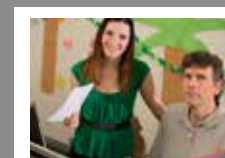


Improving the lives of Queenslanders



ANNUAL REPORT 2015

About Cancer Council Queensland

Our Mission

Medical research has successfully beaten most disease – it will beat cancer. Cancer Council Queensland raises funds which are dedicated to eliminating cancer and diminishing suffering from cancer through research, treatment, patient care, prevention and early detection.

Our Strengths

Cancer Council Queensland is dedicated to serving the community in cancer control. Cancer Council Queensland is dynamic, outcome-focused, responsive to community needs, committed to voluntarism and the pursuit of excellence in all its activities. All staff and volunteers from Cancer Council Queensland, through their work, are actively involved in cancer control.

Our impact

Improving the lives of

Innovating for the future

- The Viertel Cancer Research Centre is a member of two national Centres of Research Excellence for the development of knowledge and novel methods for skin cancer control.
- We are members of a national government/academic partnership to develop cutting-edge technology for the geospatial mapping of cancer incidence and outcomes across Australia.

Implementing solutions

- We have provided evidence to inform changes in public policy to reduce smoking prevalence in Queensland from 22 per cent (2004) to 15 per cent, including a significant and ongoing decrease in smoking among high school students.
- We have contributed to the development, testing and endorsement of new guidelines for paediatric cancer staging for population registries globally.
- We have developed and published evidence-based information on sun exposure, vitamin D and skin cancer risk.
- We contributed evidence leading to a full ban on commercial solaria in 2014, and a reduction in the risk of melanoma due to tanning beds.
- Our evidence has led to increased public funding to assist regional patients travelling from home to access life-saving cancer treatment.
- We have implemented geocoding of cancer data to enable accurate and flexible spatial analyses and reporting of cancer outcomes.

Harnessing data

- We provide accurate and timely information for the public, researchers, clinicians and government about the burden and trends of cancer in Queensland.
- We manage the Queensland Cancer Registry: the leading source of cancer-related statistics in Queensland.
- We have developed a free online system for the public to access up-to-date cancer data (Queensland Cancer Statistics Online).
- We manage the Australian Paediatric Cancer Registry, one of a few national childhood cancer registries in the world, and the leading source of information on childhood cancer in Australia.
- We use data linkage networks to better understand relationships between screening, cancer diagnoses, treatment and mortality.



Queenslanders



Building capacity

- We developed the first Atlas of Cancer in Queensland, underpinning significant changes to public policy to assist regional cancer patients.
- We signed an agreement on a five-year jointly-funded partnership with the University of Southern Queensland to understand and address inequities in cancer survival between country and city areas.
- We have strengthened national and international research collaborations in statistical, spatial and Indigenous health.

Informing service delivery

- We have provided scientific evidence on which CCQ's cancer control programs and services are based.
- We completed Queensland's largest statewide study of cancer risk behaviours, leading to the development of CCQ's QUEST program for cancer prevention.
- We published evidence of diagnostic accuracy of skin cancer clinics compared to general practitioners.
- We contributed to an Australian-first study highlighting the disparity in pap smear participation among Indigenous women.
- We contributed to a greater understanding of the role that multiple cancers have on survival outcomes for people diagnosed with cancer.
- We assessed spatial patterns in breast screening participation and associated outcomes across Queensland.

Raising standards of care

- We helped enhance statewide cancer care services for psychosocial support: our recommendation for the integration of distress management into routine clinical practice was formally adopted by Queensland Health.
- We contributed to the development of national clinical guidelines for the management of melanoma.
- We contributed to the development of national guidelines for psychosocial care of advanced prostate cancer.
- We are members of a national expert panel for the development of clinical practice guidelines for PSA testing and management of test-detected prostate cancer.
- We developed national recommendations and strategies to reduce rural and Indigenous disparities in breast cancer outcomes.

Strengthening support

- We developed innovative peer support programs, particularly for breast cancer and prostate cancer patients.
- We developed evidence-based resources (books, DVDs and online resources) for prostate cancer patients and their families, used by national cancer support and men's health organisations.
- We developed an evidence-based framework for the psychological care of cancer patients, including distress screening at first point of contact.
- We developed and tested evidence-based supportive care programs for prostate cancer patients and partners in randomised controlled trials.



Who are we?



Cancer Council Queensland's Viertel Cancer Research Centre is a multi-disciplinary research centre dedicated to collaborative work to advance global cancer control, strengthening the knowledge base that informs specialist expertise in the fields of cancer epidemiology, childhood cancer, psycho-oncology and community engagement.

Our findings have worldwide impact, demonstrating the importance of community-based cancer control in preventing and defeating cancer and reducing the years of life lost to cancer at a population-wide level.



From 2004, the Centre's work has been underpinned by a major long-term philanthropic commitment from the Sylvia and Charles Viertel Charitable Foundation. The Foundation's commitment ensures the Centre's work is future-focused, innovative, and responsive to emerging trends.

Over the past 12 years the Centre has gained recognition as a world-class research institute, helping to guide local, national and international understanding of the issues that impact quality of life and survivorship outcomes for those affected by cancer, including family members and the broader community.

We are committed to eliminating cancer as a life-threatening and distressing disease for future generations.





Charles Viertel

(1902-1992)

The Sylvia and Charles Viertel Charitable Foundation was established in 1992, following the passing of Mr Charles Viertel, prominent Queensland investor and philanthropist.

In 2004, the Foundation made a significant and ongoing commitment to Cancer Council Queensland in support of the Viertel Cancer Research Centre.

Cancer Council Queensland gratefully acknowledges the generous support of the Sylvia and Charles Viertel Charitable Foundation and its Chairman, Mr George Curphey OAM.

Our goal

Our research
focuses on
increasing
survival and
enhancing
quality of life
after cancer.



**Viertel
Cancer Research Centre**







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Message from the CEO

In 2015 we delivered world-leading research to improve the lives of Queenslanders affected by cancer, benefitting from community support and the ongoing generosity of The Sylvia and Charles Viertel Charitable Foundation.

Our work culminated in the publication, or acceptance for publication, of 67 peer-reviewed manuscripts and seven book chapters in national and international scientific literature.

Highlights included the award of a research project grant to investigate the role of vitamin D in melanoma progression, together with the University of the Sunshine Coast (led by USC and funded by the US Department of Defense) – a prestigious international competitive grant and the foundation for an ongoing research collaboration focusing on melanoma and vitamin D.

Of particular significance, CCQ played a key role in the development and testing of new UICC-endorsed international guidelines for Childhood Cancer Staging for Population Registries, which will facilitate international research into the causes, prevention and long-term outcomes of childhood cancer.

A strategic program of work continued to examine geographic inequalities in cancer survival, with the completion of a high level review and analysis of all available evidence on the reasons for poorer breast cancer outcomes experienced by women living in non-metropolitan regions. Notably, these findings have been reviewed and endorsed by Cancer Australia and will have implications for policy and further research.

In relation to geographic inequities, CCQ also confirmed a formal five-year partnership with the University of Southern Queensland to develop knowledge and strategies to reduce the disparity in cancer survival between regional and urban areas – a major undertaking which will significantly build regional resilience in cancer control.

In the area of community engagement, CCQ was awarded an Australian Research Council linkage grant for a new research project about episodic volunteering (short-term, flexible volunteering), together with Griffith University and in

partnership with the Union for International Cancer Control, American Cancer Society and Volunteering Queensland. The three-year project will explore how we can best support these volunteers in non-profit cancer control organisations.

During 2015 our researchers also worked in partnership with Griffith University to complete the development of an online support program, named CancerCope, to support distressed cancer patients, and commenced recruitment for the study, as well as trialling a national tele-based mindfulness-based cognitive therapy group intervention for men with advanced prostate cancer.

These and the other achievements outlined in this report would not have been possible without the continuing support of the Sylvia and Charles Viertel Charitable Foundation and its Chairman, Mr George Curphey OAM, to whom I extend my deepest appreciation.

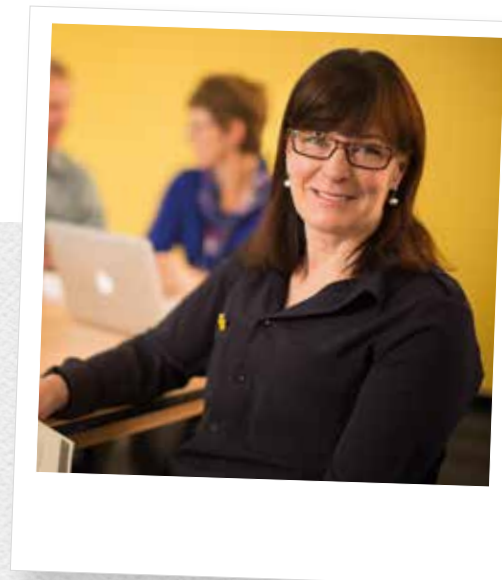
I also recognise the members of the Viertel Centre's Executive Committee, Professor Frank Gardiner AM, Professor Ian Frazer AC, and Professor David Shum, and thank them for their guidance.

Equally, I acknowledge with appreciation Cancer Council Queensland's Board of Directors and Chairman, Mr Graham Gibson QC, our staff, and our network of distinguished research collaborators for their contributions to our vision for a cancer free Queensland.

Finally, I acknowledge with deepest appreciation and abiding gratitude the thousands of community members who enable our research to reach all Queenslanders, affected by all cancers.

Professor Jeff Dunn, AO
Chief Executive Officer

Message from the *Head of Research*



The year 2015 marked the twelfth anniversary of the Viertel Cancer Research Centre. The Centre's development has been guided by a single goal, to develop the knowledge and the scientific evidence required to meet the ongoing challenge of community-based cancer control.

With this in mind, the Centre's program of work is focussed on research in four key areas – cancer epidemiology, applied psycho-oncology, community engagement and, the most recent addition to this list, childhood cancer.

The Centre's epidemiology research program - the study of the patterns and trends in cancer by time and place - has revealed both good and bad news. Many of our most common cancers are being diagnosed earlier and cancer survival is increasing. However, we have shown also that these benefits are not shared equally by everyone in our community and, in particular, that patients in Queensland's regional and country areas are at a disadvantage in terms of cancer survival. Our work is now focused on unravelling the reasons for this and developing interventions to address it. In addition, the Centre and its partners are undertaking a major project to develop a National Atlas of Cancer for Australia to investigate similar patterns throughout the nation.

The improvement in cancer survival rates means that more and more people in our community are living with cancer for many years after successful treatment. A proportion of patients and patients' families suffer significant long-term distress because of their cancer experience. Our psycho-oncology program is successfully trialling new interventions that will be accessible by all patients to address this.

The community itself has the potential to be a strong force for cancer control provided that community members have the opportunity and the necessary support to become involved. The Viertel Centre's innovative community engagement

program, focussing on the best ways to empower communities to play a role in cancer control initiatives, has attracted national funding and is one of the only such programs in Australia.

