Health Services Innovation Tasmania

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Welcome

Health Services Innovation Tasmania (HSI Tas) is a centre of the Faculty of Health, University of Tasmania, selected by the Australian Government to coordinate a clinical redesign program focused on –

- helping plan and implement improved acute care
- delivering a better patient journey
- producing greater efficiency for the state’s four public hospitals
- creating increased satisfaction for our healthcare professionals

The Tasmanian Minister for Health joined Vice-Chancellor Professor Peter Rathjen to launch this timely initiative in the evolution of Tasmania’s health system. As the Minister noted, collaboration plays a central role in innovation.

HSI Tas has been working closely with the three Tasmanian Health Organisations, and the hospitals in each of the regions, where clinical redesign offices have been opened.

In late 2014 we released four key studies identifying system shortcomings in acute care delivery, and outlining opportunities for improvement. The essential start of the clinical redesign process is acquiring a clear picture of how hospitals are managing core business such as emergency department flow and bed utilisation. Our reports from these studies have assisted our hospitals to focus on steps that, when implemented, will deliver the best patient benefits.

This is both a challenging and exciting time for Tasmania’s health system. We feel privileged to be working closely with government and a range of health partner organisations to identify clinical areas that can derive the greatest benefit from innovative transformation.

With a longstanding tradition of teaching and learning, and research in the broad field of healthcare, the University of Tasmania is making a significant contribution to the collaborative effort to improve the health and wellbeing of individual Tasmanians as well as the community at large.

Professor Greg Peterson
Associate Professor Craig Quarmby
Co-Directors, Health Services Innovation Tasmania
What is clinical redesign?

The process of clinical redesign has developed over recent decades in a range of manufacturing and services industries. It may or may not include methods such as Lean Thinking, Six Sigma, Lean Six Sigma, Theory of Constraints, Business Process Engineering and Change Management Techniques. Clinical redesign is an approach to identifying current functioning, analysing opportunities within the processes, proposing and implementing interventions, and then evaluating the intervention. Process redesign may be utilised in both clinical and non-clinical settings, with the aim of:

- Improving service delivery across all aspects of the patient’s journey
- Identifying the root causes of issues impacting the delivery of care
- Developing and implementing sustainable change processes to improve the way healthcare is delivered
- Reducing errors/adverse events
- Maximising resources to improve access and the timeliness of care

Key principles of process redesign

1. Valuing the patient/s as a central part of the redesign
2. Improving the sequences of processes for different groups of patients, as well as larger streams of the whole hospital flow
3. Ensuring that all components in the process are measurable
4. Recognising employee expertise and ensuring staff are full partners in the redesign program

What does clinical redesign mean to me?

Investing in clinical redesign means more Tasmanians will access the healthcare they need to improve their quality of life.

Advancements in medical treatment are happening faster today than at any other time in our history. It makes sense that our systems and processes that facilitate these treatments must also advance. If not, fewer people will benefit.

I am proud our healthcare leaders are prioritising clinical redesign. With family located in all regions of Tasmania, I am comforted by the knowledge that there is work being undertaken to ensure everyone, from my grandmother in Ulverstone, to my father in Hobart, can access the best medical care possible.

Alison Lai
Tasmanian Health Partners Consortium
Consumer Representative
In order to deliver better quality healthcare and improved outcomes for patients, the University of Tasmania has been allocated funding by the Australian Government to help implement clinical redesign in the Tasmanian hospital system from 2013–2016.

Health Services Innovation Tasmania (HSI Tas) and its partners the Tasmanian Health Organisations have implemented initiatives, aligned with accepted key priority areas, for clinical redesign in Tasmania. This work is sponsored by the CEO of the respective Tasmanian Health Organisation and endorsed by the Tasmanian Health Partners Consortium.

Initiatives are commencing in a phased approach across the program period, with three or four initiatives implemented at varying stages in each Tasmanian Health Organisation at one time. Clinical redesign offices have been established within each health organisation to facilitate these initiatives in partnership with HSI Tas. The offices consist of clinical lead(s), program officers and a research assistant.

