CGS Immersive

GIVING EVERY LUNG CANCER PATIENT A VOICE:

How Monash Lung & Sleep Institute Uses Cicero Coach to Support Culturally Diverse Patients

CASE STUDY

When Monash Lung and Sleep Institute set out to improve support for lung cancer patients, one challenge stood out above all others. They needed to provide reliable, compassionate information to patients who do not speak English, especially once they leave the hospital.

In 2022, 3,269 Victorians were diagnosed with lung cancer. It was the fourth most diagnosed cancer in Victoria, and the leading cause of cancer related death. Research shows that non-English speaking lung cancer patients face significantly higher unmet supportive care needs than their English-speaking peers. With limited materials available in languages other than English, patients are left navigating their diagnosis with limited information, reduced access to care, lower health literacy, and fewer opportunities to actively participate in decisions about their treatment.

Lung cancer, language, and understanding

For a diverse and dispersed community, one accessible clinic can make the difference between life and death; it's critical to deliver confusion and clear next steps to patients.

3,269 Victorians were diagnosed with lung cancer in 2022 – the leading cause of cancer-related death and the fourth most commonly diagnosed cancer in the state.

1.34M people rely on Monash Health as their tertiary referral centre in Melbourne's south-east.

300+ referrals received at the lung cancer rapid access clinic each year. Patients are triaged and prioritised for diagnostic tests and investigations.

Patients are overwhelmed and stressed facing a potential lung cancer diagnosis. Time sensitive tests and procedures are scheduled, with a higher rate of confusion, misunderstanding and missed appointments due to limited availability of information and support in the patient's preferred language.

THE PROBLEM

High anxiety, low health literacy, and limited support after hours

Despite best efforts to provide interpreters for first appointments, clinicians identified a gap the moment patients went home.

Patients and families who left the hospital with a new diagnoses or pending test results often had nowhere to turn with follow up questions in their preferred language. Many resorted to “Dr. Google,” whilst others misunderstood preparation instructions for time critical procedures and tests, resulting in delays in starting potentially curative treatment.

Compounding this, a significant proportion of the adult population reads at a primary school level, meaning traditional written materials and generic brochures are often ineffective, even when translated. The team wanted to ensure that non-English-speaking patients felt just as supported as English-speaking patients, with clear, trustworthy, and accessible information tailored to their needs and literacy level.

Discovering Cicero and re-imagining patient support

Monash Lung & Sleep Institutes journey with Cicero began at the Digital Health Festival in Melbourne, where the team first encountered CGS Immersive showcasing Cicero in action with VR and AI powered experiences.

When the idea emerged for a new support experience for lung cancer patients, the team immediately thought back to that encounter and reached out. The vision: create a secure, medically reliable support and resource that patients and their families could access 24/7, available in multiple languages and reading levels—built on Cicero Coach and governed by Monash's lung cancer clinical team.

CLINICIAN PROFILE

Sara McLaughlin-Barrett

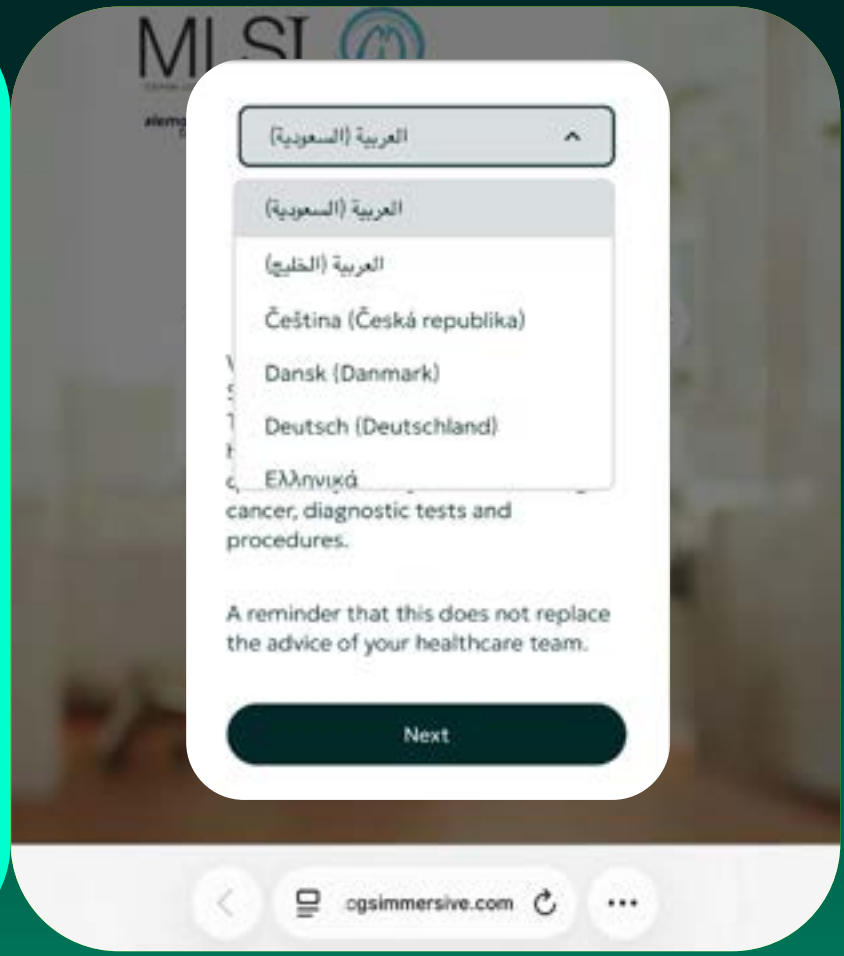
Sara McLaughlin-Barrett is one of Australia's leading lung cancer clinical nurse consultants for over 12 years. Her passion is to improve service delivery, health literacy, and outcomes for people living with lung cancer. She has helped build and grow lung cancer services across tertiary hospitals, contributed to work on the role of lung cancer nurse specialists and stigma, and previously led the development of a cancer support app. All of this gives her a rare blend of deep clinical and practical digital experience.

