

Queensland Clinical Senate

Clinician leadership. Consumer collaboration. Better care.

Innovation & transformation of models of care in response to COVID-19

Statewide Clinical Networks plus West Moreton Hospital and Health Service – Responses Received for 18 May 2020 Qld Clinical Senate meeting

	RECEIVED
1	Anaesthesia & Perioperative
2	Cancer
3	Cardiac
4	Child and Youth
5	Dementia
6	Diabetes
7	Emergency
8	Gastroenterology
9	General Medicine
10	Infection
11	Maternity and Neonatal
12	Mental Health
13	Older Persons
14	Persistent Pain
15	Rehabilitation
16	Renal
17	Respiratory
18	Rural & Remote
19	Stroke
20	West Moreton Hospital and Health Service

Models of Care Review (COVID-19)

Statewide Clinical Networks

ANAESTHESIA AND PERIOPERATIVE

New models of care that have improved patient outcomes, experiences receiving and/or providing care and better effectiveness and efficiency

Title	Telephone consultations for Preadmission & Anaesthetic Clinic patients
Description / Benefit	<p>Most patients were interviewed, assessed and provided with required information by telephone. The number of face-to-face consults for pre-anaesthetic assessment reduced significantly. A triage system was developed to determine which patients were appropriate for phone consultation to avoid face to face consults. Documentation in the form of pathology, pharmacy or further appointment requests can be sent by Fax, post or email if suitable. If an anaesthetist requires the patient to visit the clinic in person for further assessment, then an appointment is made and the patient visits in this circumstance.</p> <p>Benefits include convenience for the patients, avoidance of outpatient clinics, avoiding unnecessary travel and car parking difficulties, not having to wait long periods in a busy clinic. Limitations are investigation/examination for patients with more complex health conditions.</p>
Rationale for change	Delivering most Preadmission & Anaesthetic preoperative appointments by telephone benefits the patient greatly. This allows people to avoid attending hospital, and still allows them to progress to surgery in a safe manner. This is a more patient centred approach than our current model of care. Less clinic space would be required due to reduced number of patients visiting for appointments in person. In addition, it is possible to interact with more patients via phone than in person.

Title	PPE usage – fit testing and training
Description / Benefit	Implementation of fit testing/checking for N95 surgical masks and "Donning and Doffing" of surgical gowns training. This should be added to Orientation and mandatorys so that staff are prepared.
Rationale for change	Infection control and workplace health and safety measures to benefit patients and staff.

Existing models of care that have been expanded successfully

Title	Pre-admission reformation with integrated pathology and telehealth
Description / Benefit	GCUH Pre Admission Clinic moved to Varsity Day Hospital and has increased the use of telehealth where clinically appropriate. Medical roster adjusted to be based on 2 Drs with at least 2 yrs experience in multiple surgical specialties. Pathology support has been provided full time at Varsity. Radiology imaging support via Private provider is being
Rationale for change	Creates an independent service as it runs more efficiently due to the formation of a specialised team.

Title	Electronic pre-screening form for surgery
Description / Benefit	Pre-screening was previously done via a paper-based system. An electronic preadmission form was developed, and pre-screening is now delivered through telehealth and phone technology.
Rationale for change	To reduce transmission of COVID-19 while still providing the service. Patients with more comorbidities and greater pre-operative workup that may require more resources get allocated to the right clinic at the right site.

Models of care that we should start to implement

Title	Developing and Utilising an online patient health questionnaire
Description / Benefit	Develop and implement an online patient health questionnaire and a portal by which it can either be forwarded to the health service via a link, or of greater benefit - allow it to integrate into the ieMR. This requires capturing patient email details. This was modelled on the platform of Synopsis Home https://www.synopsishealthcare.com/synopsis-home/
Rationale for change	Allows patients to complete pre-operative questionnaire outside hospital in a place and time convenient for them. When used prior to Preadmission Clinic attendance this would save time. It would improve the triage of patients more effectively. If integrated into ieMR platform it would reduce the time it takes staff to perform in person, and allow time for other activities like prehabilitation or clinical time with high-risk cases. Research has demonstrated the benefits and effectiveness of this approach.

Title	Implement a Prehabilitation service
Description / Benefit	The way we care for patients requiring surgery is on the cusp of a radical and transformational change. Prehabilitation involves encouraging patients to prepare for treatment by adopting healthy behaviours and implementing psychological interventions which match their individual needs. This may include stopping smoking and drinking, eating healthily and taking part in prescribed exercise under the supervision of an instructor, for a set amount of time before surgery.
Rationale for change	Prehabilitation has been demonstrated to have promising benefits for patients with small studies showing improved pathway through surgery and the discharge period, a possible positive cost-effectiveness and may reduce postoperative morbidity and re-presentations. It will ideally assist us to minimise predicted bed shortages within the next 5-10 years and allow us to meet increasing demand on services by shortening length of stay. It can also reduce the chronic disease burden if patients make sustained changes to their health and fitness levels. There is increasing evidence that shows the feasibility of prehab programs prior to major surgery, and incorporating a multimodal program adds value to current practice.

Title	Provide information to patients via encrypted email or electronic form
Description / Benefit	Patients could receive and review information while at home, and if there is a booked Pre-Anaesthetic appointment there would be an opportunity to discuss the information and document discussions.
Rationale for change	Real time information exchange, ability to explain risks specific to patient. Save significant time and confusion in pre-anaesthetic clinic

Title	Elective Electronic Management System (EMS)
Description / Benefit	Implement a more streamlined fully electronic system to improve elective surgery and procedure bookings across Queensland HHS's
Rationale for change	This is an initiative which is being trailed in some pilot sites across Queensland and began in 2015. Implementation in the SCHHS would seem to have significant benefits, which have been set out in documents available on QHEPS. The time saving benefits, and the ability to have all necessary fields completed on bookings forms would be significant. Having legible, fully completed documentation which provides all details every time would be of great benefit.

Title	Information systems OPD future bookings applications
Description / Benefit	Able to visualise future OPD bookings based on type modality and age. Can monitor real time the changes from face to face to phone and telehealth. Can also see real time the actions related to co-vid directives for OPD.
Rationale for change	To see changes in real time.

Title	OPD Telehealth
Description / Benefit	Face to face OPD appointments converted to phone or telehealth OPD appointments. Introduction of a full-time telehealth specialist in clinic to guide usage. Nurse specialist to provide phone support to patients and assist medical staff with patient surveillance.
Rationale for change	This has so far proven to be a more efficient management of daily clinic activity

Title	Vulnerable patient identification, monitoring and review in the preoperative period
Description / Benefit	<p>Challenged by aged and disjointed patient information systems across its' 31 service sites, Torres and Cape Hospital and Health Service (TCHHS) has developed a new business intelligence capability to identify its' vulnerable patient cohort and prepare them for the perioperative journey.</p> <p>The developed business intelligence and analytics provides detailed analysis for each facility down to the patient level. The reports and analytics will be used to better understand and care for the most vulnerable within our communities.</p> <p>Benefits of remotely supporting rural and remote services include early identification of patients, highlighting data quality errors for rectification, and opportunities to work collaboratively to plan and deliver care through a range of modalities including telehealth.</p> <p>Plans to expand and incorporate the new capabilities into normal business practices are underway with additional capability to identify vulnerable people, initiate and review care planning, monitor overdue care activities, and provide additional support to the 31 service sites through improved coordination of inreach, outreach and virtual health care services.</p>
Rationale for change	<p>Managing patient care using disparate patient information systems has been a long-standing issue for most rural and remote HHSs.</p> <p>With the outbreak of COVID-19, TCHHS needed to rapidly identify and prepare all patients defined as vulnerable as part of the pandemic preparations.</p> <p>Utilising Power BI to create a reporting and analytics environment, the resulting business intelligence will now be used in conjunction with existing and expanded services to identify, monitor and review ongoing care for vulnerable and priority patients as part of normal</p>

business.

Things that have not worked well

Example	Telehealth into the home – approximately half of all calls are successful. This process requires significant nursing resources to contact patients prior to booking to go over IT requirement prior to appointment and troubleshooting on the day. Our experience has been that on most occasions a nurse has been required to assist medical staff during the Telehealth in the home call to trouble shoot, whereas using a phone consult did not require either of these activities.
Why didn't it work well?	Reasons included patient overwhelmed by technology, Poor reception patient end, drop out of internet, lack of smart phone +/- computer

Models of Care Review (COVID-19)

Statewide Clinical Networks

Statewide Cancer Clinical Network (SCaCN) response

New models of care that have improved patient outcomes, experiences receiving and/or providing care and better effectiveness and efficiency

Title	<p>Reduced cancer treatments</p> <p>Review of standard fractionation for radiation therapy</p>
Description / Benefit	<p>Reduced cancer treatments – a prioritisation treatment guidelines document was developed for all facets of oncology in the early stages of the COVID-19 pandemic. Consultation was with all cancer centres across the State and endorsed by the SCaCN Steering Committee. The guidelines outline the treatment prioritisation for cancer patients during the pandemic allowing for individual clinical need to still be considered in discussions at prioritisation meetings. The recommendation for these meetings includes involvement of a senior haematologist, medical oncologist, radiation oncologist, nursing, pharmacy and administration staff to prioritise patients clinically for active treatment to assist in managing resources within the cancer service.</p> <p>Review of standard fractionation for radiation therapy for example as a result of the pandemic, prostate fractionation of 20# became standard in some cancer services.</p> <p>SCaCN supports a review and change of the above-mentioned two existing models of care with a formal consultation, implementation and evaluation process. The pathways commenced through the COVID-19 response could be validated and formalized if a resource allocation was available to manage the project. The project would need to review for each model of care:</p> <ul style="list-style-type: none"> • Efficacy of the model • Patient outcomes • Patient satisfaction • Resource implications for model change (if any) • Revenue and activity implications.
Rationale for change	<p>These new models of care were implemented as a reactionary action with the impending pandemic for a short period of time.</p>

Existing models of care that have been expanded successfully

Title	Telehealth consultations
Description / Benefit	<p>Current telehealth models were modified and converted to telephone consults in a majority of cases.</p> <p>Phone consultations are being used in many HHSs for outpatient clinics; non-urgent follow up reviews; and reviews for long term patients at home.</p> <p>Benefits include reducing outpatient clinic times and high number of patients in waiting rooms, less travel and cost for the patient, reducing risks for immunocompromised patients (on treatment) by not attending hospital environment.</p>
Rationale for change	<p>Patient centred care is being delivered by being responsive to the needs of the patient. The patient can have their consultation in the comfort of their own home, include the involvement of family and carers and reduce transmission of viruses and illness. This would not work for patients who require high levels of care or possible admission to hospital.</p> <p>Guidelines would be required to be developed to patient selection for telehealth does not adversely impact patient care.</p>

Existing models of care that have been expanded successfully

Title	Emergency Department Avoidance
Description / Benefit	<p>Cancer patients who are undergoing treatment frequently attend the Emergency Department when they develop uncontrolled or unexpected side effects such as a high temperature, nausea or diarrhea that cannot be controlled with medication. Cancer patients may require to be seen by an Oncologist who may not be available at the time of presentation.</p> <p>An initiative to reduce Emergency Department presentations has been implemented at the Royal Brisbane and Women's Hospital and the Princess Alexandra Hospital. The Cancer Urgent Assessment Clinic has been successful allowing cancer patients who have uncontrolled or unexpected side effects to be seen by cancer clinicians outside of the Emergency Department.</p> <p>The benefits of this initiative include cancer specific triaging at the Clinics, patient can be seen by a cancer specialist who can provide specific treatment / advice, reduces the risk of having cancer patients in an ED waiting room with many other patients who have unknown illnesses.</p> <p>This initiative has been expanded to the Gold Coast University Hospital.</p>
Rationale for change	<p>The success of the initiative at RBWH and PAH prompted expansion of the service to another tertiary hospital and could be considered for further expansion</p>

Models of care that we should start to implement

Title	Reduced cancer treatments Review of standard fractionation for radiation therapy
Description / Benefit	As per the new models of care table 1 above, with evaluation of new/altered models of care, SCaCN would recommend models of care for HHS cancer services to consider implementing if suited to their patient load and governance structure.
Rationale for change	Providing value-based healthcare.

Models of care that we should start to implement

Title	Emergency Department Avoidance
Description / Benefit	As per existing models of care that have been expanded successfully table above, it is recommended to consider expanding the Cancer Urgent Assessment Clinic model to other tertiary cancer services within Queensland.
Rationale for change	Providing value-based healthcare.

Low benefit care that has/should be stopped

Title	N/A
Description / Benefit	
Rationale for change	

Things that have not worked well

Example	COVID-19 Pandemic
Why didn't it work well?	<p>The reactionary situation of the COVID-19 pandemic required prompt responses from clinicians all over the State with some required to respond to their HHS, Clinical Network, QCS, QCNE and/or DDGCEQ.</p> <p>The level of information required, and the tight timeframes provided were challenging given it was a new situation everyone found themselves in. In some cases, the same information was being sought from different areas and levels of Government.</p>

Things that have not worked well

Example	Advice and information to clinicians
Why didn't it work well?	Conflicting information to clinicians which caused confusion and distress.

Models of Care Review (COVID-19)

Response from Statewide Cardiac Clinical Network

New models of care that have improved patient outcomes, experiences receiving and/or providing care and better effectiveness and efficiency

Title	
Description / Benefit	
Rationale for change	

Existing models of care that have been expanded successfully

Title	My Care for Chronic Disease (Heart Failure) WMHHS
Description / Benefit	Use My Care application to monitor patients at home and provide remote counsel and care by Heart Failure nurses and cardiologist as indicated.
Rationale for change	Extend existing program that offered care close to home, save travel, continuous monitoring allows pre-emptive care and avoid hospital admission. COVID-19 prompted need to keep this cohort away from potential risky environment of hospital, and reached patients that do not want to/are scared of coming to hospital.

Title	Heart Failure telehealth – Multiple HHSs
Description / Benefit	Use telehealth to conduct outpatient specialist clinics, Nurse Practitioner medication titration and patient care, introducing supervised exercise in the home using patient remote monitoring equipment (e.g. BP monitors). Heart Failure support services are proven to reduce hospitalisation and readmission in this population.
Rationale for change	Extend existing program that offered care close to home, save travel, continuous monitoring allows pre-emptive care and avoid hospital admission. COVID-19 prompted need to keep this cohort away from potential risky environment of hospital and reached patients that do not want to/fear coming to hospital.

Title	Outpatient specialist telehealth clinics – Multiple HHSs
Description / Benefit	Use telehealth and telephone to conduct outpatient specialist clinics. Save patient and clinician time and travel especially if via phone. VC tends to take more time and be less efficient.

Rationale for change	<p>Significant shift away from face to face clinics and extend existing mode of telephone/telehealth to keep patients from a potentially risky environment at hospital due to COVID-19.</p> <p>This mode of delivery also offers care close to home, save travel and reaches patients that do not want to/fear coming to hospital for an appointment.</p> <p>Into future, should maintain as choice for patients, but not the only mode of delivery, as this is counter to a patient centric care.</p>
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Models of care that we should start to implement

Title	Cardiac Rehab Virtual Model of Care
Description / Benefit	CR is combined education and exercise program that improves quality of life, physical capacity and risk factor modification post cardiac event. It reduces hospitalisation and representation. A virtual model of care for both elements delivered continually and individualised exercise prescription.
Rationale for change	Supporting the delivery of virtual model enables clients that cannot attend facility-based programs due to COVID-19 restrictions. In the future also an opportunity for those that cannot attend due to other reasons such as distance, time or travel. Enabling the exercise component ensures that a full CR experience is received.

Things that have not worked well

Example	<p>Halting all face to face services completely, particularly outreach services to Aboriginal and Torres Strait Islander and low socioeconomic communities.</p> <p>Not having a choice for patients to attend face to face if they prefer or is more clinically beneficial.</p>
Why didn't it work well?	<p>These populations (and most patients) require/want a combination of models (F/F and Tele) to effectively engage and facilitate access/coordination of care.</p> <p>Halting cardiac testing that requires onsite staff (which are in limited supply so must use outreach model) has added to the already long list of overdue RHD scans in these communities.</p>

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Things that have not worked well

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Models of Care Review (COVID-19)

Statewide Clinical Networks

New models of care that have improved patient outcomes, experiences receiving and/or providing care and better effectiveness and efficiency

CHILD AND YOUTH

Title	eCDS: program which provides a telehealth (e) integrated specialist child development service (CDS) from the Queensland Children’s Hospital (QCH) to various rural and remote communities while simultaneously supporting the health practitioners (HP) to build skills & knowledge to better support their own families closer to home.
Description / Benefit	<ul style="list-style-type: none"> - Partnership between hospital & health services (CHQ, SWHHS & soon NWHHS) has meant that now families have access to a specialist level integrated CDS (paediatrician, psychologist & social worker) from their local health facility - This is a new model of service which provides interprofessional dynamic assessment and formulation in a single session inclusive of a systemic therapeutic approach to care.
Rationale for change	<ul style="list-style-type: none"> - This has reduced the necessary travel to receive this service and increased engagement with families (no DNAs) - The efficiency of this integrated approach has meant that less than one third (27%) of patients have required a paediatrician review after being reviewed by eCDS in rural and remote sites

Title	Outpatients Working Group
Description / Benefit	<p>Small multi-disciplinary working group established, with statewide lens, to:</p> <ol style="list-style-type: none"> 1. Coordinate a statewide perspective response to the evolving management of outpatients at Queensland Health facilitates during the COVID-19 pandemic. Particularly focusing on the potential and or current referrals which are in scope for category 3 timeframes. 2. Ensure that Queensland Hospital and Health staff engaged with clinical networks are well informed and provided with timely updates on various management strategies used across the state. 3. Enable consistent messaging and frequent communication across our continuum of care partners to ensure strategies meet needs. <p>Benefits included focusing on key practical solutions and delivering outputs that addressed issues/concerns identified by clinicians on the floor.</p> <p>There was consensus amongst the working group that there is potential benefit to continue this group beyond COVID-19.</p>

Rationale for change	<p>Value came from having a mix of clinicians – on the floor and project officers to support ideas. GP’s, specialist, regional, tertiary. Recommend to including Allied health and remote/rural representation.</p> <p>Outcomes were swift and the uptake of the communication method using short videos with links to resources will be evaluated.</p>
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Title	PHAPS: Paediatric Health Advice Portal Service is an expanded version of the traditional telehealth IT solution “store and Forward”
Description / Benefit	<ul style="list-style-type: none"> - Built for child development and general paediatrics clinics at QCH - Allows any HP from anywhere across Queensland with any device to request clinical advice to support care to families in a timely manner from QCH specialist - Provides the mechanism to securely transfer clinical content (images and videos) to help QCH specialists more accurately respond to the clinical question to support next steps in care
Rationale for change	<p>Aims to improve access to specialists care, prevents unnecessary patient travel and families languishing on clinic wait lists.</p> <p>It is recommended that PHAPS be investigated to be expanded to other speciality areas.</p>

Title	Paediatric Palliative Care telehealth service
Description / Benefit	The Paediatric Palliative Care Telehealth Clinic uses ‘Telehealth’ to deliver care and support close to home for families living outside of South-East Queensland. Infants, children and young people with life-limiting illness (and their families) can access the combined support of the Children’s Health Queensland Paediatric Palliative Care Service and the expertise of local healthcare teams close to or in their home.
Rationale for change	By connecting with families electronically in their home or local healthcare clinic, the PPCS team can work together with families and local health care providers to meet the unique physical, emotional, spiritual and psychological needs of the child and family close to home. It allows families outside of South-East Queensland to access expert care, equipment and support so they can prioritise their child’s comfort, dignity and quality of life. Small research and evaluation underway.

Title	Child health services – mixed modalities
Description / Benefit	<p>In response to COVID-19. generally child health services have reduced face to face contact, increased telehealth capability, delivered virtual parent groups and provided home visiting for vulnerable/high risk families.</p> <p>The benefits are convenience, flexibility, increased access and easier to access services with telehealth, peer support groups and home visiting. Client feedback indicates they love the convenience and flexibility of telehealth but that they need the face to face preferably by a home visit to check their baby and make sure growth and development is on track and reassurance that their child is healthy and well.</p>

Rationale for change	Continuing to implement child health service delivery via a combination of modalities offers many benefits.
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Existing models of care that have been expanded successfully

Title	eCDS
Description / Benefit	Program has been adapted to metropolitan sites within the Child Development Program across south east Queensland.
Rationale for change	Improving access even more directly into family's homes. Commenced in April 2020. eCDS should continue to be expanded.

