerate the adoption of approved AI solutions.

In addition, consideration of **Trustworthiness** for AI in health is necessary for consideration of bioethics and responsible scale. A fulsome approach to trustworthiness and ethics will consider action from multiple perspectives – the potential harm from both the implementation and the delay in implementation on AI in Health solutions. Embedding ethics would reflect the OECD’s AI principles (OECD, 2024<sup>[4]</sup>) and the broader perspectives of bioethics reflecting patient beneficence, patient non-maleficence, patient autonomy, and justice.

With this as background, the following section describes each of the parts of the OECD AI in Health Policy Checklist. This is based on the nine areas noted in Figure 2.1. With the description of the policy areas there is a brief discussion of why it is important; reflection on emergent, or divergent practices; and notable examples of the policy areas in practice. A table with questions for policymakers to understand their readiness for the responsible scale of AI is included at the end of this chapter. Chapter 3 builds on the policy checklist by examining progress across OECD countries for the responsible scale of AI.

## AI in Health Policy Checklist

### ***Enabler: Use and protection of health data in AI solutions***

**Why this is important:** Data underpins all stages in the design, development, implementation, use, evaluation, and evolution of AI solutions. Health data represents the largest segment of data from any industry (estimated at 30%) and is growing faster than any other sector (Weber, 2024<sup>[5]</sup>). Yet, the health sector is using less than 5% of the data for decision making purposes (World Bank Group, 2023<sup>[6]</sup>). Health data has the unique property of simultaneously providing value for individual care (such as through direct care) and for communities and the population (such as through public health measures, research, innovation, or health system monitoring). It is important for enablers of health data to account for the risks associated with both data use (e.g. privacy breaches) and data non-use (e.g. preventing safety issues, supporting innovation).

Further, many digital health investments have faced issues achieving effective return on investment in part due to the significant fragmentation of data and digital assets within and across health systems. This fragmentation has made it challenging to have comprehensive trusted information about individuals for the provision of care. Fragmentation also complicates data compilation and aggregation – with appropriate protections – for health system safety and performance, public health, research, and innovation among others. These challenges slow effective health interventions, prevent scientific advancement, and increase costs due to unnecessary investments in data collection, storage, and integration. To realise the benefits of AI, it is critical to strengthen data and digital foundations so that data are representative of populations and the capacity exists to use AI solutions at scale.

**What this includes:** There are many considerations for data in healthcare, including that it is findable, accessible, interoperable, and reusable (FAIR) (GO FAIR, 2021<sup>[7]</sup>). Enablers for the use of health data could be operationalised for data to be:

- **Findable:** Data assets intended for analytic use could be **catalogued** and easily discoverable by authorised users. Catalogues should be annotated to support the search of data assets for re-use.

Improving the findability of **high quality, representative datasets** will support AI developers, researchers, and policymakers to access existing resources, reduce redundant investments, and speed up innovation. This is especially important in the current landscape of international and cross-border collaborations, in areas of public health, research and healthcare innovations.

- **Accessible with individual consent:** Establish clear practices for individuals to consent for the use of their health data in care and analytics. Consider the appropriate use of opt-in or opt-out consent, or the use of compliant alternatives when consent is impractical while achieving health system objectives (such as individual emergency care or emergency public health management).
- **Accessible health data for primary use:** Health data should be accessible to authorised healthcare providers, individuals, and/or their delegates for direct care, aligned with individual consent and considerations for privacy and safety. How data are held and governed should also be addressed while shifting culture from risk avoidance and protection to **data stewardship**, which prioritises optimising the collection, use, and re-use of data in individual and public interest while providing appropriate protections across data supply chains. This process supports integrated care, professional collaboration, and patient trust (Digital Transformations for Health Lab, 2025<sup>[8]</sup>).
- **Accessible health data for analytic use in the public interest** (e.g. public safety, health system improvement): Data intended for analytic uses can be accessible through clear, streamlined processes that **minimise administrative barriers while protecting data privacy and security**. Facilitating streamlined access across health institutions supports the responsible use of data in the public interest in research, public health initiatives, and innovation. These could be governed by robust data protection and accountability frameworks that support trusted **cross-border collaboration**. A key tool in this policy area is consideration for privacy enhancing technologies (PETs) (e.g. pseudonymisation, encryption) (OECD, 2025<sup>[9]</sup>; OECD, 2023<sup>[10]</sup>). Decisions regarding **data access and analytic use** should follow **transparent, accountable** processes, with clearly defined criteria – supported by mechanisms that demonstrate how confidentiality, intellectual property and commercially sensitive information will be protected throughout the data lifecycle across the public and private sectors.
- **Interoperable:** Health systems should be interoperable. This does not mean that every country adopts the same standards for data capture and exchange, rather, it means that the **standards that are adopted are compatible** with other standards in the areas that are most important for the provision of care and crucial analytic uses such as research, clinical trials, or public health. International co-operation between standards bodies, governments, and cross sector stakeholders is beneficial to enabling interoperability. Governments could support this by adopting globally recognised standards, along with technologies that enable data exchange across diverse systems while accommodating local needs.
- **Data quality:** Health system data should have its quality measured and reported. Given that data are the foundation of AI, if data are of poor quality, then the resulting AI solutions will be of poor quality. Measuring and reporting data quality will help international collaborators work together with confidence while building trust with stakeholders. This quality evaluation would measure areas of **skewness, representativeness, accuracy, traceability, and timeliness**. Consideration could also be given to whether data quality measures are globally aligned to support international collaboration, while still allowing for local components that reflect specific population needs.
- **Linkable:** National health systems can adopt a consistent **privacy preserving digital identifier** to securely link data about individuals regardless of the location or mode of their care, while safeguarding their privacy. This will help people who receive care across borders to increase trust and ensure completeness of their health records. Linking data is also critical for AI development, where linking data across domains strengthens the quality, representativeness, and trustworthiness of AI solutions (OECD, 2025<sup>[11]</sup>).

- **Sovereign and Secure Storage:** National health systems can clarify expectations for the security and storage of data, including how data are **encrypted** – both **in motion and at rest** – and where data are stored to **protect data sovereignty**. This helps protect sovereign interests while supporting international collaboration in critical areas such as digital security.

**Emerging leading practices:** The enablers above fall under the umbrella of health data governance, though there is variation in how these are implemented. The European Health Data Space (EHDS) and the identification of country-led health data authorities is a strong step forward. As countries work together to align their national practices with the EHDS regulation, they will help to define the leading practices. Some emerging leading practices such as the adoption of the International Patient Summary (IPS) for patient records demonstrates how international collaboration could operate with a foundation of open standards and interoperability (The International Patient Summary, 2025<sup>[12]</sup>). In addition, the Digital Health Model Security Notice developed by the Global Digital Health Partnership (GDHP) provides consistent requirements to vendors of digital security expectations (Global Digital Health Partnership, 2023<sup>[13]</sup>).

### ***Enabler: Define and operationalise the assurance and use of AI in health services***

**Why this is important:** The OECD AI Principles (OECD, 2024<sup>[4]</sup>) provide clarity on what is expected for the deployment and use of AI across the entire AI lifecycle. Specifically, that AI solutions should advance **Inclusive Growth, Human Rights, Transparency and Explainability, Security and Safety, and Accountability**. While these terms are often used to describe trustworthy AI, incompatibilities in the interpretation of these terms can prevent the scalability of AI solutions when they need to be adjusted to meet different requirements.

For innovative AI solutions in health to scale across broader populations, co-ordination of assurance and approval processes is essential. This can be supported through cross-country agreements on shared principles, compatible assurance standards, and transparent evaluation procedures. Such co-ordination does not imply that approval in one country automatically results in approval in others, but rather reflects the principle of “reliance”, where assurance processes are designed to be compatible. This approach enables AI innovators to understand the steps required to gain approval, facilitating the scaling of solutions across borders. It also helps reduce duplication, accelerate access, and foster economic growth.

**What this includes:** Enablers for the AI life cycle can be clarified to enable:

- **AI solution risk management:** A key component of AI assurance processes includes the assessment of the risk of the AI solutions in the context of the health system. Questions such as “what is the likelihood of a negative occurrence?”, “what is the likelihood of not achieving a positive occurrence if we do not act?”, “what is the impact of negative or positive occurrences?”, and “what actions are in place that lower negative likelihoods, increase positive likelihoods, and minimise negative impacts” are all considerations. Compatibility for risk management – and the **identification of appropriate actions given the risk level** – help innovators understand what controls need to be incorporated into their solutions to provide greater certainty in their design. This also helps health stakeholders build trust in the use of AI solutions through the implementation of controls.
- **AI solution assessment:** Health systems can clarify the processes for the assessment of AI solutions – establishing requirements for AI solutions to be considered, reviewed, and accepted as an approved solution. The assessment should include the classification of what constitutes *AI as a medical device in health* vs. *AI as a non-medical device in health* and criteria for their review and approval. This assessment also includes the intended use for the AI solution in terms of its geography, target population, and other factors. This could include direct-to-consumer vs. direct-to-provider vs. administrative solutions. Review would assess the cost-effectiveness and other implications of AI solutions including through market-accepted tools such as Health Technology

Assessments (HTA). Health systems could also align on **tool effectiveness, value assessment and reimbursement, and ongoing compliance** frameworks to promote the long-term viability of integrating AI into clinical practice and encourage investment in scalable, sustainable innovation. Given that AI solutions are frequently updated, based on training data, the criteria for periodic updates to and review of the AI solutions could be defined.

- **Algorithmic useability:** Assure that AI solutions are fair in their application, ideally with reduced skewness, or at minimum **understood representativeness of the data** used to develop the solution and its alignment with anticipated use of the AI solution. Further, AI solutions should provide sufficiently informative output to help users understand the AI decisions depending on the context of the AI solutions and individuals either using or impacted by the solution to **facilitate their use of results from the AI solution** (e.g. explainable and transparent). This facilitates having a human-in-the-loop during the use of AI in health.
- **AI Model cards:** Health systems could have methods to clearly communicate the result of the assessment to inform consumers prior to deciding to use the AI solutions. A model card, a **standardised document summarising key information** about an AI solution, including its intended use, performance, limitations and risks, can help achieve this. This would include details on skewness, performance metrics and representativeness, as well as transparent disclosure of any residual skewness, the reasons it persists, and its acceptability for specific subpopulations. Given the adaptive nature of AI systems, model cards should be treated as living documents, updated regularly to reflect model changes, retraining and real-world performance over time. International collaboration is useful to articulate their trustworthiness for the consumer and health professionals alike.
- **Procurement:** Health system procurement could be modernised to leverage established networks to simplify procurement for individual health facilities (e.g. through certification models). New procurements could be updated to **articulate the requirements** of publicly funded health systems as new technologies, such as AI, are introduced into their footprint. This could include areas noted in the previous sections around data management and security (including interoperability), adoption of model cards, algorithmic viability, and assurance models. A modern approach to procurement helps amplify a consistent signal to the vendor community of expectations and requirements.

Alongside assurance and procurement, additional considerations are:

- **Patient consent for AI in clinical use:** Define when consent for the use of AI is necessary (vs. appropriate alternatives) and how that consent is received, recorded, and shared.
- **Approval for AI in clinical use:** Guidelines can be provided to health systems with recommendations on when AI solutions could be used due to the **availability of evidence, safety requirements, and appropriate evaluations**. These recommendations would be contingent on contextual factors such as patient characteristics and their point along the care pathway. This guidance aims to clarify when human oversight is required and when AI solutions may be autonomous with appropriate review.
- **Reimbursement of AI in clinical use:** Clarify when the use of such solutions **require special re-imburement** (as opposed to being a tool in the delivery or care), (Lobig et al., 2023<sup>[14]</sup>), (van Kessel et al., 2023<sup>[15]</sup>).
- **Liability for AI in clinical use:** Define **how liability is managed**, such as how to address a negative situation that arises from the use of the AI solution. Could be extended to consider both direct-to-clinician and direct-to-consumer models.

To accelerate innovation, many countries are establishing approaches for:

- **Regulatory sandboxes:** Regulatory sandboxes test innovative solutions that are on the “edge” of current practices. The sandbox provides extraordinary oversight to prevent harms, while establishing a “proving ground” for what is innovation possible with regulatory change or clearer interpretation. Implementation of a regulatory sandbox includes adjusting approval processes post-test to avoid lengthy delays for critical technologies while sufficient evidence is gathered.

