BOPA AI Hackathon Participant Handbook

Welcome

Thank you for joining the second BOPA AI Hackathon. This event brings together cancer pharmacy professionals from across healthcare, technology, and innovation to explore how artificial intelligence can help solve real problems in cancer pharmacy practice. The hackathon is designed to be practical, collaborative, and welcoming to people who have never taken part in a hackathon before.

Over the event, you will work in a team to explore a challenge, develop ideas, and shape a solution that utilises AI that could improve cancer pharmacy services, patient care, or the way work is done. You do not need to be a data scientist or an AI expert to contribute meaningfully. Your clinical insight, service knowledge, and problem-solving pharmacy skills are exactly what the event needs.

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Practical Information

Opening Session

Date: 18/11/2026
Time: 12:00-14:00 (2 hours)
Venue: Remote via Zoom

Closing Session

Date: 25/11/2026
Time: 12:00-14:30 (2.5 hours)
Venue: Remote via Zoom

Recording: Both sessions, including the final pitches, will be recorded for future purposes such as event reporting, training resources and planning future hackathons. If you have any concerns about being recorded, please let the organisers know before the event.

What is a hackathon?

A hackathon is a time-limited, team-based event where people come together to solve problems or develop ideas. In this event, the goal is not to create a finished product in a few hours or days, but to make progress on a real challenge, test ideas quickly, and produce something useful enough to build on afterwards.

If you have never attended a hackathon before, think of it as a structured team sprint. You will spend time understanding the problem, discussing ideas, choosing a direction, and then creating a simple solution or prototype that you can explain to others. For this event, clinical relevance, safety, and feasibility matter more than technical polish.

Why this event matters

Cancer pharmacy is working in a period of increasing pressure, complexity, and opportunity. AI may help support better workflows, reduce administrative burden, improve access to information, and enable more consistent decision-making, but it must be used responsibly and in ways that fit clinical practice.

This hackathon is intended to explore practical problems from pharmacy practice and turn them into ideas that could be tested, improved, or developed further. The most

valuable contributions will come from participants who understand where the real pain points are in day-to-day cancer pharmacy work.

Who should attend

This event is for cancer pharmacy professionals who want to explore how AI can support cancer pharmacy. It is especially suitable for people who are curious, practical, and interested in improving services, even if they have little or no previous experience with AI or hackathons.

You do not need coding or AI experience to take part, although technical expertise is welcome where available.

What to expect

The event will begin with a welcome, an overview of the challenge themes and two short talks from guest speakers. Teams will then move into breakout rooms to start working through their chosen problem together, with support from facilitators. After the opening session on 18th November, teams continue working asynchronously in their own time until the closing session on 25th November, where every team will pitch their idea to the judges. Depending on the theme you're working on, you may be developing a concept, workflow, prompt, prototype, storyboard, business case, or presentation that shows how your idea would work in practice.

You can expect a collaborative environment with time for discussion, idea development, and presentation. The event is designed so that different skills are useful at every stage, including clinical thinking, service design, communication, and technical input.

Agenda

Opening session: Wednesday 18 November 2026, 12:00-14:00 (Zoom)	
12:00-12:10	**Welcome and introductions** Welcome from the BOPA AI Specialist Advisory Group, introductions to the organising team and mentors, and housekeeping for the session.

12:10-12:25	**Introduction to the hackathon** What a hackathon is, how the week will run, how teams will work, what support is available, the presentation template, and what we expect to see in the final pitches and judging.
12:25-12:45	**Challenge themes and examples** A walk through the four challenge themes (Clinical Practice, Leadership and Management, Education and Research) with example ideas to help teams start thinking.
12:45-13:00	**Guest speaker 1 - Yogini Jani** A previous hackathon winner or AI industry speaker shares their experience of turning an idea into a working AI solution.
13:00-13:15	**Guest speaker 2: Getting started with AI** A practical introduction to basic AI skills, including how to write effective prompts and use the AI tools available to you in an NHS setting.
13:15-13:30	**Responsible AI and Q&A** A reminder of the responsible AI and information governance rules for the event, followed by open questions.
13:30-14:00	**Hacking begins: team breakout rooms** Teams move into their own breakout rooms to start hacking. The organisers and mentors will be on hand to drop in and support for the first 30 minutes. The call will close at 14:00, after which teams coordinate their own working.
Team working: 18 to 25 November 2026 (asynchronous hacking)	
Flexible	**Teams work in their own time** Teams continue working asynchronously using whichever channels suit them, preparing their pitch using the presentation template. Mentors remain available for support throughout the week.
Closing session: Wednesday 25 November 2026, 12:00-14:30 (Zoom) [Version A: BOPA only]	
12:00-12:10	**Welcome back** Introduction to the judging panel and confirmation of the pitch running order.

