					other education materials.		
SUBTOTAL	*Subtotal*			*288*			*288*
CIRC	Discounted Circulation		25%	72			72
UNIT_TOTAL	**Total**			**360**			**360**
ANAESTHETICS DEPARTMENT							
OFF_S12	Office - Single Person, 12m2	1	12	12	Clinican Director		12
OFF_S9	Office - Single Person, 9m2	27	9	243	Staff Specialists	Indicative only	243
OFF-2P	Office - 2 Person Shared, 12m2	9	12	108	Staff Specialists/Registrars	Indicative only	108
	Office - Workstation, 5.5m2	7	5.5	38.5	Admin Support	Indicative only	39
OFF-CLW	Office - Clinical Workroom	2	30	60	Up to 12 VMO's	Locate near staff station	60
MEET-L-30	Meeting Room, 30m2	1	30	30	May be shared with Perioperative service if collocated	Up to 20 staff	30
BBEV-OP	Bay - Beverage, Open Plan, 4m2	1	4	4			4
OVBR	Overnight Stay - Bedroom	2	10	20		Optional and dependent on rostering practices.	20
WCST	Toilet - Staff, 3m2	2	3	6			6
SHST	Shower - Staff, 3m2	1	3	3			3
STPS-8	Store - Photocopy / Stationery, 8m2	1	8	8			8

STGN-9	Store - General, 9m2	1	9	9			9
SUBTOTAL	*Subtotal*			*542*			*542*
CIRC	Discounted Circulation		25%	135			135
UNIT_TOTAL	**Total**			**677**			**677**
						2	

			Total Area m2			**Deviation from AusHFG m2**
Total Room Area			8731.5			1804
Total Discounted Circulation	Ave	37%	3,259			581
Total Department / Unit Area			**11,990**			**2,385**

ACT Government
Health Directorate

Abbreviations

Abbreviation	Description
ACCU	Acute Cardiac Care Unit
ACORN	Australian College Operating Room Nursing
ANZCA	Australian and New Zealand College of Anaesthetics
ASU	Acute Surgical Unit
AusHFG	Australasian Health Facility Guideline
BCA	Building Code of Australia
CCL	Cardiac Catheterisation Laboratory
CCTV	Closed Circuit Television
CH	Canberra Hospital
CHWC	Centenary Hospital for Women and Children
CT	Computed Tomography
DO	Day Only
DoSA	Day of Surgery Admission
DSU	Day Surgery Unit
EBRS	Electronic Blood Release System
ECT	Electro Convulsive Therapy
ED	Emergency Department
EDO	Extended Day Only

EDSU	Extended Day Surgery Unit
ENT	Ear, Nose and Throat
EPL	Electro Physiology Laboratory
ERCP	Endoscopic retrograde cholangiopancreatography
EVAR	Endovascular Aneurysm Repair
FFE	Furniture, Fittings and Equipment
FPU	Functional Planning Unit
FTE	Full Time Equivalent
HIS	Hospital information system
HPU	Health Planning Unit
ICL	Interventional Cardiology Laboratory
ICT	Information Communication Technology
ICU	Intensive Care Unit
IR	Interventional Radiology
MRO	Multi-resistant Organism
NICU	Neonatal Intensive Care Unit
OR	Operating Room
PAC	Pre-admission Clinic
PACU	Post Anaesthesia Care Unit
PIMS	Perioperative Information Management System
PPE	Personal Protective Equipment

RACS	Royal Australian College of Surgeons
RFA	Request for admission
RMD	Reusable medical devices
SET	Surgical Education and Training
SPIRE	Surgical Procedures, Interventional Radiology and Emergency
SSD	Sterilising Services Department
SSP	Specialty Service Plan
S4D	Schedule 4 medication. Prescription only.
S8	Schedule 8 medication. Controlled drug
VMO	Visiting Medical Officer

11. HPU brief development participants

The following personnel were consulted in the preparation of this HPU brief	
Name	Position
Daniel Wood	Executive Director Surgery And Oral Health (SAOH)
Prof Thomas Brussel	Director Anaesthesia
Frank Piscioneri	Director Surgery
Bryan Ashman	Director Surgery
Mark Duggan	Director, Medical Imaging
Kerri Reeves	ADON Perioperative Services
Kellie Noffke	Director Of Nursing (DON), Division of Medicine
Jillian Davis	A/g DON SAOH
Nicole Larkin	A/g ADON Surgical Bookings and Pre-admission Clinic
Emma Riley	A/g CNC PACU
Deanne Cole	CNC EDSU/DSU
Kate Scott	Resource Manager, Theatres
Alex Miller	A/g ADON ACSU

The following personnel were consulted in the preparation of this HPU brief	
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Alison Baldwin	CNC Cardiac Catheterisation Laboratory
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Serge Papin	Health Planning Unit
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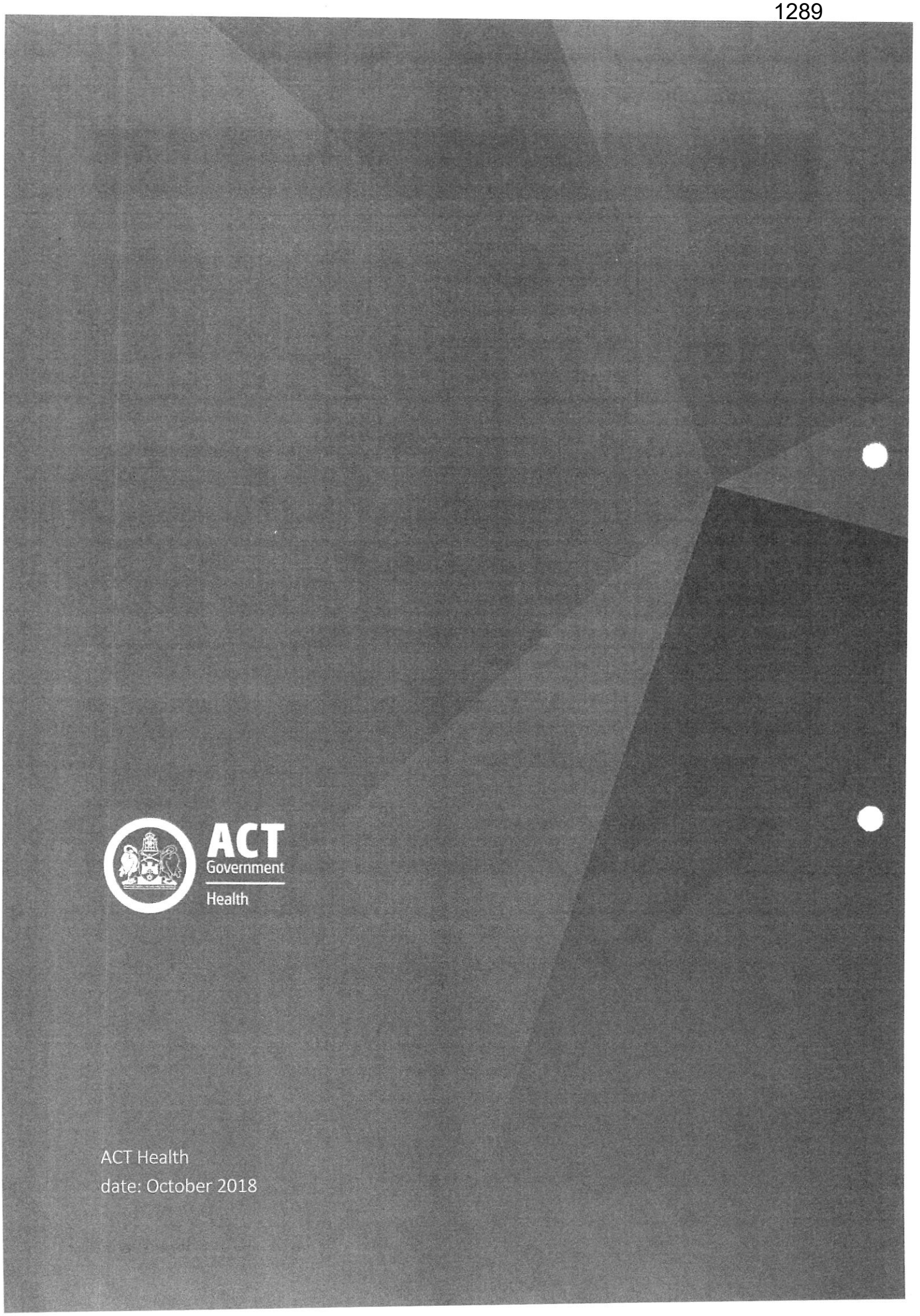