**Emerging leading practices:** A leading practice is the adoption of model cards – via Conformité Européenne (CE) marking in **Europe**, which certifies compliance with the European Union (EU) safety, health, and environmental protection standards (European Commission, 2025<sup>[16]</sup>) and the Coalition for Health AI (CHAI) in the United States which has introduced model card frameworks to enhance transparency and accountability in health-related AI systems (CHAI, 2025<sup>[17]</sup>). The International Medical Devices Regulatory Forum (IMDRF) is currently in the process of designing a comprehensive guide to AI-regulation across the AI lifecycle (IMDRF, 2024<sup>[18]</sup>).

**Areas where more convergence is needed:** Countries are developing idiosyncratic approaches to risk management and the definition of medical devices. For example, in the **United States**, the FDA has adopted risk management practices based on the output of the AI solution whereas the **European Union (EU)** considers both the input and output of AI solutions. This divergence has led to cases where AI tools like the AI Scribes were originally considered high risk in the **EU** (due to using personal health information for training) and low risk in the **United States** (due to doctors being in the loop). These differences highlight a key challenge for international collaboration, that without the shared understanding of risk categories policy coherence and scalability of AI solutions remains limited. Establishing agreement on such risk categories is a necessary pre-condition for developing interoperable AI risk governance and scalability of AI solutions, perhaps leveraging the risk management framework for medical devices published by the International Medical Devices Regulator Forum (IMDRF) (IMDRF, 2025<sup>[19]</sup>; Chapman, 2025<sup>[20]</sup>).

### ***Enabler: Sufficient human and technical capacity and capability***

**Why this is important:** Given the wide range of policy and technical activities that are needed to help the design, implementation, operation, monitoring, and improvement of AI in health solutions – and the significant opportunity from the responsible scale of AI – there is a need to build human and technical capacity. Human capacity and capability are important across borders to support the transferability and mobility of skills. Technical capacity is beneficial to share sufficient and available computing power.

**What this includes:** To build sufficient and capable human and technical capacity, countries may establish practices for:

- **Planning for future workforce:** Consider the needs of the health workforce as part of the integration of AI: what are the impacts on the frontline? What are the impacts on patients? What supporting functions are necessary? and What oversight functions are required for the system to be safe? There is benefit to proactively planning and acting on future health workforce needs, for example considering future hybrid roles. Planning could assess current **gaps in tools and knowledge across different workforce functions**. Targeted upskilling programmes can be developed to minimise knowledge gaps and prepare the digitally enabled health workforce.
- **Planning for public knowledge needs and trust:** Consider the needs for the public as AI is introduced into the health system. Focusses on building sufficient knowledge to enable the public’s capacity to effectively engage with AI. This planning process recognises that trust and understanding are mutually reinforcing. Planning could assess the current gaps in tools and knowledge across the public and include **developing methodologies, approaches and training programmes to prepare the public** to be empowered participants in their care with AI.
- **Planning for sufficient technical capacity:** The development of AI solutions requires sufficient computing power and storage to operate effectively. Decisions would need to be made about

whether to insist on local computing capability or whether co-operation is better to share computing capacity with partners, for example with cloud computing and enabling federated learning. Planning could assess current gaps in technical capacity, **project future demand, and develop forward-looking strategies** for building technical capacity when and where it is needed.

**Emerging leading practice:** Few countries in the OECD actively project and plan for the health workforce that is required for the integration of AI into health. In that work, new planning could include technologists, data managers and stewards, privacy officers, policymakers, as well as administrative staff and office managers. In the **United Kingdom**, the Digital and Data Profession Capability Framework has been developed to build capacity in support functions, though is not specific to the health sector (GOV.UK, 2025<sup>[21]</sup>). By doing workforce planning co-operatively the definition of new roles and evolution of existing roles will be more consistent which will simplify accreditation and transferability of health workers.

### ***Guardrail: Operationalise action toward common vision and objectives***

**Why this is important:** Health systems benefit from having an agreed common objective for the design of their AI in health ecosystem that is agreed across all stakeholder groups. An agreed common objective helps decisions about priority and action to evaluate those decisions against their contribution to the agreed common objective. Across countries, specific agreed objectives will vary; however, they will likely adopt common attributes in being person-centred and rights-based (to health, to privacy, and to benefit from science).

**What this includes:** Responsible scale of AI into health systems benefit from common objectives defined by:

- **Establishing a vision:** Governments could clearly articulate the intended outcome from investments in AI for health. This could consider impacts on people, providers, and industry – and the role of government to guide actions to achieve the vision. Based on the OECD Health Minister Declaration (2024), health systems should be centred on people and provide *personalised care* (OECD/LEGAL/0500, 2024<sup>[22]</sup>; WHO, 2021<sup>[23]</sup>). Health systems would preserve and enhance human-decision making while promoting human and societal well-being.
- **Establishing a strategy or action plan:** As will be seen in Chapter 3, countries are starting to develop specific strategies or action plans at the intersection of AI and health to deliver against agreed objectives for AI in health. Such strategies direct collective actions toward balancing the forces of market, health, and the public.

Many of the strategies or action plans adopt common ways of working that could be considered:

- **Open:** Open approaches include where data, digital, and AI infrastructure are as **open as possible and closed as necessary**. This approach fosters protection and the use of health data resources for systems outcomes. This will help systems have fair access to data while minimising skewness and discrimination. Humans benefit from AI solutions that are trained on representative data sets.
- **Collaborative:** Stakeholders co-operate to share knowledge to achieve better health outcomes (WHO, 2021<sup>[23]</sup>). Systems also work together toward the responsible scale of trustworthy AI (OECD, 2024<sup>[4]</sup>). In health, this helps private and public sector organisations have **collaboration mechanisms** that are **inclusive, transparent, and open** and result in better **compatibility of approaches within and across borders**. This collaboration will encourage the involvement of stakeholders, including patients, the public, and underserved communities, and foster transparent and understandable processes for AI solutions to effectively scale and be responsibly adopted.
- **Responsive and adaptable:** Policies and processes are designed to be responsive and adaptable to new opportunities and risks as they arise. Speed of change is calibrated to the risk of action and risk of inaction. Given the increasing pace of innovation, this may require forms of adaptive

governance such as rules being set dynamically by designated authorities with appropriate transparency, communication, and oversight rather through specific regulation or legislation. Responsiveness also understands the range of types of AI solutions (e.g. LLMs, agentic AI, predictive analysis, etc.) and using a risk-based evaluation, helps to prioritise action to respond to the size of the risk or opportunity.

**Emerging leading practice:** As will be discussed in Chapter 3, an emerging leading practice is for health systems to develop a strategy or action plan at the intersection of AI and health to ensure progress that is in alignment with common health system objectives.

### ***Guardrail: Oversight, measurement, and monitoring of AI solutions***

**Why this is important:** A key method to assure the ongoing safety and effectiveness of AI in health solutions is to measure their performance in clinical settings and to monitor those metrics to act when certain thresholds are attained. When measurement approaches are aligned across jurisdictions, multi-country assessments and co-operation become more feasible. More broadly, consistent measurement – alongside open sharing of results – simplifies post-market assessment, supporting collaborative learning and improvement. This would be grounded in governance structures supported by empowered institutions. Performance measurement also supports the tracking of benefits from the use of AI in health and progress against strategic milestones.

**What this includes:** Measurement and monitoring of AI solutions would include:

- **Evaluating post-market effectiveness:** In the approval for the AI solution, there is generally an effectiveness measure that describes the **expected clinical performance and measures to verify the stability of the AI solution** both before and after deployment. Post-market effectiveness tracks the AI solution for performance drift and establishes pathways for notification and remediation. Measurement plans and reporting cycles post-deployment may include safety plans (reviewing for unintended and harmful outcomes), patient-reported experience and outcomes and socio-demographic uptake and impacts. That is, measuring for the **availability, accessibility, use, and impact of the AI solution by populations**. Serious incidents could be transparently reported and acted on to prevent future re-occurrence.
- **Benefits assessment:** This would measure and estimate the net benefit from the AI solution. This would be related to the benefits hypothesis and/or quantified targets developed at the approval of the AI solution. Benefits could span the quintuple aim, including aspects of outcome improvement, equity uplift, or system efficiency. Benefits would be related to system planning and re-investment, including benefits from the scale of approved AI solutions. For example, this could estimate changes in workforce productivity and help understand how that productivity gain is re-invested – whether in reducing burnout, investing more time in care, and / or in seeing additional patients.
- **Energy usage:** This would measure the energy impact and usage of AI in health solutions to understand the **environmental impact of solutions** from energy used in the end-to-end life cycle of AI processing. This includes evaluating future energy demands during development, deployment, and operation, and considering the availability of supporting energy sources. As AI solutions scale, understanding and managing their environmental impact becomes increasingly critical to responsible scale.

Governance of AI solutions would include:

- **Appointing a Champion:** Health systems could identify a champion for AI – **a human leader with passion and leadership to mobilise stakeholders** across the sector, that ensures enablers for AI are working as intended, resolving areas of conflict, identifying methods to scale, and sharing leading practices. The Champion could be supported by a series of governance structures designed to oversee the AI in health programme of work.

- **Establish accountability and control:** To clarify what roles are important to guide the responsible scale of AI solutions and how those roles interact. This would identify **clear responsibility for actions and decision making**, including which roles are appropriately involved and consulted. It also includes defining **controls for analytic uses of data and use of AI solutions** – across public health, clinical trials, research, innovation, and health system management. This applies to all stakeholders – across the public, providers, industry, and policymakers among others.
- **Establishing incentives to collaborate:** Health systems can **adopt incentives** to encourage collaboration with AI solutions and the use of health data. This would also establish dis-incentives to significantly penalise individuals or organisations who abuse their position to either affect health data privacy breaches or deliberating fragmenting the AI in health ecosystem contrary to agreed objectives.

**Emerging leading practices:** For post-market surveillance, the OECD has developed an incident reporting framework (OECD, 2025<sup>[24]</sup>). For further measurement and monitoring, the OECD has developed the Catalogue of Tools and Metrics for Trustworthy AI, including safety, privacy, and fairness (OECD, 2025<sup>[25]</sup>). In addition, HealthAI is creating a Global Regulatory Network that will include incident reporting (HealthAI, 2026<sup>[26]</sup>). As work progresses, there will be further opportunities for collaboration on leading practices for governance, measurement, monitoring, and response.

### **Engagement: Public**

**Why this is important:** The public and the public's ability to achieve good health outcomes are at the heart of the health system. The public are both the source of most data that are used in AI solutions and the means to measure AI's effectiveness. As in the OECD Recommendation on Health Data Governance (OECD, 2016<sup>[27]</sup>), the first component involves the public being involved in the design, implementation, and operation of health data governance solutions (Vanstone et al., 2023<sup>[28]</sup>). As such, the public should be engaged in all stages of the design, deployment, operation, and improvement of AI in health solutions.

To support meaningful engagement, efforts can also be made to promote digital and AI literacy. Without this, public feedback may be less informed, as such, less valuable, and the public may be less willing to participate. Engagement must also reflect the diversity of the population to ensure inclusive perspectives. Some communities are structurally underserved and may require tailored engagement strategies to ensure their needs and perspectives are reflected in the co-production of AI solutions. Additionally, Indigenous communities hold distinct rights, including in data governance and digital technologies, which must be respected and fulfilled in accordance with relevant legal and ethical frameworks.

Cross-border co-operation enables countries to draw on shared insights. Because incidents that undermine trust in one jurisdiction may influence perceptions in others, co-ordinated approaches can help maintain and strengthen public trust.

**What this includes:** To engage the public, this includes:

- **Trust:** While trust is critical for the responsible scale of AI in health, there is not yet a consistent definition of what trust requires (Starke et al., 2025<sup>[29]</sup>). An approach for fostering trust involves **engaging with the public to learn what it takes for AI to be trustworthy**. This would include transparency in practices and open communication to demonstrate trustworthiness and checking with the public when their requirements for trustworthiness change. Trust can also be strengthened through multistakeholder engagement, ensuring diverse perspectives are included in governance.
- **Educate to empower:** Improving the awareness, level of **digital and AI literacy**, and understanding of AI in health will help demystify the new solutions for individuals and allow them to make informed decisions. With the growth of direct-to-consumer access of AI solutions, the public are becoming key actors in their care journey. A focus on education would empower people to be aware of the availability (and trustworthiness) of solutions and how they fit in their overall

programme of health and care. This will need to be done along with providers, carefully and respectfully, as this may result in changing the legacy patient-provider dynamic.

