



Sydney Local Health District Research Strategic Plan

2018–2023





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Contents

FOREWORD	04
SLHD RESEARCH STRATEGY AT A GLANCE	05
Vision	
Mission	
Strategic directions	
INTRODUCTION	07
Why Research is at the core of what we do	
Research in Sydney Local Health District	
What we have achieved	
The Research Policy Context	
The Key Drivers for change in research:	
Governance and implementation of the Plan	
STRATEGIC DIRECTION ONE: TO INVEST IN AND SUSTAIN OUR RESEARCH CAPACITY ACROSS ALL DISTRICT FACILITIES, PROFESSIONS AND DISCIPLINES.	12
Priority 1.1: Ensure consumer participation and community involvement in research	
Priority 1.2: Develop state-of-the-art shared infrastructure	
Priority 1.3: Develop District-wide research leadership and support services	
Priority 1.4: Develop and increase access to quality research education and capacity building programs	
Priority 1.5: Sustain and grow our world-class collaborations	
STRATEGIC DIRECTION TWO: TO CREATE KNOWLEDGE BY LEADING QUALITY BIOMEDICAL, CLINICAL, HEALTH SERVICES AND POPULATION HEALTH RESEARCH	19
Priority 2.1: Strengthen high quality research, with a focussed interdisciplinary and collaborative approach	
Priority 2.2: Harness the potential of clinical and population health data to inform research	
Priority 2.3: Enhance translational research	
Priority 2.4: Expand clinical trials capacity and participation	
Priority 2.5: Support a quality approach to research ethics and governance	
STRATEGIC DIRECTION THREE: TO IMPLEMENT KNOWLEDGE BY RAPIDLY TRANSLATING RESEARCH INTO BEST PRACTICE.	25
Priority 3.1: Integrate the practice of implementation science across all settings in the District	
Priority 3.2: Evaluate to ensure effective implementation of research evidence	
APPENDIX 1: SYDNEY LOCAL HEALTH DISTRICT PROFILE	30
APPENDIX 2: RESEARCH DEPARTMENTS ACROSS SYDNEY LOCAL HEALTH DISTRICT	31
APPENDIX 3: PLANNING PROCESS	31

Foreword

Health care is changing, and so are the challenges our health services face in overcoming disease, reducing health disparities and meeting the needs and expectations of our consumers and their communities. To face these challenges the Sydney Local Health District, over the next five years, will support our people to pursue world-class research and deliver evidence based care, underpinned by high quality research capabilities and state-of-the-art research infrastructure.

Our District will lead the way in creating and implementing research which is driven by, and tailored to our consumers' needs and community expectations. It will be informed by real-time meaningful data, supported by cutting-edge digital infrastructure and technologies, within new service models where integrated care thrives.

The District proudly celebrates the significant research achievements of the previous Sydney Local Health District Research Strategic Plan 2012 – 2017, these have been crucial in laying the foundations from which we have made incredible advances in novel approaches to therapies, drug delivery, surgical treatments, diagnosis, disease management and disease prevention. However many research challenges remain in bringing these health innovations to the patient.

This new District Research Plan will place us at the forefront of developing and implementing the robust evidence base which drives innovation in care by delivering on the **Sydney Local Health District Research Plan 2018-2023 Strategic Directions:**



1. To **invest** in and **sustain** our research capacity across all Sydney Local Health District facilities, professions and disciplines.
1. To **create knowledge** by leading quality biomedical, clinical, health services and population health research.
1. To **implement knowledge** by rapidly translating research into best practice and policy.

Our focus for this plan is to strengthen biomedical, clinical research including clinical trials, health services research, population health research, translational research, and implementation science that is driven by the priorities of our health services and the communities they serve. Through our strong partnerships and collaborations with our local Medical Research Institutes and Universities, and further supported by Sydney Research and Sydney Health Partners, the District will continue to support progress in pure discovery research.

During the development of this plan we have heard many passionate and reasoned voices which have provided insightful and practical ideas to improve the delivery of cutting-edge research to inform health care. I would like to thank all of those who contributed and look forward to working with you all on the implementation of the new District Research Plan. The Plan will be used as a framework from which our District will lead, collaborate and contribute to major advances in fighting cancer, dementia and diseases of aging and chronicity, infectious diseases, and a host of other pressing health challenges that will ensure the continued delivery of world-class research, health care and improved health and wellbeing for the community and society at large, now and into the future.

A handwritten signature in black ink, appearing to read 'Teresa Anderson'.

Dr Teresa Anderson AM
Chief Executive,
Sydney Local Health District

A handwritten signature in black ink, appearing to read 'Ron Phillips'.

Hon. Ron Phillips AO
Chair,
Sydney Local Health District

RESEARCH STRATEGY AT A GLANCE

01. Vision

To be a world leader in research which drives excellence in healthcare and ultimately improves the health and wellbeing of the community, while generating social and economic benefits.

02. Mission

To achieve our vision, research must be valued by all, including our community, as a central driver of healthcare, policy and program innovation, which is recognised nationally and internationally. Our vision is underpinned by a commitment to the following *principles* (1):

QUALITY

Quality research has significant potential benefit, not only based on its contribution to knowledge and expertise, but to its beneficial impact on social and individual health and wellbeing. Quality research conforms to nationally agreed research ethics standards, and is sensitive to consumer needs and community perspectives.

INTEGRITY

Public confidence and trust in the integrity and value of research in health delivery is paramount. Ethical conduct is more than simply doing the right thing. It involves acting in the right spirit, out of respect and concern for others; this includes abiding by the values of research merit, justice and beneficence. Respect requires having regard for the welfare, beliefs, perceptions, and cultural heritage of those involved in research.

EQUITY

Equity in research is the fair distribution of the benefits and burdens of research, and in the fair treatment of participants. While benefit to humankind is an important result of research it also matters that benefits of research are achieved through just means, and involve no unjust burdens for the participants and to the wider community and contribute to societal and community wellbeing.

03. Strategic direction

TO REALISE OUR VISION OUR STRATEGIC DIRECTIONS ARE:

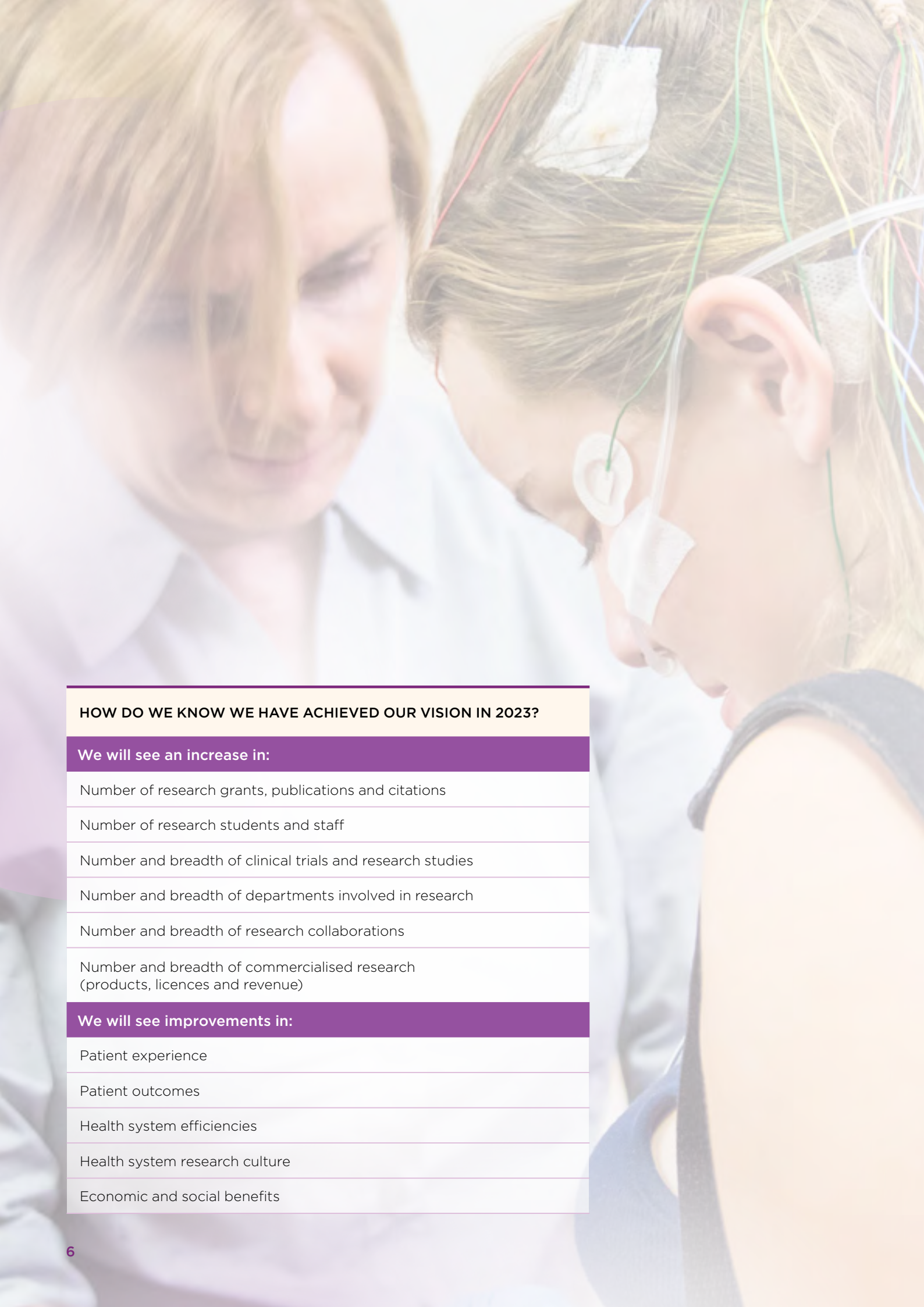
To *invest* in and *sustain* research capacity across all District facilities, professions and disciplines.