The consortium has accepted these key priority areas for clinical redesign in Tasmania:

- Emergency access
- Elective surgery
- Bed demand, capacity and flow
- Mental health

All three clinical redesign offices are now well into the diagnostic phase for emergency access, patient flow, and the medical patient journey. These diagnostics include tracking.
patients in emergency departments, monitoring ‘why patients are still in an acute bed’, shadowing medical rounds and multidisciplinary meetings.

Part of the diagnostics includes a ‘big picture map’, where all of the key stakeholders for a particular journey map the process from the beginning to the end, and look for opportunities for improvement. The ‘voice of the patient’ and the ‘voice of the staff’ will be obtained through patient and staff questionnaires, as well as focus groups and one-on-one interviews.

Tasmanian Health Organisation South is soon to begin a program of work in specialist outpatient services using a rapid improvement event technique. Four-to-five outpatient teams work collaboratively on standardised improvements for better access to these services.

The surgical program of work is in the planning and scoping phase. This will concentrate on theatre productivity and planning, and hips and knees Arthroplasty across the state. Work is in progress to implement structures to support this work. The diagnostic phase will uncover more specific areas to focus on.

HSI Tas is also working in partnership with Tasmania Medicare Local to ensure maximisation of resources and non-duplication of work.
Leadership in healthcare
Everyone is a leader

Be you a parent, an older brother or a more talented sportsman than your older sister, you are at times a leader. As a healthcare practitioner you are frequently a leader: of your patient, your juniors and your inter-professional colleagues.

Everyone is a follower

If you have children, you’ll know they lead you at times. Do they not have to lead you to teach you the nuances of parenting your children? Colleagues, of the same profession or another, must be followed when aspects of our patients’ care require it. Our juniors too must be heard; we must be open to their leadership. And patients must be followed. “My horses, my teachers”, wrote Alois Podhajsky, Director of the famous Spanish Riding School in Vienna. “My patients, my teachers” should be the motto of every healthcare provider.

High performing organisations are not so due to the presence of a single charismatic leader; such thinking was discredited by sociologist Max Weber a century ago. Strong followship and leadership is abundant throughout these organisations, and the effect of this collective leadership is far greater than can be gained from leadership offerings confined to the executive suite.

Collectively we lead better.
Collectively we follow better.
Collectively we care better.
Why data rules in health service improvement

Measurement through the collection and analysis of relevant data is a critical part of effecting positive change in healthcare delivery. Data is the only true gauge of whether changes made actually lead to safety and quality improvements, and efficiency outcomes for patients.

“Measurement and improvement are intertwined; it is impossible to make improvements without measurement. Measuring and learning from each patient and using the information gleaned to test improvements can become part of daily medical practice in local settings.”

“Good measurement can help physicians improve the care they provide.”

As the demands on western health systems rise, so does the need for clinical effectiveness and improvement research. With an evidence-based understanding of efficient and effective best practice for healthcare provision, we need to align the clinical and policy research agendas, strengthen research relevance and translation, and prepare our systems for future demand. This is the essence of a learning healthcare system designed to do the following: generate and apply the best evidence for the collaborative healthcare choices of each patient and provider; drive the process of discovery as a natural outgrowth of patient care; and ensure innovation, quality, safety, and value in healthcare.

As observed by Ioannidis: “Given the potentially tremendous costs and repercussions of system interventions, we cannot afford merely to guess that they are effective. Health system interventions should abide by the highest evidence-based standards.”

This necessitates the collection and analysis of relevant data. Furthermore, reforms in the funding of health services, such as ‘activity-based’ funding initiatives, seek to facilitate changes in how healthcare is delivered, leading to greater efficiency while maintaining quality and effectiveness. However, these changes in treatment strategies and service provision often evolve without collecting the evidence to demonstrate effectiveness in terms of patient outcomes. The contemporary pressures on healthcare expenditure make such an approach untenable and unsustainable.