12:10-13:40	**Final pitches** Each team has 5 minutes to pitch, followed by 3 minutes of questions from the judges, with 2 minutes to switch over to the next team. The pitch block will be adjusted once the final number of teams is confirmed.
13:40-14:00	**Judges' deliberation** The judging panel meets privately to score the pitches. Participants are welcome to stay on for informal discussion and reflections.
14:00-14:15	**Award presentation** Announcement of the winning team(s) and presentation of the award.
14:15-14:30	**Closing remarks and next steps** Thanks, next steps for teams who want to develop their ideas further, and the post-event survey.

Version B will be used if partner oncology pharmacy groups from Australia and Canada take part. For reference, 1200-1430 GMT is 0700-0930 in Toronto (EST) and 2300-0130 in Sydney (AEDT).

Closing session: Wednesday 25 November 2026 (Zoom) **[Version B: with international oncology pharmacy associations - Australia and Canada]**	
12:00-12:15	**Welcome and international partners** Welcome to teams and judges from BOPA and partner oncology pharmacy groups in Australia and Canada, introduction to the judging panel, a short guide to the online judging platform, and confirmation of the pitch running order.
12:15-13:45	**Final pitches with live scoring** Each team has 5 minutes to pitch, followed by 3 minutes of questions from the judges, with 2 minutes to switch over to the next team. The pitch block will be adjusted once the final number of teams is confirmed. Judges in all three countries score each pitch on the online judging platform in real time, using the published judging rubric.

13:45-14:05	**Judges' deliberation** Scores from the judging platform are collated and the judging panel meets privately to agree the final results. Participants are welcome to stay on for informal discussion and reflections.
14:05-14:15	**Award presentation** Announcement of the winning team(s) and presentation of the award.
1415-1430	**Closing remarks and next steps** Thanks from BOPA and partner organisations, next steps for teams who want to develop their ideas further, and the post-event survey.

Challenge themes

The hackathon challenges will focus on real problems in cancer pharmacy where AI may offer support. Each challenge will be designed around Royal College of Pharmacy's Core advanced pharmacist curriculum programme of learning. Teams should aim to identify a problem within the theme first, then develop a solution that is clinically sensible, safe, and realistic enough to move forward.

For this Hackathon, the following themes have been set:

- Clinical Practice
- Leadership and Management
- Education
- Research

Each theme is described below with an example idea. The examples are there to get you thinking. Your team is free to choose any problem within a theme.

Challenge Brief 1: Clinical Practice

The challenge: Much of the day-to-day work of cancer pharmacy teams involves gathering, checking and transcribing information between different systems and formats. This takes time away from patient-facing work and every manual step is an opportunity for error.

Your task: Design a solution that helps cancer pharmacy professionals deliver safer or more efficient clinical care. Focus on one clearly defined task within clinical practice where AI could reduce manual effort or support decision-making.

Example idea: Medicines reconciliation support

- A tool that takes medicines information from different sources and formats and transfers it into local templates, avoiding manual transcribing of medicine details.

Key considerations: The pharmacist must stay accountable for the final clinical decision. Show how outputs will be checked, how errors or missing information will be flagged, and how the solution would fit into existing clinical workflows and governance.

Challenge Brief 2: Leadership and Management

The challenge: Running a cancer pharmacy service involves a large amount of planning and coordination, from staffing and workforce planning to service reporting. These tasks are often repetitive and time-consuming for managers and team leads.

Your task: Design a solution that helps with a leadership or management task in cancer pharmacy, such as workforce planning, service organisation, reporting or communication.

Example idea: Automatic rota generator

- A tool that produces weekly rotas for each area that needs covering, taking into account annual leave, study days and varied working patterns

Key considerations: Consider fairness, transparency and how staff would trust and check the output. Think about what data the tool would need, who signs it off, and what happens when the tool gets it wrong.