The Viertel Centre's focus on childhood cancer research has arisen through its management of a national register of childhood cancer, the Australian Paediatric Cancer Registry. The value of this major resource, and the opportunities that it presents for improving our understanding of childhood cancer, have been recognised through national and international partnerships and, most recently, through Cancer Australia's funding of a two-year project to develop and test international guidelines for staging childhood cancer.

I acknowledge with appreciation the members of the Viertel Cancer Research Centre, our research collaborators and partners, our volunteers for their able assistance in the Centre's work, and our research participants for their willingness to become involved.

I thank the Sylvia and Charles Viertel Charitable Foundation and its Chairman, Mr George Curphey OAM, for the Foundation's generous support and ongoing commitment that has made all of this possible.

I commend this report to you as a record of the Centre's achievements during 2015.

Professor Joanne Aitken

Head of Research and Director of Cancer Registries



Cancer in Queensland the facts...

205,000 Queenslanders are alive today after a cancer diagnosis in the past 25 years.

35,471
Queenslanders are estimated to be diagnosed with cancer each year by 2023.

2 in 5
Queenslanders will develop cancer before age 80.

8651
Queenslanders died of cancer in 2013.

26,335 Queenslanders were diagnosed with cancer in 2013.

70% Overall cancer survival in Queensland has improved from 53 per cent to 70 per cent over the past 25 years.

1 in 7
Queenslanders will die from cancer before age 80.

Our research at a glance 2004-2015

10

books and book
chapters

10

reports on cancer
in Queensland

450

peer-reviewed
publications

14,000+

citations of our
research

8

national awards
and fellowships

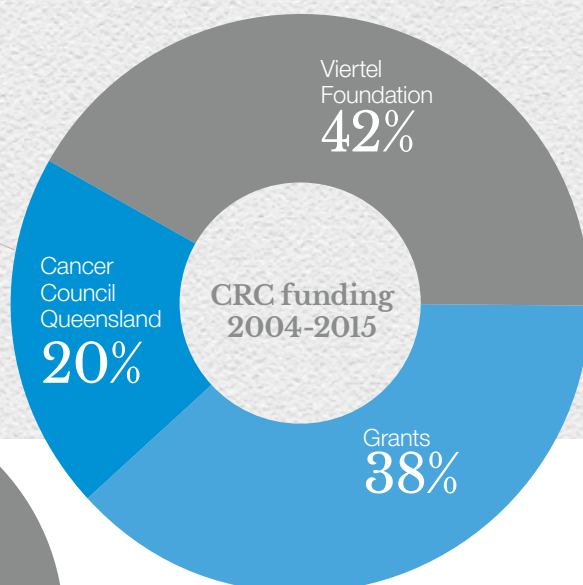
100,000+

Queenslanders took part in
our research



\$11m

research grant income



32

research grants awarded

Accreditation
by the National
Health and
Medical Research
Council

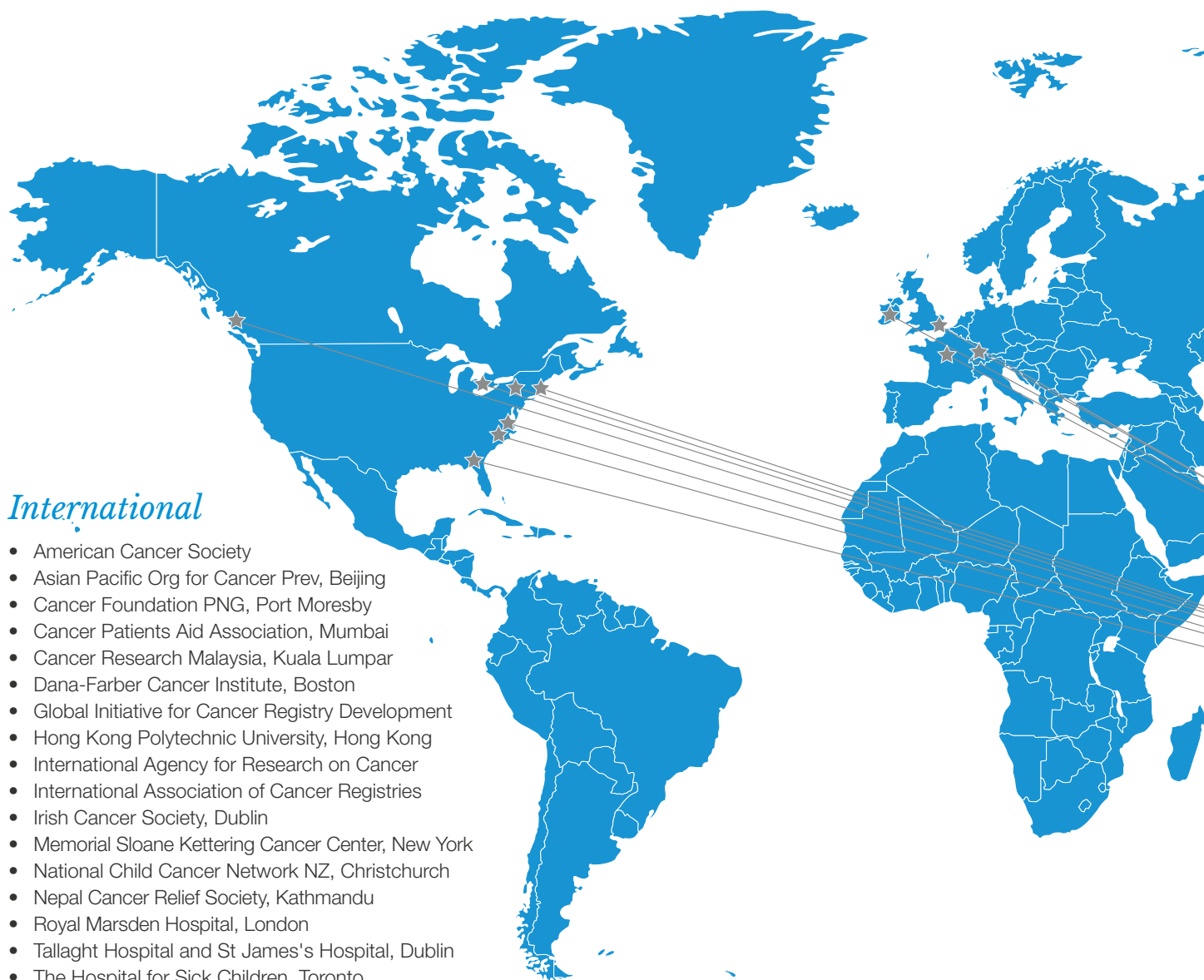
Contribution to
over 65 national
and international
expert scientific
advisory and
working groups

554

research conference
presentations



Partnerships and collaborations



International

- American Cancer Society
- Asian Pacific Org for Cancer Prev, Beijing
- Cancer Foundation PNG, Port Moresby
- Cancer Patients Aid Association, Mumbai
- Cancer Research Malaysia, Kuala Lumpur
- Dana-Farber Cancer Institute, Boston
- Global Initiative for Cancer Registry Development
- Hong Kong Polytechnic University, Hong Kong
- International Agency for Research on Cancer
- International Association of Cancer Registries
- Irish Cancer Society, Dublin
- Memorial Sloane Kettering Cancer Center, New York
- National Child Cancer Network NZ, Christchurch
- Nepal Cancer Relief Society, Kathmandu
- Royal Marsden Hospital, London
- Tallaght Hospital and St James's Hospital, Dublin
- The Hospital for Sick Children, Toronto
- Union for International Cancer Control, Geneva
- United States Department of Defense, Washington
- University of British Columbia, BC
- University of Virginia, Charlottesville



National

- Australian National University
- Australian and New Zealand Children's Haematology/Oncology Group
- Australian and New Zealand Urogenital and Prostate (ANZUP) Cancer Trials Group
- Australasian Association of Cancer Registries
- Cancer Australia
- Cancer Council NSW
- Cancer Council Victoria
- Clinical Oncology Society of Australia (COSA)
- Cooperative Research Centre for Spatial Information
- Edith Cowan University
- Major paediatric hospitals in Sydney, Perth, Brisbane, Melbourne, Adelaide
- Menzies School of Health Research, Charles Darwin University
- Monash University
- Prostate Cancer Foundation of Australia
- University of Adelaide
- University of Melbourne
- Victorian Cancer Registry

Queensland

- BreastScreen Queensland
- Children's Health Queensland
- Griffith University
- QIMR Berghofer Medical Research Institute
- Queensland Health
- Queensland University of Technology
- The University of Queensland
- University of Southern Queensland
- University of the Sunshine Coast
- Volunteering Queensland

2015 Key achievements

- Published, or had accepted for publication, in national and international scientific literature a total of **67** peer-reviewed manuscripts and **seven** book chapters.
- Played a key role in the development and testing of new UICC-endorsed international guidelines for **Paediatric Cancer Staging for Population Registries**, which will facilitate international research into the causes, prevention and long-term outcomes of childhood cancer.
- Secured a research project grant to investigate the **role of vitamin D in melanoma progression**, together with the University of the Sunshine Coast (led by USC and funded by the US Department of Defense). This is a prestigious international competitive grant and the foundation for an ongoing research collaboration with USC focusing on melanoma and vitamin D.
- Completed a high level review and analysis of all published evidence on the reasons for **poorer breast cancer outcomes** experienced by women living in **non-metropolitan regions**. Findings have been reviewed and endorsed by Cancer Australia and will have implications for policy and further research.
- Entered a formal five year partnership with the University of Southern Queensland to develop knowledge and strategies to **reduce the inequalities in cancer survival** between regional and urban areas.
- Collaborated in a national NHMRC-funded study to assess the extent of **Indigenous participation** in the **cervical screening program**.
- Secured an Australian Research Council linkage grant to study **episodic volunteering** (short-term, flexible volunteering), together with Griffith University and in partnership with the Union for International Cancer Control, American Cancer Society and Volunteering Queensland. The three year project will explore how we can best support these volunteers in non-profit cancer control organisations.
- Completed development of an **online support program** (CancerCope) for distressed cancer patients (in partnership with Griffith University) and commenced recruitment for the study.
- Trialled a national tele-based **mindfulness-based cognitive therapy** group intervention for men with **advanced prostate cancer**, in collaboration with Griffith University.
- Completed the **1000 Survivor Study** to better understand the experiences and survivorship concerns of people with cancer.

Key program areas

Our research is directed to preventing cancer, ensuring early detection, helping patients achieve the best possible quality of life after a diagnosis, and supporting cancer patients and their families.

Epidemiology Research Program

Objectives are to understand patterns and trends in cancer incidence, prevalence, mortality and survival with a view to identifying areas of improvement or need, and to investigate factors that impact on diagnosis, clinical management, health service delivery and cancer outcomes.

Childhood Cancer Research Program

Objectives are to conduct and facilitate national and international research into the epidemiology, causes and outcomes of childhood cancer. Underpinning this work is CCQ's management and support of the Australian Paediatric Cancer Registry, a national clinical database of all cases of childhood cancer diagnosed in Australia, housed in the Viertel Cancer Research Centre.

Psycho-Oncology Research Program

Objectives are to identify and understand impacts on psychosocial and survivorship outcomes for people with cancer, to undertake applied research to understand how to improve these outcomes, and to translate the results into improved services and supportive care.