- **Representativeness:** Engagement with the public in all areas above should be designed to be representative – respectful of diversities across cultures, languages, age, and other appropriate socio-demographic factors. In the case of Indigenous Peoples, engagement should respect their data sovereignty, e.g. Canada’s First Nations Peoples of Ownership, Control, Access, and Possession) (FNIGC, 2025<sup>[30]</sup>); and Australia’s Framework for Governance of Indigenous Data (Commonwealth of Australia, 2024<sup>[31]</sup>). Working with Indigenous peoples should also respect CARE principles (Collective benefit, Authority to control, Responsibility, and Ethics) (GIDA, 2018<sup>[32]</sup>). When considering representativeness, there may be value in respecting both individual and collective rights for trustworthy and inclusive AI in health (Alelyani, 2025<sup>[33]</sup>).

**Emerging leading practice:** There are several emerging leading practices associated with this area. **France** has established a Citizen Assembly for Digital Health where diverse members of the public are engaged to discuss issues pertinent to AI and digitalisation of health and making recommendations to the government (Agence du Numérique en Santé, 2025<sup>[34]</sup>). For education, there are emerging programmes such as *Elements of AI*, which originated in **Finland** in 2019, provides free AI education for the public (Elements of AI, 2025<sup>[35]</sup>).

### **Engagement: Health providers**

**Why this is important:** Health providers are essential to the functioning of the health system. They serve as a trusted guide to help their patients navigate their health journey. Like the public, it is appropriate for health providers to be involved in all stages of the design, deployment, operation, and improvement of AI in health solutions. As with the public, there is value in being co-operative across borders and learn from each other and build trustworthiness with the medical community.

**What this includes:** Engagement of health providers that personally provide care to their patients mirrors that of the public. As such, this includes:

- **Trust:** Fostering trust involves organisations learning **what it takes to be trustworthy**, demonstrating that trustworthiness, and checking with health providers when their requirements for trustworthiness change. This is in a continuous, iterative process. Involvement of stakeholders, specifically health providers at every stage of the AI lifecycle is also crucial for building and sustaining trust.
- **Educate to empower:** Improving the awareness and understanding of AI in health will help to demystify these new solutions for providers to make **informed decisions and effectively integrate** those **solutions** into their care delivery workflows. Many AI in health solutions are direct-to-provider. In these cases, health providers should be aware of the reliability and appropriate use parameters of these solutions. Importantly, they should also know how to **effectively query and challenge AI outputs** when information is inconsistent with their knowledge (Babic et al., 2021<sup>[36]</sup>). Along with the public, this should be done carefully and respectfully, as this may alter traditional patient-provider dynamics.
- **Clinical adoption:** Beyond technical assistance and financial investment, adopting AI in healthcare includes **clinical workflow redesign, interdisciplinary co-ordination, and support** for leadership structures that can guide responsible implementation. Sustained change management efforts should also address cultural readiness and fostering trust in using AI-enabled tools, supported by transparent communication and clear accountability for outcomes.

**Emerging leading practice:** There are a number of leading practices in this area, with **France** mandating AI and digital health training across all health professional programmes starting in the 2025-2026 academic year (Comité interministériel de l’Intelligence artificielle, 2025<sup>[37]</sup>), **Estonia** incorporating AI training in all

medical school curricula (TI-Hüpe, 2025<sup>[38]</sup>), and **Germany** offering certified AI training through its national KI-Campus platform (KI-Campus, 2022<sup>[39]</sup>). These examples highlight varying, ongoing efforts to engage and co-ordinate AI capacity building of healthcare providers.

### ***Engagement: Industry***

**Why this is important:** Industry is a central pillar in the development of AI in health. They are innovators and solution developers to help advance the efficiency and effectiveness of health systems. Industry engagement can aid in understanding existing barriers and opportunities with policy and regulation, co-investing in evidence generation, and co-creating meaningful solutions that meet the needs of the health system today. It is appropriate for industry partners, which include pharmaceutical and medical technology companies, small, medium and large sized enterprises in health and technology, academia and research institutions, to be involved in all stages of the design, deployment, operation, and improvement of AI in health solutions.

**What this includes:** Engagement of industry aligns with that of the public and health providers. As such, this includes:

- **Trust:** Building and maintaining trust requires collaboration to actively **cultivate trustworthiness** through transparent practices and involve industry through evolving changes. This would focus on predictability of process and minimising unnecessary duplication. Involvement of industry along the AI lifecycle is beneficial for building and sustaining trust.
- **Partnership:** Developing practices to establish **public-private partnerships** including the parameters around such partnerships – such as how risks are managed, intellectual property is protected, and how value from the partnership is shared. Could include consideration for embedding members of the public in such partnerships.

**Emerging leading practice:** There are a number of emerging leading practices in this area, in **France**, the PECAN programme is offering one-year of reimbursement for digital medical devices while finalising clinical evidence to obtain certification (G\_NIUS, 2025<sup>[40]</sup>). The **United Kingdom** has also established the NHS AI lab and associated regulatory sandbox to engage, educate and enable new solutions to enter the health ecosystem (NHS England, 2025<sup>[41]</sup>). In **Australia**, the Sparked is actively engaging with industry to enhance interoperability and the foundations for future AI implementations (Sparked, 2025<sup>[42]</sup>). In **Catalonia (Spain)**, the Observatory of Artificial Intelligence in health provides a transparent repository of all AI tools used in the region, and support for new initiatives to enter the system and scale (AI Observatory in Health, 2025<sup>[43]</sup>).

### ***Trustworthiness: Responsible Use of AI in health***

**Why this is important:** With AI, humans should feature first and foremost above machines when determining what is ultimately useful for the good of humans. The foundation of this rests in an ethical approach. Within biomedical ethics there are four key principles, as first defined in 1979: autonomy, beneficence, non-maleficence (i.e. ‘do not harm the patient’), and justice. (Varkey, 2020<sup>[44]</sup>). When implementing AI in healthcare, there is an ethical imperative to question and consider the bioethical principles and subsequent ethical impacts of the AI solution.

This ethical imperative extends beyond the clinical setting to overall system decisions about how AI is evaluated, scaled, and governed. There are several ethical principles which can be considered by policymakers, industry, and implementers when embedding ethics into standard procedures. One such guide comes from the OECD AI principles, which provide a global reference point, signalling for AI systems to be inclusive and beneficial to people and the planet; respectful of human rights and democratic values; transparent and explainable; robust, secure, and safe; and accountable (OECD, 2024<sup>[4]</sup>). These principles

reinforce the importance of embedding ethics throughout the entire AI lifecycle, from design, deployment to its use.

As AI is becoming integrated into health systems worldwide, it is critical that countries define ethical principles in alignment with their own societal values, legal frameworks, and healthcare priorities. Countries may develop their own guidelines or adopt internationally recognised tools such as OECD AI principles (OECD, 2024<sup>[4]</sup>), WHO's guiding principles for ethical use of AI in health (WHO, 2024<sup>[45]</sup>), or UNESCO's recommendation on the Ethics of AI (UNESCO, 2021<sup>[46]</sup>). These principles guide policymakers and implementers across the AI lifecycle ensuring there are clear ethical guidelines and certainty across the end-to-end decision making process.

**What this includes:** Ethical frameworks, principles, and concepts to permeate AI solutions across their lifecycle:

- **Ethical development, deployment, and use of AI solutions** aligned with applicable legal, regulatory, and societal expectations including boundaries for non-AI development. Provision should be made for human oversight and decision making for scenarios that are not clearly addressed by ethical guidelines. The objective could be to clarify as much as possible to provide certainty for end-to-end processes while aligning with bioethical principles.
- **Bioethical assessment** should consider how patient beneficence, patient non-maleficence, patient autonomy, and justice are incorporated into AI solution development, adoption, and scale. For AI solutions intended for the market, the AI solution manufacturer, developer, researcher (and similar) may **state how their specific AI solution is aligned with established bioethical principles** while quantifying impacts on people and populations with respect to cost-savings, time-savings, or other meaningful benefits.

**Emerging leading practices:** International organisations and governments are moving towards the development and use of ethical impact assessment of AI solutions. In **New Zealand**, Health NZ has established a National Artificial Intelligence and Algorithm Expert Advisory Group (NAIAEAG) as a leading governance mechanism for the ethical and safe use of AI in health. By requiring all AI projects involving Health NZ data or deployment to be registered with the group, and through the use of a structured AI checklist, NAIAEAG ensures that proposed tools meet ethical, technical, clinical and operational standards (Health New Zealand/ Te Whatu Ora, 2025<sup>[47]</sup>). Taking a different approach, **Korea** has positioned itself as a global leader in AI governance by integrating ethical oversight into its national legislation. As part of its forthcoming AI Act, expected to be launched in 2026, **Korea** will establish a national AI committee, chaired by the President and supported by a network of advisory sub-committees. With a five-year mandate, the Committee is tasked with ensuring that AI governance remains adaptable to technological advancements. The legislation will promote a decentralised ethics model, encouraging public and private sector organisations to establish independent AI ethics committees. (JustAI and Singhal, 2025<sup>[48]</sup>; Kim & Chang, 2024<sup>[49]</sup>).

**Areas where more convergence is needed:** There have been many publications on the ethics of AI, with over 140 documents being published across 19 countries – from governmental organisations, governments, and industry – including aspects of fairness, explainability, and transparency without a clear consensus on requirements (Korukoglu et al., 2025<sup>[50]</sup>). Ethical guidelines and principles are areas that would benefit from specific action to determine what international consensus is both beneficial and necessary to facilitate the scalability of trustworthy AI in health solutions.

## Using the AI in Health Policy Checklist

The above sections have described the policy areas that experts have identified as benefiting from conscious decisions about how they will operate in health systems. These policy areas have been

highlighted as they also benefit from consistency within jurisdictions and compatibility across jurisdictions. This approach fosters local autonomy while simplifying the ability to scale solutions. The following table (see Table 2.1) summarises the nine policy areas that make up the checklist for AI in health and suggests key questions to consider for the consistent development of each policy area.

**Table 2.1. Policy checklist to support responsible scale and scale of AI in health**

Type	Policy Areas	Policy Concept	Consideration – including assuring compatibility across borders were appropriate
Enablers	Better use of health data	<b>Findable</b>	Are there activities that support the findability of health data assets? With national data catalogues?
		Consent for health data	Is there clarity for when consent for health data use is necessary (vs. appropriate alternatives) and how consent is managed?
		<b>Accessible: Primary care</b>	Are comprehensive health data available for the provision of direct patient care?
		<b>Accessible: Analytic use</b>	Are health data available (with protection) for system analytics, public health, research, or innovation with defined controls?
		<b>Interoperable</b>	Are there activities to incentivise and enable the interoperability of data assets?
		Data quality	Are there activities to ensure the integrity of data across organisations? Including timeliness of data for its purpose?
		Linkable	Are there digital identifiers that support linking across data sets?
		Sovereign/secure storage	Are there activities for the secure storage of data assets? Do they include consideration for (indigenous) data sovereignty?
	Enabling the use of AI	Risk management	Are there frameworks for assessment and management of risk associated with AI solutions?
		<b>Technical Assessment</b>	Are there frameworks for the technical classification and assessment of AI solutions? Including update of features or algorithms?
		Algorithmic useability	Are there frameworks to assessment the useability of AI solutions with respect to fairness, explainability, and transparency?
		Model cards	Are there frameworks in use for “model cards” to communicate the result from assessments of AI solutions?
		<b>Procurement</b>	Are there frameworks in use for the procurement of AI in health solutions?
		Consent for AI use in care	Is there clarity for when expressed consent for the use of AI is necessary? And how that consent is managed?
		Approval for AI use in care	Is there an approach that defines boundaries for the clinical use of AI?
		Reimbursement for AI	Is there clarity on how and when use of AI solutions is re-imbursed and how much?
		Liability for AI use in care	Is there clarity on how liability is managed in care settings?
		<b>Regulatory sandboxes</b>	Are there frameworks for the implementation of regulatory sandbox(es) to accelerate innovation?
	Building capacity and capability	<b>Workforce capacity</b>	Are there actions to develop the evolving health workforce including front-office, back-office and oversight roles?
		Public capacity	Are there actions to build public digital and AI literacy?
		Technical capacity	Are there actions for future technical capacity, including storage and computing power?
Guardrails	Oversight, measurement and monitoring	Post-market effectiveness	Are there actions to measure post-market effectiveness and address issues / incidents as they arise?
		Benefit assessment	Are there actions to measure benefits from the implementation of the AI solution (including consideration for productivity change)?
		Energy usage	Are there actions to measure the energy usage to effectively understand and plan for environmental impact and energy demand?
		<b>Champion / oversight</b>	Is there a designated AI champion for the responsible integration of AI into health systems? Supported by an oversight body?
		Accountability	Is there clarity on end-to-end accountability and control across the AI life cycle across all identified roles?
		Incentives	Are there incentives in place for collaborative development of AI and use of health data? And penalties for mis-use?
	Agreed objectives	Establish a vision	Is there an endorsed vision for the intended target state?
<b>Establish an action plan</b>		Is there an endorsed strategy or action plan to achieve the agreed vision?	

