



How new EU legislations will transform medicines regulation

Opportunities across the medicines lifecycle



Faster, evidence-based R&D – identify unmet needs, refine target populations, accelerate clinical trials design

More efficient clinical trials – improved patient recruitment, continuous safety monitoring

Better regulatory decision-making: benefit-risk assessments, adaptive approvals, post-marketing evaluations

Optimised Market Access and Pricing – RWD supporting HTA and reimbursement decisions

➔ But more is needed to make sure data can enable faster and better access to medicines

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Legislative ecosystem

Data Access and sharing

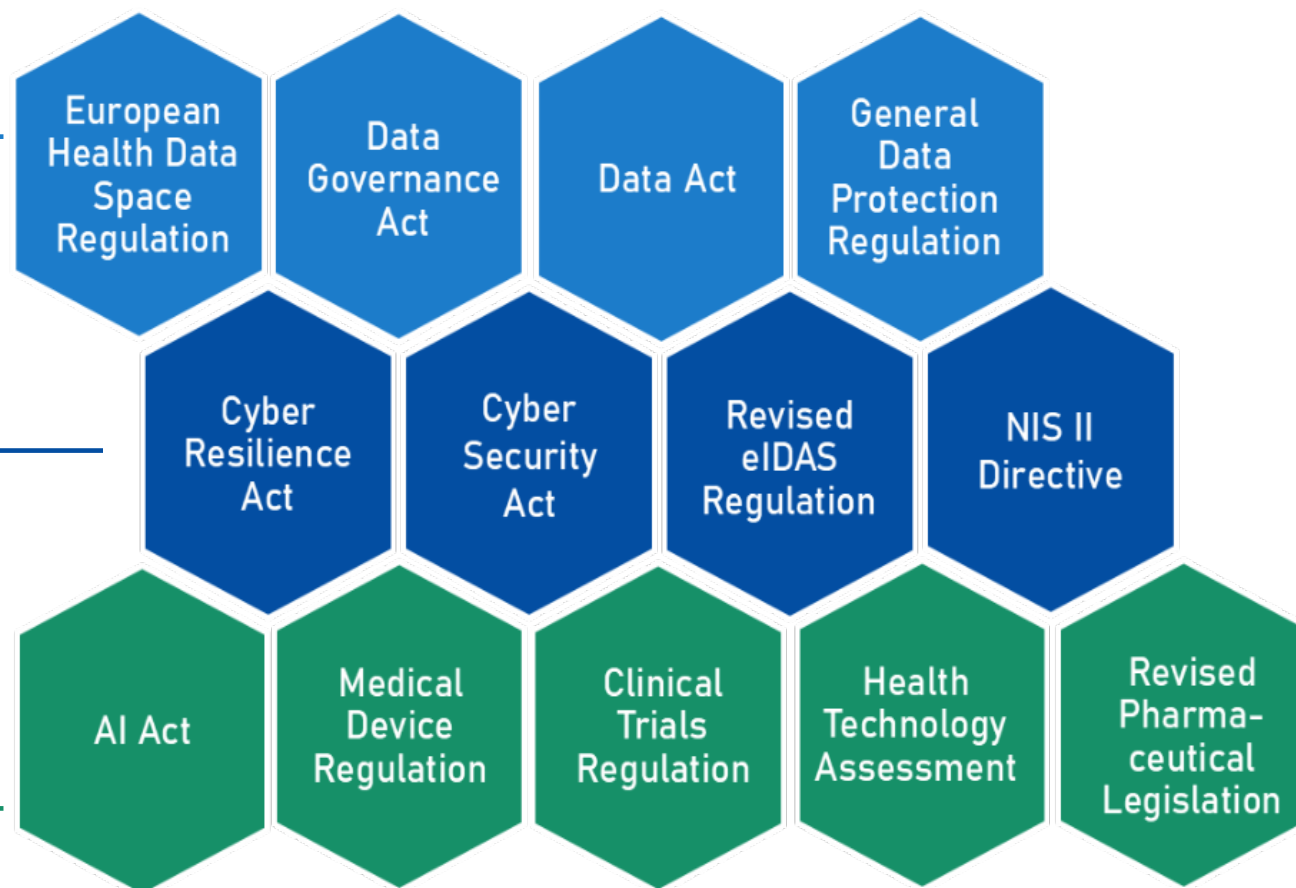
- Common rules and governance for the protection, access to, use, reuse and sharing of health data