Community Engagement Research Program

Objectives are to develop CCQ's capacity to realise its cancer control goals through community engagement and action. This program informs activities relating to public health, fundraising and volunteering, providing a better understanding of the community's aspirations and expectations of non-government organisations in cancer control.





Cancer control initiatives

The Viertel Cancer Research Centre is at the forefront of population-based research, with over 100,000 Queenslanders having taken part in our research.

Through our findings and achievements, the Centre has built a respected scientific profile, reflected in the publication of over 400 peer-reviewed articles in medical and scientific journals since the Centre's establishment, accreditation by the Commonwealth Government's National Health and Medical Research Council and continuing success in securing nationally competitive research grant awards.

The work of the Centre has had a major impact on cancer control in Queensland through the translation of research findings into changes in cancer control policy and practice. The community has been the ultimate beneficiary of this important work.

The Centre's research is focused in four key areas: cancer epidemiology, childhood cancer, psycho-oncology and community engagement.

The key research initiatives underway during 2015 are profiled in the following pages.

A *National Atlas* of Cancer for Australia



In February 2011, the Viertel Centre released its landmark report 'Atlas of Cancer in Queensland: Geographic variation in incidence and survival 1998 to 2007'.

The Atlas showed that cancer patients in regional and disadvantaged parts of Queensland suffer significantly worse cancer outcomes than urban patients and, in particular, that cancer survival becomes progressively worse the further a patient lives from Brisbane. The findings have informed the work of government agencies, health policy makers and non-government organisations. Importantly, the Atlas provided increased motivation for continued research to better understand how cancer-related outcomes differ geographically. This ongoing research focuses on building capacity by forming and strengthening research partnerships and developing statistical and spatial analytical and visualisation methods to report on spatial patterns of cancer incidence and outcomes.

Project description

The National Cancer Atlas is a collaborative project to develop the first-ever picture of how cancer-related outcomes vary by small geographical areas across Australia. By developing and applying spatial statistical models and innovative web-based reporting methods, we will provide a unique perspective of the variation in cancer-related measures across Australia. The project will identify detailed geographical patterns of inequality, examine changes in geographical patterns over time, provide a strong evidence base for advocacy efforts to reduce the impact of inequalities, focus research efforts to understand why geographical inequalities in cancer outcomes exist, and how to address these, and inform planners and policy makers as they prioritise local and national resources based on the best available evidence.

We are also working to understand how people interpret risk information presented in maps and graphs, and how they use that information in their decision-making processes. This will ensure the methods we use to disseminate results are interpreted accurately by a wide range of users.

This work is a collaboration of the Viertel Centre with our research partners listed below.

Impact

For researchers, this work will provide insights into disparities and variations in cancer outcomes and potential drivers of these. It will facilitate international research collaborations to help quantify the difference in spatial patterns between countries. Our methods have been used by international researchers to determine small-area inequalities in cancer outcomes. For Australian policy makers, building on the impact of the Queensland Atlas, this program of work will provide a trusted evidence base for informed decisions about health and spatial inequalities.

Project partners

- Queensland University of Technology
- Cooperative Research Centre for Spatial Information
- Menzies School of Health Research, Charles Darwin University
- BreastScreen Queensland
- Australasian Association of Cancer Registries

Queensland Cancer Statistics *Online* (QCSOL)

The Queensland Cancer Registry has collected information about all cancers in Queensland since 1982.

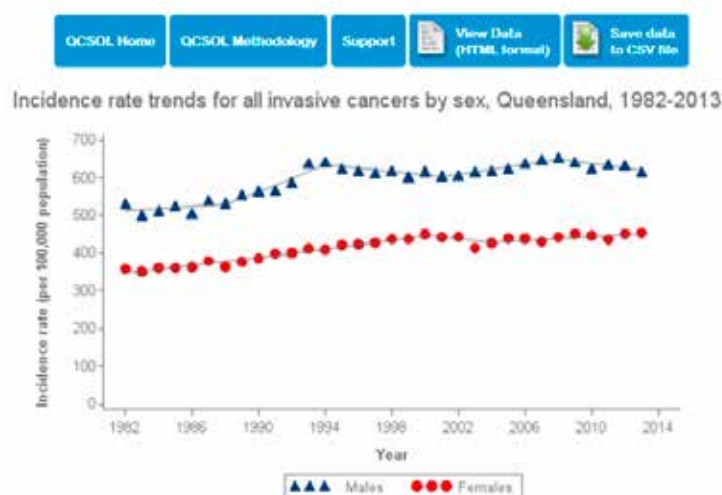
While this information is published in official reports and research publications, it previously had limited accessibility to the broader community. To address this, in 2008 the Viertel Cancer Research Centre developed a web-based information system for the public to freely access the latest available statistics for cancer in Queensland, including navigation tools, graphs and tables for cancer incidence, survival, mortality and prevalence. A subsequent redesign in January 2010 provided easier navigation. Additional statistics have since been included, and this website remains the most detailed freely accessible online source for Queensland cancer statistics that exist today.

Project description

The QCSOL research tool contains detailed statistics on cancer diagnosis, survival, deaths and prevalence. This information is presented through a series of graphs and tables for 22 of the most common types of cancer, as well as all invasive cancers combined, all gynaecological cancers, head and neck cancers, all leukaemias and all lymphomas. Each year when the Queensland Cancer Registry releases their most recent data, an update of QCSOL is also released.

Impact

QCSOL enables researchers, media, clinicians, cancer patients and carers, and members of the public to increase their understanding of the current burden and latest trends in cancer across Queensland.



Data source: Queensland Cancer Registry

Notes:

1. Rates age-standardised to the Australian standard population (2001)
 2. Trends modelled using Joinpoint software (version 4.1.1), National Cancer Institute (surveillance.cancer.gov/joinpoint).
 3. Rates based on less than 5 cancer diagnoses are not shown.
- Linear trends (estimated average annual percentage change with 95% confidence intervals shown in brackets):
Males 1982-1989 = +0.6% (+0.6%, +1.2%); 1989-1994 = +0.0% (-0.7%, +0.7%); 1994-2001 = +0.0% (-0.4%, +0.4%); 2001-2008 = +0.1% (+0.0%, +0.2%); 2008-2013 = -0.2% (-0.3%, -0.1%)
Females 1982-1989 = +0.1% (+0.0%, +0.2%); 1989-1994 = +0.0% (-0.1%, +0.1%); 1994-2001 = +0.1% (+0.0%, +0.2%); 2001-2008 = +0.1% (+0.0%, +0.2%); 2008-2013 = -0.2% (-0.3%, -0.1%)

Project partners

The development of QCSOL would not have been possible without the expertise of Cancer Council Queensland's Information Technology team.

All data reported in QCSOL is only available through the efforts of staff in the Queensland Cancer Registry, and the hospitals, pathology labs and nursing homes that provide data to them.

Cancer among *Aboriginal and Torres Strait Islander people*

It is widely acknowledged that Aboriginal and Torres Strait Islanders or Islander people face poorer cancer outcomes than their non-Indigenous counterparts.



Indigenous Australians report lower participation in screening programs, have higher incidence of poor-prognosis cancers, higher mortality rates and poorer survival. The reasons for these inequalities are multifaceted, and likely to include later stage diagnosis and reduced uptake of, or access to, treatment and supportive care. To date, work in this area, particularly nationally, has been limited.

Project description

This project is building on a foundation of work previously conducted by Cancer Council Queensland and our research partners to increase knowledge of the patterns of cancer-related outcomes among Indigenous people. In particular, we are investigating the extent of the inequalities Indigenous Australians face compared to their non-Indigenous counterparts, and how these inequalities impact their lives. We will inform evidence-based initiatives to reduce the gap in outcomes between Indigenous and non-Indigenous populations.

Much of the work is utilising existing population-based datasets such as cancer registries, hospital admission and screening datasets, at a state and national level, and either stand-alone or through data linkage methods. In particular, the National Indigenous Cervical Cancer Screening Project (NICSP) is a data linkage project designed to combine pap test registers, hospital-admitted patient data collections and cancer registries to examine pap test participation by Indigenous women across Australia. Complementing these datasets is additional survey data, providing comprehensive information on possible risk factors associated with cancer outcomes among specific cohorts of Indigenous people.

An important and critical feature of this project is ongoing collaboration with Indigenous researchers, particularly from Menzies School of Health Research. This increases our capacity to undertake innovative research on a larger scale, ensures our research questions are relevant to Indigenous communities, and the results are rapidly translated to inform policy and practice.

Impact

- Provide the capacity to conduct research aimed at better understanding the inequalities in cancer-related outcomes among Indigenous Australians.
- Provide a mechanism to facilitate increased collaboration with national and international researchers and policy makers.
- Quantify the disparities in screening, incidence, survival and mortality among Indigenous people and their implications.
- Understand the impact of geographical location on the observed inequalities.

Project partners

- Menzies School of Health Research, Charles Darwin University
- Queensland Health
- QIMR Berghofer Medical Research Institute

A systematic review of *inequalities in breast cancer survival* and other outcomes

Although Australia overall has high rates of survival following treatment for breast cancer, some population groups experience worse outcomes in terms of survival and psychosocial outcomes, particularly women living in non-metropolitan and socioeconomically disadvantaged areas, and Indigenous women.

The underlying causes for the observed inequalities during and after a breast cancer diagnosis are complex, and while a number of studies have examined specific aspects of these inequalities, there has been no comprehensive summary of their findings. This has limited the ability of relevant agencies to identify gaps in knowledge, formulate strategic priorities and develop appropriate interventions.

Project description

A systematic review was conducted to provide a comprehensive summary of the current literature on breast cancer outcomes for Australian women by residential location and Indigenous status. Key clinical questions were formulated and grouped according to survival, patient/tumour characteristics, diagnosis and treatment and psychosocial outcomes.

Results indicated that non-metropolitan women have poorer breast cancer survival than metropolitan women, and Indigenous women have significantly poorer breast cancer survival than non-Indigenous women. Breast cancer screening rates were significantly lower for women living in very remote areas and for Indigenous women. Indigenous women were more likely to be diagnosed with advanced breast cancer compared to non-Indigenous women. Non-metropolitan and Indigenous women experienced less optimal clinical management compared to metropolitan and non-Indigenous women. Non-metropolitan women with breast cancer were more likely to experience poorer quality of life regarding treatment-related symptoms, and more likely to report unmet psychosocial and support needs.

Impact

Based on the findings, Cancer Council Queensland and Cancer Australia identified priority areas of focus and specific strategies that have the potential to reduce variations in breast cancer outcomes. These priorities include:

- Increasing awareness and participation rates for breast cancer screening.
- Increasing awareness of the symptoms of breast cancer and encouraging early detection for non-metropolitan and Indigenous women.
- Promoting multidisciplinary care for non-metropolitan and Indigenous women with breast cancer.
- Increasing access to culturally appropriate breast cancer care for Indigenous women.
- Improving access to optimal breast cancer clinical management and follow-up care for non-metropolitan and Indigenous women.
- Improving access to psychosocial and supportive care.
- Advancing research, including qualitative studies on the psychosocial and supportive care needs of Indigenous women.
- Adopting standardised definitions of geographical classifications to enable comparative studies.
- Improving the collection and recording of Indigenous data by cancer registries.

