National Framework for Genomics in Cancer Control

Personalised, equitable, culturally safe cancer care

Strategic Objectives

Prevention and early detection

Genomic testing is integrated into healthcare to reduce cancer incidence and enable early detection

Goal

Evidence-based genomic testing is accessible to individuals and their families to support personalised prevention, risk-reduction and earlier detection of cancer.

Actions

1.1 As the evidence is established, expand access to affordable genomic testing to enable personalised cancer prevention and risk-reducing strategies.

1.2 Give priority to the establishment of evidence for genomic testing in Aboriginal and Torres Strait Islander people and other priority population groups and increase the scope of genomic reference datasets to more accurately reflect the diversity of the Australian population.

1.3 Promote translational research into personalised risk prediction and genomic risk-based cancer screening.

1.4 Embed evidence-based culturally safe genomic testing into national cancer screening programs, to enable risk-stratified screening.

Diagnosis, treatment and clinical trials

Genomic testing is used to guide diagnostic and treatment decisions to deliver better outcomes for people affected by cancer

Goal

Genomics technology is incorporated into routine cancer care to inform accurate diagnosis, personalised treatment and access to clinical trials.

Actions

2.1 Enhance access to genomic testing for people affected by cancer where there is evidence of benefit, supported by information and recommendations for management.

2.2 Enable timely access to genomics-informed cancer treatments through Health Technology Assessment (HTA) processes and clinical trials.

2.3 Promote translational research into cost-effective evidence-based genomic tools to support cancer detection, genomics-guided treatments and monitoring for progressive disease or recurrence, and transition from research to routine cancer care.

2.4 Build the evidence for genomics-guided treatments, including through expanded access to appropriate clinical trials, ensuring that the specialist cancer and primary care sectors, including Aboriginal Community Controlled Health Services, are engaged to support equitable patient participation.

Supportive care

The experience of people affected by cancer is improved by genomics-informed cancer care

Goal

Genomics is used to optimise treatment response and minimise treatment toxicity, and people affected by cancer receive psychosocial care when needed.

Actions

3.1 Provide tailored clinical and psychosocial support to people affected by cancer, according to their genomic profile and individual preferences.

3.2 Provide Aboriginal and Torres Strait Islander people and other priority populations with holistic navigation support and wrap-around personalised genomic cancer care.

3.3 Build understanding of how genomics influences treatment response and patient experience, integrating pharmacogenomics into routine care to enhance treatment effectiveness and minimise treatment toxicity.

3.4 Minimise financial toxicity for patients and families associated with access to best-practice genomics-informed cancer care.

Awareness and education

Health professionals, consumers and the community have appropriate genomics health literacy to support informed use of genomic technologies and decision-making

Goal

All health professionals are competent in using genomics in cancer care, and the community is empowered to understand the role of genomic testing and genomics-informed care.

Actions

4.1 Embed cancer genomics education into health professional curricula and ongoing professional development to build competence in using genomics in cancer care.

4.2 Develop tools for the specialist cancer workforce and primary care, including Aboriginal Community Controlled Health Services, to support shared decision-making with patients about the use of genomics in cancer care.

4.3 Develop awareness campaigns about cancer genomics, including in community spaces, GP waiting rooms and community pharmacies.

4.4 Co-design resources with Aboriginal and Torres Strait Islander communities, other priority populations and consumer groups, to raise awareness of, and address concerns about, genomic testing and genomics-informed care.

Foundational Objectives

Research and data

Evidence-based and data-driven cancer genomics is incorporated into the health system

Goal

Cancer genomic research and data are representative of population diversity, underpinned by Indigenous Data Sovereignty principles, and used to inform best practice cancer care.

Actions

5.1 Promote equitable access and culturally safe participation in cancer clinical trials incorporating genomics.

5.2 Implement nationally consistent processes to collect, store, share and link cancer genomic data safely and securely.

5.3 Apply Indigenous Data Sovereignty principles to the governance of cancer genomic data across the continuum.

Workforce and models of care

An agile workforce is enabled to adapt to genomics evidence, treatment and technologies

Goal

Development of workforce capability in genomics and cultural safety are prioritised to support sustainable and equitable delivery of genomic cancer care.

Actions

6.1 Upskill all cancer health professionals to offer mainstreamed culturally safe cancer genomic testing, information and support, to meet current and future demand.

6.2 Increase patient and family access to specialist genetic counselling services as part of multidisciplinary cancer care.

6.3 Co-design education for all staff in the specialist cancer sector and primary health sector (mainstream and Aboriginal Community Controlled Health Services) on the role of genomics in cancer control.

6.4 Drive system level changes relating to cultural safety, with education for health services which acknowledges the complex history of genetics and genomics for Aboriginal and Torres Strait Islander people.

6.5 Investigate the potential for oncology outreach services, genetics outreach services and clinical trials to be delivered through local health services to enable more cancer care to happen on Country, or closer to home.

Funding, quality and safety

Genomics is integrated safely, consistently and cost-effectively across the cancer care continuum

Goal

Ethical, legal, financial and regulatory considerations are addressed as part of the design and expansion of best-practice genomics-informed cancer care.

Actions

7.1 Evolve Health Technology Assessment (HTA) methodologies and processes to streamline access to reimbursed genomic testing and treatment.

7.2 Apply relevant national and international policies, laws, and guidance to the design and delivery of genomic cancer care to ensure equity of experience and outcomes.

7.3 Ensure innovative models of care for integrating genomics across the cancer care continuum maintain the standard of high-value culturally safe care.

7.4 Strengthen consideration of ethical issues in relation to use of genomic testing and genomics-informed cancer treatment for all people affected by cancer.

7.5 Develop protocols to ensure Aboriginal and Torres Strait Islander sovereignty over data and samples collected for cancer genomics, particularly when retained in a biobank or data registry.

Aboriginal and Torres Strait Islander themes — Self-Determination — Culture — Capacity Building — Access