William Edwards Deming, American engineer, statistician and management consultant, quipped, “In God we trust; all others bring data!” Generally credited with Japan’s remarkable ascendency in reputation for the design and manufacture of innovative and high-quality products, Deming was lauded for his transformational role – founded on carefully designed data collection and appropriate analysis – in improving quality processes in Japanese industry.
However, data collection should be neither daunting nor overshadow the actual implementation of health service improvement initiatives. Measurement should facilitate the improvement endeavours, not slow them down. The key is to select the right mix of variables, timeframes for collection and methods of analysis. Information overload is wasteful and leads to a high degree of confusion.9

HSI Tas has significant expertise in the collection and analysis of data (qualitative and quantitative, small and large datasets) relevant to health service improvement and encompassing a range of outcomes (e.g. clinical parameters, voice of the patient and health professional) and process measures (e.g. reflecting efficiency of healthcare delivery). Along with its core team of data analysts, statisticians and health service improvement researchers, HSI Tas presently has five doctoral students investigating various aspects of clinical redesign and healthcare improvement.

Notes:
7. Lloyd RC. “In God we trust; all others bring data”. Front Health Serv Manage 2007;23:33-8; discussion 43-5.
Transfer of learning through targeted capacity building

Since August 2014, HSI Tas, in partnership with the University of Tasmania and Tasmanian Health Organisations, has been delivering workshops with the aim of building capacity in the area of health services improvement and clinical redesign. The workshops were designed and developed by experts in the field for a wide variety of clinicians and administrative/clerical staff.

The workshops focus on introducing the concepts of health service redesign such as scoping, diagnostic, intervention, evaluation and continuous improvement phases and gaining an understanding of how health service redesign can improve service delivery.

The relational side of change and service improvement has been addressed through the Working with People for Health Services Innovation workshop. The workshop content was built on the work of Dr David Rock, an Australian expert in neuroleadership and human behaviour, and Professor Kenneth Walsh, a University of Tasmania and THO South translational research expert. The workshop aims to enhance communication and engagement skills related to workplace culture, innovation and redesign. Furthermore, there is a focus on enhancing skills in motivating teams and facilitating change.

The workshops are being delivered statewide, and to date more than 300 participants have attended. The interactive workshops blend theory with practical tools and processes and have been well received by participants. The majority of participants attending the Introduction to Clinical Redesign workshops indicated that their clinical redesign knowledge was low before attending. However, post-workshops most participants reported that their knowledge of clinical redesign concepts has increased, including their knowledge on tools and techniques, standard work and visual management.

Evaluation findings indicated that the Working with People workshop content was most relevant to the participants’ practice. The majority of participants advised that the interactive nature of the workshop resulted in them returning to their respective areas with increased confidence to handle difficult situations. Evaluation results also indicated that most of the attendees had a better understanding of how to engage people in redesign initiatives.

In July 2015, HSI Tasmania will launch an exciting interactive 5-day Health Services and Clinical Redesign course. Delivered over a 20-week period, this will support participants to successfully plan, implement, evaluate and sustain an improvement project or initiative.

More Information

For more information on Health Services Innovation workshops and courses, or to discuss the possibilities of customised education, please contact the Health Services Innovation Tasmania Educational Facilitator on (03) 6226 6987.

The workshops and courses are free of charge for Tasmanian Department of Health and Human Services staff and Tasmania Medicare Local staff.

“Fun learning and the new lessons learnt will be invaluable.”

Great practical exercises that have improved my learning

One-Day Clinical Redesign Workshops are conducted regularly by HSI Tas
Research

Research students assist HSI Tas in its key role, capacity building within health service improvement. Their diverse projects range from investigating organisational culture within health services, through to examining the determinants of usage of emergency medicine departments.