Project partners

- Cancer Australia
- Menzies School of Health Research, Charles Darwin University

Tania Charlwood



Earlier this year, Kingaroy local Tania Charlwood received the devastating news that she had stage two breast cancer.

Living rurally meant Tania was faced with the reality of travelling to receive treatment for an extended period of time. Tania stayed at Olive McMahon Lodge in Toowoomba, one of six Cancer Council Queensland accommodation lodges available statewide.

Our CCQ lodges, a home-away-from-home, are offered free of charge to regional cancer patients who have to leave their homes and travel for treatment.

The Viertel Cancer Research Centre has dedicated years of hard work to better understand the burden faced by country cancer patients, and the reasons for inequalities in diagnosis, treatment and cancer outcomes across Queensland.

Our research has discovered that a woman's risk of being diagnosed with advanced breast cancer is higher for women in socioeconomically disadvantaged and outer regional areas of Queensland.

For many of the major cancers that affect Queenslanders, including breast cancer, there is a consistent pattern of poorer survival following diagnosis for patients living in rural and remote areas of the state.

The Viertel Centre is committed to playing its part in closing the survival gap for rural and remote cancer patients, and we will continue to work to ensure cancer patients like Tania have the best chance of survival and best possible quality of life after treatment.

Understanding why women in rural and regional areas have poorer outcomes after breast cancer

Our research has identified a number of inequalities in breast cancer outcomes for rural and regional women.

Compared to women living in urban areas, rural and regional women are more likely to be diagnosed with advanced disease, have poorer survival, are less likely to be offered treatment options for early stage breast cancer, and report more unmet psychological needs. Potential reasons for these differences may include lower rates of breast screening, limited access to, and the need to travel long distances for treatment, and less access to psychosocial support. However, to date we have little understanding of the underlying factors impacting these poorer outcomes. This project addresses this knowledge gap and represents the largest Australian study ever aimed at examining the reasons why rural and regional women diagnosed with breast cancer have poorer outcomes.

Project description

More than 3300 women from urban, regional and rural areas of Queensland have provided detailed information on their diagnostic and treatment pathways, and completed questionnaires to assess psychosocial outcomes. To complement this information, the project has collected clinical information about each breast cancer and established a DNA and RNA biobank to allow future studies of genetic susceptibility.

Results to date indicate that despite being eligible for free biennial mammogram screening, about 40 per cent of breast cancers were symptom-detected, with these cancers more likely to be advanced. The study also found the median time to histologically proven breast cancer was significantly longer for women who self-detected their breast cancer compared to those detected through mammography. Compared to women in urban areas, those in rural and regional areas recorded significantly longer delays to diagnosis. Overall, women whose diagnosis took more than one month from initial detection were significantly more likely to have advanced disease.

Impact

- Findings to date indicate a need to increase awareness and participation in routine breast cancer screening for eligible women.
- Findings have identified a need to increase awareness of the symptoms of breast cancer and for women to seek immediate medical attention if required.
- The research has identified a need to improve timely access to primary and specialist care.
- Results from this work will provide health care providers, policy makers and support organisations with targeted information to improve the future care of women with breast cancer.

Project partners

- Griffith University
- Queensland University of Technology
- Mater Private Breast Cancer Centre



Does having multiple melanomas influence a patient's *survival*?

Growing numbers of patients are being diagnosed with more than one primary invasive cutaneous melanoma during their lifetime.

This is due to the increasing incidence of melanoma, high survival rates for melanoma overall and the increased risk among melanoma survivors of developing a subsequent primary melanoma. However, it is not known whether the survival of patients with multiple primary melanomas differs from that of patients with a single primary melanoma. Of previous studies on the topic, it's surprising that most have reported that being diagnosed with multiple melanomas is associated with improved survival. However, we were concerned the methods used may have produced biased results.

Project description

Using a large cohort of melanoma patients from the Queensland Cancer Registry, we applied a different methodology to that used in the past – a methodology that appropriately accounts for the total period between diagnosis of the first and subsequent melanomas, without introducing a survival bias. After adjusting for key prognostic factors, the risk of death within 10 years from melanoma was found to be two times higher for patients with two melanomas and nearly three times higher for people with three melanomas, compared to those with a single melanoma. Melanoma-specific mortality remained elevated even after adjusting for key factors including melanoma thickness and ulceration. Our results clearly demonstrate that survival is significantly poorer for patients diagnosed with multiple melanomas, versus a single primary invasive melanoma.



Impact

- We have discovered a significant shift in the current understanding of survival for people with multiple melanomas.
- The ability to provide reliable prognostic information for melanoma patients has improved.
- Knowing that a patient has been diagnosed with a melanoma previously will prompt careful surveillance to detect new or recurrent disease.
- There is potential for future work focusing on how stage at diagnosis of the initial melanoma influences survival for patients with multiple melanomas.

Project partners

- The University of Queensland
- QIMR Berghofer Medical Research Institute

Is *vitamin D status* at time of melanoma diagnosis associated with stage of tumour?

Queensland has the highest incidence of melanoma in the world.

While it is well known that the main risk factor for melanoma is sun exposure, there is evidence that vitamin D may play a role in this pathway. Vitamin D is produced by the action of ultraviolet radiation on exposed skin, and is important for maintaining healthy bones. There is a growing body of evidence suggesting vitamin D may play an important role in melanoma development and progression. Further, some studies have suggested that higher lifetime sun exposure is associated with lower risk of mortality during the five years following melanoma. So while excessive sun exposure is a major risk factor this hypothesis suggests that increased vitamin D from sun exposure may also increase survival from melanoma.

Project description

This is a prospective cross-sectional study involving 600 participants newly diagnosed with melanoma. The primary aim is to investigate if having a lower (<50nmol/L) serum vitamin D (25[OH]D) concentration at diagnosis is associated with poorer melanoma prognostic characteristics, including site of melanoma, thickness, stage and presence or absence of ulceration.

Our study participants will undergo a brief telephone interview to elicit information on sociodemographics, melanoma risk factors, history of skin self-examination, clinical skin examination and pathways to diagnosis. Following the interview, participants will complete a self-administered questionnaire to collect the history of their lifetime sun exposure, and use of sun protection in the two weeks prior to their melanoma diagnosis. Participants will also be asked to record their use of over-the-counter vitamin D supplements currently and in the 12 months prior to diagnosis.

Blood samples to measure vitamin D status will be collected within 14 days of initial diagnosis.

Impact

This project will investigate the exciting possibility that vitamin D could be used as a potential biomarker of melanoma progression, with an additional role in melanoma treatment and prevention. The project will generate new knowledge in melanoma and have direct relevance to Queensland and the broader Australian population. Results will be rolled out to study partners, including the US Department of Defense who have a specific interest in how the findings may benefit active military personnel. The findings will also be used as a foundation for future melanoma research projects. With melanoma incidence continuing to rise in most predominantly fair-skinned populations globally, identifying factors that may impact diagnosis and prognosis is critical to reduce the burden of this cancer.

Project partners

- University of the Sunshine Coast
- US Department of Defense, Washington



Centre for Research Excellence in *Sun and Health*

The NHMRC Centre for Research Excellence in Sun and Health's (CRESH) primary outcome is to understand the health duality (vitamin D vs. skin cancer risk) of exposure to solar ultraviolet (UV) radiation.



Project description

CRESH is building an evidence base leading to the development of national public health guidelines to balance the adverse and beneficial effects of sun exposure, optimising the health of the Australian community.

Impact

- Preliminary analysis of a small randomised controlled trial suggests increasing levels of sun exposure does not result in an increase in vitamin D levels.
- Analysis and documentation of the impact UV exposure has on the burden of disease will assist in informing preventive policies and actions.
- While it is well known that UV exposure increases the risk of skin cancer, our analysis of observational studies shows very limited impact in risk for other types of cancer. Some skin cancers such as basal cell carcinoma and squamous cell carcinoma share common risk factors, however our research has shown that other risk factors are unique to particular skin cancer types, indicating the need to continue refinement of public health messages.
- Analysis of the financial cost of treating skin cancer and recent significant increases in testing for vitamin D deficiency has helped to inform the need for ongoing public health messaging to reduce skin cancer risk.
- Using a new method to evaluate current skin cancer questionnaires has enabled us to develop a series of standard questions that can now be used across research studies to assess skin cancer risk and health behaviours.

Project partners

CRESH is coordinated through the University of the Sunshine Coast (USC) and is based jointly at USC and at Cancer Council Queensland. Other CRESH partners include:

- Queensland University of Technology
- QIMR Berghofer Medical Research Institute
- Australian National University
- Griffith University
- University of Melbourne
- Monash University
- Cancer Council Victoria

“ Using a new method to evaluate the skin cancer questionnaires, we have developed a series of standard questions that can now be used across research studies. ”

The Australian *Paediatric Cancer* Registry

Childhood cancer is fundamentally different to adult cancer in its biological basis, clinical classification and treatment.

Cancer is the most common cause of disease-related death among children aged 1-14 years, accounting for 17 per cent of all deaths in this age group. However, because of the relatively small number of cases, basic information such as incidence, mortality and survival is not routinely reported by Australia's population cancer registries. This limits access to vital childhood cancer information that is needed by researchers, clinicians and affected families.

For over three decades, the Australian Paediatric Cancer Registry (APCR), managed by Cancer Council Queensland since 2004, has provided the solution to this problem. The APCR is a unique, population-based, national clinical cancer registry just for children. It is the only such registry in Australia and one of only a few in the world.

Project description

All cases of cancer in children aged 0-14 years are identified, and demographic and diagnostic data are collected annually from population cancer registries in each Australian state and territory, under appropriate ethics and legislative approvals. The APCR Data Manager visits all major paediatric oncology hospitals to obtain detailed clinical and treatment information for each patient. All patients in the APCR are regularly matched against the National Death Index and the Australian Cancer Database to record up-to-date mortality status and the incidence of second and subsequent cancers respectively.

Planning is underway to produce an interactive website which provides free and instant access to the latest data on childhood cancer in Australia, with a particular focus on the information needs of

patients and their families, researchers and clinicians. Confidentiality considerations will be paramount. Any data that could potentially lead to identification of individual children will not be released.

Impact

- Enables national dissemination of childhood cancer information that is not available through any other source.
- Contributes data to international collaborative studies to improve outcomes of childhood cancer, both in Australia and throughout the world.
- Online publication of childhood cancer statistics will deliver a platform for increasing awareness of childhood cancer amongst government and the community, and will underpin advocacy and research.

Project partners

- The Australasian Association of Cancer Registries
- All major paediatric oncology hospitals in Australia
- The Australian and New Zealand Children's Haematology/Oncology Group
- QIMR Berghofer Medical Research Institute
- Children's Health Queensland
- The International Population Data for Childhood Cancer (iPDCC) collaborative group



International cancer staging guidelines for *childhood cancer*

Information on the stage of cancer (extent of disease at diagnosis) is essential for understanding cancer incidence and outcomes, including survival.