To *create knowledge* by leading quality biomedical, clinical, health services and population health research.

To *implement knowledge* by rapidly translating research into best practice and policy.

WE WILL ACHIEVE OUR STRATEGIC DIRECTIONS BY CONCENTRATING ON THE FOLLOWING PRIORITY AREAS:

1.1	Ensure consumer participation and community involvement in research	2.1	Strengthen high quality research, with a focused interdisciplinary and collaborative approach	3.1	Integrate the practice of implementation science across all settings in the District		
	Develop state-of-the-art shared infrastructure		2.2			Harness the potential of clinical and population health data to inform research	
	Deliver District-wide research leadership and support services	2.3	Enhance translational research				
	Develop and increase access to quality research education	2.4	Expand clinical trials capacity and participation			3.2	Evaluate to ensure effective implementation of research evidence
	1.5	Sustain and grow our world-class collaborations	2.5				



HOW DO WE KNOW WE HAVE ACHIEVED OUR VISION IN 2023?

We will see an increase in:

- Number of research grants, publications and citations
- Number of research students and staff
- Number and breadth of clinical trials and research studies
- Number and breadth of departments involved in research
- Number and breadth of research collaborations
- Number and breadth of commercialised research (products, licences and revenue)

We will see improvements in:

- Patient experience
- Patient outcomes
- Health system efficiencies
- Health system research culture
- Economic and social benefits

Introduction

WHY RESEARCH IS AT THE CORE OF WHAT WE DO

In the context of this plan, research is defined very broadly as:

“Health and medical research which spans a pipeline from concept to laboratory through to translation, clinical application and community benefit. This research answers questions about causes, prevention, management and the impact of disease, and about how best practice healthcare and policy can be effectively implemented” (2).

Sydney Local Health District is committed to fostering research for the following compelling reasons:

- Medical breakthroughs are associated with improved health and wellbeing;
- Research fosters policy, service development and health care which is evidence-based;
- A strong research ethos is an important factor in attracting and retaining high quality staff; and
- A positive research culture supports a valued and sustainable teaching and training environment.

RESEARCH IN SYDNEY LOCAL HEALTH DISTRICT

Sydney Local Health District has a long and proud history of health and medical research across the healthcare continuum; with more than 60 departments involved in research - from the newborn care unit at Royal Prince Alfred Hospital to research in the elderly at the Centre for Education and Research in Aging at Concord Repatriation General Hospital. Scientific research also occurs across populations at Sydney Dental Hospital where oral health is being integrated into general health through an interdisciplinary evidence-based approach.

Research has also flourished across settings and disciplines from community health; developing targeted and universal community-based approaches implemented within a research framework, to population health; supporting staff to undertake action research to address health inequity. Research across the District is increasing the capabilities across our medical, nursing and allied health workforce and it is clear that our success and strength is attributed to this outstanding and dedicated workforce.

Researchers across District facilities published over 1,470 articles annually, with 570 clinical trials underway and approximately \$260 million awarded in grants. There are extensive research

collaborations between staff in the District, the medical research institutes that have developed within the boundaries of the District and the University of Sydney extending to national and international collaborations.

The interface between the District, the University of Sydney and the local medical research institutes is complex. Many of our senior researchers are specialist clinicians at both Royal Prince Alfred Hospital and Concord Hospital, while also lecturers at The University of Sydney. Their direct and personal experience with patients inspires their work to improve care and save lives. The close ties between the University and District mean our scientists are not isolated from the people who are affected by the diseases we are working to overcome.

There is a long history, and a continuing strong appetite for research training in the District, both in the completion of formal PhDs, Masters and clinical research training for staff at many levels – supported by the District Clinical Research Centre, established in 2014 and the Human and Animal Research Ethics Committees at Royal Prince Alfred and Concord Hospitals, which are two of the largest and most highly regarded in NSW.

Health and medical research institutes within the Sydney Local Health District boundaries are the:

- ANZAC Research Institute
- Asbestos Diseases Research Institute
- Baird Institute
- Boden Institute
- Bosch Institute
- Brain and Mind Centre
- Centenary Institute of Cancer Medicine and Cell Biology
- Centre for Education and Research on Ageing – Ageing and Alzheimer’s Institute
- Charles Perkins Centre
- Chris O’Brien LifeHouse
- Concord Centre for Cardio-metabolic Health in Psychosis
- George Institute for Global Health
- Heart Research Institute
- Melanoma Institute of Australia
- NHMRC Clinical Trials Centre
- Professor Marie Bashir Centre
- RPA Institute of Academic Surgery
- Surgical Outcomes Research Centre
- Woolcock Institute of Medical Research

Our Achievements

Over the last 5 years there has been considerable progress in the amount and quality of health and medical research undertaken in the District. We have seen an increase in the depth of research expertise and capability due to the development and retention of quality staff and infrastructure that support research. Key achievements include:

Appointment of the Director of Research to oversight the implementation of the District Research Strategic Plan 2012-2017 and advocate for increased capacity for research across the District.

Launch of the Clinical Research Centre (CRC) in 2014, to provide district-wide support to our researchers in areas such as statistical analysis, data management, business/finance advice, training and clinical trials support. In 2017, the CRC provided over 2,000 consultations to researchers and delivered 54 training courses. The CRC has been listed as co-author on 30 submitted publications/abstracts.

Establishment of Sydney Research in 2013, as a cooperative alliance between the District, University of Sydney and medical research institutes. Sydney Research has 16 founding member organisations who collaborate through knowledge, resource and capabilities sharing across the Districts' campus to ensure laboratory discoveries benefit patients at the bedside.

Development of Sydney Health Partners (SHP) in 2015, through a partnership between Sydney Research, Western Sydney Local Health District, Northern Sydney Local Health District and Sydney Children's Hospital Network (Westmead). This alliance was recognised as one of Australia's first NHMRC Advanced Health and Research Translation Centres.

Establishment of the Institute of Academic Surgery at Royal Prince Alfred Hospital in 2014, as a collaboration between RPA Hospital and the University of Sydney to lead surgical practice and patient care with the aspiration to become the primary hub of surgical research and education in the country.

Development of the Charles Perkins Centre RPA Clinic, a collaborative model between the Charles Perkins Centre and the District to deliver on projects across specialties including cardiovascular and renal disease, endocrinology, diabetes and obesity. Over 1,700 participants have participated in studies in the last year.

The District forming a strong partnership with the Chris O'Brien LifeHouse, a world-class cancer treatment, teaching and research facility providing integrated and research driven care to patients and their families.

Launch of the Professor Marie Bashir Centre in 2014, designed to be a place of healing and recovery for people with mental health issues, with research undertaken in collaboration with University of Sydney.

The inaugural Sydney Innovation and Research Symposium held in August 2013. The fifth annual Symposium held in June 2017, set a benchmark in leading health and medical research conferences with over a thousand participants gathering across the now three day event; including the Big Idea showcasing novel ideas on the brink of commercialisation, the Clinical Trials Showcase and Sydney Robotics Summit bringing together leaders in their fields to discuss advancements in health care.

Advancement of Nursing and Allied Health in research through the appointment of conjoint professorial positions including two professorial positions in Allied Health and two in Midwifery and Nursing.

Establishment of the Sydney Local Health District Public Health Observatory and the Health Equity and Research Development Unit to provide accessible and timely population health information to clinicians, managers and the community about the distribution of disease, injury, health risk and health inequities in the District, and research within which to reduce these disparities.

The District's continued investment in the Concord Cancer Centre delivering quality care led by cutting-edge research. The Centre has two well-established clinical trials departments in Medical Oncology and Haematology where patients have access to the latest treatments.

The redesign of the Healthy Families, Healthy Children program of services and resources that support evidence-based sustainability of population based approaches to care for children and families.

Our Research Policy Context

Health and medical research in the District is undertaken in a complex environment. Current trends in research investment and policy development for research are being driven by the priorities of our consumers and health services. The Sydney Local Health District Research Strategy 2018-2023 is informed by the following policies, plans and collaborations:

The *National Health and Medical Research Council (NHMRC) Corporate Plan 2017-2018* (3) aims to:

- fund high quality health and medical research and build research capability across the country;
- support the translation of health and medical research into better health outcomes; and
- promote the highest ethical standards in health and medical research.

The *Australian Medical Research and Innovation Strategy 2016-2021* (2) aims to deliver priority focused research funded through the Medical Research Future Fund. The Strategy is underpinned by the following strategic platforms:

- Strategic and international horizons;
- Data and infrastructure;
- Health services and systems;
- Capacity and collaboration;
- Trials and translation; and
- Commercialisation.

The *NSW Government Response to the NSW Health and Medical Research Strategic Review 2012-2022* (4) made recommendations to improve the way the NSW Government manages research resources, including: supporting greater collaboration between research organisations; having a priority driven approach to research; and focusing on translation of research into better patient care and health outcomes.

The *NSW Health State Plan: Towards 2021* (5) is consistent with the direction of the NSW Health and Medical Strategic Review and committed to Strategy two: Supporting and harnessing research and innovation implemented through the establishment of The Office for Health and Medical Research to deliver on recommendations from the NSW Health Strategic Review by:

- Working with other Ministry branches, pillar organisations and local health districts to deliver key programs;
- Facilitating engagement of health and medical research stakeholders;
- Providing a supportive policy framework;
- Administering funding programs that support research infrastructure and innovation; and
- Improving health and medical research administration and supporting clinical trials.

Sydney Local Health District Strategic Plan 2018-2022 (6) is committed to cultivating high quality research to ensure a culture of enquiry and innovation in clinical practice – and is a priority area of the District's Strategic Plan 2018-2022, with following research goals:

- Drive a culture committed to research informed by evidence and the consumer experience;
- Rapidly translate research into practice; and
- Undertake collaborative research.

