

8 May 2020

Dr Matthew Butlin
Chair and CEO
SA Productivity Commission

By email

Dear Dr Butlin,

Re: Health & Medical Research Inquiry

Health Translation SA (HTSA) aims to enable research findings to be translated into action and to ensure that health research has a positive impact on the health of individuals and the community.

To achieve these outcomes requires strong and robust health and medical research structures, systems and processes. The Productivity Commission Inquiry into Health and Medical Research has created great expectations that in time, SA will become a national leader in research endeavours, translation and positive health outcomes.

As our contribution to the deliberations of the Productivity Inquiry, on behalf of Dr Leanna Read, Chair of the Board of Partners and HTSA Partners, I submit to you a comprehensive response to the Issues Paper as released in March 2020.

I hope that this submission further informs and assists the Commission's direction setting and draft report.

With best wishes for the next phase of the report and I confirm HTSA's commitment to assisting in the implementation of the final outcome of the Inquiry.

Yours sincerely



Wendy Keech
Chief Executive Officer
Health Translation SA

Attachment: Health Translation SA Submission



Health Translation SA

> RESEARCH > ACTION > IMPACT

South Australian Productivity Commission (SAPC) Inquiry into Health & Medical Research in South Australia

Submission & Response to SAPC Issues Paper
Submitted Friday 8 May 2020



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Acronyms & Definitions

Acronyms

ABMC	Adelaide Bio-Med City
AHCSA	Aboriginal Health Council of SA
AHRA	Australian Health Research Alliance
AHRTC	Advanced Health and Research Translation Centre
CEIH	Commission for Excellence in Healthcare
CIRH	Centres for Innovation in Regional Hubs
DHW	Department of Health & Wellbeing
HCASA	Health Consumers Alliance SA
HMR	Health & Medical Research
HARC	Health Analytics Research collaborative
HREC	Human Research Ethics Committee
HTSA	Health Translation SA
LHN	Local Health Network
MRFF	Medical Research Future Fund
MRI	Medical Research Institutes
NHMRC	National Health & Medical Research Council
NSLI	National System Level Initiatives
PHNs	Adelaide and Country Primary Health Networks
RART	Rapid Applied Research Translation
SA	South Australia
SA Health	Includes Local Health Networks and Department of Health & Wellbeing
SAHMRI	South Australian Health & Medical Research Institute
SAPC	South Australian Productivity Commission
SSA	Site Specific Assessment

Definitions

LHN	Means the local health networks and includes all government hospitals and health services.
Office for Research	The research office specifically located within DHW.
Research Office	The office, located within Central, Northern and Southern LHNs and one for the whole of country LHNs, function to support processing of research ethics submissions and site-specific approval processes. The two functions together are sometimes referred to as research governance.
SA Health	The whole government health system inclusive of both DHW and LHN

1 Introduction

1.1 About Health Translation SA

Health Translation SA (HTSA) is a National Health and Medical Research Council (NHMRC) accredited Advanced Health and Research Translation Centre (AHRTC) established in 2015, as one of only four AHRTC's across Australia. It was initially called the South Australian Academic Health Science and Translation Centre (The Centre). Currently there are 10 accredited Translation Centres across Australia.

Initially driven by SAHMRI in 2014/15, potential partners were brought together to establish the integrated academic research translation agenda within the state. Today, HTSA is a unique partnership that unites nine academic, research and health care agencies within SA. It encompasses the full breadth of health service delivery and includes organisations who can contribute to, and directly influence activities that impact on the health and medical needs of the entire South Australian population. Its collaborative and inclusive approach provides a focal point for a state-wide, cross-sectoral collaboration to research and the translation of evidence into care.

Our Partner agencies are SA Health including SA Department for Health and Wellbeing (DHW) and the 10 Local Health Networks (LHNs)); the State's two Primary Health Networks (PHNs) – Adelaide and Country SA; South Australian Health & Medical Research Institute (SAHMRI); three South Australian universities – Flinders University, Adelaide University and the University of South Australia; the peak body representing the Aboriginal Community Controlled sector in SA – Aboriginal Health Council of SA (AHCSA); and the State's peak health consumer agency - Health Consumers Alliance (HCASA). In addition, there are strategic partnerships with the Commission on Excellence and Innovation in Health (CEIH); and Wellbeing SA.

Our purpose is to enable research findings to be translated into action, as quickly as possible and in a practical way, to ensure that health research can positively impact on the health of South Australians.

By combining the expertise and strengths of our partners, Health Translation SA is well-placed to address the major healthcare challenges in South Australia. This is achieved through:

- Facilitating co-operation and collaboration between researchers, healthcare services, industry and consumers to address health system challenges from public health and prevention strategies to primary care, acute services and ongoing care for those managing chronic disease
- Promoting and supporting the use of evidence-based health care by providing education, training and professional development opportunities
- Building relationships with industry to accelerate new research findings and innovations for clinical application and patient benefit
- Leveraging and supporting new research by promoting, and in some cases, coordinating funding opportunities
- Providing a framework for the systematic participation of consumers and community members in health and medical research to better enable translation in all health and medical research

Of critical importance is the leadership, innovation and collaborative approach that HTSA is able to bring to Health and Medical Research (HMR) in SA through its independence and through the way in which it brings all elements of the sector together.

It must be noted that NHMRC accreditation comes without funding. HTSA depends on partner contributions and is an un-incorporated joint venture.

SAHMRI makes in-kind contributions to support the successful functioning of HTSA and both organisations share a commitment to building state-wide collaborations. SAHMRI supports HTSA in the following areas: human resources; legal advice; finance oversight, research contract administration and information technology support.

1.2 Establishing HTSA - Shifting the Paradigm in South Australia

In the last decade, across many parts of the world, particularly the United Kingdom and the USA, there has been a paradigm shift to reorient HMR around research translation, improving health outcomes and impact.

The emphasis is being placed on the benefits of research to end users, including patients or other service recipients, as well as the traditional bibliometrics of publications and grant success. This reorientation responded to the realisation that the time lag and rate of implementation success of putting evidence into practice was unacceptable, leading to significant research waste and delays in health impact.

The need to refocus the research agenda around impact was articulated in the McKeon Review in 2013 and has led to the NHMRC strategically investing in the creation of the Translation Centre initiative. This concept is also gaining momentum across Australia with all major funding bodies now adjusting their focus to consider impact as a key objective to any research program. This includes health impact, economic impact and social impact.

For HTSA to receive accreditation in the first round was a cause for celebration as it was an extremely competitive field with several interstate high-profile research groups unsuccessful in their applications.

NHMRC Assessment criteria when originally applying for to be an AHRTC

- leadership in outstanding research and evidence-based clinical care, including for the most difficult clinical conditions
- excellence in innovative biomedical, clinical, public health and health services research
- programs and activities to accelerate research findings into healthcare and ways of bringing health care problems to the researchers
- research-infused education and training
- health professional leaders who ensure that research knowledge is translated into policies and practices locally, nationally and internationally
- strong collaboration among the research, translation, patient care and education programs

Delivering better healthcare to all Australians by:

- increasing the cost-effectiveness of health care in your system by identifying, testing and introducing systems of care, procedures and devices that are most effective
- reducing the cost of health care by identifying and eliminating these process, procedures and treatments that are ineffective or less cost-effective
- providing strong and more effective dissemination of information towards achieving the two deliverables above – better scale and scope, while also locally embedded and led
- providing a more powerful base for clinical trials – to the benefit of patients, and our clinical trials industry
- great efficiency in the use of clinical, community and research resources – through
- rationalisation, avoiding duplication, and gaining critical mass efficiencies

In 2016 and 2017 HTSA focussed on implementing the Road Map that was proposed in its original application. At this time, it was evident that embedding research in health services as part of normal business and using data to drive health service decision making needed specific and considerable attention. Projects were successful when a clinical research champion took the lead. It was during this period that some lead researchers and clinicians made significant investments in specific projects, with the evaluation of Transforming Health¹, just one example of an across-sector collaboration project² lead by HTSA. This example demonstrated that collaboration, data and leadership could successfully bring researchers, health service leaders and other experts together to inform health system reform.

Since July 2018 all Partners have committed formally, through a Memorandum of Understanding (MOU), to participate in HTSA. The MOU includes a governance structure that recognises a Board of Partners with all partners committing to supporting HTSA through a financial and/or in-kind contribution. The total operating budget for HTSA from partner contributions is \$540,000. In 2018 the Centre was renamed Health Translation SA (HTSA). In 2019 the original NHMRC accreditation, which was for 5 years until March 2020, was extended until March 2022.