Childhood cancer is staged differently to adult cancer and, for certain childhood cancers, multiple staging systems have been developed without a universally accepted standard. For these reasons, paediatric-specific stage has rarely been collected in population-based cancer registries and, when it is collected, there is no consistency in the staging systems used. This severely limits the ability of clinicians and researchers to understand and address questions such as differences in survival between populations and groups of patients.

In 2014, the Australian Paediatric Cancer Registry (APCR) was an invited member of an international expert panel that developed guidelines for the collection of childhood cancer stage by population registries around the world (*The Toronto Paediatric Cancer Stage Guidelines*). These guidelines have now been published and endorsed by the Union for International Cancer Control and Cancer Australia is supporting the next phase of this groundbreaking work: that is, development of detailed staging rules for the new international guidelines in a real-world setting.

Project description

Detailed protocols based on the international guidelines are being developed. These protocols detail what clinical data is required and how it will be used to assign cancer stage at diagnosis for each patient. An expert advisory group will review the staging protocols for their practicality and consistency with *The Toronto Paediatric Cancer Stage Guidelines*.

The staging protocols are being tested in a random sample of over 1400 Australian children diagnosed with cancer between 2006 and 2010. Information required to assign stage is being collected from patients' medical records under appropriate ethics approvals. The feasibility of the staging protocols will be assessed based on indicators such as the proportion of cases that could be staged for each type of cancer.

In addition, a customised data collection system is being developed to facilitate the accurate extraction of clinical information required to assign stage.

Impact

- This project will deliver the world's first validated staging protocols for the collection of childhood cancer stage by population registries, based on newly endorsed international guidelines.
- It will produce a unique, national repository of stage information for all childhood cancer cases diagnosed in Australia. This will allow, for the first time anywhere in the world, publication of national childhood cancer incidence and survival according to the extent of disease at diagnosis.
- In the longer term, this research will make the consistent collection of childhood cancer stage in childhood cancer registries throughout the world possible. This will allow accurate international comparisons of childhood cancer outcomes, and will assist research to understand and improve inequalities in survival.

Project partners

- Cancer Australia
- The Australasian Association of Cancer Registries
- All major paediatric oncology hospitals in Australia
- The Australian and New Zealand Children's Haematology/Oncology Group
- The Dana-Farber Cancer Institute, Boston
- The Hospital for Sick Children, Toronto
- QIMR Berghofer Medical Research Institute
- Children's Health Queensland
- The Victorian Cancer Registry

Lifesaving research for Queensland children



Since Lucy was diagnosed with leukaemia, she has experienced more pain and grief than any child should have to endure.

While her friends were busy going to school and playing, Lucy was in hospital undergoing months of gruelling chemotherapy.

Cancer has robbed Lucy of her childhood and the stress continues with each treatment, operation and setback.

“It was awful, watching her go through chemotherapy and trying to hold her hand because it was really painful,” Julie said.

Cancer has also taken people away from Lucy. As a nine year old she watched the friends she made in hospital get sicker and sicker, and eventually pass away.

Through its Childhood Cancer Research Program, the Viertel Cancer Research Centre is playing a key role in improving understanding of childhood cancer in Australia. The Centre is part of an international panel that has developed new guidelines for population registries to assign the stage of cancer at diagnosis among children, and is now the first site in the world to test the practical application of these guidelines.

This work will have a lasting impact on the way that childhood cancer survival is analysed and assessed not only in Australia but around the world.

The Viertel Cancer Research Centre is proud to be part of this project, working to help children like Lucy.

CancerCope: a randomised trial of an online support program for people with cancer

The diagnosis and treatment of cancer is a major life stress often followed by a range of psychological, social, physical and spiritual difficulties.

One-third of cancer patients experience persistent clinically significant distress, and many don't seek help for their distress. Accessible psychosocial care services throughout a patient's cancer journey, not only while they are in the acute health care system, are urgently needed in Australia.

A web-based approach to delivering these support services can help overcome geographic, and socio-demographic barriers associated with access to available psychosocial care. Online interventions can be delivered at home, reducing the need for cancer patients to travel great distances to receive therapy, and allow patients to proceed through the intervention at their own pace and convenience. Web-based delivery can also be a cost-effective way of providing support at a community level.

Project description

The CancerCope Study is trialling an innovative online supportive care program for distressed cancer patients, aiming to reduce cancer-related distress and improve quality of life. Developed by a multi-disciplinary team of psychologists, eHealth researchers, instructional designers and software developers, CancerCope is a six-week interactive program providing information on stress management, relaxation exercises, managing unhelpful thoughts, problem-solving, decision making and self-care (including exercise, sleep, fatigue and nutrition).

The CancerCope program was piloted in 2014, and a randomised controlled trial is currently underway comparing the program to a static website containing patient education materials. Participants have been recruited from the Queensland Cancer Registry and through Cancer Council's 13 11 20, and follow-up will be completed in early 2017. Outcomes from this trial will provide important information on the potential for an

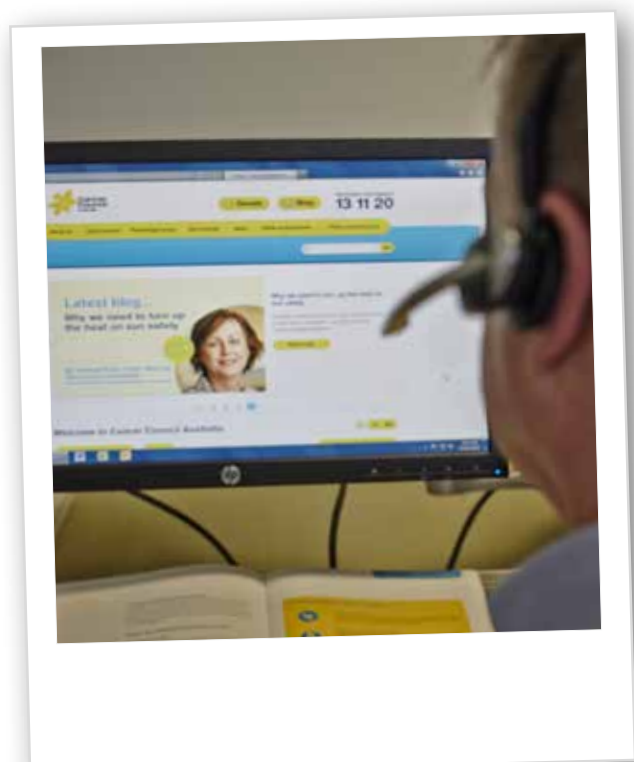
online psychological intervention to improve the mental health of people with cancer, at minimal cost and high community accessibility.

Impact

- Provides an online option to match patient preferences, serves as a potential adjunct to existing services and meets a service gap, particularly for rural and regional patients.
- Possibility of developing the CancerCope program into an app to increase accessibility, particularly for patients who may not have access to a computer.

Project partners

- Griffith University
- University of Virginia, Charlottesville



Living with *prostate cancer*

Adjusting to a diagnosis of prostate cancer can be difficult, and side effects including urinary, bowel and sexual dysfunction are common after treatment.

Many Queensland men report a lack of support and information after diagnosis and treatment of the disease. A general wellness approach, incorporating information and support on a range of issues, can help meet the supportive care needs of men affected. Physical activity is included in this approach, with research showing exercise can help reduce the impact of side effects associated with prostate cancer treatment.

Project description

The Living with Prostate Cancer Study trialed a support program, including a group peer-support and exercise component, for 463 men recently diagnosed with localised prostate cancer. In 2015 we published baseline data collected at the start of the study showing many men were physically inactive, and that physical inactivity was associated with poorer quality of life, higher distress and supportive care needs. This highlights the importance of increasing prostate cancer survivor participation in physical activity.

Baseline data from the trial also showed that 82 per cent of men reported unmet supportive care needs, and most often these were sexual, prostate-cancer specific, and psychological. However, few men accessed the range of health professional and community support options available. Men with the greatest need for support were the least likely to seek help, particularly men who were older, had lower education and increased depression. Trial participants are currently being contacted as part of a study extension to examine wellness behaviours and their help-seeking behaviour for psychological concerns and use of support services since completion of the trial.



Impact

- Initial findings indicate the program helped men to meet recommended guidelines for exercise.
- Information provided by participants as part of the follow-up study will help to better understand the support needs of men with prostate cancer, and how to best improve support services for men in future.

Project partners

- Griffith University
- Edith Cowan University
- Prostate Cancer Foundation of Australia
- University of Adelaide

“Information provided by participants of this study will help to better understand the support needs of men with prostate cancer.”

Masculinity and sexual health after prostate cancer

More men are surviving prostate cancer than ever before, but they are not necessarily surviving well.

Men are living longer with ongoing physical, psychosexual and practical burdens related to prostate cancer diagnosis and treatment. In particular, one in three men have concerns about their sexual health after prostate cancer treatment. However, many men are reluctant to get help for their sexual concerns, and when they do, men often do not continue with treatment. Masculinity may also be linked to how men respond to prostate cancer treatment and side-effects, but the exact nature of this link is unclear. There is little research available to help us understand men's concerns about their sexual health after prostate cancer, how masculinity contributes to their concerns, and their preferences for support services.

Project description

The Masculinity and Sexual Health after Prostate Cancer Study developed a masculinity scale representing men's views about masculinity (as opposed to societal views) in facing a chronic disease such as prostate cancer. We tested the measurement properties of our Masculinity in Chronic Disease Inventory with 510 men who were also surveyed about their sexual concerns and medical help-seeking. Our results, published in 2015, showed the scale had promise. Further analysis of the data showed less than one-third of men sought help for their sexual concerns after prostate cancer treatment, and men with severe erectile dysfunction were least likely to do so. Masculinity contributed significantly to men's plans to seek medical help for sexual concerns in the future. The results highlight the importance of

masculinity, and the ongoing need to understand men's decisions to use support services to address their sexual concerns. A new international study is in development and will use an online survey to explore men's concerns about their masculinity and sexual health after prostate cancer, what factors contribute to their decisions to seek support, and which providers they prefer to receive support from.

Impact

- The Masculinity in Chronic Disease Inventory provides an open-access and free scale to help researchers and clinicians understand and identify the impact of masculinity on men's response to chronic diseases such as prostate cancer.
- Information provided by these studies will help us understand how prostate cancer affects men's masculinity, their sexual concerns after treatment and overall quality of life, to develop more effective, targeted support options for men with sexual needs.

Project partners

- Griffith University
- Prostate Cancer Foundation of Australia
- Memorial Sloan Kettering Cancer Center, New York
- University of British Columbia, BC
- Prostate Cancer Foundation of New Zealand
- Australian and New Zealand Urogenital and Prostate (ANZUP) Cancer Trials Group
- Tallaght Hospital and St James's Hospital, Dublin

“Information provided by this study will help us understand how prostate cancer affects men's masculinity. ●●

Volunteering patterns in non-profit organisations

Volunteers play a key role in non-profit cancer control organisations by increasing cancer awareness and prevention, and providing support and services to cancer patients, families, and the broader community.