Challenge Brief 3: Education

The challenge: Cancer pharmacy guidance, protocols and national recommendations change frequently. Keeping the whole team up to date and confident in new practice is a constant challenge alongside clinical workload.

Your task: Design a solution that helps cancer pharmacy professionals learn, train others, or keep up to date with new guidance and practice.

Example idea: Guideline-to-quiz converter

- A tool that turns new protocols or national guidance into short quizzes to support team updates

Key considerations: Educational content must be accurate and traceable to its source. Show how content would be checked before use, how errors would be caught, and how the tool would support rather than replace professional learning.

Challenge Brief 4: Research

The challenge: Research teams spend significant time on tasks such as summarising findings, drafting documents and preparing funding applications. AI could help, but carries risks of inaccuracy, bias and overconfidence if outputs are not checked.

Your task: Design a solution for a specific research task in cancer pharmacy, from shaping a research question through to sharing findings.

Example idea: Plain language summary generator

- A tool that drafts a plain language summary of a paper that has been published, or that is in draft for a funding application

Key considerations: AI must not replace critical appraisal, interpretation or authorship responsibility. Address hallucinations, citation checking and confidentiality, and show where human review is essential.

How teams will work

Every participant needs to be part of a team before the opening session. We encourage you to form your own team with colleagues before you register, ideally bringing together a mix of perspectives, roles and levels of AI experience. If you do not have a team, please let us know when you sign up and the organisers will place you in one before the event. All teams will be confirmed before the opening session so that everyone can start working straight away.

Teams are encouraged to connect with each other throughout the hackathon week using any communication channel that works best for them (ie. WhatsApp, email or Teams). We encourage you to make contact early in the week, as this can help your team hit the ground running by allowing you to introduce yourselves, divide any preparatory thinking and agree on a working approach.

Within your team, people may naturally take different roles. These might include:

- Clinical lead
- Problem owner or challenge translator
- Technical contributor
- Note-taker
- Presenter
- Facilitator

If you are new to hackathons, you can still make a major contribution by describing the workflow, identifying risks, clarifying what would and would not work in practice, or helping the team keep the solution grounded in reality.

Before the event

Please spend a little time preparing in advance. This will help you get the most out of the event and help your team move more quickly once the hackathon begins.

Before the opening session:

- Read the challenge descriptions carefully.
- Think about problems in your own practice that you would like to solve.
- Consider what an ideal AI-supported solution would need to do.
- Reflect on any safety, governance, or implementation concerns.
- Complete the pre-event questionnaire.
- Confirm your team, or let the organisers know if you need to be placed in one.

If you have relevant examples from your service, bring them with you in general terms. Responsible AI and information governance are central to this event. No patient data or commercially sensitive information is to be used at any point during this hackathon.

You do not need to arrive with a polished proposal. The point of the event is to build ideas together.

During the event

Make the most of the time available by staying focussed, collaborative and willing to adapt.

During the hackathon:

- Spend time as a team defining and agreeing on the problem before jumping to solutions
- Assign roles early so everyone knows how they are contributing, even if these shift as the session progresses

- Keep your solution grounded in real clinical practice and challenge assumptions that sound plausible but may not hold up in a real-world oncology setting
- Document your thinking as you go rather than leaving it to the end, including ideas you rejected and why
- Ask for mentor support early if you are stuck
- Test your idea against a realistic failure scenario before you present it
- Manage your time actively and be prepared to simplify your solution if it becomes too complex to present clearly
- Keep responsible AI principles visible throughout *(please see Responsible AI section)*

Support during the event

Help will be available throughout the hackathon. BOPA AI CAG Members will support teams with clinical thinking, technical questions, and practical problem-solving. If you are unsure how to start, what direction to take, or how to turn an idea into a workable concept, ask for help early.

The event team will also be available to help with logistics, accessibility needs, and any issues that arise throughout the duration of the hackathon. If you need adjustments to help you participate fully, please tell the organisers in advance or message the team.

Final Pitch

At the end of the hack, you and your team will deliver a presentation or “pitch” on your idea.

Each team will have **5 minutes** to deliver their pitch, followed by **3 minutes** of questions from the judges. Please keep to time, as the next team will be called straight after.

Presentation template: All teams must use the presentation template provided by the organisers. The template sets out the key points your pitch needs to cover so that every team is judged on the same basis. Please make sure your pitch addresses each section of the template.