Type	Policy Areas	Policy Concept	Consideration – including assuring compatibility across borders were appropriate	
Engagement		Open	Is there consideration for open data and AI solutions as part of the action plan?	
		Collaborative	Is there consideration for collaboration as part of the action plan? Does this include cross-border collaboration?	
		Responsive / Adaptable	Is there consideration for policies and processes to be responsive / adaptable to risk or opportunity as part of the action plan?	
	Public	<b>Trust</b>	Trust	Are there programmes in place for building trustworthiness of AI solutions with the public?
			Educate to empower	Are there programmes in place to educate and empower the public on the use of AI?
			Representative	Are programmes designed to address cultural, linguistic, age, and other diversities? Are considerations for Indigenous Peoples?
		Health Providers	Trust	Are there programmes in place for inclusive design with providers?
			Educate to empower	Are there programmes in place to educate and empower providers on the use of AI?
			Clinical adoption	Are there programmes to optimise adoption of AI tools by providers?
Industry	Trust	Are there programmes in place for transparent and inclusion of industry in end-to-end AI life cycle processes?		
	Partnership	Are there frameworks to establish public-private partnerships?		
Trust	Trustworthy AI	Ethical development	Is there an approach that defines processes to manage ethical considerations for AI solutions? Including boundaries?	
		Bioethics assessments	Are there considerations for the alignment with bioethical principles in the development and use of AI?	

Note: **Bolded** items are included in the analysis in Chapter 3.

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# 3 Current state of implementation of AI in health across OECD Members

AI is rapidly advancing in the healthcare sector, offering transformative potential. Yet its integration must be grounded in a robust, transparent, and fair foundation. The AI in Health Policy Checklist (Chapter 2) provides a structured tool with which countries can begin to identify and address existing gaps across policy in the areas of enablers, guardrails, engagement, and ethics.

As part of this chapter, findings are presented on the current state of AI adoption in health across all OECD countries, drawn through desk research, the OECD survey *Health Data Governance, the Impact of Artificial Intelligence on the Health Workforce, and Interoperability and Progress in Implementing the European Union Co-ordinated Plan on Artificial Intelligence (Volume 1)* (OECD, 2025<sup>[1]</sup>) and reviewed by OECD countries. This analysis is based on the available results as of the writing of this report. While individual responses will change over time, directional findings remain accurate. Together, these sources offer a comparative outlook of national AI readiness in health systems and review OECD Members' progress toward sector-specific approaches to AI and health.

## Review of progress toward the responsible scale of AI in health

This chapter will review progress in OECD countries toward the responsible scale of AI. This will include examining actions toward national strategies or action plans at the intersection of AI and health as part of **agreed objectives**. The chapter looks at aspects of the checklist across various areas including agreed objectives; better use of health data; enabling the use of AI; building capacity and capability among the health workforce; oversight bodies; and public engagement. These were chosen due to their expert-informed foundational importance in advancing the responsible scale of AI.

### **Agreed objectives: Strategies that enable the responsible scale of AI in health**

A key aspect of establishing agreed objectives is articulating and advancing coherent strategies. This section will consider progress for strategies at the intersection of AI and health, for cloud services, for interoperability, and for digital security (see Table 3.1). This includes a specific look at the AI in health strategies. These areas could benefit from sharing of practices across OECD countries.

**AI in Health strategies:** An emerging trend for the responsible scale of AI in health is for governments to develop **strategies at the intersection at AI and health**. This is in part due to establishing a place that can reconcile the balance between forces: market forces (moving fast), health forces (doing no harm), and human forces (scaling to every person). Collectively, an AI in Health strategy would allow countries to “scale fast while doing no harm”.

Countries have taken different approaches in the detail of implementation. In **Korea**, there is a mention of driving innovation with clear regulatory pathways for medical devices (MOHW, 2024<sup>[2]</sup>). In **Norway**, there is emphasis on cross border information sharing and the specific use of Large Language models

(Helsedirektoratet, 2025<sup>[3]</sup>). In **Finland**, a comprehensive vision for 2035 has been developed with a comparison between radical advancement and cautious profession across healthcare and social welfare (Digifinland, 2025<sup>[4]</sup>). **France** has a focus on citizen rights, building trust and transparency, functional national governance and the data foundations to enable sharing, use, and reuse (Ministère du Travail de la Santé et des Solidarités, 2025<sup>[5]</sup>). In **Spain**, emphasis has been placed on reliability, utility, humanism, and universality (Ministerio De Sanidad, 2025<sup>[6]</sup>). In the **United States** the democratising of AI technologies was highlighted (United States Department of Health and Human Services, 2025<sup>[7]</sup>). In **Ireland**, the strategy places a particular focus on the use of AI to improve operational efficiency and enhance the experience of both patients and healthcare staff (Department of Health, 2026<sup>[8]</sup>). Additional leading practices have emerged, one in **Catalonia (Spain)** where transparent communication and processes for all stakeholders, including clear pathways for innovators, are emphasised (Salut Generalitat de Catalunya, 2025<sup>[9]</sup>). Additionally in **India**, a strategy was published in February 2026 detailing five key pillars for the human centric and responsible adoption of AI in healthcare, including: prioritising governance, evidence generation, digital and data infrastructure, workforce readiness, and ecosystem enablement (Ministry of Health and Family Welfare, 2026<sup>[10]</sup>).

Nevertheless, these strategies and action plans have common components: **fostering cross-sector collaboration, building human capacity, fostering trust with the public, incentivising quality and trust, support for development and deployment, and improving health data foundations** (see Table 3.1).

Table 3.1. Components of national AI in health strategy/action plans

Components of National AI in Health Strategy/Action Plans	Finland	France	Ireland	Korea	Norway	Spain	United States
<b>Innovation and Cross Sector Collaboration</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Establish an AI Advisory Group	No	Partly	Yes	No	Yes	Partly	No
Cross-Border Information Sharing	Partly	Yes	Partly	No	Yes	No	No
Regulatory Guidance and Assessment	Yes	Partly	Yes	Yes	Yes	Yes	No
Use and Implementation of AI (Including Procurement)	Yes	Yes	Yes	No	Yes	Yes	Yes
Use of Large Language Models	Partly	No	No	No	Yes	No	No
Continuous Assessment of Implemented Solutions	No	Yes	Partly	No	No	Partly	No
<b>AI Competency and Training: Building AI Capacity</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Citizen Rights and Trust	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Transparent Communication	Yes	Yes	Yes	No	Yes	Yes	Partly
<b>Promoting Trustworthy and Quality AI Development ( Ethical and Responsible Use to Avoid Potential Harm)</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Research (Targeted support for development and deployment)</b>	Partly	Yes	Yes	Partly	Partly	Partly	Yes
Democratising AI Technologies and Resources to Promote Access	No	No	Yes	No	No	Partly	Yes
Regulatory Pathways for Medical Devices	No	Partly	No	Yes	No	Yes	No
<b>Health Data Utilisation and Quality Data Foundation</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Data Sharing and Data Provisions	No	Yes	Partly	Partly	Yes	Partly	Yes
Modernise Technical Infrastructure	Partly	Yes	Yes	No	No	Partly	Yes
Financial Incentives for Industry	Partly	Partly	No	No	No	No	Yes

Note: AI in Health Strategies were reviewed by the authors, high-level categories were identified for each country to support a comparison.

Source: Helsedirektoratet (2025<sup>[3]</sup>), “Joint AI plan for the safe and effective use of AI in the Norwegian health and care services 2024 - 2025 – Helsedirektoratet”, <https://www.helsedirektoratet.no/rapporter/joint-ai-plan-for-the-safe-and-effective-use-of-ai-in-the-norwegian-health-and-care-services-2024-2025>; Digifinland (2025<sup>[4]</sup>), “AI Ecosystem in Social and Health Services (SOTE)-AI Vision 2035”, <https://digifinland.fi/wp-content/uploads/2025/09/SOTE-AI-Ecosystem-AI-Vision-2035.pdf>; (Ministère du Travail de la Santé et des Solidarités (2025<sup>[5]</sup>), “Stratégie intelligence artificielle et données de santé”, [https://sante.gouv.fr/IMG/pdf/strategie\\_donnees\\_et\\_intelligence\\_artificielle.pdf](https://sante.gouv.fr/IMG/pdf/strategie_donnees_et_intelligence_artificielle.pdf); United States Department of Health and Human Services (2025<sup>[7]</sup>), “U.S. Department of Health and Human Services: Strategic Plan for the Use of Artificial Intelligence in Health, Human Services, and Public Health”, [https://irp.nih.gov/system/files/media/file/2025-03/2025-hhs-ai-strategic-plan\\_full\\_508.pdf](https://irp.nih.gov/system/files/media/file/2025-03/2025-hhs-ai-strategic-plan_full_508.pdf); MOHW (2024<sup>[2]</sup>), 인공지능 기반 의료기술 혁신으로 국민건강 증진 < 일반 < 보도자료 < 알림: 힘이 되는 평생 친구, 보건복지부, [https://www.mohw.go.kr/board.es?mid=a10503010200&bid=0027&act=view&list\\_no=1483021&tag=&nPage=1](https://www.mohw.go.kr/board.es?mid=a10503010200&bid=0027&act=view&list_no=1483021&tag=&nPage=1;); Ministerio De Sanidad (2025<sup>[6]</sup>), “Artificial Intelligence Strategy for the National Health System. eIASNS”, [https://www.sanidad.gob.es/en/areas/saludDigital/doc/eIASNS\\_en.pdf](https://www.sanidad.gob.es/en/areas/saludDigital/doc/eIASNS_en.pdf); (Department of Health, 2026<sup>[8]</sup>), “AI for Care - The Artificial Intelligence (AI) Strategy for Healthcare in Ireland 2026 - 2030”, <https://www.gov.ie/en/department-of-health/publications/ai-for-care-the-artificial-intelligence-ai-strategy-for-healthcare-in-ireland-2026-2030/>.

Additionally, **12 countries – Australia, Belgium, Canada, Czechia, Estonia, Iceland, Israel, Japan, New Zealand, Slovenia, Sweden, and the United Kingdom** – have made considerable steps towards providing transparent guidance at the intersection of AI in Health, but do not yet have a published strategy (although some are in development) (see Table 3.2). **New Zealand** has published a strategic vision for the integration of AI in healthcare, which is grounded in principles of equity, equitable deployment of AI solutions, Māori partnership, and its advancements of digital capabilities across the health workforce (OPMCSA, 2023<sup>[11]</sup>). **Canada** has published the Pan-Canadian AI for Health (AI4H) Guiding Principles to aid provinces and territories in the responsible adoption and use of AI, and is incorporating health examples within the national AI strategy (Government of Canada, 2025<sup>[12]</sup>; CIFAR, 2023<sup>[13]</sup>).