From July 2018 to February 2020 the HTSA Board of Partners was chaired by the SAHMRI Executive Director and HTSA Honorary Director, Professor Steve Wesselingh. The Board has recently appointed its first independent chair with Dr Leanna Read, former SA Chief Scientist, commencing in early 2020 (a non-financial position) and Professor Steve Wesselingh has taken on the role of HTSA Research Director (a non-financial position). The Board convenes time-limited working groups to undertake specific tasks as needed.

1.3 Significance of the Medical Research Future Fund (MRFF)

As mentioned, funding was not included with the NHMRC accreditation, so Translation Centres are dependent on partner contributions to operate. With the creation of the Medical Research Future Fund (MRFF) opportunities to triangulate with the AHRTC, NHMRC and MRFF to support Translation Centres to achieve their goals were considered nationally.

In late 2017/early 2018 the MRFF commenced a process to allocate \$2 million to each AHRTC to deliver health and medical research translation projects that had impact in a 12-month period. In Round 1 funding was available to the first 4 accredited AHRTCs³. Subsequently Rounds 2 and 3 were made available to the new AHRTCs and Centres for Innovation in Regional Health (CIRH) accredited in 2017⁴.

This MRFF funding program is referred to as the MRFF Rapid Applied Research Translation (RART) Program and has significantly changed the landscape for HTSA. To date HTSA has coordinated the allocation of \$8 million to fund a range of projects across 3 RART funding rounds (RART 1 - 2018, RART 2 – 2019/20, RART 3 2019/2020/2021). While there have been federal government forward estimates projections to continue MRFF RART funding for a total 10-year period, this program is currently under review.

HTSA, under the direction of the Board, coordinates the selection, awarding, reporting and ongoing administration of the MRFF RART program of work within SA. It must be noted that the RART projects have

¹ Transforming Health – a SA Government initiative in 2015 to improve the distribution and quality of Health Services

² SA Academic Health Science and Translation Centre Summary Report, Health System & Service Reform in SA

³ First four accredited AHRTC - HTSA, Monash Partners, Melbourne Academic Health Centre and Sydney Health Partners)

⁴ Second group of accredited AHRTC - SPHERE, Brisbane Diamantina Health Partners, Western Australian Health Translation Network (WAHTN) and 2 CIRHs - Central Australia Health Translation Network, NSW Regional Health Partners

largely been health service-based projects and were initially required to deliver “impact” in a 12-month period. It has now been acknowledged that it is difficult to deliver projects that have impact with a level of academic rigour, at scale and include stakeholder and consumer engagement in a 12-month window. As a result, MRFF RART funding has been extended to 2-year timeframes. In RART Round 3 (July 2019 -June 21) funding has been allocated for South Australian strategic priority projects with criteria around collaboration being a major focus. Projects are now proceeding in the following areas:

- Data-driven healthcare
- Aboriginal Research capacity building
- Aged Care Services
- Mental Health
- Acute - Primary care interface

1.4 Australian Health Research Alliance (AHRA)

HTSA is one of ten NHMRC accredited Translation Centres (7 AHRTCs and 3 CIRHs) across Australia. Together these Translation Centres form the Australian Health Research Alliance (AHRA) and are members of the AHRA Council which is supported by the AHRA Operations Group.

Currently AHRA and its members cover 95% of health and medical researchers and ~80% of our hospitals nationally. AHRA members are actively working to embed research in health services at a systems, partnership, organisation and individual level by encouraging health services to identify and prioritise issues in collaboration with academics, researchers, policy makers, community and consumers and then co-designing and implementing solutions to drive health improvements from within health systems and services. Most members have links with primary care and other community services.

These Translation Centres individually, and collectively through AHRA, are leading culture change across Australia - moving from a culture of isolated, investigator initiated, competitive, and siloed research (driven by traditional research metrics) to collaborative, clinician and health service led initiatives with high level consumer involvement (driven by translation metrics such as health impact).

HTSA has played a very active role in AHRA. From July 2018 to June 2019 Professor Steve Wesselingh was AHRA Chair, supported by CEO Wendy Keech as Chair of the AHRA Operations Group. During this time HTSA led the consolidation of the AHRA Council and the establishment of an across alliance operations group. This assisted AHRA to speak with a single voice to government, including the Commonwealth, the MRFF and the NHMRC. Additionally, the formal extension of the MRFF funding from one year to several and then the positioning for the 10-year funding commitment was also part of the achievements during this time.

In 2018 AHRA identified 4 National System Level Initiatives (NSLI) that it uses to focus its work. HTSA plays a significant role in progressing these initiatives through either direct leadership or expert participation in working groups such as:

- NSLI 1. Indigenous Researcher and Capacity Building - Led by HTSA - Professor Alex Brown and Dr Karla Canuto
- NSLI 2. Health Service Improvement and Sustainability
 - Clinical Research Facilitation – Professor Maria Makrides/ Professor Derek Chew
 - Embedded Economist – Professor Jon Karnon
- NSLI 3. Data Driven Healthcare – Professor Derek Chew/ Wendy Keech/ Associate Professor Nicole Pratt/ Professor David Roder

- NSLI 4. Consumer and Community Involvement - Ellen Kerrins/ Dr Agustina Gancia (HTSA) / Professor Caroline Miller

Additionally, AHRA has other special interest groups that benefit from the active involvement of SA experts:

- Aged Care Services Network – Associate Professor Maria Inacio/ Professor Maria Crotty
- Women’s Health Network – Dr Maria Makrides/ Karen Glover
- Wound Care – Dr Rob Fitridge/ Professor Allison Cowin
- Workforce Development – Dr Ecushla Linedale/Wendy Keech

1.5 HTSA Strategic Planning

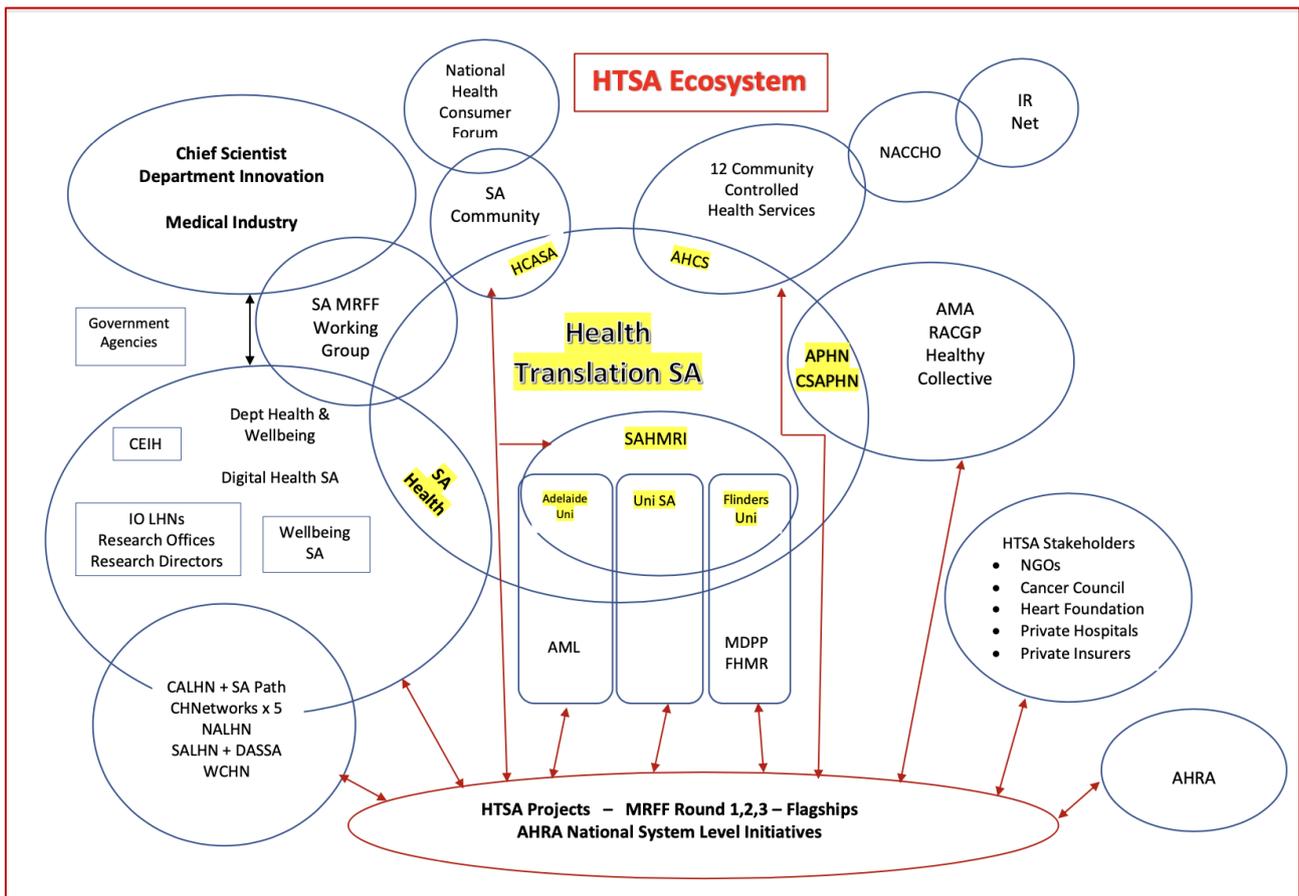
Extensive consultation across Partners and other stakeholders has been undertaken to ensure HTSA priorities are relevant to the needs of SA. Importantly, the organisations responsible for delivering health services in SA, DHW, PHNs and AHCSA executives have been engaged in the development of HTSA’s priorities and work agenda. In early 2019 the Board of Partners undertook a strategic planning process to develop an 18-month Strategy for the period July 2019 - December 2020. The following strategic priority areas and key activities were identified.

