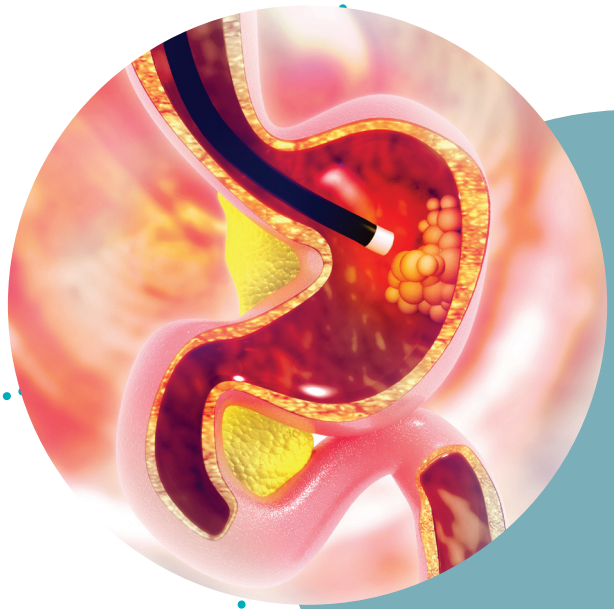
Metro North Hospital and Health Service *Putting people first*

GASTROENTEROLOGY AND HEPATOLOGY PLAN 2019



Queensland Government

Published by the State of Queensland (Metro North Hospital and Health Service), 2019.

For more information, contact:

Health Service Strategy and Planning Unit, Metro North Hospital and Health Service, RBWH, Butterfield Street, Herston, QLD 4029, email MNHHS_PlanningStrategy@health.qld.gov.au, phone 36479537 for Health Service Strategy and Planning Unit.

An electronic version of this document is available at www.health.qld.gov.au/metronorth/publications

Contents

Introduction

Gastrointestinal and liver disorders affect a significant proportion of the population and people of all ages. Some disorders are acute and life threatening, others are more chronic but can be severely debilitating. About one in six admissions to Metro North Hospital and Health Service (Metro North HHS) hospitals are for a primary diagnosis of gastrointestinal disease. About one in six of the surgical procedures performed in Metro North HHS are performed on the digestive tract.

Gastrointestinal disorders cover diseases of the oesophagus, stomach and duodenum, small bowel and colon, and associated organs (liver, gallbladder and pancreas) and gastrointestinal cancers. Gastrointestinal disorders include very common conditions such as gastro-oesophageal reflux disease, non-ulcer dyspepsia and functional bowel disease. Other common conditions include inflammatory bowel disease (IBD), coeliac and diverticular disease.

Gastrointestinal cancers are common—some are curable, others are almost invariably fatal. According to the Australian Institute of Health and Welfare in 2018, colorectal cancer will be the most commonly diagnosed digestive-tract cancer and the most common cause of digestive-tract cancer-related deaths. Colorectal cancer is estimated to be the third most commonly diagnosed type of cancer in Australia and the second leading cause of cancer death.

Alcoholic liver disease remains a significant problem but with increasing obesity and lifestyle trends chronic liver disease due to non-alcoholic fatty liver disease and hepatitis C is being increasingly seen. In the Metro North region, one in five residents consume alcohol at levels at which there is a risk of alcohol related harm over a lifetime. Chronic use of illicit drugs may lead to significant damage to the liver. In Metro North HHS 15.5 per cent of people used illicit drugs in the past 12 months.

Increases in the incidence of most gastrointestinal diseases has major implications for future healthcare needs. Demand for gastrointestinal and liver services is increasing due to a range of factors including a growing and ageing population, changes in technology and the Australian government policy expanding national bowel cancer screening program (NBCSP). The growing demand has seen significant increases in public hospital service activity with growth at a significantly higher rate than private sector service activity. In recognition of the growing demand the Queensland Minister for Health launched the Endoscopy Action Plan in 2017. The Action Plan provides a framework to attain sustainable and equitable access to gastrointestinal endoscopy services.

The wide spectrum of disorders requires a range of treatment involving self-care, primary care through to secondary care, and highly specialised tertiary referral centres. The care and management of these conditions requires contributions from a wide variety of health professionals.

The Metro North HHS Gastroenterology and Hepatology Plan (The Plan) is a three to five year action plan to enable services to better respond to community needs through increased capacity and capability, innovative models of care, research, education and training, and better use of technology. The Plan provides prioritised actions against subspecialty areas that will enable gastroenterology (GE) and hepatology services to respond appropriately to service need so patients receive timely high-quality care.

Service environment

GE and hepatology services are provided across Metro North HHS. Table 1 shows the broad range of services provided in Metro North HHS facilities. Services are provided to patients that reside within Metro North HHS and also neighbouring and regional hospital and health services.

track endoscopy model supports faster diagnosis for patients and better patient outcomes. Nurse led telephone clinics provide an avenue for patient followup without requiring face to face consult, reducing the impost on patients' time and ability to travel to the acute facility and reducing clinic space requirements.