ACT Government
Health

ACT Health
date: October 2018

ACT Government
Health

MODEL OF CARE

PERIOPERATIVE & INTERVENTIONAL CENTRE

ACT HEALTH

DATE: MAY 2018

Approvals

Name	Position	Signature	Date
	Executive Director, Surgical and Oral health Division		
	Deputy Director General, Canberra Hospital and Health Services		
	For Information - Executive Sponsor, Chief of Clinical Operations, ACT Health		

Outstanding issues

Subject	Issue
Workforce	Workforce recurrent costs have not been included in the document. This will be provided in the detailed Business Case.
Workforce	Staff profiles are subject to review by Workforce Policy and Planning Unit

Document Version History

Version	Issue Date	Issued By	Issued To	Reason for Issue
Draft v0.1	14/3/18	Healthcare Management Advisors (HMA)	ACT Health	Draft for review
Draft v0.1	9/4/18	Health Services Planning Unit (HSPU)	Perioperative Services	Circulation prior to face-to-face consultation on 12 April 2018
Draft v0.2	10/4/18	HMA	ACT Health	Draft for review
Draft v0.2	10/4/18	HSPU	Perioperative Services	Circulation prior to face-to-face consultation on 26 April 2018
Draft v0.3	29/4/18	HMA	ACT Health	Draft for review
Draft v0.4	24/5/18	HSPU	ACT Health	Draft for review
Draft v0.5	8/10/18	HSPU	BHSP	For progression to Design Consultant for proof of concept

Table of Contents

1. Introduction

In September 2016, ACT Government announced the construction of a Surgical Procedures, Interventional Radiology and Emergency (SPIRE) Centre to be built at Canberra Hospital (CH). This infrastructure project is part of the ACT Government's 10-Year Health Plan and is in response to the increasing demand on ACT hospitals and health services across the territory.

The ACT Government 2017 Budget provided funding for the first stages of the SPIRE project which includes planning and the commencement of design. A Model of Care (MoC) is a planning document that broadly defines the way health services are delivered and outlines best practice care for a person using this service. This MoC planning document has been developed for building design only and is required by the prospective design consultants to enable design development. For noting, a complete patient journey MoC is a subsequent piece of work.

ACT Health engaged Healthcare Management Advisors (HMA) Pty Ltd to undertake the MoC development in collaboration with staff from Health Services Redesign and Building Health Service's Program. Development of this document occurred between February and March 2018 with internal ACT Health stakeholders who have been identified within this document. Outstanding issues that require resolution over the next design phases are noted at the beginning of this document.

2. Description of the service

CH is the major tertiary and trauma referral centre for the catchment, and manages trauma and emergency cases that cannot be provided by other facilities in the region. This means CH is in a distinctive situation compared to most other equivalent hospitals in metropolitan settings; the hospital is significantly limited in its capacity to request initiation of bypass system in periods of high demand for surgery services.

Perioperative services is integral to the role of the CH as a Major Trauma Centre and Tertiary Health Facility for the ACT and the surrounding NSW region. CH perioperative services is a role delineation[1] level 6 clinical service for most surgery and encompasses a Territory-wide and regional role.

As a role delineation level 6 clinical service in most specialty areas, this means:

- **For the operating suite** CH provides complex surgical procedures, manages patients at the highest level of surgical risk. Provides specialised surgery such as cardiothoracic surgery and/or neurosurgery
- **For the anaesthesia and Post Anaesthetic Care Units (PACU) areas** CH "provide(s) anaesthesia for all levels of patient risk undergoing complex major surgical procedures." [There is] "subspecialty anaesthesia on-site, such as neurosurgery, cardiothoracic surgery....."[2]

The only service related groups (SRGs) where CH does not provide level 5 or 6 role delineation capability are transplantation (SRG 61) and extensive burns (SRG 62). There is insufficient activity generated within the CH catchment to justify developing level 6 capability for transplantation or ongoing management of extensive burns.

The CH perioperative services target population is the ACT and Southern NSW patients who require tertiary level surgical procedures. The CH provides capacity for surgical procedures to be undertaken 24 hours a day, seven days per week. The hospital provides elective and emergency surgical procedures, including organ and lifesaving surgery between 2100 and 0700 hours.

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[1] NSW Guide to the Role Delineation of Clinical Services 2016 (Second Edition, May 2017)

[2] NSW Guide to the Role Delineation of Clinical Services 2016 (Second Edition, May 2017), p.11, p.13.

Less complex elective and emergency adult surgical procedures and high volume short stay procedures are provided at Calvary Public Hospital Bruce (CPHB). The perioperative profiles and role delineations for the public hospitals delivering surgical services will be articulated in the Perioperative Service Specialty Plan.

2.1. Surgery types

The tertiary perioperative services provided at the CH include:

- cardio-thoracic
- dental
- ear, nose and throat (ENT)
- general
- gynaecology
- neurosurgery
- obstetrics
- oral-maxillary-facial
- organ retrieval
- orthopaedics
- ophthalmology
- paediatrics
- plastics
- trauma
- urology
- vascular.