Title	Expanded inpatient telehealth services to support paediatric inpatients throughout the Children's Health Queensland (CHQ) catchment, coordinated by Children's Advice and Transport Coordination Hub (CATCH)
Description / Benefit	As part of its pandemic-response, CATCH has enhanced its 'care closer to home' advice and support model by: <ul style="list-style-type: none"> Expanding its inpatient telehealth services Securing support from all divisions within QCH to provide telehealth services Providing information to HHSs on how to access those services. The benefit is: <ul style="list-style-type: none"> Ensuring children have access to the right advice from the right clinician at the right time, as close to home as possible. Preventing unnecessary travel or transfers, where telehealth consultation or advice will suffice. Providing access to the full complement of medical, nursing and allied health professionals, despite shortages of paediatric trained staff outside south east Queensland.
Rationale for change	Queensland Paediatric Critical Care Pathway Project has identified: <ul style="list-style-type: none"> 40.2% of Queensland children live outside major cities, with limited access to specialised paediatric care Families prefer treatment closer to home Families incur significant cost and disruption when travelling for treatment. Advice can be coordinated efficiently and cost-effectively using the existing CATCH service.

Models of care that we should start to implement

Title	Enhanced Paediatric HITH
Description / Benefit	Looking at establishing a Paediatric HITH MOC, for a regional service (e.g. Bundaberg). Benefit - this will build on current policy of follow up telephone calls and "Gate Leave"

Rationale for change	Earlier discharge increases capacity within the hospital, whilst follow up care can be provided in a patient/family centred manner in the home environment.
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Title	Paediatric Critical Care Telehealth Ward Round (PCC TWR)
Description / Benefit	<p>A scheduled Paediatric Critical Care Telehealth Ward Round, where clinicians treating inpatients throughout the CHQ catchment can consult with a PICU intensivist, 7 days a week.</p> <ul style="list-style-type: none"> • Clinicians use existing Retrieval Services Queensland referral pathways to access care for critically unwell or deteriorating patients • Where clinically appropriate, clinicians may be supported to care for children closer to home, by being referred to the Telehealth Ward Round. • Wrap around nursing and allied health support can be provided in addition to critical care medical advice <p>The benefit is:</p> <ul style="list-style-type: none"> • Ensuring referring clinicians have access to the right advice from the right clinician at the right time in order to safely support the care of a patient as close to home as possible. • Supporting clinicians to deliver safe and appropriate care where timely access to a facility that can provide dedicated paediatric critical care is not possible • Providing access to the full complement of medical, nursing and allied health professionals, despite shortages of paediatric trained staff outside south east Queensland. • Providing cost savings from avoidance of unnecessary intensive care admissions and transports
Rationale for change	<p>The service was developed to respond to the COVID-19 pandemic (rationale below) but can also provide benefit in any situation where retrieval is delayed or not possible.</p> <p>COVID-19 Rationale:</p> <p>As demand for adult intensive care and retrieval services increases in the context of the COVID-19 pandemic, there will be a flow-on effect to paediatric health services. CHQ is committed to ensuring every child in Queensland and its catchment accesses the right advice, from the right clinician at the right time.</p> <p>Additionally, this service also addresses established issues in critical care identified by the Queensland Paediatric Critical Care Pathway Project:</p> <ul style="list-style-type: none"> • Admissions of children to Intensive Care Units occur in disproportionately higher numbers in Queensland compared to other states • These ICU admissions result in unnecessary transportation of unwell children further away from home

Title	Telehealth - outpatients
Description / Benefit	Using telehealth into the home for outpatients
Rationale for change	This has even allowed service to capture some clients that have previously found it difficult to engage and not attend OPD (Paediatrics)

Low benefit care that has/should be stopped

Title	Defaulting back to face to face appointments for all category 3 outpatients.
Description / Benefit	Patients should get the choice of the appropriate type of appointment based on their case after the clinician triages (i.e. phone, video conference or face to face) and appointments could involve Interprofessional dynamic assessment.
Rationale for change	Patient centred care

Things that have not worked well

Example	Telehealth (eg in regional area)
Why didn't it work well?	Initially videoconferencing into the home was of poor quality and made this a non-acceptable means of interaction for the consult. Most required the consult to be progressed by phone.

Other positives:

- Improved relationships with GP's and following clinical pathways
- Extension on extended midwifery services allowing for earlier discharge
- Increased telehealth to rural communities
- Telehealth clinics /nurse lead for pre-anaesthetic clinic

Challenges:

- Ongoing issue of families reluctance to present to ED, primary care & routine care, and concerns for presenting late with high acuity – advocating for consumer communications and messaging
- Inability to do examinations. This does impact on who and how you should see patients, especially new appointments
- The build up of Category 3 patients who will need addressing when restrictions are lifted
- Inability to have in-reach clinics from QCH. Some clinics require face to face, e.g. respiratory, cardiac, but **this is an opportunity** to see what clinics are suitable for teleconferencing from QCH

It also needs to be noted that there has been very little time for any appropriate evaluation of the effectiveness and cost-effectiveness of the innovations and models of care due to short timeframe since COVID-19 began in Qld.

Models of Care Review (COVID-19)

Statewide Clinical Networks

New models of care that have improved patient outcomes, experiences receiving and/or providing care and better effectiveness and efficiency

Title	Harnessing telehealth for Memory/Neurocognitive Clinics
Description / Benefit	Identifying telehealth for memory/neurocognitive clinics as an emerging model of health. There are multiple models at different stages of implementation and evaluation across the state. Members of Statewide Dementia Clinical networks are participating in Australian Dementia Network (ADNeT) – Memory Clinics initiative to further develop these models and work towards models of care that will be adaptable to local circumstances.
Rationale for change	COVID-19 has proven to be a catalyst for accelerating clinical solutions such as Telehealth Virtual Clinics. The older population, those who are frail, and those with cognitive impairment will particularly benefit from being able to be clinically assessed in their own home. Telehealth solutions also vastly improve accessibility across our regions.

Existing models of care that have been expanded successfully

Title	Nurse Practitioner Service in RACF
Description / Benefit	<p>A nurse practitioner provides onsite health service (full time comprehensive primary care, preventative, chronic disease management, episodic care and palliative care in long term care facility in collaboration and partnership with primary care physicians providing services in Residential Aged Care Facilities. The nurse practitioner also performs clinical admission of newly admitted patients in the RACF, develops comprehensive care plans, facilitates advance care planning and goal settings with residents and their families. They also coordinate and collaborate with the RACF clinical team, allied healthcare team and other health care professionals e.g. pharmacist, physiotherapist, podiatry, dietician, speech pathologist and registered nurses. In addition to this, the NP in collaborative case management with the resident's GP, refers to telehealth geriatrician services e.g. RESeCARE to provide better access for residents and their families. The Nurse Practitioner also provides clinical leadership, education and mentorship for registered staff, nurse practitioner candidates and other healthcare practitioners. Additionally, the NP liaise with other external service providers and specialists involved in the residents' health management e.g. wound specialist, cardiologist, nephrologist, psychiatrist/ psycho-geriatricians, psychologist, palliative care specialist etc.</p> <p>Benefits:</p> <p>Clinical Benefits</p> <ul style="list-style-type: none"> ● Improved collaborative and interdisciplinary care ● Improved preventative care and case management ● Improved management and monitoring of vulnerable patients ● Improved medication management and management of polypharmacy ● Improved advance care planning and end of life care ● Improved comprehensive care and person-centred care ● Early identification and de-escalation of acute health events ● Facilitation of early hospital discharge and reduced risk of readmission ● Provide clinical concierge ● Improved structured approach to chronic disease management in long term care <p>Economic Benefits</p> <ul style="list-style-type: none"> ● Reduced cost from unnecessary treatment / management ● Better utilization of GP time and resources ● Reduced unnecessary duplication of work Patient and Family Benefits ● Reduce unnecessary treatment/ management ● Improved patient-health practitioner interface ● Improved engagement and self-management for patients ● Support for patient's in self-management and decision making ● Improved patient centred education ● Facilitate timely, patient-centred decisions ● Increased time with health practitioner <p>Other Benefits</p> <ul style="list-style-type: none"> ● Improved clinical governance ● Upskilling, training and mentoring of other health professional/ staff in RACF ● Bridge gaps in care ● Leadership ● Care coordination and integration of care ● Improved interdisciplinary team collaboration and partnership ● Early identification of critical issues with quality of clinical cares ● Improved linkages to hospital, external service providers and specialists ● Improved communication with other members of healthcare team ● Improved work life balance for PCP/ GP and workload management

Rationale for change

- The older Australian population has been growing consistently with the trend across the world
- Access to medical care is sometimes not streamlined or easy to navigate and costly.
- transition from home setting to a formal or acute care setting can also often cause distress and difficulty for the older adult to settle in the new environment particularly when accessing acute hospital services
- A good number of people residing in residential aged care facilities also transition in and out of the hospital system
- Hospital transfers, although most of the time necessary, unfortunately, poses a potential burden to the older person's physical and psychological health, can be traumatic to the person and their families and can be very costly
- Most of the hospital transfers among older people particularly those in long term care are potentially preventable and can be reduced or avoided
- A significant number of people aged 65 and up are living with at least 2 chronic conditions and more among older people aged 85 years and older
- disproportionate demand in comparison to the supply of healthcare professionals such as geriatricians, primary care physicians, nurse practitioners, nurses, and allied health professionals to name a few that practice in the aged care sector
- current model of health services delivery for older people in residential aged care facilities, general practitioners provide most primary care services on-site however less than 25% are regularly engaged in residential aged care (possibly due to: disproportionate remunerations for the services they provide on-site in comparison to reviewing and managing patients in the GP practice , high volume of non-contact time required such as exchange of correspondence and case conferences with key staff and stakeholders, particularly during significant patient health status changes that are not reimbursable, practice in this setting less attractive and less financially viable)
- gravity of the gap around access to timely and high-quality care for older people in long term care have been more remarked and has gradually become critical and in fact, has been highlighted in the recent report that was released by the Royal Commission into Aged Care Quality and Safety describing the services of older adults as fragmented, unsupported, underfunded and some unsafe and uncaring

Models of care that we should start to implement

<p>Title</p>	<p>NP Led Community Health Service delivery through telehealth in Community Care</p>
<p>Description / Benefit</p>	<p>Due to the current challenges brought about by the coronavirus crisis, access of some vital services to older persons in the community have been compromised partly due to the limitation in their ability to travel, health recommendations to reduce their risk of exposure to the virus in the community as well as individual fears and concerns about exposing self to infection if external providers continue to provide services to them in their home. This challenges the traditional delivery of services and provision of comprehensive community care management and at the same time highlights pre-existing limitations around choices of healthcare delivery and silos within the healthcare system. This crisis however provides positive opportunities to review existing challenges, available resources and brainstorm new models of care that can help close in the above-mentioned challenges and gaps.</p> <p>This proposed project is to be trialed by one of the aged care providers in partnership with a University Partner which envision a Nurse Practitioner-led community care program that will be delivered through telehealth service for clients in Retirement Village and Home Care. The Nurse Practitioner for this program also provides support service to RACF residents and their primary care physicians in the organization.</p> <p>The idea is to set up a virtual community care clinic wherein clients have options to access RN, NP/GP and allied health services (and potentially link clients to external services in the community e.g. geriatrician, wound specialist, PHN, palliative care, Hospital outpatient etc) via telehealth. Clients under the program will be set up for regular (either annually/ 6 monthly/ 3 monthly) consultation with either the NP or community GP to review goals of care and realign their management plan. This will also be an opportunity to track the individual client's chronic conditions, symptom management and pick up possible health decline to be able to liaise with the client's PCP, introduce or revisit advance care planning or further collaborate with other healthcare team members involved in the client's care management and readjust plan accordingly.</p> <p>The introduction of telehealth and the telehealth application/ device in the client's home, also provides clients peace of mind that they can communicate with the community care team more easily without leaving their home which can increase patient engagement and improve monitoring and follow ups for the healthcare team.</p> <p>Benefits:</p> <p>Improve patient care outcomes in the following areas:</p> <ul style="list-style-type: none"> ● Access ● Care ● Patient choice ● Safety ● Inter-professional collaboration and partnership ● Well-being and Re-enablement ● Hospital avoidance
<p>Rationale for change</p>	<ul style="list-style-type: none"> ● Current crisis (coronavirus) have affected some healthcare access for older adults in the community, some services have been put on hold and some clients declining provision of support services from community care due to fear of exposure to infection

Models of care that we should start to implement

Title	“Older Adult – Model of Care”
Description / Benefit	<p>The vision of this model of care is true integration and collaboration between Old Age Psychiatry and Geriatrics with primary care (GPs) and third sector in improving older adult patient care in hospital and community. Integrated team within hospital will have a strong presence in emergency department and short stay medical assessment units for early assessment and management of older persons presenting into the hospital domain. Community integrated team would liaise with the primary sector and Care homes through a single point of contact. The ethos of this model is to provide comprehensive and holistic care to the older adult and improve the (dementia) journey from diagnosis to end of life care.</p> <p>The benefits are qualitative and quantitative with a potential for significant savings for service by minimizing hospital admissions, supporting primary care in preventing unnecessary admissions and presentations at ED and facilitating early hospital discharges and as well as managing patients at home or a homely environment with the right staff at the right place with right skillset.</p>
Rationale for change	<p>Population projections of Australia suggest a rapid acceleration of over 65 age group in the next decade with hospital beds occupied by older people. Innovations in service development and provision would be the key and the way forward is delivery of person-centred care for the older person with true integration of Old Age Psychiatry and Geriatrics with primary care & third sector in improving patient (dementia) journey with better qualitative and quantitative outcomes.</p>

Low benefit care that has/should be stopped

Title	
Description / Benefit	
Rationale for change	

Things that have not worked well

Example	
Why didn't it work well?	

Models of Care Review (COVID-19)

Statewide Clinical Networks

DIABETES

New models of care that have improved patient outcomes, experiences receiving and/or providing care and better effectiveness and efficiency

Title	VOICeD – Diabetes, Renal and Cardiac Networks
Description / Benefit	VOICeD provides a model to access specialists from Diabetes, Renal and Cardiac care at a single appointment. The program is anticipated to improve access to specialist care and case coordination, reduce patient travel requirements, and improve information and involvement of primary care provider/s. Comprehensive costing and evaluation is required. Additional detail has been presented at QCNE
Rationale for change	People living in First Nations communities and BioSecurity areas have additional travel restrictions, and limitations on outreach clinics. Patients are frequently engaged with more than one of these specialties and currently receive separate care across multiple occasions of service. First Nations Branch advise there is widespread disengagement with healthcare in target communities as a result of COVID-19.

Title	Supporting upload of diabetes data from home
Description / Benefit	Diabetes services require data from glucose monitoring devices in order to provide care. Expansion of Telehealth technologies offers an opportunity to support patients to upload their data.
Rationale for change	Some patient face issues uploading data to manufacturer cloud services a step required for raw data to be converted to clinical information.

Title	Paediatric diabetes MDT outpatient clinic
Description / Benefit	Clinic for children and young people with diabetes. The Paediatrician, dietitian and diabetes educator are all in the one room with the young person with diabetes and their parents. This improves continuity of care and standardised messages of care. This clinic enables the patient to attend one appointment, not multiple. The clinic now offers telehealth sessions to the patient's home so they don't need to attend the clinic. CGM data is downloaded prior and discussed in the appointment.
Rationale for change	Patients/parents frequently engaged with multiple health professionals via multiple occasions of service. As a result of COVID-19 many families do not want to attend the outpatient facility therefore telehealth services are offered.

Existing models of care that have been expanded successfully

Title	Telehealth and phone for GDM Dietician consult
Description / Benefit	<p>Newly diagnosed women with GDM usually (pre- covid 19) receive initial dietary education in a group setting FTF. In light of Covid-19, we converted this to a virtual group using tele-health and changed the times offered to increase the likelihood the women would be at home (8am and 4 PM).</p> <p>Provided the technology works and there is adequate admin support , we think having a virtual group is a good alternative. Post Covid, we plan to offer either a virtual group or FTF as we suspect the virtual option is a more convenient option for some working women or women with young children. We will do some patient satisfaction surveys in the coming weeks to determine consumer preferences .</p> <p>We have also developed 3 voice over power points with captions translated into 6 different languages for women who cannot attend in person or who miss the virtual group or do not speak English. (Link below).</p> <p>https://www.health.qld.gov.au/nutrition/patients#</p> <p>The challenge with virtual appointments is that they are less likely to be aligned and so coordination of care is more challenging.</p>
Rationale for change	Reduce face to face contact

Title	Remote facilitated patient and staff education on new blood glucose monitoring devices (Flash GM and Libreview)
Description / Benefit	<p>In response to the changes to the NDSS subsidies, education on new BGL monitoring technologies has expanded.</p> <p>Ipswich Diabetes Service and Abbott Diabetes care ,are working together on providing virtual patient and staff education on Flash GM and Libreview. This is replacing the libre group education (F2F) that was provided by Abbott Diabetes representatives .</p>
Rationale for change	Reduced face to face contact. Necessary BGL monitoring education for glycaemic control.

Title	Telehealth Diabetes Service consultations
Description / Benefit	<p>All Ipswich Diabetes Service consultations are via telephone. We are working with our patients ,that can use technology like Libreview ,CGM and pump to upload their data before their appointment to try to make the appointment more efficient/effective. Depending on the ability and or the willingness of the patient this can be a time consuming process to set up , once done it is a very effective consultation</p> <p>Phone consults are increasing attendance and engagement with diabetes services for urban indigenous groups who otherwise do not attend for care. This is particularly successful where there is a known care provider or local support such as an indigenous control health service or patient liaison.</p>

Rationale for change	Reduced face to face contact. Convenience for patients.
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Models of care that we should start to implement

Title	Remote inpatient diabetes service
Description / Benefit	<p>The service would help clinicians to improve their management of diabetes inpatients while hospitalised. This model could be from tertiary hospital to smaller hospital, or within a given hospital (tertiary or otherwise).</p> <p><i>Utilising iEMR to identify patients and provide input to care from a tertiary site, this service would target day-to-day glycaemic control and prescribing, as well as a dedicated multidisciplinary team for diabetic foot infections in small sites across Queensland. This would require dedicated funding and the project(s) would require robust evaluation to ensure that any potential benefits are properly realised.</i></p>
Rationale for change	Refer to QuIDS Report for supporting data

Low benefit care that has/should be stopped

Title	
Description / Benefit	
Rationale for change	

Things that have not worked well

Example (report from one facility)	Reduced number of blood glucose monitoring by nursing staff for inpatients.
Why didn't it work well?	Many patients want to check their own BGLs using their own glucometers or even flash/CGM however nursing staff do not have the training on how the technology works and are not confident in allowing patients to use their own devices. There are also no inpatient policies/procedures for the use of such technology

Example (report from one facility)	New QLD Health recommendations for the diagnosis of GDM, using fasting plasma blood glucose
Why didn't it work well?	Referrals of GDM women to diabetes services at many facilities have reduced, meaning less women have been diagnosed with GDM. The current method misses those who would normally be diagnosed at the 1 or 2 hour-post glucose load. The new recommendations also do not address how to diagnose women btw 12-24 weeks gestation (2 nd tri) who are high risk.

Considerations for expansion of telehealth models – paediatric endocrinology perspective

1. Telehealth needs to be used in the right setting to reduce unnecessary patient travel, particularly for short appointments
2. This needs to be balanced with the need to still perform physical examinations, particularly for new patients. Up-skilling of clinicians at the other end may help sub-speciality utilisation of telehealth.
3. Telehealth should be seamlessly integrated to normal outpatient clinics. A clinic should have a mix of face to face and telehealth without clinicians having to move rooms which allows for efficiency
4. Telehealth needs to be co-ordinated with designated AO support to troubleshoot and make appropriate connections with end users.
5. Microsoft Teams should be continued to be utilised as a way of performing stakeholder meetings, primary care education and clinical network meetings. Will save the HHS and dept of health lots of money in travel expenses. Will also improve the reach of specialists into the community to provide primary prevention education (ie DKA education).

Virtual ED Model of Care

Model

The Virtual ED model originally started with a proposal for a 'trial of concept' under CaRS initiative funding at The Prince Charles Hospital (TPCH). The proposal sought to respond to increasing demand on emergency departments in Metro North Hospital and Health Service (MNHHS).