Security and Trust

- Common rules, standards and certifications for cybersecurity, and trust services ensuring the security of and trust in healthcare organisations' information systems

Safety and Robustness

- Common rules, for the development, validation of technologies, including AI systems, and their safe use across the medicine and medical device lifecycle



Strategic ecosystem

Infrastructures

- DARWIN EU
- HealthData@EU
- AI Testing and Experiment Facilities / AI Factories

➡ *Providing researchers and innovators with the right infrastructures, support and settings to develop and validate their approaches*

Development and Adoption

- Apply AI Strategy
- Life Science Strategy
- Biotech Act

➡ *Enhance the competitiveness of the EU by boosting data and AI adoption and innovation, including in life sciences*



Skills

- EU4Health & Pact for Skills
- EHDS Capacity Building activities
- EHDEN Academy
- AI Skills Academy

➡ *Equip researchers and decision-makers with the right skills and resources to successfully leverage health data.*



Financing

- Horizon Europe
- Digital Europe
- Innovative Health Initiative (IHI) programme

➡ *Funding the research, development and deployment of data and AI in Europe.*

European Health Data Space

Primary use

Empower individuals to access and control their personal health data + Ensuring seamless exchanges for continuity of healthcare.

Building on existing voluntary **MyHealth@EU** infrastructure not touching upon national rules on provision of care.

Promote International standards (i.e. EMA PMS, SNOMED CT, ISO)

Secondary use

Ensure a consistent framework for the use of individuals' health data for research, innovation, policy-making and regulatory activities

Common European rules on who has to make which data available for which purposes and under which conditions.