Table 1: Gastroenterology and hepatology services provided in Metro North HHS 2018

Service	RBWH	TPCH	Redcliffe	Caboolture	North Lakes
General gastroenterology (inpatient and outpatient)	✓	✓	✓	✓	✓
CSCF Medicine	6	5	5	Outpatient only	Outpatients only (managed by RBWH)
Inflammatory bowel disease (inpatient and outpatient)	✓	× (inclusive in general gastroenterology services)	× (inclusive in general gastroenterology services)	× **(inclusive in general gastroenterology services)**	✓ Outpatients only (managed by RBWH and Redcliffe Hospital)
Hepatology (inpatient and outpatient)	✓	✓	✓ (commenced February 2019)	×	✓ Outpatients only (managed by RBWH)
Endoscopy CSCF Endoscopy	3 rooms 6	2 rooms 5	2 rooms 4	2 rooms 4	0 rooms
Surveillance	✓	✓	✓	×	×
Specialist Nutrition Support Team*	✓	×	×	×	✓ (managed by RBWH)
Dietetics	✓	✓	✓	✓	×

*Note: Clinical Services Capability Framework refers to inpatient only. * Dedicated team including Gastroenterologist, Dietician, Clinical Nurse, Pharmacist and Administration.*

The Metro North HHS services collaborate through the Gastroenterology substream, a subcommittee of the Metro North HHS Surgery Clinical Stream. Clinicians are also active participants on the Statewide Gastroenterology Clinical Network.

The service has adopted innovative service models for nursing and allied health to provide patients with best practice care, improve access to care, and address capacity constraints associated with growing demand. Some of these models include nurse led colonoscopy consent, nurse led telephone clinics, fast track endoscopy, nurse led cirrhosis follow up clinics and dietitian first clinics. Nurse led models have been shown to facilitate shorter waiting times for care, earlier discharge of patients back to their General Practitioner (GP), increased job satisfaction for staff, prioritisation of medical expertise to patients with greater complexity and increased efficiency in outpatient clinics. The fast

The GE and hepatology service is active in local, state and national education programs and training is provided to support students, nursing staff and medical trainees. Dedicated training positions are provided to three advanced trainees and four to five fellows annually.

The services are engaged in research programs in hepatology, IBD, endoscopy and nutrition. Senior consultants of the service are laboratory leads at the Queensland Institute of Medical Research Berghofer Medical Research Institute.

Population

The local catchment of Metro North HHS is one of the most populous catchments in Queensland with a population of 1,003,517 people in 2017. By 2026, the Metro North HHS projected resident population is expected to increase by 162,255 persons (1.5 per cent per annum) from 2016 to reach a total projected resident population of 1,143, 241 persons. During this same period, the population growth for older people aged 65 years and over is projected to increase by 55, 079 persons at a 3.1 per cent per annum growth rate.

Metro North HHS population projections indicate the Metro North HHS region to experience significant growth and ageing, however this growth will not be equally distributed across Metro North HHS, with overall high population growth expected in the northern region of Caboolture and Redcliffe Hospitals' catchments.

In addition, these hospital catchments have significant levels of disadvantage with 51.1 per cent of Redcliffe Hospital catchment residents and 59.1 per cent of Caboolture Hospital catchment residents in the two quintiles of most socioeconomic disadvantage.

Service activity

In 2017-18, Metro North HHS delivered 21,183 separations/occasions of service (OOS) for GI endoscopy, accounting for 25,851 GI endoscopy procedures. The number of GI endoscopy procedures have increased 10.3 per cent per annum between 2012-13 and 2017-18 with more recent growth of 12.2 per cent per cent between 2015-16 and 2017-18. Colonoscopies contributed to 48 per cent of all procedural activity.

Residents of TPCH catchment and Caboolture Hospital catchment are required to travel to other Metro North HHS facilities for endoscopy services with only 62.1 per cent of resident demand treated at TPCH in 2017-18 and 62.8 per cent of resident demand treated at Caboolture Hospital in 2017-18. The self sufficiency for other facilities is 65.5 per cent for Redcliffe Hospital and 77.9 per cent for RBWH in 2017-18. Metro North HHS also provided GI endoscopy services to 3327 residents from other HHSs accounting for 13 per cent of total activity in 2017-18.

As of January 2019, there were a total of 3749 patients on the waitlist for GI endoscopy procedures of which 600 patients were waiting longer than clinically recommended for treatment (16 per cent). The greatest number of long waits was at TPCH, 561 patients, with 391 (70 per cent) of these patients waiting for colonoscopy procedures.

Metro North HHS is expected to have significant growth in GI endoscopy activity in the coming years due to the expansion of the National Bowel Cancer Screening Program (NBCSP), new and emerging treatments for bariatric patients and other GI surgical procedures. By 2026-27, it is projected that Metro North HHS will undertake 50,652 GI endoscopy procedures, which is an increase of 24,801 GI endoscopy procedures from 2017-18.

In 2017-18, Metro North HHS delivered 19,396 OOS at gastroenterology outpatient clinics, including 13,756 specialist medical outpatient OOS and 5640 allied health/nursing OOS. Over the last 3 years, gastroenterology outpatient OOS in Metro North HHS have grown by 14 per cent annually. Total hepatobiliary and hepatology outpatient OOS have increased 8.4 per cent per annum.

In January 2019 there were 1511 long wait patients waiting for an outpatient appointment in Metro North HHS compared to 1114 patients in January 2017 (35 per cent increase). The greatest number of long wait outpatient appointments is at Caboolture Hospital.

In recent years Metro North HHS has seen an annual growth rate of 4.2 per cent in admitted gastroenterology separations. In 2017-18 total acute admitted gastroenterology activity in Metro North facilities was 12,187 separations, a 4.2 per cent per annum increase from 11,228 separations in 2015-16. Total acute admitted Upper GIT surgery in Metro North facilities was 2310 separations, a 4.2 per cent per annum increase from 2127 separations in 2015-16.