Increased time constraints, personal pressures and changing forms of participation (e.g. short-term, flexible, or episodic volunteering) are impacting the availability of volunteer resources. Non-profit organisations such as Cancer Council Queensland rely on sustained and episodic volunteers to assist with the delivery of vital community services and fundraising events. Our previously published work (systematic reviews and a survey with Relay For Life team captains) shows that episodic volunteering and the impact of volunteering patterns on cancer control is poorly understood, and there is a paucity of research in this area.

Project description

Our new world-first study, in partnership with Griffith University, Union for International Cancer Control, American Cancer Society and Volunteering Queensland, seeks to understand the volunteering patterns in non-profit cancer control organisations, especially differences in the number of years a person volunteers, the amount of time they give, how often they volunteer, and the unique qualities and contributions of the people who volunteer. The study, funded by the Australian Research Council with support from our partners, will use mixed methods (interviews and surveys) and multiple perspectives (volunteers and staff who manage them) to address knowledge gaps including retention of volunteers, and the economic and social impact of episodic volunteering.

Impact

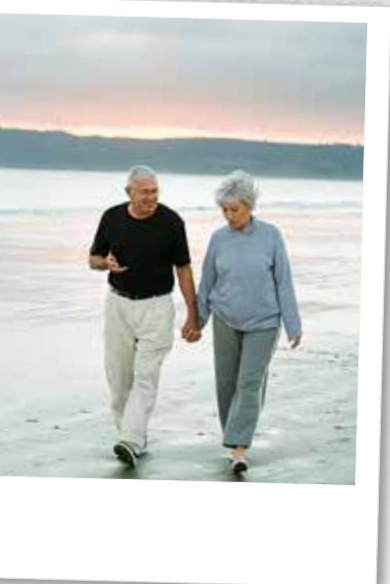
The study will provide valuable insight into how non-profit organisations can best support volunteers who give their time in different ways, add to the evidence base for researchers, and provide recommendations for non-profit sector policy and practice involving episodic volunteers.

Project partners

- Griffith University
- Union for International Cancer Control
- American Cancer Society
- Volunteering Queensland



Enhancing community knowledge and engagement with *law at the end of life*



This project, led by the Health Law Research Centre at the Queensland University of Technology in collaboration with the Viertel Cancer Research Centre, is the first attempt to understand whether members of the community understand and act upon their legal right to participate in decisions about medical treatment for themselves, or for their loved ones at the end of life.

Australian law requires that informed consent about medical treatment be given prior to treatment, and that patients participate in decisions about their

healthcare, however, there are major barriers to such participation, particularly at the end of life. Genuine participation in such fundamental decisions as continuing aggressive treatment or taking a palliative approach requires knowledge and understanding from the patient about their legal rights. This project will explore the community's knowledge of law at the end of life, and how that affects the ability of patients and their families to make decisions about treatment. The study will address a significant issue of access to justice for a vulnerable group of patients at a time of immense stress, within a complex health system.

Project description

The project employs qualitative and quantitative methodologies and will consider law and practice in three jurisdictions: Queensland, Victoria and New South Wales. Stage 1 involves legal research and critical analysis of current resources and information available to patients, families and the community about legal duties, rights, and resolving conflict with health professionals. In Stage 2, community knowledge and experience of end of life decision-making will be explored through a computer-assisted telephone survey of a sample of adults. Stage 3 will involve in-depth interviews with a sample of senior staff of guardianship bodies and approximately 210 individuals

who have engaged with the health system in the context of end of life decisions, including adult patients with a diagnosis of terminal cancer and their family.

The final stage of the project will make recommendations about law reform, health service system changes and community education. This will include the design and pilot of a community education and information strategy to address identified knowledge gaps.

Impact

- Generation of strategies to enhance community understanding and engagement with law at the end of life, and recommendations to improve law and practice.
- Enhanced participation by patients and family members in treatment decisions at the end of life through a better understanding of legal rights, powers and duties.
- Improved experiences of patients and families at the end of life and minimisation of adverse outcomes, including burdensome and unwanted treatment or dying in pain.

Project partners

- Health Law Research Centre, Queensland University of Technology
- University of Queensland
- McCabe Centre for Law and Cancer, Cancer Council Victoria
- Cancer Council NSW

The 1000 Survivor Study

In Australia, the five-year survival rate for cancer has steadily increased over the past three decades.

This is largely due to improvements in diagnosis and available treatments. While this is encouraging, it means that more people are surviving cancer longer with ongoing effects of the disease and treatment. These effects include impacts on a person's physical (pain, fatigue, sexual function) or psychological function (anxiety, depression, fear of cancer recurrence), quality of life, disruption to social or working life, and economic effects (loss of income, cost of treatment). Unfortunately, many of these issues are often under-reported or not addressed in follow-up care. There is an urgent need for more information about how cancer survivors cope, in order to better support those affected by the disease, inform clinicians and primary health care professionals about the challenges faced, and direct advocacy and policy.

Project description

The 1000 Survivor Study used an online survey of people aged over 18, living in Queensland, who had completed treatment for cancer. The survey specifically addressed the physical, emotional and practical challenges that Queensland cancer survivors may face. The results are based on 1031 Queenslanders who completed the online survey.

Results, which are now publicly available via the CCQ website, show over 90 per cent of participants experienced at least one physical or emotional concern after treatment. Although help was received for at least one of their concerns, over 80 per cent reported that they did not receive help or care for

remaining physical or emotional concerns. The primary reason was that survivors learned to live with their concern. One-third reported that cancer had a negative impact on their job or finances. Encouragingly, 70 per cent reported attempting to take better care of their health post-treatment, through regular screening and physical activity. Around 53 per cent found it helpful to connect with others who had also experienced a diagnosis of cancer.

Impact

- The 1000 Survivor Study has provided a better understanding of the concerns and support-use behaviour of cancer survivors in Queensland.
- Despite the large number of concerns reported, receipt of care was low, particularly for emotional challenges. This finding highlights a gap in post-treatment care which may be attributable to patient, health care provider or health system factors, and requires further investigation.
- Results will be used to further inform, develop and identify support mechanisms required to help improve quality of life, support advocacy efforts and provide an evidence base for CCQ's service provision strategy for survivorship.

Project partners

- The LIVESTRONG Foundation, Austin



Equity in cancer outcomes

This research program, conducted in partnership with the University of Southern Queensland, aims to improve cancer survival rates and reduce the disproportionate burden of cancer among rural and regional Australians.

It will do this by investigating the complex range of factors that contribute to Australia's urban-regional health divide.

For some years, the Viertel Centre has undertaken a strategic program of work that has greatly increased our knowledge of geographic disparities in cancer outcomes in Queensland. However, there is still limited understanding of why such inequities exist or how to address them.

Project description

The project will examine the social determinants, lifestyle and behavioural factors associated with poorer cancer outcomes in country Australia, developing and testing solutions that have the potential to save lives.

Stage 1 involves a strategic program of quantitative and qualitative research to investigate the key factors in inequities in cancer outcomes. Stage 2 involves the development and testing of interventions to mitigate those factors that are amenable to change. The program will include investigation of community-level cancer awareness and attitudes, beliefs about cancer outcomes and perceived barriers to accessing the health care system, health care factors including access to services and specialist consultations, quality of follow-up after cancer treatment, and knowledge and skills of GPs, diagnostic and treatment pathways, and individual behavioural risk factors and comorbidities.

Impact

- Delivery of tested, cost-effective interventions to improve equity in cancer outcomes.
- Patient-centred solutions integrated with existing services and models of care, and opportunities to harness new technologies to meet population needs.
- Improved availability of services and programs across the whole continuum of cancer care, including cancer prevention, screening, treatment and follow-up.

Project partners

- Institute for Resilient Regions, University of Southern Queensland






The next 10 years



of our journey



With continuity of support and resources the key to success, the next 10 years of the Viertel Cancer Research Centre will build on our achievements to date, finding solutions to strategically targeted research questions, enhancing collaborations with leading groups around the world and continuing the translation of research outcomes into real results for Queenslanders.

Cancer Council Queensland's Viertel Cancer Research Centre began in 2004.

In the 12 years since, we have generated fundamental new information about the epidemiology of cancer in Queensland, inequalities in cancer survival and psychosocial outcomes, and the enormous and growing burden of cancer in the community.

Through that knowledge, we have identified key gaps, and put our effort into addressing those gaps, through targeted, community-based research.

Research results have been translated directly into better outcomes for cancer patients and their families. This has been achieved through improved, evidence-based programs and services, the development of new tools and resources for health professionals, patients and carers, contributions to national and international cancer guidelines, and changes to legislation and public policy.

However, there is still a great deal of work to be done.

The Viertel Cancer Research Centre is part of an international cancer research community, and its reputation and national and international research partnerships are strong and well-established. Over the next 10 years, with ongoing support, we look forward to building on our achievements to contribute to the elimination of the burden of cancer in our community.

Meet our *leadership team*



Professor Jeff Dunn, AO

PhD, GAICD

Professor Jeff Dunn AO is the Chief Executive Officer of Cancer Council Queensland. He holds Professorial appointments with the University of Southern Queensland Institute for Resilient Regions, Griffith University School of Medicine and University of Queensland's School of Social Science. He has a central focus on the social and behavioural aspects of cancer control, spanning across the continuum of research, prevention, early detection, supportive care and quality of life. He is actively involved in research in this field and has dedicated his career to the development of novel supportive care strategies that underpin cancer prevention and improve community awareness of the disease.

Jeff continues to serve on the Board of the Union for International Cancer Control (UICC) and is the Secretary and a Director of the International Psycho-Oncology Society (IPOS). He currently serves as an editorial Board member for Psycho-Oncology Journal and is the Chair of the UICC's Asia-Pacific Cancer Society Training Grants program. Jeff is the Immediate Past President of the Asian Pacific Organization for Cancer Prevention (APOCP).

Jeff was appointed an Officer in the Order of Australia in June 2014 for distinguished service to medical administration through leadership roles with cancer control organisations, and the promotion of innovative and integrated cancer care programs.



Professor Joanne Aitken

BSc(Hons), ScM, PhD

Professor Joanne Aitken is Head of Research and Director of the Queensland Cancer Registry and Australian Paediatric Cancer Registry at Cancer Council Queensland. Joanne holds academic appointments in the School of Public Health at Queensland University of Technology and Menzies Health Institute Queensland.

Joanne is a distinguished research scientist who has worked in the field of cancer epidemiology for the past 25 years. She completed her PhD at The University of Queensland in 1991, a Master of Science at Harvard University in the same year, and moved to Cancer Council Queensland in 1997 to lead a world-first investigation of early detection of melanoma.

Joanne has co-authored over 200 scientific publications and she was co-winner of the Queensland Government's inaugural Smart Women Smart State award in the research scientist category for cancer control research. Joanne sits on national (cancer registration, cancer in young adults, cancer service quality and safety) and international advisory groups. She is the elected regional representative for Oceania on the Executive Board of the International Association of Cancer Registries.