HTSA Strategic Priorities

<p>Strategic Priority 1 Mobilise leadership and collaboration to strengthen research translation <i>Key activities</i></p> <ul style="list-style-type: none"> ○ Embed research in health systems ○ Orient research around impact ○ Measure and communicate impact ○ Support increased funding opportunities 	<p>Strategic Priority 2 Develop the state-wide research translation pathway <i>Key activities</i></p> <ul style="list-style-type: none"> ○ Improve data access and analytic capacity ○ Improve clinical research processes ○ Advance commercialisation practices ○ Increase consumer/community participation
<p>Strategic Priority 3 Build expertise and capacity in research translation <i>Key activities</i></p> <ul style="list-style-type: none"> ○ Facilitate workforce development ○ Convene and support courses and events ○ Mobilise fellowships and scholarships 	<p>Strategic Priority 4 Deliver and support state and national projects <i>Key activities</i></p> <ul style="list-style-type: none"> ○ Fund, enable and/or support ○ Flagship Programs ○ MRFF funded projects ○ Support and facilitate AHRA National System Level Initiatives and Interest Groups

HTSA operates in a dynamic ecosystem across the entire health and research sectors as outlined in the diagram below. We work to partner across this ecosystem, to harness and leverage the translational strengths in South Australia.

In summary, HTSA is well positioned with the SA research, academic and health service delivery sectors to provide the leadership, coordination and collaboration required to progress HMR within the state and to position SA at the forefront of national HMR.



2 Response to the Issues Paper: Health and Medical Research in SA

For SA to be competitive and successful on the national and international landscape a significant push is required, enabling a paradigm shift to create a culture where large scale, transformative collaborations to solve health and medical issues becomes the norm. SAPC must recommend strategies to mobilise the state in this direction.

As an independently accredited Translation Centre, HTSA, is poised to play a leadership role in driving HMR in SA. (It is noted for the benefit of SAPC, that HTSA is not an Australian Government centre as listed in Table 2.1 of the Issues Paper.)

3 Policy Environment

3.1 A Statewide HMR Strategy

South Australia must develop a whole of government HMR Strategy that includes research priorities based on the state’s needs and strengths. This strategy must also consider broader horizons to include issues at a national and international level in which the state has leading capabilities.

While there is acknowledgement that blue sky research should still be part of the research landscape, research priorities that address recognised local, state, national or international problems and challenges must be a major focus of research in order to deliver impact. This research should take into account:

- population need - based on epidemiological and clinical disease profiles including an equity lens for those most disadvantaged
- consumer and community need - based on what is important to the community
- clinician need - based on the issues that are most pressing to them
- service need - including how to equitably deliver services
- industry need
- financial need - where cost of services must be considered relative to ability to meet population needs
- system need - where system-based solutions can enable the delivery outcomes of population and services across a whole the system

When identifying SA strengths, both research and system strengths should be considered:

- research groups and organisations ability to meet population, social, industry and/or health system need/s
- across sector and across organisational collaboration
- state-wide capability
- focus on impact, spanning health benefits through to commercialisation, as well as great science
- national and international linkages and leadership
- academic track record success
- ability to influence decision making to allocate funding and reform policy

Targeted funding to drive and support large scale, collaborative initiatives is now being made available by national funding mechanisms, particularly the MRFF. However, anecdotal evidence and our track record would suggest that currently the SA HMR culture does not position us well to undertake large scale collaborations.

For SA to be competitive and successful on the national and international landscape, the SA Government needs to support HMR that encourages large scale collaborations and drives a culture shift. HTSA, as an organisation that already spans all the key players in the state's HMR, is ideally positioned to drive this strategic vision and to create an environment for excellence through collaboration and supportive infrastructure for impactful projects in priority areas.

HTSA Recommends:

1. The development of a State-wide HMR Strategy that includes research priorities and a vision to drive across-state collaborations with health services, industry, researchers, policy makers and consumers. The process must include health service leaders including lead clinicians, LHN CEOs and Board chairs, stakeholders, health consumers and the community.
2. Give HTSA the mandate (with funding) to coordinate the HMR strategy and vision for the state.
3. The establishment of a State based research funding pool available on a contested basis to encourage and incentivise South Australian HMR which addresses priorities in a coordinated, collaborative and impact-based manner that can achieve at scale. This could be modelled on the MRFF Frontiers Grant scheme.

3.2 Research Governance Processes

HTSA is committed to improving clinical research governance processes and enhancing infrastructure to support clinical research and clinical trials, commercialisation and consumer engagement across the state.

In support of this commitment, HTSA was given the mandate by the Minister for Health and Wellbeing to drive the implementation of the Birch Review⁵ recommendations and has established a Steering Committee to spearhead this work. The Steering Committee, chaired by the SA Chief Scientist, Professor Caroline McMillen, and managed by HTSA, reports to the Minister for Health and Wellbeing and has the support of the Chief Executive SA Department for Health and Wellbeing, and the Chairs and CEOs of each of the LHN Governing Boards. Membership of the Steering Committee includes representatives from SA Health, HTSA, LHNs, Dept of Trade Tourism and Investment, researchers, Adelaide Biomed City and an independent adviser. Recognising the importance of clinical research for the SA economy, there is also wider Government support for this initiative from Minister Ridgeway (Trade, Tourism & Investment) and Minister Pisoni (Innovation & Skills), endorsing these endeavours.

Working groups, consisting of research staff from across SA Health have been established with significant engagement with all SA universities, SAHMRI, the Aboriginal Health Council of SA, Industry, clinical researchers and other key stakeholders.

The Steering Committee's initial key activity was to prioritise and implement the 17 recommendations resulting from the Birch Review. The approach adopted by the Steering Committee and the working groups is highly collaborative using co-design principles to empower all parties to take responsibility for design and implementation of the process to improve outcomes⁶.

To date, while progress has been made, more must be achieved. HTSA is pleased to continue to drive this work in partnership with SA Health, SAHMRI and South Australia's academic institutions and with the support of Minister for Health and Wellbeing.

HTSA Recommends

4. Significantly supporting the implementation and ongoing administration of the Research Management System that is currently being procured by SA Health to ensure a streamlined single point of entry for submission of ethics and site-specific assessment applications.
5. DHW prioritising and embedding research within health services by including research related key performance indicators into Service Agreements.
6. Establishing a single coordination process for all Human Research Ethics Committees (HREC) across the state to enable a service model that meets the needs of research applicants in a predictable, high quality and high functioning manner while ensuring the South Australian public is well served by ethically conducted research.
7. Providing training for researchers and supervisors in Universities, MRIs and health services and for HREC members to ensure competency at all levels, including the ability to consider the scientific merit of research proposals and the benefits of consumer involvement at all stages of the research.
8. Establishing a state-wide operational working group to unify health services Research Offices with university Research Offices to promote effective cross-institutional collaboration.

⁵ The Review of Research Governance in the Department for Health and Wellbeing and related LHNs commissioned by the Department for Health and Wellbeing (SA) in 2018 and undertaken by Jim Birch AM.