Historical analysis of GI endoscopy service activity shows that a large proportion of diagnostic activity can lead to additional interventions. Approximately 9.2 per cent of all patients undergoing endoscopy received further surgical treatment or cancer care (8.4 per cent underwent surgery, 1.3 per cent underwent chemotherapy, 0.4 per cent had radiation therapy).[1]

In 2017-18, 46 per cent of colonoscopies performed included removal of one or more polyps.

1 Some patients receive more than one type of intervention

Issues and challenges

Metro North HHS recognises there are a range of issues and challenges facing our services as described below. The GE and hepatology service has responded to these challenges through innovation, service redesign, increased capacity, with the support of the substream. The ongoing challenges of meeting population demand amidst demographic and policy changes requires a strategic action plan to deliver patients with high quality care, closer to home.

A significant proportion of our community is living with the burden of gastrointestinal and liver disease which are enduring conditions requiring life-long care and management. This causes considerable distress to individuals and families, especially older people. This is a particular concern for residents that live in the north of our HHS, who are more likely to live with socioeconomic disadvantage which is associated with greater prevalence of gastrointestinal disease, poorer prognosis and poorer health outcomes.

The increasing number of people being referred for treatment of gastrointestinal and liver disease is placing extreme pressure on GE and hepatology services to provide timely care. This has resulted in an increasing number of people waiting longer than clinically recommended for GE outpatient services and procedures. Delays to assessment impact on quality of care and lead to poorer health outcomes. Service demand is also impacted by the increasing number of patients that require regular surveillance colonoscopies.

A range of new policy directions, emerging evidence, new clinical guidelines and quality and safety standards all contribute to increased pressure on services through identification of disease, new treatment regimes, new techniques and technologies to treat conditions and workforce assessment processes. Examples include changes to the NBCSP resulting in increased surveillance intervals, colonoscopy clinical care standards, and review of the Standard 7 and the Patient Blood Management Guidelines which will result in increased referrals to GE services for patient management[2].

2 The impact to GE services as a result of the review of Standard 7 and the Patient Blood Management Guidelines is beyond the remit of this Plan and will be addressed through other consultation mechanisms.

The ability to recruit, train and retain staff across GE specialties and professional disciplines to keep pace with service demand is challenging. The lack of sufficient training programs/places for medical and nursing staff hinders ability to provide on the job training and have sufficient workforce numbers to backfill planned and emergent leave reducing service efficiency especially in outpatients and procedural services. Despite the extended roles of practice across Metro North HHS there are currently no nurse practitioners or nurse endoscopists in GE. Availability and management of specialty equipment is also limiting ability to optimise utilisation of resources.

Services have developed in the absence of a networked approach which has led to inconsistencies of practice and models of care and operational inefficiencies. Whilst a multidisciplinary approach to care is utilised there is inadequate access to allied health professionals to support inpatient and specialist outpatient clinics and a lack of specialised nursing positions to coordinate and manage these complex patients.

Referral management processes and resources have contributed to operational inefficiencies and are impacting our ability to provide treatment in a timely manner. Current information technology systems also contribute to services ability to become more streamlined.

The distribution of specialty services across Metro North is not aligned with population need and restricts the ability to provide routine services closer to people's homes.

Specialist nutrition and dietetics services across Metro North are limited, particularly in the northern end of the HHS impacting services for patients with fatty liver disease and patients awaiting organ transplantation. Limited access to specialist nutrition and dietetic services also impacts the provision of parental nutrition and Percutaneous Endoscopic Gastrostomy (PEG) services.

Metro North HHS tertiary services ability to support outreach/shared care model with other HHSs and within Metro North HHS utilising telehealth modalities is constrained.

Future growth of the service will be constrained by limited outpatient consultation space and staff accommodation.

There are inconsistencies in data collection, management and quality which impacts on our ability to effectively monitor, manage and make informed service decisions.

There is limited time and opportunity for clinicians to participate in research activities.

Outcomes of the Plan

GE and hepatology services aspire to provide patients with timely, high quality care that is closer to home. The desired outcomes of this Plan describe a set of service principles that require changes at the system level and consideration of how we deliver services to support the move from current to future state. Our measures of success include standardised performance metrics to promote greater collaboration and efficient care, patients receiving seamless care through shared care arrangements across the continuum, the workforce aptly responding to changing complexity of patients through increased opportunities to participate in training, education and research. The following outcomes can be expected following implementation of the Plan:

- **person-centred care**—engagement of consumers enabling them to make informed decisions about their healthcare and quality of life and is underpinned by a consumer clinician collaborative approach
- **access**—increased and equitable access for all Metro North HHS residents delivered within appropriate clinical timeframes
- **effective care**—increased emphasis on research to support evidenced-based models of care, where systems are redesigned to support best practice and reduce low value care
- **safe care**—sustainable care practices that are actively monitored, evaluated and reported e.g. surveillance and sentinel systems in place, reducing the risk of care complications
- **quality care**—achieve continuous improvement and meet relevant professional standards of care
- **efficient care**—a culture of monitoring, performance analysis and reporting to minimise duplication and unnecessary or low value practices and maximise capacity across the care continuum
- **integrated care**—integrated and multidisciplinary management of GE conditions that takes a population and service network perspective
- **skilled workforce**—care delivered by an appropriately skilled and multidisciplinary workforce based on optimising scope of practice, research and training opportunities across all facets of the service
- **innovation and technology**—embrace and drive innovation and new technologies in GE and hepatology.