Dr Fayez Hanna

Dr Fayez Hanna has a background in obstetrics/gynaecology and emergency medicine in Egypt and Saudi Arabia. His PhD is exploring the effect of a new Clinical Leadership Program within the Tasmanian Health Organisations; he is particularly interested in comparing the ability to make the right clinical decision, in the right time by the right person for the right patient, before and after the implementation of the new program.

This will help to develop and refine future programs in the field of clinical leadership to promote the quality, efficiency and safety of health services, and to also improve patient and staff satisfaction.
Nelle Seccombe

Nelle Seccombe began her PhD in May 2014, after graduating with a Master of Business in 2013, following nearly ten years working in management, project and business development positions in the University of Tasmania. Nelle is undertaking research to examine both the environmental and organisational conditions necessary for public hospital improvement, recovery and renewal.

She will undertake a two-part mixed methods study to address the paucity of evidence surrounding hospital performance failure and improvement, specifically working to test and extend a recent theoretical and empirical advancement: the concept of ‘capability-complementarity’ for hospital turnaround, which was recently developed and administered in the UK as a National Health Service population study.

Lisa Stanton

Lisa is a clinical pharmacist who has spent much of her career in the intensive care environment. She has also taught both undergraduate and postgraduate pharmacy students in the areas of oncology, paediatrics and infectious diseases.

Lisa has a particular interest in all aspects of safety and quality in the health system and will be focusing on outpatient clinics. She will investigate the patient journey through the clinics, starting with the initial referral and ending when the patient’s care is transferred back to the community. Hospital outpatient clinic cancellation rates tend to be high – due both to patients who do not attend and in-house hospital staffing issues. These factors will be examined in detail.

Patient and staff satisfaction will be surveyed, and the objective is to create an environment of service improvement that is sustainable beyond the length of the project.

Jane Sugden

Jane Sugden’s initial training was in pharmacy, and she subsequently worked in Australia and overseas in most parts of the pharmaceutical supply chain from research and development and publications, to safety and regulatory affairs, trials, medical information and investor communications.

Jane’s work will explore the design, implementation and evaluation of activities to streamline flow and processes associated with the care of medical patients admitted to hospital. Data collection will include quantitative metrics in the form of length of stay, safety and quality indicators, and surveys of staff and patients for satisfaction before and after the interventions. Patient interviews will complement and expand upon different aspects of their time in hospital and provide a qualitative perspective.
Working in Health Promoting Ways

Working in Health Promoting Ways provides the direction and resources for health and community services in Tasmania to act on the causes of ill health and to achieve better health outcomes for clients and communities. The framework provides guidance to help us work together to reduce the burden of chronic conditions and create a more sustainable, cost efficient and effective health and community services system.

In 2013, Australia’s Health and Cultural Ministers endorsed a National Framework for Arts and Health stating, “There is clear empirical evidence that arts and health activity is a health-promoting endeavour for all members of society”. The arts provide an important method for promoting health and wellbeing and preventing illness.

Arts Health Tasmania is a new initiative that is supported by the Australian Health Promotion Association that works with professional artists and arts organisations as well as health and community services in Tasmania.

This recent development will contribute to the growing awareness of the place of arts in health and help to build a more sustainable and responsive healthcare service.

For more information on Arts and Health please visit:
http://instituteforcreativehealth.org.au

The virtual Tasmanian Academic Health Science Precinct

The Commonwealth Government has provided funding to create an academic health science precinct for Tasmania.

This precinct aims to unite the Tasmanian hospitals, health organisations, research institutes and the University of Tasmania as partners to collaboratively sponsor and support the translation of the latest medical discoveries into clinical service delivery and better health outcomes for Tasmanians.

The design of the precinct is based on the three pillars of academic health science centres – excellence in research, education and clinical services. The strategic aims are to build strong networks and collaborations that link leading researchers with research expertise and resources across the state to build capacity and deliver greater benefits for the community by working together.