⁶ Note: The Clinical Research Governance Steering Committee is providing a separate submission to SAPC.

9. Building research leadership capacity within SA Health so that across-department activities and policy initiatives are prioritised and coordinated.
10. Developing a researcher accreditation system that would identify and acknowledge key credentials so that researchers could have streamlined access to services and systems including data, patient records and resources in a systematic, ethical, and transparent manner.

3.3 Health System HMR Leadership

Currently responsibilities for research leadership within DHW resides with the Chief Medical Officer. Whilst there have been useful interactions with the three acting CMOs over the past 8 months regarding the role of research in the health system, it is evident that research leadership should be significantly strengthened. If HMR remains as the responsibility of the CMO, the CMO position should report to the Chief Executive DWB and have suitably senior staff and resourcing to support and drive research policy work to advance HMR across the state including:

- Providing leadership for health and medical research transformation through research policy development, strategic directions and research quality assurance across the health system
- Working with and supporting the research director functions within the LHNs, the University sector and SAHMRI
- Being accountable for strategic research activity and outcome reporting
- Contributing to whole of government research strategy
- Having the authority to represent South Australia nationally with subsequent reflection of national initiatives in policy changes and advice to LHNs
- Overseeing research governance reforms commenced through the implementation of the Birch Review recommendations

Additionally, existing research leadership positions in LHNs should be strengthened and, where needed, new positions created that report to the LHN CEOs.

The DHW Chief Executive should also ensure that research is embedded and evidence-based approaches are prioritised in all the other Chief positions including the Chief Allied Health Officer, Chief Nurse and Midwifery Officer, Chief Pharmacist and the Chief Digital Health Officer.

It would also be valuable to have other key players involved at a leadership level including private hospitals, the AMA and RACGP and others who can assist further collaboration across the research and clinical domains, such as CSIRO and some of the funding bodies such as the hospital foundations.

A key role of HTSA is to facilitate co-operation and collaboration between researchers and clinicians in healthcare services. From discussions with key leaders and experts from within healthcare services and as highlighted in the Birch Review (2018) there are significant challenges to be addressed to enhance the role of research within health services. This view is based on the following observations by HTSA:

- There are high levels of variation in practice and process in relation to research strategy and operations within LHNs, however most LHNs have a Research Director and a Research Office.
- Capacity in the Research Offices could be enhanced and until recently the operations of these Offices have been relatively hidden.
- The link each LHN has with universities and SAHMRI vary with some being much stronger than others.

HTSA Recommends

11. Significantly strengthen the role of the CMO to lead and drive a reinvigorated culture of research in SA Health
12. Support the creation of a state-wide Research Governance Structure through:
 - Revisions to the Local Health Network Board Charter to include responsibilities for fostering research as an essential contribution to quality and safe health care and
 - The establishment of a Health & Medical Research Advisory Panel to work with government and SA Health on research priorities and to support the ongoing development of HMR and
 - Implement the original Shine Young Report recommendation (SA Dept of Health 2008) to expand SAHMRI's reach through the development of research nodes in each of the LHNs

4 Performance Analysis

4.1 Measuring HMR Activity

With all major funding bodies adjusting their focus to consider impact and the emergence of the Medical Research Future Fund as a key funding source, South Australia must ensure impact is clearly defined and related to the needs of health consumers and the community.

All AHTRCs in Australia and internationally are thinking about the metrics they use to assess and demonstrate impact, leadership, collaboration, consumer and community involvement, and workforce development. This is complicated by the conflicting metrics that exist between the academic, healthcare and community sectors.

While academic organisations use the traditional metrics of grants, publications and citations; healthcare services focus on service outcomes (length of stay, occasions of service and to some extent patient outcomes), and health consumers and the community value things like access, equity and efficiency.

HTSA needs to have available metrics that reflect patient and public impact, healthcare improvement at the local level and larger system-wide transformative activity while also recognising the importance of traditional measures required by academia. To this end HTSA is working on the development of an Impact Framework to ensure mapping and measurement of progress towards our goal of accelerating the translation of research to improve health outcomes for South Australians. The Framework which will be finalised in 2020 will be important for reporting to the NHMRC, stakeholders and funders.

Other activity HTSA has also undertaken:

- HTSA's Research Director, Professor Steve Wesselingh has participated in a NHMRC Working Group to guide the early conceptualisation of impact measures.
- HTSA and SAHMRI have been involved in a project led by Telethon Kids in WA and Australian Association of Medical Research Institutes (MRI), to design an impact framework for MRIs.
- HTSA participation in AHRA's working group that is considering impact measures particularly the measurement of impact of collaborative approaches to advance translation research projects

HTSA Recommends

13. An Impact Framework, with suitable agreed metrics, is included in the state-wide HMR Strategy to measure the success of health and medical research across South Australia over the next 10 years.

5 Key Issues – Factors Influencing HMR Activity

5.1 Workforce

HTSA Research Translation Capacity Building Steering Committee

HTSA is leading efforts to harness cross-sector expertise to build the capabilities of the research translation workforce. This workforce includes researchers, clinicians, policy makers and other staff involved in program implementation. Led by Professor Alison Kitson and Dr Ecushla Linedale, these efforts include the establishment of the HTSA Research Translation Capacity Building Steering Committee. The Steering Committee includes representatives from organisations that have training responsibilities across the state, the CEIH, health services, universities and registered training organisations and HCASA. The group has identified the key competencies needed to create a thriving workforce which include Knowledge Translation; Consumer Engagement; Communication; Impact Evaluation; Health Economics; Knowledge Synthesis; Clinical Research skills including Good Clinical Practice; Design Thinking; Influencing Government Policy; Using Data to Driven Healthcare; Commercialisation and Entrepreneurial Research.

A suite of introductory educational resources around research translation are currently in development and all currently available courses in Australia have been identified and mapped to the key competencies and published on the HTSA website. Additionally, this committee is focusing on:

- Training - providing accessible quality training in core competencies of health research translation;
- Networking & Mentorship - facilitating relationship building and collaboration via the establishment of the Health Translation Network and communities of practice;
- Career Pathway Development - creating valued career-pathways and embedding health research translation in the health system.

Good Clinical Practice State-wide Training Platform

HTSA has been working with partners and potential funders to conceptualise a state-wide, centrally coordinated, face-to-face Good Clinical Practice (GCP) training program, that would be based on a Gold Standard - TransCelerate ICH-E6 GCP course. A state-wide consistent rollout, based on a train the trainer, collaborative model, could raise the bar across the state generally while also preparing individual staff for clinical research. Importantly this could coincide with the introduction of new research standards that will be introduced for all Health Service Organisations by the Commission on Quality and Safety in Healthcare. Each service will need to provide evidence that staff are suitably trained for their accreditation.

GCP training, originally developed for pharmaceutical clinical trials, has become widely adopted as the standard for all clinical research. GCP training is appropriate for all clinical researchers in public and private hospitals, academia and industry including Principal Investigators, Associate Investigators, Research Nurses, Coordinators and Data Managers. Additionally, it could be used as a component of medical, nursing and allied health student training. This type of approach was used in South Korea to improve its success in clinical research and in Monash precinct in Victoria where, to date, over 3,500 people have completed a similar face to face training.

Introducing good quality GCP training has the potential to:

- Develop a culture of Good Clinical Practice in South Australia
- Build capacity in local teams and staff
- Improve the quality of clinical trials and clinical research

- Increase funding and investment in clinical trials
- Improve SA's ability to attract and retain leading clinical and researcher talent and
- Support hospital accreditation and compliance standards

Creating a Clinical Research Translation Workforce

HTSA has identified a workforce gap in clinical research translation. While Clinical Academics, as mentioned in *SAPC Issues Paper, Section 3 – Policy Environment*, play an important role, the role has diminished over the past 10-15 years as the priorities for research within clinical practice also diminished. The history of clinical academics is embedded in medical practice and today clinical research is on a broader base including nursing, midwifery and allied health practitioners.

Internationally, particularly in the United Kingdom two additional positions have been implemented - Clinical Researcher Translation Fellows and Research Translators.

HTSA has developed a more detailed commentary paper on clinical academics (Attachment A) which also further describes the UK models and recommends that more detailed investigation is required including an understanding of interstate and international models to grow the clinical research workforce.