2.2. Classifications

Surgery is classified on the basis of a patient's presentation and subsequent care (not by time periods to surgery):

- **Emergency surgery** is surgery to treat trauma or acute illness subsequent to an emergency presentation. Emergency surgery includes unplanned surgery for admitted patients and unplanned surgery for patients already awaiting an elective surgery procedure (for example, in cases of acute deterioration of an existing condition). A *request for emergency operating time* classifies patients according to the following urgency categories:
    - category 1: Life threatening (operate <1 hour)
    - category 2: Organ threatening (operate <4 hours)
    - category 3: Non-critical but emergent (operate <8 hours)
    - category 4: Non-critical, non-emergent (operate <24 hours)
    - category 5: Subacute (operate >24 hours <72 hours).
- **Elective surgery** is planned surgery that can be booked in advance as a result of a specialist clinical assessment resulting in placement on an elective surgery waiting list. A request for admission categorises patients according to the National Elective Surgery Urgency. Categories:
    - category 1 Procedures that are clinically indicated within 30 days
    - category 2 Procedures that are clinically indicated within 90 days
    - category 3 Procedures that are clinically indicated within 365 days.
- **Caesarean Section surgery** is the use of surgery to assist the birthing of a baby. Classifications for caesarean section surgical procedures are:
    - category A: Delivery within 30 minutes
    - category B: Delivery within 60 minutes

- category C: Delivery within 6 hours
- category D: Delivery to suit ORs and D/S.

- **Other surgery**: transplant surgery and planned obstetrics procedures.

2.3. Care streams

There are broad phases to the perioperative patient pathway:

- prior to a surgical procedure (preoperative care)
- conduct of the surgical procedure (intraoperative care)
- after the surgical procedure (post anaesthetic care).

2.3.1. Preoperative care

Surgical bookings

The surgical bookings unit is responsible for the management of the scheduling of patients on the CH Elective Surgery Waiting List that includes booking of patients on to a theatre list. This unit works in collaboration with the Central Waitlisting Service, as part of the Territory Wide Surgical Services (TWSS) team, who are mainly responsible for reviewing and assessing the Request for Admission (RFA) form and adding patients to the electronic waiting list. The management of patients waiting for elective surgery is in line with the Elective Surgery Access policy, which aims to ensure equity of access to all patients waiting for elective surgery based on identified clinical urgency timeframes.

Pre-admission

The pre-admission service conducts preoperative assessment for elective surgical patients as part of a multidisciplinary team. These services are provided for all people undergoing elective surgery. The aim of the service is to ensure patients are admitted in the best possible state of health, with all test completed prior to admission.

The clinic is staffed by nursing and anaesthetic staff who complete a thorough health assessment in order to ensure the patient is ready for surgery. Dependent on various factors (e.g. patient co-morbidities and socio-economic characteristics), this consultation may take place in the form of a face to face consultation or via telephone. The results of that assessment are made available to the treating specialist and General Practitioner (GP). The service operates a High Anaesthetic Risk Patient (HARP) clinic for people with complex needs and multiple comorbidities.

Day of Surgery Admission (DoSA)

DoSA describes the process whereby patients are admitted to CH and undergo surgery on the same day. This is the admission policy for most CH elective patients.

Holding bay

Nursing and anaesthetic assessments are undertaken in the holding bay, prior to entry to the operating theatres. Several patients are often in the holding bay area to ensure the next patient is always ready for theatre.

2.3.2. Intraoperative care

The intraoperative area will consists of the existing operating theatres (13 including MRI), with the addition of 10 hybrid, complex/robotics, interventional radiology suites, and a shell for a future 10 hybrid/complex/robotic theatres.

The hybrid operating suite will include operating rooms with angiography suitable for endovascular work e.g. cardiothoracic, neurological, and vascular.

For space planning purposes it has been assumed that the ten room SPIRE suite will comprise:

- four hybrid operating rooms with angiography equipment requiring control and computer rooms initially for use in cardiac, cardiothoracic, vascular surgery (EVAR), neuro interventional, and trauma surgery
- four complex/robotic surgery operating rooms with garaging facilities for robotic tools for use initially in ENT, urology, gynaeoncology, colorectal, paediatric services, and appropriate emergency cases
- one intraoperative room with direct access to an MRI scanning room
- one intraoperative room with direct access to specialised imaging equipment, yet to be determined (e.g. simulation theatre).

Hybrid theatres have a fixed imaging platform designed to support minimally invasive surgery. Hybrid theatres enable surgeons to perform combined open, minimally invasive, image-guided and/or catheter-based procedures in the same operating room.

The hybrid/complex/robotic theatres will include provision for robotic surgery, mobile robot arms and tactile feel technology systems.

Hybrid/complex/robotic theatres require additional space to house extra equipment as well as accommodate more staff who are present during a procedure.

Initially it is expected that hybrid theatre activity will be focussed in the following four surgery specialties:

- interventional neurology
    - digital angiography is used for neurovascular surgery and spinal surgery
    - Computer Tomography (CT) scan or MRI scan is applied in brain tumour surgery
- neurosurgery/orthopaedic surgery – the o-arm system is specifically used in spinal surgery
- vascular
- cardiothoracic.

Use of hybrid theatre techniques is evolving rapidly. Other areas where hybrid surgery techniques could expand in the medium term include orthopaedics and trauma.

2.3.3. Post anaesthetic care

PACU

The PACU, operated by specialist nursing staff, is responsible for the management of patients' immediate post-procedural period. Following conclusion of the surgical procedure there are typically three stages of recovery:

- Stage 1 recovery accommodates unconscious patients who require constant observation and monitoring with a one-to-one patient nurse ratio. Open planned bays are provided that can be observed from a staff station
- Stage 2 recovery accommodates:
    - patients who have regained consciousness after anaesthesia but require further observation
    - patients who have undergone procedures with local anaesthetic who may bypass recovery stage 1
    - post-operative obstetric patient needs including facilitating breast feeding as per the breast feeding-friendly hospital policy.

Extended Day Surgery Unit (EDSU)

EDSU is a flexible area where patients can have their entire episode of care within the perioperative environment. Bed allocation is for patients who meet the 23 hour EDSU admission criteria and do not require admission to an inpatient unit as they meet the admission criteria for the unit which ensures patient safety and have a planned discharge within 23 hours after the surgery/procedure.

Stage 3 (discharge lounge)

Stage 3 (discharge lounge) provides comfortable chairs for patients who are awake and ready to discharged, generally to their home.

2.4. Care needs

2.4.1. Additional needs

CH makes provision for perioperative patients identified as having additional needs (e.g. physical disabilities, medical conditions, mild learning disabilities or profound cognitive impairment, developmental delays, and emotional vulnerabilities). Patients may require additional planning and resource allocation coordinated via a multidisciplinary approach for their perioperative journey. This planning and support is required across the various phases of perioperative care including pre-admission clinics, pre-operative care and post-operative care.

Justice Health detainee patients requiring a surgical procedure also need consideration given to additional resourcing e.g. separate areas in recovery.

2.4.2. Needs of Aboriginal and Torres Strait Islander People

It is important that perioperative care is delivered in culturally safe and competent ways. To overcome the evolving barriers to lifelong care that Aboriginal people may experience, perioperative services need to work in partnership with Aboriginal health care providers to tailor care to achieve optimal perioperative health outcomes. In particular, this should include a demonstrated commitment to building trust with Aboriginal people to ensure assessment, planning, referral and follow up processes are tailored to the individual.