Her driving belief is simple: no one should be disadvantaged because of the language they speak, where they live, or how confident they feel navigating the health system.

"This project is about making sure our most vulnerable patients aren't left behind just because they don't speak English or live far away. With Cicero, they have reliable information about their lung cancer, in their own language, any time of the day or night. Cicero evens the playing field, so they feel just as supported as any other patient."

How the Cicero-powered patient companion works

Working in partnership, Monash Lung & Sleep Institute and CGS Immersive designed a Cicero based “patient companion” to extend the reach of the medical and nursing team beyond the hospital visit.



Clinically governed and closed circuit

Content is curated and approved by Monash's Lung Cancer multidisciplinary team: respiratory physicians, oncologists, surgeons, radiation oncologists, and nurse specialists. It's then loaded into a secure environment. Patients are not sent into the open internet; they receive answers only from vetted, evidence-based information.

Multilingual far beyond initial expectations

Monash Lung & Sleep Institute initially planned to support its top 5 most commonly spoken languages other than English. Once they saw Cicero's expansive language capabilities, they realized they could quickly expand to hundreds of languages, dramatically widening access for culturally diverse patients and their families.

Driven by real patient questions

Sara and her colleagues began by collecting data and identifying the questions they hear most often from patients and families, about lung cancer diagnoses, tests, treatment side effects, logistics, and prognosis. These informed the initial knowledge base, but Cicero's conversational design means each patient can ask what matters most to them, in their own words.

Aligned with everyday reading levels

Responses are provided at a Grade 6 reading level, favouring clear, plain language over technical terminology. This is critical in a population where adult literacy levels are often lower than those assumed by the health system.

Available 24/7 on patients' own phones

Patients are introduced to the companion in-clinic, with interpreters present where needed, and receive a flyer with a QR code and sent an SMS with the URL that they can access on any smartphone or internet connected device. They can then type or speak questions in their native language at any time—from home, work, or even rural properties hundreds of kilometers away.

Under the hood, the companion behaves very differently from a "black box" chatbot. It uses a retrieval based approach so that Cicero answers only from content Monash Lung & Sleep Institute has approved. For clinical and IT leaders, that governance model is as important as the user experience. The AI is not improvising from the open web; it draws only from a curated, clinician owned source of truth.

Configurable and clinician controlled

The Lung Cancer Team can update standard closing messages (such as "If you are worried or have further questions, please call this number") and add new content as treatments and guidelines evolve. Unlike previous digital projects that required expensive redevelopment for every change, this companion can evolve in real-time, as procedures and treatments advance.

With more than 300 new lung cancer referrals each year, the team estimates that up to one third of these patients could benefit from a Cicero powered companion, particularly those from culturally and linguistically diverse (CALD) backgrounds who struggle most with language and health literacy barriers.

From concept to rollout

The journey from concept to rollout unfolded in close collaboration:

Co-design sessions

Co-design sessions with patients and clinicians ensured the experience reflected real gaps in care, questions, and practical needs.

Technical configuration

Technical configuration focused on security, reliability, and alignment with Monash Health's governance expectations.

Initial rollout

The initial rollout targeted lung cancer patients who were non-English speaking or geographically remote, where the gap between need and available support was greatest.