In response to the COVID-19 pandemic, this trial of concept was brought forward as a possible model that would assist in reducing ED demand across the MNHHS for all patients.

The service is designed as an in-reach service for clinicians to have direct real-time consultations with consultants regarding patients under their care. The service is a clinician to clinician consultation only. It is not open to the public as the program of work is to assist community-based clinicians in maximising patient care and outcomes, use existing community based services and reduce unnecessary ED presentations and hospitalisations. It will also allow for direct inpatient unit referrals and avoid patients transiting ED.

Community Services will coordinate community based management.

Acute patients requiring semi-urgent review will be managed via "hot clinics" set up at each facility.

Minor trauma will be managed jointly with the clinician and community/facility based management can be facilitated.

Chronic disease patients will be linked directly to the appropriate outreach service associated with facility specialty units.

Target Clinicians are:

- General Practitioners (GPs)
- Queensland Ambulance Service Officers (QAS)
- Registered Nurses at Residential Aged Care Facilities (RACF)
- Clinicians from Residential Aged Care Assessment and Referral Service (RADAR)
- Community and Oral Health based clinicians (COH)

The service will be available for consultation about all patients, including COVID-19, and for any age group.

Specifically for QAS, the service will provide the following:

1. Onsite advice and assistance in patient assessment and management.
2. Advice on suitability of transport.
3. Advice on destination of transport.
4. Advice on management in transit.
5. Advice on alternative management pathways.
6. Assistance with "000" call responses and on scene management and disposition.

Model Management

The project will be managed by a project team under the Emergency Medicine and Access Coordination Stream of MNHHS.

An operations team will be responsible for the the operation of the service on a day to day basis. The team will be responsible for staff management, including rostering, and support.

A detailed project plan, business plan, risk analysis and “road map” is in place.

There are three stages to the project:

1. Proof of Concept: The service will be provided to GPs.
2. The model will be extended to Community based services and Residential Aged Care Facilities (RACF), other residential facilities operated by MNHHS and RADAR.
3. The service will be extended to include QAS.

The operational hours will be expanded to align with each stage.

The project will be managed by a Steering Group, led by the Nursing Director of EMAC.

A project officer with a clinical lead will be responsible for the project implementation.

Process

Aligning to standard ED triage practice will minimise the need for additional staff training and allow for the use of existing data platforms including; ieMR, EDIS, HBCIS and Viewer.

There are seven steps involved in the process:

1. The nurse answers all incoming calls.
2. The nurse determines the type of the call (audio or audio-visual).
3. The nurse collects basic information and contact details of the clinician.
4. The call is transferred to the consultant.
5. While the call is taking place the clinician’s administration staff are contacted and the patient is registered on HBCIS/ieMR and EDIS, if not already a patient of MNHHS.
6. The AO ensures the patient demographics are correct and up to date.
7. Callers have the option to engage either by telephone or by face to face consultation.
8. If a face to face consultation is required, an appointment time is sent to the caller with a link to begin the virtual consultation.
9. Microsoft Teams™ is the preferred platform but any Apple or Android device platform can be used.
10. Once the consultation has concluded, a discharge letter is faxed to the referring clinician outlining all aspects of the consultation, including an agreed plan.
11. All clinical information is entered in EDIS and HBCIS/ieMR as per standard practice in an ED.

Technology

- Physical infrastructure requirements: the service will be located centrally on the RBWH campus.
- Communication will primarily use the existing technology of Microsoft Teams™, as well as other platforms.
- Clinical decision support software. As per Q Health applications.
- Access to IT - EDIS, HBCIS, Viewer, Auslab, PAX.

Staffing and Rostering

FACEM Consultants

Criteria

To work in the virtual ED, consultants must:

- Be currently registered as an emergency medicine specialist.
- Be currently employed by MNHHS.
- Be credentialed by MNHHS in Emergency Medicine.
- Have endorsement by the department director to participate.
- Work a maximum of two shifts per seven days.
- Comply with Queensland Health and MNHHS fatigue management policy and guidelines.
- Have completed orientation about the service.
- Be familiar with, and competent in, all MNHHS ED and other clinical IT platforms.

In addition:

- Initially, all staff participating in the service will be existing MNHHS personnel. Staff must have the necessary skills to manage the various IT systems and have some ED experience.
- At-risk groups for COVID-19 who wish to continue to provide emergency care will have priority to work in the Virtual ED.
- Where possible, Virtual ED staffing will not deplete ED regular staffing required for continuing operational functions.
- All staff, fulfilling the criteria, are invited to participate.
- All fatigue management processes will be in place.

N.B. If a shift in the Virtual ED is in lieu of a department shift, backfill will be supplied whenever possible.

- If a shift worked in the Virtual ED is extra to normal rostered shift, overtime will be paid.
- Work patterns will be monitored to ensure fatigue policies are not breached.

Medical Staff Rostering

2 x 10-hour shifts for 15 hours per day, seven days per week.

Consultant	AM Shift 0800-1630	PM Shift 1500-2230
Consultant 1	VED*	OFF
Consultant 2	OFF	VED

*VED – Virtual Emergency Department shift

Total shifts per 7day period – 21 which is equivalent to 6.5 FTE (including leave and on-cost adjustment)

Administration Rostering

Administration staff will work on a three-person rotational roster to provide support over two shifts seven days per week. Administration staff are employed to work 8 hours shifts with a paid lunch break. Current roster allows for paid meal breaks and hand-over between shift.

Administration Officer		AM Shift: 0800-1600	PM Shift: 1500-2300
Administration Officer 1		VED	Off
Administration Officer 2		Off	VED

*Two shifts over seven days equates to 3.5 FTE (including leave and on-cost adjustments).

Nursing Rostering

Nursing staff are employed to work 7.5 hours per shift, allowing for 2 x rostered nursing staff per 15-hour operational period.

There is also scope for 2 x 10-hour shifts by agreement, allowing for overlap and additional workforce during the expected busiest time.

Nurse	AM Shift: 0800-1530	PM Shift:1530-2300
1	VED	Off
2	Off	VED

Total shifts per 7-day period – 14, which is equivalent to 3.5 FTE (including leave and oncost adjustment).

Governance

The service will reside under the MNHHS Executive Director of the Health Emergency Operations Centre.

Clinical Governance and Performance

These responsibilities reside with the MNHHS ED of EMAC.

Patient Care

The responsibility for the care of the patient remains with the clinician who is currently responsible for their care. Clinical governance continues until the patient is formally transferred to another clinician or another facility.

Patient Data

Patients managed by the service will have data recorded into EDIS and HBCIS. Patients medical record information and attendance data will be allocated to The Prince Charles Hospital (TPCH) MNHHS emergency department database. This data will not form part of the record of regular activity for the emergency department.

Patient information will be downloaded into the Viewer platform.

Prepared by:

Dr Chris May, Director of Virtual ED.

6th April 2020

Models of Care Review (COVID-19)

Statewide Clinical Networks

New models of care that have improved patient outcomes, experiences receiving and/or providing care and better effectiveness and efficiency

Title	QEII ED direct stream from triage to HOT Clinics in outpatients
Description / Benefit	As specialist general surgery, orthopaedic, gynaecology and urology started to downscale their operative amounts/capacity allowed ability to open new models of care where ED patients were assessed by triage nurse (with support from nurse practitioner when required) and streamed directly to relevant Hot Clinics after nurse assessment.
Rationale for change	<p>Allowed a cohort of stable, ambulatory, non-acute respiratory illness patients to be diverted away from the emergency department to be seen in the hot clinic located in outpatients by speciality registrars (general surgery, orthopaedic, urology and gynaecology) and physiotherapists.</p> <p>Used staff members outside of the ED and outpatient area to reduce density of patients in the ED to deliver timely care away from clinical areas where an expected high number of infective patients were thought to be potentially presenting and would be a large workload for ED staff.</p>

Existing models of care that have been expanded successfully

Title	
Description / Benefit	
Rationale for change	

Models of care that we should start to implement

Title	
Description / Benefit	
Rationale for change	

Models of care that we should start to implement

Title	
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Description / Benefit	
Rationale for change	

Low benefit care that has/should be stopped

Title	
Description / Benefit	
Rationale for change	

Things that have not worked well

Example	
Why didn't it work well?	

Models of Care Review (COVID-19)

Statewide Clinical Networks

Existing models of care that have been expanded successfully

Title	Purple Zone for Fast-Track Patients
Description / Benefit	<p>The existing Ambulatory care model at Redcliffe ED was crowded, over-congested with limited space and beds (x6), accounting for seeing a throughput of up to 100 patients per day. Any patients who is ambulant is deemed suitable to be seen at Ambulatory care. This has resulted in overcrowding in ambulatory care, coupled with high admission rates and bed-blocked in ambulatory care due to inpatient access block. The issue had been identified for a long time but due to limited space/footprint within the current ED, all resources had been exhausted to seek solution but without much success.</p> <p>Opportunistically (with COVID-19), ED was given the additional space to extend our footprint to hospital specialist OPD (purple zone). These are 8 singles rooms with dedicated beds, workstations that we have converted to using as true fast-track model using strict selective triage criteria. These singles rooms are staffed by nurse practitioners, registrars and junior doctors (supervised by an SMO).</p> <p>The creation of space with individual single rooms provided the ideal setup for fast-track patients, as well as maintaining patients' dignity and confidentiality. The proximity of purple zone to physio and plaster technicians also allowed rapid access to these services which are paramount to fast-track model. The additional footprint created in purple zone has now allowed the previous ambulatory care zone in ED to be repurposed to a respiratory zone for dedicated cohort of patients.</p>
Rationale for change	<ul style="list-style-type: none"> • Lack of existing ED space • Lack of true model of care for fast-track related patients • Cohorting purpose for respiratory/fever patients due to COVID-19 • Rationale to create 'clean' and 'dirty' ED

Models of care that we should start to implement

Title	True fast-track model
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Description / Benefit	Dedicated space with correct adaptation (eg. Single room, bed configuration, equipment, proximity to other relevant services) to allow continuation of this new MOC to enhance flow, patient care, privacy and satisfaction. Dedicated staffing with appropriate skill-mix is important
Rationale for change	New MOC

Models of care that we should start to implement

Title	
Description / Benefit	
Rationale for change	

Low benefit care that has/should be stopped

Title	Unnecessary investigations or reviews that do not change disposition planning
Description / Benefit	Traditionally, ED has been used as the 'sorting' site to facilitate all forms of investigations, imaging, and 'holding' bay for patient reviews. These orthodox practices continue to clog-up ED with no apparent reasons in the form of improving patient care. Ultimately majority of these patients require admissions. In response to COVID-19, we have somewhat managed to facilitate rapid admissions with minimal 'sorting' in ED. Such practice has not resulted in significant M&Ms (as far as we know). These investigations and additional 'sorting' may likely be still required but can be safely facilitated up in the ward Empowering ED to make the decision for direct admission and to decide when episode of care in ED completes
Rationale for change	Facilitate flow Redefining ED care

Things that have not worked well

Example	
Why didn't it work well?	

Models of Care Review (COVID-19)

Statewide Clinical Networks

New models of care that have improved patient outcomes, experiences receiving and/or providing care and better effectiveness and efficiency

Title	Rapid partial conversion of face-to-face consultation to virtual service delivery
Description / Benefit	The number of face-to-face visits was substantially reduced as part of the emergency response and supported by the implementation of social distancing within existing infrastructure. Urgent cases received timely care while chronic cases received ongoing care. Limitations are the inability to properly physically assess patients. Model is not suitable for all patient groups.
Rationale for change	Inability to deliver care in the established models due to social distancing requirements.

Existing models of care that have been expanded successfully

Title	Telehealth delivered services
Description / Benefit	Services were delivered via telehealth or phone
Rationale for change	Inability to comply with social distancing requirements when normal OPD services were delivered.

Models of care that we should start to implement

Title	Virtual preclinical review clinics to support hybrid clinics
Description / Benefit	As much clinical information as possible is captured, documented and reviewed (e.g. symptoms, medications, previous interventions) prior to the appointment. Patients receive prior to OPD consultation phone call or structured, questionnaires tailored towards specific conditions. Thus, face-to-face interactions can be avoided or shortened.
Rationale for change	Reducing number and duration of consultations due to infrastructure constraints

Models of care that we should start to implement

Title	Augmentation of endoscopist administered sedation
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Description / Benefit	Due to limited availability of anaesthetic staff, endoscopic lists could not be supported by anaesthetists. Instead of cancelling the majority of services, sedations (midazolam/fentanyl or propofol) were delivered by endoscopists. Thus, substantial numbers of procedures were delivered which otherwise would have been cancelled.
Rationale for change	Lack of the required staff

Low benefit care that has/should be stopped

Title	Reduction of referral received for non-urgent conditions
Description / Benefit	Overall reduction of case load
Rationale for change	Patients hesitant to attend appointments in hospitals

Things that have not worked well

Example	Value proposition of phone delivered services
Why didn't it work well?	Services are very convenient for patients/consumers. However, patient assessment is frequently at best superficial and value of service can be limited.

Models of Care Review (COVID-19)

Statewide General Medicine Clinical Network

New models of care that have improved patient outcomes, experiences receiving and/or providing care and better effectiveness and efficiency

Title	Change in medical model of acute care
Description / Benefit	Rapid transition to a longitudinal inpatient model with greater presence of general physicians in ED to assist in clinical decision making and discharge disposition
Rationale for change	Avoids repetitive medical handovers, provides longitudinal supervision of registrars and RMOs, and has created new roles (such as perioperative medical registrars to oversee management of acute medical problems in patients presenting with surgical emergencies)

Title	Change in outpatient delivery
Description / Benefit	Telehealth and virtual clinics At Ipswich Hospital an increase of 63% was seen in the use of telehealth/telephone services with specialist OPD, resulting in a reduction of community presentations and increasing the ability of patients to attend their clinic appointment by a telehealth/telephone. Reductions in failures to attend seen within allied health clinics.
Rationale for change	Need to avoid unnecessary F2F visits for patients who find such visits difficult and inconvenient, allows more flexibility in appointment schedules, increases clinic productivity in patient turnover and less clerical processing, and reduced unnecessary physical requirements of on-site clinics. Concede that not all patients are eligible for a virtual encounter.

Title	Overhaul of community services
Description / Benefit	Single point of contact for all community based services with streamlining of referral processes and improved responsiveness
Rationale for change	Confusing inclusion/exclusion criteria for different services with significant overlap between them, different entry points and lines of authority and accountability, diverse funding arrangements, and slow bureaucratic processes

Title	Digital meetings/education
Description / Benefit	Rapid uptake of Microsoft teams by junior staff with improved engagement/attendance at all levels.

Rationale for change	F2F meetings present many challenges including inability to attend (geographical separation, rostered days off), clumsy to record, and occasionally a power differential in the room that can stifle discussion, which the chat feature overcomes and allows thoughts to be shared instantly among attendees. Attendance at grand rounds has increased by 30%.
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Title	MetroNorth Covid-19 Virtual Ward
Description / Benefit	All Covid positive patients were referred by email and automatically accepted to the Metro North Virtual Ward. They remained in their homes or equivalent in isolation. They were initially risk assessed then monitored accordingly in a standardised fashion. Escalation thresholds were set for further assessment and referrals for urgent assessment were expedited where necessary. Subsequent recovery was determined according to guidelines and release from isolation was facilitated. At time of writing, of 236 consecutive patients, 228 have recovered, 8 are active, 18 referred to hospital for assessment, 10 admitted of which two ventilated in ICU and no fatalities.
Rationale for change	Faced with the prospect of overwhelming numbers the policy of confinement of Covid as inpatients was not a feasible option. Hundreds of patients avoided admission thus avoiding use of personal protective equipment and exposure of health care staff without any apparent harm to Covid positive individuals.

Title	Drive-through Prescription Collection Service
Description / Benefit	<p>Patients at high risk of COVID-19 complications were able to collect their prescription via contactless drive-through service. Medication counselling was performed by a clinical pharmacist via phone or telehealth.</p> <p>Patients of the Lung Transplant, Heart Transplant and Cystic Fibrosis units at TPCH were asked to provide five days' notice for repeat prescriptions and as much notice as possible for new prescriptions if collecting via the drive-through service.</p> <p>Benefits included increased patient satisfaction and reduced prescription wait times for all prescription categories, due to enhanced ability to stagger dispensing workloads across the day. Reduced average prescription wait time was observed despite an overall increase in number of dispensing episodes for the month of March 2020.</p> <p>The service has been in operation since 16th March 2020 and we have provided drive-through collection to approximately fifty patients since commencement. We hope to double our capacity by extending the service to other patient cohorts throughout May 2020 with assistance from a temporary AO3 position.</p>

Rationale for change	<p>Transplant recipients and Cystic Fibrosis patients were identified as patient cohorts at high risk of medical complications in the context of COVID-19 infection. Many outpatient clinics transitioned to telehealth modality to keep these patients out of the hospital however the challenge of prescription collection remained.</p> <p>Advantages to continuing this service beyond COVID-19 pandemic include enhanced patient satisfaction and reduced prescription wait times for all hospital patients.</p>
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Title	The implementation of a hybrid Ambulatory Emergency Care (AEC) and Integrated Care hub at Bundaberg Base Hospital
Description / Benefit	<p>A 'place based' model of care has been developed that delivers holistic healthcare to the local population through the colocation of Ambulatory Emergency Care with Integrated Care.</p> <p>AEC refers to the care of patients, with an urgent medical problem, outside the traditional bed base. It is widely recognised that this method of same day emergency care is safe, effective and offers excellent patient experience. A large gymnasium within the hospital has been adapted to provide 5 assessment beds, 3 infusion chairs, a procedure room and a GP style waiting area.</p> <p>The main "measures of success" was no increase in LOS and indeed reduction of 0 to 1 day. Bed occupancy was reduced (aim <85%) with less cancellation of elective procedures, outliers were eliminated, patient experience was improved, nosocomial infections were fewer, and there was less deconditioning in the elderly</p> <p>The colocation of AEC and the Integrated Care hub delivers high quality patient centred care across primary, secondary and social care with the ability to manage 35-40% of all urgent care patients who present in any 24 hours.</p>
Rationale for change	AEC and integrated care models are recognised as 'best practice' by the Future Hospital programme. This initiative serves as a single 'one stop shop' for acute medical problems, exacerbations of long term conditions and social barriers to discharge, with the focus on and admission avoidance and better patient experience.

Title	West Moreton Virtual Visiting
Description / Benefit	Given restrictions placed on visitation, and new legislation in relation to social distancing, a new way for family and friends to continue to connect with loved ones was developed. Virtual visitors are now able to see and speak with their loved ones via videoconference technology, in a manner which prioritises the safety of all.
Rationale for change	COVID-19 required a change of approach to visiting to ensure our patients felt connected with their loved ones to benefit their well-being and aide in their recovery. This will be valuable beyond the current pandemic response, in connecting loved ones who have difficulty attending in-person particularly in an ICU setting.

Title	West Moreton Virtual Case Conferencing Intensive Care Unit
Description / Benefit	Case conferring involving family members is a core communication process within Intensive Care Units to ensure patient and family centred care is maintained. The use of IPADS and workstation on wheels (teleconference function) this enabled this process to occur.
Rationale for change	Due to the inability to have family members attend the ICU due to the patient being COVID-19 positive an option of a virtual case conference model was commenced.

Title	West Moreton – Light Touch Program Nurse Navigator Program
Description / Benefit	Secure, web-browser enabled portal that allows patients who are COVID-19 positive and requiring a lower touch monitoring to be safely managed at home with telephone support by Nurse Navigator. Patient user's own measurement devices and enters measurements manually and responds to surveys (can view trends) back to the Nurse Navigator Program
Rationale for change	Hospital alternative program

Title	Fever Clinics (at various hospitals)
Description / Benefit	Low risk stream of patients were screened for COVID-19 and flu like symptoms. Clinics adjacent to ED or at other sites with streaming by a senior nurse at the front door of the ED to either the fever clinic or into the ED; in other sites patients presented direct to fever clinic and referred to ED if required after assessment by MO. Models could be expanded as a winter strategy for the management of low risk flu like symptoms.
Rationale for change	Reduction in unnecessary presentations to the ED.

Title	Data driven Service Innovation
Description / Benefit	Collaboration between SGMCN and Systems Performance Branch in using routinely collected administrative data to identify differences, at a geographic level, in variations in LOS of admissions with specific primary discharge diagnoses that may suggest unwarranted variation in clinical practice. Data pertaining to patients admitted with cellulitis were reviewed and various population attributes associated with longer LOS were identified which informed development of a standardised cellulitis pathway which was then disseminated, with localised datasets, to directors of general medicine to implement local targeted remedial intervention.
Rationale for change	Routinely collected administrative data is underutilised in disclosing variations in outcomes between geographical areas which can be used for peer benchmarking and quality improvement activities.