HTSA recommends

14. SA Health embeds research translation training and workforce development, in particular implementation science and knowledge translation, within the health system.
15. Training and supportive structures including funding and incentive schemes to promote entrepreneurial research
16. A Good Clinical Practice (GCP) training model is supported on an ongoing basis and led by HTSA. A collaborative funding model with industry is being explored.
17. Review the existence, role and current function of Clinical Academics and associated positions across the state and what opportunities may arise from other international initiatives.

5.2 Access to Data

Data access for researchers remains a very frustrating and a research limiting feature of the South Australian landscape. Experienced researchers have developed “work arounds” to access data for specific projects but typically researchers are confronted with difficulties in knowing what data is available and how to access it, long waits for data, and difficulties with ethics process around data projects.

HTSA has long held a vision to create a SA Data Hub as a key component of a state-wide learning health system that would dramatically improve access to health system data for researchers and clinicians. HTSA has been advocating for the creation of this virtual data hub, with accredited users including researchers, that would support the timely and prudent use of data to inform decision making and impactful research projects. In-principle support has been provided from leaders in DHW, and HTSA has also been working with the CEIH as it develops its SA Data and Analytic Plan. It is critical that researchers are inclusively considered in all elements of this Plan as it evolves, and resources are allocated to support it.

Building data analytic capacity was also included as one of HTSA's strategic priorities as part of the MRFF RART Round 3 funding allocation. A very positive outcome was that the allocation of MRFF funding (\$320,000/year for 2 years) was matched by the CEIH to create the Health Analytics Research Collaborative (HARC).

This collaborative aims to work closely with health services to consolidate and build upon the analytic expertise that is already available across the state and to mobilise and connect the expert analytic capability within the academic and research sectors. The success of this collaborative will be to realise the potential of relevant information sources to enhance policy, practice and care across the health system. HARC engages with both primary and acute health services and associated stakeholders, including the community and consumers, to work towards this vision.

The HARC Leadership Group, co-chaired by Prof Derek Chew (SAHMRI/Flinders University/SALHN) and Tina Hardin (CEIH) guides and governs the Collaborative, includes clinical researchers, registry analysts and data scientists, to boost collaboration and further develop the data analytic capacity in South Australia.

As part of this collaborative, four data fellows were employed to undertake data analysis to deliver impactful projects to inform health services. Some of these data fellows are working with the CEIH's newly created Clinical Networks.

HARC aims to assist with the development of the next generation of data science leaders in research.

HTSA Recommends

18. The SA Government significantly invests in the implementation of a Data and Analytics Plan to enable SA's data assets to be available in a timely and equitable way to researchers, clinicians and policy makers to mobilise a data driven health system. Such an investment must include ongoing data support mechanisms.

5.3 Research Infrastructure

HMR Capability mapping

HTSA recognises the importance of creating and using a platform to track and mobilise capability in health and medical research translation in South Australia. HTSA has a vision to develop a suitable tool to capture, monitor and utilise the state's capability. HTSA's MRFF Working Group, which includes representation from all HTSA's partners and the Department of Innovation and Skills is well positioned to take a key role in the coordination of this platform. This is evidenced by the significant interactions and rapid state-wide mapping of research in response to the COVID-19 pandemic.

There are opportunities to work with two existing web-based platforms – Healthy Ideas (SA Health) and the Medical Devices Partnering Program (MDPP) run by Flinders University to develop such a tool. MDPP currently has a narrow application in the field of medical devices, however with further expansion this could provide a whole of state platform that would be available to national and international researchers/companies.

Registries

Infrastructure to support Registries needs to be prioritised in South Australia. While SAHMRI is currently leading an active Registry Centre that is working to develop the impact of over 30 Registries, more could be done for the state to benefit from this registry expertise. Developing mechanisms to ensure registry data can inform service planning and services to improve patient outcomes is vital.

Research infrastructure for clinical trials is discussed in Section 5.7.

HTSA Recommends

19. Establish and maintain a collaborative across-sector, across-institution SA research capability platform utilising the well-developed and collaborative SA MRFF Working Group as the coordinating point to work with MDPP to explore the feasibility of expanding the MDPP's current platform to include all state health related capability.
20. South Australia must prioritise infrastructure to support Clinical Registries and ensure that they are positioned and utilised to inform and improve health services in a timely and effective way.

5.4 Collaboration

Research funding is increasingly being focused on large collaborative efforts that can achieve the scale required to address big global challenges. SA has not historically fared as well in the large collaborative research funding programs versus individual project grants. Incentives therefore need to be put in place (financial, promotion, recognition etc) to encourage researchers to take a more collaborative, large-scale entrepreneurial approach to achieving impact.

Individual organisational identity and competition between organisations is replaced by the primary goal of collaboration to deliver positive impact for all South Australians while advancing both research and health care achievements at the state, national and international level. This includes improved patient outcomes, tangible research outputs based around impact, health system improvements and collaborations with industry. Clinician and consumer driven priorities must be key to prioritising projects.

Capability and need across the state should be considered, not institution by institution, or even precinct by precinct. All capability, irrespective of where it is located, should be respected as part of our ability to achieve our vision.

Collaboration is the underlying principle for everything that is undertaken at HTSA and must be the principle that drives research endeavours. It is often very difficult to achieve meaningful collaboration in an environment where partners are competing for funding, status and students and where even within partner organisations, there are competing departments striving for recognition, control or power.

The key is leadership and incentives to support and drive collaboration. Traditional metrics must be complemented by new metrics that measure the value of collaboration.

Government funding incentives will be crucial to changing the current culture towards large, collaborative efforts. Such a program was, in fact, previously in place with the Research Consortium Program. One of the successful initiatives funded by this program was the establishment of the Registry of Senior Australians (ROSA), formerly known as the Registry of Older South Australians, to monitor the health, service utilisation, medication use, mortality, and other outcomes of people receiving aged care services in South Australia. Unfortunately, the Research Consortium Program has been discontinued. Consideration should be given to the reintroduction of this, or a similar funding opportunity. Priority could be given to seeding large-scale collaborative initiatives that can be competitive for major national or international funding.

HTSA recommends

21. The SA Government should reinstate the Research Consortium Program, or a comparable fund with a focus on incentivising a collaborative approach in grant applications so that researchers can be better prepared to be competitive for major funding on the national and international stage.

5.5 Funding

After reviewing MRFF funding success, under the direction of the HTSA Board in mid-2019 HTSA established and is now coordinating the SA MRFF Working Group that includes representatives from each university, SAHMRI and various government departments (Health, Industry and Innovation). The Working Group aims to improve our competitiveness and increase our share of the MRFF through a collaborative, connected state-wide approach to raising awareness, upskilling and creating collaborative opportunities for South Australia.

To date the group has convened information sessions at various locations, hosted a session with an interstate speaker from Monash University to hear about their successful approach, shared information from and about the MRFF, actively promoted all new grant rounds, convened an expert review panel for Frontier Grants, met with the national MRFF leaders and provided the contacts for expert reviewers to the MRFF. It is this established network that enabled the rapid capture of information on research projects to create the SA COVID -19 Research Register.

HTSA Recommends

22. HTSA is funded to lead the MRFF Working Group (currently unfunded) to support grant applications and to foster collaborative initiatives to improve South Australia's success in HMR grants.

5.6 Translation

HTSA and all the NHMRC accredited Translation Centres are premised on the concept that it is beneficial to orient, nurture and support research activities in tangible and deliberate ways to enable them to have more rapid impact, that is sustainable and scalable. This means environments for projects to successfully accelerate along the translation pathway must be created and sustained and be easily accessible to those who need them. This includes those involved from the discovery, clinical, health service and population health research perspectives. Creating these environments requires investment in HTSA structures and the coordinating capacity that holds them together and allows them to be successful.

HTSA acknowledge the process is complex and often non-linear and would suggest that all projects have both commercial and non-commercial drivers. For example, a new model of care (diagnostic, therapeutic or direct care) should be considered in an economic evaluation of effectiveness.

Investing in strategically placed incubators or structures along the translation pathway/commercialisation process is essential and HTSA supports the model developed by McKeon in 2013 and as outlined in the *SAPC Issues Paper pg 30*.

Commercialisation pathways are confusing in the SA landscape with different stakeholders, such as the university sector, operating in competition with other stakeholders. HTSA is well positioned, through its partnership model, to explore opportunities to consider how existing commercialisation approaches can be better connected, more efficient and leveraged.

In the first instance, one of the key barriers to successful research translation is the matter of Intellectual Property (IP). Sorting out who will own IP at research contractual stage causes delays in contract approval and research commencement. This is a particular issue when projects straddle both an LHN and a University. Clarity on IP ownership and education on IP for researchers, research office staff and executives approving research contracts is essential to overcoming this barrier.