2.4.3. Paediatric, obstetrics and miscarrying gynaecology patients

The patient journey for paediatric patients and women who are miscarrying is to be sensitive, and to acknowledge the special needs of these groups. Children and women will need/want support and there will the ability to facilitate this. Paediatric, obstetric and miscarrying gynaecology patients require appropriate streaming for each cohort from DoSA through the operating theatres and into PACU. Separation of miscarrying women from surgically assisted birthing women is required in both DoSA and PACU.

- Parent access to stay with children as long as possible is required in appropriate areas of the operating theatres
- Appropriate post anaesthetic care environments are required for each cohort including the ability for an optimal first breast feed for post caesarean women and their babies.

2.5. Changes to model

- An integrated booking system Perioperative Information Management System (PIMS) will be introduced to manage and streamline bookings and the waiting list, with the ability to differentiate between elective and emergency surgery
- Centralised pre-admission for all elective surgery

- Dedicated areas for different patient cohorts will facilitate a patient centred journey, where the environment is appropriate the cohort- such as paediatrics etc. facilitating communication that is targeted, appropriate and informed
- Waiting space for relatives
- Commencement of the discharge planning from the time of admissions with the establishment of a Discharge Planning Unit (DPU)
- Allocation of a dedicated nurse for the duration of care within the perioperative suite to facilitate the patient journey and decrease the length of stay
- Onsight Sterilising Services Department (SSD) will increase efficiency in pre-rinse and sterilising processes.

3. Care/service setting

Perioperative care will be provided in dedicated facilities at the CH. Existing perioperative services are located at the CH site in Woden, in Building 12, Level 3, with the exception of the pre-admission unit located on Level 2. Perioperative services are an inpatient service type.

Perioperative services include preoperative, intraoperative and postoperative activity. Facilities utilised within the perioperative services will depend on the individual's requirements.

The scope of perioperative services covered by this MoC is:

- Operating Suites, comprising:
- surgical and procedural clerical admissions
- holding areas
- high volume surgery operating/procedure suite
- conventional surgery operating/procedure suite
- hybrid / complex / robotic operating suite.
- Interventional Radiology Suite
- holding area
- Interventional Radiology/Angiography rooms
- Perioperative support areas, including:
- DoSA unit
- Day Surgery/Procedure Unit - preoperative and postoperative
- PACU for recovery, including a dedicated paediatric area
- EDSU.
- Anaesthetics Services
- SSD.

3.1. Environmental considerations

The aim of health care is not only to treat disease, but also to create a healing environment for patients that is safe and free of psychosocial elements created through poor design. To this end the environment and design is to support the MoC.

Noise has been linked with poorer outcomes and increased levels of stress, for both patients and staff. Noise leads to communication difficulties, and may impede on an individual's privacy. Therefore strategies for combating noise levels within perioperative services should be included. This includes, but is not limited to:

- sound absorbing ceiling tiles
- ceiling battens.

Lighting is to be consistent with the AHFG 0520 – Operating Unit 3.5. Interior décor should be chosen that does not alter the observer's perception of skin tones.

Infectious, custodial and/or other patients with privacy needs will require an appropriate environment ensuring a balance between privacy and observation, given that this space will be multi-purpose.

Regardless of specific environmental considerations, the design is to support a balance between line of sight and privacy of patients in treatment areas and waiting areas from staff areas, specifically staff stations.

4. Care provision continuum and workforce

4.1. Philosophy and principles of care

Effective perioperative care is reliant on the following key elements:

- The perioperative process prepares the patient, support people for the patient, for the whole surgical/procedural journey
- All patients require pre-admission review using a triage process
- Pre-procedure preparation optimises and supports management of the patient's perioperative risks associated with their surgery/procedure and anaesthesia
- The multidisciplinary team collects, analyses, integrates and communicates information to optimise patient centred care
- Each patient's individual journey should follow a planned standardised perioperative pathway
- Support safe, efficient person-centred care, supported by evidence-based practice, and enhance patient experiences and outcomes.

Workflow improvement will be facilitated by:

- Greater specialisation of some operating rooms for:
- elective and emergency/non-elective surgery
- greater specialisation of theatres for specific surgery types e.g. cardiac, urology, vascular and neurosurgery
- relocation of the majority of the urology case load to procedure rooms
- Improved patient flows in the pre, intra and post-operative phases of perioperative care
- More efficient movement of equipment and consumables (including clearer delineation of clean and dirty zones in the perioperative space).

Perioperative care delivers knowledge sharing to support patient centred care. This involves the collation, analysis, integration and communication of information relevant to a number of domains:

- patients: preferences, expectations, concerns needing to be addressed
- medical information: health status, social support, recent investigations
- GPs/primary care: address concerns, expectations
- surgery: staffing, equipment and other resources required to deliver a procedure
- anaesthetic requirements: to optimise care for each patient, consideration must be given to staffing, equipment, assistant for procedures, resourcing for pre-operative anaesthetic care, technical backup for high-risk patients
- hospital: resources, targets, process indicators and health outcomes
- an important aspect of perioperative services is partnering with patients and their support people; this optimises shared decision making for the whole perioperative journey
- patient-centred perioperative care involves a comprehensive team. This comprises: the patient, their support people, GPs, surgeons, proceduralists, anaesthetists, nurses, administrative and

clerical staff, allied health professionals, clinical support and operational support personnel (e.g. theatre technicians and cleaners), primary care providers, Aboriginal health workers, and multicultural and diversity health workers.

The SPIRE centre and refurbished perioperative services in Building 12 will provide an environment that seeks to decrease unnecessary patient stresses whilst streamlining the care pathway and facilitating the separation of patient flows for complex and high volume short stay surgery, day procedures, paediatrics, obstetrics and miscarrying gynaecology patients, interventional radiology, and interventional cardiology.

Facilities must be provided to enable staff to have breaks/timeout without leaving the unit.

4.2. Business rules

There is a hierarchy of policies and business rules that are relevant to Perioperative services.

The overarching standards at a national level are provided by the Australian Commission on Safety and Quality in Healthcare. These standards seek to improve the quality of health service provision in Australia.

National specialty bodies specify standards relevant to their interest area e.g. Royal Australian College of Surgeons (RACS) Surgical Education and Training (SET) requirements, the Australian and New Zealand College of Anaesthetists (ANZCA), and the Australian College Operating Room Nursing (ACORN) Standards, Recommended Practices, and Guidelines, Infection Control in Endoscopy, Gastroenterology Society of Australia (GESA).

ACT Health and CH Perioperative related policies, standard operating procedures, and guidelines.

4.3. Patient pathway

A key function of perioperative services is to ensure the patient is optimally prepared for their complete surgical/procedural journey and that this occurs in a safe, efficient and patient-centred manner. The patient's procedural journey begins with the patient at home (or other location in the community) and ends when the patient is safely returned to their place of residence.