Existing models of care that have been expanded successfully

Title	Hospital in the Home expansion
Description / Benefit	Significantly expanded capacity and dedicated screening and referral of potentially eligible patients to free up inpatient beds. Microsoft Team meetings has helped in this regard by allowing HITH staff to attend more multidisciplinary team meetings that discuss admitted patients. HITH now has a greater presence and profile than previously.
Rationale for change	HITH is often not actively considered by inpatient teams unless they are constantly reminded of the service, or have their concerns about safe discharge satisfied by HITH staff.

Title	WMH COVID-19 HITH
Description / Benefit	COVID-19 patients admitted into the HITH Program (separate stream) via the electronic care coordinator (eCC). Patients are provided with an IT kit which includes a mini iPad and Bluetooth equipment. Patients' observations and health status are monitored closely using the point of care devices within their homes. Utilising the current Me Care platform to support the virtual program and the hub can support up to 4000 'live' patients.
Rationale for change	Hospital alternative program.

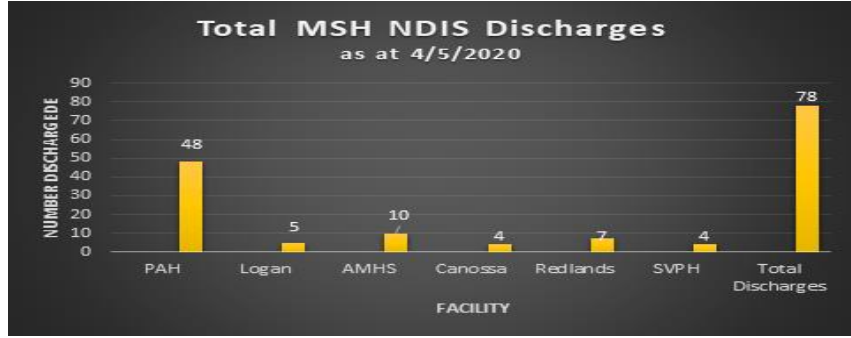
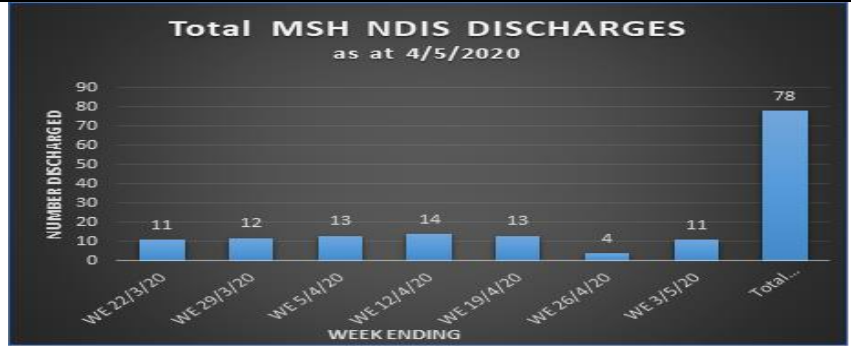
Title	Group Education Involving Patients
Description / Benefit	Group education sessions had previously had poor attendance rates in person for a variety of reasons. Since utilising telehealth to facilitate group education sessions, departments in West Moreton have experienced a higher attendance rate, improved consumer engagement and better use of clinical time which will result in improved health outcomes.
Rationale for change	COVID-19 social distancing regulations prevented large gatherings from occurring, so the telehealth model facilitated the engagement of large patient numbers.

Title	Proactive Preventive Intervention to Reduce Admissions
Description / Benefit	MS HHS Chronic Disease Management Service nurse navigators contacted, between March and May 2020, all 901 patients with COPD, heart failure or diabetes who had a hospital admission of 2 days or more for exacerbation during 2018 and 2019 and ensuring they were adhering to their management plans, thereby reducing the risk of admission or ED presentation for decompensation during the winter months at a time when inpatient beds may be required for COVID-19 patients. The service is now contacting 806 patients who had a one-day stay. Data will be collected to see if the numbers of admissions involving these patients over the winter period (June-Aug) is less than would be expected compared to the same period in 2018/19.

Rationale for change	Proactive preventive intervention in patients with chronic disease and high risk of admission may reduce incidence of decompensation requiring hospitalisation or ED presentations.
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Title	Enhancing Princess Alexandra Hospital (PAH) NDIS Response Team to rapidly discharge NDIS participants in hospital during the COVID-19 pandemic
Description / Benefit	<p>Since the commencement of the COVID-19 pandemic the PAH National Disability Insurance Scheme (NDIS) Response Project (“the Project”) (3.0 FTE project officers, HP5 / NRG7) re-focused on facilitating the earliest possible discharge of NDIS participants who are ready for discharge.</p> <p>With increased staffing (additional 2.0FTE projects officers), the Project has expanded its activity beyond PAH and is now assisting all MSH facilities and services including Addiction and Mental Health Services and St. Vincent’s and Canossa Private Hospitals, where PAH patients have been previously discharged for rehabilitation or interim care.</p> <p>For the 7 week period between 15/03/20 and 03/05/20 there were a total of 78 NDIS participants discharged from MSH facilities with the majority being from PAH. (Please see Graphs below).</p> <p>The discharge planning process has been greatly assisted by NDIS being very flexible and streamlining usual processes to facilitate earlier discharge.</p> <p>The success of the project can be attributed to a number of factors including:</p> <ol style="list-style-type: none"> 1. a dedicated project team with time, expertise and knowledge of NDIS processes to assist busy clinicians with discharge 2. the concerted efforts of the project officers and MSH social workers and clinical teams. 3. highly effective, collaborative working relationships that have been established between the project team, clinicians and perhaps and most importantly with the NDIS Director of Service Delivery and Performance, Brisbane and the NDIS MSH Health Liaison Officer (HLO). 4. establishing an innovative community partnership with Multicap to provide appropriate accommodation 5. establishing a partnership Queensland Department of Housing for priority access to social housing for people with disability in hospital. 6. Gaining visibility of all accommodation vacancies in the marketplace suitable for people with complex needs.

Description / Benefit



Rationale for change

The Division of Rehabilitation / Princess Alexandra Hospital NDIS Project has been running in various forms since the NDIS commenced in 2016. It has been funded by MSH and Division of Rehabilitation at various times.

The Project has been previously and continues to be required because NDIS eligible hospital patients are experiencing major discharge delays. The primary contributing factors are:

- a) the complex, multi-faceted NDIS processes,
- b) fragmented and immature service provider markets and
- c) MSH clinicians are challenged by the need to navigate evolving and complex NDIS processes which requires large amounts of clinician time and negatively impacts on their ability to provide a high level of clinical care to patients.

The PAH NDIS Response Project is essential in achieving efficient discharge outcomes for NDIS participants and the HHS by:

- a) providing leadership and strategic direction in response to the implementation of the NDIS.
- b) directly supporting and working with clinical teams across MSH and actively collaborating and negotiating with NDIS on behalf of clinicians to enable early discharge.
- c) building capacity and offering highly specialised NDIS support and training to remove NDIS related discharge barriers.
- d) responding to and capitalizing on opportunities presented by the NDIS to improve patient flow and streamline discharge pathways.
- e) representing PAH / MSH interests at NDIS stake-holder consultation meetings.
- f) assisting with and managing NDIS-related data at PAH and MSH

Future challenges include maintaining funding for the current project team and working with the NDIS to ensure that streamlined process and earlier discharge can be maintained in the future.

Models of care that we should start to implement

Title	Formalised integration of general physicians within ED
Description / Benefit	Shared daily ED rounds with ED consultants and general physicians to assist: more rapid clinical decision-making involving medical patients; pull strategies and parallel processing which have patients transferred into MAPU or inpatient wards more quickly; collaborative development and implementation of clinical pathways; education and training of medical and ED staff around topics of mutual interest.
Rationale for change	Move away from serial/linear patient journey at ED:medicine interface which slows patient journey through, and exit from, ED. Avoids siloed approach to patient care, eliminates the ping-pong multiple referrals made by ED teams in finding an accepting inpatient unit for an admission, and smoothes negotiations around how to manage problematic cases.

Title	Streamlining of bureaucratic processes
Description / Benefit	Credentialing of medical staff, changes in job descriptions, revision of protocols and guidelines, new models of care (especially use of digital platforms and virtual care) and reconfiguration of wards – changes which would normally take weeks to months to negotiate and require detailed business cases and sign off by finance officers have been approved and implemented within days. This greatly enhanced efficiency and removal of the hassle factor allowed staff to move quickly and with greater collaborative spirit and energy in preparing their workplaces for the expected pandemic which then, in turn, gave them greater confidence that they were ready and prepared to confront the pandemic.
Rationale for change	Major health threat instilled a need to determine what is essential and what needs to be done and can be done in an environment of collective willingness to disband with unnecessary red tape. This efficiency of process needs to remain post-pandemic.

Title	Inter-specialty collaboration
Description / Benefit	In preparing for worst case scenarios of large numbers of COVID-19 admissions, it was recognised that all physicians, regardless of specialty, would need, on the basis of equity, to participate in rosters of COVID teams. Given that many patients were expected to be older with co-morbidities, general physicians would buddy with specialists in ensuring an appropriate mix of skills required to provide care to these patients. These rosters and team compositions were overseen by an executive group of different specialists. The interfaces between ED, ID, respiratory medicine, general medicine and ICU were given special attention. This process bred a level of collaboration and appreciation of each other's roles greater than in pre-pandemic times. Regular inter-specialty meetings led to consensus decisions and action plans that previously would have taken more time to negotiate.
Rationale for change	Recognition that we would all stand a better chance of success if we stood together as a united team.

Low benefit care that has/should be stopped

Title	'Routine' reviews in outpatient clinics
Description / Benefit	Patients being brought back for review at 4, 6 or 12 monthly intervals and filling up clinic visits with stable patients for whom no changes to management are necessary – many could be discharged back to GP with an appropriate management plan.
Rationale for change	Waste of clinic slots which should be made available for urgent, as required reviews of old cases, or new hot referrals from ED or general practice.

Title	Low value investigations, treatments and procedures
Description / Benefit	Different departments undertook a critical look at 'discretionary' care and identified and suspended interventions that were not clinically indicated or of marginal benefit. This was particularly noticeable in regards to imaging requests (CT, ultrasound, MRI) but also included deprescribing of unnecessary medications. This change was driven primarily by the need to reduce risk of viral transmission to clinical staff and to free up capacity to provide urgent care to COVID patients, but most of these interventions were not indicated even at the best of times. Position statements from CSANZ suggested how patients presenting to ED with chest pain and assessed as being at low coronary risk could be safely discharged from ED following single negative troponin assay.
Rationale for change	Ongoing waste of resources which has been estimated to consume about 30% of healthcare spending must be avoided, especially as post-pandemic healthcare budgets are likely to be cut back or frozen to restore fiscal integrity.

Things that have not worked well

Example	Communication and co-ordination
Why didn't it work well?	Reliance on email or phone calls as primary means of communication was not optimal. Mapping current processes that may need to be changed as part of COVID preparedness were not made clear and relevant stakeholders were often not involved when they were essential to formulations of plans. Clinical directors were often unable to provide meaningful context to executive decision-making. The endless repetition and multiple sources of information was very distracting.

Models of Care Review (COVID-19)

Statewide Clinical Networks

New models of care that have improved patient outcomes, experiences receiving and/or providing care and better effectiveness and efficiency

Title	COVID 'virtual ward' for home patients
Description / Benefit	A single chronic encounter for home patients (mild cases) that require daily or second daily phone calls
Rationale for change	<p>Allows a single list/reference point in ieMR, but a single administrative admission / discharge to/from service rather than daily OPD appointment schedules – much less admin time, and flexibility regarding frequency of contact according to assessment of treating clinician</p> <p>However, this has been staffed and managed by nurses and doctors redeployed from usual roles due to changes in activity due to covid, or vulnerability to infection (non-physically patient-facing). Not necessarily sustainable or adaptable to other illness/services.</p> <p>The ability to develop a home unit quickly is useful however, as initially this took some time to set up and we had to work from our own database as there wasn't an equivalent system in place and did not have sufficient admin support to book/check in/check out daily OPD for dozens of patients</p>

Existing models of care that have been expanded successfully

Title	Telephone reviews for general ID OPD
Description / Benefit	<p>Patient focussed – well received, saves travel time, waiting time, parking fees for a busy clinic</p> <p>Phoning patients at home rather than telehealth also an improvement for many remote patients, as sometimes still require significant travel to telehealth location, and allows for more flexibility in time of contact</p> <p>(Issues around counting activity and funding, however)</p>
Rationale for change	<p>Minimise person to person contact at hospital</p> <p>Maintain ability to physically distance patients that do require face to face visits</p>

Models of care that we should start to implement

Title	
Description / Benefit	

Rationale for change	
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Models of care that we should start to implement

Title	
Description / Benefit	
Rationale for change	

Low benefit care that has/should be stopped

Title	
Description / Benefit	
Rationale for change	

Things that have not worked well

Example	
Why didn't it work well?	



Dr Liz Kenny, Chair Queensland Clinical Networks Executive
Dr Alex Markwell, Chair Queensland Clinical Senate

Cc: Michael Zanco, Executive Director Healthcare Improvement Unit

Queensland Health

Dear Liz and Alex,

Thank you for inviting Statewide Clinical Network Chairs to contribute to emergent high value health care from learnings and opportunities as a consequence of the COVID-19 Pandemic.

Our Maternity and Neonatal Clinical Network has led the Nation in it's responsiveness to community and clinician needs in establishing Relational Networks Nationally, and very strongly at the State level.

These Relational Networks with our State and Jurisdictional colleagues have facilitated inclusive direct dialogue and efficient communication and sharing of ideas and models that are based on evolving and new evidence, along with strengthening of established innovative models.

Emergent high value models of care and processes will be underpinned by common principles. Understanding the context that makes the model successful will support coordinated investment across the system including clinical improvement, community engagement, finance and regulation processes.

Forums and events offer an environment to build relationships and capture desired information in detail – these can be arranged quickly and effectively with large audiences and would be valuable in facilitating direct dialogue with our many and experienced Network Chairs and senate members.

Actions underpinning successful maternity and neonatal response:

- Establishment of Directors of Obstetrics and Gynaecology, and Directors of Nursing and Midwifery Forum, inclusive of consumers, chaired by SMNCN Chair and meeting weekly to check-in and share new Quality systems, develop and utilise Clinical Guidelines and associated consumer information
- Establishment of Consumer Forum to check-in and develop and publish consumer messaging
- Establishment of Directors of Neonatology Forum for similar oversight and guidance as above
- Inter-jurisdictional consultation and contribution to development of Guidelines, adopted and adapted by NSW Health, WA Health, NT Health
- Support for telehealth and hospital avoidance models
- Strengthening of Midwifery continuity of care models to support community and home based antenatal and postnatal checks

Maternity and neonatal care did not reduce activity during the pandemic, however the system and population constraints and response dependencies are largely similar. I have attached information addressing the questions as initially posed and a summary of the CEQ Maternity response work.

Yours sincerely,

Assoc. Professor Rebecca Kimble

Chair, Statewide Maternity and Neonatal Clinical Network

Director Queensland Clinical Guidelines

Director Statewide Paediatric & Adolescent Gynaecology Services

Pre-Eminent Staff Specialist Obstetrics and Gynaecology

Royal Brisbane & Women's Hospital and Queensland Children's Hospital

University of Queensland, Faculty of Medicine

Emergent models/processes examples

Title	Amended antenatal schedule of care
Description / Benefit	The number of face to face visits during antenatal care was reduced from 10-12 to only 3 (excluding birth). The full standard antenatal schedule of care is delivered. A combination of telehealth and phone consultation are used in conjunction with self-monitoring or midwife led monitoring/observations delivered from a community hub. Benefits include convenience for the woman, avoidance of outpatient clinics. Limitations are investigation/examination for escalation of care. This is not suited to high risk patients.
Rationale for change	All required care is delivered in a manner that is more woman centred. There is possibility of co-locating midwifery and child health hubs into areas of social disadvantage (A model that has been evaluated separately and greatly beneficial).

Title	Remote facilitated antenatal education
Description / Benefit	Accessible and consistent antenatal education using combination of online materials and video conference events with a clinician facilitator. Offers greater access to education without attending a hospital. Limitations for immersive engagement and demonstrating equipment and interactions.
Rationale for change	Limited face to face delivery opportunity. Necessary to continue providing for safe and effective care.

Title	Remote facilitated syphilis in pregnancy in service education
Description / Benefit	Project engaging facilities in syphilis in pregnancy screening activities and supporting process improvement for notifiable conditions reporting, now being delivered by Project team engaging via Teams with the receiving site to support a local educator and facilitate the capability change.
Rationale for change	Travel restriction.

Title	Remote facilitated postnatal support models
Description / Benefit	Postnatal period is particularly vulnerable for infant safety and perinatal mental health. Support of family and community is important in managing postnatal stressors for people with and without diagnosable mental health conditions. Support programs are facilitated by hospital or community based clinicians or trained peer facilitators. Moving to video based services maintains accessibility for counselling and support.
Rationale for change	Travel restriction. Restriction on congregations.

Expansion of models/processes

Title	Continuity of carer models
Description / Benefit	Continuity of carer models have emerged as favoured models for many pregnant women. The benefits are well described. The relationship and known care provider was able to be more responsive in people under their care to navigate the changing policy context, and achieve positive experiences.
Rationale for change	Trust of provider and advice. Avoidance of hospitals.

Title	Online antenatal education materials
Description / Benefit	Statewide antenatal education program was provided open access online. This reduces a significant burden on HHSs directly developing education materials and supports remote facilitation.
Rationale for change	Limited face to face delivery opportunity.

Observed benefits

There are examples of patient benefit that are suspected to result from reduction in visitors and the increased opportunity for staff contact during the postnatal period. For example, an increased proportion of return to birth weight within 5 days. Stronger relational networks with General Practice and other community healthcare providers are also beneficial. Evaluation of these benefits and the conditions giving rise to them are

Things that have not worked well

- Reducing support people during labour and birth is not favoured and will not be continued.
- Delay associated with data collections such as the Perinatal Data Collection have necessitated direct reporting of cases via case series. An 'on course' collection would be greatly beneficial – ieMR may provide that in future but there are limits. This ties with national direction for central national digital pregnancy health record and child health record.

Opportunities to cease low benefit care

Care provided remains largely unchanged as a result of the pandemic, although the delivery modes have been adapted. Further consideration of the system value of DoH led improvement activities is required across the maternity and neonatal services. Maintaining the current CEQ team of teams and an agreed achievable priorities and leadership is central to addressing this question.

Summary of CEQ Maternity Response

1. National leadership- Guidance for clinicians and services

- Developed, updated and published [Queensland Clinical Guideline – Maternity care during the COVID-19 pandemic](#) - New South Wales, Northern Territory, and Western Australia have adopted (by directive in NSW) or adapted Queensland's guideline recommendations. Guidelines are downloaded globally once every ten minutes.
- *Operational framework* (Guidance for service provision)
- *Flowcharts* supporting triage and assessment, neonatal care, Nitrous oxide circuits, inpatient assessment of women (with fever).
- Modified antenatal visit schedule that reduces face to face antenatal care from 12 visits to 3 visits
- Reviewed Gestational Diabetes testing guidelines to reduce unnecessary testing and exposure of pregnant women to the public

2. Relational Networks - Connecting and supporting clinical service leaders

- Stood up a weekly meeting of Statewide Directors of Obstetrics and Gynaecology and Directors of Midwifery and Statewide Maternity and Neonatal Clinical Network Steering Committee Chaired by Assoc. Professor Rebecca Kimble
- Fortnightly meeting of Statewide Directors of Neonatal Intensive Care Units
- Focus on sharing solutions and tools addressing local process and workforce issues
- Feedback has been positive. Groups are planned to continue beyond COVID-19.

3. Public messaging and access to information

- [Queensland Health Antenatal Education](#) is now available open access online
- [Short video](#) about pregnancy care during COVID-19
- [COVID-19 and pregnancy consumer information](#) sheets aligned to the guideline
- [Queensland Health pregnancy and breastfeeding consumer website](#)
- [Pregnancy, birth and feeding baby during the coronavirus \(COVID-19\) pandemic](#) – The first social media post attracted more than 5000 views.