HTSA Recommends

23. Authorise and support HTSA to work with all existing stakeholders to explore mechanisms to improve commercialisation across the state in HMR.
24. Further investigation is undertaken into the management of intellectual property in resolving a barrier to efficient research approval processes.

5.7 Clinical Trials

Data

The SAPC Issues paper cites a number of key performance indicators in which SA lags behind other states. An important exception relates to the number of registered clinical trials in SA, which are cited as increasing from 180 in 2015 to 313 in 2018, with the share of trials nationally also rising over this period from 13.1% to 15.2% (Table 2.2).

HTSA notes that the Productivity Commission uses the ANZ Clinical Trials Registry as the source for data on clinical trials. Whilst the ANZ Clinical Trials Registry is a useful primary clinical trials registry, HTSA believes that the Clinical Trials Registry has a range of limitations including:

- Incomplete picture of clinical trials activity in Australia
- Limitations associated with self-reported data
- Cumbersome to analyse
- Updating data is not mandatory/compulsory
- While type of funding source is reported there is no data provided on the amount of funding

The growth in clinical trials as reported through the ANZ data may in fact reflect a change in registrations rather than an increase in trials. Registration of clinical trials is not legally required in Australia or New Zealand but since 2014, trial registration has been a pre-condition of ethics approval.

Clinical Trials Landscape and Infrastructure

Development of the Clinical Trials landscape in South Australia is emerging as a shared platform of activity for HTSA, SAHMRI, SA Health including all LHN's and Adelaide BioMed City. Our vision is to network with an evolving Primary Care network and ensure trials are available across the whole state. Foundational mapping, stakeholder engagement work and relationship building has commenced with health services, clinicians and industry and this has been further enabled by the work lead by Health and Medical Industries, Department for Trade and Investment.

Infrastructure is required to support and nurture clinical trials for both industry-based and clinician-initiated trials. This includes promotional tools, patient recruiting and management systems and an efficient and effective ethics and SSA system.

To progress the clinical trials landscape HTSA has been involved in activities including:

- Working with COAG funded Clinical Trials Coordinator position, based in the DHW Office for Research, to support and promote their deliverables while ensuring that clinical trials development activities are well coordinated.
- Supported and promoted the consultation of the developing Australian Commission of Quality and Safety in Healthcare Clinical Trials Framework.

- Convened preliminary workshops with SA Health Research Offices, researchers and academic administrators, who have carriage of Clinical Trials related activities and infrastructure, to develop connections across SA.
- Commenced a mapping process with Adelaide BioMed City, of the current activities across the state with regards to clinical trials.
- Worked to progress the establishment of a Registry Centre which would enable the use of registries for clinical trials.
- Working closely with ABMC and its Clinical Trials sub-committee to ensure all industry approaches are connected.
- Working with ABMC and SA Health to map current clinical trials capability and stakeholder activities across SA. This will lead to a significant stakeholder forum where all interested parties from ethics committees to researchers and industry partners will come together to develop a Road Map for Clinical Trials Success for SA. It is anticipated that this will include the identification of 3-5 tangible activities that will make the most difference in progressing clinical trials in the state and gaining commitment for stakeholders to support short, medium and long-term progress.
- Connected SAHMRI and CALHN to commence discussions to develop and implement IT platforms to enable Clinical Trial management systems.

HTSA Recommends

25. HTSA is funded to work with all key players, including industry, to strengthen the Clinical Trials infrastructure across the state
26. That the implementation of the Research Management System becomes a state priority as it will be able to capture clinical trials metrics

5.8 Consumer and Community Involvement

Health Translation SA works in partnership with South Australia's lead consumer advocacy agency Health Consumers Alliance of South Australia (HCASA), and health consumers and community members to ensure our research priorities and projects reflect the current and future health care needs of South Australians.

Health consumers and community members play active roles within our Stakeholder Forum, grant planning and review processes, state and national research projects and other strategic planning activities. HTSA also contributes to national consumer and community engagement partnership activities through AHRA.

HCASA has a large network of supporters and considerable expertise in ensuring consumers have a voice in healthcare. The CE of HCASA is a member of HTSA Board of Partners, ensuring the consumer voice is recognised by HTSA partners⁷.

HTSA works in collaboration with SAHMRI to implement a consumer and community engagement framework, developed in partnership with HCASA. This framework guides a range of capacity building and infrastructure projects to ensure consumers can have a greater voice in research and are able to develop strong and productive relationships with our researchers. A *Community Interest Register*, which provides a database of consumers who are interested in being involved in health and medical research, was launched in May 2019 and is available to all HTSA partners to assist recruiting consumers to research projects.

⁷ HCASA's core funding from SA Health has been discontinued and the organisation will likely cease to exist from 1 October 2020. This would make SA the only state in Australia not to have an independent consumer advocacy group.

HTSA Recommends

27. The proposed state-wide HMR strategy includes as a key principle the role and importance of meaningful engagement of consumers and community groups across the research translation landscape.
28. The important role of health consumers and community in health and medical research is recognised.

5.9 Competitive Advantage

Collectively Adelaide and South Australia has many physical, intellectual and social advantages. We have extensive capabilities in research, education and clinical care set in an accessible and affordable environment where most of the key assets already have existing relationships.

HTSA is seen as an independent agent that can be a catalyst while also providing the glue to join the dots between agencies around common visions. South Australia's assets include but are not limited to:

- Academic sector
 - Well equipped, high achieving universities and a state-wide medical research institute
- Health care:
 - World-class, well connected and technologically advanced public teaching hospitals
 - Well linked public and private hospitals
 - Active NDIS and ageing well facilities and expertise
- Facilities:
 - Preclinical imaging and research laboratories, including large animal research facilities
 - Good Laboratory Practice (GLP), Good Manufacturing Practice (GMP) facilities including clean rooms, laboratories, warehousing and cryogenic storage
 - GMP compliant radiopharmaceuticals through the cyclotron facility
 - Advanced microscopy, flow cytometry, mass-spectrometry and cellular imaging
 - Advanced manufacturing specialising in health and medical devices and assistive technologies
 - Machine learning and artificial intelligence centres
 - National clinical and population registries
 - Proton Beam Therapy centre (under development)
 - Multi-phase clinical trial facilities
 - At least 4 public and 1 private clinical trial facilities
- Expertise:
 - Digital health capabilities with a focus on smart technologies and clinical applications
 - Drug development, generic drug manufacturing and traditional medicine (including Australian Indigenous medicine)
 - Genomics, photonics, bioinformatics, proteomics and metabolomics
 - High-tech simulation, virtual and augmented reality engineering and robotics
 - Nanotechnology
 - Highly engaged clinical trials eco system

These key capabilities are well connected industry and university hubs, focusing on research, development and commercialisation. These hubs are home to both international organisations and start-ups, often with state-of-the-art infrastructure available.

6 Summary

HTSA believes that SA health and medical research is on the cusp of a renaissance through well placed infrastructure, well intentioned and skilled researchers and emerging stronger links between the various institutions and through the recognition of the importance of consumer and community involvement at all stages across the continuum. However, stronger leadership and ongoing investment is required to ensure SA research continues to grow and contribute to the social, economic, education and health of all South Australians.

The HTSA Board respectfully asks that the SAPC consider the following recommendations:

Section 3.1 Policy Environment

1. The development of a Statewide HMR Strategy that includes research priorities and a vision to drive across-state collaborations with health services, industry, researchers, policy makers and consumers. The process must include health service leaders including lead clinicians, LHN CEOs and Board chairs, stakeholders and the community.
2. Give HTSA the mandate (with funding) to expand its current role to drive the HMR strategy and vision for the state.
3. The establishment of a State based research funding pool available on a contested basis to encourage and incentivise South Australian HMR which addresses priorities in a coordinated, collaborative and impact-based manner that can achieve at scale. This could be modelled on the MRFF Frontiers Grant scheme.