Table 3.2. Guardrails to establish agreed objectives for AI in health

	National AI Strategy or AI Action Plan Specific to Health	National AI Strategy Referencing Health	Defined National Strategy for Cloud Based Resources for Health	Defined National Interoperability Strategy for Health Data	Defined National Digital Security Strategy for Health
Australia	Partly	Yes	Yes	Yes	Yes
Austria	No	Yes	No	Partly	No
Belgium	Partly	Yes	Yes	Yes	Yes
Canada	Partly	Yes	Yes	Yes	No
Chile	No	Yes	No	Yes	No
Colombia	No	No	No	No	No
Costa Rica	No	No	No	Yes	No
Czechia	Partly	No	No	Partly	Yes
Denmark	No	Yes	Yes	Yes	Yes
Estonia	Partly	No	Yes	Yes	Yes
Finland	Yes	Yes	Yes	Yes	Yes
France	Yes	Yes	Yes	Yes	Yes
Germany	No	No	Yes	Yes	Yes
Greece	No	Yes	Yes	Partly	No
Hungary	No	Yes	Yes	No	Yes
Iceland	Partly	Yes	Yes	Partly	Partly
Ireland	Yes	Yes	Partly	Yes	Yes
Israel	Partly	Yes	Yes	Yes	Yes
Italy	No	Yes	Yes	Partly	Yes
Japan	Partly	Yes	Yes	Yes	Yes
Korea	Yes	Yes	Yes	Yes	Yes
Latvia	No	No	Yes	Partly	Partly
Lithuania	No	Yes	No	Yes	Yes
Luxembourg	No	Yes	Yes	Yes	Yes
Mexico	No	No	No	Yes	No
Netherlands	No	Yes	Yes	Yes	Yes
New Zealand	Partly	Partly	Yes	Yes	Yes
Norway	Yes	Yes	Partly	Yes	Partly
Poland	No	Yes	No	Yes	Yes
Portugal	No	Yes	Yes	Yes	Yes
Slovak Republic	No	Yes	Yes	Partly	No
Slovenia	Partly	Partly	Yes	Yes	Yes
Spain	Yes	Yes	Yes	Yes	Partly
Sweden	Partly	Yes	No	Yes	Yes
Switzerland	No	No	Yes	Yes	No
Türkiye	No	Partly	No	N/A	N/A
United Kingdom	Partly	Yes	Yes	Yes	Yes
United States	Yes	Yes	Partly	Partly	Yes

**AI strategies that contain health:** To harness the potential of AI to improve efficiency, safety, and quality of health service delivery, clarity is needed to provide direction across the lifecycle of AI. To that end, most OECD countries are developing an overall strategy for AI that contains some consideration for health with **27 countries** already having established such a national strategy and/or action plan. Three others, **New Zealand, Slovenia, and Türkiye** are working towards the publication of a national AI strategy. **Chile** has advanced an AI strategy and action plan, including a focus on the development of regulatory sandboxes for healthcare and approaches to data anonymisation (MinCiencia, 2025<sup>[14]</sup>; Chile IA, 2024<sup>[15]</sup>).

Across the OECD, **Finland, France, Ireland, Norway, Korea, Spain and the United States** stand out with the emerging practice of a specific national strategy and/or action plan at the intersection of AI and healthcare (see Table 3.1) as of the publication of this document.

**Cloud strategies:** AI in health is inherently data-intensive and safety-critical, demanding substantial computing capacity, secure environments, and well-defined regulatory compliance mechanisms. The backbone of this capacity lies in a Cloud Smart approach, which emphasises robust, transparent, and sovereign cloud frameworks which are tailored to the sensitivity and complexity of health data within health systems (Kedi, Ejimuda and Dayo Ajegbile, 2024<sup>[16]</sup>).

Cloud infrastructure can enable high-performance computing for AI model training and real-time inference, but also ensure strict compliance with data protection regulations such as the GDPR in the **EU** or **Australia's** Privacy Act 1988 (European Union, 2018<sup>[17]</sup>; Busch et al., 2025<sup>[18]</sup>). Additionally, cloud infrastructure is resilient enough to support current technological and security needs while remaining adaptable to sustain future digital health innovations. This includes the needs of open by design data infrastructure with established standards to support technically and semantically interoperable sharing of health data across care venues and settings.

Throughout OECD countries, **25 countries** have already defined a national cloud infrastructure ensuring AI in health is deployed securely, at scale, and in compliance with national legal frameworks (see Table 3.2). Meanwhile, **Ireland, Norway** and the **United States** are making considerable steps toward implementation. For example, **Ireland** has set a priority to adopt secure, scalable, and cost-effective adoption of cloud in the health system through the Digital for Care strategy (Government of Ireland, 2024<sup>[19]</sup>). As a leading practice, the **United Kingdom**, where the NHS Cloud Centre provides a unified framework for scalable cloud adoption across the health system, offering technical guidance and procurement support to ensure compliance, interoperability, and innovation (NHS England Digital, 2025<sup>[20]</sup>).

**Interoperability strategies:** While cloud infrastructure provides the secure pathway for scalable solutions for AI operations, **interoperability** provides the backbone of data use in the AI age with semantic, technical and organisational standards. Without national and compatible international interoperability frameworks, even the most advanced data infrastructure risks reinforcing fragmentation and undermining the scalability and utility of AI solutions.

Across the OECD **27 countries** have now adopted a national health interoperability strategy, whilst **Austria, Czechia, Greece, Iceland, Italy, Latvia**, the Slovak Republic and the **United States** are making progress adopting frameworks on a national level (see Table 3.2). In **Finland**, all Finnish healthcare providers must use Kanta Services for standardised electronic patient records, as mandated by the Act on Client Data, and with it a set of defined semantic data standards (1050/2021) (Kanta.fi, 2024<sup>[21]</sup>). This law enhances cross sectorial interoperability by integrating healthcare and social care data flows. In **Denmark**, Sundhed.dk, MedCom, and the Danish Health Data Authority collaborate to develop and uphold standardised reference architectures and IT standards to enhance healthcare quality and efficiency (Sundhed.dk, 2024<sup>[22]</sup>; MedCom, 1994<sup>[23]</sup>; The Danish Health Data Authority, 2025<sup>[24]</sup>). **Estonia** has advanced their interoperability by leveraging e-Governance, secure data exchange, and a public-centric approach to enhance healthcare (e-Estonia, 2025<sup>[25]</sup>). **Australia's** National Healthcare Interoperability Plan further highlights the strategic alignment of interoperability with the goal of advancing the digital maturity of its health sector (Australian Digital Health Agency, 2023<sup>[26]</sup>). Similarly, **Chile's** national interoperability strategy, centred on transparency and patient-focussed care, is improving data exchange efficiency and strengthening health system co-ordination (Capurro et al., 2017<sup>[27]</sup>).

Interoperability is also evolving into a global and system level initiative. Across the European Union, the EHDS is setting the standards for cross border data exchange and use, fostering strong collaboration between member states and health data standards organisations on compatible frameworks (European Commission, 2024<sup>[28]</sup>). Additionally, the adoption of the International Patient Summary (IPS) within national

interoperability strategies demonstrates the value of agreed-upon objectives and shared standards in enabling long-term international health data exchange (The International Patient Summary, 2025<sup>[29]</sup>).

**Digital security strategies:** Digital security is another foundational pillar of trusted infrastructure for the responsible scale of AI in health (Sutherland et al., 2023<sup>[30]</sup>). This includes a trusted cybersecurity framework that ensures secure data storage, transmission, and processing, particularly given the sensitive nature of health information. A robust approach to security for AI in health must address emerging threats such as model manipulation, adversarial attacks, and unauthorised data extraction, all of which pose risks to both patient safety and institutional credibility. Critically, digital security must not be treated as a siloed technical function. It must operate in concert with national cloud strategies and interoperability frameworks, forming an integrated infrastructure upon which AI in health can safely, equitably, and sustainably be built.

**Twenty-four** OECD countries have embedded national digital security principles into broader cybersecurity strategies, increasingly recognising the specific needs of health and AI (see Table 3.1). **Iceland, Latvia, Norway** and **Spain** are currently undergoing efforts to incorporate health within their national digital strategy. **Australia's** Digital Health Cyber Security Centre (Australian Digital Health Agency, 2022<sup>[31]</sup>), **Denmark's** National Strategy for Cyber and Information Security planning (The Danish Health Data Authority, 2025<sup>[24]</sup>), and the **Netherlands'** Cybersecurity Agenda provide leading examples of efforts to integrate AI-specific risks into national infrastructure (NLCS, 2022<sup>[32]</sup>).

Leading practices emerge across these strategies, including the foundations of safety, quality, ethics, and security; competency and training of healthcare professionals and the public; and providing regulatory guidance for AI and associated medical devices (see Table 3.2). Additionally, strategies mention setting a foundation of promoting innovation, cross sector collaboration and the implementation and use of AI in the health system.

### ***Better use of health data***

A consistent theme across this report is that timely access to quality data with protections in place is necessary for the responsible scale of AI solutions. This section considers the use of health data for AI solutions, such as catalogues, health data access bodies, and legislation for protection.

Table 3.3. Leading practices to enable better use of health data

	Set of National Procedures for the Cataloguing of Significant Health Data Assets	Defined Central Agency for Health Data Access and Management	National Legislation Related to Health Data Privacy or Protection
Australia	Yes	Yes	Yes
Austria	No	Partly	Yes
Belgium	Yes	Yes	Yes
Canada	Yes	Yes	Yes
Chile	No	No	Yes
Colombia	No	No	Yes
Costa Rica	No	No	Yes
Czechia	No	Yes	Yes
Denmark	Yes	Yes	Yes
Estonia	Yes	Yes	Yes
Finland	Yes	Yes	Yes
France	Yes	Yes	Yes
Germany	Yes	Yes	Yes
Greece	No	No	Yes
Hungary	Yes	No	Yes
Iceland	Yes	Yes	Yes
Ireland	Partly	Yes	Yes
Israel	Yes	Yes	Yes
Italy	Yes	Partly	Yes
Japan	No	No	Yes
Korea	Yes	No	Yes
Latvia	Yes	Partly	Yes
Lithuania	Yes	Partly	Yes
Luxembourg	Partly	Partly	Yes
Mexico	No	No	Yes
Netherlands	Partly	Yes	Yes
New Zealand	Yes	No	Yes
Norway	Yes	Yes	Yes
Poland	Yes	Yes	Yes
Portugal	Partly	Yes	Yes
Slovak Republic	Yes	Yes	Yes
Slovenia	Yes	Yes	Yes
Spain	Yes	Partly	Yes
Sweden	Yes	Yes	Yes
Switzerland	No	No	Yes
Türkiye	Yes	N/A	Yes
United Kingdom	Yes	Yes	Yes
United States	N/A	Partly	Yes

**Cataloguing data assets:** In line with the OECD Recommendation on Enhancing Access to and Sharing of Data (OECD, 2021<sup>[33]</sup>), many members are strengthening national approaches to cataloguing health data assets to improve discoverability, interoperability, and responsible analytic use (OECD, 2025<sup>[34]</sup>).

Across the OECD, **24 countries** have established national approaches to cataloguing significant health data (see Table 3.3). As leading practices, **Türkiye's** e-Nabiz system managed by the Ministry of Health centralised its digital platform systematically collecting and organising secure access to a range of health data (EIPA, 2024<sup>[35]</sup>). This standardisation, interoperability and patient access enables data-driven decision

making which supports continuity of care and lays a foundation for responsible (EIPA, 2024<sup>[35]</sup>). In **Slovenia**, the Act on Databases in Health provides the legal foundation for the National Institute of Public Health to authorise the collection, management, and use of diverse health datasets (NIJZ, 2022<sup>[36]</sup>). These datasets are made readily accessible through a centralised data portal, supporting transparency, interoperability, and evidence-based decision making across the health system (NIJZ, 2022<sup>[36]</sup>). **Denmark's** health data system, enabled by a national civil registration number, offers high-quality, linkable and comprehensive health datasets. Managed by the Danish Health Data Authority, its platforms eSunhed and Research Health Data Getaway support secure access, enabling evidence-based research and policy through nationally co-ordinated data infrastructure (Ministry of Foreign Affairs of Denmark, 2022<sup>[37]</sup>; eSundhed, 2025<sup>[38]</sup>; Danish Health Data Authority, 2025<sup>[39]</sup>). In April 2025, it was announced that a new national one point of entry portal, backed by the Novo Nordisk Foundation will further streamline access and analysis, strengthening Denmark's leadership in health data and innovation (Nordic Life Science, 2025<sup>[40]</sup>).

Established under the *2019 Act on the Secondary Use of Health and Social Data*, Findata serves as **Finland's** central data permit authority (Ministry of Social Affairs and Health, 2019<sup>[41]</sup>). The act enables secure access to data across public and private health entities and requires all key data controllers to produce standardised metadata. Finland's national approach demonstrates transparency, privacy, and streamlined secondary use of health data (FINDATA, 2025<sup>[42]</sup>). In **France**, the Health Data Hub has maintained a national catalogue of health datasets since 2019, supporting discoverability and secure access for authorised analytic uses of health data (Health Data Hub, 2025<sup>[43]</sup>).

Meanwhile, **four countries, Ireland, Luxembourg, the Netherlands and Portugal** are advancing efforts to build a national metadata catalogue. The **Netherlands** is advancing efforts to create a national metadata catalogue for health data. While data remains decentralised, institutions like the National Institute for Public Health and the Environment (RIVM) and Health-RI maintain individual health data catalogues. Work is underway to harmonise these using standards like DCAT-AP, improving data discoverability and interoperability (TEHDAS, 2025<sup>[44]</sup>).