4. Emerging service models and processes

- Maternity and neonatal services have not reduced services during the pandemic
- Face to face delivery has been minimised using
 - Amended antenatal schedule involving only 3 visits but delivering the full schedule of care
 - Alternative screening for Gestational Diabetes Mellitus
 - Community based maternity hubs
- Continuity of carer models and locating aspects of care in community centres have been successful approaches well received by women.
- Postnatal support via facilitated online models are also being developed.

5. Data about COVID-19 in pregnancy cases

We are monitoring cases of confirmed COVID-19 in pregnancy to identify potential impacts of infection on mother and baby, during and after pregnancy.

Healthcare during COVID-19

Information for the Queensland Clinical Senate

May 2020

Mental Health Alcohol and Other Drugs Statewide Clinical Network

Through a project jointly managed by Metro North and Metro South Hospital and Health Services (HHS), the Mental Health Alcohol and Other Drugs Statewide (MHAOD) Clinical Network is supporting public MHAOD services to share innovative ideas, information and resources regarding the planning and delivery of safe, effective and efficient healthcare during the COVID-19 pandemic. This is being achieved through the coordination of regular information exchange meetings and the collation of resulting information and resources. All HHS MHAOD services are invited to participate.

Challenges, opportunities and solutions in COVID-19

The COVID-19 pandemic has created new challenges for all services, in particular how to deliver:

- care in the present while planning for the future.
- person-centered care while keeping the community/population safe.

These challenges and solutions have been explored in relation to key topics through a number of statewide virtual information exchange meetings. Some of the key points are listed below.

Inpatient Care

Solutions implemented

- Mental health inpatient ward processes and layouts were not previously designed for managing infection. Changes have been implemented across the state.
- Plans and processes in place to manage COVID-positive mental health inpatients in medical wards where possible and appropriate.
- Education of staff in donning and doffing of personal protective equipment (PPE).
- Simulation scenarios beneficial for highlighting issues for mental health and emergency department (ED) staff.
- Implications of legislation (primarily *Mental Health Act 2016* and *Public Health Act 2005*) on non-compliance with self-isolation or quarantine have been determined in different scenarios and fact sheets produced in some services to guide practice.

Care in the Community

Telehealth solutions for Video/Virtual Care

Solutions implemented

- Preferable video/virtual care solutions were matched to scenarios/care settings.
- Anecdotal feedback is that some consumers prefer virtual care – time savings, less travel, less parking costs, greater flexibility and potential stigma reduction as there is reduced need to attend a mental health clinic in person.
- Early data suggests Did-Not-Attend rates appear reduced while increased use of video/virtual care is offered.

Models of care for implementation in the 'new normal'

- Routinely offering appointments through telehealth as an option where appropriate has been suggested as a desirable component of the 'new normal' for community based MHAOD services. Current indications are that for some consumer groups this is likely to improve engagement with

- services, and that this may also provide greater scope for engaging with family and carers.
- Potential next steps may include exploring how we can best determine:
 - MHAOD consumer groups most likely to engage and benefit (by diagnosis and demographics)
 - types of MHAOD assessments and interventions that can be delivered most effectively using telehealth
 - the proportion of services that can be effectively delivered via telehealth-based appointments - this will vary according to service location and consumer population
 - how services can be expanded through telehealth, for example increased service capacity created through reduced travel time and other efficiencies, and enhanced service availability through after-hours telehealth-based consultations
 - how interventions can be adapted or newly created to take advantage of telehealth technology.

Key challenges

- Concerns highlighted regarding use of virtual platforms for consumer care, including security, availability, privacy, consumer lack of devices/data.
- Lack of availability of hardware and software is an issue for staff and consumers.

Housing and accommodation

- Department of Housing and Specialist Housing Services (SHS) have funding to provide crisis accommodation for people at risk of homelessness during COVID-19, including short-term hotel accommodation and longer-term options in studios at a vacant student building in Toowong, Brisbane.
- MHAOD services can approach the SHS in their area for information, with communication strategies between SHS and MHAOD services to be determined.
- Information available in a weekly state-wide housing link-up hosted by Q Shelter.

Issues for specific at-risk populations e.g. consumers on Clozapine

- International consensus statement on the use of clozapine during the COVID-19 pandemic has been submitted to the TGA, although not progressing quickly.

Expanded/alternative models of care

- Some MHAOD services are exploring alternative models for efficient and safe management of clozapine clinics, including utilising GP practices, nurse-led clinics or using portable hemocues (blood testing devices).

Models of Care Review (COVID-19)

Statewide Clinical Networks

New models of care that have improved patient outcomes, experiences receiving and/or providing care and better effectiveness and efficiency

OLDER PERSONS

Title	Increased capability for Telehealth Assessment
Description / Benefit	The threat of a COVID-19 pandemic has informed a natural progression towards a more virtual means for performing patient assessments. The SOPHCN and the SDCN have put together a joint statement and a list of Telehealth resources to aid clinicians in performing remote assessments. This resource will be circulated when finalised in the coming weeks.
Rationale for change	The increased capacity and functionality of telehealth services in response to COVID highlights an opportunity to conduct appropriate patient assessments from remote locations. Effectively, this shift in practice could work to reduce the strain on outpatient clinics.

Models of Care Review (COVID-19)

Statewide Clinical Networks

OLDER PERSONS – Part 2

Existing models of care that have been expanded successfully

Title	Residential Aged Care District Assessment and Referral (RADAR) service – Metro North
Description / Benefit	<p>RADAR is an existing model of care providing patient centred, integration of care for Residential Aged Care Facility (RACF) residents. This includes alternatives to ED presentation and / or hospital admission if clinically appropriate.</p> <p>In the setting of COVID-19, RADAR has rapidly increased telehealth capacity to provide alternatives to ED presentation or RADAR outreach visits in response to the concerns of residents and RACFs about possible COVID exposure.</p> <p>The service has also added an on-call consultant for weekends to maximise clinical governance and support for nursing staff. There is a recruitment process underway to also add a Nurse Practitioner to support capability to respond to complex end-of-life and geriatric medicine needs.</p>
Rationale for change	<p>These changes have facilitated increased responsiveness from the RADAR team to the needs of RACF residents. The use of telehealth has increased the efficiency of the service and provided another tool to support quality care within the RACF setting.</p> <p>The addition of the on-call consultant and Nurse Practitioner roles will increase the capacity of RADAR to provide quality care in the after-hours space, and to reduce unnecessary transfers to hospital.</p> <p>Both changes have also increased the capacity and quality of the future RADAR response to a COVID positive patient receiving care within a RACF.</p>

Models of Care Review (COVID-19)

Statewide Clinical Networks

Existing models of care that have been expanded successfully

Title	Residential Aged Care Facility (RACF) acute care support service (RaSS)
Description / Benefit	<p>RaSS are Queensland Health funded services that provide some or all of the following acute care services to residents of residential aged care facilities:</p> <ul style="list-style-type: none"> • Telephone triage – telephone assessment of acute care needs and matching the care need to the most appropriate care delivery service • Gerontic nursing assessment for RACF residents presenting to Emergency Department (ED) or admitted to hospital • Discharge planning, co-ordination and transitional communication for RACF residents presenting to ED or admitted to hospital, including for residents who have presented to and been discharged from ED after-hours • Follow-up of all RACF residents at 7 days (earlier if clinical need requires) to ensure fulfillment of referrals, resolution of care need • ED substitutive care – acute care in the RACF environment as an alternative to ED transfer; the types of care able to be delivered will be determined by the scope of practice of individual RaSS staffing models; and • Specialist consultative services via telehealth to RACF residents <p>Benefits include:</p> <ul style="list-style-type: none"> • Improve capacity of clinical staff across the care continuum to provide optimal care to residents of aged care facilities; and • Optimise quality of care to residents of RACFs across the care continuum and • Improve choice of care setting for RACF residents with acute healthcare needs, where these exceed the scope of the General Practitioner (GP) and RACF to manage independently of the hospital sector
Rationale for change	<p>Expansion of the RaSS teams to cover 7 days/24 hours reduced pressure on the hospital system as older persons are known to spend longer in the emergency department are more likely to be admitted and when admitted are more likely to have an extended hospital stay with rehabilitation needs.</p> <p>RaSS is patient centred model of care and when it is safe to do so and in keeping with patient wishes, providing care in the residential aged care facility will reduce risk of hospital acquired infections, in particular with COVID-19 which is known to impact older persons more severely.</p>

Models of Care Review (COVID-19)

Statewide Clinical Networks

STATEWIDE PERSISTENT PAIN CLINICAL NETWORK

New models of care that have improved patient outcomes, experiences receiving and/or providing care and better effectiveness and efficiency

Title	Primary Health Care Enhancement
Description / Benefit	General Practitioner Case Conferencing and Phone Advice Services to Support Primary Care
Rationale for change	<p>Identified innovative, evidence-based models of care within pre-existing services that have the potential to scale across the entire network and enhance primary care integration.</p> <p>Most persistent pain can be managed in primary care, with the persistent pain services providing secondary support provides an opportunity to enhance the performance of the services with a relatively modest investment.</p> <p>Referrals from primary care constitute the bulk of public persistent pain management service's caseload. This is especially pronounced for category 3 patients. This relationship with primary care, and its impact on referral numbers, is consistent with the best practice approach that most persistent pain can be managed in the primary care setting, with a referral only necessary when the General Practitioner feels that a referral is necessary:</p> <p>Clinically recommended waiting time for a category 3 referral (365 days) creates vulnerability for both the patient and the general practitioner.</p> <p>Currently General Practitioners report an increased oversight of opioid prescribing by <i>Medicines Regulation Queensland (MRQ)</i>, varying levels of comfort and skill with managing complex persistent pain, and financial sustainability issues in managing these complex patients under the 'fee-for-service' <i>Medicare Benefits Schedule</i>. Where a referral is then made, as clinically appropriate, to a public persistent pain service there may be a 12-month wait before that patient is seen. The General Practitioner, with varying skill levels, will then be expected to manage a complex patient with pain. They will also be subject to considerable scrutiny of their prescribing practices, especially if the patient has a prescription for opioids.</p> <p>An innovation, established at Metro South and currently being trialled at Metro North as part of the COVID 19 response, is the management of a dedicated phone line and case conferencing clinics to allow general practitioners to contact the services for advice and direction on complex patient management.</p> <p>A valid referral still needs to be made to the service but, upon receiving and triaging the referral, it may be managed through a phone consultation.</p> <p>This has the dual benefit of not only accelerating the patient's access to care, but also supporting the skill base of the General Practitioner. Focus must be on improving mechanisms for GPs and public persistent pain services to share information. This model would integrate well with the <i>Primary Healthcare Network</i> model and should be further examined.</p>

Title	Project Echo Telementoring Program
Description / Benefit	<p>Queensland Health has long recognized the difficulties of providing health care across the vast geography of the state, particularly into regional, rural and remote areas and has been highly innovative in developing its capacity to provide effective digital healthcare solutions, particularly over the past ten years.</p> <p>This program provides an opportunity to deliver equitable access to quality education and training in pain management across the primary and secondary sectors. This also aligns with the specific education programs, designed by the Faculty of Pain Medicine, for General Practitioners to develop specific expertise in pain management.</p>
Rationale for change	<p>The organisational drive to increase service capacity across the state via telehealth mediums, the existing pain services have embedded telehealth into their services through a variety of means. These include individual telehealth clinics run out of regional and rural health centers, to group-based education or therapy programs coordinated with rural and remote QH facilities, as well as most recently trialing video calling into patient's home's, or providing education and screening via telephone. Much of the focus has been around providing services in this way to consumers. There is a need to support and educate the primary and secondary healthcare workforce across the state – medical officers, allied health professionals and nurses – who work at the coalface with people living with persistent pain and provide the bulk of care.</p> <p>Healthcare providers often have a limited understanding of pain and delivering pain management service is significant challenge for those living with pain as well as for those managing and treating pain outside of specialty pain clinics.</p> <p>Project Echo is a collaborative model of care and education, provided through the telehealth medium of videoconferencing. The format focuses on both healthcare professional education and case management, through attendees participating regularly in real-time online video forums with the opportunity to discuss current complex cases with an expert multidisciplinary panel and receive education on relevant specialty topics. The purpose of this model is to empower clinicians across the primary, secondary and tertiary sectors to provide care for patients they would otherwise need to refer on. Hence it is particularly useful as a statewide model of care when endeavoring to provide specialty support and education across a vast geographical area.</p> <p>The clinical team at Children's Health Queensland persistent Pain services have been successfully running this model for over two years. It has become a key system enabler to upskill and educate clinicians and educators across the state in the management of paediatric persistent pain. Uptake has been excellent with an average of 20 attendees per monthly session, and positive outcomes for clinicians and patients acting on the case-based recommendations from the expert panel.</p> <p>Based on this success NQPPMS (Townsville-based) team are ready to launch a similar program for Adult persistent pain services. All Primary Health Networks support the program with the hope it can be adopted in remote, rural and regional areas across Queensland.</p>

Title	Standardised Outcomes Benchmarking (ePPOC)
Description / Benefit	<p>Providing Statewide standardised and validated outcomes for Persistent pain services</p> <p>Health system are progressing towards embracing value-based care, standardised and validated outcomes measures are being recognised as integral markers of both service quality and effectiveness</p>
Rationale for change	<p>Currently all public persistent pain services are subscribed to the <i>Electronic Persistent Pain Outcomes Collaboration</i>, (ePPOC) operated by the University of Wollongong. ePPOC collects patient level data at each service, including patient pre and post surveys, to develop a comprehensive picture of service outcomes.</p> <p>The importance of validated benchmarked data helps develop and mature services and provide patient reported outcomes (PROMs) and deliver meaningful comparisons to drive service improvement. The data would support the development of new services by ensuring that they are being consistently measured, and benchmarked, to guarantee the quality of their services.</p> <p>Statewide high level administration to collect and review the data would be beneficial.</p>

Models of Care Review (COVID-19)

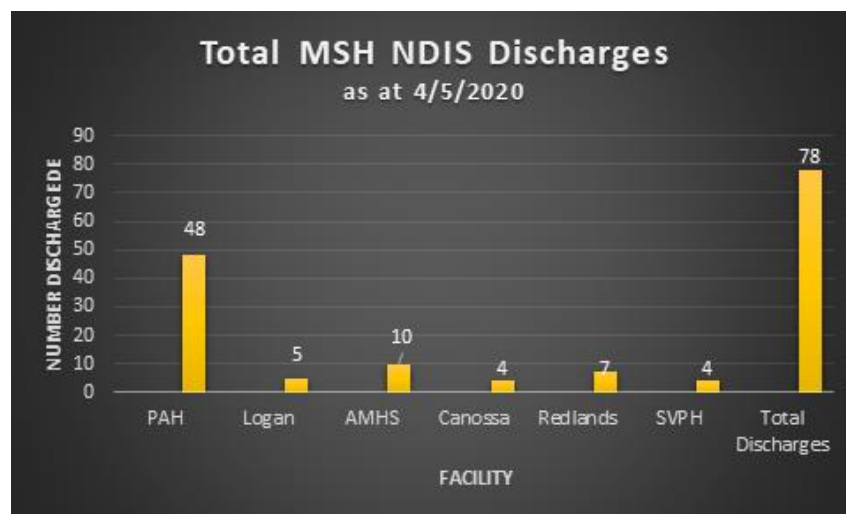
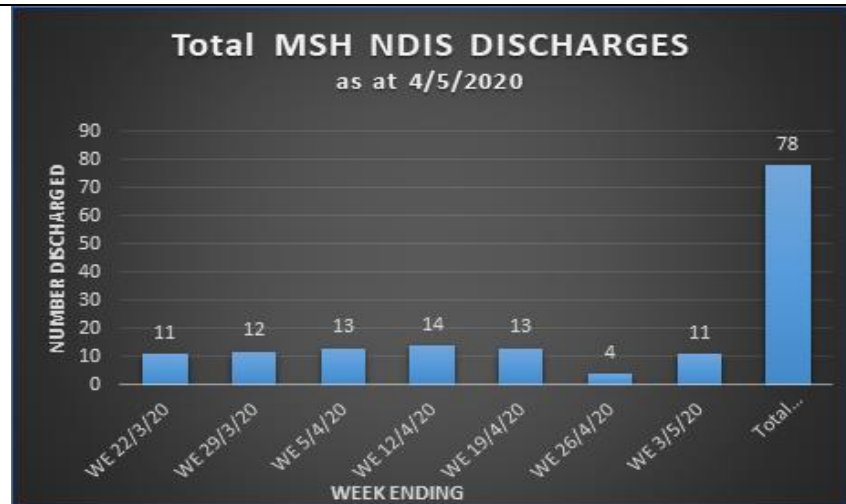
Statewide Clinical Networks

STATEWIDE REHABILITATION CLINICAL NETWORK

Existing models of care that have been expanded successfully

Title	Enhancing Princess Alexandra Hospital (PAH) NDIS Response Team to rapidly discharge NDIS participants in hospital during the COVID-19 pandemic
Description / Benefit	<p>Since the commencement of the COVID-19 pandemic the PAH National Disability Insurance Scheme (NDIS) Response Project (“the Project”) (3.0 FTE project officers, HP5 / NRG7) re-focussed on facilitating the earliest possible discharge of NDIS participants who are ready for discharge.</p> <p>With increased staffing (additional 2.0FTE projects officers), the Project has expanded its activity beyond PAH and is now assisting all MSH facilities and services including Addiction and Mental Health Services and St. Vincent’s and Canossa Private Hospitals, where PAH patients have been previously discharged for rehabilitation or interim care.</p> <p>For the 7 week period between 15/03/20 and 03/05/20 there were a total of 78 NDIS participants discharged from MSH facilities with the majority being from PAH. (Please see Graphs below).</p> <p>The discharge planning process has been greatly assisted by NDIS being very flexible and streamlining usual processes to facilitate earlier discharge.</p> <p>The success of the project can be attributed to a number of factors including:</p> <ol style="list-style-type: none"> 1. a dedicated project team with time, expertise and knowledge of NDIS processes to assist busy clinicians with discharge 2. the concerted efforts of the project officers and MSH social workers and clinical teams. 3. highly effective, collaborative working relationships that have been established between the project team, clinicians and perhaps and most importantly with the NDIS Director of Service Delivery and Performance, Brisbane and the NDIS MSH Health Liaison Officer (HLO). 4. establishing an innovative community partnership with Multicap to provide appropriate accommodation 5. establishing a partnership Queensland Department of Housing for priority access to social housing for people with disability in hospital. 6. Gaining visibility of all accommodation vacancies in the marketplace suitable for people with complex needs.

Description / Benefit



Rationale for change

The Division of Rehabilitation / Princess Alexandra Hospital NDIS Project has been running in various forms since the NDIS commenced in 2016. It has been funded by MSH and Division of Rehabilitation at various times.

The Project has been previously and continues to be required because NDIS eligible hospital patients are experiencing major discharge delays. The primary contributing factors are:

- the complex, multi-faceted NDIS processes,
- fragmented and immature service provider markets and
- MSH clinicians are challenged by the need to navigate evolving and complex NDIS processes which requires large amounts of clinician time and negatively impacts on their ability to provide a high level of clinical care to patients.

The PAH NDIS Response Project is essential in achieving efficient discharge outcomes for NDIS participants and the HHS by:

- providing leadership and strategic direction in response to the implementation of the NDIS.
- directly supporting and working with clinical teams across MSH and actively collaborating and negotiating with NDIS on behalf of clinicians to enable early discharge.
- building capacity and offering highly specialised NDIS support and training to remove NDIS related discharge barriers.
- responding to and capitalizing on opportunities presented by the NDIS to improve patient flow and streamline discharge pathways.