Professor Michael Kimlin

BAppSc, MAppSc, GradDipEd
(Further Education & Training), PhD

Professor Michael Kimlin is USC/CCQ Professor of Cancer Prevention Research. He has developed a world-first research program to understand the health duality of human exposure to ultraviolet radiation. His career spans both experience in the USA and Australia culminating with presently leading the NHMRC Centre for Research Excellence in Sun and Health and, until recently, QUT's AusSun Research Lab.

He has published over 150 articles on the topics of skin cancer prevention, vitamin D and sun exposure assessment. Michael is a mentor and supervisor of five doctoral students and has conducted projects in Australia, USA, China and Germany. He is the Chair of the Queensland Skin Cancer Prevention Network and is the Cancer Council Queensland Foundation Professorial Chair of Cancer Prevention at the University of the Sunshine Coast (USC). His most important translational work is authoring the defining paper "AusD: A study of Vitamin D in Australian Adults" which recently won the "Top Ten Papers of 2014" in the American Journal of Epidemiology. His vitamin D and UV radiation research provided valuable evidence for the Risks and Benefits Statement for UV Exposure – a joint position statement by Cancer Australia, Osteoporosis Australia, Australasian College of Dermatologists and the Australian Bone and Mineral Society.



Professor Suzanne Chambers

RN, BA, BBehSci (Hons), PhD

Professor Suzanne Chambers is a health psychologist and registered nurse and has worked as a practitioner and researcher in psychological support for people with cancer for over 25 years. She is an Australian Research Council Future Fellow and the Director and Menzies Foundation Professor of Allied Health Research in the Menzies Health Institute Queensland at Griffith University. She has published extensively on the psychological effects of cancer and is currently leading large scale randomised controlled trials of interventions that address couple support and sexuality, lifestyle and unmet supportive care needs, and psychological distress in men with prostate cancer.

Since 1997 Suzanne has published/in press 174 peer review manuscripts, 9 book chapters, 56 published abstracts, one e-book, 6 reports and one book. Her research is published in top quality international journals, as well as those that have relevance for communicating within the field. For example, she has published in the Journal of Clinical Oncology, Health Psychology, Oncology Nursing Forum, the Medical Journal of Australia and Cancer. She has 5,121 citations, h-index of 39 (Google Scholar August 2016).

Suzanne has been a Chief Investigator on successful research grants valued at over \$26.5 million including National Health and Medical Research Council, Australian Research Council, Prostate Cancer Foundation of Australia, Cancer Australia, Beyond Blue and Cancer Council Queensland.

Appendix

Publications 2015

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Book chapters 2015

1. Chambers SK, Grassi L, Hyde MK, Holland J, Dunn J. Integrating psychosocial care into neuro-oncology: Challenges and strategies. 2015; 5:41. In T Ownsworth, SK Chambers, HM Dhillon (Eds.). *Frontiers in Oncology, Neuro-Oncology Research Topic: Psychosocial advances in Neuro-Oncology*.
2. Cormie P, Nowak AK, Chambers SK, Galvão DA, Newton RU. The potential role of exercise in neuro-oncology. 2015; 5:85. In T Ownsworth, SK Chambers, HM Dhillon (Eds.). *Frontiers in Oncology, Neuro-Oncology Research Topic: Psychosocial advances in Neuro-Oncology*.
3. Dunn J, Bultz BD, Watson M. Chapter 102: Emerging international directions for psychosocial care. 2015. In JC Holland, WS Breitbart, PB Jacobsen, MJ Loscalzo, R McCorkle (Eds.). *Psycho-Oncology*. Third edition. Oxford University Press.
4. Dwan TM, Ownsworth T, Chambers SK, Walker DG, Shum D. Neuropsychological assessment of individuals with brain tumour: comparison of approaches used in the classification of impairment. 2015; 5:56. In T Ownsworth, SK Chambers, HM Dhillon (Eds.). *Frontiers in Oncology, Neuro-Oncology Research Topic: Psychosocial advances in Neuro-Oncology*.
5. Ono M, Ogilvie JM, Wilson JS, Green HJ, Chambers SK, Ownsworth T, Shum DHK. A meta-analysis of cognitive impairment and decline associated with adjuvant chemotherapy in women with breast cancer. 2015; 5:59. In T Ownsworth, SK Chambers, HM Dhillon (Eds.). *Frontiers in Oncology, Neuro-Oncology Research Topic: Psychosocial advances in Neuro-Oncology*.
6. Ownsworth T, Chambers SK, Dhillon HM. Psychosocial advances in neuro-oncology (Editorial). 2015; 5:243. In T Ownsworth, SK Chambers, HM Dhillon (Eds.). *Frontiers in Oncology, Neuro-Oncology Research Topic: Psychosocial advances in Neuro-Oncology*.
7. Ownsworth T, Goadby E, Chambers SK. Support after brain tumor means different things: family caregivers' experience of support and relationship changes. 2015; 5:33. In T Ownsworth, SK Chambers, HM Dhillon (Eds.). *Frontiers in Oncology, Neuro-Oncology Research Topic: Psychosocial advances in Neuro-Oncology*.

Grants and Awards 2015

Research grants awarded in 2015

Aitken J, Youlden D, Baade P, Green A, Valery P, Gupta S, Hallahan A, Thursfield V. Development and evaluation of Business Rules for the collection of paediatric cancer stage by population registries. Cancer Australia (2015-2016: \$127,446).

Chambers SK, Hyde MK, Ng SK, Scuffham P, Dunn J, Creyton M, Torode J, Stein KD. Celebrate. Remember. Fight back. Episodic volunteering for non-profits. Australian Research Council # LP150100368 (2015-2018: \$221,574).

Kimlin M, Baade P, Youl P. Is vitamin D status at time of melanoma diagnosis associated with stage of tumour? United States Department of Defence #CA140415 (2015-2017: USD\$283,166).

Research grants underway during 2015:

Chambers SK, Dunn J, Ritterband L, Aitken J, Scuffham P, Morris B, Baade P, Youl P. Improving access to psychological services for people with cancer: A randomised controlled trial of an interactive web-based intervention (CancerCope). NHMRC Partnerships Grant #1056756 (2013-2017: \$587,271).

Chambers SK, Smith D, Berry M, Lepore S, Foley E, Occhipinti S, Frydenberg M, Gardiner RA. A randomised controlled trial of a mindfulness intervention for men with advanced prostate cancer. NHMRC Grant #1024989 (2012-2015: \$706,243).

Youl P, Baade P, Garvey G, Aitken J. Addressing variations in outcomes for non-metropolitan women with breast cancer. Cancer Australia (2014-2015: \$122,425).

Research fellowships underway in 2015:

Youl P. The impact of geographical location and socioeconomics on outcomes from breast cancer. NHMRC Early Career Fellowship #1054038 (2013-2016: \$299,564).

Other collaborative research grants awarded or underway in 2015

Jordan S, Pandeya N, Bain C, Youl P, Baade P. Understanding causes of the rising incidence of thyroid cancer – What can mutations in the BRAF oncogene tell us about causes and diagnostic pathways for thyroid cancer? NHMRC Grant #104773 (2013-2015: \$584,521).

Kimlin M, Whiteman D, Lucas R, Sinclair C, Neale R, Ebeling P, Youl P, Gordon L, Janda M. Sun exposure and health. NHMRC Centre of Research Excellence Grant #1001456 (2011-2015: \$2,500,000).

White B, Willmott L, Tilse C, Wilson J, Lawson D, Dunn J, Pearce A. Enhancing community knowledge and engagement with law at the end of life. Australian Research Council # LP140100883. (2015-2017: \$321,527).

Scientific presentations 2015

1. Aitken JF. A project to implement International Consensus Guidelines for collection of paediatric cancer stage by population registries. Australasian Association of Cancer Registries Scientific Meeting, 15 August 2015, Adelaide.
2. Aitken JF. Symposium on health notification. Invited Lecture. University of Queensland MBBS Course, 14 September 2015, UQ St Lucia campus.
3. Aitken JF. Cancer registration in Oceania. International Association of Cancer Registries AGM, 7 October 2015, Mumbai, India.
4. Aitken JF. Hope for the future: conditional survival estimates for childhood cancer in Australia, 2002 to 2011. Poster. American Association for Cancer Research, Advances in Paediatric Cancer Research Conference, 12 November 2015, Fort Lauderdale, USA.
5. Chambers SK. Australian survivorship research in prostate cancer: key targets and challenges. Invited Speaker. American Cancer Society, 2 March 2015, Atlanta, USA.
6. Chambers SK. Prostate cancer support. Invited Speaker. Mt Tamborine RSL, 16 May 2015, Mt Tamborine.
7. Chambers SK. Living well after prostate cancer. Invited Speaker. Ipswich Prostate Cancer Support Group, 21 May 2015, Ipswich.
8. Chambers SK. Survivorship research in a community setting. Invited Speaker. Irish Cancer Society, 28 May 2015, Dublin, Ireland.
9. Chambers SK. Australian survivorship research in a community setting. Invited Speaker. Tumorbiology Centre University of Freiburg, 5 June 2015, Freiburg, Germany.
10. Chambers SK. Improving psychological support. Invited Board Presentation. Prostate Cancer Foundation of Australia, 11 June 2015, Sydney.
11. Chambers SK. Making the case for psychological support. Invited Presentation. 2nd Tolmar UroOncology Symposium, 13 June 2015, Sydney.
12. Chambers SK. It's not just about drugs! Supportive care. Invited speaker. Community Engagement Forum, ANZUP Annual Scientific Meeting, 12 July 2015, Sydney.
13. Chambers SK. Prostate cancer. Invited Session Co-Chair. ANZUP Annual Scientific Meeting, 13 July 2015, Sydney.
14. Chambers SK. Maximising effectiveness in peer support: practical considerations. Invited speaker. World Psycho-Oncology Congress, 30 July 2015, Washington DC, USA.
15. Chambers SK. Coping with aging and cancer: psychosocial factors and geriatric-specific interventions. Invited Panel Member. World Psycho-Oncology Congress, 1 August 2015, Washington DC, USA.
16. Chambers SK. Patient Advocacy: consumers & advocates – adding the “rock & roll” to the practice of contemporary psycho-oncology. Invited Plenary Speaker. World Psycho-Oncology Congress, 1 August 2015, Washington DC, USA.