Future state of GE and hepatology service delivery

In the next three to five years Metro North HHS will continue to develop GE and hepatology services to facilitate patient access to equitable, safe high-quality care/services as close to their home as possible.

Consistent clinical governance arrangements will support networked services across Metro North HHS enabling collaborative practice, consistent processes and systems and sharing of a skilled workforce.

Robust referral management systems, business rules and processes will support referring GPs/ other HHSs to make clinically appropriate referrals through adherence to minimum referral information requirements that meet accepted guidelines/ standards. Improved referral management will also minimise any impediments to the patient's journey maximising patient's receiving treatment in clinically appropriate time frames.

Innovative models of care will take advantage of expanded scope of practice across a multidisciplinary workforce to deliver effective and efficient care in a timely manner that meets patient and community need. As GE and hepatology services grow and expand appropriate administrative and clinical services will expand as required. Metro North HHS will continue to provide leadership and support to rural and regional HHSs by providing care to patients through telehealth and training of staff to sustain services well into the future.

There will be an emphasis on growing our own GE and hepatology workforce who are sustained and encouraged through education and professional development and provided with a variety of training opportunities. Metro North HHS will raise its GE and hepatology research profile and output through key academic and industry partnerships. Metro North HHS will grow its national and international reputation through a healthy culture of research and innovation which will support its ability to attract and retain world-class clinician/scientists, researchers to Queensland.

Metro North HHS GE and hepatology services will be underpinned by data/information systems that support: transparency; data quality; continuous improvement; monitoring and reporting practices that enables effective business/service and clinician decision making in meeting system requirements and patient outcomes.

Action Plan – service network level

No.	Actions	Responsibility
1.1	Develop a clinical governance structure that supports effective clinical practice and consolidates operational points of accountability. The structure will: • appoint a Clinical Director and an Operational Manager to support clinical and operational activities • streamline reporting arrangements across Metro North HHS GE and hepatology services • embed a data quality framework to standardise reporting and inform continuous quality improvement activities and be considered for implementation in 2019-2020.	Surgery Clinical Stream GE sub-committee ED Operations
1.2	Establish a dedicated familial gastrointestinal cancer clinic with Genetic Health Queensland.	RBWH
1.3	Establish specialist GE Nurse Practitioner positions across Metro North HHS	Metro North HHS ED Nursing and Midwifery Services Surgery Clinical Stream GE sub-committee RBWH TPCH Redcliffe Caboolture
1.4	Review the current referral and triage business process and standardise practices that will support: • consistent application of business rules including use of Clinical Prioritisation Criteria (CPC) /referral criteria • timely triaging of referrals • appropriate GP referrals based on referral guidelines • consistency of pathways.	Metro North HHS OPD Program CPI/GE Hub Surgery Clinical Stream GE sub-committee
1.5	Develop health pathways to support GP's manage patients following transition of care from the hospital/acute care system.	Surgery Clinical Stream GE sub-committee GPLO Program
1.6	• Establish care pathways to safely manage patients with GI cancers transition between services and across Metro North HHS.	Surgery Clinical Stream GE sub-committee General Surgery Cancer Services
1.7	• Define clinical governance arrangements at each facility to ensure consistency in the delivery of parenteral nutrition.	Surgery Clinical Stream GE sub-committee RBWH TPCH Redcliffe Caboolture

No.	Actions	Responsibility
1.8	Establish a Nurse Care Coordinator role to safely manage patients with GI cancers transition between services within and across Metro North HHS.	Surgery Clinical Stream GE sub-committee General Surgery Cancer Services
1.9	Implement the recommendations of the evaluation of the GE General Practitioner with Special Interest program.	Surgery Clinical Stream GE sub-committee
1.10	Coordinate strategies to opportunistically promote bowel cancer screening participation to eligible patients accessing any Metro North health service.	Clinical Stream GE sub-committee GPLO and Outpatient Program Cancer services
1.11	Develop and implement clinical pathways, guidelines and MDT models that facilitate patient flow and support senior nurse decision making to provide care to complex/co-morbidity patients (renal, cardiac, motor neuron disease and cystic fibrosis).	Surgery Clinical Stream GE sub-committee
1.12	Support staff participation in research and publishing by strengthening existing partnerships with GI surgery, dietetics, radiology and Cancer Care e.g. expand Digestive Health banner.	Clinical Stream GE sub-committee RBWH TPCH Redcliffe Caboolture North Lakes
1.13	Develop and implement a GE nurse training and education framework/post graduate program to train, recruit and retain nurses.	Clinical Stream GE sub-committee HR Business Partners
1.14	Enhance education and professional development programs for medical specialist and nursing staff including: • advanced trainee programs including increased educational opportunities and the availability of live case workshops • expanded scope of practice for nursing and allied health.	Clinical Stream GE sub-committee Metro North HHS ED Nursing and Midwifery Services Metro North HHS ED Medical Services Metro North HHS ED Allied Health
1.15	Investigate the feasibility of a single equipment provider for endoscopy equipment.	Procurement services Clinical Stream GE sub-committee
1.16	Increase access and utilisation of telehealth for residents of Metro North HHS across GE and hepatology services.	Clinical Stream GE sub-committee Metro North HHS Telehealth Services RBWH TPCH Redcliffe Caboolture
1.17	Use information technology to support the delivery of nurse led (Nurse Practitioner/ CNC) outpatient consultations with clinically indicated patients in their own home e.g. Pexip application across GE and hepatology services.	RBWH TPCH Redcliffe Caboolture

Future state of endoscopy services

Endoscopy services will grow to respond to the anticipated expansion of the NBCSP, growth of surveillance services and demographic drivers including population growth and ageing.