**Health data access bodies:** In the **EU**, the EHDS proposes the creation of Health Data Access Bodies (HDABs) in each Member State and EEA countries by 2027 (European Commission, 2024<sup>[28]</sup>). These entities will act as national authorities responsible for granting and monitoring access to electronic health data for analytic uses, such as research, innovation, policymaking, and the development of digital health and AI solutions. HDABs are designed to function as both gatekeepers and enablers. They ensure compliance with data protection laws such as the **EU's** GDPR, while facilitating AI development by overcoming fragmented data systems and enabling access to high-quality, pseudonymised or anonymised datasets. This dual role represents a leading practice that is critical for the safe scaling of AI in healthcare (European Union, 2018<sup>[17]</sup>).

According to Article 37 of the EHDS, HDABs are tasked with evaluating data access applications, issuing permits, ensuring secure processing environments, and maintaining transparent public registries (European Commission, 2024<sup>[28]</sup>). They must also disclose information on approved data uses, protections for individual rights, and resulting outcomes. Additionally, HDABs support cross-border research through the HealthData@EU infrastructure, collaborate with ethics bodies and supervisory authorities, and enable innovation through mechanisms such as regulatory sandboxes (European Union, 2025<sup>[45]</sup>).

In the developing landscape across OECD countries, HDABs are defined as a central agency for data access and management in which the identified organisation may be formally suitable to be HDABs under the EHDS. HDABs serve as a trusted umbrella arching entity that oversees the regulatory, secure, and ethical use and sharing of health data for research, innovation, public health, and policy development. Currently, **20 countries** have established or designated a HDAB under the OECD definition, while **seven** countries – **Austria, Italy, Latvia, Lithuania, Luxembourg, Spain** and the **United States** – are making substantial efforts in designating a central authority (see Table 3.3). In **Belgium**, the Health Data Agency

(HDA) co-ordinates regional and federal stakeholders to facilitate secure and transparent data use for research and policy (Health Data Agency, 2025<sup>[46]</sup>). **Canada's** Data Access Support Hub (DASH) serves as a national portal to harmonise access to multi-regional health and administrative data (Health Data Research Network Canada, 2025<sup>[47]</sup>). **Australia's** National Health Data Hub (NHDH) consolidates pseudonymised, linked datasets to support evidence-based policymaking (Australian Institute of Health and Welfare, 2025<sup>[48]</sup>). In **Germany**, the Health Data Use Act (GDNG), which entered into force in 2024, establishes the legal foundation for enhanced use of health data and empowers the creation of a national HDAB (Bundesministerium der Justiz und für Verbraucherschutz, 2024<sup>[49]</sup>). In the **United States**, the Trusted Exchange Framework and Common Agreement (TEFCA) is a federated health data sharing infrastructure, with planned expansion into analytic data use (ONC, 2025<sup>[50]</sup>).

The absence of good data governance risks innovation being hindered by legal uncertainty, data silos, and risk-averse culture. Conversely, models like EHDS's HDAB may provide balance between innovation and individual rights providing a scalable, ethical, and legally compliant foundation for AI in health (European Commission, 2024<sup>[28]</sup>). Developing national procedures for cataloguing health data involve standardised methods to manage and organise datasets for improved discoverability and access. This includes developing metadata catalogues which support interoperability and compliant health data access for analytic use within and cross border (Scheider and Mallick, 2025<sup>[51]</sup>; González-García et al., 2021<sup>[52]</sup>).

**Privacy and protection:** Privacy and data protection frameworks are long-established regulatory frameworks that apply to AI but were not created for it. These frameworks form the foundation of trustworthy, lawful and transparent data use, as reflected in the OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data (OECD, 2002<sup>[53]</sup>). Building on the 1995 EU Data Protection Directive (European Union, 1995<sup>[54]</sup>), the GDPR has been in force across the **EU** since 2016 and provides comprehensive cross sector regulation protection for personal data, including health data (European Union, 2018<sup>[17]</sup>). Other examples include the **United States'** Health Insurance Portability and Accountability Act (HIPAA), which was established in 1996 (U.S. Department of Health and Human Services, 2024<sup>[55]</sup>); in **Switzerland** where the Federal Act on Data Protection (FADP), which mentions that all health-related personal data are considered as “sensitive personal data” thus requiring highest level of protection (Swiss Federal Chancellery, 2020<sup>[56]</sup>); the Personal Information Protection and Electronic Documents Act (PIPEDA) in **Canada** (Office of the Privacy Commissioner of Canada, 2000<sup>[57]</sup>); and **Japan's** Act on the Protection of Personal Information (APPI) (Japanese Government, 2003<sup>[58]</sup>). Many of these data privacy and protection acts are not health-specific; however, have health-specific provisions in their design.

Penalties for privacy infringements are long-standing features of data protection frameworks, applying across all sectors and types of data. The severity of penalties and enforcement capacity have increased in recent years, rather than introducing new or health-specific measures. Within the **EU**, the GDPR establishes penalties of up to EUR 20 million or 4% of global turnover for unauthorised access, processing or the loss of any type of personal data (European Union, 2018<sup>[17]</sup>). The EHDS builds on this regulation, reinforcing existing enforcement mechanisms, including penalties for attempts to re-identify anonymised data (European Commission, 2024<sup>[28]</sup>). Similarly, in **Australia**, amendments to the Privacy Act in 2022 increased penalties up to AUD 2.5 million for a repeated or serious offence (Australian Government, 2024<sup>[59]</sup>).

### ***Enabling the use of AI***

Advances in AI are accelerating at an unprecedented rate, and health is no different. AI in health is evolving, with new publications and technologies emerging in the field daily. To support health administrators, healthcare providers, researchers, industry, and the public to make the best use of this technology, a signal is needed to cut through the noise and support AI to “scale fast while doing no harm”.

This section will examine progress with legislation, health technology assessments (HTAs), regulatory sandboxes, procurement, and approval of medical devices.

**Table 3.4. Practices enabling the use of AI**

	National Legislation Related to AI	National Legislation Specific to AI in Health	National Approach to Health Technology Assessments to Include AI	National Approach for a Regulatory Sandbox for AI in Health	Adapted National Procurement to Account for AI in Health	National Approach to Approval of Medical Devices incorporating AI
Australia	No	No	Partly	No	Yes	Yes
Austria	Partly	No	Partly	Partly	No	Partly
Belgium	Partly	No	Yes	Partly	N/A	Yes
Canada	Partly	No	Partly	No	Partly	Yes
Chile	Partly	No	No	Partly	No	No
Colombia	Partly	No	No	No	No	No
Costa Rica	Partly	No	No	No	No	No
Czechia	Partly	No	No	Partly	No	Partly
Denmark	Yes	No	Yes	Yes	Yes	Yes
Estonia	Partly	No	Partly	Partly	Partly	Yes
Finland	Partly	Partly	Yes	Yes	Partly	Yes
France	Partly	Yes	Yes	Partly	Partly	Partly
Germany	Partly	No	Yes	No	No	Partly
Greece	Partly	No	N/A	No	N/A	Partly
Hungary	Partly	No	N/A	N/A	N/A	Partly
Iceland	No	No	No	No	No	Yes
Ireland	Partly	No	Yes	Partly	Partly	Partly
Israel	No	No	N/A	Partly	No	Yes
Italy	Yes	Partly	Partly	Partly	Partly	Partly
Japan	Yes	No	N/A	Yes	N/A	Yes
Korea	Partly	No	Yes	Partly	N/A	Yes
Latvia	Partly	No	No	Partly	No	Partly
Lithuania	Partly	No	No	Partly	N/A	Yes
Luxembourg	Partly	No	No	Yes	N/A	Yes
Mexico	Partly	No	No	No	No	No
Netherlands	Partly	No	Partly	No	No	Yes
New Zealand	No	No	Partly	Partly	N/A	No
Norway	Partly	No	No	Yes	Yes	Yes
Poland	Partly	No	Yes	Partly	N/A	Yes
Portugal	Partly	No	N/A	No	N/A	Yes
Slovak Republic	Partly	No	N/A	No	No	Partly
Slovenia	Partly	No	No	No	N/A	Yes
Spain	Partly	Partly	No	Yes	N/A	Yes
Sweden	Partly	No	Partly	Partly	No	Yes
Switzerland	Partly	No	No	No	No	Yes
Türkiye	Partly	No	N/A	No	N/A	Yes
United Kingdom	Partly	No	Yes	Yes	Yes	Yes
United States	Partly	No	N/A	No	No	Yes

**Legislation for AI:** When looking at legislation, the **EU AI Act** is an emerging leading practice, and **22 countries** are in the process of adopting national legislation to compliment the **EU AI Act** (See Table 3.4) (European Union, 2024<sub>[60]</sub>). The AI Act was adopted in June 2024 and represents a first of its kind of regulation across OECD countries (European Union, 2024<sub>[60]</sub>).

Of the EU Countries, **Italy** has adopted a national AI Act, provisions and Delegations to the government on Artificial Intelligence, which came into effect in October 2025 and **Denmark** designated national authorities and oversight of the AI Act in May 2025 (Della Repubblica Italiana, 2025<sup>[61]</sup>; FOLKETINGET, 2024<sup>[62]</sup>). Outside of the EU, **Japan** enacted the *Act on the Promotion of Research, Development and Utilisation of Artificial Intelligence-Related Technologies* into force in September 2025 to accelerate innovation and responsible use of AI within the country (Government of Japan, 2025<sup>[63]</sup>). Following the example of the AI Act, the remaining EU countries are looking to enact the legislation at a national level.

An additional 11 OECD countries are working towards AI legislation, such as **Canada** with the former Artificial Intelligence and Data Act (AIDA) which was introduced to the government in 2021, but was not passed into law (Government of Canada, 2023<sup>[64]</sup>). The **United Kingdom** and **Norway** are well underway in adopting an AI legislation following the example of the EU AI Act, with the countries projecting that the legislation will be passed into law in 2026 (UK Parliament, 2025<sup>[65]</sup>; Ministry of Digitalisation and Public Governance, 2025<sup>[66]</sup>).

Another avenue to enable countries to unleash the potential of AI in health is to update health legislation to incorporate AI specific topics, such as protecting patients' rights, fostering trust, establishing accountabilities and addressing data skewness. **France** has moved towards this with revisions to the 2021 Bioethics Law for healthcare providers to share information with patients when using AI and to require mandatory human oversight for any AI in decision making (République Française, 2021<sup>[67]</sup>). These actions legislate the safeguarding of human rights while accounting for the need for advancement in AI within health (See Table 3.4).

**Health Technology Assessments:** Many countries are also updating their Health Technology Assessment (HTA) frameworks to evaluate AI's clinical relevance, cost-effectiveness, transparency, and long-term safety. These include **Belgium, Denmark, France, Finland, Germany, Ireland, Korea, Poland** and the **United Kingdom** (See Table 3.4). An additional **eight** countries – **Australia, Austria, Canada, Estonia, Italy**, the Netherlands, **New Zealand**, and **Sweden** are in process.

As a leading practice based on the German DiGA blueprint, **France's** PECAN (La prize en charge anticipée numérique) scheme provides a fast-track, one year derogatory reimbursement for mature digital health and remote monitoring solutions, enabling developers to validate benefits while the solution is already reimbursed and in use (G\_NIUS, 2025<sup>[68]</sup>; Olesch Artur, 2024<sup>[69]</sup>). In **Belgium**, the Belgian Parliament called for the creation of a fast-track approval and reimbursement pathway. The Belgian National Institute for Health and Disability Insurance (NIHDI) introduced a new evaluation process for health applications, including AI-enabled solutions aiming for reimbursement decisions within 270 days (iclg, 2025<sup>[70]</sup>). **Germany's** DiGA Fast-Track enables rapid reimbursement of certified digital health applications, including AI-driven tools, that demonstrate positive health impact (GTAI, 2025<sup>[71]</sup>; Schmidt et al., 2024<sup>[72]</sup>). In **Finland**, the Ministry of Social Affairs and Health commissioned the development of a dedicated Digi-HTA assessment model designed for digital health technologies which included AI and robotics (Haverinen et al., 2024<sup>[73]</sup>). **Korea** has introduced changes in the coverage of advanced medical technologies, where health insurance will include advanced medical technologies such as digital therapeutics and AI-based diagnostics (Ministry of Food and Drug Safety, 2023<sup>[74]</sup>; Kao and Lakhnpal, 2024<sup>[75]</sup>).