Our mission is to be a leading academic health sciences centre. To date, we have developed a draft strategy and organisational model and have sponsored a suite of research projects and training workshops. Projects were awarded funding based on their research proposal and its level of connection to the strategic aims of the precinct. The two projects on the next page have been launched and are delivering beneficial outcomes for the Tasmanian health system.
Right time every time

Improving patient outcomes by reducing harm from omitted and duplicated medicines in hospital.

The Right time every time project aims to reduce the incidence of omitted, delayed or duplicated medication administration to hospitalised patients in order to reduce associated adverse outcomes.

Audits have been conducted on ward rounds, nursing clinical handover, medication administration rounds and pharmacy processes. These have highlighted issues related to medication supply and prescribing practices.

Approaches have been implemented that focus on interdisciplinary communication around medication-related issues; the systems for the ordering, supply and delivery of medicines have been revised and measures introduced to expedite these processes.

Time-critical medications were identified and a protocol developed to provide guidance when prescribing, ordering, dispensing and administering these medicines. Hospital-wide education has been provided to nursing, medical and pharmacy staff to promote project initiatives.

National Inpatient Medication Chart audit data pre and post-intervention will be compared to identify change associated with project initiatives.

Shockingly easy

Ambulance Tasmania launched the Early Access to Defibrillation Program in June 2014. This initiative is an Australian first, and is designed to take advantage of the many Automated External Defibrillators (known as ‘AEDs’) held in the Tasmanian community.

If a cardiac arrest occurs within a few blocks of an AED registered with Ambulance Tasmania, the owner will be alerted by a text message or an automated voice message and, where possible, take their defibrillator to the scene and provide life-saving first aid before an ambulance arrives.

The Early Access to Defibrillation Program aims to reduce the time between cardiac arrest and defibrillation. Through community education, this program also aims to increase public awareness of the need for effective cardiopulmonary resuscitation (CPR) as a companion to early AED usage.
University of Tasmania
School of Medicine
short course program

The Continuing Professional Development Unit at the School of Medicine offers a wide range of professional development opportunities for health professionals throughout Australia and beyond.

Innovative short courses are delivered by University of Tasmania faculty members and subject matter experts from various health and corporate organisations across the country.

The interactive short courses in the program are orientated around improving patient care by assisting health professionals to meet their unique learning needs and professional development requirements.

Onsite courses are conducted in the state-of-the-art training facilities at the University of Tasmania Medical Science Precinct in Hobart, Tasmania. Workplace training, consultancy, and venue hire services are provided upon request.

2015 short courses include:

- Demystifying Epidemiology
- Basic & Advanced Surgical Skills
- Assessment and Management of Skin Lesions
- Regional Anaesthesia
- Management of the Critically Ill Patient in Remote Locations
- Mental Health First Aid
- Applied Surgical Anatomy: Brain & Spinal Cord Regions
- Applied Surgical Anatomy: Abdominal, Pelvic & Inguinal Regions (General Surgery / Urology/ Obstetrics & Gynaecology Streams)
- Parasitology: Intestinal, Tissue & Blood Borne Parasites

For more information please visit: http://www.utas.edu.au/medicine/medicine/short-course

Health Services Innovation Tasmania expands contacts across the globe

On behalf of the Faculty of Health, HSI Tas Professor Greg Peterson recently travelled to London and visited several academic health science centres.

It was opportune that he met with Sir Robert Naylor, the Chief Executive of the University College of London Hospitals. Sir Robert is a keynote speaker at the upcoming Sustainable Healthcare Transformation Conference, being hosted by HSI Tas.

Sir Robert is one of the most experienced and senior NHS executives, internationally recognised for his strategic leadership and use of organisational development as a means of empowering clinical teams.

International collaboration is an exciting way to increase the local knowledge needed to improve patient care and health system efficiency.
Health services improvement: a European perspective

Many challenges confront the delivery of healthcare in Europe, including social and geographical inequalities, aging populations and rising burdens of chronic diseases. These challenges are similar in Australia.

