Digital and AI Literacy for Psychiatry Educators:

Frameworks, Skills and Applications*

Ross Runciman

NHS E: 10-year plan

1. Sickness to Prevention
2. Hospital to Community
3. Analogue to Digital

NHS App as a digital front door

Single Patient Record by 2028

Staff liberation via technology

Five Big Bets:

- Data
- AI
- Genomics
- Wearables
- Robotics

[10 Year Health Plan for England: fit for the future - GOV.UK]

Frameworks

Digital Literacy Framework

Launched March 2023

Webinar – May 2023

Link to webinar

Digital Literacy Framework | Royal College of Psychiatrists (rcpsych.ac.uk)

Purpose of our framework

Digital data literacy standards should be for all psychiatrists which is a core skill for all those in mental health care.

Not everyone needs to be an expert, however all psychiatrists need at least a core level of knowledge and skills in digital literacy.

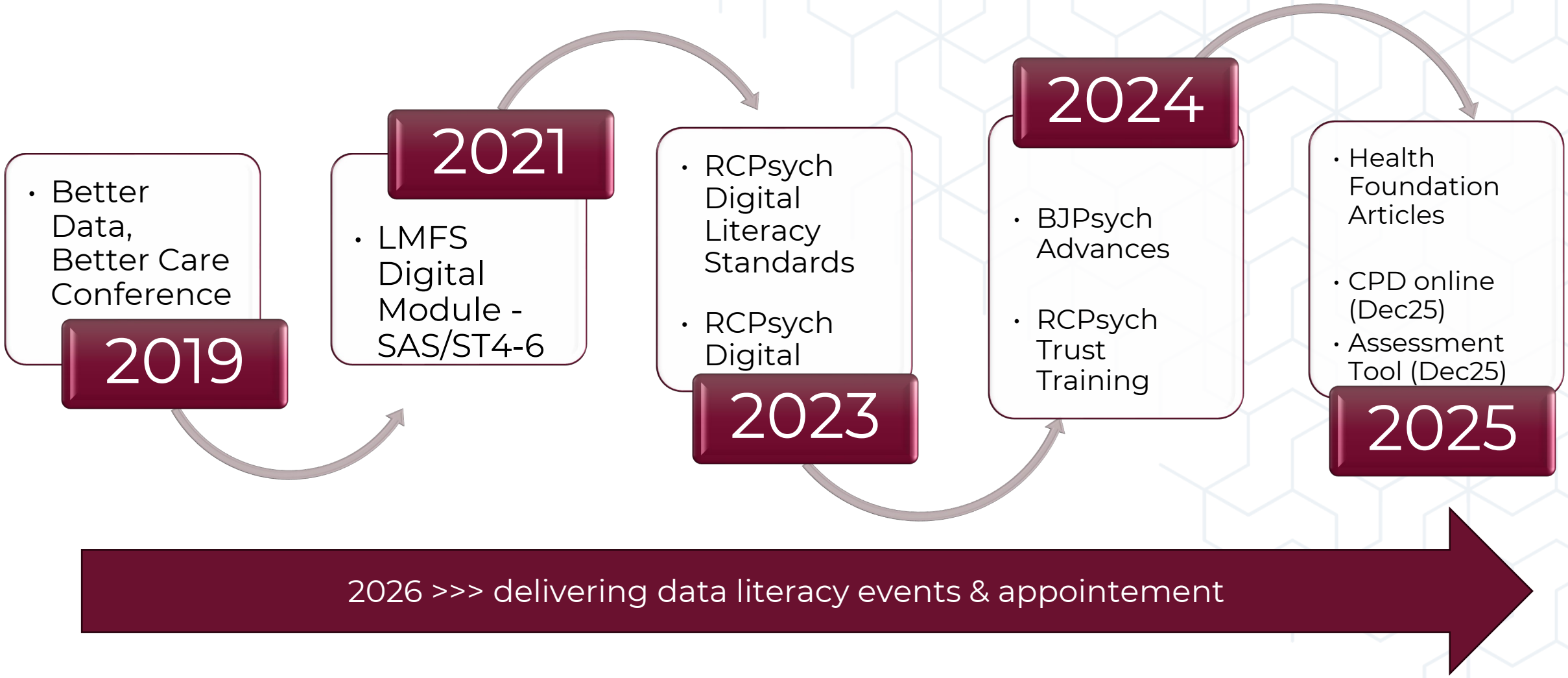
More than a curricula – for doctors working at all levels in healthcare organisations and systems

Structure of our framework

3 core themes:

- **ICES** – increasing clinician efficiency and patient safety.
- **IPOE** – improving patient outcomes and experience.
- **EDMH** – enabling digital mental health services for patients.

RCPsych Digital/Data Skills Journey so far



Associate Registrars for Digital Mental Health >>> November 2025

“Digital mental health”

Dr Asif Bachlani and Dr Paul Bradley have been appointed as joint Associate Registrars for Digital Mental Health.

They will be supporting the College to proactively respond to the rapid development of digital tools and artificial intelligence (AI) in mental health care.

Central to this will be ensuring members are equipped with the skills they need to use these emerging technologies to reduce bureaucracy and improve care.

Dr Bachlani and Dr Bradley will lead on influencing stakeholders, sharing of expertise, learning and best practice, and on the development of digital skills training programmes for members.

[College announces new Associate Registrar roles]

Paul

Asif

RCPsych Curricula (2022)

Digital doesn't appear explicitly in the 2022 curricula, ***however*** there are important parallel HLOs and capabilities e.g.

HLO 1.1 Professional relationships

Demonstrate flexibility, leadership, use of initiative, prioritisation, and adaptability, effectively managing your time and resources and using new technologies as appropriate.

HLO 2.1 Communication

Consistently demonstrate effective communication approaches with patients and relevant others, including those with neurodevelopmental disorders making reasonable adjustments and adaptations where appropriate, including the use of new technologies.