	<p>e) representing PAH / MSH interests at NDIS stake-holder consultation meetings.</p> <p>f) assisting with and managing NDIS-related data at PAH and MSH</p> <p>Future challenges include maintaining funding for the current project team and working with the NDIS to ensure that streamlined process and earlier discharge can be maintained in the future.</p>
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Title	SPOT Virtual Outreach and Virtual Meetings
Description / Benefit	<p>SPOT Virtual Outreach - The COVID-19 pandemic has increased the Spinal Outreach Team's (SPOT's) use of Telehealth (i.e. <u>live video-conference technology</u>) as one of the modes for providing Virtual Outreach. Other modes include <u>telephone</u>, <u>teleconferencing</u> and <u>email</u>.</p> <p>Telehealth is an important communication tool that SPOT has been using for several years. However, its use was previously confined to a small number of clients outside South East Queensland. In-person outreach was preferred, whenever this was feasible. SPOT's use of Telehealth as part of a Virtual Outreach model of care, has now become a day to day practise.</p> <p>The benefits of Virtual Outreach underpinned by Telehealth include the ability to provide outreach in real time, reduced time lost travelling, and reduced time spent on logistics and planning associated with in-person outreach. However, Virtual Outreach is not the ideal model for all SPOT interventions. In-person visits are still the gold standard when some form of physical or environmental assessment is required. With respect to rapport building between SPOT staff and clients an initial in-person visit is still believed to be the gold standard.</p> <p>SPOT Virtual Meetings - With the requirement of social distancing and some SPOT staff working from home, the SPOT weekly 2-hour Team meeting has become a Virtual Meeting via <u>Microsoft Teams</u>. As the facilitation of these meetings and the documentation of outcomes is being standardised and nuanced, the model of the Virtual Meeting is proving to be highly time efficient and inclusive of all participants.</p> <p>Far more Virtual Meetings (i.e. meetings with professionals outside SPOT) are now being conducted. These are being conducted via platforms such as Microsoft Teams, <u>Cisco Teleconference System</u>, and <u>Facetime</u>. These meetings are proving to be productive and time efficient.</p>
Rationale for change	<p>The restrictions placed on in-person outreach and in-person meetings has propelled SPOT into a new way of working. While Virtual Outreach and Virtual Meetings will never replace the need for in-person contact, it is evident that Virtual models can comprise a larger portion of SPOTs total service provision, after the pandemic is over.</p> <p>However, if SPOT is to sustain these Virtual models long term, clinicians and clients will require access to a Telehealth platform that is reliable and uncomplicated. Virtual Outreach will only truly</p>

	have arrived when it is as easy as making a phone call and has the feel of being invited into a client's home.
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Title	Paediatric Rehabilitation Outpatient Clinics for ABI, SCI, Limb Difference, Cerebral palsy services including some aspects of Outreach Clinics
Description / Benefit	<p>Offering option of telehealth into the home and /or telephone clinic review in the place of face to face (F2F) reviews. This was previously being offered for selected children for selected clinics.</p> <p>Benefits include: reduced need and costs for travel, parking, less time from work/school; less cancellations and FTAs over this period than would otherwise have occurred due to COVID or other issues because we offered this option; some advantages about a new and negotiated virtual shared space, able to achieve some of what might be achieved in F2F apt: ability to identify higher need to review F2F and plan this with family. Works better for those children with less physical involvement and need for physical assessment and intervention. More Telehealth into the home can be used going forward but we need to identify which children and when this might be appropriate and there is more to do to improve the quality of the interaction.</p> <p>Limitations: a lot of change and team effort required to expand models of service delivery so quickly; takes time to organise telehealth into home with families; technology challenges in the home or here at the hospital or both; many issues that limit quality – light, noise, space, bandwidth, having a device that can be moved around to show what is required, lots of people in the background at times; physical examination of patient limited – can't monitor weight/growth, may not able to observe gait as well; swallow etc no physical examination; can't provide or review orthoses, review equipment; can't have hip x-ray if on hip surveillance; miss nuances of communication; family may not be well prepared or distracted; not so easy if multidisciplinary team to have sufficient air time – back to back appointments not so easy for family; does not suit many children with quite complex presentations. Can't provide the additional services and interventions eg BoNTa injecting; gait lab video; hip x-ray; specialised assessment. We have found there is a lot of follow up to compensate and also children have had additional appointments scheduled sooner that would have otherwise occurred if they were seen F2F.</p>
Rationale for change	COVID times so less ability/desire to travel and attend etc

Title	Delivery of telerehabilitation for Day Hospital patients
Description / Benefit	Provision of telerehabilitation increases access to care to patient's own homes so transport and carer availability is not an issue to accessing care. There have been technical issues with the current system capability and staff and patients have had to rapidly adjust to this being the primary mode of rehabilitation for our Day Hospital patients with getting used to the platform and technology. It is envisioned that Day Hospital will be delivered through a mixed model of face to face therapies and telerehabilitation.
Rationale for change	Telerehabilitation was already being adopted by the team but uptake was slow – COVID-19 social distancing measures accelerated uptake and acceptance of this model.

Models of care that we should start to implement

Title	Paediatric Rehabilitation in the Home (RITH)
Description / Benefit	<p>RITH could occur as subacute care as part of the existing Hospital in the Home (HITH) program where there is bed substitution and reduced LOS. RITH could also occur as Post-Acute Care (PAC) to smooth the transition to home to improve the patient experience, provide contextualised rehab and problem solving and prevent readmission. Access to these services have been limited previously due to capacity.</p> <p>Lots of benefits for family and child well documented in literature and likely improved experiences – smooth transition. Targeted contextualised rehab.</p> <p>The agreement and acceptability of virtual reviews with telehealth/telephone into the home make RITH more likely to be able to be supported from a resource point of view. We have previously requested funding to look at these models but not been successful. We have yet to implement this but the model is being developed. The requirement to be living within 40 kms of Queensland Children's Hospital (QCH) may be less rigidly applied with the use of virtual reviews and rehab for some sessions. Ideally the Rehab team would provide most of RITH depending on need for continuity, issues of capacity and competency, efficiency etc.</p> <p>Limitations: currently 40 km radius; the HITH & PAC team have limited capacity; if only HITH & PAC teams are offering this there are some challenges around continuity of care; there are some issues around confidence and competency of HITH and PAC teams in some areas; resource heavy but offset a little if the travel is somewhat reduced and there is some use of virtual care. Need to ensure families have appropriate devices and Wi-Fi to support this or need to provide iPad with SIM card so this is possible.</p>
Rationale for change	Family and child preference and benefits, benefits of contextualised rehab. Being able to free up beds and reducing LOS made more possible by acceptance of virtual reviews and rehab.

Title	SPOT Virtual Regional Visiting
Description / Benefit	<p>SPOT Virtual Regional Visiting – SPOT provides specialist spinal cord injury services to people across Queensland. To ensure equity of access to these services, for regional and rural clients, SPOT undertakes 10 to 12, multiday regional visits each year. This allows SPOT clinicians to meet with clients in their home and with their local health providers. Regional visits are unable to proceed currently which compromises equity of access.</p> <p>It is proposed that SPOT undertake a trial of Virtual Regional Visits. This would be undertaken via Telehealth, possibly with the use of the Virtual Clinics interface. The Virtual Regional Visit model will differ from the Virtual Outreach model in as much as the SPOT clinicians will connect exclusively with clients and service providers from a designated region, over a number of successive days. It is proposed that the same self referral process that SPOT regional clients are familiar with be used, however they will be booked into a virtual visit not an in-person visit. SPOT will co-ordinate local service providers to either be present at the client's home or to join the visit virtually.</p>
Rationale for change	While a Virtual Regional Visiting model will never replace the need for some in-person contact it would provide consistency and certainty to our regional clients in the short to medium term. In the long term it is envisaged that Virtual Regional Visiting could reduce and/or supplement the need for in-person regional visiting.

Title	Allied Health Skill Sharing
Description / Benefit	In anticipation of staff shortages due to COVID-19, Occupational therapists underwent skill sharing training in mobility related CTIs and it is flagged that PTs can undergo training for ADL assessments.
Rationale for change	Staff capacity to provide care can be increased with skill sharing between disciplines. This means staff are working to their full scope and there will be efficiencies in assessments and providing interventions (we already delegate to AHAs to improve therapy dosage as able as well).

Title	Telehealth for outreach inpatients
Description / Benefit	<p>Patients in the local outlying hospitals have their therapy programs reviewed by AHPs via telehealth with the support of an AHA at the outreach site.</p> <p>There has been AHA and AHP training of this including the 'Mobility Ax via telehealth' CTI and ongoing work on home visits conducted via telehealth.</p>
Rationale for change	With reduced AHP visits to outlying hospitals, telehealth affords the opportunity to conduct timely and safe reviews for patients at these outreach sites so their progress will not be delayed.

Things that have not worked well

<p>What didn't it work well? (Implementation problems)</p>	<p>Implementation problems</p> <p>Need for one, simple, Telehealth platform</p> <p>The more telehealth options we have the more confusing it is for staff and clients. The option that is the simplest to access i.e. single click to access, is the most likely to be favoured.</p> <p>Need for highspeed and secure connections</p> <p>SPOT's experience with the current Telehealth portal has highlighted issues with sound quality and dropouts during calls.</p> <p>The Telehealth option must not allow uninvited drop-ins i.e. exclusivity of the connection is required.</p> <p>Need to overcome digital poverty</p> <p>There is a risk of digital poverty hindering client access to services. Some clients do not have access to computers, tablets or even smart phones. Clients access to a data plan for internet may also be an issue.</p> <p>Resistance to change driven by low digital skill</p> <p>Clinician and client familiarity with technology is an issue.</p> <p>Lack of hardware for conducting Telehealth</p> <p>SPOT requires technology hardware to be able to effectively deliver telehealth. Within the SPOT office, lack of microphone and camera on our computers has been a huge issue.</p>
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<p>Example</p>	<p>Some clinic reviews by telehealth /telephone. Initial diagnostic clinics for children at high risk for CP; children with complex physical presentations; children who need other care as they need to come in anyhow or we need to go to the regional centre as per outreach clinics to see children with the local teams, undertake more complex physical assessments and provide interventions such as botulinum Toxin injecting.</p> <p>Some assessments e.g. neuropsychological assessments and SLP assessments required F2F for at least some aspects of the assessment.</p> <p>Some OPD reviews for same reason.</p> <p>Some clinic reviews by telehealth/telephone for adult rehab clinics also. Particularly those for patients with cognitive impairments (e.g. ABI), complex physical deficits requiring review, and some subspecialist clinics e.g. spasticity management (including botulinum toxin injections) and amputee clinics.</p>
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Why didn't it work well?

Limitations: takes time to organise telehealth into home with families; technology challenges in the home or here at the hospital or both; many issues that limit quality – light, noise, space, bandwidth, having a device that can be moved around to show what is required, lots of people in the background at times; physical examination of patient limited – can't monitor weight/growth, may not be able to observe gait as well; swallow etc no physical examination; can't provide or review orthoses, review equipment; can't have hip x-ray if on hip surveillance; miss nuances of communication; family may not be well prepared or distracted; not so easy for multidisciplinary team to have sufficient air time – back to back appointments not so easy for family; does not suit many children with quite complex presentations. Can't provide the additional services and interventions e.g. BoNTa injecting; gait lab video; hip x-ray; specialised assessment. We have found there is a lot of follow up to compensate and also children have had additional appointments scheduled sooner that would have otherwise occurred if they were seen F2F.

The same issues have been experienced in the adult rehabilitation group.

Some assessments are not valid if not F2F.

Models of Care Review (COVID-19)

Statewide Clinical Networks – Renal Network

1. New models of care that have improved patient outcomes, experiences receiving and/or providing care and better effectiveness and efficiency

MNHHS Kidney Health Service	
Title	1. GPwSI (GPs with Special Interests) clinics in the Caboolture area – GPwSI in CKD
Description / Benefit	<p>Started as 2 clinics a week. We leveraged off the need to have Nephrologist supervision of the GPwSI to introduce a SMO clinic. Then reconfigured to have a GPwSI clinic running all day i.e. increase SMO clinic to 2/week and then added a pharmacist.</p> <p>Patients don't have to travel to RBWH, NLHP, etc, Patients survey for experience – PREMs – and rate the experience as non-inferior, released capacity in the rest of the specialist OP, impacting on reducing waitlist</p>
Rationale for change	<p>Unacceptably long outpatient (OP) wait list</p> <p>Recognition that Caboolture is an area of relative underservicing of high-end kidney care</p>
Title	2. Third haemodialysis shift @ Redcliffe & North Lakes Health Precinct Haemodialysis Units
Description / Benefit	<p>The Herston Haemodialysis Unit (HDU) did not meet the needs of social distancing. We reduced the number of patients in dialysis chairs to conform to these requirements. The only haemodialysis capacity we have, other than a new site, is to start up third dialysis shifts. This was in place at Herston and was instituted in our other two chronic haemodialysis sites.</p>
Rationale for change	<p>A response to COVID-19 social distancing requirements.</p> <p>Capacity @ HDU saturated</p>
Title	3. Ward based inpatient care
Description / Benefit	<p>RBWH Internal Medicine Service (IMS) changed from team based to ward based inpatient workforce resourcing.</p> <p>The aim was to compartmentalise staff to reduce risk of COVID-19 transmission among inpatients.</p> <p>It also reduced crowding in the central resource areas of the wards where teams congregate to discuss patients and access clinical records e.g. computers available for accessing ieMR.</p> <p>An additional benefit was ward based staff e.g. nursing, had only one medical and allied health team to keep track of, particularly important in the number of clinical handovers the nursing team participate in.</p>
Rationale for change	<p>A response to COVID-19 social distancing requirements.</p> <p>Medical teams found handing over to nursing staff less constrained.</p>

MSHHS – Logan Renal Service	
Title	1. Amended Chronic Kidney Disease Clinic Schedule of care using telemedicine
Description / Benefit	<p>The number of face-to-face visits during COVID-19 renal clinics was reduced from 20-25 to only 2-5. The full standard renal schedule of care is delivered. A combination of telehealth and phone consultation are used in conjunction with recent blood results.</p> <p>Benefits include convenience for the patients, avoidance of outpatient clinics. Limitations are physical assessment for escalation of care. This is not suited to high risk immunosuppressed and CKD pre dialysis patients.</p>
Rationale for change	All required care is delivered in a manner that is more patient centred. There is possibility of co-locating renal reviews to outreach clinics with Nurse Practitioner and Telehealth hubs into areas of social distancing.
Title	2. Nurse Practitioner (NP) Outreach CKD clinic
Description / Benefit	<p>New CKD patients were seen in outreach clinics via QH community health centres (no waiting, immediate transfer to large room for new review and limited contact with other people/patients in outreach clinics). The number of face-to-face visits reduced for CKD review patients. Phone consultation were used in conjunction with self-monitoring or GP visits to assess clinical changes. Patients were still required to get pre-clinic pathology organised and this required faxing pathology request forms to GP practice or direct to private pathology. Phone calls were planned with the patient aware of day and time that phone call review would be done.</p> <p>Benefits include convenience for the patient being seen closer to their home, immediate entry to NP clinic (no wait time); With phone reviews patients did not require driving to and from clinic. Limitations are ability to exam clinically and decision for escalation of care. This is not suited to high risk patients.</p>
Rationale for change	All required care is delivered in a manner that is more patient centred. Patients are being seen closer to their home and outside the acute care hospital environment enables patient to be more relaxed

SCHHS Renal Service	
Title	Phone consultations
Description / Benefit	Phone call to patient rather than attendance at hospital for FTF clinic
Rationale for change	<p>Positives: Avoided face to face contact for infection risk, avoided any technical issues older people may face with telehealth (and the online image of the patient adds nothing to the consultation if the patient is known to the Dr), cheaper than telehealth (no clinic staff at the hospital where patient goes and the hospital where the doctor is based), reduced travel costs (for patients and also clinic staff who did not travel to satellite hospitals/clinics provided iEMR access was available), more efficient consultation time than standard FTF care.</p> <p>Negatives are: unable to examine patients if needed (not common issue for known patients), some patients could not check blood pressure at home, Medicare billing issues</p> <p>Overall, works very well for well-known patients and often for cat 2 and 3 new patients. Patients seem happy. Drs scanning the clinic lists for the upcoming week identifies patients who need to attend in person and are called to come to the clinic for an FTF appointment.</p>

NWHHS Renal Service	
Title	1. Joint Outreach Clinics – CKD CNC and Diabetes Educator (Renal)
Description / Benefit	<p>High risk remote areas such as Mornington Island and Doomadgee are being visited by both CKD nurse and diabetes educator to ensure all CKD patients are being given the utmost benefit of diabetes self-management education. This model works well in terms of slowing down the progression of CKD specially those who are not managing well in controlling blood sugar levels. Diabetes prevalence among CKD patients is estimated to be more than 50% (review is still ongoing).</p> <p>One day a week in Mount Isa, home visits are done by the tandem team to cater to the local CKD patients who do not have time or willingness to attend scheduled clinics. A dedicated Renal Diabetes Educator working side by side with CKD nurse strengthens the health service's effort to keep people away from dialysis as long as possible.</p> <p>Benefits:</p> <ol style="list-style-type: none"> 1. Close monitoring of diabetic patients who are normally at higher risk of progressing rapidly to ESRD. 2. Stronger efforts in promoting self-management of diabetes, demonstrating support to patient at varying stages of their CKD and their bout with diabetes, thus, increasing patient engagement with the health service 3. Immediate referral and on the spot establishment of diabetes-CKD care plan 4. Reduces chances of "failure to attend" by patients 5. Case conference with outreach GP is made easier with CKD nurse and diabetes educator; renal and diabetes issues are addressed simultaneously
Rationale for change	Previous CKD outreach visits identified the need for a diabetes educator to be present on site to capture patients in one appointment.
Title	2. Peritoneal Dialysis Nursing Support Services
Description / Benefit	<p>Home Therapy nurses are now supporting NWHHS PD patients and Townsville Home Therapy Unit. Intra-operative and in-patient assistance is also provided in Mount Isa Hospital. Patients now have a local contact person which also serves as a support in their home therapy. PD nurses also sits in telehealth consults to ensure continuity of care. The Mount Isa Home Therapy Unit also facilitates PD course for NWHHS staff nurses.</p> <p>Benefits:</p> <ol style="list-style-type: none"> 1. PET and adequacy tests, inpatient follow-up, belt line markings pre catheter insertion, antibiotics bag loading, Day 7 post-op wound dressing and home visits, facilitated by Mount Isa Home Therapy 2. In-patient and post-discharge follow up reduces re-presentation to emergency department 3. Frequent home visits increase patient confidence in doing therapy at home knowing local support is available at any time 4. New starters are provided intensive support to ensure success in transition from the controlled environment of the training unit to home setting 5. Pre-dialysis education and support on PD is provided as soon as patient made the decision to do PD, resulting to reduced anxiety and fear of commencing life-long dialysis treatment
Rationale for change	NWHHS has now 3 full-time FTE Clinical Nurses

2. Existing models of care that have been expanded successfully

Children's Health Queensland - Paediatric Renal Service	
Title	Telehealth/Telephone reviews of patients
Description / Benefit	Reduced face-to-face meetings leading to the decrease risk of coronavirus transmission, decreased expense for the families (travel, parking). On the other hand, face-to-face appointments provide opportunity for more personal interaction, especially in case when difficult discussion occurs e.g. Starting of dialysis, poor prognosis etc.
Rationale for change	We have noticed that in the field of paediatric nephrology, it is possible for many of our OPD appointments to be done via telehealth or telephone without compromising the care for these kids. However, many appointments will have to be done in person in the future (patients coming for imaging and review, patients requiring nutritional assessment etc).

MNHHS Kidney Health Service	
Title	1. Procedures on the ward
Description / Benefit	<p>Planning of COVID-19 needs in inpatients identified that ICU resources would be unlikely to be available to insert catheter access for dialysis (vascaths).</p> <p>We already do kidney biopsies on the ward.</p> <p>We developed a clinical pathway to expand to insertion of vascaths, supervised by nephrologists with skills in their placement</p> <p>Released ICU capacity – both beds & workforce</p> <p>Important capability in training advanced trainees in nephrology</p>
Rationale for change	<p>A response to COVID-19 to reduce foot traffic in the RBWH.</p> <p>Upskills nephrology workforce & extends skills in our advanced trainee mentoring program</p>
Title	2. Teleconference Outpatient Pharmacy review
Description / Benefit	<p>All pharmacy consultations were switched from in person to over the phone.</p> <p>A benefit has been that patients have been able to physically inspect their medicines in their homes and convey details such as brands and strengths to the pharmacist.</p> <p>Another benefit is that in some clinical areas higher numbers of patients have been able to be reviewed due to a reduction in patient non-attendance.</p>
Rationale for change	Due to the face to face restrictions and a desire to limit at risk patient's exposure to a hospital environment

MSHHS – Logan Renal Service	
Title	1. Uptake of acute PD for AKI
Description / Benefit	Acute peritoneal dialysis was adopted as the initial means for AKI treatment, rather than HD via a central venous catheter. This allowed renal replacement therapy to be delivered by the patient bedside in the ward setting, minimizing patient movement, and strain on in-center hemodialysis facility.
Rationale for change	The pandemic has caused considerable strain on healthcare resources in haemodialysis centres, including shortages in supplies, staffing, and risk of virus transmission from patient movement/transit in hospital to attend hemodialysis treatment.