Sydney Health Partners was established through a partnership between Sydney Research, WSLHD, NSLHD and SCHN (Westmead), as per the NSW ten-year strategic plan for health and medical research recommendation to enhance the role for research hubs fostering translation, innovation and research capacity (7). The Sydney Health Partners vision is to transform the way research improves patient care and public health in our health system through strong collaboration, inclusive thinking and an overriding commitment to meet the health needs of the community now and into the future.

Sydney Research Strategic Plan 2014-2019 (8) aims to bring together leading researchers within a cooperative group to optimise innovation, research opportunities and healthcare outcomes by delivering on four key domains:

- Advancement of a powerful research culture;
- Optimising capabilities;
- Sustainable infrastructure and growth; and
- Prominence and communications.

Key Drivers for change in Research:

Policy and government funding changes for research reflect the increasing importance of collaboration across health services, research organisations, industry and community to ensure effective research translation. Current priority focused research funded by the Medical Research Future Fund (MRFF), the Translational Research Grants Scheme (TRGS) and Medical Devices Fund support the discovery, translation and commercialisation of new medicines and technologies, and enable innovative treatments and cures.

Research across the District is partly driven by the policies and priorities related to research grants and the National Health Priority Areas. The District will remain at the forefront of delivering on these national research priorities while demonstrating an increased capacity to drive our local level research priorities.

Sydney Local Health District will increase capacity in delivering on national, State and local research priorities over the next 5 years by raising research standards and enhancing the understanding and behaviours of our researchers, clinicians, consumers and community by creating and implementing research that is:

HEALTH INFORMATICS DRIVEN

The unparalleled availability of biomedical and population health data, and the enabling technology, including innovative data linkage, is driving broader and more sophisticated analytics use to better support decision making across the health system. New IT platforms and software will also be harnessed to ensure up-to-date evidence reaches all of our workforce and other relevant audiences in the most effective way and enhances the experience of consumers of evidence-based healthcare.

CONSUMER INFORMED AND PARTICIPATED IN AT EVERY LEVEL

Increasingly, consumers play critical roles in their own care, from monitoring their health with wearable devices to shaping the direction of research on the diseases that affect them. The importance of involving consumers and communities in research, at every level, is well recognised and is likely to enhance the relevance of the research, improve participation rates, and facilitate the dissemination and uptake of findings.

COLLABORATIVE

In Australia, grant schemes such as NHMRC Partnership Centres, NHMRC Partnership Projects, the Medical Research Future Fund and Translational Research Grants Scheme emphasise the importance of collaborative research involving the consumer, academics, disciplines involved in health service delivery and industry. The sharing of information, resources and collaboration through shared projects to drive innovation will create shared value and opportunities to grow and pursue research in a number of strategically chosen areas.

EMBEDDED IN INTEGRATED CARE

Integrated care will provide opportunities to undertake research across a wide range of different services which are typically delivered through multi-level and multi-faceted approaches across several sites. Developing integrated care based on a strong research framework will allow our District to make evidence-based decisions on delivering sustainable healthcare into the future.

ENABLED BY NEW TECHNOLOGIES AND DEDICATED INFRASTRUCTURE

Smart devices, portable diagnostics, implant drug delivery, digital therapeutics, genome sequencing and machine learning have and will continue to have a transformative effect on the research base from which health care evolves (9). Ensuring the integration of new technologies into health service building and service developments will provide for exponential increases across research capabilities and also for individuals to manage their own healthcare.





Governance and implementation of the Plan

The implementation of the Research Strategic Plan 2018-2023 will require leadership across all levels of the District and across all multidisciplinary groups. The high-level initiatives detailed in this plan will deliver on the three strategic directions over a five year period.

GOVERNANCE

Primary governance for this plan and leadership for its implementation lies with the Sydney Local Health District Board, which is ultimately responsible for ensuring processes and governance structures that embody the principles of research merit and integrity.

In order to achieve maximum results, implementation of the Plan will be overseen by the Board Committee on Education and Research which has delegated responsibility for oversight of the three strategic directions of the plan.

The District Research Director has key responsibility to develop and support research across the District and will be responsible for implementing actions within each of the of the Research Strategic Plan 2018-2023 priority areas. The Research Director will need to draw on the expertise across the District, which are identified under each initiative within the plan, to implement this plan.

MONITORING AND EVALUATION

The District Research Director will track performance and inform implementation of the plan, including refinement of the initiatives, based on the indicative timeframes outlined in the plan. Expected outcome reports will be completed at the short term (0 to 12 months), medium term (1 to 3 year) and long term (4 to 5 year) and will be provided to the Clinical Quality Council and Board Committee on Education and Research.

01. Strategic Direction One

To *invest in* and *sustain* our research capacity across all District facilities, professions and disciplines.

Priority 1.1: Ensure consumer participation and community involvement in research

Health and medical research which spans a pipeline from concept to laboratory through to translation, clinical application and community benefit. This research answers questions about causes, prevention, management and the impact of disease, and about how best practice healthcare and policy can be effectively implemented” (2). A positive research culture supports a valued and sustainable teaching and training environment.

Healthcare is a significant social, economic and political issue and there is evidence in Australia that consumers are wanting to be more engaged (10). Research and innovation have wide-ranging effects on the lives of everyone, yet only a small group of people make important decisions about what is prioritised.

This lack of diversity narrows the kinds of questions we ask, the kinds of problems we think of tackling and the ways in which we go about doing our work (11).

WHAT THE EVIDENCE TELLS US:

Innovation is informed by the needs of the consumers and the knowledge of the clinicians. A sustainable interface between our clinician researchers and the community is best achieved through a meaningful partnership with consumers, communities and their primary care providers. Key focus areas for the District to better involve consumers, and the wider community in research include:

- Developing new models of care which ensure that all patients are part of research from its design, development and evaluation e.g. community involvement in the research governance structure, targeted communication and engagement of under-represented community members, e.g. culturally and linguistically diverse, Aboriginal and low socioeconomic residents;
- Undertaking research that directly addresses the challenges faced by our community and health care providers through combined consultations with patients, carers, clinicians and researchers and online service to identify research questions and consumers interested in being involved in research (12); and
- Improving communication and promotion of research to the community by better linking research outcomes with their impacts on the community and promoting the lived experience of research from the consumer perspective, through various tailored communication and marketing strategies.

WHAT WE WILL DO:		
Initiatives	To achieve the initiative the <i>Research Director</i> will be supported by:	Time frame
Performance Measures:		
<ol style="list-style-type: none"> 1. Increase in consumer and community support for research and its impact 2. Increase in consumer knowledge of, and participation in research 		
Ensure research is a standing item on the current and any new District/Facility consumer councils	Manager Community Participation	Short term (0-12 mths)
Continue to support consumer involvement and representation in the research governance structure	SLHD Executive Research Manager	Short term (0-12 mths)
Develop a community engagement strategy for research in the District to ensure patients, families and patient advocacy groups are aware of, understand and can contribute to research at every level	Director Strategic Relations and Communication; Director Media; Manager Community Participation	Med term (1-3 yrs)
Explore opportunities to improve consultations with patients, carers, clinicians and researchers to develop research priority areas; including online platform for consumers and clinicians to identify research questions or online registry for consumers interested in being involved in research	Director Strategic Relations and Communication; Director Media; Manager Community Participation; SLHD Executive Research Manager	Med term (1-3 yrs)

Priority 1.2: Develop state-of-the-art shared infrastructure

Investing in world-class research infrastructure is critical to our District's research standing. Knowledge creation increasingly requires access to innovative capital equipment, digital technologies and expert operators.

The *NSW Government Response to the NSW Health and Medical Research Strategic Review 2012-2022* (4) highlighted a State commitment to enhancing shared research infrastructure, assets, systems and processes "to create efficiencies and explore cutting edge technology and new developments that have the potential to redesign health care".

WHAT THE EVIDENCE TELLS US:

Purpose-built infrastructure needs to be designed and organised to stimulate new and higher levels of connectivity, collaboration and innovation. This will enable our research and education to adapt and flourish as an outcome of efficiently co-locating appropriately resourced interdisciplinary researchers and teaching staff.

The District's ability to access state-of-the-art shared infrastructure ensures fully-equipped research facilities, including: biobanking, cellular imaging, preclinical and clinical imaging, cytometry, genomics and proteomics, flexible teaching and learning spaces, and proximity to the clinical settings and end user – the consumer.

Information and Communication Technology (ICT) is fundamental to supporting advances in evidence-based clinical care. The District's ICT strategy aims to support clinical and research excellence through: prioritising the support for healthcare research, clinical trials and evidence based practice (13).

A range of applications, patient portals, social media strategies, interactive websites and monitoring devices can be designed to promote health and keep people out of hospital. Providing community staff with mobile devices, tablets with electronic medical record access, and telehealth all promise to improve the integration and efficiency of care and enable patients to remain at home for their care.

WHAT WE WILL DO:

Initiatives	To achieve the initiative the <i>Research Director</i> will be supported by:	Time frame
Performance Measures:		
1. Increased access to world-class research infrastructure at SLHD - shared across the District, state and country		
Support and utilise the increased biobanking and data linking capacity available through the new NSW Health State-wide Biobank Facility	SLHD Chief Executive; Chief Information Manager; Chief Medical Information Officer	Med term (1-3 yrs)
Support the development of research infrastructure at Concord Hospital through the redevelopment	SLHD Chief Executive; CRGH General Manager	Med term (1-3 yrs)
Extend the model of the RPA Institute of Academic Surgery at Concord Hospital to promote collaborative surgical research	CRGH General Manager; Executive Director, RPA Institute of Academic Surgery	Med term (1-3 yrs)
Ensure animal facilities are of the highest standard throughout the District	SLHD Chief Executive; Director Operations; SLHD Animal Welfare Committee	Long term (4-5 yrs)
Plan and construct purpose built research facilities on the Royal Prince Alfred Hospital campus with tertiary hospital, medical research institute and university presence that facilitates more efficient shared infrastructure utilisation	SLHD Chief Executive; RPA General Manager; Executive Director Sydney Research	Long term (4-5 yrs)
Ensure all capital redevelopments in the District incorporate opportunities to physically integrate research and healthcare	SLHD Chief Executive; Director Operations; Director Capital Assets, Property and Engineering; Director Planning	Long term (4-5 yrs)

Priority 1.3: Develop District-wide research leadership and support services

The District is committed to driving a culture that identifies research and its implementation as “everybody’s business”. Evidence-driven governance, supported by fair and transparent processes and support services will ensure that across all levels of the system research, and a strong evidence base for decision making are entrenched in direct patient level care, policy and planning, corporate and ancillary services and intellectual property.