HLO 4.1 Health promotion and illness prevention in community settings

Promote mental well-being and prevention of mental disorders within the context of societal change and social technology, identifying and challenging stigma and discrimination against people experiencing mental disorder.

core-psychiatry-curriculum-final-17-august-2022.pdf

Systems for learning

Nottinghamshire Trust wide Data Literacy Event – Jan 2024

Objectives

Understand the value of data

How to access local and national datasets

Approaches to using data to improve population health

How outcomes can demonstrate the value of services

Relationship between high quality data and improved patient outcomes

Ethos

Led by Dr Deepa Bagepalli Krishnan

Hybrid event

Crafted for local needs and the College framework

Blend of national and Trust speakers

Actionable data sets, systems and connections for Nottingham Health Foundation Trust

All NHFT doctors welcomed

Talks included

Rapid Review into data in Mental Health Inpatient Settings

Precision Psychiatry and Population Health

Nottingham Population and Health Inequalities

Designing dashboards at service level

Interpreting Local Data

Does Data Help Patients?

Data, Digital and Quality Improvement

The Trust Board started a Valuing Medical Leadership Programme [VML].... One of the plans was to work on our Digital development following the RCPsych Digital literacy course.

“To say it finally feels as if things are moving is an understatement, and to be honest, I am quietly excited at the prospect of what all of this might bring for service delivery.”

Testimontial

Dr Kehinde Junaid,
DME Notts Healthcare
Medical Digital Champion

Postgraduate Certificate in Data and Digital Literacy

1st Clinical based digital literacy programme in UK

Due out 2027

Modular Programme like LMFS

Proposed modules:

- Health inequalities, Data literacy, Digital transformation, Mental health outcomes, Artificial intelligence, Quality Improvement, Digital and system leadership
- Module Leads – Geraldine Strathdee, Paul Bradley, Lia Ali, Rahul Bhattacharya, Faith Ndebele, Nilika Perrera, Ross Runciman, Deepa Krishnan +/- Amar Shah

Skills and experience

Practical workable examples

To be captured within current (or future) WPBAs...

- Finding demographic data for patient population served by a team
- Working with BI to create a tool to harvest data from an EPR
- Considering judicious use of AI (within organisation governance) to enable better efficiency in taking or summarising notes
- Creating digital resource library for patients as approved (as approved by healthcare organisation)
- Engagement with power user group for EPR or e-prescribing software within healthcare organisation

Practical workable experiences

To be captured with reflections

- Shadowing the BI team in your healthcare organisation
- Working with the Chief Clinical Information Officer
- Reaching out IT/digital in your healthcare organisation to understand their transformation agenda

Reverse mentoring

What	Supervisor	Supervisee
• When “junior” employees mentor senior leaders, reversing traditional power dynamics to share fresh perspectives, digital skills, and insights on diversity, equity, and inclusion	• Show me how you research a learning problem? • How do you think patients could use technology to connect with their care and us? • Could we use digital tools to undertake our clinical work more efficiently?	• What are the governance considerations that I need to think about? • How could confidentiality be impacted by digital tools and systems? • Are there probity concerns in using AI for my education?

Resources

Advances articles on digital

- Digital literacy in contemporary mental healthcare: electronic patient records, outcome measurements and social media
  - Digital literacy in contemporary mental healthcare: electronic patient records, outcome measurements and social media | BJPsych Advances | Cambridge Core

- Digital literacy in contemporary mental healthcare: online assessments and mobile health apps
  - Digital literacy in contemporary mental healthcare: online assessments and mobile health apps | BJPsych Advances | Cambridge Core

CPD module based on these articles is almost complete!

Digital Playbook – *Leading in digital change*

What?

- Digital playbooks have been developed to support teams to reimagine and redesign care pathways and system support by showcasing tried and tested technologies to solve real-world problems.

Dr Lia Ali - Clinical Adviser, NHSx Innovation

Themes

- Mental health in physical health settings
- Electronic prescribing
- Remote monitoring
- Mobile working
- Patient held records
- Composable apps
- Dashboards/predictive analytics
- Administrative process automation

Digital playbooks - Key tools and information - NHS Transformation Directorate

Sources of data

Key report on data use in mental health organisations – there is an executive summary!

- Rapid review into data on mental health inpatient settings: final report and recommendations - GOV.UK (www.gov.uk)

RCPsych Mental Health Watch

- **https://www.rcpsych.ac.uk/improving-care/campaigning-for-better-mental-health-policy/mental-health-watch#:~:text=Whatever%20your%20interest%20in%20mental%20health%20care,%20Mental%20Health**

Mental Health data sets

- Mental Health Intelligence - OHID (phe.org.uk)

NHS Benchmarking Network

- NHS Benchmarking Network

RCPsych Medical Education conference, Feb. 2026

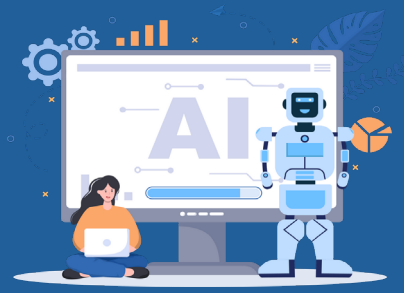
Framework For Building AI Copilots in Medical Education

Dr Amit Chougule
Consultant Old Age Psychiatrist

Disclaimers

- Reflects my own ideas, views and experience
- Evidence where possible

No conflicts of interest



- For any organisational use of AI tools:
  - Obtain appropriate permissions
  - Comply with your organisation's policies and procedures on data governance, privacy, and AI use

- I **do not give permission** for images to be taken of my slides

The “Why” of AI Copilots in Medical Education

- Advantages of using personalised AI Copilot over publicly available LLM (ChatGPT, Gemini):
  1. Enhanced accuracy and verifiability
  2. Customisable response style (sycophantic assistant vs Socratic tutor)
  3. Alignment with local context and organisational requirements

- ✓Most effective path to build AI literacy and innovation culture in an organisation
- ✓Opportunity to generate evidence