Here is a guideline on how to plan your pitch:

- **Introduction**: Briefly introduce yourself and your team.

- **Problem**: Clearly describe the problem you are addressing. Who does this problem affect, and what is the real-world impact on them at the moment?
- **Solution**: Explain the technical aspects of your idea. Provide enough detail to demonstrate your oncology pharmacy expertise and decision-making process, without overwhelming your audience with excessive information.
- **Impact/Demo**: Support your idea with a live demo (if possible) or use visualisation tools to mockup the design, functionality, and key features. Describe the impact of your solution and how does it benefit the end users?
- **Closing**: Summarise the main points of your pitch and end with a strong closing statement.

Judging and outcomes

Final judging will focus on the quality and potential of the idea rather than on perfection. Common criteria include:

- Clinical relevance
- Safety
- Innovation
- Feasibility
- Scalability
- User value.
- Potential for real-world impact
- Clarity of presentation
- Responsible AI use
- Hallucination risk mitigation

The strongest solutions will show that the team has understood the problem well and thought carefully about how the idea would fit into cancer pharmacy practice.

Judging rubric:

Criterion	Considerations	Score
Clinical Foundations		
Clinical Relevance	• Is there a clearly defined problem grounded in real oncology pharmacy practice? • Does the solution address a genuine clinical need rather than a perceived one? • Would a practising cancer pharmacy professional recognise	/5

	this as a meaningful problem worth solving?	
Safety	• Has the team identified patient safety risks associated with their solution? • Are appropriate safeguards built in, including human oversight of AI outputs? • Does the solution avoid creating new risks such as dose errors, missed interactions, or over-reliance on AI? • Has the team considered what happens when the solution fails or produces an incorrect output?	/10
AI Quality		
Responsible AI Use	• Does the solution demonstrate awareness of bias, fairness, and equity across patient groups? • Is the AI's role clearly defined and appropriately bounded? • Does the team acknowledge the limitations and ethical considerations of their approach? • Is there transparency about what the AI can and cannot do?	/5
Hallucination Risk Mitigation	• Has the team identified scenarios where the AI may produce incorrect or fabricated outputs? • Are there mechanisms to detect, flag, or correct erroneous AI outputs? • Does the solution require human verification of AI-generated content before it is acted upon? • Is the team aware of how hallucination risk is heightened in clinical contexts such as chemotherapy dosing?	/5
Innovation and Impact		
Innovation	• Does the solution offer a novel approach or meaningfully improve on existing methods? • Is the use of AI justified and additive rather than substituting a simpler non-AI solution? • Does the idea show creative thinking within the constraints of clinical practice?	/5
End User Value	• Is there a clear and tangible benefit to the end user (pharmacist, patient, research Sponsor etc.)? • Does the solution reduce burden, improve safety, or enhance quality of care? • Has the team considered the end user's workflow and context, including time pressures and system constraints?	/5
Potential for Real-World Impact	• Could this idea plausibly improve outcomes, efficiency, or safety at a service level? • Does the team articulate the broader impact beyond the	/5

	immediate use case? • Is there a sense of urgency or significance to the problem being solved?	
Implementation		
Feasibility	• Is the solution realistic within NHS oncology pharmacy infrastructure? • Has the team considered integration with existing systems, governance requirements, and resource constraints? • Is there a credible pathway from prototype to implementation?	/5
Scalability	• Could the solution be adopted beyond a single centre or trust? • Is the underlying approach generalisable to other oncology pharmacy settings? • Has the team considered what would need to be true for national or regional adoption?	/5
Presentation		
Clarity of Presentation	• Is the problem and proposed solution communicated clearly and concisely? • Can the team explain what their solution does not do as clearly as what it does? • Are visual aids or demonstrations used effectively where appropriate? • Does the team respond confidently and accurately to questions from judges?	/5
Total		/55

Responsible AI and safety

This event is guided by responsible AI principles. AI should support clinical work, not replace professional judgement. Any idea developed during the hackathon must take account of patient safety, data protection, bias, explainability, and the realities of clinical implementation.

Please remember:

- Do not use patient-identifiable information
- Do not use commercially sensitive information
- Think carefully about risks, limitations, and unintended consequences

- Assume AI outputs need human review
- Be transparent about what your idea can and cannot do
- Raise safety concerns early

The Responsible AI guidance for healthcare stresses ethics, accountability, and quality assurance, and NHS-style practical resources emphasise oversight, patient data protection, fairness, and documented review processes.