17. Chambers SK. Developing and evaluating health interventions in chronic disease. Invited Presenter. 50th APS Annual Conference, 29 September 2015, Gold Coast.
18. Chambers SK. Psycho-oncology: the science of care. Invited Keynote Speaker. 50th APS Annual Conference, 1 October 2015, Gold Coast.
19. Chambers SK. Social psychology and health. Invited Lecture. Griffith University Social Psychology Course in the Bachelor of Psychology Program, 22 October 2015, Gold Coast.
20. Cramb SM. Spatio-temporal modelling of cancer data in Queensland using Bayesian methods. Final Seminar presentation. Mathematical Sciences School QUT, 30 March 2015, Brisbane.
21. Cramb SM. Mapping cancer survival: small area estimation, methods and challenges. Invited Speaker. Spatial Statistics, 9-12 June 2015, Université D'Avignon, Avignon, France.
22. Cramb SM, Aitken JF. Mapping cancer: the role of location. Invited Speakers. CRCIS Annual Conference, 25-27 November 2015, Melbourne.
23. Dunn J. The role of peer support in survivorship care. Session Chair. World Congress of Psycho-oncology, 30 July 2015, Washington DC, USA.
24. Dunn J. Consumers and advocates adding the "rock and roll" to the practice of contemporary psycho-oncology! Plenary Chair. World Congress of Psycho-oncology, 31 July 2015, Washington DC, USA.
25. Hyde MK. Translating distress screening into cancer care: phase 1 of an implementation case study. The 12th Behavioural Research in Cancer Control Conference, 12-15 May 2015, Sydney.
26. Hyde MK. Medical help-seeking for sexual concerns in prostate cancer survivors. ANZUP Concept Development Workshop. ANZUP Annual Scientific Meeting, 14 July 2015, Sydney.
27. Hyde MK. ProsCan Partners Study: predicting distress and quality of life for partners of men with prostate cancer up to 5 years after treatment. World Psycho-Oncology Congress, 30 July 2015, Washington DC, USA.
28. Hyde MK. Developing a commitment to cancer control organisations in Relay for Life volunteers from Queensland, Australia. Poster. World Psycho-Oncology Congress, 30 July 2015, Washington DC, USA.
29. Hyde MK. Translating distress screening into cancer care: an implementation case study at Gold Coast University Hospital, Australia. World Psycho-Oncology Congress, 31 July 2015, Washington DC, USA.
30. Hyde MK. Living well after breast cancer. Invited Workshop. 18th Reach to Recovery International Breast Cancer Support Conference, 6 September 2015, Beijing, China.
31. Hyde MK. Sexuality and body image. Session Chair. 18th Reach to Recovery International Breast Cancer Support Conference, 7 September 2015, Beijing, China.

32. Hyde MK. Motivations in volunteering. Invited Plenary. 18th Reach to Recovery International Breast Cancer Support Conference, 8 September 2015, Beijing, China.
33. Hyde MK. Medical help-seeking for sexual concerns in prostate cancer survivors. Gold Coast Health and Medical Research Conference, 3-4 December 2015, Gold Coast.
34. Legg M. Social influence and peer support amongst women with breast cancer. Poster. Gold Coast Health and Medical Research Conference, 3-4 December 2015, Gold Coast.
35. Scott C. Symposium on health notification. Invited Lecture. University of Queensland MBBS Course, 15 September 2015, UQ Ipswich campus.
36. Youl PH. Research in the not-for-profit sector. Invited Lecture. University of Queensland Research Higher Degrees, 4 February 2015, UQ St Lucia Campus.
37. Youl PH. The cancer burden. Invited Lecture. University of Queensland Health Sciences Course, 23 March 2015, UQ Ipswich Campus.
38. Youl PH. Melanoma: update on epidemiology and public health. Invited Speaker. 2nd Global Advances and Controversies in Skin Cancer Consumer Forum, 31 October 2015, Brisbane.
39. Youlden D. Comparison of melanoma incidence and trends among youth under 25 years in Australia and England, 1990-2010. 2nd Global Advances and Controversies in Skin Cancer Conference, 29-31 October 2015, Brisbane.
40. Zajdlewicz L. The 1000 survivor study. The 12th Behavioural Research in Cancer Control Conference, 12-15 May 2015, Sydney.
41. Zajdlewicz L. Psychological distress and locally advanced prostate cancer. World Congress of Psycho-Oncology, 28 July-1 August, Washington DC, USA.
42. Zajdlewicz L. The 1000 survivor study. World Congress of Psycho-Oncology, 28 July-1 August, Washington DC, USA.
43. Zajdlewicz L. Psychological distress and advanced prostate cancer. Prostate Cancer Support Group Meeting, 11 November 2015, Brisbane.
44. Zajdlewicz L. Emotional concerns of cancer survivors. Gold Coast Health and Medical Research Conference, 3-4 December 2015, Gold Coast.

Professional and community activities 2015

Expert advisory committees, scientific panels and working groups

Australian and New Zealand Urogenital and Prostate (ANZUP) Cancer Trials Group, Quality of Life Committee

Asian Pacific Organization for Cancer Prevention (APOCP)

- President
- Regional Chairperson Australasia
- Executive Committee member

Australasian Association of Cancer Registries, Executive Committee

Cancer Australia, Expert Reference Group

Cancer Council Australia, CEO Forum

Cancer Research Malaysia, Scientific Advisory Group

Centre for Prostate Cancer Survivorship Research, Lead Advisory Group member

Co-operative Research Centre for Spatial Information (CRCSI) Health Program, Program Board

International Association of Cancer Registries

- Board member
- Elected representative for Oceania

International Childhood Cancer Staging Guidelines, Implementation Advisory Group

International Psycho-Oncology Society (IPOS)

- Director and Board member
- Secretary

International Population Data for Childhood Cancer Steering Committee

Queensland Cancer Control Safety and Quality Partnership

Queensland University of Technology, Faculty of Health Advisory Committee

Union for International Cancer Control (UICC)

- Director and Board member
- Asia-Pacific Cancer Society Training Grant program (APCASOT) Chair
- Reach to Recovery International Breast Cancer Support Service Chair
- World Leaders Forum meeting
- NCD Task Force member
- Membership Committee member
- Regional Activities Committee member

Conference organising committees

- Organising Committee, IPOS/ASPOS 17th World Congress of Psycho-Oncology jointly with the 12th Annual Conference of the American Psychosocial Oncology Society World Congress, USA, 2015
- Chair of the Board of Management Committee, 18th Reach to Recovery International Breast Cancer Support Conference, Beijing, China, 2015
- Chair, Executive Organising Committee, 8th General Assembly and International Conference of the Asian Pacific Organization for Cancer Prevention (APOCP8), Brisbane, 2016
- Chair, Asia Pacific Cancer Leaders' Summit, Brisbane, 2016
- Organising Sub-Committee 17th Asia-Pacific Prostate Cancer Conference Nursing and Allied Health, Melbourne, 2016
- Scientific committee, 18th International Psycho-Oncology Society (IPOS), Ireland, 2016
- Co-Chair, World Congress on Melanoma, Brisbane, 2017

Professional Memberships

Andrology Australia
Australasian Epidemiological Association
Australasian Society of Behavioural Medicine
Australian and New Zealand Urogenital and Prostate Cancer Trials Group (ANZUP)
Australian Psychological Society (APS)
Australian Society for Medical Research (ASMR)
Clinical Oncological Society of Australia (COSA)
International Epidemiological Association (IEA)
International Psycho-Oncology Society (IPOS)
International Society for Bayesian Analysis
Multinational Association of Supportive Care in Cancer (MASCC)
Psychology Board of Australia
Psycho-Oncology Co-operative Research Group (PoCoG)
Queensland Epidemiology Group
Society for Psychological Study of Social Issues
Society of Australasian Social Psychologists
Statistical Society of Australia
Urological Society of Australia and New Zealand (USANZ)

Reviews and editorial activities

Editorial boards and panels

- Asian Pacific Journal of Cancer Prevention
- European Journal of Cancer Care
- Psycho-Oncology
- Frontiers in Public Health

Review for journals

- American Journal of Clinical Dermatology
- American Journal of Clinical Nutrition
- American Journal of Epidemiology
- American Journal of Preventive Medicine
- Annals of Behavioural Medicine
- Annals of Epidemiology
- Annals of Oncology
- Archives of Dermatological Research
- Australasian Journal of Dermatology
- Australian Family Physician
- Australian Health Review
- Australian Journal of Psychology
- Australian Journal of Rural Health
- Australian and New Zealand Journal of Public Health
- BioPsychoSocial Medicine
- BMC Cancer
- BMC Dermatology
- BMC Family Practice
- BMC Public Health
- BMJ Open
- BMJ Supportive & Palliative Care
- Breast Cancer Research and Treatment
- British Journal of Cancer
- British Journal of Dermatology
- British Journal of Health Psychology
- British Journal of Sports Medicine
- British Journal of Urology International
- British Medical Journal
- Cancer
- Cancer Causes and Control
- Cancer Epidemiology
- Cancer Epidemiology Biomarkers and Prevention
- Clinical and Experimental Dermatology
- Current Cancer Therapy Reviews

- Dermatology
- Environmental Health Insights
- European Journal of Cancer
- European Journal of Cancer Care
- European Journal of Dermatology
- Expert Reviews in Dermatology
- Frontiers in Psychology
- Frontiers in Public Health
- Health and Place
- Health and Quality of Life Outcomes
- Health Education Research
- Health Promotion Journal of Australia
- Health Psychology
- Integrative Cancer Therapies
- International Journal of Cancer
- JAMA Dermatology
- Journal of Applied Social Psychology
- Journal of Clinical Oncology
- Journal of European Academy of Dermatology and Venereology
- Journal of Health Psychology
- Journal of Investigative Dermatology
- Journal of Mixed Methods Research
- Journal of Psychosomatic Research
- Journal of Surgery
- Leukemia and Lymphoma
- Medical Journal of Australia
- Melanoma Management
- Melanoma Research
- Nature Scientific Reports
- Netherlands Organisation for Scientific Research
- Paediatrics
- Patient Education and Counselling
- Plastic Surgery International
- PLOS ONE
- Preventive Medicine
- Protein
- Psychology & Health
- Psychology, Health and Medicine
- Psycho-Oncology
- Quality of Life Research
- Scientific Reports
- Social Behavior and Personality
- Social Science & Medicine
- Supportive Care in Cancer
- World Cancer Research Fund International

Reviews for funding bodies

- Australian Research Council
- Breast Cancer Now
- Cancer Australia
- Cancer Council Western Australia Epidemiology Initiative
- Cancer Research UK
- Cancer Research Wales
- French National Cancer Institute
- Health Research Council New Zealand
- Hong Kong SAR Government
- International Cancer Research Education Technology Transfer Program, UICC
- Italian Association for Cancer Research
- National Health and Medical Research Council
- Queensland Nursing Council
- The Research Fund for the Control of Infectious Diseases (RFCID) / The Health and Health Services Research Fund (HHSRF), Hong Kong

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Fortitude Valley Qld 4006
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BUNDABERG

Ground Floor
312 Bourbong Street
Bundaberg West Qld 4670
T: 07 4150 4500

CAIRNS

169 Aumuller Street
Bungalow Qld 4870
T: 07 4047 5500

GOLD COAST

1 Short Street
Southport Qld 4215
T: 07 5503 3700

MACKAY

97 Victoria Street
Mackay Qld 4740
T: 07 4842 2000

ROCKHAMPTON

43 Upper Dawson Road
Rockhampton Qld 4700
T: 07 4932 8600

SUNSHINE COAST

Big Top Shopping Centre
(Outside Big Top)
Shops DA1 & DA2
Duporth Avenue
Maroochydore Qld 4558
T: 07 5451 6000

TOOWOOMBA

Shop 7
High Street Shopping
Centre
52 High Street
Rangeville Qld 4350
T: 07 4690 5800

TOWNSVILLE

24 Warburton Street
North Ward Qld 4810
T: 07 4796 8400

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