WHAT THE EVIDENCE TELLS US:

Introducing research support services that enhance hospital-based, community-based, population health and primary care research is a complex and evolving challenge. Much of this hinges on the introduction of quality digital technology and information system capabilities (9).

WHAT WE WILL DO:		
Initiatives	To achieve the initiative the <i>Research Director</i> will be supported by:	Time frame
Performance Measures: <ol style="list-style-type: none"> Increase in staff capacity to undertake research (incl. experience and satisfaction measures) Increased efficiency in the District’s research administrative support functions 		
Enhance and expand the Clinical Research Centre services across the District: Establish a strong consultancy model for services including biostatistician, data management, health economics and community involvement	SLHD Executive Research Manager; Manager Community Participation	Short term (0-12 mths)
Implement practical measures to increase access to essential research supportive software e.g. qualitative and quantitative statistical programs (NVivo, SPSS), reference manager software (ENDNOTE) and online journal datasets etc.	SLHD Executive Research Manager	Short term (0-12 mths)
Enhance the District’s capacity to report on its research performance, including developing staff experience measures and systems to capture these measures	SLHD Executive Research Manager	Short term (0-12 mths)
Enhance the District Intellectual Property committee and District policies to encourage proper patenting and intellectual property protection	SLHD Chief Executive; SLHD IP Committee	Med term (1-3 yrs)
Further develop and measure KPIs with research-related outcomes for senior executive	SLHD Chief Executive	Med term (1-3 yrs)
Develop capacity for the Clinical Research Centre to provide developmental support for research applications to diversified funding sources (e.g. MRFF, NHMRC, TRGS etc.) and access to a defined budget for research support activities	SLHD Executive Research Manager	Med term (1-3 yrs)
Develop the electronic medical record governance and information management framework to further support District research capacity	SLHD CE; Chief Information Officer	Med term (1-3 yrs)
Develop efficient recruitment processes that define position descriptions and classifications for staff undertaking research	Director Workforce Services	Med term (1-3 yrs)
Improve efficiencies and transparent processes for research-related financial administration	Director Finance	Med term (1-3 yrs)
Develop a research communication strategy with a focus on an up-to-date website supported by social media	Director Strategic Relations and Communication	Med term (1-3 yrs)
Develop a coordinated and sustainable fundraising model to support District research priorities	SLHD Chief Executive; Director Partnerships	Long term (4-5 yrs)

Priority 1.4: Develop state-of-the-art shared infrastructure

WHAT THE EVIDENCE TELLS US:

Investments in research support tools, training and education are essential to facilitate new discoveries and to move promising discoveries in basic science and clinical research into use in clinics, hospitals, and homes (15). Health and medical research depends largely on workforce talent. Research training should be integral to the education of all health service providers; through opportunities such as the Master Health Service Management, our aspiring early and mid-career clinician researchers and elite level researchers and be one of the key performance indicators for the health services and their senior management.

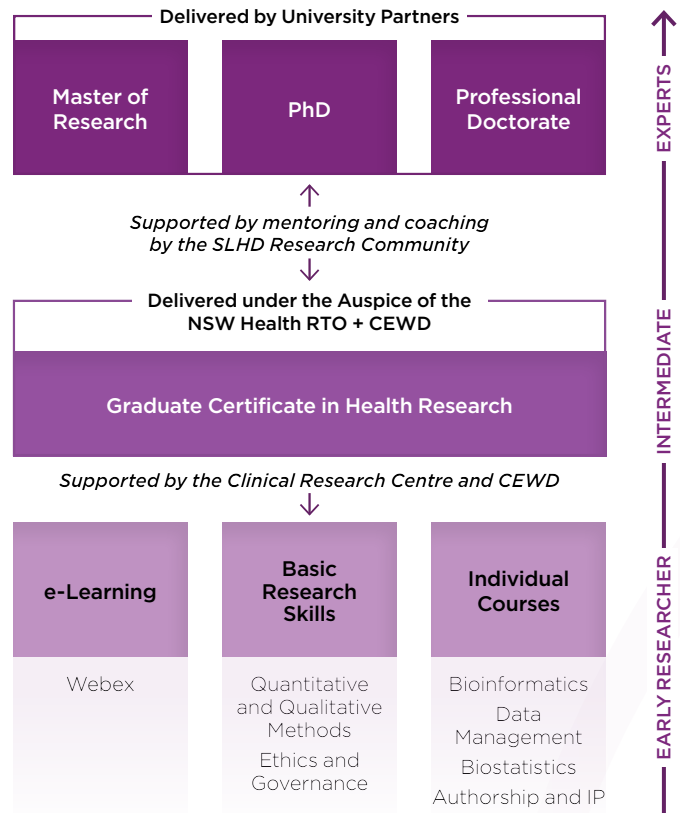


Figure 4: Sydney Local Health District Research Education Framework

WHAT WE WILL DO:

Initiatives	To achieve the initiative the Research Director will be supported by:	Time frame
Performance Measures:		
1. Increase in staff capacity to undertake research (staff experience and satisfaction measures)		
Expand the research education pathways to support early and intermediate researchers within the District through mixed modality courses in research methods including the Graduate Certificate in Health Research and the Clinical Research Centre Courses	Director CEWD; SLHD Executive Research Manager; SLHD Research Education Committee	Short term (0-12 mths)
Promote attendance at the Sydney Research STRIVE research impact and commercialisation capacity building programs	Executive Director Sydney Research	Short term (0-12 mths)
Continue to provide electronic medical record training and support to assist clinicians and researchers to perform complex information queries across systems	Chief Information Officer (eMR Team)	Short term (0-12 mths)
Provide training and support for our research mentors	Director CEWD; SLHD Executive Research Manager; SLHD Research Education Committee	Med term (1-3 yrs)
Develop strategies to evaluate the impact of research education delivered in the District	Director CEWD; Executive Director Sydney Research; SLHD Executive Research Manager	Long term (4-5 yrs)
Ensure all capital redevelopments in the District incorporate opportunities to physically integrate research and healthcare	SLHD Chief Executive; Director Operations; Director Capital Assets, Property and Engineering; Director Planning	Long term (4-5 yrs)

Priority 1.5: Sustain and grow our world-class collaborations

Collaborative partnerships are core to a strong and sustainable research agenda for the District. The sharing of information and resources, and shared projects will create opportunities to grow and pursue research in strategically chosen areas, that are locally, nationally and internationally relevant.

Figure 2: Sydney Local Health District is a key member of: **Sydney Health Partners** — one of the first four National Advanced Health Research Translation Centres; and **Sydney Research** — a Health, Research and Education super precinct.



Figure 2: Sydney Local Health District, Sydney Health Partners and Sydney Research

WHAT THE EVIDENCE TELLS US:

Collaborative research is important for addressing the social, environmental and economic determinants of health. The formation of geographically defined research hubs such as Sydney Research and Sydney Health Partners, support cooperative organisations that bring together local health districts and research enterprises such as independent institutes and universities—is enabling the sharing of facilities and ideas to stimulate new local and international partnership research, for example through the newly launched Sydney Imaging allowing access to a range of biomedical imaging technologies, artificial intelligence and robotics to support pioneering surgical practice.

Maximising the contribution of research to Aboriginal health is of particular significance for our District and will require strong collaborative partnerships to ensure the needs and interests of Aboriginal people are embedded into the planning and conduct of all research. This is further supported through the implementation of the NSW Aboriginal Health Impact Statement, which supports ethical and culturally sensitive research that is specific to Aboriginal people, and building workforce capability to undertake research in Aboriginal health (16).

WHAT WE WILL DO:

Initiatives	To achieve the initiative the <i>Research Director</i> will be supported by:	Time frame
Performance Measures: <ol style="list-style-type: none"> 1. Increase in collaborative research undertaken 2. Increase in breadth of collaboration members 		
Build our research partnerships, through Sydney Research and Sydney Health Partners , with the University of Sydney and medical research institutes to increase collaborative district, national and international research funding opportunities	Executive Director Sydney Research; Executive Director Sydney Health Partners	Med term (1-3 yrs)
Continue to develop active Aboriginal Health research collaborations with key stakeholders and the local community, including the Sydney Metropolitan Local Aboriginal Health Partnership and Redfern Aboriginal Medical Services	Chief Executive SLHD; Director Aboriginal Health; Clinical Director Public Health	Long term (4-5 yrs)
Continue to support the development and evaluation of collaborations across the Charles Perkins Centre , Chris O'Brien LifeHouse , Professor Marie Bashir Centre and Brain and Mind Centre	Chief Executive SLHD; Director RPA Clinical Research Facility Executive Director Sydney Research	Long term (4-5 yrs)
Collaborate with the universities, government agencies, community groups and industry to further develop the health and research knowledge hubs within the District	Chief Executive SLHD; Executive Director Sydney Research; Director Planning	Long term (4-5 yrs)
Work in collaboration with Central and Eastern Sydney Primary Health Network to develop primary care research	Chief Executive SLHD; CEO CESPHN; Director Clinical Services Integration	Long term (4-5 yrs)



02. Strategic Direction Two

To *create knowledge* by leading quality biomedical, clinical, health services and population health research

Priority 2.1: Strengthen high quality research, with a focused interdisciplinary and collaborative approach

The District is committed to enhancing interdisciplinary research and supports benchmarks that value collaborative approaches while complementing the traditional benchmarks for academic success that focus on individual accomplishments (e.g. publications, grants).