Title	2. Increased use of telemedicine in chronic kidney disease clinic schedule
Description / Benefit	<p>The number of outpatient episodes of care delivered increased from 80/week to approximately 100/week (telehealth and face-to-face reviews) as a result of the reduced in-person consultations. In addition to consultation with the nephrologist, the full standard renal schedule of care was delivered, including dialysis education, dietetics advice and pharmacy reviews.</p> <p>Number of benefits:</p> <ol style="list-style-type: none"> 1. Limit physical congregation in facilities 2. Both patients and health professionals limit risk of exposure 3. Anecdotal evidence of immense patient satisfaction with telehealth (no formal survey) 4. Increased clinic space to review new referrals face-to-face. Thereby, ensuring wait-list is kept to a minimum. <p>However, an important limitation to this model was the inability to perform a physical assessment and escalate care as necessary. This model of care is not suitable to high-risk patients, including patients on immunosuppression or those imminently requiring renal replacement therapy.</p>
Rationale for change	In order to adhere to 'lockdown' measures, minimising patient movement/transit (e.g.: public transport, etc) was essential to mitigate risk of virus transmission.

MSHHS – The Princess Alexandra Hospital Renal Service	
Title	Teleclinics
Description / Benefit	These clinics, mostly over the telephone, have allowed basic consultations to occur with social distancing.
Rationale for change	Teleclinics have a place. They are second- or third-rate clinical care that is appropriate when the alternative is worse, or no alternative is available. They need to be limited to simple problems or reserved to when there are no good alternatives such as great distance or COVID19.

T&CHHS Renal Service	
Title	Cape York Kidney Care
Description / Benefit	<p>Continuation of support for high risk patients through telehealth and engaging with PHCC. The multidisciplinary dialled in using telehealth platform with client at the PHCC and Indigenous Health Workers (IHW) attending and undertaking the assessment. Benefits include:</p> <p>Continuation of monitoring of clinical indicators, upskilling of IHW, ability for large number of multidisciplinary team to engage at the same time with the client instead of each connecting at a different time (physio, social worker, occupational therapist, dietitian, pharmacist, diabetes educator)</p> <p>Limitations was primarily around difficulty hearing, understanding what was being said, and reliability of the technology. Took a long time to undertake each consult due to failure in technology and having to repeat messages due to lack of non-verbal cues and poor audibility of the technology.</p>
Rationale for change	Unable to visit communities due to biosecurity laws

NWHHS Renal Service	
Title	Acute Dialysis in Satellite Unit
Description / Benefit	<p>Previously, acute dialysis patients were flown to Townsville if not suitable for local haemodialysis management. Currently, Mount Isa Renal Unit are dialysing acutely ill patients including those admitted in ICU. This is made possible through the help of the medical team, the support of the Townsville nephrologists and collaboration between ICU and Renal nurses. Acute dialysis prescriptions are done over the phone.</p> <p>Benefits:</p> <ol style="list-style-type: none"> 1. Reduces delay of treatment 2. Prevents risks of further complications due to delay of treatment when waiting for transport or inpatient bed in Townsville Hospital 3. Reduces patient anxiety of being away from loved ones 4. Promotes better patient outcomes 5. Allows continuity of care 6. Enable collaboration among teams 7. Increases exposure of satellite renal nurses to acute cases, enabling learning and upskilling in managing HD patients 8. Maximises use of available renal nursing skills 9. Cost efficient 10. Positive patient experience
Rationale for change	<p>The restrictions imposed by COVID 19 has mobilised the Renal Unit to look for local solutions in providing haemodialysis for acutely ill patients.</p> <p>As mentioned in the benefits above, the positive impact of dialysing patients locally, justifies the expansion of this model. The unit has successfully retained staff who have acute/ICU dialysis experience.</p>

3. Models of care that we should start to implement

MNHHS Kidney Health Service	
Title	1. Redesign accommodation of staff
Description / Benefit	<p>Staff accommodation does not meet social distancing rules. In the short term, clinical spaces have been converted to staff accommodation. The accommodation doubles for clinical activity e.g. virtual OP clinics, follow-up of clinical work, etc</p> <p>However, the staff will need to move out of these clinical spaces as we move to higher clinical activity.</p> <p>The benefit is that we comply with social distancing at the moment but will not going forward</p>
Rationale for change	A response to COVID-19 social distancing requirements.
Title	2. Ensuring that a number of clinical interactions remain via telephone will increase efficiency, in particular, new to service referrals
Description / Benefit	Patients who are new to service could be reviewed over the phone prior to initial consultant review to allow there to be an accurate up to date medication list and list of medication related problems prior to first medical review.
Rationale for change	Often initial medical review occurs before pharmacist review and medication related problems are uncovered after the first medical review.

NWHHS Renal Service	
Title	Home Therapy Unit in Mount Isa
Description / Benefit	<p>At this stage, all Home Therapy patients of NWHHS is under Townsville Health Service. This means anyone commencing on Peritoneal Dialysis must relocate to Townsville for at least 2 months and for self-care HD, minimum of 3 months depending on patient's ability to learn HD. NWHHS has 3 full-time FTE Clinical Nurses who are able to train and support Home Therapy patients in the district. This can be easily achieved with the guidance of the nephrologist. The Home Therapy should be transitioned to NWHHS to achieve the benefits stated below.</p> <p>Benefits of transferring service to NWHHS includes:</p> <ol style="list-style-type: none"> 1. Optimum patient care 2. Intensive patient support – post home placement 3. Continuity of care 4. Improved inpatient management 5. Timely delivery of care 6. Enhanced ongoing home support 7. Cost efficient – no expense on travel and accommodation 8. Closer to home and loved ones (whilst on training) 9. Promotes collaboration among care teams (local MDT) 10. Improve patient quality of life 11. Increase uptake of PD 12. Positive patient experience
Rationale for change	To provide timely, safe and quality holistic care and support to home therapy patients in NWHHS

4. Low benefit care that has/should be stopped

MSHHS – The Princess Alexandra Renal Service	
Title	Multi-Disciplinary Clinics
Description / Benefit	Clinics where everybody sees a wide range of disciplines just because they can.
Rationale for change	Very expensive and no evidence of added benefit.

5. Things that have not worked well

MNHHS – Kidney Health Service	
Example	Telephone reviews may not work as well once restrictions are lifted
Why didn't it work well?	Previous attempts at telephone reviews has been hampered by patients not being home and the difficulties when they answer and they are in shopping centres or public places etc.

MSHHS – Logan Renal Service	
Example	End of life family discussions via phone
Why didn't it work well?	Sensitive discussion that involves non-verbal communication and best delivered in-person. Exemptions to gathering rules at times, such as this need to be considered.

SCHHS Renal Service	
Example	Managing dialysis patients with phone calls
Why didn't it work well?	Unable to assess fluid state

T&CHHS Renal Service	
Example	Trying to provide telehealth support in PHCC where there is not enough man power due to biosecurity (at lot of these clinics are supported by agency staff) to go and invite the clients to the clinic and also to provide support to the clients during the consultation.
Why didn't it work well?	Resources, and clients, were very reluctant to come to PHCC during COVID-19 and there are no other means to communicate with these clients in these aboriginal communities as access to technology is very limited.

NWHHS Renal Service	
Example	Challenges of Primary Health Care (PHC) provider (remote communities) – NWHHS Renal Service works closely with PHC. Their challenges affect the delivery of service to CKD patients. For CKD service to be effective, the PHC needs to be highly efficient in ensuring patients present to clinic for review.
Why didn't it work well?	PHC challenges listed below lead to fragmented care due to several factors e.g. <ol style="list-style-type: none"> 1. Limited resources/staffing specially in outreach communities – different clinicians going outreach mostly contracts which limits rapport with patients 2. Reliability of Health Care Workers working for PHC – attendance at work is poor, and if present, very low efficiency (this is general observation of clinicians going out to remote communities) 3. Very low patient engagement in the communities (dependent on Health Care Workers) – patients require pick up from home (sometimes more than one address). PHC serves as the responsible representative for majority of the community, keeping appointments for review, medication, etc., as very few patients have interest to self-manage or take on responsibility for their own health 4. Due to limited staffing in remote communities, there is no accountability as to what level of support should be given to visiting clinicians or telehealth appointments. Renal clinicians cannot operate in these communities unless supported by PHC to bring in patients to clinic or telehealth appointments.

Models of Care Review (COVID-19)

Statewide Clinical Networks

RESPIRATORY

New models of care that have improved patient outcomes, experiences receiving and/or providing care and better effectiveness and efficiency

Title	
Description / Benefit	
Rationale for change	

Existing models of care that have been expanded successfully

Title	<u>Potentially Preventable Hospitalisation Strategy by Respiratory Clinical Nurses</u>
Description / Benefit	Respiratory CNs contacting patients who have presented or been admitted with exacerbations of COPD via telephone. Screening tool audited several factors including: participation in previous pulmonary rehab, smoking status, immunisation status, existing action plans, advance care planning status.
Rationale for change	Expansion on the original idea from Statewide Respiratory Network. The clinical nurses were able to contact 362 patients - offering smoking cessation counselling, mailed blank action plans with example plan for GPs to complete, suggested seeing GP re vaccinations and offering referrals for ACP discussions (125 referrals generated). This intervention was well received by patients and not particularly onerous for the CNs, resulting in increased penetrance of action plans and ACP discussions for vulnerable patients during the pandemic.

Models of care that we should start to implement

Title	Telephone reviews for respiratory OPD reviews
Description / Benefit	Almost all patients were comfortable with phone reviews and very few were identified who required subsequent face-to-face reviews. Less time spent in waiting rooms, more convenient for patients, less of a deadline for clinician, though some patients still expected being called at a specific timeline.
Rationale for change	Government recommendation for reduction in clinics during COVID.

Models of care that we should start to implement

Title	Online teaching
Description / Benefit	Meant that all could attend regardless of physical location, including across facilities within the HHS.
Rationale for change	

Low benefit care that has/should be stopped

Title	
Description / Benefit	
Rationale for change	

Things that have not worked well

Example	Some meetings didn't work as well on Teams
Why didn't it work well?	Mainly the meetings with multiple less predictable interactions between participants, e.g. Lung cancer meeting – people talking at once, people not speaking up, difficulties in sharing multiple different screens

Models of Care Review (COVID-19)

Statewide Clinical Networks

RESPIRATORY – LATE SUBMISSION

New models of care that have improved patient outcomes, experiences receiving and/or providing care and better effectiveness and efficiency

Title	
Description / Benefit	
Rationale for change	

Existing models of care that have been expanded successfully

Title	<u>Potentially Preventable Hospitalisation Strategy by Respiratory Clinical Nurses</u>
Description / Benefit	Respiratory CNs contacting patients who have presented or been admitted with exacerbations of COPD via telephone. Screening tool audited several factors including: participation in previous pulmonary rehab, smoking status, immunisation status, existing action plans, advance care planning status.
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Models of care that we should start to implement

Title	Telephone reviews for respiratory OPD reviews
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Models of care that we should start to implement

Title	Online teaching
Description / Benefit	Meant that all could attend regardless of physical location, including across facilities within the HHS.
Rationale for change	

Low benefit care that has/should be stopped

Title	
Description / Benefit	
Rationale for change	

Things that have not worked well

Example	Some meetings didn't work as well on Teams
Why didn't it work well?	Mainly the meetings with multiple less predictable interactions between participants, e.g. Lung cancer meeting – people talking at once, people not speaking up, difficulties in sharing multiple different screens

Models of Care Review (COVID-19)

Statewide Clinical Networks – Statewide Rural and Remote Clinical Network

New models of care that have improved patient outcomes, experiences receiving and/or providing care and better effectiveness and efficiency

Title	Targeted Vulnerable Patient Model of care
Description / Benefit	<p>Vulnerable Patients criteria developed, and patients extracted from the medical software so a list is developed of all patient's reaching criteria (those at risk of more serious illness from COVID-19). These are identified with a patient identifier in the medical record as "Vulnerable Patient" and a task for "Vulnerable Patient Initial Contact". Initial contact performed as targeted patient education delivered preferentially via telephone with contact from primary health clinic with an autofill template covering education and resources on social distancing, enquiry into medication supply and scripts required, enquiry and follow up with any immunisations due (influenza and pneumovax), identification of any risk factors and brief intervention if required for smoking cessation, optimisation of chronic disease management and discussion regarding advanced care planning and follow up if required. Weekly follow up is offered with adding of a reminder for "Vulnerable Patient Weekly Check in" for the following week and any follow up appointments as required for immunisations or chronic disease management plan appointment with GP.</p> <p>Benefits include standardisation and identification of vulnerable patients across primary health clinics and tracking of completion rates for Initial Contact and Weekly Check ins through reminder system within the medical record. Advanced Care Planning discussions timely in preparation for potential serious illness. Preferential telephone contact utilises Telehealth item numbers and pro-active identification of medication and health requirements safeguards against vulnerable patients presentations face to face for non urgent matters and potential exposure to COVID-19.</p> <p>The clinical coordination Hub interface with the DONs/facility managers and medical officers/specialists/diagnostics to enable these vulnerable patients to be managed as per their plans by the right team in the right place at the right time with the right tools.</p>
Rationale for change	<p>Targeted patient education and optimisation of vulnerable patients care prior to COVID-19 cases optimises chronic disease management and proactive identification of risk exposure. Reduction in smoking rates to be expected and reduction in vaccine preventable illness. Advanced Care Planning discussions useful preparation for all potential serious illness in future. A process is then developed that can continue post COVID that allows governance of primary health care and synergises population health with primary health care. It allows for the first time the HHS to have overall governance over the delivery of primary care that is proactive, measurable and adaptive and ensures that patients with the greatest morbidity are cared for during COVID and beyond.</p>

Models of care that we should start to implement

Title	Virtual Clinical Handover
Description / Benefit	<p>Collaborative telehealth consultation between Specialist clinic, General Practitioner / Rural Generalist, and patient. This would be a properly scheduled clinic visit, with the patient at either end, and would allow open bilateral communication between clinicians to allow safe ongoing care of the patient, with clear understanding of condition, prognosis, anticipated management and triggers for clinic review</p> <p>This would supersede current repeated clinic reviews following acute care episode, or indefinite reviews for a stable or chronic condition.</p>
Rationale for change	<p>Current Outpatient clinic structures remain a highly fragmented model of patient care. Disease or system focussed clinics, where patients seldom see the same clinician at each visit, often far from home, are centred on hospital needs rather than those of the patient or their usual care provider.</p> <p>Current communication is grossly compromised, where referral letters may have little information, patients may not fully understand their condition or consultation outcomes, and clinic notes can take several weeks to be typed and sent, mean that a patient returning home the week after their clinic review is unlikely to be able to have their care meaningfully resumed.</p> <p>While tools such as Viewer and My Health Record can assist in earlier uploading of information, they do not permit bilateral communication between clinicians, or any reassurance to the treating Specialist that care can be safely handed over.</p> <p>Patient satisfaction and efficiency of care are greatly enhanced when care can be delivered close to home. Rural General Practitioners and Rural Generalists are more than capable of providing follow up care, including some procedural tasks, when a structured handover has been performed and the patient is fully aware of their management plan.</p>

Models of Care Review (COVID-19)

Statewide Clinical Networks – Statewide Rural and Remote Clinical Network

New models of care that have improved patient outcomes, experiences receiving and/or providing care and better effectiveness and efficiency

Title	Wound Clinic - Eidsvold MPHS
Description / Benefit	<p>Change of clinic hours to handover period between morning and afternoon shift. Wound clinic treatment area moved away from ED/Ward area to consult/treatment room usually used by allied health. Temperature & Symptom checking prior to clinic.</p> <p>Better utilisation of handover period and decreased interruption of regular duties – old clinic time was 1000hrs.</p> <p>For clients who do not have transport – wound care in the home can be utilised.</p>
Rationale for change	<p>Minimise entry into the MPHS to protect residents</p> <p>Morning shift nursing staff conduct the clinic so that they are leaving their shift after interaction with community clients – protecting our residents</p>

Title	Staff Accommodation -Eidsvold MPHS
Description / Benefit	<p>Nurses' quarters divided into sections so that a maximum of 2 staff would be interacting with each other at any one time.</p> <p>This meant moving some staff from their regular room to another area, some staff would utilise accommodation units in Mundubbera (30 minutes' drive away).</p> <p>To accommodate this we had an extra shower (over bath) installed, used one bedroom to create a small kitchenette.</p> <p>Moved one staff member into the flat.</p>
Rationale for change	<p>Current accommodation available to nursing staff is the old-style nurses' quarters. This houses up to 7 staff at any one time. We realised early on that should one staff member become sick, we would need to potentially isolate half of our nursing team. This would have had huge implications on our ability to provide our service. This also highlights the need to an upgrade to the staff accommodation provided.</p>

Title	Isolation room communication & observation – Eidsvold MPHS
Description / Benefit	<p>DECT phone stays in isolation room</p> <p>Baby monitor stays in isolation room</p> <p>Automatic BP & O2 sats monitor stays in isolation room</p> <p>Tympanic thermometer stays in isolation room</p> <p>Depending on the severity of symptoms, patients are directed straight into the isolation room. Signs in the room direct the patient to contact the RN via the DECT phone should they need any assistance.</p> <p>The baby monitor allows nursing staff to see and hear the patient without having to open the door.</p> <p>Patient is given instructions on how to use BP and O2 sats monitor as well as tympanic thermometer. If patient able to follow instructions can do own set of vital signs without staff interaction. The baby monitor allows staff to observe work of breathing and respiration rate.</p>

Rationale for change	<p>2 rooms set up as isolation Neither room is a negative pressure room Neither room has double access doors Only one room has an ensuite Making these changes ensures minimal entry into the patient's room throughout the shift. Planning can be done with the patient to group tasks together.</p>
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Title	Richmond MPHS
Description / Benefit	<p>Richmond MPHS closed all access to the facility allowing nursing staff to monitor the patients coming into the facility as there are aged care residents. And health related questions are asked of all visitors.</p> <p>Flu vaccinations were administered to all staff members and the visitors of the MPHS residents are required to have immunisations too.</p> <p>Locked all CUTAN on the wall down with zip ties, allocated all PPE to area being heavily monitored by nursing staff – nurses' station.</p> <p>A COVID 19 designated room has been set up – removed all items from a room at the front of the hospital and set up with basic intubation items, basic monitoring items. This room was once utilised by visiting health professional who no longer visit</p> <p>Nurses quarters – all accommodated nursing staff are in two bedroom units and if nursing staff come in contact with COVID-19 patients for testing or inpatient the nurse who was not involved in the care of the COVID-19 patient is to relocate to a spare room in the nurse's quarters.</p>
Rationale for change	To minimise the extent of COVID-19 on a facility which caters for aged care residents

Existing models of care that have been expanded successfully

Title	Moving mobile wound care clinic – Richmond MPHS
Description / Benefit	Community Nurse provides home visits, to attend to wound care needs in the community for patients requiring frequent or complex wound care. Utilises technology to access expert advice & guidance from wound care specialist and medical consultants.
Rationale for change	Avoids presentation to hospital. Consistency of wound care achieved.

Models of care that we should start to implement

Title	Portable HEPA Filtration – Eidsvold MPHS
Description / Benefit	<p>Allow for rural facilities to create negative pressure isolation rooms where these are not already available.</p> <p>This would possibly increase the ability for rural facilities to keep patients rather than costly transportation and utilisation of beds at tertiary facilities.</p> <p>Increased safety for staff working with these patients.</p> <p>Noting this has not been implemented.</p>
Rationale for change	<p>No negative pressure rooms available in the rural facilities in the WBHHS.</p> <p>No isolation rooms with double entry doors</p>

Title	Adapt models of care to meet psychosocial needs of MPHS Residents – Richmond MPHS
Description / Benefit	Accessing onsite community garden; implementation of individual diversional therapies; providing video-linkage to social engagement through other cares homes. Bingo etc,
Rationale for change	Provides participation in social activities and peer relationships whilst covid-19 limits other usual activities.