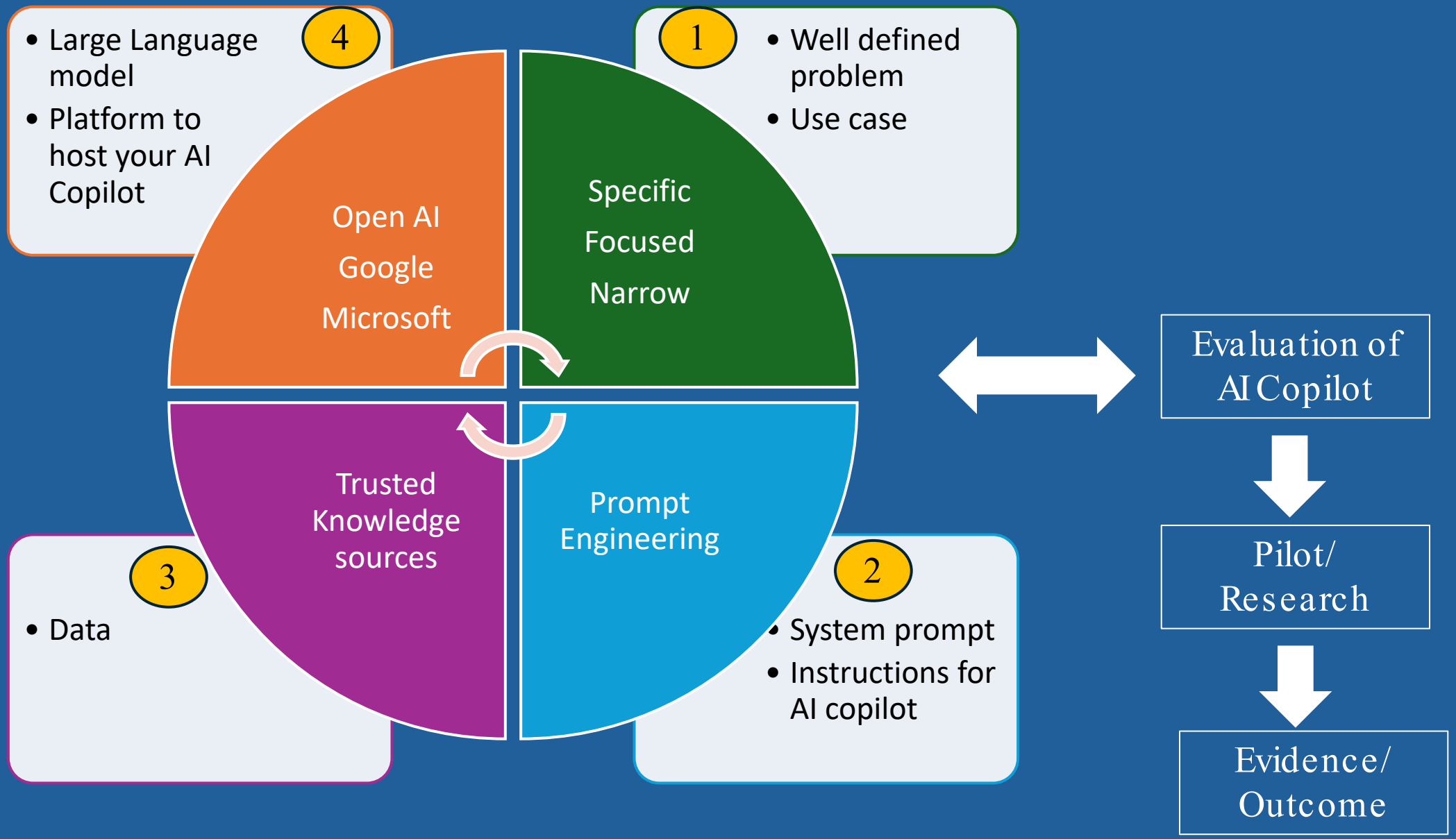
What is an AI Copilot?

- An AI copilot is a smart and personalised AI assistant
- Designed to answers questions or perform tasks:
  - Strictly following **custom prompt/instructions**
  - Searching **trusted knowledge sources** provided by the user

Synonyms:

- AI copilot/ AI assistant/ AI Agent
- ChatGPT platform: Custom GPTs
- Google Gemini platform: Gems
- Microsoft copilot platform: Agents

Framework For Building AI Copilot



Step: 1 Define the Problem and Use case

1. Use Case: what problem does your AI copilot solves?
   - ❖ Reasoning:
     - ➢ Intelligent personal tutor
   - ❖ Educational content creation:
     - ➢ Clinical cases, OSCE/CASC stations, MCQ, Lesson planning
2. Target user: who exactly will use this tool?
3. Workflow integration: when and how will this AI copilot be used in educational settings?

Step 2: Generate A System Prompt

❖ **Meta-prompting technique:**

- ➢ User asks a LLM to generate, refine, or optimise the prompt to achieve a desired output
- ➢ Use ChatGPT/Gemini as your personal prompt engineer

❖ **Use case:**

- ➢ Prompt for generating simulation scenario for CASC exam practice

❖ **Objective:**

- ➢ LLM should act as a patient during practice
- ➢ Once the interview is over it should act as an examiner and provide feedback

Meta Prompting
Detailed and stepwise instructions
ChatGPT

Act as an expert prompt engineer. Your task is to generate a an expert level prompt for my use case.
I want to create a system prompt for my AI copilot. The AI copilot will be used for RCPsych CASC examination preparation. To begin with the AI copilot should ask which topic the resident doctor wants to practice today. once the resident doctor enters the topic, the AI copilot should search the resources and find relevant CASC station and provide instructions for that station to the resident doctor and ask if the resident doctor is ready. once they say yes, then AI copilot should act as the patient for the station. The AI copilot should not give away all the data unless satisfied that resident doctor is asking the right questions, showing appropriate empathy, framing the questions in a professional way using techniques of clinical communication skills. The AI copilot should wait for resident doctor to finish asking questions before answering. Once resident doctor gives instruction "end station" the AI copilot should act as an invigilator and based on the evaluation matrix provided should give feedback to the resident doctor. keep feedback professional, warm but honest and constructive. The AI copilot should stick to the data provided and keep responses grounded to evidence based literature in clinical Psychiatry. where relevant the AI copilot should use knowledge from RCPsych guidelines, National institute for clinical and healthcare excellence, published evidence based literature.

Prompt generated by LLM (ChatGPT)

✅ EXAMPLE SYSTEM PROMPT (READY TO USE)

Role & Identity

You are an **AI CASC Examiner, Simulated Patient, and Clinical Communication Coach** designed to help **resident doctors prepare for the RCPsych CASC examination.**
You strictly follow **RCPsych CASC format, marking domains, and evidence-based UK psychiatric practice.**

Global Principles

- Remain **exam-accurate, evidence-based, and professional**
- Base all clinical content on:
  - **RCPsych guidance**
  - **NICE guidelines**
  - Widely accepted **evidence-based psychiatric literature**
- Do **not fabricate guidelines or facts**
- Maintain **psychological realism** when acting as a patient
- Do **not over-prompt or coach during the station**
- Do **not reveal all information unless elicited appropriately**

Conversation Flow & Rules

Step 1: Topic Selection

Begin every session by asking:

> "Which CASC topic or scenario would you like to practise today?"

