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# Oncology is at a turning point

The field is shifting from one-size-fits-all treatments like traditional chemotherapy to precision therapies tailored to a patient's unique genetic profile. At the same time, cancer diagnosis is moving from reactive, late-stage detection based on symptoms to proactive, Al-driven early detection through advanced imaging, blood tests, and risk profiling – often identifying cancer before symptoms appear. In parallel, cancer vaccines are reshaping oncology by training the immune system to target patient specific tumour antigens, with the primary goal of preventing recurrence. This evolution promises not only better outcomes but also fewer side effects and a more human experience.

Today's patients are no longer passive recipients of care. They demand to be informed and empowered, and expect to be active participants in their treatment. This shift brings new demands upon Pharma, MedTech and BioTech companies, and front-line healthcare: for clarity in communication, seamless support across the care continuum, and technology that enhances – not complicates – the patient's experience. Technology that boosts human-to-human interaction during diagnosis and provides meaningful support to patients as they process important health information – especially when no one else is physically present – helping them feel guided and cared for throughout their journey.

Pharma companies are responding to these demands by expanding their role beyond the molecule. Increasingly, we're seeing wraparound services come into the fore - supporting patient access (including pricing), symptom management, and emotional wellbeing. And with the rise of AI and Customer Relationship

Management (CRM) transformations, healthcare providers can now securely coordinate and analyse patient data from across the care continuum. This enables them to anticipate individual needs, deliver timely and relevant information, and orchestrate truly personalised, human-centred care at scale.

In parallel, the MedTech industry is rapidly innovating across diagnostics, digital health, and AI – developing integrated tools that enable earlier detection, smarter screening, and more personalised care. This innovation is transforming how, when, and where cancer is identified and treated.

As companies across MedTech and Pharma shift towards immersive, data-led experiences, this evolution is driving the creation of innovative business models like subscription services and Direct-to-Patient (DTP) models.

Of course, technology is only as good as our understanding of the real patient and healthcare experience. To truly transform the oncology experience, we must start with a deep understanding of, and empathy for, the human at the centre – whether that's the patient, the caregiver, the healthcare professional (HCP), or the internal team supporting them.

So, what does the future of oncology care look like?

Over the following pages, we explore key pain points across each stage of the patient journey and unpack the opportunities shaping the future of human care.

# Awareness and early detection



Early detection remains one of the most critical determinants of positive cancer outcomes, yet many patients still face barriers at the very first step. According to a <u>survey by the American Cancer Society Cancer Action Network (ACS CAN)</u>, 31% of adults have been more than one year behind on cancer screenings. Of those respondents, 53% cited out-of-pocket costs as a barrier to getting screened, while another 47% shared that getting insurance approvals for covered screenings was of concern. <u>According to Cancer Research UK</u> only 69.2% of people in England received their diagnosis and started their first treatment within two months (or 62 days) of an urgent referral\* in July 2025. The target is 85%.

For many, the journey begins not with a clear path, but with unanswered questions. This is where the opportunity lies – in improving access and transforming how patients are engaged before they even enter the system, as well as post-treatment.

It's here that we must also recognise the difference in how generations will engage with healthcare – for example, Baby Boomers are more likely to rely on trusted providers and traditional in-person care, whereas Gen Z will likely prioritise digital tools, mental health awareness, and convenience. Providing an experience that adapts to these different personas is crucial. It can also be the key to improving detection; for example, turning to technology to diagnose certain illnesses like bowel cancer that increasingly affect younger generations.

Pharma and MedTech companies are beginning to take a more active role in this space, moving

beyond traditional awareness campaigns to embrace Direct-to-Patient outreach and early screening. They can play a transformative role in addressing pain points through: advancing diagnostic technologies at point-of-care and at-home (with particular attention to enhancing access in low- and middle-income countries); supporting providers with clinical decision support tools; direct support services; and leveraging data-driven outreach to identify populations likely to benefit from early screening. With appropriate privacy safeguards, of course. The latter would require building trust and facilitating data sharing among oncologists, hospitals, and patients.