The 2012 NSW Strategic Review of Health and Medical Research (33) outlined a vision of better health through research and emphasised the importance of strong links between **biomedical, clinical, health services and population health research**. Through our **collaborative partnerships**, and the Districts commitment to consumer-driven research the District is well-placed to deliver on a number of priority areas, including Acute Hospitals, Community & Outpatient Care, Chronic Disease (incl. Sexually Transmitted Infections), Mental Health, Aged Care, Cancer Care, Aboriginal Health and Children and Families.

WHAT THE EVIDENCE TELLS US:

Interdisciplinary research gains depth and breadth from a broader mix of researchers across health and other related fields. It releases the potential to generate, sharpen and link population health, biomedical, clinical and health services research to accelerate the advancement of ideas to solve health problems. Sustainable and meaningful interdisciplinary research does not mean that different fields of study merely share their tools, but rather that the fields come together to re-conceptualise approaches to research and solving problems (17).

This change in focus requires a sustained approach to supporting and developing a skilled workforce committed to creating and implementing knowledge. A number of strategies to achieve this have been recognised including: supporting researchers in the early stages of their careers; articulating career pathways in research, with a focus on our Aboriginal and culturally and linguistically diverse workforce; collaborating with industry; providing balanced workloads, advice and mentoring for researchers, increasing access to Higher Degree Research training and supporting tenure, permanency and long term contracts.

WHAT WE WILL DO:

Initiatives	To achieve the initiative the <i>Research Director</i> will be supported by:	Time frame
Performance Measures: <ol style="list-style-type: none"> Number of research grants, publications and citations Increase in interdisciplinary research 		
Work with stakeholders to promote interdisciplinary research as a focus area for strategic plans in each facility, discipline and profession including Allied Health, Nursing and Midwifery, Aboriginal Health, Community Health, Drug Health, Mental Health, Population Health and the SLHD clinical streams with a particular focus at Canterbury and Balmain Hospitals	Chief Executive SLHD; Directors of Nursing, Allied Health and Aboriginal Health; General Managers of Community Health and Population Health; SLHD Clinical Directors	Short term (0-12 mths)
Explore the capacity to backfill clinician researcher positions to undertake research in District prioritised research areas	Chief Executive SLHD; Director Workforce Services	Short term (0-12 mths)
Increase access to seed funding and support for pilot projects for early to mid-career researchers	Chief Executive SLHD; Executive Director Sydney Research	Med term (1-3 yrs)
Enhance support for researchers and supervisors through more collaborative (cross department and Medical Research Institutes) mentorship, training opportunities and transfer of knowledge, including attendance at conferences, additional conjoint appointment, cross-department hiring and secondments	Chief Executive SLHD; Director Workforce Services; SLHD Clinical Directors	Med term (1-3 yrs)
Support succession planning for clinician researchers across the District to ensure sustainability of research priority areas	Chief Executive SLHD; Director Workforce Services; SLHD Clinical Directors	Long term (4-5 yrs)

Priority 2.2: Harness the potential of clinical and population health data to inform research

The District is committed to enhancing interdisciplinary research and supports benchmarks that value collaborative approaches while complementing the traditional benchmarks for academic success that focus on individual accomplishments (e.g. publications, grants).

The NSW Health Analytics Framework (20) reported on key capabilities and enablers the health system requires to effectively access, interpret, analyse, and utilise the increasing volume and complexity of health data to inform research questions and decision making. These are:

- A skilled and diverse workforce including experts in clinical leadership, data integration, information extraction, epidemiology, bioinformatics and biostatisticians;
- A supportive culture and effective engagement across the health system;
- Appropriate analytical tools and technologies;
- Efficient data capture;
- High quality data sources; and
- Strategic data governance.

WHAT THE EVIDENCE TELLS US:

The unprecedented availability of clinical and population health data and the enabling technology to collect, analyse and link data for research, policy and evaluation purposes is transformative. Data linkage will support enhanced and integrated care through linkage of data from general practice and outpatient settings, while also linking new datasets such as those available through bio-banks.

This availability and analysis of data will allow for the identification of well delineated patient cohorts, mapping of the patient journey and their health trajectories. This process will ultimately disentangle interactions between health and social care providers (18). The District has been developing sophisticated health informatics and analytics over the past five years. The District has the capacity for

outcome analysis, data mining, indicator analysis and performance monitoring. Fostering improved access and usability of the electronic medical record and related analytical data sets for our clinicians, researchers and managers is a key directive of the District's Information and Communication Technology Strategic Plan 2015-2020 (13).

The eHealth Strategy for NSW Health 2016-2026 includes an explicit focus on improving preventive health analytics to support population health research. In support of this focus, the NSW Health Analytics Framework aims to drive broader and more sophisticated analytics use to better support decision making and analysis across the NSW health system (19).

WHAT WE WILL DO:

Initiatives	To achieve the initiative the <i>Research Director</i> will be supported by:	Time frame
Performance Measures:		
1. Increase in utilisation of the electronic medical record including population and clinical databases to inform research		
2. Increase in number of clinical and population datasets linked to the electronic medical record		
Promote the utilisation of population health datasets, to inform research design and impact e.g. NSW Health Population Survey, Health Statistics NSW and the 45 and up study etc.	Clinical Director Public Health; Public Health Observatory; Health Informatics Unit	Short term (0-12 mths)
Increase capacity to undertake health economics and integrate economic evaluation and cost benefit analysis into research design	Chief Executive SLHD; SLHD Executive Research Manager	Short term (0-12 mths)
Develop system and staff capability in health informatics and data analytics.	Chief Information Officer; Health Informatics Unit; Director Performance, System Improvement and Innovation	Med term (1-3 yrs)
Explore the integration of patient reported experience measures (PREMS) and patient reported outcomes measures (PROMS) in research design and evaluation	Chief Information Officer; Health Informatics Unit	Med term (1-3 yrs)
Develop and enhance procedures and policies for requesting, extracting and linking data from the Electronic Medical Record, clinical and population health databases, clinical registries and REDCAP to inform research design and outcomes	Chief Information Officer; SLHD Health Informatics Unit; SLHD Executive Research Manager; Clinical Director Public Health	Med term (1-3 yrs)

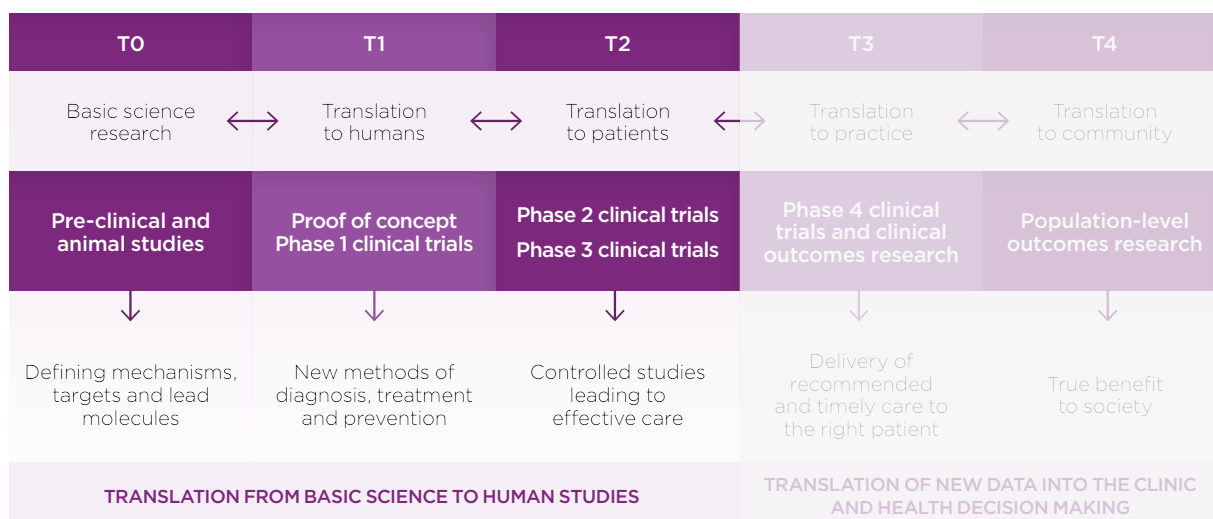
Priority 2.3: Enhance translational research

Over the last three years the District has remained committed to translational research through its membership of *Sydney Research* and *Sydney Health Partners*. Enhancing the District's translational research capacity is the pathway to creating research impact, promoting research utilisation and ultimately impact that creates benefits to society.

WHAT THE EVIDENCE TELLS US:

Translational research includes all 'bench-to-bedside' stages of research from laboratory research to clinical treatments, as well as the translation of clinical research into healthcare, preventive and public health. The District participates across the entire paradigm of research. The Priority Area 2.3: Enhance translational research focuses on enhancing research undertaken through T0 and T2 phases, while Priority 3.1: Integrate the practice of implementation science will aim to support the implementation science behind T3 and T4 research to ultimately promote the routine uptake of interventions that have been proven effective through T0 to T2 research.

Figure 3: Operational phases of Translational research (15)



In light of increasing competition for competitive research grants, industry engagement presents not only a robust pathway for research translation, but also significant and sustainable funding opportunities. A focus for this priority area is to engage with key industry stakeholders to leverage skills, networks and resources to enhance research, while collaborating to increase researcher skills in commercialisation (3). The District remains committed to translational research, data harmonisation and greater activity and efficiency in clinical trials through its membership of Sydney Research and Sydney Health Partners. This Priority Area will focus on delivering patient and public benefit by accelerating the transfer of research innovation into healthcare improvement (21).