For Sara, the contrast with earlier digital efforts was stark. Where a previous cancer app required long delays and high costs for even small changes, the Cicero based companion can be adjusted quickly and directly by the clinical team, allowing it to remain current and relevant as practice and treatments change.

Early signs of impact

Several clear patterns are emerging:

01

Patients are using the companion outside business hours, reflecting when questions naturally arise and when traditional services are closed.

02

Non-English-speaking patients are relieved to be able to interact entirely in their native language, whether typing or using voice.

03

Reviewing the questions patients ask helps clinicians see where explanations in-clinic may not have landed, prompting changes in how they structure future conversations.

04

Different patients use the tool for very different needs. Some want to understand prognosis in more detail; others focus on day-to-day side-effect management or appointment logistics. This demonstrates that support is genuinely personalized, not one-size-fits-all.

05

Other clinicians and services groups in the region are watching Monash's experience closely as they consider their own path into AI-enabled patient support.

Taken together, these results show significant impact: better patient experience, more equitable access for CALD populations, and a pathway to return more clinician time to higher-value conversations instead of responsiveness with repetitive FAQs.

Voices from the clinic and community

The early data is reinforced by feedback from both clinicians and families:

> “I cannot believe how few little non-English speaking resources are available to these vulnerable patients. They have every right to feel confused and disengaged with the healthcare system.
>
> — **Healthcare professional worker,** party member

“

Cicero decreased stress, anxiety and fears of the CALD patients, who were able to access information about their diagnosis and how to prepare for upcoming tests and procedures.

— **Clinician**

“

If I did not have access to this support from Cicero, I would have been very stressed not knowing what and why I was having all these tests. Thank you.

— **Patient**

“

Being able to ask questions about Mum’s condition and know I was getting information back that I could trust and understand really helped me support my Mum and made me feel less anxious and overwhelmed.

— **Family member**

“

I was able to ask more questions at my dad’s next doctor’s appointment because I now understood his diagnosis.

— **Family member**

These voices bring the impact of the companion into sharp focus. Cicero is not just answering questions; it’s changing how patients and families feel about their care and their ability to participate in it.

Ethics, safety, and building confidence in AI

Because the Cicero-powered companion interacts directly with patients and touches health information, it required careful ethics review. Adding AI into the picture raised understandable questions about safety, accuracy, and risk.

The Monash Lung Cancer Team initially received extensive feedback and requests for detail, much of which was difficult to answer without a working system. Once the companion was built, however, they were able to show exactly how it operates, what content it uses, and what guardrails are in place. Ethics reviewers could interact with the system, test responses, and explore escalation language, moving the conversation from hypothetical risk to concrete evaluation.

For clinical, risk, and IT leaders, this is the critical shift. Instead of an uncontrolled “black box,” Monash Lung & Sleep Institute has created a governed environment where the AI only knows what the clinicians have chosen to teach it, making it much easier to have a constructive conversation about safety, quality, and accountability.

Why this matters now: human-centered AI that delivers

Monash Lung & Sleep Institute's Cicero-powered patient companion shows what it looks like to lead in an AI enabled world without sacrificing humanity, personalization, or rigor. For Sara and her colleagues, this is not an experiment on the side; it is becoming part of how they deliver care to some of their most vulnerable patients.

Their experience echoes a wider trend: when AI is transparent, clinically guided, and deployed with clear boundaries, it can support understanding, reduce anxiety, and strengthen trust, not just automate tasks. By combining Cicero's Coach's flexible conversational engine with a closed, clinician-curated knowledge base, Monash Lung & Sleep Institute demonstrates a practical path forward: AI that scales empathy and access, not just efficiency.

In a landscape where health equity, patient experience, clinician well-being, cost, and outcomes are increasingly intertwined, that blend of reach and governance is exactly what boards and executive teams are looking for.

Human-centered AI for real-world healthcare

Across healthcare, organizations are under pressure to move beyond pilots and prove that AI can improve outcomes for patients, clinicians, and the business. Monash Lung & Sleep Institute's experience with Cicero shows it can be done in a way that is safe, sustainable, and deeply human-centered.

AI that meets patients where they are

Cicero lets you stand up clinically governed, multilingual AI companions that extend support between visits, without sending patients into the open internet. It plugs into your own pathways and content, so you keep control of safety, equity, and tone.

As AI comes under greater scrutiny, this kind of governed architecture turns high-risk innovation into low-risk, high-impact clinical infrastructure.

READY TO SEE WHAT THIS COULD LOOK LIKE IN YOUR SERVICE?

TALK TO US ABOUT CICERO