Common infrastructure :
HealthData@EU

Accelerated procedure for public bodies

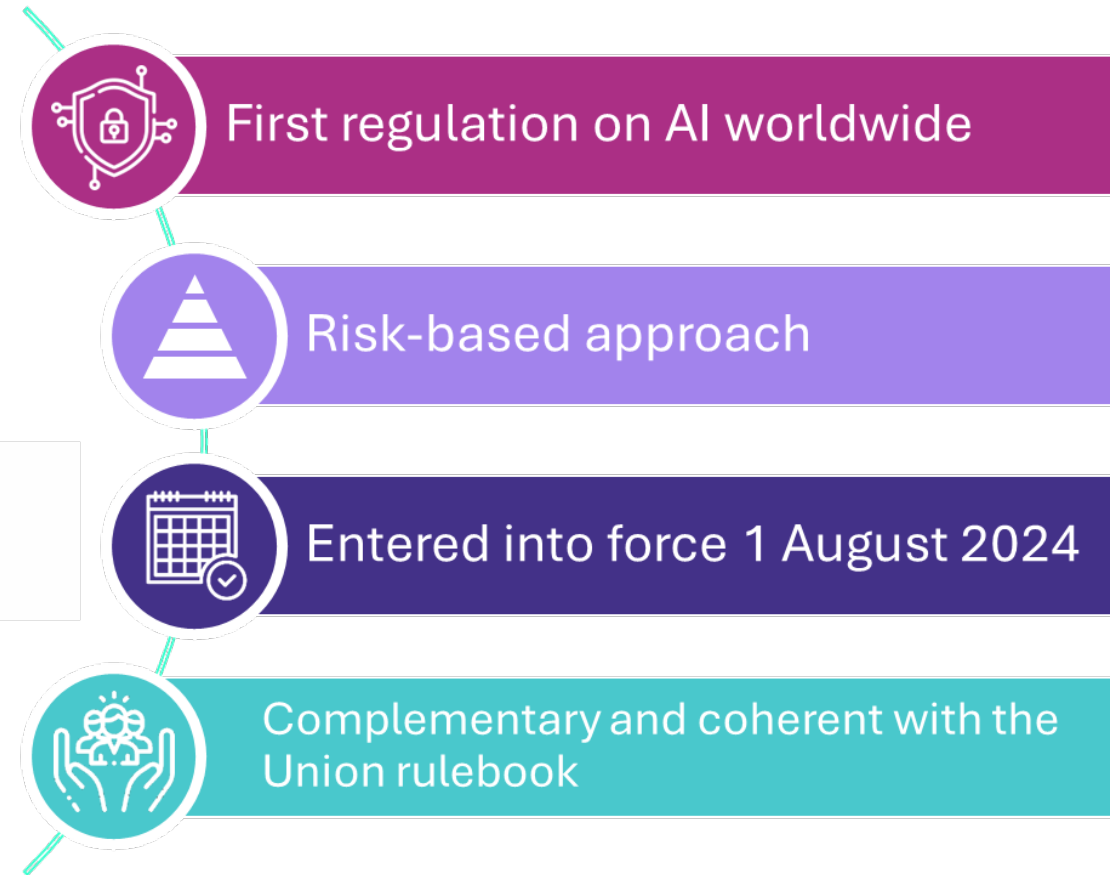
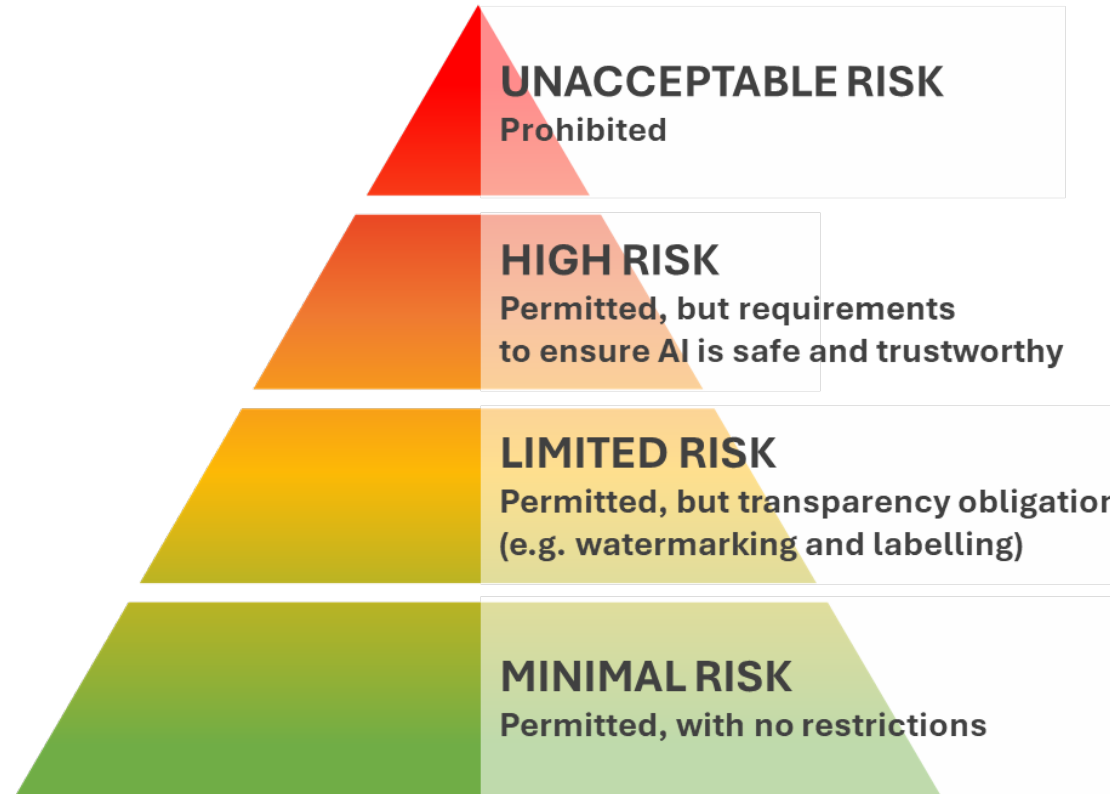
EHR systems requirements

Creating a single market for electronic health records systems, supporting both primary and secondary use.