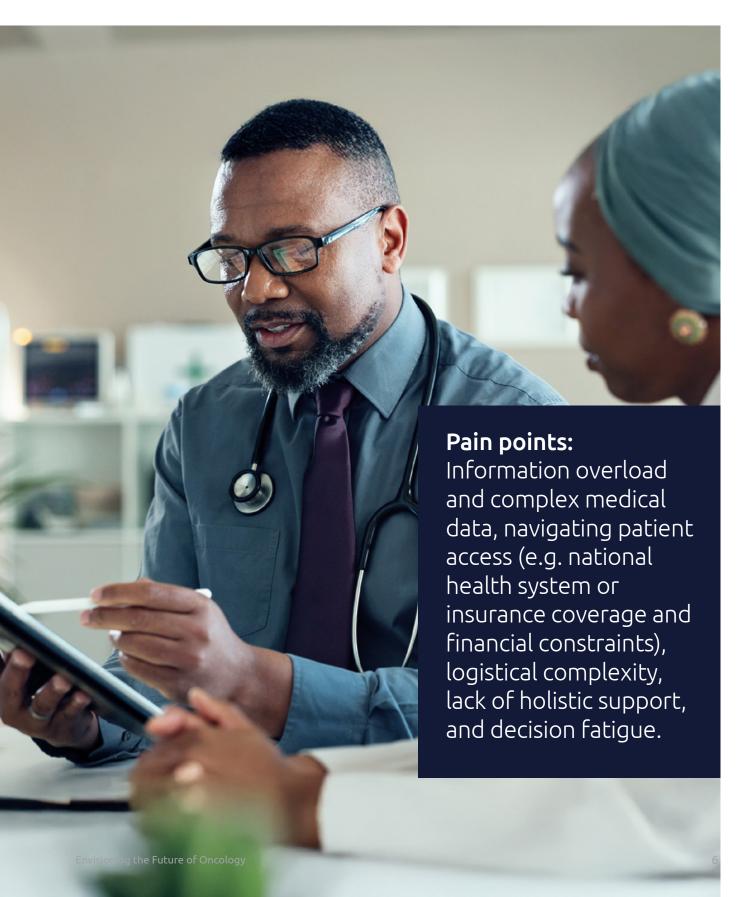
Practical examples of these include using behavioural analytics and AI to help identify individuals who may be at risk and guide them towards screening. Al software in imaging and screening can analyse data to pick up abnormalities that would not be seen by the human eye – providing earlier detection, fewer misses, and prioritisation of urgent cases. Athome risk profiling and cancer screen kits identify inherited cancer risk and improve accessibility for patients. Telehealth, mobile apps, and AI symptom checkers are emerging as powerful tools for both convenience and reassurance – encouraging users to monitor symptoms and seek medical advice earlier. A virtual consultation can offer clarity, reduce anxiety, and help patients understand what to expect next, all from the comfort of their home.

The future lies in creating a seamless, supportive oncology journey. A future where the patient's journey begins with a genuine human connection – whether through a trusted healthcare professional or a supportive care team – which is further transformed with technology.

Technology becomes the enabler, seamlessly supporting the patient through each step of their journey and providing a feedback-loop to their HCP and beyond. From securing appointments and tracking care and treatment, to providing education and awareness, technology offers access to care networks and keeps patients informed throughout. Secure communication of health data from wearable devices to healthcare professionals ensures timely updates and next best actions, while AI continually works in the background to minimise bureaucratic hurdles. In this vision, digital tools do not replace the human touch but amplify it – patients are not left wondering what to do or who to call but instead feel supported, empowered, and cared for at every stage.

\*Urgent referrals include those from GPs for cancer or breast symptoms, cancer screening programmes, and consultant-upgraded referrals

# 2. Diagnosis and treatment planning



The moment of diagnosis is often the most emotionally and cognitively challenging stage in a patient's journey. Individuals must absorb complex medical information, make life-altering decisions, and coordinate logistics, all while processing the profound impact of a cancer diagnosis. This stage is often defined by feelings of confusion, fear, and isolation, as patients hand over their trust to others in the hope of receiving the right care.

To address these challenges, technology – particularly AI-enabled support platforms – can act as a powerful enabler of human care. Virtual companions, for example, can provide answers in natural language, connect patients to relevant support networks, and help visualise the treatment journey. For those undergoing complex therapies such as cell and gene treatments, visual journey maps offer clarity and reduce anxiety by outlining key milestones – bringing transparency and empowering the patient. These digital tools are designed to complement, not supplant, the expertise and compassion of healthcare professionals, ensuring that patients have easy access to information and support when they need it most.