In both settings there is a common recognition that the provision of care needs to change in order to respond to the trends in changing demographics and to adapt to progress in medical advancements. It is these advancements that are mainly responsible for exploring different models of care. Hospitals play a significant role in the delivery of health services, but their role is subject to change and is being challenged.

There are several reasons why this is the case. The business and clinical models on which hospitals are based no longer suit the current healthcare paradigm. The existing models are often based on clinical silos, which do not meet the needs of complex patients with multiple conditions. However, the way some European countries are handling these challenges has led to some interesting innovations and improvements.

For example, in the Netherlands they are:

- providing health insurers with appropriate incentives whereby the insurers are encouraged to act as purchasers of health services on behalf of their clients. By strengthening their role and improving the freedom of choice for patients, this creates sustainability, quality, and efficiency in the healthcare system.

- developing integrated care pathways that involve the analysis, design, planning and control of all the steps necessary to provide care for a client. A care pathway includes outpatient department’s activities, discharge from the hospital and after-care for the patient. For the organisation, it leads to greater consistency of care between the different healthcare professionals and reduces costs due to shortened hospital stays.
More Tasmanian HealthPathways available

A number of new Tasmanian pathways for neurodegenerative diseases and other neurological conditions (e.g. stroke, epilepsy and multiple sclerosis) are now available for use on the Tasmanian HealthPathways portal.

This brings the total of Tasmanian pathways to over 130, including those in the previously completed clinical areas of cardiology, diabetes, immunisation and respiratory conditions.

Localised Tasmanian pathways for cognitive impairment, dementia and a range of other neurological conditions (including stroke, epilepsy and multiple sclerosis) will be available over the next few months.

Pathways in the areas of mental health, palliative care and orthopaedic/musculoskeletal conditions are due to be developed by mid-2015.


The Tasmanian HealthPathways team is keen to receive any feedback to help improve the localised pathways. It also welcomes expressions of interest from health professionals interested in joining clinical work groups to develop future pathways.

TML’s Tasmanian HealthPathways is a web portal supporting primary care clinicians and other health professionals to plan and provide patient care across all parts of the state’s health system. It is funded under the Australian Government’s Tasmanian Health Assistance Package.

For more information on Tasmanian HealthPathways:
Catherine Spiller or Paul Shinkfield on (03) 6213 8200 or HealthPathways@tasmedicarelocal.com.au
Welcome to the City of Hobart

Tasmania’s capital the City of Hobart is surrounded by breathtaking natural beauty, with the city boundaries spanning from the foothills of Kunanyi /Mount Wellington to the banks of the River Derwent. As Australia’s second oldest city, Hobart’s urban environment is a mix of classic colonial architecture and contemporary urban streetscapes.

The mountain is easily accessible from the city centre and provides sweeping views of southern Tasmania from the summit – stretching from Bruny Island to the south, Tasman Peninsula to the east and the Derwent Valley, north-west of Hobart. Kunanyi /Mount Wellington is part of the 18,250 hectare Wellington Park that offers a variety of bush trails from short walks to full day hikes.

Hobart has a number of appealing markets, such as Salamanca Market held every Saturday in historic Salamanca Place and offering fresh produce direct from farm gates to artisan crafts and designer products. Salamanca’s Georgian warehouses are home to the Salamanca Arts Centre, restaurants, cafes and contemporary art galleries.

Hobart has a diverse collection of public art, some of which can be enjoyed by following the Battery Point Sculpture Trail and North Hobart’s Treasures, and the city has a thriving arts and cultural scene, including the Theatre Royal, Australia’s oldest performing arts venue. Trails and the Theatre Royal are a short walk from the city centre.

Events populate the city’s entertainment calendar throughout the year. Summer hosts The Taste of Tasmania, which showcases the state’s fine food and wines, while the contemporary arts event Dark Mofo warms up the city’s streets and secret (and not so secret) venues in the depth of winter.

For more information about Hobart, contact the Tasmanian Travel and Information Centre.

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(Corner of Davey and Elizabeth Streets)
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Email: bookings@hobarttravelcentre.com.au
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