

EPSO TRAINING DAY

AI IN REGULATION

SINGAPORE - 15 OCTOBER 2026

Using Data and AI in Health Supervision: From Insight to Strategy

Date: October 15th, 2026

Location: Ministry of Health Singapore – Labrador Boardroom at the Labrador Tower, 1 Pasir Panjang Road, #20-01, Singapore 118479 ([Maps](#))

Facilitators: Kavitha Palaniappan (Duke-NUS Singapore) and Alex van Vorstenbosch (NZa and Tilburg University Netherlands) & EPSO

Registration: [Click here](#)

Overview:

This one-day interactive training equips supervisory authorities with practical and strategic tools to use data and AI responsibly and effectively.

The programme balances:

- Foundational understanding of AI
- Mapping and unlocking existing datasets
- Hands-on exploration using Studio LLM (with simulated data)
- Ethical and strategic governance considerations
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Participants will:

- Understand what AI is (and is not)
- Identify hidden potential in their organisation's datasets
- Explore how AI can support risk profiling and supervision
- Reflect on governance, ethics, human-in-the-loop design and cost considerations
- Develop medium-to-long term strategies for AI use within their organisations

This training combines theory, discussion and guided practical exploration.

Expectations from Participants:

1. Bring a laptop with Studio LLM installed
2. Prepare a 2-page dataset description – each participant must prepare a 2-page description of one dataset from their organisation that they believe has the potential for extended use or AI application. The dataset description can include the following information:
 - a. Basic information:**
 - i. Dataset name
 - ii. Who collects it?
 - iii. Why was it originally collected?
 - iv. Frequency of collection
 - v. Format (structured, unstructured, mixed)
 - vi. Digital or partially paper-based?
 - b. Content description:**
 - i. Main variables (or types of information)
 - ii. Level of granularity (individual/entity/system level)
 - iii. Time coverage
 - iv. Estimated size
 - c. Data quality and constraints:**
 - i. Known limitations
 - ii. Missing data issues?
 - iii. Potential biases
 - iv. Legal/privacy constraints
 - v. Access restrictions
 - d. Current use:**
 - i. How is it currently used?
 - ii. Who uses it?
 - iii. For what decisions?

	Preliminary Programme	
Time	Session Topics	Presenter
09.00 – 09.05	Opening Speech and introduction to the training day	
09.05 – 09.25	Paradigm shift in Regulation the shift towards everything is interconnected: AI, Digital health, Data infrastructure management and making optimal use of your own data by Regulators, Inspectorates and Supervisory organisations) Setting the stage for theme 4 - Update on the recent experience with AI in Singapore What changes in working methods are already visible because of the use of AI in regulation by regulator and regulatee? How to recognise the risks of AI?	MOH Singapore
09.25 - 09.45	Warming up for the Training Day: brief intro on Data Science Developments & brief participant introductions	Alex van Vorstenbosch
9.45 - 10.00	Comfort break	9.45-10.00
10.00 – 10.40	Analytics for Supervisors Descriptive versus predictive versus prescriptive, risk profiling concepts, signal detection and compliance targeting	Alex van Vorstenbosch
10.40 – 11.10	What is AI? (Demystified) Lay explanation of what is AI, types of AI (rule-based systems, machine learning, generative AI), prediction versus causal inference, strengths and blind spots of generative AI, common traps in regulatory settings.	Asst. Prof. Kavitha Palaniappan
11.10 – 12.00	What is Data in a Supervisory Context? Types of regulatory data, structured versus unstructured data, missing data and bias, why and how data was collected matters.	Asst. Prof. Kavitha Palaniappan
12.00 - 13.00	Lunch	12.00 - 13.00
13.00 - 14.45	Mapping your Data Landscape	
13.00 - 13.30	Participants sharing on their datasets	Alex van Vorstenbosch & Asst. Prof. Kavitha Palaniappan
13.30 - 14.15	Probing for hidden potential – facilitated discussion	Alex & Asst. Prof. Kavitha

14.15 - 14.45	Group reflection on what collective tools could benefit the network	Alex & Asst. Prof. Kavitha
14.45 - 15.00	Tea Break	
15.00 - 16.30	Practice Session: Using AI safely (Studio LLM Demonstration)	
15.00 - 15.45	Introduction to LLMs and Studio LLM	Alex van Vorstenbosch
15.45 - 16.30	Simulated Exercises Highlight prediction versus explanation, missing data distortions, bias emergence.	Alex van Vorstenbosch
16.30 - 17.30	Strategy, Ethics and Organisational Design	
16.30 - 16.50	Core Ethical Principles for Regulators Accountability, transparency, fairness, proportionality, human-in-the-loop, defining boundaries without stifling innovation.	Asst. Prof. Kavitha
16.50 - 17.10	Organisational Strategy The topics can revolve around separate AI team versus integrated model; AI policy in partially paper-based systems, cost considerations and medium-to-long term roadmap	Asst. Prof. Kavitha & Alex van Vorstenbosch
17.10 - 17.30	Final Reflection and Action Points Each participant identifies one short-term step, one medium-term structural change and one ethical safeguard to implement	Asst. Prof. Kavitha & Alex van Vorstenbosch

Please register by using [this form](#).

If you have any questions, please contact us at office@epsonet.eu