Product legislation for two components of EHR systems: interoperability and logging; Full harmonisation for those two components

All EHR systems providing standardised data (e-prescription, patient summary)

AI Act



Advancing the safe, effective, efficient and equitable deployment of AI in Healthcare (COMPASS AI project):

Guidance, validation frameworks, and a dashboard for AI deployment monitoring across Member States

Making EHDS and AI work together (SHAIPED project): "regulatory sandboxes" for AI medical devices, assisting Health Data Access Bodies, developers, authorities, and data holders to seamlessly integrate AI solutions into clinical practice

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Health Technology Assessment Regulation



In application since **12 January 2025**



Common **framework and procedures** for cooperation of Member States on health technologies at Union level



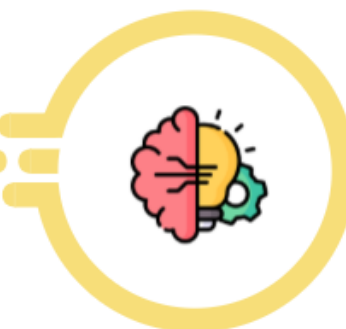
Strengthens data requirements for Joint Clinical Assessments (JCAs) by promoting standardized, high-quality clinical and real-world evidence

Encourages efficient cross-border data sharing and reuse, aligning methodologies for evidence generation (including RWD/RWE)

The new EU pharmaceutical legislation: Driving digital transformation in medicines



Improved clarity
on the
legislative interplay



Agility to enable AI
e.g. sandboxes and
adapted frameworks



Facilitate use
of RWE



'Digital by default'
Electronic
submissions



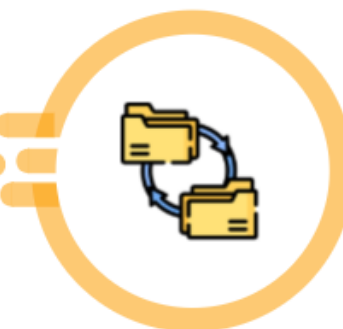
Submission of
raw data



Data processing
by the Agency



EU-wide
public databases



Exchange of data
and information



Expanding the
scope of ESMP



Electronic
package leaflet
- ePI

MDR's contribution to the shift to data-driven legislation

- Strong emphasis on data quality, traceability and transparency, overall reinforcing the trends towards **ongoing evidence generation**
- MDR introduced:
 - **EUDAMED** for centralised device and safety data – mandatory use of 4 modules from 28 May 2026
 - **UDI system** improving traceability and recall readiness
 - **Monitoring availability of devices**
 - **Strengthened Post Market Surveillance** → constant safety/performance monitoring
 - **Robust clinical data expectations** pre-market and post-market
 - **Reinforced requirements for medical devices software** including cybersecurity

Benefits and Opportunities

Benefits

Simplification of regulatory procedures

Faster, more **agile** approvals and reviews

More data-driven/**informed regulatory decisions**

Improved use of Real-World Evidence (RWE) and health **data**

Transparency and **clarity** across the EU

Interoperability and cross-border data exchange

Support to **innovation** and **competitiveness**

Alignment with **digital transformation** and **AI readiness**

Opportunities

Reduce time to market, especially for innovative therapies

Strengthen **EU competitiveness** in the pharmaceutical sector

Enable a **data-driven health ecosystem** in Europe

Empowering **patient-centered** digital services

Enhancing **sustainability** and **preparedness**

Boost **cross-sector collaboration**

Attracting **investment, talent** and **innovation**

Enable a **data-driven health ecosystem** in Europe

Thank you