WHAT WE WILL DO:

Initiatives	To achieve the initiative the <i>Research Director</i> will be supported by:	Time frame
Performance Measures:		
<ol style="list-style-type: none"> Increase in commercialisation of health research outcomes Increase in utilisation and adherence to up to date, evidence-based clinical practice guidelines 		
Enhance capacity for Sydney Research to expand SLHD partnership opportunities to help take research from the bench to bedside by developing and commercialising research outcomes	Executive Director Sydney Research	Med term (1-3 yrs)
Lead, with our partners, the development of Sydney Health Partners in its goal of translating our research into better health outcomes	Executive Director Sydney Health Partners; Executive Director Sydney Research	Long term (4-5 yrs)

Priority 2.4: Expand clinical trials capacity and participation

The District is committed to a culture where research is embedded within clinical care as a matter of routine. This culture will continue to enhance staff and patient experience and community perception about the benefits of clinical trials, and increase patient participation in clinical trials.

The RPA Institute of Academic Surgery (IAS) Strategy (25) identified “fostering hospital-wide and community recognition that patients receive the best surgical care in academic centres of surgical excellence” as a key objective, requiring:

- Support for surgical departments to identify opportunities for clinical trials for suitable patient groups within their specialty; and
- Enhanced numbers of patients involved in this type of research.

WHAT THE EVIDENCE TELLS US:

Clinical trials are an essential tool in delivering patient and community benefit by accelerating the transfer of research outcomes into health care. Expanding our capacity to undertake specialised and innovative trials is a high priority for the District as it provides our consumers access to new and cutting-edge treatments, it attracts high quality clinician-researchers and promotes academic best-practice. This approach is supported by a substantial evidence base within cancer care that shows patients who participate in research studies receive a higher quality of care and achieve better outcomes as clinical pathways are clearly defined, care is carefully monitored and data is collected on changes in the patient condition (22).

Clinical trials have evolved substantially, with increases in technological capabilities, and study complexity, for example through the availability of large-scale genetic data allowing for Mendelian Randomisation Studies which provide a more reliable indication of the causal role of a biomarker in the development of disease, and has direct relevance for drug development (23, 24). To keep pace with the scale and complexity of clinical trials and to ensure appropriate use of technology, the District will look to enable the implementation of innovative approaches to clinical trial design, management, oversight, conduct, documentation and reporting that will better safeguard participants and ensure data quality.

WHAT WE WILL DO:

Initiatives	To achieve the initiative the <i>Research Director</i> will be supported by:	Time frame
Performance Measures:		
<ol style="list-style-type: none"> 1. Increase number of clinical trials undertaken at Sydney Local Health District 2. Increase in participant recruitment to clinical trials 3. Improvement in participant experience and awareness (increase participant satisfaction) 		
Develop community targeted communication about clinical trials and their benefits	Director Strategic Relations and Communication; Director Media; Manager Community Participation; SLHD Executive Research Manager	Short term (0-12 mths)
Enhance capacity of Clinical Trials Pharmacies at Concord and RPA Hospitals	Director Pharmacy; RPA and CRGH General Managers	Short term (0-12 mths)
Improve patient recruitment through clinical trial registries and proactive identification through our information and communication technology (ICT) infrastructure e.g. Sydney Health Partners ClinTrial Refer App	Chief Information Officer; Manager Community Participation; SLHD Clinical Trials Steering Committee	Med term (1-3 yrs)
Ensure clinical trials are integrated into the developing ICT system across the District e.g. Powerchart clinical trials	Chief Information Officer; Health Informatics Unit; SLHD Clinical Trials Steering Committee	Med term (1-3 yrs)
Enhance and further develop phase 1 clinical trial capability at Concord and RPA Hospitals	RPA and CRGH General Managers; SLHD Clinical Trials Steering Committee	Long term (4-5 yrs)
Ensure all patients have the opportunity to be a clinical trials participant and all staff are engaged and supportive of clinical trials	Director Operation; RPA and Concord Hospital General Managers; Manager Community Participation; SLHD Executive Research Manager	Long term (4-5 yrs)

Priority 2.5: Support a quality approach to research ethics and governance

The overall ethical and scientific review and governance – site authorisation framework ensures the compliance, accountability and transparency of research activity across sites.

In response to recommendations to enhance the health and medical research pre-approval process and to reduce barriers to undertake clinical trials in NSW the Office for Health and Medical Research undertook the NSW Health and Medical Research Governance Reform Project, including the development of the Research Ethics and Governance Information System (REGIS) (26). The District is committed to the implementation of REGIS to facilitate a better way of working together within and across Districts.

WHAT THE EVIDENCE TELLS US:

The following benefits will be realised through the implementation of REGIS:

- Researchers will have increased visibility of their ethics and governance applications. With more consistent policies and processes, researchers will be able to navigate the processes with greater ease;
- Research office staff, along with their ability to track applications through pre- and post-approval, will be able to provide better reporting; and
- Executives through better reporting will be able to drive more informed decisions to promote growth and innovation in health and medical research.

WHAT WE WILL DO:

Initiatives	To achieve the initiative the <i>Research Director</i> will be supported by:	Time frame
Performance Measures: <ol style="list-style-type: none"> 1. Increase in ethics and governance applications 2. Increase in staff capacity to complete the ethics and governance applications (incl. experience and satisfaction measures) 		
Support implementation of the Research Ethics and Governance Information System (REGIS) to ensure our ethics and governance offices meet performance benchmarks	Chief Executive SLHD; Research Executive Manager; RPA and CRGH General Managers	Short term (0-12 mths)
Deliver user-friendly education for researchers about both human and animal ethics and governance processes	SLHD Research Executive Manager; RPA and CRGH Research Ethics Committee	Short term (0-12 mths)
Improve research ethics and governance data collection and analysis	SLHD Research Executive Manager; RPA and CRGH Research Ethics Committee	Med term (1-3 yrs)
Develop pathways for approval and oversight, in collaboration with the AMS Redfern, for Aboriginal research undertaken in the SLHD that is culturally and ethically appropriate	Director Aboriginal Health; Clinical Director Public Health	Med term (1-3 yrs)

03. Strategic Direction Three

To *implement knowledge* by rapidly translating research into best practice.

Priority 3.1: Integrate the practice of implementation science across all settings in the District

The District will continue to support a culture where staff at every level are incentivised and have the ability to participate in the implementation, evaluation and co-design of research. The District will drive the implementation of departmental level research plans across all District services to identify key research goals, including strategies to build capacity to undertake research and implement it across all settings within the District.

“Evidence based medicine should be complemented by evidence based implementation” (28) with a focus on:

- Undertaking diagnostic assessments of barriers;
- Understanding the mechanism of action of interventions; and
- Empirical evidence about effects of the interventions.

WHAT THE EVIDENCE TELLS US:

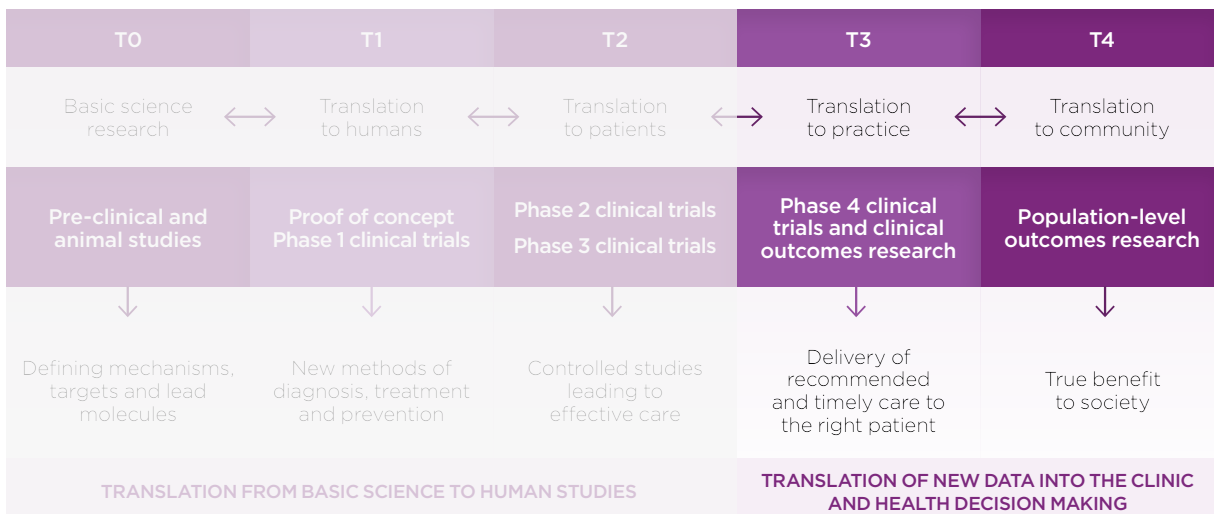
Implementation Science is the “scientific study of methods to promote the systematic uptake of research findings and other evidence based practice into routine practice. Ultimately improving the quality and effectiveness of health services” (28). Implementation Science is not evaluating the primary efficacy of the intervention but ensuring tailored, sustainable and outcomes focused implementation.

Both implementation science and quality improvement share the goal of improving the quality of healthcare. Methods used in the two fields overlap, although there are differences. Quality improvement usually begins with a specific problem recognised at the level of the healthcare provider, and lead to the design and trial of strategies to solve the problem. In contrast, implementation science begins with an evidence based practice that is under-utilised, and then identifies and addresses quality gaps at the healthcare provider level. Additionally, implementation science also has an explicit goal of developing knowledge that can be widely applied beyond the individual system under study (28). As a District we will explore and work within innovative and collaborative models such as Sydney Research, Sydney Health Partners and Sydney Catalyst to expand the integration of Implementation Science into routine practice.

Staff should be appropriately skilled in meta-analysis and critical review, while having access to evidence based tools such as Computerised Decision Support Systems, used at the point of care and integrated into workflows (29). Furthermore, data linkage systems should provide feedback into health systems so that interventions can be rigorously evaluated (30).

The District is committed to expanding the Implementation Science behind T3 and T4 research to ultimately promote the routine uptake of interventions that have been proven effective through T0 to T2 research. Our success will be determined by patient level factors, e.g. quality, safety, effectiveness, experience and outcomes, and organisational factors, e.g. length of stay, readmissions, cost weights.