Surveillance services will be provided at all Metro North HHS facilities with a balanced distribution approach and model of care to be streamlined and efficient. Open access clinics for colonoscopies will not be supported, with all patients being assessed by a clinician prior to their procedure.

Patients will be seen within clinically recommended timeframes through increases in screening, diagnostic procedures and interventions across Metro North HHS. As technologies evolve, some gastrointestinal surgical procedures will be replaced with endoscopic interventional procedures which will increase complexity of procedures undertaken by GE clinicians.

Action plan—endoscopy

No.	Actions	Responsibility
2.1	Fully utilise endoscopy rooms (to 50 weeks per year) by increasing staff establishment for gastroenterologists, general surgeons nursing staff and support staff and to allow backfill for planned leave at the following facilities: 2.1.1 RBWH 2.1.2 TPCH 2.1.3 Redcliffe Hospital 2.1.4 Caboolture Hospital 2.1.5 STARS.	RBWH TPCH Redcliffe Caboolture
2.2	Conduct feasibility studies to trial and implement new technologies as they become available e.g. endoscopic suturing systems for management of visceral perforations or fistulae and for bariatric applications and endoscopic resection of tumours, endoscopy robots.	Clinical Stream GE sub-committee
2.3	Commission new endoscopy rooms in the Surgical, Treatment and Rehabilitation Service facility in 2021.	Metro North Infrastructure
2.4	Continue to progress planning for a new expanded endoscopy room capacity at: 2.4.1 RBWH 2.4.2 The Prince Charles Hospital 2.4.3 Redcliffe Hospital 2.4.4 Caboolture Hospital 2.4.5 STARS.	RBWH TPCH Redcliffe Caboolture

No.	Actions	Responsibility
2.5	Increase access to colonoscopies for Aboriginal and Torres Strait Islander people as part of 'closing the gap' recommendations by: • ensuring the multidisciplinary team have access to the Aboriginal and Torres Strait Islander Hospital Liaison Officer to address any perceived barriers to care • improving the cultural competency of staff so that patients and their families and community members can feel comfortable engaging with and receiving care	Community and Oral Health Directorate Clinical Stream GE sub-committee
2.6	Establish a new Nurse Unit Manager at Redcliffe Hospital to facilitate separation of the Day Procedure Unit and the endoscopy service.	Redcliffe
2.7	Increase the number of outpatient, colon consent and preadmission appointments to support increased capacity to deliver endoscopy procedures at: 2.7.1 RBWH 2.7.2 Caboolture Hospital 2.7.3 Redcliffe Hospital. 2.7.4 TPCH 2.7.5 STARS.	RBWH Caboolture Redcliffe TPCH
2.8	Establish and maintain pharmacy services in colon consent clinics at: 2.8.1 RBWH 2.8.2 TPCH 2.8.3 Redcliffe Hospital 2.8.4 Caboolture Hospital.	RBWH Pharmacy Director/IMS Redcliffe Pharmacy Director Caboolture Pharmacy Director TPCH Pharmacy Director
2.9	Investigate availability of consult rooms in community health centres to provide GE clinics.	Community and Oral Health Directorate RBWH TPCH Redcliffe Caboolture
2.10	Standardise clinical guidelines for fast-track endoscopy including referral criteria across Metro North HHS.	Surgery Clinical Stream GE sub-committee
2.11	Standardise and implement a Metro North HHS wide GI bleed pathway.	Clinical Stream GE sub-committee
2.12	Develop and implement guidelines for routine surveillance requirements for patients over 75 years.	Clinical Stream GE sub-committee
2.13	Improve effectiveness of bowel preparation for admitted patients and outpatients by upskilling existing nursing staff in bowel preparation f to provide patients with adequate support for bowel preparation.	Clinical Stream GE sub-committee
2.14	Reduce the number of low value care endoscopy procedures by: • monitoring procedure data • educate proceduralists and referring clinicians regarding low value care procedures.	Clinical Stream GE sub-committee RBWH TPCH Redcliffe Caboolture