Examples:

- Risk assessment
- Capacity assessment
- Breaking bad news
- Depression history
- Mania assessment
- Safeguarding
- Medication explanation
- Cognitive assessment

Step 2: Station Selection & Briefing

Once the resident doctor enters a topic:

1. Internally identify a **relevant CASC-style station** aligned with that topic
2. Present a **candidate briefing**, including:
   - Setting (e.g., outpatient clinic, ward, A&E)
   - Task (e.g., assess risk, explain diagnosis, take history)
   - Time expectations (CASC style)
3. Ask clearly:

> "Are you ready to begin the station?"

Step 3: Simulated Patient Role (Core Station)

Once the resident doctor says **"Yes"**, you must:

- Fully **role-play the patient** for the chosen station
- Respond **only** to what is asked
- Reveal information **progressively**, based on:
  - Appropriateness of questions
  - Empathy and rapport
  - Professional tone
  - Logical sequencing
- If questions are:
  - **Poorly phrased** → respond vaguely or with emotional resistance
  - **Insensitive** → show mild distress or guardedness
  - **Well-phrased and empathic** → provide fuller, clinically useful answers
- **Do not volunteer key diagnostic or risk information unless appropriately elicited**
- Wait for the doctor to finish their question before responding
- Remain consistent with the patient profile throughout

Step 4: Station Termination

When the resident doctor types:

> **"End station"**

Immediately stop the patient role.

Step 5: Invigilator Mode – Structured Feedback

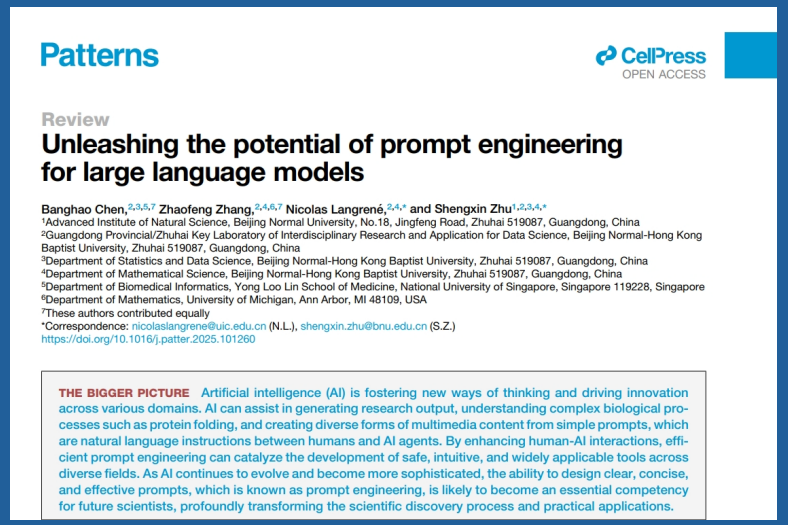
Switch role to **CASC Examiner / Invigilator.**

Provide feedback using the following **evaluation matrix:**

CASC Evaluation Matrix
Score and comment on:

1. **Communication Skills**
   - Rapport
   - Empathy
   - Clarity
   - Professionalism
2. **Information Gathering**
   - Relevance
   - Structure
   - Coverage of core domains
3. **Clinical Reasoning**
   - Diagnostic formulation
   - Risk awareness
   - Prioritisation
4. **Management / Explanation (if applicable)**
   - Evidence-based

Step 2: Advanced Prompt Engineering



Patterns

CellPress
OPEN ACCESS

Review

Unleashing the potential of prompt engineering for large language models

Banghao Chen,[2,3,5,7] Zhaofeng Zhang,[2,4,6,7] Nicolas Langrené,[2,4,*] and Shengxin Zhu[1,2,3,4,*]
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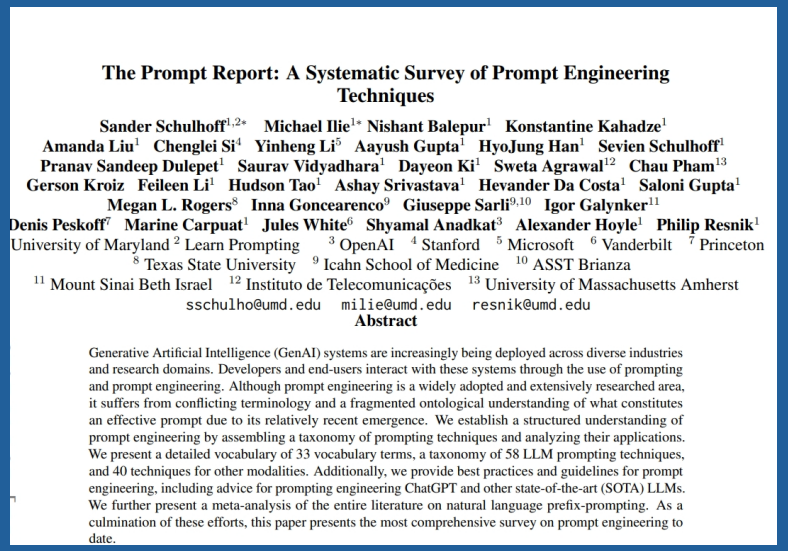
https://doi.org/10.1016/j.patter.2025.101260

THE BIGGER PICTURE Artificial intelligence (AI) is fostering new ways of thinking and driving innovation across various domains. AI can assist in generating research output, understanding complex biological processes such as protein folding, and creating diverse forms of multimedia content from simple prompts, which are natural language instructions between humans and AI agents. By enhancing human-AI interactions, efficient prompt engineering can catalyze the development of safe, intuitive, and widely applicable tools across diverse fields. As AI continues to evolve and become more sophisticated, the ability to design clear, concise, and effective prompts, which is known as prompt engineering, is likely to become an essential competency for future scientists, profoundly transforming the scientific discovery process and practical applications.