There are multiple points of entry to perioperative services. These include via:

- Emergency department (ED)
- Pre-admission and DoSA, for elective patients
- From other areas of the hospital including the intensive care unit (ICU), inpatient units, outpatient clinics, Hospital In The Home, and retrieval services
- Centenary Hospital for Women and Children (CHWC)
- patients who have undergone procedures with local anaesthetic who may bypass recovery stage 1.

The actual patient pathway through PACU varies according to the nature of the procedure conducted. EDSU is a flexible area where patients can have their entire episode of care within the perioperative environment. Bed allocation is for patients who meet the 23 hour EDSU admission criteria and do not require admission to an inpatient unit as they meet the admission criteria for the unit which ensures patient safety and have a planned discharge within 23 hours after the surgery/procedure. Based on the summary description of pre, intra and post-operative processes presented above, this section presents an overview of the CH perioperative patient flows (see Figure 1 on the next page).

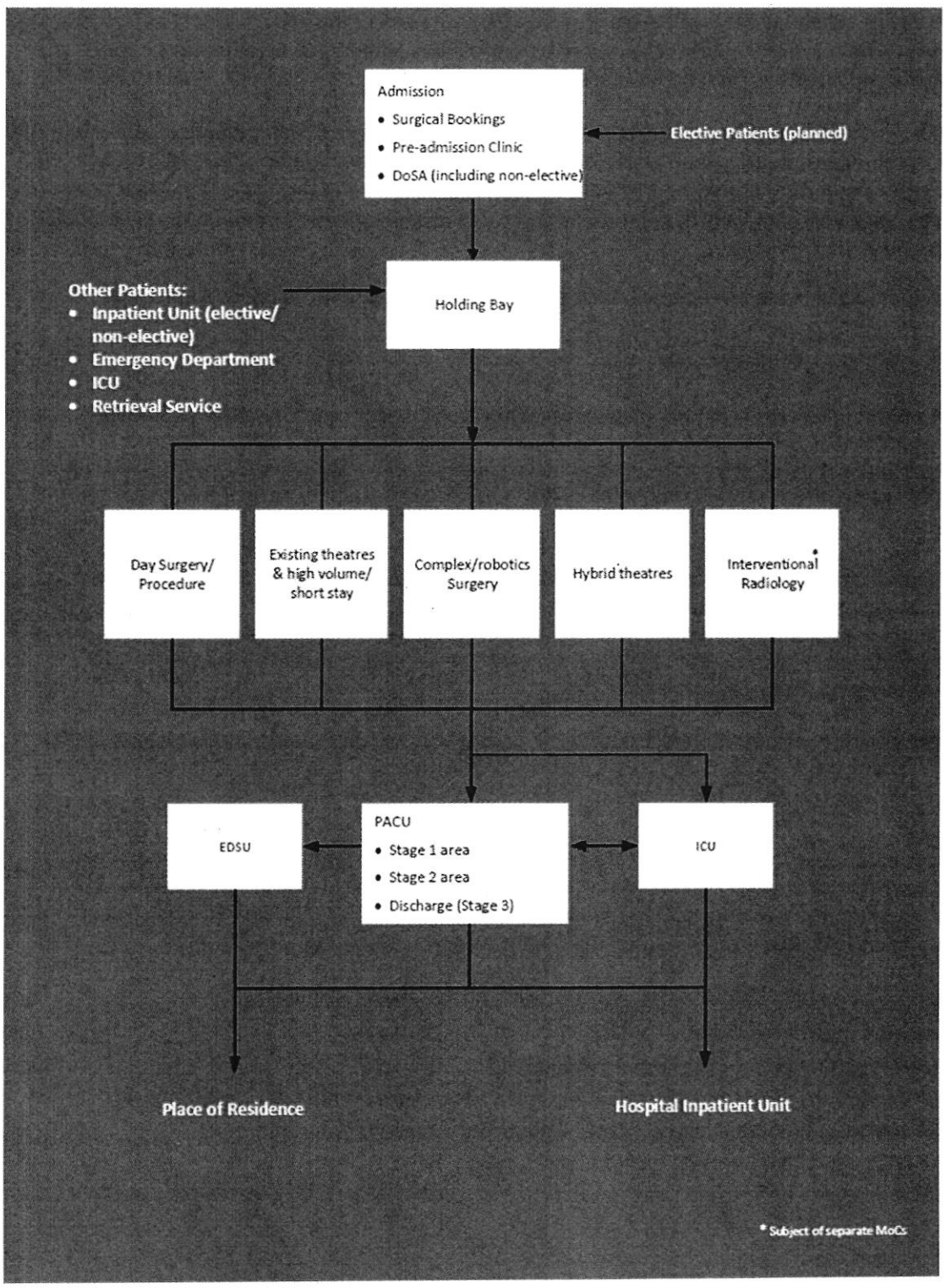


Figure 1: Patient pathway for perioperative services at CH

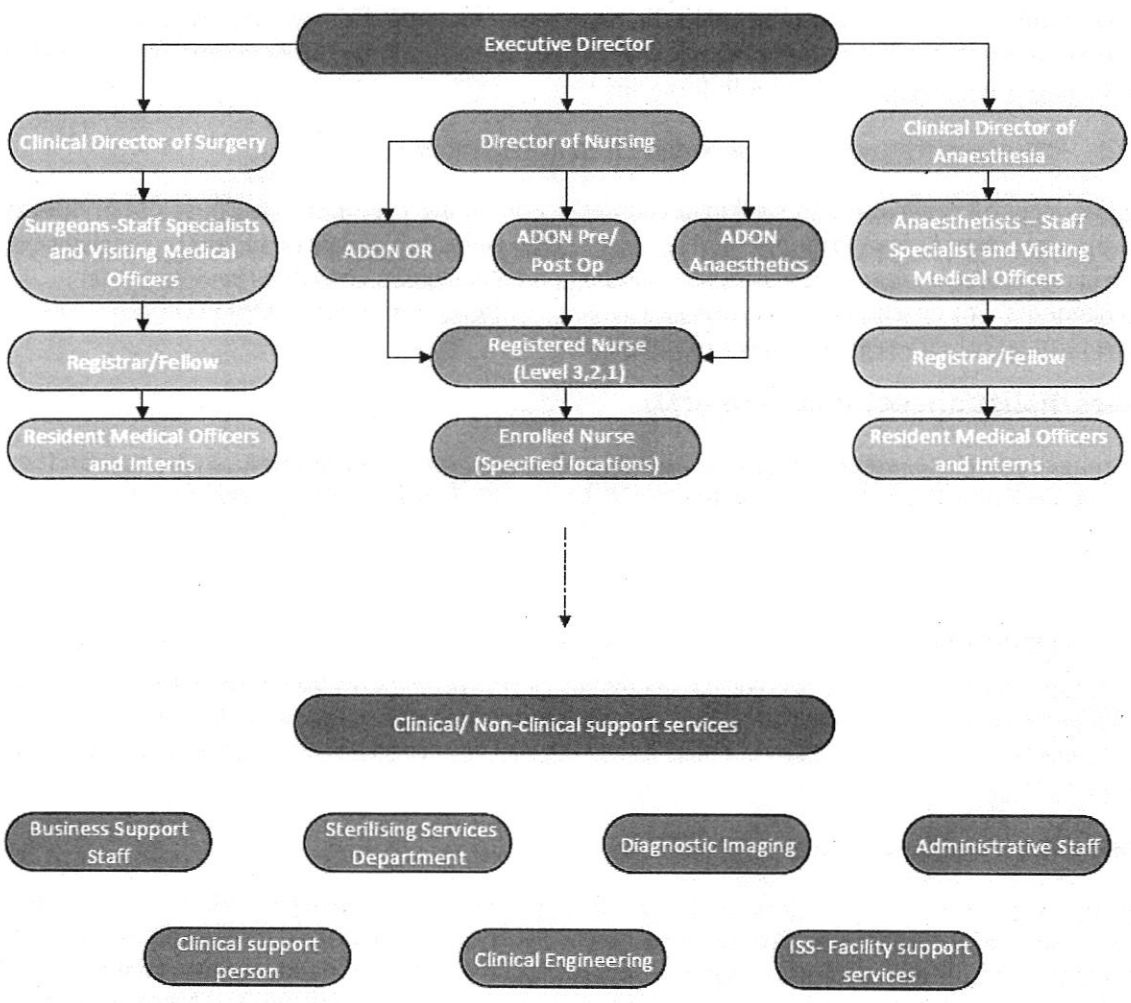
4.4. Workflow and work processes

Overall staff workflows are guided by the patient pathways through perioperative services. Perioperative services involve a wide-ranging number of specialised staff.

A perioperative management structure supports efficient and effective fiscal, human resource, and materials management practices for both elective and emergency streams. This includes utilisation of an Operating Room and Anaesthetic Management System.

Information management unit staff support the provision of sound data for planning and analysis.

Figure 2 –Organisational structure for perioperative services at CHI



4.4.1. Variations to workflow and process: the impact of procedure type

The category of operating room and surgical subspecialty required varies in the intraoperative phase according to a range of characteristics, including:

- the body part involved and procedural complexity e.g. simple day procedures (e.g. closed reduction of a fractured bone) compared to a more complex operating room procedure (e.g. hip replacement)
- the degree of invasiveness and associated procedural techniques e.g. minimally invasive techniques using endoscopy, open surgery
- equipment needed e.g. lasers, hybrid theatre imaging equipment, robotic surgery
- number of surgeons or other proceduralist involved, which can vary from one to several for a complex trauma or organ retrieval case.

The procedural characteristics determine the numbers of anaesthetic, nursing and technical staff together with non-clinical staff in the intraoperative phase e.g. more wardspersons are required to assist with patient movement in multi trauma surgical cases.

4.4.2. Preoperative care: overview of work process

The overall work processes and staff involved in the immediate pre-operative phase of perioperative care are described below. Prior to elective surgery the relevant surgical consultant or registrar on-call will undertake a surgery assessment, including medical examination and review of test requirements. For emergency cases this assessment is often undertaken within ED at the same time as the request for emergency surgery is prepared.

Anaesthetist/anaesthetic registrar

The anaesthetist/anaesthetic registrar undertakes an anaesthetic assessment, in preparation for tailoring the anaesthetic to the individual patient's medical history and the type of surgical procedure planned. They assess requirements for appropriate post-operative care to maximise patient safety. Intraoperative care: overview of work process.

Lead Surgeon

Prior to surgery the lead surgeon will assess the surgical approach, including assessment of resource availability to support the procedure and the position for procedural access. Patient care during the intraoperative period is the responsibility of the surgeon or proceduralist, the anaesthetist, and the operating theatre nursing team.