Section 3.2 Research Governance Processes

4. Significantly supporting the implementation and ongoing administration of the Research Management System that is currently being procured by SA Health to ensure a streamlined single point of entry for submission of ethics and site-specific assessment applications.
5. SA Health prioritising and embedding research within health services by including research related key performance indicators into Service Agreements.
6. Establishing a single coordination process for all Human Research Ethics Committees (HREC) across the state to ensure the service model that meets the needs of research applicants in a predictable, high quality and high functioning manner.
7. Providing training for researchers and supervisors in Universities, MRIs and health services and for HREC members to ensure competency at all levels, including the ability to consider the scientific merit of research proposals and the benefits of consumer involvement at all stages of the research.
8. Establishing an across-state operational working group to unify health services Research Offices with university Research Offices to promote effective across-institution collaboration.
9. Building research leadership capacity within SA Health so that across-department activities and policy initiatives are prioritised and coordinated.
10. Developing a researcher accreditation system that would identify and acknowledge key credentials so that researchers could have streamlined access to services and systems including data, patient records and resources in a systematic, ethical, and transparent manner.

Section 3.3 Health System HMR Leadership

11. Significantly strengthen the role of the CMO to lead and drive a reinvigorated culture of research in SA Health.
12. Support the creation of a state-wide Research Governance Structure through:

- Revisions to the Local Health Network Board Charter to include responsibilities for fostering research as an essential contribution to quality and safe health care and
- The establishment of a Health & Medical Research Advisory Panel to work with government and SA Health on research priorities and to support the ongoing development of HMR and
- Implement the original Shine Young Report recommendation (SA Dept of Health 2008) to expand SAHMRI's reach through the development of research nodes in each of the LHNs

Section 4.1 Performance Analysis - Measuring HMR Activity

13. An Impact Framework, with suitable agreed metrics, is included in the statewide HMR Strategy to measure the success of health and medical research across South Australia over the next 10 years.

Section 5.1 Workforce

14. SA Health embeds research translation training and workforce development, in particular implementation science and knowledge translation, within the health system.
15. Training and supportive structures including funding and incentive schemes to promote entrepreneurial research.
16. A Good Clinical Practice (GCP) training model is supported on an ongoing basis and led by HTSA.
17. Review the existence, role and current function of Clinical Academics and associated positions across the state and what opportunities may arise from other international initiatives.

Section 5.2 Access to Data

18. The SA Government significantly invests in the implementation of a Data and Analytics Plan to enable SA's data assets to be available in a timely and equitable way to researchers, clinicians and policy makers to mobilise a data driven health system. Such an investment must include ongoing data support mechanisms.

Section 5.3 Research Infrastructure

19. Establish and maintain a collaborative across-sector, across-institution SA research capability platform utilising the well-developed and collaborative SA MRFF Working Group as the coordinating point to work with MDPP to explore the feasibility of expanding the MDPP's current platform to include all state health related capability.
20. South Australia must prioritise infrastructure to support Clinical Registries and ensure that they are positioned and utilised to inform and improve health services in a timely and effective way.

Section 5.4 Collaboration

21. The SA Government should reinstate the Research Consortium Program, or a comparable fund with a focus on incentivising a collaborative approach in grant applications so that researchers can be better prepared to be competitive for major funding on the national and international stage.

Section 5.5 Funding

22. HTSA is funded to lead the MRFF Working Group (currently unfunded) to support grant applications and to foster collaborative initiatives to improve South Australia's success in HMR grants.

Section 5.6 Translation

23. Authorise and support HTSA to work with all existing stakeholders to explore mechanisms to improve commercialisation across the state in HMR.
24. Further investigation is undertaken into the management of intellectual property in resolving a barrier to efficient research approval processes.

Section 5.7 Clinical Trials

25. HTSA is funded to work with all key players, including industry, to strengthen the Clinical Trials infrastructure across the state.
26. That the implementation of the Research Management System becomes a state priority as it will be able to capture clinical trials metrics

Section 5.8 Consumer and Community Involvement

27. The proposed state-wide HMR strategy includes as a key principle the role and importance of meaningful engagement of consumers and community groups across the research translation landscape.
28. The important role of health consumers and community in health and medical research is recognised.

END

7 Attachment A - Clinical Academics & Clinical Researchers

CLINICAL ACADEMICS AND CLINICAL RESEARCHERS

COMMENTARY

1. Background

Health Translation SA (HTSA) has become aware of the need to discuss the role of clinical academics, clinical researchers and clinical affiliates in the context of health & medical research across the state and understand the role these positions may have in advancing quality research and innovation within the South Australian health services environment.

It is further noted that the role of the State's public hospitals in facilitating commercial, university based, and clinician-initiated research needs to be better articulated as is the role of the universities in supporting the development of the next generation of medical, nursing and allied health staff.

In acknowledging that research is led by all disciplines including nursing, midwifery and allied health professions, the intent of this short paper which is based on medical clinical academics and their associated links to research, teaching and delivery of clinical care, identifies a number of questions for further consideration.

2. Clinical Academics

The history of the Clinical Academic in South Australia is embedded in the time when university employed doctors provided honorary services to hospitals as a way of continuing their clinical practice. Over time, the participation of these university doctors in on call rosters, clinics, quality assurance activities and other direct patient care and administrative services was recognised, as was the fact that university academic salaries were lower than the medical staff employed directly by the health system. In some cases, the hospitals used the opportunity of a university appointment or title such as 'professor' with remuneration above award rates as a way of attracting high profile doctors who were also recognised researchers.

In the past, clinical units within hospitals had a single head who was also the head of the university academic department e.g. the head of the academic school of surgery at the Adelaide University was also the head of the surgical unit at the RAH. Today this is no longer the case with the universities and hospitals, each with independent organisational structures no longer having academic and clinical alignment e.g. the head of surgery at SALHN is not the academic lead or professor of surgery at Flinders University.

Undergraduate, RMO, intern and registrar training (and to some extent nursing, midwifery and allied health) were all provided with teaching opportunities led by senior medical staff.

The development of the Clinical Academic position and subsequent enterprise agreement was an acknowledgement of the contribution clinical academics make to the health system in terms of teaching, research and clinical service¹ (and that there was a salary differential²).

Today a Clinical Academic is defined as a medical specialist registered by the Medical Board of Australia and who is employed by a University as a Professor, Associate Professor, Senior Lecturer or Lecturer in the

¹ SA Health Clinical Academics Enterprise Agreement 2018 pg 1

² Interestingly, today, allied health academics are paid more by the Universities than their LHN employed colleagues

faculty of Health Sciences and also employed by the employing authority as a Clinical Academic performing duties³ inclusive of teaching, clinical practice, research and administration.

The University of Adelaide and the Flinders University are the primary universities engaged in clinical academic arrangements although a relatively new agreement between University of SA and Calvary Adelaide is seeing a small number of clinical academic posts emerging from this innovative partnership.

Clinical Academics when employed by a Local Health Network (LHN) perform a range of duties including the provision of clinical services; administrative functions; supervision and management of staff providing clinical services, supervision of research programs, teaching and training; involved in quality assurance activities; participating on-call and recall rosters and other associated activities.

Clinical academics are paid by the University and also by the LHN to enable base salaries to reach the same level as medical staff employed fully by an LHN. Clinical Academics are also eligible for additional allowances if they have responsibility for the management of human/financial resources or for the coordination of research or the management of extensive research projects.⁴ (The University sector does not have an allowance for additional administrative responsibilities.)

Clinical academic positions are primarily metropolitan hospital based, reflecting the historical evolution of the positions. There are approximately 69 Clinical Academic positions across LHNS/SAAS as distributed in the table below.

Distribution of Clinical Academics⁵

SA Health Entities	Clinical Academics
CALHN	39
Rural Networks combined	0
NALHN	5
SA Ambulance	0
SALHN	15
Statewide Clinical Support Service (SA path)	1
WCHN	9
Total	69

Currently there are 6 clinical academics working at SAHMRI with hours varying from 0.2 FTE to 1.0 FTE. There are two known joint appointments, one with University of Adelaide and one with SA Health, however, such appointments with other entities are generally not captured within SAHMRI's HR system. It is possible that any SAHMRI clinical academic positions are double counted in the SA Health numbers.

Further detailed analysis is required of the scope of clinical academics particularly with regards to research (and teaching) activities. However, anecdotally, it would appear that responsibilities for research will vary between individual clinical academics and be influenced by the research interests of the individual and the workplan where agreed with the LHN clinical lead or head of unit.

³ SA Health Clinical Academics Enterprise Agreement 2018 pg 2

⁴ SA Health Clinical Academics Enterprise Agreement 2018 Section 14.4 and 14.5 pg. 9

⁵ These numbers have been gathered informally and more detailed data collection is required to be confident of the precise numbers.