No.	Actions	Responsibility
2.15	Develop and implement process to clean/sterilise scopes used after hours in line with infection control guidelines and ASA 4187, at: 2.15.1 RBWH 2.15.2 TPCH 2.15.3 Redcliffe Hospital 2.15.4 Caboolture Hospital.	RBWH TPCH Redcliffe Caboolture
2.16	Develop and implement Metro North HHS wide pathways for management of bowel cancer screening patients, surveillance management andimprove data, recording and reporting of these patients.	Clinical Stream GE sub-committee
2.17	Monitor impact on service demand in relation to NBCSP and surveillance.	Clinical Stream GE sub-committee
2.18	Identify surveillance patients that can be removed from the NBCSP and notify patients and referring practitioner.	Clinical Stream GE sub-committee
2.19	Standardise data collection in Provation and implement quality assurance processes.	RBWH TPCH Redcliffe Caboolture STARS
2.20	Embed national and state based guidelines into endoscopy practices.	Surgery Clinical Stream GE sub-committee RBWH TPCH Redcliffe Caboolture
2.21	Set standard key performance indicators and enable collection of data through uniform data collection system.	Surgery Clinical Stream GE sub-committee
2.22	Regularly conduct audits of the endoscopy waitlist for accuracy.	RBWH TPCH Redcliffe Caboolture STARS
2.23	Establish a Fellow position to backfill leave for outpatient and endoscopy procedures across Metro North HHS.	Metro North
2.24	Recruit a Fellow at Redcliffe Hospital.	Redcliffe Hospital
2.25	Create advanced trainee registrar positions to support GE services at the following facilities: 2.25.1 RBWH 2.25.2 TPCH 2.25.3 Redcliffe Hospital 2.25.4 Caboolture Hospital.	RBWH TPCH Redcliffe GE Director Caboolture Director of Surgery

No.	Actions	Responsibility
2.26	Investigate workforce models such as the Nurse Endoscopist and Nurse Sedationist for an appropriate subset of patients (i.e. ASA1 and 2) and recommend an appropriate workforce to support growing demand.	Surgery Clinical Stream GE sub-committee
2.27	Commence recertification of colonoscopy proceduralists (a three year cycle).	Surgery Clinical Stream GE sub-committee
2.28	Develop a sustainable nursing workforce model for Metro North HHS to enable: • sharing of the nursing endoscopy workforce across sites to broaden skillset and assist in recruitment and retention • a casual pool of trained endoscopy nurses.	Metro North ED Nursing and Midwifery
2.29	Develop a national profile in training and research for interventional endoscopy.	Metro North ED Research Surgery Clinical Stream GE sub-committee
2.30	Develop guidelines and pathways for fast track endoscopy and implement consistently across Metro North HHS.	Clinical Stream GE sub-committee

Future state of inflammatory bowel disease services

Inflammatory Bowel Disease will be delivered in all Metro North HHS facilities. Metro North HHS will support regional and remote HHSs by increasing telehealth services including continued support to Wide Bay HHS and Central Queensland HHS. Complex IBD services will continue to be provided at RBWH.

Innovative workforce models such as IBD nurse led phone clinics will improve work flow efficiency for high-volume areas and ensure patient readiness and safety.

Expanded services will be provided in the northern end of Metro North HHS and technology will be used to improve diagnosis and treatment e.g. intestinal ultrasound.

Action plan —inflammatory bowel disease

No.	Actions	Responsibility
3.1	Develop criteria to support appropriate internal referrals for complex and non-complex IBD patients between Metro North IBD outpatient services.	Surgery Clinical Stream GE sub-committee GPLO and Outpatient Programs
3.2	Increase staff establishments to support best practice MDT model of care for IBD clinics (gastroenterologist, nursing and allied health staff including dietetics, pharmacy and psychology and social work services as required) at: 3.2.1 RBWH 3.2.2 TPCH 3.2.3 Redcliffe Hospital 3.2.4 Caboolture Hospital.	RBWH TPCH Redcliffe Caboolture
3.3	Increase and/or establish IBD outpatient clinics to support best practice MDT model of care with support from gastroenterologist, nursing and allied health and appropriate medical imaging services at the following facilities: 3.3.1 RBWH (increase) 3.3.2 TPCH (establish) 3.3.3 Redcliffe Hospital (establish) 3.3.3 Caboolture Hospital (establish) 3.3.4 North Lakes (increase).	RBWH TPCH Redcliffe Caboolture Medical Imaging

No.	Actions	Responsibility
3.4	Create a new IBD CNC position to proactively plan, implement service improvements and coordinate patient flow at: 3.4.1 RBWH 3.4.2 TPCH 3.4.3 Redcliffe Hospital 3.4.4 Caboolture Hospital.	RBWH TPCH Redcliffe Caboolture
3.5	Develop and maintain inpatient IBD services supported by a MDT at: 3.5.1 RBWH 3.5.2 TPCH 3.5.3 Redcliffe Hospital 3.5.4 Caboolture Hospital.	Surgery Clinical Stream GE sub-committee Redcliffe Caboolture
3.6	Develop and implement a nurse led model for IBD clinics for chronic disease patients and follow up at: 3.6.1 RBWH 3.6.2 TPCH 3.6.2 Redcliffe Hospital 3.6.3 Caboolture Hospital.	RBWH TPCH Redcliffe Caboolture
3.7	Enhance IBD service at North Lakes by: • increasing medical, nursing, allied health (dietitian, social work, psychology, pharmacy) and administration staff • improving support services on site including access to pharmacy (scripts) and pathology services • increasing hours for nursing hotlines with MDT support • commencing a fibroscan and ultrasound service.	COHD RBWH Patient Support Services
3.8	Expand IBD telehealth program to regional facilities by increasing medical, nursing (CN and CNC), pharmacy and administration staff at: 3.8.1 RBWH 3.8.2 TPCH 3.8.3 Redcliffe Hospital 3.8.4 Caboolture Hospital.	RBWH TPCH Redcliffe Caboolture Metro North Telehealth Services
3.9	Establish and/or expand IBD biologic infusion ambulatory models of care (including home/community based models) delivered by a MDT including nursing, pharmacist, administration and, identification of physical space at: 3.9.1 RBWH (establish) 3.9.2 TPCH (expand) 3.9.3 Redcliffe Hospital (establish) 3.9.4 Caboolture Hospital (establish) 3.9.5 North Lakes (establish).	RBWH TPCH Redcliffe Caboolture