Operating Room Coordinator (ORC)

The ORC is supernumerary to the provision of anaesthesia. The anaesthetist ORC works in close collaboration with the nursing Patient Flow Coordinators in the allocation of defined resources to provide to each of the surgical and medical subspecialties and the respective ideal utilisation of OR and interventional suite capacity according to agreed requirements and sudden temporary variation in demand. Any change/optimisation of the workflow and process is aligned with the patient centred MoC.

Perioperative Patient Flow Coordinator

The Perioperative Patient Flow Coordinator provides resource assessment. This involves coordinating the staffing, equipment and consumable resource requirements, including:

- booking and scheduling the operating room and team, including surgical, anaesthetics, nursing capability and necessary technical support e.g. perfusionist, radiographer (the precise team mix will depend on the nature of the procedures on the surgical list)
- coordination of resource supports such as equipment, stores, implants and prosthetics

- prosthetic, tissue, bone, and other implants required
- additional coordination may be required for specialist equipment or prosthetics from interstate, in consultation with Perioperative resource nurse, hospital supply and equipment loan staff.

In undertaking scheduling and resource coordination the Patient Flow Coordinator adheres to patient categorisation rules, underlying demand for emergency and elective sessions, and any additional support requirements needed (e.g. for organ retrieval).

4.4.3. Intraoperative care: overview of work process

Surgeon and surgical team

Surgery involves a range of work. For instance, it may include excision, resection, ligation, grafts, and insertion of prosthetics, stoma creation, arthrodesis and debridement. The surgeon:

- prepares for the procedure
- performs the procedure
- is accountable for the sterility of the environment and safety of the patient
- is responsible for identifying and resolving intraoperative surgical challenges
- in conjunction with the anaesthetist, assesses the post-operative destination for care provision.

Anaesthetist and anaesthetic team

- induces anaesthesia
- manages pain during procedure
- maintains and monitors anaesthesia
- monitors vital signs
- is responsible for identifying and resolving intraoperative anaesthetic challenges
- reverses the effects of anaesthesia.

Operating room nursing team

- supports the surgeon during surgical procedures
- prepares the operating room
- prepares the instruments and equipment
- maintains a record of instruments and equipment used during the procedure
- is responsible for identifying and resolving intraoperative nursing challenges.

Other intraoperative staff include cleaning staff and wardspersons to assist with patient direct and indirect care. The CH is a tertiary level teaching hospital. The level of theatre throughput can be affected by teaching and research responsibilities.

4.4.4. Post anaesthetic care: overview of work process

Anaesthetist

The anaesthetist is responsible for the patient transfer from the operating theatre to the PACU until the transfer to the recovery area is complete. They provide written and verbal instructions to the PACU nursing staff, based on pre-determined clinical criteria. They negotiate acceptance of the patient to the post perioperative destination and, where relevant, facilitate transport and clinical handover to the inpatient unit.

The anaesthetist is responsible for authorising the patient's discharge from the recovery area. Discharge responsibilities may be delegated to a specialist PACU nurse.

PACU Clinical Nurse Consultant (CNC)

A CNC is responsible for the PACU. There is a ratio of one nurse to each patient in Stage 1 who has not recovered protective reflexes or consciousness. The ratio is 1:2 for Stage 2 recovery.

EDSU/DSU CNC

A CNC is responsible for the EDSU/DSU/discharge lounge. There is a 1:4 nurse: patient ratio in EDSU/DSU.