**Regulatory sandboxes:** Regulatory sandboxes complement MDR by offering controlled environments where AI tools can be tested in real-world settings under regulatory supervision. These frameworks enable responsible experimentation while providing regulators with critical oversight in a secure, structured context. Across OECD countries this is becoming an emerging practice, with countries like **Denmark, Finland, Japan, Luxembourg, Norway, Spain** and the **United Kingdom** having established a sandbox designated for AI in health. In the **United Kingdom**, the Medicines and Healthcare Products Regulatory Agency (MHRA) recently launched its AI Airlock, marking the country's first regulatory sandbox for AI in health (CMC Medical Devices, 2025<sup>[76]</sup>). In **Denmark**, the Danish Data Protection Authority in collaboration with the Danish Agency for Digitalisation, launched a regulatory sandbox specifically for AI with the aim to

reduce time from development to operation (Datatilsynet, 2024<sup>[77]</sup>). Similarly, countries such as **Korea** and **Poland** are actively developing sandbox models to support safe and adaptive AI integration in healthcare (Healthcare Poland, 2024<sup>[78]</sup>; Chambers and Partners, 2024<sup>[79]</sup>), (see Table 3.4 for more detail).

**Procurement:** Procurement serves as a primary governance “gate” and key enabler, shaping which AI tools and solutions are introduced into healthcare environments. Through strategic procurement practices, governments can then set expectations for ethical standards, technical robustness, interoperability, data protection, and clinical relevance before products reach health providers. Across the OECD, countries such as **Australia, Denmark, Norway and the United Kingdom** have incorporated procurement to account for AI in health (See Table 3.4). **Six** other countries – **Canada, Estonia, Finland, France, Ireland** and **Italy** are still in initial stages but are taking steps towards its integration.

The **United Kingdom** stands out as a leading example having recently launched a GBP 150 million tender to integrate AI into the NHS, prioritising diagnostics, early disease detection, and operational efficiency with the objective to enhance healthcare delivery, reduce costs, and improve patient outcomes (Phil Taylor, 2025<sup>[80]</sup>).

**Medical device regulation:** Following procurement, Medical Device Regulation (MDR) oversees the legal framework to monitor the safety and performance of AI-embedded medical technologies. A key component of MDR is to also provide the levels of risk and classification of medical and non-medical solutions. Integrating AI-specific risk classification into MDR, as already done by **23** OECD countries, ensures that adaptive AI solutions meet clinical effectiveness, safety, and regulatory standards (See Table 3.4). Notably, **Ireland** and **France** are currently incorporating oversight for AI within MDR (Scannell and Moore, 2025<sup>[81]</sup>; Ministère des Solidarités et de la Santé, 2025<sup>[82]</sup>).

Crucially, MDR is being extended to post-market surveillance, ensuring that AI tools continuously perform safely after deployment. **Belgium’s** Federal Agency for Medicines and Health Products (FAMHP) framework includes a direction for post-market surveillance to consider any adaptations required (Q-Reg, 2025<sup>[83]</sup>).

### ***Capacity and capability among the health workforce***

Capacity and capability are foundational to the responsible scale of AI in health, ensuring that technologies are not only technically sound but also ethically grounded, operationally viable, and operate with multi-stakeholder engagement throughout the AI lifecycle. This section examines progress of OECD countries in advancing these objectives through targeted workforce developments to build awareness.

Table 3.5. Enabling capacity and capability of health workforce

	National Approach to Improve Health Workforce Awareness and/or Competency
Australia	Yes
Austria	No
Belgium	Partly
Canada	Partly
Chile	Partly
Colombia	Partly
Costa Rica	Partly
Czechia	Yes
Denmark	Yes
Estonia	Yes
Finland	Yes
France	Yes
Germany	Partly
Greece	No
Hungary	Partly
Iceland	No
Ireland	Partly
Israel	Partly
Italy	Partly
Japan	Partly
Korea	Yes
Latvia	Yes
Lithuania	N/A
Luxembourg	Partly
Mexico	Partly
Netherlands	Partly
New Zealand	Yes
Norway	Partly
Poland	Partly
Portugal	No
Slovak Republic	No
Slovenia	N/A
Spain	Partly
Sweden	Yes
Switzerland	No
Türkiye	N/A
United Kingdom	Yes
United States	Partly

Note: Countries were assessed at a national level. Regional or local initiatives in the absence of a national initiative are categorised as “partly”.

**Building awareness and capability:** Across the OECD, **11** countries have established a national strategy and/or programme aimed at strengthening its health workforce (See Table 3.5). **Denmark’s** national pilot project CAIDX which aims to strengthen capacity building for clinicians and develop training tools to help healthcare professionals become more confident in utilising AI tools in health (Danish Life Science Cluster, 2025<sup>[84]</sup>). **Australia** has set the stage for a national programme with the introduction of a strategic plan for upskilling healthcare professionals in digital competencies, including AI (Australian Digital Health Agency, 2025<sup>[85]</sup>) **Eighteen** countries are taking significant steps in developing national approaches (See Table 3.5). Additionally, **Estonia** is now expanding foundational AI literacy through the national AI Leap 2025 program, targeting 20 000 high school students and training 3 000 teachers (TI-Hüpe, 2025<sup>[86]</sup>).

**Table 3.6. Components of national AI capacity building in health across OECD countries**

	France	Korea	Germany	Latvia	Belgium
AI Courses Included in Medical School Curricula	Yes	Yes	Partly	Partly	Partly
Mandatory AI Courses Included in Medical School Curricula	Yes	Yes	Partly	Partly	Partly
Training For Practicing Frontline Healthcare Professionals	Yes	No	Partly	Yes	Partly
Training Programmes with Build-in Mechanisms for Feedback Performance Evaluation and Improvement	N/A	No	Partly	No	Partly

Note: Countries were assessed at a national level. Regional or local initiatives in the absence of a national initiative are categorised as “partly”.  
Source: OECD Interviews.

**Building capacity:** Building capacity and trust in AI is essential to support healthcare providers in adopting and effectively leveraging AI in their practice, and consequently reinforcing public trust in its use, such as the autonomous applications of AI to support the provision of care. Leading practices among OECD countries include the integration of national AI curricula in medical education, as well as implementation of national upskilling training programmes with built-in mechanisms to assess the effectiveness of AI solutions to ensure continuous improvement (OECD, Forthcoming, 2026). Some countries have made significant progress in this regard (see Table 3.6). **France** has mandated AI and digital health training across all health professional programmes starting in the 2025-2026 academic year, backed by EUR 119 million to train 500 000 professionals over five years (Comité interministériel de l'Intelligence artificielle, 2025<sup>[87]</sup>). In **Korea**, the future health workforce are being equipped with AI competencies through the Medical Bio AI Education programme, which has been integrated into medical curriculum (Ministry of Health and Welfare, 2025<sup>[88]</sup>). **Germany** offers certified AI training through its national KI-Campus platform and is advancing plans for a national Masters in Digital Medicine, although national mandates remain absent and implementation is fragmented (KI-Campus, 2022<sup>[89]</sup>). **Latvia** supports healthcare upskilling through regional and NGO-led initiatives, including RSU's AI courses and the Riga TechGirls program, aligned with objectives under its Digital Health Strategy 2029 (Digital Health Uptake, 2025<sup>[90]</sup>). At the **Belgium** Flanders AI Research Institute (FARI), AI for the Common Good has launched its training for medical professions, designed to bridge the gap between AI technology and healthcare by educating medical professionals on the application, benefits, and ethical considerations of AI in the medical field (FARI, 2025<sup>[91]</sup>). These examples highlight varying degrees of institutional maturity and national co-ordination in AI capacity building across the allied healthcare sector.

### ***Oversight bodies***

National oversight bodies, which ensure AI solutions are developed, implemented, and monitored in ways that are effective, safe, ethical, and aligned with the interests of the public good, are guardrails to the responsible scale of AI in health. This section will review progress in establishing formal national oversight bodies to co-ordinate AI initiatives in the health sector.

Table 3.7. State of AI in health oversight

	Established <b>National Oversight Body</b> for the Use of AI in Health
Australia	Partly
Austria	No
Belgium	Yes
Canada	Partly
Chile	No
Colombia	No
Costa Rica	No
Czechia	No
Denmark	No
Estonia	No
Finland	No
France	Yes
Germany	No
Greece	No
Hungary	N/A
Iceland	N/A
Ireland	N/A
Israel	No
Italy	Partly
Japan	No
Korea	Partly
Latvia	Partly
Lithuania	No
Luxembourg	Yes
Mexico	No
Netherlands	No
New Zealand	Yes
Norway	Yes
Poland	No
Portugal	No
Slovak Republic	No
Slovenia	No
Spain	Yes
Sweden	Partly
Switzerland	No
Türkiye	No
United Kingdom	Yes
United States	Partly

**Oversight:** Among OECD countries, **Belgium, France, Luxembourg, New Zealand, Norway, Spain** and the **United Kingdom** have established a national oversight body, while an additional seven countries (**Australia, Canada, Italy, Korea, Latvia, Sweden, and the United States**) are actively working towards a similar national body (see Table 3.7). **New Zealand** represents an emerging practice with the National Artificial Intelligence and Algorithm Expert Advisory Group (NAIAEAG). This group oversees AI use within Health New Zealand (Te Whatu Ora), focussing on AI related risk including skewness and inaccuracies (Health New Zealand/ Te Whatu Ora, 2025<sup>[92]</sup>). In the **United Kingdom**, the NHS AI Safety Lab provides guidance and regulation to ensure safe AI tools are brought into the NHS while also supporting their deployment (NHS England, 2025<sup>[93]</sup>). Additionally in the **United Kingdom**, the Medicines and Healthcare products Regulatory Agency (MHRA) has set out its strategic approach to its regulatory role in AI and providing additional oversight on a national level (GOV.UK, 2024<sup>[94]</sup>). **Luxembourg** has also recently progressed in this area through bill n°8 476 to align with the EU AI Act, named the Agency for Medicines

and Health Products (ALMPS) as the designated national oversight body for AI in health, specifically for AI systems in medical devices and in vitro diagnostic tools (Elisabeth Margue, 2024<sup>[95]</sup>; Arendt, 2025<sup>[96]</sup>).

### Public engagement

In building trust with the public, there are opportunities to build public awareness and capability to know how and when to leverage AI solutions – as well as how to choose AI solutions that are fit-for-purpose and clinically validated. Further, enabling the integration of AI solutions while ensuring appropriate safeguards are in place requires careful design to balance individual and community health data rights (OECD, 2025<sup>[34]</sup>). Public engagement serves essential functions to build capacity and trust.

**Table 3.8. State of public engagement for AI in health**

	Public Engagement Initiative(s) to <b>Increase Public Understanding of the Capabilities</b> and Usage of AI in Health	<b>Public Assembly</b> for the Design of AI
Australia	Partly	Yes
Austria	No	No
Belgium	No	Yes
Canada	Yes	Partly
Chile	Yes	No
Colombia	No	No
Costa Rica	No	No
Czechia	Partly	N/A
Denmark	Yes	Yes
Estonia	Yes	Yes
Finland	Yes	Yes
France	Yes	Yes
Germany	Yes	Yes
Greece	No	No
Hungary	No	N/A
Iceland	Yes	No
Ireland	No	Yes
Israel	No	No
Italy	Partly	Partly
Japan	Yes	Yes
Korea	Yes	Partly
Latvia	No	No
Lithuania	No	Yes
Luxembourg	Yes	Yes
Mexico	No	No
Netherlands	Yes	No
New Zealand	Yes	Yes
Norway	No	Yes
Poland	No	No
Portugal	No	No
Slovak Republic	Partly	No
Slovenia	Partly	No
Spain	Partly	Yes
Sweden	Yes	No
Switzerland	No	Partly
Türkiye	No	N/A
United Kingdom	Yes	Yes
United States	No	Yes

Note: Countries were assessed at a national level. Regional or local initiatives in the absence of a national initiative are categorised as “partly”.

**Building public understanding:** Public engagement builds public capacity to critically assess, understand, and ultimately leads to building trust in the use of AI technologies. Trust is not generated by technical performance alone; it emerges through transparency, accountability, and the visible inclusion of public voices throughout the AI lifecycle. When the public recognises that AI solutions reflect collective input, not just expert-driven design, their approach shifts to trust, adopt, and further support these technologies.