No.	Actions	Responsibility
3.10	Develop MDT (medical, nursing, dietetics, administration) model of care for intestinal ultrasound services for diagnostic purposes at: 3.10.1 RBWH 3.10.2 TPCH 3.10.3 Redcliffe Hospital 3.10.4 Caboolture Hospital 3.10.5 North Lakes.	GE/Hepatology services at: RBWH TPCH Redcliffe Caboolture Medical Imaging
3.11	Develop succession plans for medical specialists and specialised nursing staff for IBD.	GE/Hepatology services at: RBWH TPCH Redcliffe Caboolture
3.12	Upskill GPs in the management of non-complex IBD patients including treatment pathways and the decision to refer to specialist services.	GPLO Program Surgery Clinical Stream GE sub-committee
3.13	Monitor and evaluate the effectiveness of the IBD patient portal for improving access and efficiency of outpatient clinics by capturing Patient Reported Experience Measures and Patient Reported Outcome Measures at the RBWH.	RBWH

Future state of hepatology services

Hepatology services will be delivered from the RBWH, TPCH, Redcliffe and Caboolture Hospitals, as well as selected community health centres, where patients will have access to diagnosis and management for all forms of liver disease. The service will evolve to support patients living with chronic liver disease. Services will be developed in accordance with the following guiding principles:

- Optimising equity of access to care
- Delivering evidence-based medicine that is safe, effective and efficient
- Developing cost-effective interventions in response to evidence-based demands
- Maximising access to integrated and multi-disciplinary care
- Developing a skilled workforce
- Employing innovation and technology.

There will be improved access to hepatology services, particularly for patients residing in the northern end of the catchment, including access to expanded hepatology outpatient clinics and point of care testing (e.g. FibroScan). Outpatient services will be delivered from Metro North HHS hospitals and community health centres. The development of Metro North HHS outreach hepatology services will also be supported to provide care closer to home and facilitate increased capability of partner HHSs to deliver sustainable hepatology services for their catchment.

Innovative workforce models and practices will shape hepatology services, including the introduction of extended scope of practice for nurse- and allied health-led clinics, in the care for hepatology patients. The changing complexity of this patient cohort will require a sophisticated multidisciplinary — senior level allied health, medical and nursing staff — approach from earlier provision of care in the patient journey to end of life palliative care support.

Technology advances in immunotherapy and interventional procedures will support Metro North's capacity to meet the increasing demand in the treatment and surveillance of hepatocellular carcinoma (HCC) patients.

Action plan—hepatology

No.	Actions	Responsibility
4.1	Develop and implement a multi-disciplinary (MDT) model of care for the assessment, management and treatment for patients with Non-Alcoholic Fatty Liver Disease/Non-alcoholic steatohepatitis (NAFLD /NASH).	Surgery Clinical Stream GE sub-committee RBWH TPCH Redcliffe Caboolture
4.2	Implement (where not already in place) a MDT model of care for hepatology outpatient services which includes a core set of disciplines (senior medical officer, nursing dietetics and psychology) and access to additional services including pharmacy, medical imaging, physiotherapy and social work at all facilities, as well as access to interventional endoscopy and surgery.	RBWH TPCH Redcliffe Caboolture

No.	Actions	Responsibility
4.3	Assess the resources required to improve the availability of dedicated hepatology outpatient clinics and related clinical support services to support a best practice MDT model of care (per Action 4.2) at the following facilities according to demand for services: 4.3.1 RBWH (increase number of clinics) 4.3.2 TPCH (increase number of clinics) 4.3.3 Redcliffe Hospital (increase number of clinics) 4.3.4 Caboolture Hospital (establish dedicated clinic) 4.3.5 North Lakes (increase number of clinics).	RBWH TPCH Redcliffe Caboolture Medical Imaging
4.4	Investigate the role of nurse led (Nurse Practitioner/CNC) hepatology clinics and models of care at each facility to support referral management and emergency department avoidance for patients with liver diseases such as abnormal liver function tests, Fatty Liver, Hepatitis C, Hepatitis B, and HCC.	RBWH TPCH Redcliffe Caboolture
4.5	Review current service models that provide hepatology services to Central Queensland HHS and Wide Bay HHS and develop a sustainable model to support delivery of hepatology services within and to these HHSs in partnership with them. This may include telehealth or outreach service provision.	COSI (Metro North HHS Telehealth Services) RBWH TPCH
4.6	Develop the model of care and clinical pathway for the best practice surveillance treatment and management of Hepatocellular Carcinoma (HCC) patients across Metro North HHS.	Clinical Stream GE sub-committee
4.7	Develop and implement a pathway for access to interventional oncology for Hepatocellular carcinoma (HCC) patients initially at the RBWH in line with existing oncology pathways and best practice care.	Medical Imaging Surgery Clinical Stream GE sub-committee RBWH Cancer Care
4.8	Ensure access to a best practice MDT meeting (including video conference options) is established and coordinated for hepatocellular carcinoma (HCC) patients across all Metro North HHS facilities.	Medical Imaging Surgery Clinical Stream GE sub-committee RBWH Cancer Care
4.9	Establish the nurse led (Nurse Practitioner/ CNC) Hepatoma and Compensated Cirrhosis Follow-Up (HACC–FOL) clinic, for patients at risk of developing HCC across the following facilities: 4.9.1 TPCH 4.9.2 Redcliffe Hospital 4.9.3 Caboolture Hospital 4.9.4 Northlakes.	Clinical Stream GE sub-committee RBWH TPCH Redcliffe Caboolture
4.10	Evaluate the MDT model of care that provides patients with advanced cirrhosis with dedicated end of life and supportive hepatology care and expand across Metro North HHS facilities as appropriate.	RBWH TPCH Redcliffe Caboolture