Title	Caring at home safely – MPHS
Description / Benefit	<p>Provide palliative based care in community. Avoids hospital admissions; provides choice of “place of care” in line with palliative care Australia. Increases consumer engagement and partnerships with families and health care professionals, locally to extend quality of life with patient centred approach.</p> <p>Here’s a factsheet explaining what the project is about. https://www.caringathomeproject.com.au/Portals/13/Documents/caringathome-FactSheet-2019.pdf</p> <p>Or you can also download them here: https://www.caringathomeproject.com.au/tabid/5144/Default.aspx</p>
Rationale for change	Currently no provision of palliative care services within the community setting to support home cares.

Models of Care Review (COVID-19)

Statewide Clinical Networks

Response from the Statewide Stroke Clinical Network 6th May 2020

Existing models of care that have been expanded successfully

Title	Tele-TIA
Description / Benefit	<p>Rapid Access TIA services have been provided on the Sunshine Coast to Gympie Hospital via Telemed for a number of years, but face to face at SCUH.</p> <p>With COVID restrictions, many TIA services at all sites have been provided by telemedicine including initial phone triage, and video-consult into patients' homes.</p> <p>Rapid neuro/vascular imaging (according to clinical need) has been outsourced to private providers close to the patient's home. This has been extremely well received by patients, allowed faster review, and solved the issue of legal driving restrictions for 2/52 following TIA limiting many patient's ability to access clinic / hospital based urgent investigations.</p> <p>Roll-out of similar models across the state could substantially free ED and acute bed capacity, whilst improving patient experience and outcomes.</p>
Rationale for change	<p>TIA is a warning sign, with up to 10% incidence of subsequent disabling stroke in the subsequent week. Rapid initiation of initial therapy and specialist assessment within 48 hrs has been demonstrated to be highly effective, with subsequent stroke rates below 2%.</p> <p>There were 4337 ED presentations with a diagnosis of TIA to Qld Health facilities in 2019, of whom 44% were admitted to a hospital unit, and a further 23% admitted to ED short stay services.</p> <p>Rapid access ambulant TIA services are safe, effective, and can substantially reduce admission rates, costs, and free ED capacity.</p>

Models of care that we should start to implement

Title	Telestroke to guide delivery of hyperacute care in rural and remote regions
Description / Benefit	<p>Queensland is the only state in Australia without an established telestroke system. As a result, access to hyperacute reperfusion therapies for stroke is much lower in rural and regional areas.</p> <p>The SSCN suggests benchmarking and review existing Telehealth/telestroke models of care to identify ways of implementing telestroke with the goal to improve access to hyperacute care for Queenslanders in rural and remote areas.</p>
Rationale for change	<p>The rates of access for hyperacute stroke treatment in rural and remote areas of Queensland is vastly different when compared to metro areas. There is significant challenges and disparity with access to treatment across the state.</p> <p>Rates of thrombolysis and transfer to Metro hospitals for Endovascular clot retrieval would significantly be improved with establishment of telestroke for time critical assessment, clinical decision making and identification of appropriate patients for hyperacute treatment and transfer to metro hospitals.</p>

Title	Virtual ED - <ul style="list-style-type: none"> TIA assessment and prioritisation of care
Description / Benefit	<p>Leveraging from established Virtual ED models, patients with TIA may be triaged and reviewed by QAS and ED consultant support (via Virtual ED model) in the field, thereby determining if transfer to hospital is required.</p> <p>Rapid referral to TIA review clinics (including Tele-TIA) following expedited neuro-vascular imaging, GP appointment or HITH services would benefit patients by ensuring the rapid and appropriate referral for the patient's condition is completed.</p>
Rationale for change	<p>High rates of presentations to ED for "code stroke" are TIA or stroke mimics. Determining the need for hospital-based care prior to presentation to ED may significantly reduce the burden of TIA on existing stroke teams and demand for inpatient beds.</p>

Title	TIA rapid access clinics – Nurse led <ul style="list-style-type: none"> • Face to face • Telehealth
Description / Benefit	<p>National Guidelines recommend that patients with TIA receive specialist review within 48hrs of discharge from ED/inpatient setting (Clinical Guidelines for Stroke Management 2017). Models of care with these timeframes achieve subsequent stroke rates of less than 2%.</p> <p>There is inconsistent approach state-wide to provision of TIA review clinics with most locations relying on admission-based systems or intermittent consultant led clinics with limited access within recommended timeframes.</p> <p>The need for patient review post TIA continues to increase with the increase in incidence of TIA.</p> <p>Specialist nurse led clinics for TIA offer potential for consistent rapid TIA review within 48hrs of ED discharge.</p> <p>Benefits include rapid patient review, potential reduction in rates of stroke, improved patient education and health literacy surrounding prevention of stroke. This can include telehealth review with improved convenience for the patient (driving restrictions are imposed for 2 weeks following TIA).</p>
Rationale for change	<p>Workforce availability and sustainability may be enhanced with use of specialist nurse led clinics.</p> <p>ED demand may be minimised with more consistent and rapid access to specialised ambulant clinics.</p> <p>This model would allow for improved alignment with the Australian Guidelines for Stroke Management.</p> <p>Patients will benefit by accessing care to optimise medication, lifestyle modification and other ways to enhance prevention of stroke and vascular disease. This, in turn, may reduce the rates of acute stroke presentations if we are able to ensure patients receive optimised care post TIA.</p>

Title	Ability to monitor access to community as well as ambulant rehabilitation options for patients with Stroke <ul style="list-style-type: none"> • Construction of consistent mechanisms to identify appropriate pathways into rehabilitation settings.
Description / Benefit	<p>Maximising subacute bed capacity within both inpatient and ambulant settings is necessary to maintain flow through inpatient services and maximise acute bed availability.</p> <p>Development of a consistent data-point to identify patients in need of subacute care, suitability for community-based services, and access to community services would assist greatly in managing whole of service patient flow.</p> <p>Benefits include reducing confusion in determining which services a patient requires, what is available and reducing variability in access to subacute services state-wide.</p>

<p>Rationale for change</p>	<p>Planning for periods of extreme acute bed capacity demand highlighted issues of access to subacute care for several networks. Severe illness is often associated with deconditioning and functional impairment (physical and cognitive) which impact on ability to discharge patients safely home, even well after “recovery” from their acute event.</p> <p>A period of subacute care is often required to restore function (rehabilitation, geriatric evaluation) or manage symptoms and maximise quality of life if recovery is not possible (palliative care). In response to this, options for community-based care including tele-rehab and substitution of inpatient subacute units to alternate services were considered by many.</p> <p>Subacute care services, however, are highly fragmented and variable with not consistent data collection for community-based services. This means that in a period of maximal demand, no data is available to help direct patients and resources to maintain optimal patient flow.</p> <p>Development of a consistent mechanism for capturing data on subacute care needs, suitability for community-based services, and access to community services would assist greatly in managing whole of service patient flow.</p>
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Low benefit care that has/should be stopped

<p>Title</p>	<p>Re-location of Stroke Units to facilitate surge capacity for COVID-19 provision of care</p>
<p>Description / Benefit</p>	<p>The SSCN has been informed that stroke units have been relocated in preparedness for COVID-19 patient admissions.</p> <p>The movement of the unit did not include staff members therefore, the provision of specialized stroke care delivery was unable to be maintained.</p> <p>There is an established evidence base that management of stroke by an integrated multidisciplinary team (nursing, medical and allied health) with specialized training and understanding of stroke management within a geographically identified unit results in improved outcomes, and reduction in complications. RCT evidence has demonstrated this to be superior to general medical ward care and mobile “virtual” stroke teams. This is consistent with the Clinical Guidelines for Stroke Management (2017).</p>
<p>Rationale for change</p>	<p>It is yet to be determined if there were long term disadvantage to Qld patients due to the geographical movement of stroke units, but increased length of stay is likely as a minimum. Anecdotally, provision of patient secondary prevention education and discharge planning was fragmented as a result of stroke unit relocation.</p> <p>If a unit is required to be moved, the entire unit, including staff should move to maintain evidenced based care aligning with the Clinical Guidelines for Stroke Management.</p> <p>The SSCN would encourage the relocation of stroke units do not occur unless critical.</p>

Models of Care Review (COVID-19)

Statewide Clinical Networks

Response from the Statewide Stroke Clinical Network 6th May 2020

Existing models of care that have been expanded successfully

Title	Tele-TIA
Description / Benefit	<p>Rapid Access TIA services have been provided on the Sunshine Coast to Gympie Hospital via Telemed for a number of years, but face to face at SCUH.</p> <p>With COVID restrictions, many TIA services at all sites have been provided by telemedicine including initial phone triage, and video-consult into patients' homes.</p> <p>Rapid neuro/vascular imaging (according to clinical need) has been outsourced to private providers close to the patient's home. This has been extremely well received by patients, allowed faster review, and solved the issue of legal driving restrictions for 2/52 following TIA limiting many patient's ability to access clinic / hospital based urgent investigations.</p> <p>Roll-out of similar models across the state could substantially free ED and acute bed capacity, whilst improving patient experience and outcomes.</p>
Rationale for change	<p>TIA is a warning sign, with up to 10% incidence of subsequent disabling stroke in the subsequent week. Rapid initiation of initial therapy and specialist assessment within 48 hrs has been demonstrated to be highly effective, with subsequent stroke rates below 2%.</p> <p>There were 4337 ED presentations with a diagnosis of TIA to Qld Health facilities in 2019, of whom 44% were admitted to a hospital unit, and a further 23% admitted to ED short stay services.</p> <p>Rapid access ambulant TIA services are safe, effective, and can substantially reduce admission rates, costs, and free ED capacity.</p>

Title	Increased use in Telehealth (Consumer Response)
Description / Benefit	The increased use of telehealth during the COVID -19 response obviously offers many benefits to stroke consumers in terms of being able to access some of their follow up care either at home or close to home without the inconvenience, or difficulty experienced by some stroke survivors or the cost of travel and /or parking. This may have advantages for stroke follow up consultations (I understand there are already established telehealth follow up clinics for some patients in MN) but this service model requires agreed clinical protocols as it won't suit all stroke survivors eg. Those stroke survivors with aphasia or with subtle psychosocial/cognitive issues may need a different mix of services. It is also important that there is adequate resourcing/funding for the specialist and various allied health staff.
Rationale for change	Provision of care in patients place of residence.

Models of care that we should start to implement

Title	Telestroke to guide delivery of hyperacute care in rural and remote regions
Description / Benefit	Queensland is the only state in Australia without an established telestroke system. As a result, access to hyperacute reperfusion therapies for stroke is much lower in rural and regional areas. The SSCN suggests benchmarking and review existing Telehealth/telestroke models of care to identify ways of implementing telestroke with the goal to improve access to hyperacute care for Queenslanders in rural and remote areas.
Rationale for change	The rates of access for hyperacute stroke treatment in rural and remote areas of Queensland is vastly different when compared to metro areas. There is significant challenges and disparity with access to treatment across the state. Rates of thrombolysis and transfer to Metro hospitals for Endovascular clot retrieval would significantly be improved with establishment of telestroke for time critical assessment, clinical decision making and identification of appropriate patients for hyperacute treatment and transfer to metro hospitals.

Title	Virtual ED - <ul style="list-style-type: none"> TIA assessment and prioritisation of care
Description / Benefit	Leveraging from established Virtual ED models, patients with TIA may be triaged and reviewed by QAS and ED consultant support (via Virtual ED model) in the field, thereby determining if transfer to hospital is required. Rapid referral to TIA review clinics (including Tele-TIA) following expedited neuro-vascular imaging, GP appointment or HITH services would benefit patients by ensuring the rapid and appropriate referral for the patient's condition is completed.

Rationale for change	High rates of presentations to ED for “code stroke” are TIA or stroke mimics. Determining the need for hospital-based care prior to presentation to ED may significantly reduce the burden of TIA on existing stroke teams and demand for inpatient beds.
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Title	TIA rapid access clinics – Nurse led <ul style="list-style-type: none"> • Face to face • Telehealth
Description / Benefit	<p>National Guidelines recommend that patients with TIA receive specialist review within 48hrs of discharge from ED/inpatient setting (Clinical Guidelines for Stroke Management 2017). Models of care with these timeframes achieve subsequent stroke rates of less than 2%.</p> <p>There is inconsistent approach state-wide to provision of TIA review clinics with most locations relying on admission-based systems or intermittent consultant led clinics with limited access within recommended timeframes.</p> <p>The need for patient review post TIA continues to increase with the increase in incidence of TIA.</p> <p>Specialist nurse led clinics for TIA offer potential for consistent rapid TIA review within 48hrs of ED discharge.</p> <p>Benefits include rapid patient review, potential reduction in rates of stroke, improved patient education and health literacy surrounding prevention of stroke. This can include telehealth review with improved convenience for the patient (driving restrictions are imposed for 2 weeks following TIA).</p>
Rationale for change	<p>Workforce availability and sustainability may be enhanced with use of specialist nurse led clinics.</p> <p>ED demand may be minimised with more consistent and rapid access to specialised ambulant clinics.</p> <p>This model would allow for improved alignment with the Australian Guidelines for Stroke Management.</p> <p>Patients will benefit by accessing care to optimise medication, lifestyle modification and other ways to enhance prevention of stroke and vascular disease. This, in turn, may reduce the rates of acute stroke presentations if we are able to ensure patients receive optimised care post TIA.</p>

Title	<p>Ability to monitor access to community as well as ambulant rehabilitation options for patients with Stroke</p> <ul style="list-style-type: none"> • Construction of consistent mechanisms to identify appropriate pathways into rehabilitation settings.
Description / Benefit	<p>Maximising subacute bed capacity within both inpatient and ambulant settings is necessary to maintain flow through inpatient services and maximise acute bed availability.</p> <p>Development of a consistent data-point to identify patients in need of subacute care, suitability for community-based services, and access to community services would assist greatly in managing whole of service patient flow.</p> <p>Benefits include reducing confusion in determining which services a patient requires, what is available and reducing variability in access to subacute services state-wide.</p>
Rationale for change	<p>Planning for periods of extreme acute bed capacity demand highlighted issues of access to subacute care for several networks. Severe illness is often associated with deconditioning and functional impairment (physical and cognitive) which impact on ability to discharge patients safely home, even well after “recovery” from their acute event.</p> <p>A period of subacute care is often required to restore function (rehabilitation, geriatric evaluation) or manage symptoms and maximise quality of life if recovery is not possible (palliative care). In response to this, options for community-based care including tele-rehab and substitution of inpatient subacute units to alternate services were considered by many.</p> <p>Subacute care services, however, are highly fragmented and variable with not consistent data collection for community-based services. This means that in a period of maximal demand, no data is available to help direct patients and resources to maintain optimal patient flow.</p> <p>Development of a consistent mechanism for capturing data on subacute care needs, suitability for community-based services, and access to community services would assist greatly in managing whole of service patient flow.</p>

Title	<p>Increase access to community rehabilitation for stroke survivors</p> <ul style="list-style-type: none"> • Telerehabilitation (consumer response)
Description / Benefit	<p>Another ongoing benefit may be to increase access to community rehabilitation for stroke survivors using telehealth in the home or local health centre/GP clinic. Many rural or outer metro patients cannot access community rehabilitation due to the inability to drive or other mobility issues and /or cost and therefore have a poorer recovery from their stroke. This may also be compounded by post stroke depression.</p> <p>This would need to be new service model – an opportunity for a service codesign with consumers and clinicians.</p>
Rationale for change	<p>Improved equity of access to community-based rehabilitation via telehealth</p>

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Further comments from our Consumer Representative –

What barriers were overcome to enable new models of care to be introduced in a short timeframe.

- The barriers may be resistance to change from consumers who may think that it is a reduced service that is ok in a crisis but not as a new way of providing care- this may be overcome by assessing the experience of patients who have experienced a telehealth (video or phone) service during the crisis. I have heard good and bad reports regarding stroke patients. The may also be some technical infrastructure issues to overcome – not all patients have access to or are literate in digital technology.

What are the barriers to enabling successful models of care to continue.

- The barriers to success are often related to poor implementation of the model ie. Not planned or funded.

What priorities and recommendations should inform decision making for the “new normal” of the health system.

- I would advocate for the recommendations to feature multidisciplinary collaboration and a

focus on co design with consumers from the outset.

- It would be good for the recommendations to be about evidence based care. Noting that many stroke patients currently do not receive evidence based acute care in Queensland due to rural and regional variations in practice, specifically in regard to 24/7 access to thrombolysis. This of course increases the need for accessible rehabilitation services in these areas.

Models of Care Review (COVID-19)

Statewide Clinical Networks

New models of care that have improved patient outcomes, experiences receiving and/or providing care and better effectiveness and efficiency

Title	WMH - Virtual Visiting
Description / Benefit	Given restrictions placed on visitation, and new legislation in relation to social distancing, a new way for family and friends to continue to connect with loved ones has been developed. Virtual visitors are now able to see and speak with their loved ones via videoconference technology, in a manner which prioritises the safety of all.
Rationale for change	COVID-19 required the change of approach to visiting to ensure our patients felt connected with their loved ones to benefit their well-being and aide in their recovery. This will be valuable beyond the current pandemic response, in connecting loved ones who have difficulty attending in-person particularly in an ICU setting.

Title	WMH – Virtual Case Conferencing Intensive Care Unit
Description / Benefit	Case conferring involving family members is a core communication process within Intensive Care Units to ensure patient and family centred care is maintained. The use of IPADS and workstation on wheels (teleconference function) this enabled this process to occur.
Rationale for change	Due to the inability to have family members attend the ICU due to the patient being COVID-19 positive an option of a virtual case conference model was commenced.

Title	WMH – Light Touch Program Nurse Navigator Program
Description / Benefit	Secure, web-browser enabled portal that allows patients who are COVID-19 positive who require a lower touch monitoring can be safely managed at home with telephone support by Nurse Navigator. Patient user's own measurement devices and enters measurements manually and responds to surveys (can view trends) back to the Nurse Navigator Program.
Rationale for change	Hospital alternative program.

Title	WMH – Oncology Services Telehealth
Description / Benefit	Oncology Clinics reverted as able to telehealth. If unable to use telehealth they have moved to telephone clinics.

Rationale for change	Vulnerable cohort of patients and supported by the Oncology patients to reduce the risk of attendance in an OPD setting at Ipswich Hospital.
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Title	Ipswich Hospital Fever Clinic
Description / Benefit	Low risk stream of patients to be screened for COVID-19 and Flu like symptoms. Model adjacent to Ipswich Hospital Emergency Department with streaming by a senior ED Nurse at the front door of the ED to either the Fever Clinic or directly into the ED. Model able to be expanded as a winter strategy for the management of low risk flu like symptoms.
Rationale for change	Reduction in unnecessary presentations to the Emergency Department

Existing models of care that have been expanded successfully

Title	Group Education
Description / Benefit	Group Education sessions had previously had poor attendance rates in person for a variety of reasons. Since utilising Telehealth to facilitate group education sessions, departments in WMHHS have experienced a higher attendance rate, improving consumer engagement and maximising the use of our clinical time which will result in improved health outcomes.
Rationale for change	COVID-19 social distancing regulations prevented large gatherings from occurring, so the Telehealth model still facilitates the engagement of large patient numbers.

Title	WMH COVID-19 HITH
Description / Benefit	COVID-19 patients admitted into the HITH Program (separate stream) via the electronic care coordinator (eCC). Patients are provided with an IT kit which includes a mini iPad and Bluetooth equipment. Patients observations and health status are monitored closely using the point of care devices within their homes. Utilising the current Me Care platform to support the virtual program and the hub can support up to 4000 'live' patients.
Rationale for change	Hospital alternative program.

Title	IH Intensive Care Unit
Description / Benefit	Expansion of the Intensive Care Unit within Tier 1 to both service a COVID-19 and non-COVID-19 patient cohort. Expansion of 5 beds to a 16-bed total into the Endoscopy Suite.
Rationale for change	Ability to surge ICU capacity at Ipswich Hospital to meet the predicted increase presentations of COVID-19 suspected and confirmed admissions.

Title	WMH – Telehealth Services Specialist Outpatients Department
Description / Benefit	Increase of 63% in the use of Telehealth/Telephone Services with SOPD. Resulting in a reduction of community presentations and increasing the ability of patients to attend their clinic appointment by a telehealth/telephone. Noting a reduction in FTA within the allied health clinics.
Rationale for change	Reduce unnecessary physical requirements of onsite SOPD clinics across the HHS in all sub speciality areas.

Approved:

WMH HEOC – Incident Management Team

Incident Controller/Chief Operating Officer – Matthew Tallis

01/05/2020