**Public assemblies:** Public assemblies directly inform the design and operationalisation of AI solutions by involving the public in the design of policy solutions, ensuring they are socially responsive and ethically grounded. These efforts also reinforce guardrails by promoting person-centred, rights-based governance. A practice leveraged for meaningful consultation with the public is the establishment of public assemblies.

Across the OECD, member countries are advancing at different paces. **Fifteen** OECD countries have developed national public engagement initiatives which were aimed at increasing public understanding, alongside **16** countries which have established a formal public engagement platform for the design of AI (see Table 3.8). Among those countries, **Denmark** has embedded public panels into national AI ethics and health data strategies (Smarter Together Association, 2023<sup>[97]</sup>). **Finland's AuroraAI programme** systematically involves the public in co-designing AI-driven healthcare services (Finnish Government, 2020<sup>[98]</sup>). **Lithuania's E-Pilietis portal** and initiatives like **Kurk Lietuvai** formally integrate public feedback into digital health and AI policymaking (Office of the Government of the Republic of Lithuania, 2025<sup>[99]</sup>). **Norway's Board of Technology** fosters public and expert collaboration in scenario planning and system design for digital health services (Teknologirådet, 2025<sup>[100]</sup>). While approaches vary, these efforts collectively demonstrate an emerging commitment to **democratising AI governance** and reinforcing societal trust.

Transparent engagement processes further strengthen institutional accountability by challenging industry and policymakers to make their objectives, assumptions, and anticipated impacts clearer. This transparency is fundamental to achieving equitable AI outcomes, higher levels of adoption, sustainability and ultimately, scalability of AI solutions – as highlighted in our AI in Health Policy Checklist.

## Priorities for the responsible scale of AI in health

There is an opportunity for a proactive approach that meets at the convergence of healthcare and AI. Today, only **18%** of OECD countries have adopted a national strategy or action plan specific to healthcare. Progress is being made as a further **32%** are working towards this objective.

This analysis also highlights possible priorities for action to advance the responsible scale of AI in Health (See Table 3.9):

- An oversight body for the use of AI in health (18%)
- Streamlining the national approach to health technology assessments to include AI (24%),
- Establishing a national approach to **regulatory sandbox** with a focus on AI in health (**16%**),
- Updating **national procurement guidelines** to account for AI in health (**11%**), and
- The establishment of national approach to improve AI in the health workforce (29%).

Table 3.9. Readiness for the responsible scale of AI in health by policy action

Policy Pillars	Policy Areas	Policy Action	Yes	Partly	No	N/A
Guardrails	Agreed objectives	National AI strategy or AI Action plan specific to health	18%	32%	50%	0%
		National AI strategy referencing Health	71%	8%	21%	0%
		Defined national approach for cloud-based resource availability for health	66%	8%	26%	0%
		Defined national interoperability strategy for health data	71%	21%	5%	3%
		Defined national digital security strategy for health	63%	11%	24%	3%
		<b>Average %</b>	<b>58%</b>	<b>16%</b>	<b>25%</b>	<b>1%</b>
Enabling Practices	Better use of health data	Set of national procedures for the cataloguing of significant health data assets	63%	11%	24%	3%
		Defined central agency for health data access and management	53%	18%	26%	3%
		National legislation related to health data privacy or protection	100%	0%	0%	0%
		<b>Average %</b>	<b>72%</b>	<b>10%</b>	<b>17%</b>	<b>2%</b>
Enabling Practices	Enabling the use of AI	National legislation related to AI	5%	84%	11%	0%
		National legislation specific to AI in health	3%	8%	89%	0%
		National approach to health technology assessments to include AI	24%	21%	34%	21%
		National approach for a regulatory sandbox for AI in health	18%	39%	39%	3%
		Adapted national procurement to account for AI in health	11%	16%	39%	34%
		National approach to approval of medical devices incorporating AI	61%	26%	13%	0%
		<b>Average %</b>	<b>20%</b>	<b>32%</b>	<b>38%</b>	<b>10%</b>
Enabling Practices	Building capacity and capability	National approach to improve AI in health workforce awareness and/ or competency	29%	47%	16%	8%
Guardrails	Oversight, measurement and monitoring	Established national oversight body for the use of AI in health	18%	18%	55%	8%
Engagement	Public engagement	Public engagement initiative(s) to increase public understanding of the capabilities and usage of AI in health	39%	16%	45%	0%
		Public assembly for the design of AI	42%	11%	39%	8%
		<b>Average %</b>	<b>41%</b>	<b>13%</b>	<b>42%</b>	<b>4%</b>

Note: Cells are coloured green where > 66%; orange when between 65-34%; grey when < 33%

Source: Based on OECD Survey on Health Data Governance, the Impact of Artificial Intelligence on the Health Workforce, and Interoperability. These analyses summarise Tables 3.1 to 3.8.

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# 4 Scaling fast while doing no harm

**AI is not a panacea for health. It is a powerful tool for addressing some of the most complex and urgent challenges facing health systems today.** AI alone cannot be expected to revolutionise healthcare. It is the policies, governance structures, and collective societal choices that will determine whether AI will become a driver of equitable, safe, and sustainable health impacts.

In this report, **four key pillars and nine key policy areas** were explored encompassing **42 policy questions** at the intersection of AI and health. Several OECD countries are adopting legislation, strategy, and action plans to help address the tensions between market forces, the Hippocratic oath, and reaching every person – **scaling fast and doing no harm**.

Chapter 3 investigated OECD Member's progress across six of the nine policy areas (summarised in Table 4.1). This finds that there is a strong focus on the foundations of data and AI, but less attention is paid to the people behind and impacted by these technologies.

**Table 4.1. Readiness for the responsible scale of AI in health by select policy areas**

Policy Checklist Pillars	Policy Areas	Yes	Partly	No	N/A
Enabling Practices	Better use of health data	72%	10%	17%	2%
	Enabling the use of AI	20%	32%	38%	10%
	Capacity and capability among the health workforce	29%	47%	16%	8%
Guardrails	Agreed objectives	58%	16%	25%	1%
	Oversight, measurement and monitoring	18%	18%	55%	8%
Engagement	Public engagement	41%	13%	42%	4%

Note: Cells are coloured green where > 66%; orange when between 65-34%; grey when < 33%

Source: Based on OECD Survey on Health Data Governance, the Impact of Artificial Intelligence on the Health Workforce, and Interoperability. This table summarises the analyses from Table 3.9.

This found that **72%** of OECD countries have enacted policies supporting the **better use of health data**. In contrast, only **29%** have acted on workforce **capacity and capabilities**, meaning that as AI solutions are approved, they will be faced with challenges achieving their optimal impact.

**Oversight** of AI solutions also lags, with only **18%** of countries demonstrating policy actions in this area. Without effective oversight, it is likely that AI in health solutions will continue to be developed in siloes, be challenged to scale, and fail to achieve their potential.

Further progress is needed in strengthening the enabling conditions for AI adoption, with only **20%** showing activity. OECD Members have shown active progress in establishing strategies that provide agreed upon objectives (**58%**) and advancing public engagement (**41%**); however, without plans for adoption and scale the value of AI will be limited.

**A collaborative and focussed effort to strengthen policies would meet future challenges** for the responsible scale of AI in healthcare and optimises human and economic value.

Beyond the application of the AI in Health Policy Checklist, there are also opportunities for collaboration. As seen with the strategies at the intersection of AI in health, countries have taken different approaches based on their local contexts, but compatibility of policies across borders will help accelerate the responsible scale of AI.

Hence, **there is urgency to act together for health systems and align on the responsible scaling and use of AI in healthcare**. There are opportunities to learn from each other to recognise leading practices and to develop approaches to policy that are compatible across borders. Guided by the **OECD AI in Health Policy Checklist**, countries could design their solutions in a way that enables local autonomy while simplifying the ability to collaborate. It will take time, leadership, will, effort, and investment to achieve and sustain benefits from AI in health. Policymakers can proactively shape the evolution of AI in health policies so that advances can scale fast while doing no harm.

## Annex A. Members of the OECD AI in Health Experts Group

Full name	Country / Organisation
Emily Bogue	Australia
Enrico Coiera	Australia
Farah Magrabi	Australia
Steve Miller	Australia
Yvonne Ho	Australia
Barbara Weinberger	Austria
Philipp Schardax	Austria
Frank Robben	Belgium
Adriana Marques	Brazil
Ana Estela	Brazil
Blanda Mello	Brazil
David Silva	Brazil
Ricardo Kaminski	Brazil
Lilyana Marinova	Bulgaria
Radostina Nikolova	Bulgaria
Elissa Strome	Canada
Muhammad Mamdani	Canada
Anton Ilarionov	Costa Rica
Eduardo Rodriguez Cubillo	Costa Rica
Anton Zamora	Costa Rica
Merja Mustonen	Finland
Aymeric Perchant	France
Jonas Marcello	Germany
Malte Schmieding	Germany
Tamas Joo	Hungary
Anat Boehm Cahan	Israel
Ran Milman	Israel
Francesca Trenta	Italy
Luca Demicheli	Italy
Rossella Arcomano	Italy
Takeshita Kohei	Japan
Aiga Balode	Latvia
Isabelle Debourges	Luxembourg
Jose Garcia	Luxembourg
Hilde Lovett	Norway
Hubert Źyciński	Poland
Andre Brito	Portugal
Catia Pinto	Portugal
Diogo Ferreira	Portugal
Filipe Mealha	Portugal

Full name	Country / Organisation
Sofia Ferreira	Portugal
Vanessa Lima	Portugal
Mohammed Alawad	Saudi Arabia
Mona Almeheid	Saudi Arabia
Tomáš Švec	Slovak Republic
Nina Remskar	Slovenia
Alvaro Alonso	Spain
Belen Delgado	Spain
Gemma del Rey	Spain
Lucia Escapa	Spain
Gian-Reto Grond	Switzerland
Nicole Formica	Switzerland
Victor Plat	The Netherlands
Berrak Basara	Türkiye
Eray Orhan	Türkiye
Gamze Cimilli	Türkiye
Hatice Aktas Gokce	Türkiye
Ozgur Sezer	Türkiye
Selma Altan Celik	Türkiye
Tugba Gul	Türkiye
Jos Kelly	United Kingdom
Micky Tripathi	United States
Leah Stephenson	Alliance for Healthier Communities
Carla Cartwright	Business and Industry Advisory Committee (BIAC)
Kaoutar Sghiouer	Business and Industry Advisory Committee (BIAC)
Olga Mironenko-Stampfer	Business and Industry Advisory Committee (BIAC)
Aferdita Bytyqi	Digital Transformations for Health Lab
Yiannos Toliás	European Commission
Marie-Laure Hecquet	European Directorate for the Quality of Medicines and Healthcare, Council of Europe
Milana Trucl	European Patients Forum
Simao Campos	International Telecommunication Union (ITU)
Alberto Busetto	HealthAI - The Global Agency for Responsible AI in Health
Peiling Yap	HealthAI - The Global Agency for Responsible AI in Health
Divya Srivastava	London School of Economics
Laura Adams	National Academy of Medicine
Limor Shmerling-Magazanik	OECD (Data Free Flows with Trust)
Alies Maybee	Patient Advisors Network
Munira Ratansi	Patient Advisors Network
Louise Binder	Save Your Skin Foundation
Dipak Kalra	The European Institute for Innovation through Health Data
Derya Sahin	World Bank
Samir Pujari	World Health Organization

# Scaling Artificial Intelligence in Health

Artificial Intelligence (AI), when scaled responsibly, holds significant potential for healthcare systems. Yet significant barriers to its adoption remain, including fragmented data foundations, regulatory uncertainty, and gaps in governance and workforce capacity. Unleashing AI's potential to benefit everyone's health requires the balancing of market forces and health culture.

OECD Member countries are undertaking initiatives to address these gaps, such as establishing a strategies and action plans at the intersection of AI and health. To support these actions, a coherent policy checklist was developed to guide decision making and prioritisation and to avoid blind spots.

The checklist is organised into four pillars: establishing enablers (for data foundations, assuring and scaling AI, and capacity building); implementing guardrails (to oversee and monitor progress toward common objectives); engaging meaningfully with the public, providers and industry; and deploying trustworthy AI. Across the four pillars, nine main policy categories and 43 questions have emerged as critical for responsibly scaling the benefits of AI in health.

Action will be accelerated by learning from each other and solving challenges together. A shared recognition has emerged: that coherent, cross-border compatible policies are essential to balance innovation with safety, and economic opportunity with building public trust.



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