No.	Actions	Responsibility
4.11	Expand the shared care program between GP and the Hepatologist to provide cost-effective interventions for patients living with uncomplicated chronic Hepatitis C with education, advice and treatment in the community including access to specialist advice as required. Consider expansion to other chronic low risk liver diseases if appropriate (e.g. fatty liver).	TPCH
4.12	Identify the current demand and existing service provision in the community for patients with chronic hepatitis B. Explore the opportunities for Metro North HHS to partner with community health service providers to screen and monitor chronic hepatitis B patients considering the role of a nurse led (Nurse Practitioner/ CNC) model of care.	Clinical Stream GE sub-committee Community and Oral Health Directorate
4.13	Investigate components of care within hepatology services that could be delivered safely by telehealth as a means of providing Metro North HHS patients with greater flexibility in how they access care and improving service efficiency and effectiveness across Metro North HHS.	RBWH TPCH Redcliffe Caboolture Metro North Telehealth Services
4.14	Investigate and deliver expanded hepatologist consultant FTE to meet the demand for dedicated hepatology support for the heart and lung transplant program at TPCH.	TPCH
4.15	Introduce direct access to FibroScan technology to identify and manage patients with chronic liver disease at the following facilities: 4.15.1 Redcliffe Hospital 4.15.2 Caboolture Hospital 4.15.3 Northlakes 4.15.4 Woodford Corrections Health Service.	RBWH TPCH Redcliffe Caboolture
4.16	Continue the Hepatitis B & C Screening and Treatment Clinic at Woodford Corrections Health Service to treat, monitor and appropriately manage patients with Hepatitis B & C with a view to expanding services to manage those with other liver diseases (including liver cancers).	Caboolture TPCH
4.17	Regularly engage with GPs through education and support to manage non-complex chronic liver conditions, such as early fatty liver diseases across all facilities, including an assessment of the demand for increased community-based support and the cost-effectiveness of interventions to develop community-based models of care.	GPLO/ GPwSi Program RBWH TPCH Redcliffe Caboolture
4.18	Establish an agreed set of hepatology-specific clinical data and key performance indicators to inform current and future hepatology service demands and improve the availability of data to guide performance.	Clinical Stream GE sub-committee
4.19	Assess the demands for dedicated and effective inpatient hepatology services (including inpatient consultant liaison services) across different MNHHS facilities and how these impact on delivering outpatient hepatology services in accordance with the Gastroenterology and Hepatology Plan 2019.	Clinical Stream GE Sub-committee

Future state of specialist allied health and nutrition services

Specialist allied health and nutrition services across Metro North HHS will be reviewed and incorporate latest evidence based models of care to support GE and hepatology services such as the dietitian first model. There will be increased access to psychology services to support to GE clinics.

Action plan —specialist allied health and nutrition services

No.	Actions	Responsibility
5.1	Provide dedicated and/ or access to psychology support to GE clinics at the following: 5.1.1 RBWH 5.1.2 TPCH 5.1.3 Redcliffe Hospital 5.1.4 Caboolture Hospital.	RBWH TPCH Redcliffe Caboolture
5.2	Establish or maintain dietitian first clinic model supported by dietitian and administration support at: 5.2.1 RBWH 5.2.2 TPCH 5.2.3 Redcliffe Hospital 5.2.4 Caboolture Hospital.	RBWH TPCH Redcliffe Caboolture
5.3	Expand the dietitian first clinic model to enable the proactive pulling of eligible patients from the GE waitlist at all facilities and refer patients to dietitian first clinic as first point of contact—as opposed to referring to specialist and dietitian first clinic simultaneously.	RBWH TPCH Caboolture Redcliffe
5.4	Continuously review, monitor and incorporate best practice and evidence based models in allied health.	RBWH TPCH Caboolture Redcliffe
5.5	Develop dietitian led pathway for management of gastrointestinal and liver disorders where evidence suggests improved patient outcomes.	RBWH TPCH Redcliffe Caboolture
5.6	Review the current PEG services and develop a sustainable model that will support the review, monitoring and emergency management of PEG services at the following: 5.6.1 RBWH 5.6.2 TPCH 5.6.3 Redcliffe Hospital 5.6.4 Caboolture Hospital 5.6.5 North Lakes.	RBWH TPCH Caboolture Redcliffe

Implementation, monitoring and review

Metro North HHS is committed to implementing the Metro North HHS Gastroenterology and Hepatology Clinical Services Plan 2019-24 over the next three to five years and will actively work towards progressing the actions across the various service settings in Metro North HHS. An implementation plan will be developed to progress actions over time. Whilst there is a commitment of funding there are some actions that will require additional resourcing over time and these will be sought through normal budgetary processes.

This Plan will be monitored and reported on annual basis. These processes will allow changes in health needs or service developments during implementation of this Plan to be identified and ensure this Plan can be reviewed and updated if required.