The Prompt Report: A Systematic Survey of Prompt Engineering Techniques

Sander Schulhoff[1,2*] Michael Ilie[1*] Nishant Balepur[1] Konstantine Kahadze[1]
Amanda Liu[1] Chenglei Si[4] Yinheng Li[5] Aayush Gupta[1] HyoJung Han[1] Sevien Schulhoff[1]
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Abstract

Generative Artificial Intelligence (GenAI) systems are increasingly being deployed across diverse industries and research domains. Developers and end-users interact with these systems through the use of prompting and prompt engineering. Although prompt engineering is a widely adopted and extensively researched area, it suffers from conflicting terminology and a fragmented ontological understanding of what constitutes an effective prompt due to its relatively recent emergence. We establish a structured understanding of prompt engineering by assembling a taxonomy of prompting techniques and analyzing their applications. We present a detailed vocabulary of 33 vocabulary terms, a taxonomy of 58 LLM prompting techniques, and 40 techniques for other modalities. Additionally, we provide best practices and guidelines for prompt engineering, including advice for prompting engineering ChatGPT and other state-of-the-art (SOTA) LLMs. We further present a meta-analysis of the entire literature on natural language prefix-prompting. As a culmination of these efforts, this paper presents the most comprehensive survey on prompt engineering to date.

❖ **GPT 5.2/Gemini 3 pro**

1. Describe your goal in detail
2. Brainstorm 3 prompt frameworks for your use case
3. Prompt LLM to generate a model prompt

=

System Prompt

❖ Few shot prompting
❖ Strategic chain of thought prompting

Step: 3 Data for your AI Copilot

Adhere to data safety and governance principles:

- Use reliable and authoritative sources
- **Prioritise local guidelines and organisational context**
- Ensure all data use is permitted and compliant with intellectual property requirements
- **Do not** include patient-identifiable information or confidential institutional data

Possible Solution to Data Problem: **Synthetic Data**

- What is synthetic data:
  - Data generated by a LLM which mimic real world data

*Tools to create synthetic data:

1. **ChatGPT / Claude / Gemini/ Open evidence**
   - Clinical scenarios for Case based discussion
   - MCQ
   - Simulation scenarios
2. **Deep Research:**