4.4.5. Service leads

The medical and nursing clinical leads steer the frontline multidisciplinary team (see below). These leaders are responsible for developing the service framework and overseeing work processes, including:

- the coordination of integrated perioperative multidisciplinary care
- the identification, communication and management of perioperative patient risk
- the establishment of local guidelines
- efficient and effective use of perioperative facilities
- measurement, benchmarking and reporting of outcomes to support continuous quality improvement.

SPIRE development will generate a significant investment in theatre capacity and associated support services. Consideration could be given to the development of a dedicated clinical director and director of nursing of perioperative services in response to the growing scale of CH perioperative services.

4.4.6. Team members

The perioperative service is comprised of a frontline multidisciplinary team of surgeons, anaesthetists, nurses and other proceduralists, allied health clinicians and clerks (responsible for liaising and facilitating the work of key stakeholders who manage the patient's surgical/procedural journey). Other team members include:

- Technical staff, including scientists
- Wardspersons/theatre technician/clinical support persons
- Theatre cleaners.

Patient flows will be facilitated by wardspersons/theatre technicians/ clinical support persons. These roles undertake a variety of tasks including direct and inpatient care. Dedicated wardspersons to facilitate patient flow into OR are required for an expanded holding bay and for provisioning transport for patients to IPU post peri-operative journey completion.

Structures and processes of the frontline perioperative service are in place to facilitate their roles and responsibilities to patients and their support people.

At different stages of the patient's perioperative journey, different team members more closely provide patient centred care, depending on the individual patient's progress along the patient care pathway and workflow processes described in Section 3. Typical team member involvement along the care pathway are:

- Before and after hospital admission: primary healthcare providers
- Preoperatively: the anaesthetist, the medical officer with the surgical team and the nurse with the clerk who spend most time with the patient and their support people
- During the intraoperative phase the surgeon, the procedural anaesthetist and the operating theatre nursing team, technicians, clinical support personnel

- Post anaesthetically the patient is primarily cared for by the anaesthetist and nursing staff in the PACU
- During all phases of care members of the perioperative team, including the broader multidisciplinary team, can be called upon to contribute their expertise to patient centred care.

At all times in the revised MoC there should be real time access to updated documentation on each patient's aggregated health and social status, via there electronic medical record.

At all stages all members of the multidisciplinary team are responsible for checking that the patient information shows consistency e.g. the RFA, the consent form, correct site surgery, the ward notes and medications. They must also ensure patient identification and procedure matching requirements are fulfilled.

Details of staffing levels for perioperative services will be considered in development of the perioperative health service plan.

4.4.7. Roles and responsibilities

Table 1: Staff roles and responsibilities

Position Levels	Roles / Responsibilities
Preoperative care (immediate)	
Consultant/fellow/surgical registrar on call	Patient surgery assessment
Anaesthetic consultant/registrar	Patient anaesthetic assessment, preparation and optimisation
ORC	Management of the theatre utilisation
Nurse (Patient Flow Coordinator)	Procedure resource assessment
CNC, DoSA	Manager of the DoSA Unit
Nurses	Nursing support within DoSA, supply management
Intraoperative care	
Consultant surgeon(s)/fellow/registrar (Subspecialty as required by the procedure)	Surgical resourcing assessment; conduct of the procedure
Consultant anaesthetist(s)/fellow/registrar	Anaesthetic service provision pertaining to the procedure/specialty as required
Theatre nurses	Intraoperative nursing care
Technicians – various e.g. perfusionists, radiologists, scientists	Various, depending on the procedure and equipment used
Patient support staff	Wardspersons - patient movement, clinical support Ward assistants – clinical support
Theatre cleaner	Cleaning of theatre surfaces; waste classification and waste removal
Postoperative care	
Anaesthetist	Post-operative anaesthetic assessment and care as required
CNC, PACU	Postoperative nursing care
Nurses	Nursing support within PACU, EDSU, DSU, Discharge Lounge
Patient support staff	Patient direct and indirect care
Other	
Clerical/administration staff	Clerical support to perioperative processes, including patient clerical admissions, recording patient details and procedural processes. Clerical support for administrative functions

Position Levels	Roles / Responsibilities
Supply, physical resource RN, and loan service staff	Obtain required physical resources and specialist equipment and implants from interstate/overseas, as required

4.5. Workforce

Based on the description of pre, intra and post-operative staff and processes presented above, the CH perioperative staffing and work processes will be provided in the detailed Business Case.

Projected staff profiles require development to inform future stages of planning and will be subject to adjustment both in numbers and classification as better clarity is gained around service delivery models. Staff profiles are subject to review by the Workforce Policy and Planning unit.

Future workforce requirements will be determined using relevant College standards e.g. Australian College Operating Room Nursing (ACORN) Standards for Perioperative Nursing; 14th Edition.

4.6. Changes to workforce model

The continued evolution of procedural activity types will see ongoing changes to areas of perioperative care where there is a need for anaesthetic services. Clinical areas where there is a growing need for anaesthetic services are: Diagnostic Imaging; brachytherapy; gastroenterology; mental health unit for electroconvulsive therapy (ECT); pre-admission clinics; High Risk Anaesthetic Patient (HARP) clinic; the acute pain service; use of extracorporeal membrane oxygenation (ECMO); emergency surgery coordination; Cardiac Catheterisation Laboratories; Electrophysiological Laboratory; trauma; medical emergency team (MET) response; disaster management; and the PACU.

The changing mix of procedural activity will generate greater demand for interventional radiology within theatres and an associated requirement for extra anaesthetic staffing.

There is an emerging trend for anaesthetic provision outside the operating room environment. This will generate demand for additional anaesthetic and nursing staff and safe provision of care with medications and resources.

There is a requirement for 24/7 anaesthetic staffing to facilitate acute pain reviews and epidural insertion in labouring women. A registrar and on-call consultant will be available overnight.

4.7. Training, education and research

A major function of perioperative services is to support training, education and research within the perioperative services, to enable and support the delivery of a high quality service to both adults and children. Ongoing training is a major focus of perioperative services into the future.

Perioperative services will continue to train large numbers of junior medical officers each term, in addition to registrars training in streams of surgical and anaesthetic specialties. Facilities will be required to facilitate onsite nursing and medical training.

Programs include facilitation of clinical updates, undertaking of research, quality improvement and accreditation programmes, mandatory training for medical and nursing staff, Basic and Advanced Cardiac Life Support and training, in-service education and training programs for all staff, mock scenarios, competency assessments, undertaking of vivas for medical staff, orientation of new staff, conducting and supporting the Transition To Practice (New Graduate) program annually, and more.

To support education, training and research, perioperative services maintains a strong focus on education and research through structured positions and portfolios and contributes to teaching students from the Australian National University (ANU) Medical School, University of Canberra, Australian Catholic University, and the Charles Sturt University.