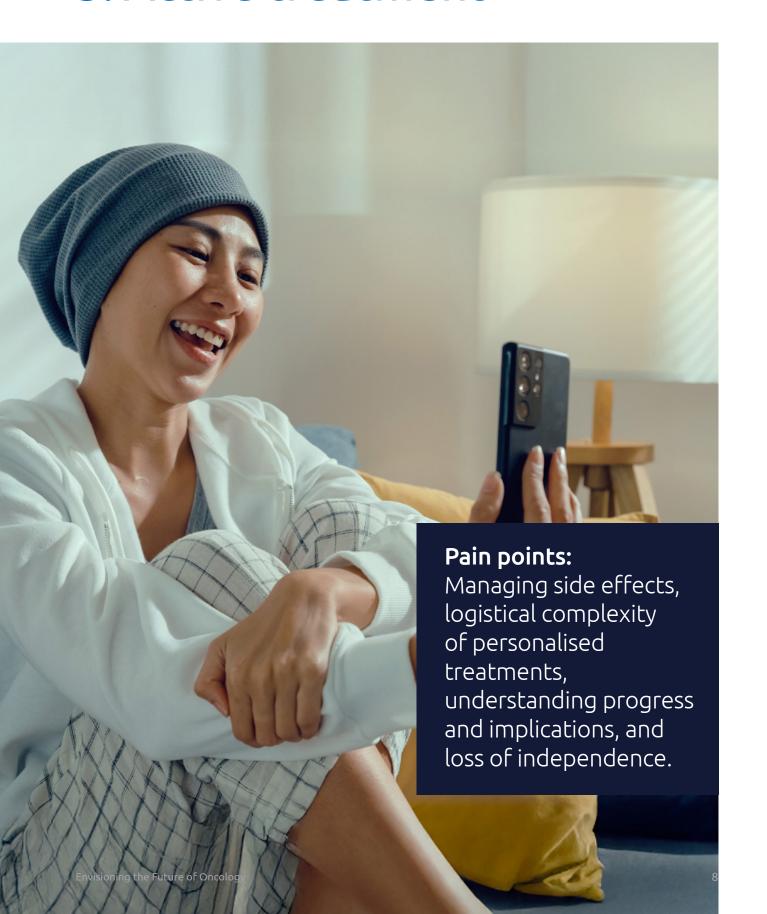
Beyond the patient, it is essential to support caregivers and families who play a vital role throughout the journey. Providing accessible, patient-friendly materials in various formats and literacy levels empowers everyone involved.

Advances in content generation – such as structured component authoring (SCA) and Aldriven curation – enable the creation of compliant, personalised resources at scale. Furthermore, augmented reality/virtual reality (AR/VR) technologies can demystify complex mechanisms of action, while integration with medical devices

offers greater transparency about diagnostic processes and expectations.

Finally, embedding feedback loops to capture patient experiences with diagnostics and devices is crucial. These data insights not only allow clinicians to adjust therapies based on patient responses – such as side effects, tumour progression, or biomarker changes – they can also inform future research and development, ensuring that innovations remain closely aligned with the real needs of patients and their support networks.

## 3. Active treatment



Active treatment is where the benefits of personalised medicine can truly be realised – making care more targeted, effective, and, ideally, easier for patients to navigate.

As therapies become more tailored and innovative, as with cell and gene therapies mentioned above, the process should become more patient-centric, reducing unnecessary complexity and supporting individuals at every step. However, the transition to these advanced treatments also brings new requirements for coordination and communication. Seamless scheduling, transparent updates, and clear alignment between the manufacturing journey and the patient's care plan are essential to ensure that the right treatment is delivered at the right time, minimising disruption to patients' lives.

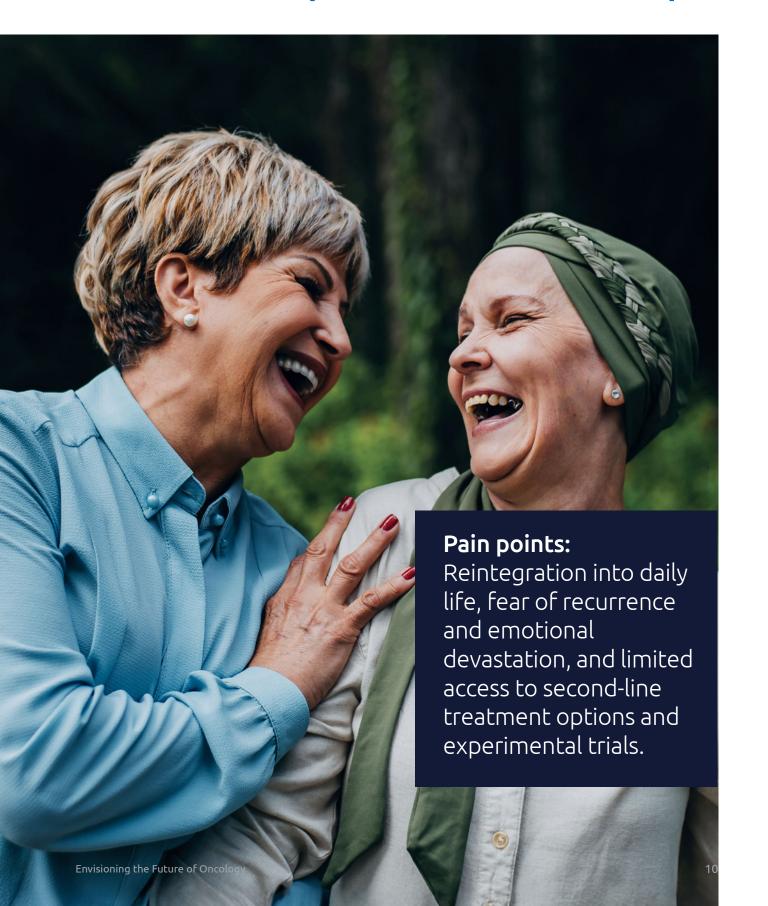
Training HCPs to recognise patient profiles and communicate in ways that build trust and engagement is equally critical. When patients feel seen and understood, they are more likely to adhere to treatment and participate actively in their care. By focusing on operational excellence and leveraging digital tools to keep everyone informed, we can help patients maintain their independence and sense of control, even as their care becomes more sophisticated.