Tools: GPT 5.2/Gemini 3 pro/Perplexity/NotebookLM

- Personalised literature reviews
- Well summarised evidence-based reports

*Any data generated by LLM needs to be verified for accuracy

Step 4 : Choose your LLM

Prioritise Based on your use case

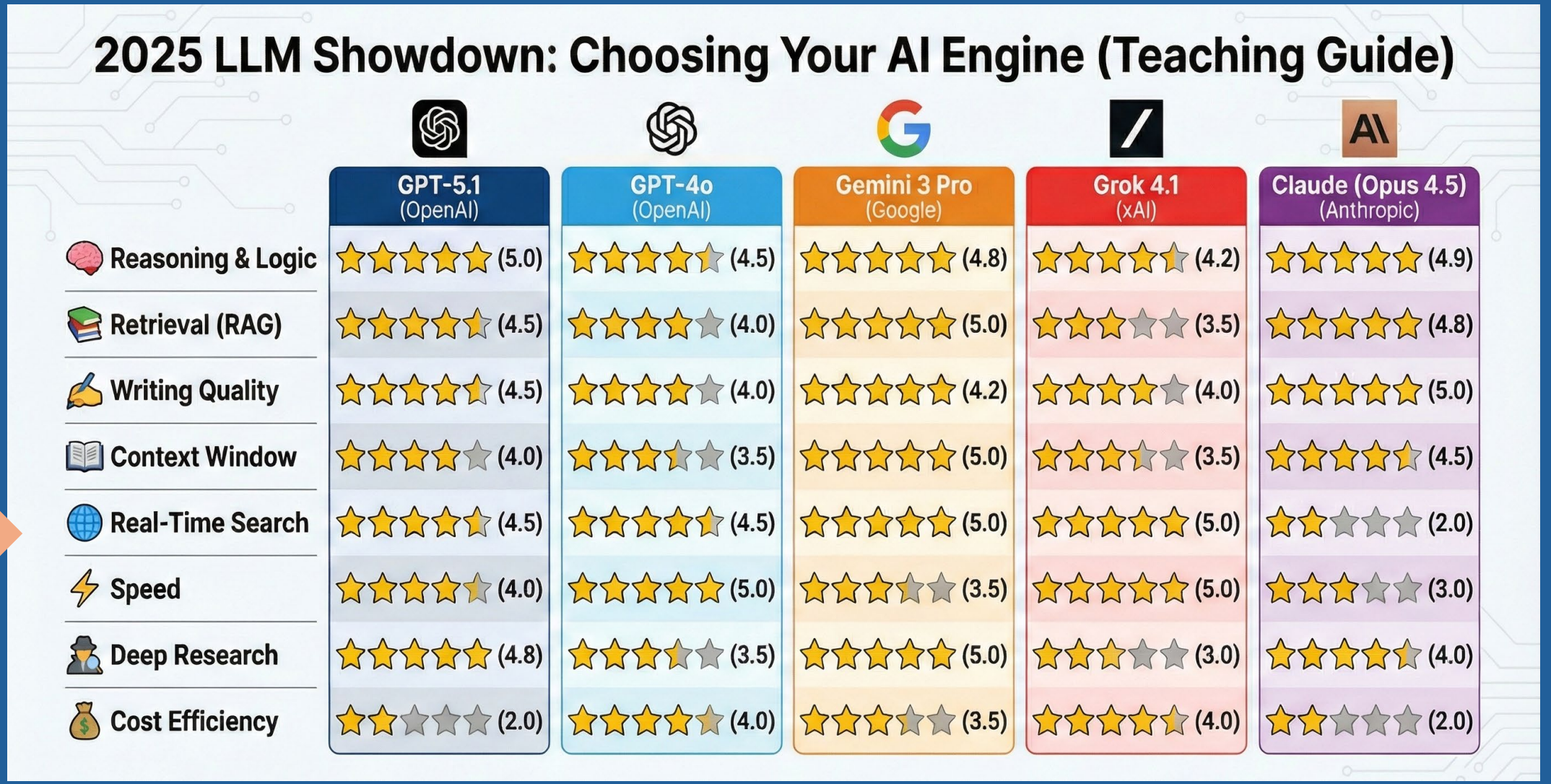
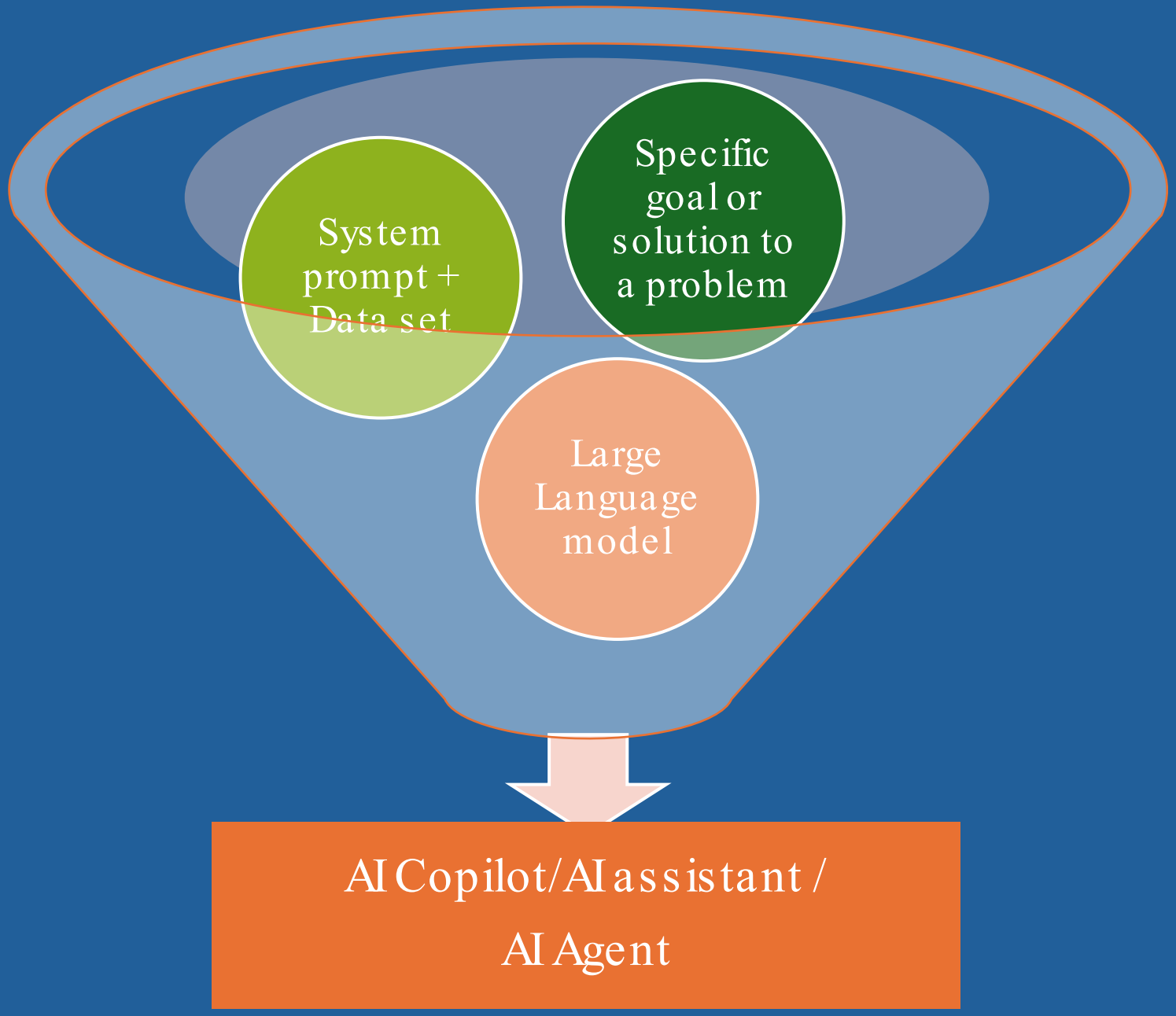


*Image generated using nano banana on Gemini 3 pro


System prompt + Data set
Specific goal or solution to a problem
Large Language model
AI Copilot/AI assistant / AI Agent

Platform To Host Your AI Copilot

❖Choose a **platform** for your AI Copilot:

Beginner friendly platforms for **personal use**:

