



WA DATA SCIENCE
INNOVATION HUB
Powering an AI Future

WA Health Hackathon

2023 | Participant Brochure

Improving Western
Australian healthcare
through technology &
innovation.

REGISTER NOW



Begins October 9th.



WA DATA SCIENCE
INNOVATION HUB
Powering an AI Future



Government of Western Australia
Department of Health



Microsoft



WA Life Sciences
Innovation Hub



Government of Western Australia
North Metropolitan Health Service

WA Health Hackathon 2023

BACKGROUND

You are invited to attend the WA Health Hackathon 2023. This year the Hackathon is being organised by the WA Data Science Innovation Hub (WADSIH) and the Department of Health (DoH). There will be six Challenges that will improve the health outcomes for all of Western Australia if they're solved. Participating teams will be provided with cutting-edge synthetic data and expert mentor support to help them develop ideas and prototype their solutions. The winning teams will be eligible for major prizes as well as ongoing support to move their solution forward.

WHY

The WA Health Hackathon is the premier technology and innovation event for technologists and developers who are interested in improving how WA's health system works. Also the WA Health Hackathon is a great way for you to:

- Win more than \$5,000 in prizes.
- Access ongoing support for your solution to help you make an impact in WA.
- Build a valuable prototype or business - the Participation Agreement provides clear IP rights that mean your prototype is yours.
- Test your skills by using ground-breaking use of synthetic data in the health industry.
- Access the best and brightest innovators and technology leaders in WA.
- Enhance your team's comradery by participating together.
- Help your State by improving our health system.

WHAT

The six Challenges cover a variety of different elements of WA's healthcare systems. Each of the Challenges will be paired with supporting data and dedicated mentors. These Challenges are big and complex! They will require participants to dedicate slightly more time to developing and testing their ideas than a normal hackathon would require. To help this we will be having dedicated mentoring sessions and a week-long, moderated chat system to help answer any questions that teams might have.

The six Challenges are:

1. How can we use our data to help improve patient flow through Emergency Departments in WA public hospitals without compromising care quality?

- 2.** How can we improve our surgical and operational planning to reduce patient wait times?
- 3.** Hospitals are often at the end of a long chain of service interactions. How could we use non-health data feeds and optimisation technologies to improve our operational planning for Emergency Departments?
- 4.** A cancer diagnosis is a significant moment for a patient and their support network. It often leads into a long period of treatment and support. Prevention and early detection play a big role in positive outcomes. How could we better track and support cancer patients through this journey? Can we pre-emptively identify potential patients through target interviews and other ongoing, cancer detection programs?
- 5.** Hospitals are complex systems with data being transferred from patient to nurse, to doctor, to surgeon, to GP and back to the patient — all through a variety of technologies. With new technologies emerging every day how could we use artificial intelligence and machine learning to increase efficiencies in clinical practice?
- 6.** Our patients are at the heart of all the health system — we are always trying to do better for you. Using modern digital tools and thinking how can we provide patients with better ways to interact with their care process and provide us feedback?

WHO

Participation in the hackathon is open to all members of WA's innovation and technology ecosystems. You don't have to be a software developer or a data analyst to participate. In fact Challenges 5 and 6 would be ideal opportunities to apply user experience, process analysis and design-based approaches to resolve the Challenges.

To participate in the WA Health Hackathon you will need to register and participate as a team. Teams can be any size but we recommend that you aim for between 4 to 6 team members. You can participate solo and register your own team, but we have observed that teams tend to do the best at hackathons and also have the most fun. We will not be running team building activities for this year's Hackathon.

WHEN AND WHERE

The WA Health Hackathon will occur over the second week of October 2023. Access to the supporting data will be opened at the Launch on Monday 9 October. On the evenings of the Tuesday 10, Wednesday 11 and Thursday 12 of October participants will be invited to attend workshops on their chosen Challenge. These workshops will be attended by the Challenge Owners, expert mentors, data custodians and senior stakeholders. These workshops will be a great opportunity to test your theories and prototypes. The Launch and Workshops will be held at Curtin Technical School, 139 St Georges Terrace, Perth, WA.

On Saturday 14 and Sunday 15 October the Hackathon will be held at the Innovation Centre Perth, Curtin University, Bentley Campus. This Hackathon is intended to provide teams with a collaborative space to build and test their prototypes. Expert Mentors and Hackathon Coaches will be around all weekend to provide teams with assistance.

At 13:00 on Sunday 15 October the Hackathon will stop and the pitches begin. Teams will have four minutes to pitch their solutions to a panel of judges. A shortlist of the five most promising solutions will be invited to pitch their solution at the Finale. Shortlisted teams are encouraged to keep working on their solutions and fine tuning their pitch. On the evening of Thursday 19 October the Shortlisted Teams will have five minutes (with an additional two minutes for questions) to pitch their Solution. The Finale Judging Panel will then award the prizes to the very deserving winners!

But that's not the end. All Challenges Owners and participating agencies are encouraged to engage with teams after the Hackathon. The Participation Agreement provides participants with strong rights to their intellectual property so you can grow your prototype as you see fit. There will be plenty of options (grants, accelerators, innovation programs) available to teams after the Hackathon.

EXPECTATIONS OF PARTICIPANTS

We do not expect (or want) you to be working on your prototypes for a whole week! Rather, the structure of the event is intended to broadly fit in with most people's professional commitments. The Workshops will be held in the evenings in the city and the information outlined there will also be shared on our communication tool.

We anticipate that you may want to get started on building your solution as soon as the data is released and you are allowed to do that. You do not have to wait for the Hackathon Weekend to start developing your prototype. We anticipate that most teams will probably put a few hours in to working out what they want to build during the week and maybe even start on the supporting framework for their prototype.

Remote participation is also an option. All remote participants need to be registered team members. Pitches will be in person, so a remote team will need to attend the Hackathon Space on Saturday to register their team, and then again on Sunday afternoon to pitch their idea.

HOW

You can register your participation and nominate your team by clicking the link below or by using the QR code:

[REGISTER NOW](#)



Registrations close on 2 October 2023.



Images from the previous WA Emergency Hackathon 2023.