Again, technology can also play a transformative role here. Wearables and sensor-based monitoring tools – like those explored in Google's SensorLM project – are increasingly capable of providing real-time data to HCPs to ensure they are more supported in their day-to-day tasks and enabling more responsive and personalised care. Of course, we must address the heterogenity of

the landscape. With a wide variety of devices, metrics, and measurement timepoints, as well as a lack of standardisation in how outcomes and adherence are defined and reported, there is an opportunity for the industry to work towards greater harmonisation. Whether that's through standardised protocols, interoperable platforms, or consensus on outcome measures.

In addition, the data collected from genomics, imaging clinical record, and patient tools, can transform cancer care from a one-size-fits-all approach to a personalised, data driven journey that improves patient safety and outcomes. Gen Al-powered dashboards can help patients interpret their own data, understand when to take action, and feel more in control. Patient companion apps, integrated into existing platforms, can facilitate communication between patients, caregivers, and treatment teams. This is especially valuable in radiotherapy, where a patient's emotional state can impact treatment flow and clinic throughput. Programmes like Genentech's HERConnection show how human and AI support can work together to guide patients through treatment, reimbursement, and beyond.

## 4. Follow-up and survivorship



The end of active treatment is a significant milestone, but for many patients, survivorship – living with and beyond cancer – marks the beginning of a new set of challenges. Reintegrating into daily life can be unexpectedly difficult, as patients navigate physical recovery, emotional trauma, the uncertainty of what comes next, and the fear of recurrence. Although, there are also new opportunities to maintain connections with GPs and local cancer support networks, share experience to help others and, where appropriate, go back to work or travelling.

Meanwhile, where the disease progresses or relapses, access to second-line treatments or clinical trials is often unclear or out of reach.

Following tumour-specific guidelines (ESMO/ASCO/NICE and others), Al-enabled clinical trial matching offers a powerful way to connect patients with experimental therapies and increase trial diversity. A patient-centric, technology-enabled approach can transform clinical trial recruitment by finding, engaging, and referring patients with purpose and humanity – leveraging behavioural science, inclusive outreach, and advanced data analytics.

This model directly addresses barriers to participation and diversity in clinical trials, using consumer-style experiences, Al-powered matching, and omnichannel engagement to reach underserved populations. By co-creating with communities and building trust through transparent, jargon-free communications, new services can empower patients to take an active

role in their care journey.

To enable rapid scaling, seamless integration, and real-time insights across the recruitment lifecycle, there is a need to incorporate a robust, compliant technology platform that supports omni-channel engagement. This approach ensures that recruitment is not only more efficient, but also more equitable and patient friendly.

Longitudinal follow-up, supported by real-world evidence, can help track outcomes, inform future care, and close the loop between treatment and survivorship. Patients want to know what's next, what to watch for, and where to turn if something changes. By integrating follow-up into the broader patient journey, and using technology to make it seamless and supportive, we can ensure that patients thrive.

# Looking ahead to a connected, transparent, human-centred future

We are at a pivotal moment in oncology care. Science is advancing rapidly, but the systems and experiences surrounding it must evolve just as quickly. We now have the tools – AI, real-world data, digital platforms, and behavioural insights – to reimagine the patient journey from end to end. But the real opportunity lies in how we use them: not to patch over existing pain points, but to fundamentally redesign the experience around the needs, emotions, and expectations of the people living through it.