Code of conduct

We want this to be a respectful, inclusive, and productive event. Everyone is expected to:

- Treat others with courtesy and professionalism
- Listen actively and value different viewpoints
- Share ideas fairly and credit contributions appropriately
- Avoid discriminatory, disruptive, or unsafe behaviour
- Respect confidentiality and information governance rules

If you experience or witness a concern, speak to an organiser or facilitator straight away.

Closing message

Thank you for being part of this BOPA hackathon. Your knowledge of cancer pharmacy practice is essential to making AI useful, safe, and relevant in the real world. We hope the event is enjoyable, practical, and inspiring, and that you leave with new ideas, useful connections, and confidence in what AI can contribute to pharmacy services.

Frequently asked questions

Do I need a paid AI account?

No. There are no requirements for access to specific AI models. This event is about finding realistic AI solutions so please use any AI models you would have access to in an NHS environment (eg. Microsoft Copilot via NHSmail, Claude, ChatGPT). No reimbursements will be made for credits purchased for use in this event.

Do I need to be in a team?

Yes. All participants need to be in a team before the opening session. If you do not have one, tell us when you sign up and we will place you in a team before the event.

Do I need hackathon experience?
No. This event is designed to be accessible to first-time participants.

Do I need coding skills?
No. Clinical and service insight are just as important as technical expertise.

What if I do not work in AI or digital?
The event needs people who understand cancer pharmacy practice.

Where can I learn how to use AI?
See the resources section at the end of this document.

Will we build a finished product?
The goal is to create a strong concept, prototype, or plan that can be developed further, though a finished solution would be a great outcome.

What happens after the event?
The outcomes and findings from each team will be shared with BOPA members. A post event survey will be disseminated to participants in order to evaluate the event and enable learnings for how to make the next hackathon event even better.

Who owns the outcomes/solutions/findings?
Hackathon outputs remain the property of the individuals and/or organisations that created them unless otherwise agreed in writing. BOPA and the organisers do not claim ownership of ideas, materials or prototypes created by participants.

By taking part, participants agree that the organisers may record, and share non-confidential event activities and may reference team names, project titles, and summary descriptions of submitted work for event reporting, promotion, and follow-up activity, unless a participant has explicitly requested otherwise in writing.

Resources

There are many resources available to help learn how to use AI, some more helpful than others:

Description	Link
How to AI by Ruben Hassid – practical examples and real-world use cases for using AI effectively	https://ruben.substack.com/
Prompt Engineering Guide – strong resource for learning AI prompting fundamentals, techniques, and frameworks	https://www.promptingguide.ai/
AI How to Guide from a Similar AI Healthcare Hackathon	https://docs.google.com/document/d/1NqZ3AzIkUBhPX9REwJ6ZxCOxXKC-aLZ-tSGoyS2pubo/edit?tab=t.0#heading=h.wbxibzerf87a
AI Prompting for Everyone – free DeepLearning.AI course covering core prompting concepts	https://learn.deeplearning.ai/courses/ai-prompting-for-everyone/information
UK Government AI Skills Hub – free AI skills courses and learning resources	https://aiskillshub.org.uk/aiskillsboost/coursecatalogue/
Understanding AI in the NHS – simple, accessible NHS-focused AI guides	https://www.miaa.nhs.uk/services/digital/understanding-ai-in-the-nhs-a-practical-resource-hub/
NHS Digital AI Knowledge Repository – broader NHS AI resources, guidance, and implementation materials	https://digital.nhs.uk/services/ai-knowledge-repository
GPhC Position Statement on the use of AI in pharmacy	https://www.pharmacyregulation.org/about-us/news-and-updates/gphc-publishes-new-position-statement-use-artificial-intelligence-pharmacy
Writing AI prompts for Dummies Book in pdf format	https://www.vailtech.net/sites/default/files/AI_Writing_AI_Prompts_for_Dummies.pdf
Artificial intelligence - how to guide and regulate for health and social care professionals using AI	https://www.professionalstandards.org.uk/publications/artificial-intelligence-how-guide-and-regulate-health-and-social-care-professionals
BOPA Webinar	