Figure 4: Operational phases of Translational research (15)



WHAT WE WILL DO:

Initiatives	To achieve the initiative the <i>Research Director</i> will be supported by:	Time frame
<p>Performance Measures:</p> <ol style="list-style-type: none"> 1. Increase in staff capacity to implement research outcomes (incl. performance, experience and satisfaction measures) 2. Increase in staff and system efficiencies (incl. cost benefit analysis) 3. Improved patient experience and outcomes (incl. Quality of Life measures) 		
Develop departmental level research action plans that align to the District Research Strategic Plan 2018-2023	SLHD Clinical Directors and Clinical Managers; SLHD Executive Research Manager	Short term (0-12 mths)
Support Department and Service level Journal clubs, regular collaborative 'Think Tanks' and The Pitch, to harness innovation through research outcomes	Director Performance, System Improvement and Innovation; SLHD Clinical Directors and Clinical Managers	Short term (0-12 mths)
Support further development of up to date, evidence informed clinical guidelines to inform practice	Director Operations; SLHD Clinical Directors and Managers	Med term (1-3 yrs)
Integrate research evidence into clinical governance and ongoing quality improvement, District policies, plans and models of care/interventions	Chief Executive SLHD; SLHD Senior Executive Team; SLHD Executive Research Manager; Director Clinical Governance and risk; SLHD Clinical Directors and Clinical Managers; Director Planning	Long term (4-5 yrs)
Continue to expand the content and reach of the annual Innovation and Research Symposium, The Big Idea and the Sydney Robotics Summit	Director Strategic Relations and Communication; Director Media; Executive Director Sydney Research; Executive Director SLHD Executive Research Manager; RPA Institute of Academic Surgery	Long term (4-5 yrs)



Priority 3.2: Evaluate to ensure effective implementation of research evidence

The District is committed to building a cumulative evidence base to inform implementation of evidence-based care. Evaluation requires assessment of effectiveness, understanding of the change process and analysis of cost-effectiveness. The District will continue to invest in the Performance and Redesign Unit and Sydney Targeted Activity Reporting System (STARS) to support operational staff, researchers and clinicians to obtain the information they require from existing systems. Access to, and the ability to link clinical and population data brings insights necessary to support comprehensive evaluation and the ability to perform predictive modelling to plan for the future (18).

The **Australian Medical Research and Innovation Strategy 2016-2012** (2) advocates for the discovery, development, implementation and commercialisation of meaningful research requiring appropriate workforce capacity, effective implementation and a means to evaluate the impact this work has on quality of life for consumers and patients.

WHAT THE EVIDENCE TELLS US:

Why we invest in integrating research into health care delivery? ... findings in health care practice to date, indicate:

Variation in clinical care is widespread even for conditions where the evidence for management is strong. It occurs across diseases, clinicians, healthcare settings and geographical regions. Most variation concerned inappropriate use of investigations and/or over prescription of inappropriate treatments (30). Highlighting that implementation of research findings remains a priority for the health care system (31).

Health and medical research results in healthier Australians and has a measureable impact on health system sustainability, productivity, and health outcomes (2). Evaluation remains at the core of effective implementation.

Evaluation is defined as a rigorous, systematic and objective process to assess a program's effectiveness, efficiency, appropriateness, and sustainability. Evaluation is distinct from more operational assessments of programs, such as a program review (typically a quick appraisal, often to inform continuous improvement) or monitoring (a process to periodically report against planned targets). Evaluation is also considered to be distinct from research, although both processes involve the rigorous gathering of evidence, research can ask different types of questions that may not be related to judging the merit or worth of a program (32).

WHAT WE WILL DO:

Initiatives	To achieve the initiative the <i>Research Director</i> will be supported by:	Time frame
Performance Measures:		
<ol style="list-style-type: none"> 1. Increase in staff capacity to implement research outcomes (incl. performance, experience and satisfaction measures) 2. Improved patient experience and outcomes (incl. Quality of Life measures) 		
Improve access to timely and clinically meaningful information for evaluation e.g. increased utilisation of the Sydney Targeted Activity Reporting System (STARS)	Director Performance, System Improvement and Innovation	Med term (1-3 yrs)
Ensure evaluation is embedded into the implementation of appropriate clinical governance and ongoing quality improvement, District policies, plans and models of care/interventions	Chief Executive SLHD; SLHD Senior Executive Team, SLHD Clinical Directors and Clinical Managers; SLHD Executive Research Manager	Med term (1-3 yrs)
Undertake the review of innovative research models, such as RPA Clinical Research Facility at the Charles Perkins Centre, Professor Marie Bashir Centre, Green Square HealthOne and RPA Institute for Academic Surgery	Chief Executive SLHD; Executive Director RPA Institute of Academic Surgery; Director RPA Clinical Research Facility; Director Clinical Services Integration; SLHD Executive Research Manager	Med term (1-3 yrs)
Evaluate the inter-sectoral initiatives aimed at improving the health and wellbeing of our communities e.g. HealthPathways and the Inner West Sydney Child Health and Wellbeing Plan	Director Clinical Services Integration	Long term (4-5 yrs)

Reference list

1. National Health and Medical Research Council. National Statement on Ethical Conduct in Human Research 2007.NHMRC, 2015.
2. Medical Research Future Fund. Australian Medical Research and Innovation Strategy 2016-2021. Australian Government, 2016.
3. National Health and Medical Research Council. National Health and Medical Research Council Corporate Plan 2017-18. Commonwealth of Australia, 2017.
4. NSW Ministry of Health. NSW Government response to the NSW Health and Medical Research Strategic review 2012-2022. North Sydney, 2012.
5. NSW Ministry of Health.. NSW Health State Plan: Towards 2021. North Sydney,2014.
6. Sydney Local Health District. Sydney Local Health District Strategic Plan 2018-2022. Camperdown, 2018.
7. NSW Ministry of Health. NSW Health and Medical Research Strategy 2014-2019. North Sydney: NSW MoH, 2014.
8. Sydney Research. Sydney Research Strategic Plan 2014-2019. Sydney, 2014.
9. NSW Ministry of Health. eHealth Strategy for NSW Health 2016-2026. North Sydney: NSW Health, 2016.
10. Research Australia. Australia Speaks! 2016 Opinion Poll. Darlinghurst, 2016.
11. Sydney Local Health District. A framework for improving health equity in Sydney Local Health District. Camperdown, 2017.
12. Lee J & et.al. Is science only for the rich? Around the world poverty and social background remain huge barriers to scientific careers. Nature, vol 537, 2016.
13. Sydney Local Health District. SLHD Information and Communication Technology Strategic Plan 2015-2020. SLHD, 2015.
14. Sydney Local Health District. Education and Training Startegic Plan 2013-2018. Sydney : s.n., 2013.
15. Committee to Review the Clinical and Translational Committee. The CTSA Program at NIH - Opportunities for advancing Clinical and Translational Research. Washington: The National Academies Press, 2013.
16. NSW Ministry of Health. NSW Aboriginal Health Plan 2013-2023. Sydney: NSW Ministry of Health, 2012.
17. Committee on Facilitaing Interdisciplinary Research. Facilitating interdisciplinary research. National Academics, 2004.
18. Bureau of Health Information. Data Matters — Linking data to unlock information. Sydney: BHI, 2015.
19. Centre for Epidemiology and Evidence. Population Health Research Strategy 2018-2022. NSW Ministry of Health, 2018.
20. NSW Ministry of Health. NSW Health Analytics Framework: transformed health through data and insights. North Sydney: NSW Health, 2016.
21. Sydney Health Partners. Sydney Health Partners: Translating Research into Better Health Outcomes: Sydney Health Partners, 2015.
22. McGrath-Lone L and et.al. Exploring research participation among cancer patients: analysis of a national survey and an in-depth interview study. BMC Cancer. 15: Vol. 618, 2015.
23. Bennett D & Holmes M. Mendelian Randomisation in Cardiovascular Research — An introduction for clinicians. (18): Heart, 2017.
24. Emdin C, Khera A & Kathiresan S. Mendelian Randomization. 19: JAMA, 2017.
25. RPA Institute of Academic Surgery. RPA Institute of Academic Surgery Strategic Plan 2014-2018.Sydney Local Health District, 2014.
26. 26. NSW Health and Medical Research Governance Project. Reform Framework and Action Plan: NSW Ministry of Health, 2014.
27. Grol R. Briefs and evidence in changing clinical practice. British Medical Journal. Vol. 315, 1997.
28. Bauer M & et.al. An introduction to implementation science for the non-specialist. BMC Psychology, Vol. 3:32, 2015.
29. Keasberry L & et.al. Going digital: a narrative overview of the clinical and organisational impacts of eHealth technologies in hospital practice. Australian Health Review: 41, 2017.
30. 30. Hiscock H & et.al. Variation in clinical paediatric practice: An Evidence Check review for NSW Kids and Families: Sax Institute, 2014.
31. 31.Grol R. Successes and failures in the implementation of evidence-based guidelines for clinical practice. Medical Care. 38: 2, 2001.
32. NSW Department of Premier and Cabinet. NSW Government Program Evaluation Guidelines: NSW Department of Premier and Cabinet, 2016.
33. NSW Ministry of Health. NSW Health and Medical Research Strategic Review. North Sydney, 2012.