3. Clinical Researchers

There is no official recognition of a clinical researcher. The SA Medical Officers Enterprise Agreement (EA) recognises that research constitutes an integral part of the work of many Consultants and that Medical Practitioners (as defined in the EA) ‘may be required to participate in clinical and scientific research’⁶ and that Senior Medical Practitioners ‘must be well advanced in one or more fields of clinical medicine, management, teaching and/or research’.⁷

Therefore, a clinical researcher may be simply defined as a clinician who undertakes research which may or may not be self-initiated or initiated on behalf of the LHN/clinical unit.

SAHMRI uses a variety of descriptions for staff who undertake research, so it is not possible to identify the number of ‘clinical researchers’. SAHMRI has 51 individual titles which all include the word ‘research’ in the title, and which cover approximately 130 employees. This is not unexpected in an institute focused entirely on research but demonstrates the broader need to establish a common nomenclature for clinicians involved in research.

4. (Clinical) Affiliate Agreements

Affiliation agreements are aimed primarily at joint research arrangements between a specific LHN and a specific University.

- A university may have a separate agreement with more than one LHN e.g. Adelaide University has an Affiliate Agreement with WCHN and another agreement with CALHN. Flinders University has an affiliate agreement with SALHN (which is currently being renegotiated). SALHN also has a separate research agreement with Adelaide University.
- These agreements are built on an historical ‘strong’ relationship with the participating entities; acknowledge that their successful research endeavours could not be achieved without this strong relationship and that this existing relationship should be used to further advance their respective (research) interests.
- Through this cooperative relationship, the agreements provide support at the institutional level for:
 - Administration of (research) grants
 - Appointment of academic title holders and the
 - Undertaking of joint projects.
- The purpose of these agreements is to promote cooperation between the two participating entities with regards to:
 - Administering Research Activities
 - Undertaking Academic and Clinical Duties – Teaching and Supervision of Higher Degree by Research Students and
 - Undertaking Research Collaborations between Institutions
- Affiliation Agreements are not public documents and a review of these agreements has not been possible. It is assumed that the primary purpose and content of each agreement is similar between the two universities and the LHNs. It is further noted that the University of SA does not have any affiliate agreements with the LHNs although as noted above the University of SA and Calvary Adelaide have recently entered into an agreement creating a number of ‘adjunct’ or honorary positions.

⁶ SA Health Salaried Medical Officers Enterprise Agreement 2017 Section 52.3.2 pg 29

⁷ SA Health Salaried Medical Officers Enterprise Agreement 2017 Section 52.4.2 pg 29

Clinical Affiliate status is also awarded to individuals through the university sector, but this is a university initiated and controlled process at the individual personal level e.g. Flinders University, Collage of Medicine has over 900 clinical affiliates. Clinical affiliates are honorary positions and include appointments at Adjunct Professor, Associate Professor, Senior Lecturer or Lecturer levels.

5. Unnamed Group

There is also another group, as yet unnamed, where the university cross charges back to the LHNs costs associated with services provided by university staff to LHNs and where LHNs cross charges back to the Universities. It is understood that these are clinical academics funded via a different mechanism.

This requires further investigation to fully understand who these academics are and what service is being provided and why they are treated in a different way.

6. International Variations

In the pursuit of identifying ways in which research can be accelerated within the clinical environment, the UK has developed the positions of Senior Clinical Researcher Translation Fellows and Research Translators.

Clinical Researcher Translation Fellows have academic credibility to lead research translation, capacity building and innovation of services across acute sector, primary care and intersect with industry. Following evaluation, these fellow positions have been expanded with demonstrated benefits in system change. Impact measurements would differ to conventional NHMRC fellowships with greater focus on leadership, health service knowledge, stakeholder priorities, impact and translation. This model could expand health services research workforce in South Australia and potentially drive significant and meaningful change.

Research Translators are implementation specialists that complement the Research Translation Fellows and provide hands-on skills to work with clinical and policy staff to put evidence into practice. These positions can be located in primary and acute health services.

Both options are worthy of exploration in the context of clinical academics once clearer direction is achieved on the desired outcomes for the investment in clinical academics and/or these alternative roles.

7. Complex Benefits Realisation

In unravelling the role of the clinical academic, it is important to note the complex relationship that exists between the universities and the hospitals/LHNs. As the relationships between the universities and the hospitals have become more 'distant', the role of the clinical academic has become less defined. This 'distant' relationship could in part be the result of changing health system structures from the development of health regions/LHNs, resulting in relationships changing from a direct link by a university medical school with a hospital clinical speciality unit to a more corporate relationship that now exists with universities at LHN level.

The Universities and health facilities should work together to develop the clinical workforce in a balanced manner to ensure that future workforce skills are relevant and reflect the needs health services, but this does not always occur. Universities rely on health facilities for placements of their students and utilise clinical staff within the LHNs to assist with teaching. Likewise, the health facilities and LHNs benefit from influencing the emerging skills and knowledge of the future workforce. On a more fundamental level,

Universities benefit from the ability to include the publications of these academics in their publication statistics that contribute to their international University rankings when the majority of the authors are clinical titleholders and not university academics.

It is also noted that workforce development goes beyond that provided by the University encompassing prevocational and significant vocational training embedded entirely within the health facilities.

What is less clear is the co-dependency the health system as a whole has on the university sector to support the next generation of clinician staff – medical, nursing, midwifery and allied health. Therein lies the dichotomy between a local university/LHN need vs a more philosophical health system wide need.

One can also speculate on the benefits clinical academics can bring to improving standards of clinical practice and translational research but the measurement of this is either unknown or anecdotal.

There are potentially other benefits that a strong clinical academic profile can bring including research grants, clinical trials and raising the national and international profile of both the university and the hospital/LHN. As an aside, the matter of intellectual property management and ownership has been raised as an issue between universities and LHNs. This requires further exploration but is cited as one of the barriers to an efficient research approval process.

8. Discussion

The clinical academic role however defined, exists in a confusing landscape which has evolved over time with little apparent governance oversight or direction in its evolution. Whilst there is a role described within the medical industrial framework there are other arrangements that remain undescribed and elusive. This is particularly the case for high profile medical clinicians who also undertake research and who may work across one or more LHNs, a university and also SAHMRI.

There appears to be no clear strategy to maximise the use of the clinical academic positions (however defined). The LHNs are primarily focused on the clinical services that can be provided through clinical academics, while Universities are focused on training outcomes, developing innovative diagnostic and treatment solutions through research and accessing patients for other research endeavours. These are achieved through the affiliate agreements, research agreements and teaching/training agreements.

It is noted that community-based health services are also important from a research perspective and whilst not mentioned specifically it is assumed that clinical academics based in an LHN will also undertake community-based work were relevant e.g. a psychology clinical academic may also participate in a community based mental health team.

Understanding the role of the clinical academic and its relationship to career pathways is essential in assisting the development of this role in nursing, midwifery and the allied health professions. As outlined in the UK environment, barriers to achieving this relate to health research capacity and individual research capacity.⁸

It is proposed that the distinction between clinical academic and clinician should be removed. All clinicians however defined should have research and teaching obligations regardless of their employing organisation

⁸ Developing clinical academic researchers: insights from practitioners and managers in nursing, midwifery and allied health IN British Journal of Healthcare Management Vol 25, No. 9, 19 September 2019

and appropriate structures should be in place to ensure accountability for obligations associated with teaching, research and clinical practice. Afterall, clinical practice should be evidence based.

However, joint appointments between the university and LHNs are essential to creating opportunities for research project development through:

- Maximising these joint appointments as research supervisors for first time researchers
- Assisting to develop research questions and creating a valid research proposal
- Assisting the researcher to navigate the HREC and SSA approval processes
- Providing opportunities for the researcher to access the university for support in areas such as statistical analysis and protocol development

As the state’s major research institute, a mechanism needs to be identified to bring SAHMRI into the clinical academic construct across all clinical disciplines.

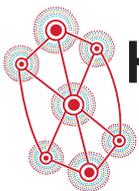
In summary, the concept and benefits of clinical academia should be available to all clinicians including nursing, midwifery and allied health. Further consultation and analysis including an understanding of interstate arrangements is required to better appreciate the potential in the role. This improved understanding and measurement of impact should inform an approach that will assist to strengthen research within LHNs, create a research focused culture and develop a robust research strategy. This process should also explore structures that enable both LHNs and the University sector to equally benefit from such joint arrangements.

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This short discussion paper has been written for Health Translation SA to promote discussion about this important topic. Any comments on this paper can be provided to:

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