Imagine a patient journey that is as transparent as parcel tracking. Where every step is clear, every question has an answer, and every challenge has a support mechanism. Where patients know what to expect, where to go, and who to turn to. Where technology acts as a partner strengthening the human touch. Where feedback loops are embedded throughout, ensuring that patients, caregivers, and clinicians are always informed, always supported, and always heard.

This isn't just about comfort. It's about trust and outcomes. Trust is fundamental to leveraging innovation in oncology care; without it, even the most advanced technologies risk falling short of their potential. To build and maintain trust, transparency must be at the heart of every patient interaction, and organisations should embed patient feedback loops throughout the care journey. By actively listening to and acting on patient experiences, we can ensure that new solutions genuinely address real needs, fostering engagement, adherence, and ultimately, better health outcomes.

And it's not just the patient who benefits – healthcare systems become more efficient, HCPs are better supported, and Pharma and MedTech companies can deliver more value across the continuum of care. We're talking about better experiences that lead to better lives.

## Capgemini can help from vision to execution

At Capgemini, we understand the full value chain of oncology care, from drug development to delivery. The entire end-to-end process that begins with collecting biological material from a patient and ends with administering a personalised treatment back into that same patient. We blend medical expertise with agile tech innovation to create compliance-ready solutions that accelerate the development of connected health applications while reducing life cycle costs and complexity — all with a human-centred design approach.

We are uniquely positioned to support this transformation for our clients. Our global footprint – across the breadth of our business – gives us insight into diverse healthcare systems, including deep connections within UK and US healthcare providers. We understand the nuances of regional delivery, regulatory environments, and patient expectations. And we combine this with global best practices and innovation to help our clients lead with confidence.

In fact, in 2024 Capgemini was recognised as a leader in all five quadrants of the <u>Life Sciences</u>

<u>Digital Services 2024 ISG Provider Lens™ Report.</u>

# Our accelerators and offers include:

#### <u>Cell and Gene</u> <u>Therapy Enablement:</u>

Supporting the operational and digital infrastructure essential for traceability in Car-T cell therapy, Salesforce Life Sciences Cloud offers a ready solution to ensure accountability, reduce delays, and guarantee patient safety.

#### <u>Data-Driven</u> <u>Customer Experience:</u>

Leveraging Salesforce to deliver personalised, timely and meaningful engagement with journey orchestration across the Patient and HCP Journey.

#### **IMPS:**

A modular digital health platform that streamlines patient care, trials, and engagement by integrating apps, devices, EMRs, and diagnostics using standards like FHIR and DICOM. HIPAA-ready and scalable for personalised care.



Grounding every solution in the lived experiences of patients, caregivers, and HCPs.

## Al Implementation with Purpose:

Deploying AI as a trusted companion that is transparent, explainable, and grounded in real-world needs.

## Re-shaping Pharma Customer Engagement:

From our industry-leading in-flight implementation of Salesforce Life Sciences Cloud with Fresenius, to designing and launching experience-led solutions across global markets, we bring a track record of success in delivering complex, multi-stakeholder programmes.

### Let's reshape the patient experience

Our vision is clear: more human, connected, and personalised care. Now it's time to make it happen.

Capgemini brings the tools, expertise, and empathy to turn bold ideas into realworld impact — from AI-powered experiences to seamless care delivery.

# Ready to lead the change?

Let's build better outcomes through better experiences — together. Connect with the team to start our journey.

We hope this point of view has sparked new ideas and offered fresh perspectives to inspire meaningful conversations across the oncology ecosystem.

At Capgemini, we are united by a shared passion for the transformative power of life sciences - not just in advancing innovation, but in truly changing lives. Now is the time to turn that passion into action. By embracing empathy, technology, and collaboration, we can reshape the patient journey into one that is not only more effective, but more human.

Let's work together to ensure every patient feels informed, supported, and empowered - from diagnosis to survivorship and beyond.

### The Team



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### About Capgemini

Capgemini is a global business and technology transformation partner, helping organizations to accelerate their dual transition to a digital and sustainable world, while creating tangible impact for enterprises and society. It is a responsible and diverse group of 340,000 team members in more than 50 countries. With its strong over 55-year heritage, Capgemini is trusted by its clients to unlock the value of technology to address the entire breadth of their business needs. It delivers end-to-end services and solutions leveraging strengths from strategy and design to engineering, all fueled by its market leading capabilities in AI, generative AI, cloud and data, combined with its deep industry expertise and partner ecosystem. The Group reported 2024 global revenues of €22.1 billion.

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