Appendix 1: Sydney Local Health District Profile

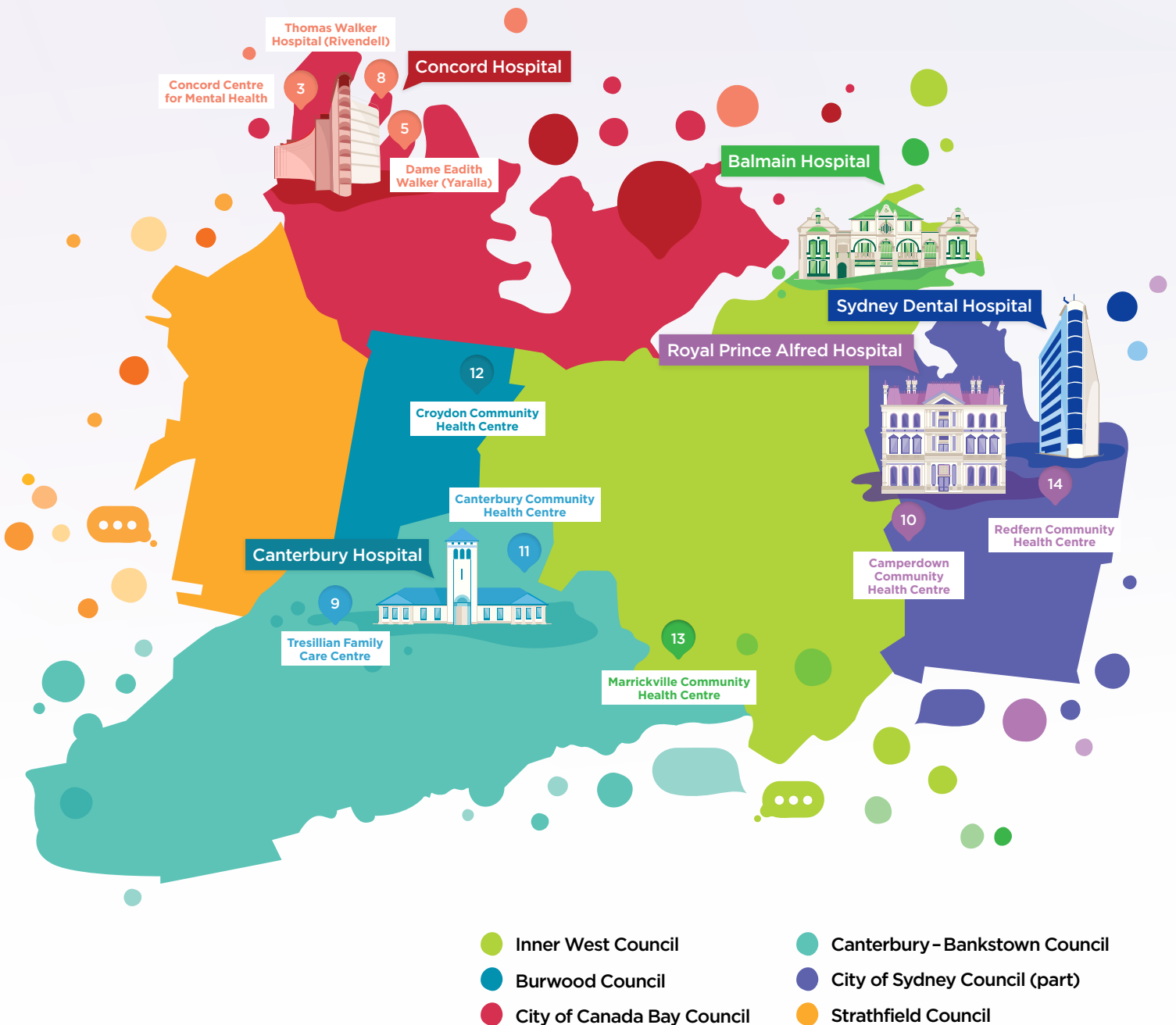
Sydney Local Health District covers a geographical area of 126 square kilometres and is centrally located in the Sydney metropolitan area, positioned directly west of the Sydney central business district. The District serves a diverse local population of approximately 670,000, with the population expected to grow to over 700,000 by 2021.

The health of our residents is generally better than the NSW average, with higher life expectancy and lower rates of premature death, particularly from cancer.

The District covers a diverse region and there are marked socioeconomic health inequalities. The gap in life expectancy between those living in the most and least disadvantaged areas is 6.7 years for men and 3.9 years for women. Rates of sexually transmitted infections and hepatitis B are among the highest in NSW, and although the rate of risky alcohol consumption is similar to the NSW average, there is a higher rate of alcohol related hospitalisations.

Sydney Local Health District includes principal referral hospitals at Royal Prince Alfred and Concord Repatriation General Hospital and hospitals at Balmain and Canterbury. The District also includes the tertiary oral health facility, the Sydney Dental Hospital. The District has a comprehensive range of community-based health services. Services are linked with primary care providers, including the Central and Eastern Sydney PHN. Sydney Local Health District also has around 100 community based services provided by 900 staff.

In the last financial year, approximately 152,000 people attended our emergency departments, 6,700 babies were delivered and 29,000 operations were performed. With over 11,000 staff, we are one of the biggest employers in our community, employing 1450 doctors, 5300 nurses, 1000 allied health staff, 450 scientists, 300 oral health staff, 680 cleaners and 1700 administrative staff.



Appendix 2: Sydney Local Health Districts Departments with Active Research Portfolios

- Academic Colorectal Unit, Concord Hospital
- Anaesthetics & Pain Management
- Andrology
- AW Gastroenterology and Liver Centre
- Cancer Nursing Research Unit
- Cardiology
- Cardiothoracic Surgery
- Cell and Molecular Therapies
- Centre for Education and Research on Ageing (CERA)
- Child and Adolescent Mental Health
- Clinical Biochemistry and Endocrinology
- Clinical Immunology
- Collaborative Centre for Cardiometabolic Health in Psychosis (ccCHIP)
- Community Health — Child and Family Health Services /Child and Family Health Nursing, Community Paediatrics, HIV Services, Sexual Health, Sydney District Nursing, Women's Health, Youth Block
- Dermatology
- Drug Health Services
- Emergency Department
- Endocrinology & Metabolism
- Geriatric Medicine
- Gynaecology
- Haematology
- Health Equity Research and Development Unit (HERDU)
- Health Promotion Unit
- Infectious Diseases and Microbiology
- Institute of Haematology
- Intensive Care Service/Unit
- Medical Genomics
- Medical Oncology
- Mental Health
- Mental Health Services for Older People
- Melanoma and Surgical Oncology
- Neonatal Medicine
- Neurobiology and Molecular Medicine
- Neurology
- Neurosciences
- Nuclear Medicine and Molecular Imaging
- Nursing and Midwifery
- Nutrition and Dietetics
- Occupational Therapy
- Oral Health
- Palliative Care
- PET/ Nuclear Medicine
- Pharmacy
- Pharmacy Aged Care Research Laboratory
- Physiotherapy
- Podiatry
- Population Health
- Psychology
- Public Health Observatory
- Public Health Unit
- Radiology
- Rehabilitation Medicine
- Renal Medicine/Unit
- Rheumatology
- RPA Institute of Academic Surgery (RPA-IAS)
- Sleep and Circadian Research Group
- Speech Pathology
- Surgical Outcomes Research Centre and Department of Colorectal Surgery (SOURCE)
- Thoracic Medicine
- Tissue Pathology and Diagnostic Oncology
- Tresillian Family Care Centres
- Vascular Surgery
- Women and Babies / Obstetrics

Appendix 3: Planning Process

The District Research Plan 2018-2023 was developed between April 2017 and March 2018. The District Planning Unit supported the development of the plan which was led by the District Director of Research with oversight of the Chief Executive, through the Subcommittee of the Education and Research Board Committee.

The Subcommittee membership provided advice on the broad direction of the plan. Subcommittee membership included:

- A/Professor Christine Giles, Board Member, SLHD
- Professor Warwick Britton, Director Research, SLHD
- Ms Louise Ford, A/Research Business Manager, SLHD
- Ms Lisa Daly, A/Program Coordinator, Sydney Research, SLHD
- A/Professor Li Ming Wen, Manager Research and Evaluation, Health Promotion Unit, SLHD
- Ms Lesley Innes, Director, Centre for Education and Workforce Development, SLHD
- Dr Catherine O'Connor, Exec Clinical Director, Community Health, SLHD
- Dr Katherine Moore, Director Clinical Governance and Risk, SLHD
- Professor Leena Gupta, Clinical Director Population Health, SLHD
- Professor Andrew McLachlan, Chair SLHD HREC - CRGH
- Professor Jennifer Alison, Allied Health Representative
- Dr Pam Garrett, Director Planning, SLHD (Chair)
- Ms Debbie Banovic, Planner, SLHD (Secretariat)

In July to August 2018, alignment with the development of the District's new strategic plan 2018-2022, allowed for combined District and Research Strategy consultations with staff and community members. Five employee forums attended by almost 500 staff were held and six community forums attended by over 150 people.

During September to October 2018 individual consultations were undertaken with key District research support services staff including; Clinical Research Centre, Centre for Education and Workforce Development, senior clinician researchers and relevant staff of the organisations that make up Sydney Research including: ANZAC Research Institute, Asbestos Diseases Research Institute, Baird Institute, Boden Institute, Brain and Mind Centre, Centre for Education and Research on Ageing - Ageing and Alzheimer's Institute, Centenary Institute of Cancer Medicine and Cell Biology, Charles Perkins Centre, Chris O'Brien LifeHouse, Concord Centre for Cardio-metabolic Health in Psychosis, Heart Research Institute, NHMRC Clinical Trials Centre, RPA Institute of Academic Surgery, Woolcock Institute of Medical Research, University of Sydney and Central and Eastern Sydney PHN to discuss current issues and recommendations for investment into future research capabilities to support research across the District.

In November and December 2018 two stakeholder research forums were held at Concord Hospital and RPA Hospital, 180 medical, nursing, allied health, community and population health clinician researchers and clinical services directors and directors from each of the medical research institutes. The forums provided the opportunity to discuss key issues and future recommendations for strategic areas of focus to deliver a research-driven health system.

A survey was also conducted through this period, opening on 15 July and closing on 15 August (n = 80). A summary analysis containing the results from the consultations, workshop and survey was used to inform the development of the plan.

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