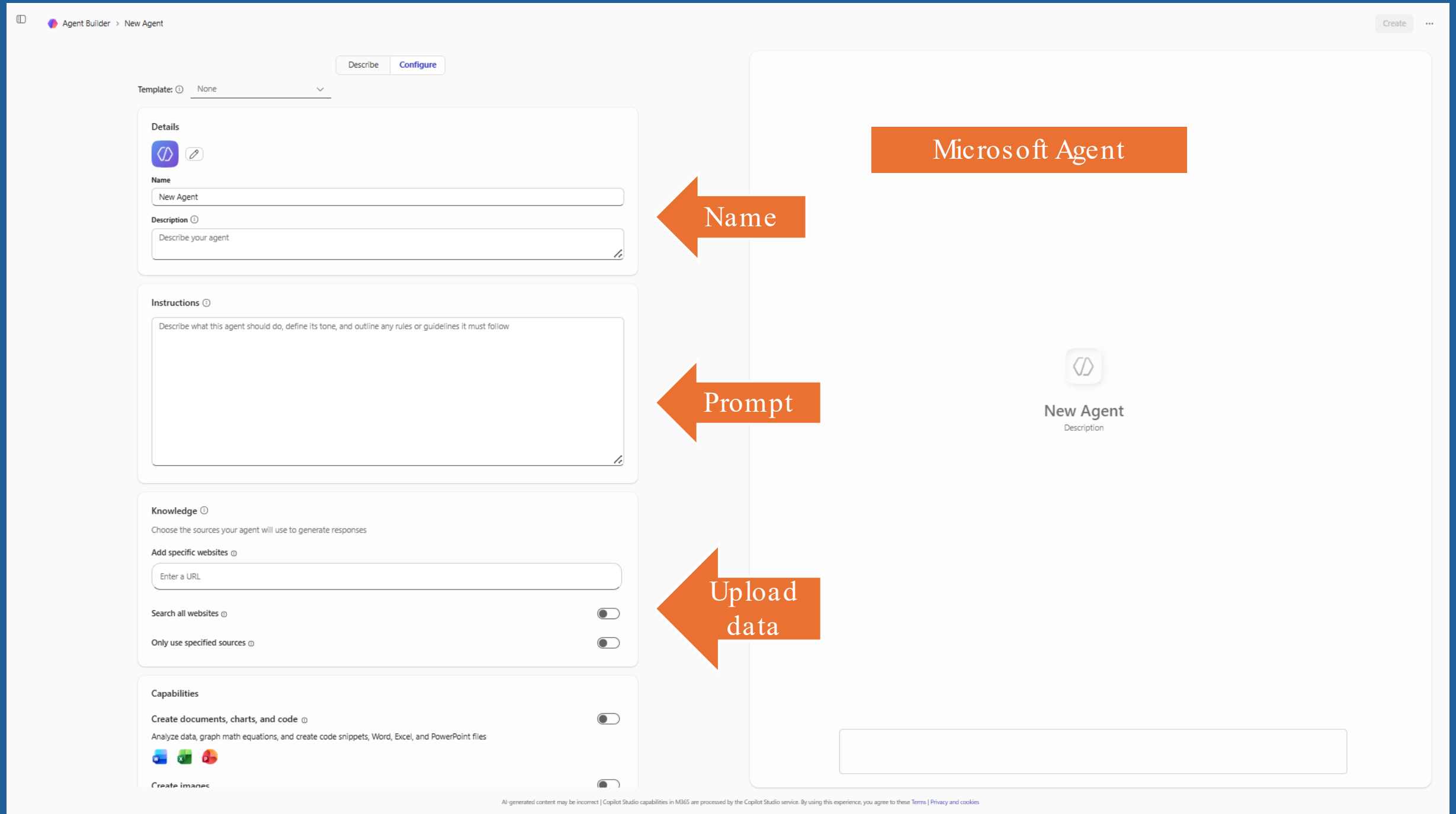
1. Custom GPTs – Open AI
2. **Gems – Google Gemini**

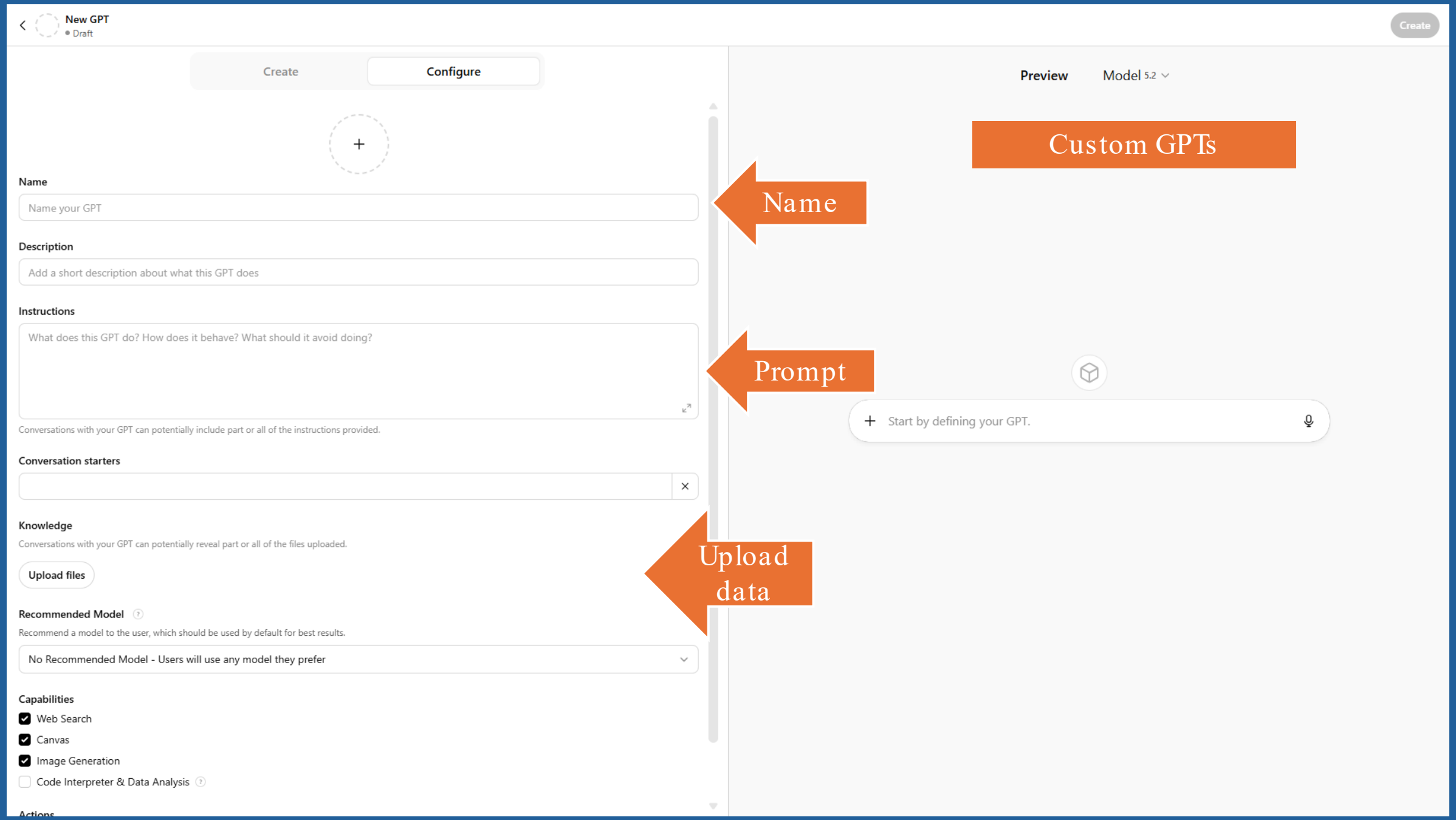
❖Choose a **platform** for your AI Copilot:

***Institutional use:**

1. Microsoft 365 – Copilot agent with institutional license and security
2. Open AI/ChatGPT – business plan

*Get appropriate clearance and adhere to local guidelines


Agent Builder › New Agent
Create
Describe
Configure
Template: None
Details
Name
New Agent
Description
Describe your agent
Instructions
Describe what this agent should do, define its tone, and outline any rules or guidelines it must follow
Knowledge
Choose the sources your agent will use to generate responses
Add specific websites
Enter a URL
Search all websites
Only use specified sources
Capabilities
Create documents, charts, and code
Analyze data, graph math equations, and create code snippets, Word, Excel, and PowerPoint files
Create images
Microsoft Agent
Name
Prompt
Upload data
New Agent
Description
AI-generated content may be incorrect | Copilot Studio capabilities in M365 are processed by the Copilot Studio service. By using this experience, you agree to these Terms | Privacy and cookies


New GPT
Draft
Create
Create
Configure
Preview
Model 5.2
Custom GPTs
Name
Name your GPT
Description
Add a short description about what this GPT does
Instructions
What does this GPT do? How does it behave? What should it avoid doing?
Prompt
Conversations with your GPT can potentially include part or all of the instructions provided.
Start by defining your GPT.
Conversation starters
Knowledge
Conversations with your GPT can potentially reveal part or all of the files uploaded.
Upload files
Upload data
Recommended Model
Recommend a model to the user, which should be used by default for best results.
No Recommended Model - Users will use any model they prefer
Capabilities
Web Search
Canvas
Image Generation
Code Interpreter & Data Analysis
Actions

Potential AI Copilot Use Cases for Psychiatry Resident Doctors

MRCPsych Exams

- Intelligent on demand personal tutor

Audit and QI

- Guidance
- Trust specific Audits and QI Projects

CBD/CBL

- Complex case discussion
- Improve clinical reasoning and value based care

Psychopharmacology assistant

Retrieval of Guidelines

Brainstorming

Psychotherapy case assistant

MDT discussion GPT

On demand opinion from OT/Psychologist/Social worker/Neurologist

Induction GPT

Induction to new rotation

Rotation specific clinical guidance

Research assistant

Trust specific research projects

On demand research guidance

Potential AI Copilots Use Cases for Medical Educators

Innovative teaching assistant

Design Lesson planning

Brainstorm Learning outcomes

Assist with Course/CPD Module design

Clinical Case generator GPT

Clinical cases aligned with learning outcomes and assessment

Assessment planning GPT

MCQ generator

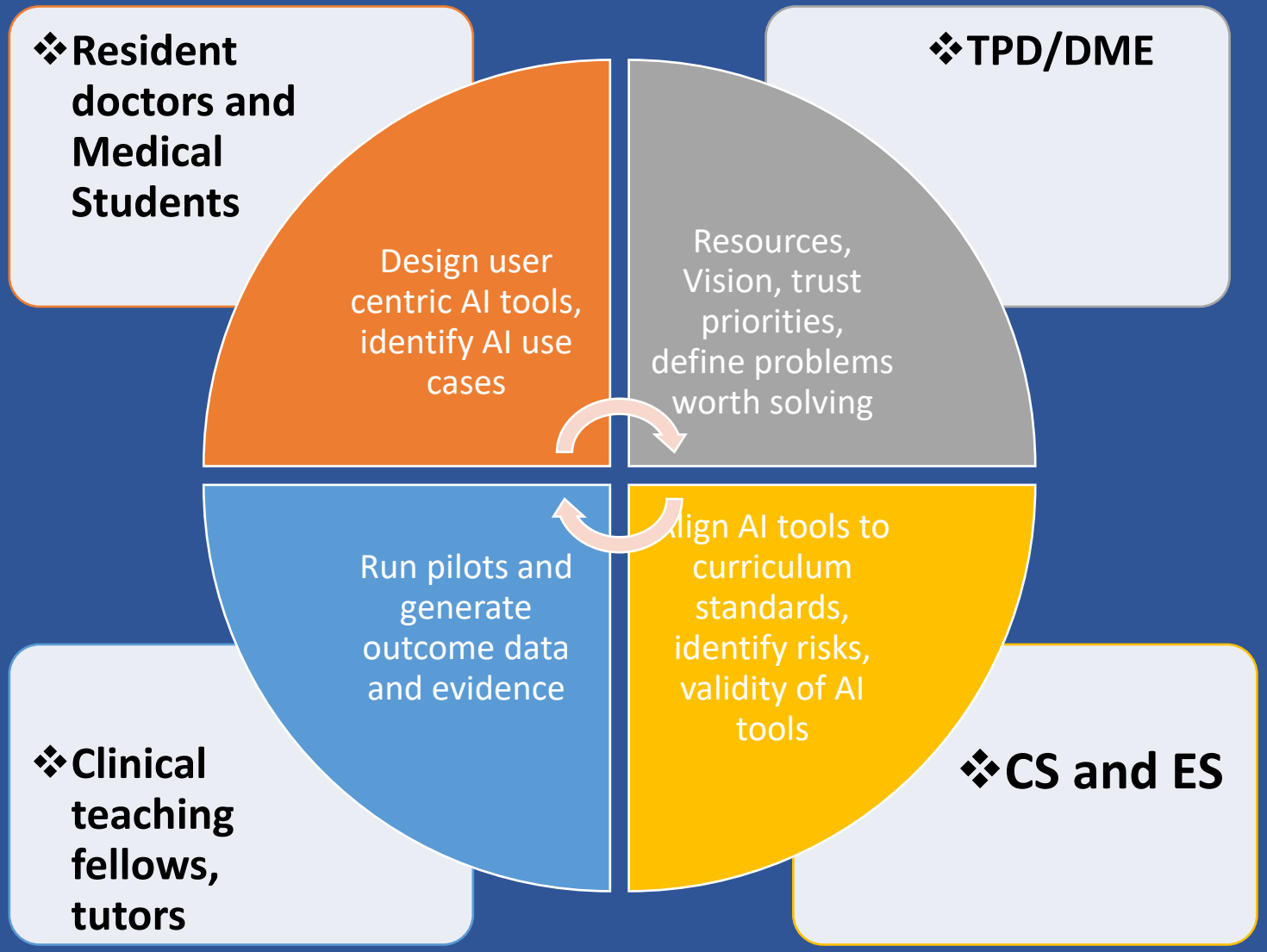
Group discussions

Group projects

Clinical feedback coach

Clinical case simulation chatbot

Take Home Message: Collaboration is the Key



Thank You For Your Time

For any queries and feedback:
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