5. Service support elements

5.1. Essential equipment and technology

Bedside data entry

- Staff will need access to computers at each bedside, staff stations, in consultation, treatment and procedure rooms.
- Clinicians (nurse, allied health, doctor, etc.) should have a tablet device to enter relevant patient information, order tests, review results, send outpatient referrals, provide discharge emails (to patient and GP). This should include entering information in a real time medical record, that all involved in the patients care can see. These handheld devices should also be the communication method between staff within and outside the ED, and may be best used when plugged into wall mounts.
- Access is required to a mobile device platform (computer on wheels) for the purpose of data entry. One device will be used between two bed spaces.

Wi-Fi

- Provision for medically safe wireless networking throughout the clinical area
- Wi-Fi internet access will be provided throughout the Department (including lounge/wait areas) for use by staff and visitors unless contraindicated in specific areas for patient safety reasons.

Printer

Printers are required at the staff station in each stream, at reception/triage and in close proximity to the ambulance entrance. Space is required for equipment relating to electronic medication/pathology/wristband/programs.

Hearing loop

Hearing loop is to be available at triage/reception and scattered through the streams. Each stream will have at least one area with hearing loop installed; this will include interview, consult and meeting rooms.

Patient monitoring

- Patients should be issued with Electronic wristbands that provide real time tracking ability, can be scanned by clinician devices to confirm identity and provide alerts for allergies etc.
- Patient monitoring at bed spaces, and selected other spaces (e.g. procedure rooms) will be configured for monitoring at a central location with real time reporting.
- All resuscitation beds are to have haemodynamic monitoring and ventilation equipment.
- Central monitoring will feature in all streams.
- All monitoring modalities will be compatible with other critical care areas within the hospital including ICU/CCU and Interventional Suite.

Patient bedside entertainment in DoSA, EDSU/DSU/DPU

- Where appropriate and required, patient entertainment (i.e. TV) will be provided. Bedside data entry for clinical staff will be provided by an alternate system.
- Patient entertainment will be available in all paediatric areas.
- TV in lounge/wait areas providing access to entertainment and health information.

Telemedicine/Video conferencing

Selected clinical spaces will be configured to provide remote telemedicine, these facilities can be located in either the education room or a communal office area.

Communication

The most appropriate latest technology will be required for:

- communicating during systems fail or in disaster response
- audible communication in all clinical and non-clinical areas of perioperative services with access to points in multiple locations
- communication will be via real time direct smart phone/tablet device leading to minimal landline or overhead paging use.

5.2. Information, Communication and Technology (ICT)

Introduction of a dedicated Surgery Management and Anaesthesia Information System (SMAIS) will be introduced as part of the SPIRE development. This will increase overall workflow efficiency within perioperative services. SMAIS integrates inventory systems, scheduling, anaesthesia activity records, documentation, and patient data.

The SMAIS must link to patients' electronic medical record and ACT Patient Administration System (ACTPAS).

5.3. Environmental and supply services

Food services

Patients in recovery areas need access to light refreshments. Staff working in the sterile areas of operating rooms need access to appropriate food services and refreshments that are accessible 24 hours.

Draping

The range of operating room gowns/draping is extensive (e.g. surgical garments include scrub suits, surgical gowns, and uniforms), sheets, large storage areas are required to support access to non-sterile supplies, especially as surgery services function 24 hours per day. Bed linen is a key consumable.

Stores

A range of store room areas are required, including for: sterilisation services, surgical garments/draping's, anaesthetics, dirty linen, cleaning stores, sterile medical supplies, and chemical stores.

Business support services

Easy access to appropriately qualified translators. Dedicated cleaners will be allocated to perioperative services.

Administrative support staff

Clerical staff will be located in Clerical Admissions. Clerical staff will require access to various ICT modalities including facsimile. In addition clerical staff will be distributed throughout the perioperative services.

Volunteers

Not applicable

Waste Management

The range of waste materials that require standardised processes for categorisation is extensive. Waste should be categorised into three groups: reducing, reusing and recycling. This categorisation should apply to used medical supplies, wrappings, devices, waste pharmaceuticals, blood and other fluids, tissue, contaminated gowns and drapes, cardboard and other paper, glass, plastic, and used disinfectants.

5.4. Core services

5.4.1. Anaesthetics and Perioperative Medicine

The Department of Anaesthesia and Perioperative Medicine provides a 24 hour service encompassing pre-anaesthesia assessment, intraoperative anaesthesia, post operative anaesthetic support, anaesthesia services to units outside of the operating suites, and tertiary trauma care. The department also supports and manages the Acute Pain Management Unit.

ACT Health Anaesthetic and Perioperative Medicine services are providing anaesthetic services for all elective and emergency surgery at the Canberra Hospital and Calvary Public Hospital Bruce. Anaesthetic services at the Canberra Hospital are provided in many locations outside the operating suites including Diagnostic Imaging; brachytherapy; gastroenterology; mental health unit for electroconvulsive therapy (ECT); pre-admission clinics; High Risk Anaesthetic Patient (HARP) clinic; the acute pain service; use of extracorporeal membrane oxygenation (ECMO); emergency surgery coordination; Cardiac Catheterisation Laboratories; Electrophysiological Laboratory; trauma; medical emergency team (MET) response; disaster management; and the PACU.

5.4.2. Diagnostic Imaging

The use of Diagnostic imaging in the theatres is increasing. This is in part due to the trend towards less invasive procedures. Provision for a range of equipment is needed, including:

- mobile imaging such as image intensifiers, general x-ray, ultrasound, video laryngoscopes for tracheal intubation, stereotactic equipment and in some instances, mobile CT
- fixed imaging such as C-arms, angiography, CT, ultrasound and – in limited circumstances - MRI
- mobile equipment needs storage in a dedicated location when not in use. New technology, such as mobile CTs is very large, requiring extensive space
- in hybrid environments, the fixed imaging unit ideally should have a location away from the sterile field. This makes the room more flexible when the technology is not in use
- additional radiographer full time equivalent (FTE) is needed to manage the increased imaging requirement for emergency patients.

5.4.3. Pathology

A range of pathology related activities are needed to support the operating rooms, including:

- point of care testing
- frozen sections whereby a fresh tissue specimen is taken in the operating room, reviewed by an anatomical pathologist and then results provided to the surgeon within a 20 minute timeframe. The results are relayed from the pathologist back to the surgeon, so the surgical procedure can continue
- other tissue specimens that are not time critical are placed in a fixation agent and sent to the pathology department for preparation and examination. Most samples are transported in pre-filled specimen containers. Larger specimens require decanting and a suitable exhaust ventilation system is needed to manage fumes

- Pathology and blood specimens are currently transported from operating rooms to pathology via vacuum tubes.

5.4.4. Pharmacy

Central storage for medications is needed within the perioperative suite, including provision for appropriately stored S4D and S8 drugs in a locked safe. Remaining medications to be accommodated in accordance to legislation.

Decentralised storage is needed to support the DoSA unit and PACU, which will experience increased patient flows as a result of projected increases in patient surgical activity and the SPIRE development.

Each operating room needs proximate access to a drug safe in either the anaesthetic or operating room. Ideally, refrigerated medications will be centrally stored within the operating suite so they can be accessed as required with cold chain monitoring to a central assessment point where temperature excursions are monitored, identified and mitigated.

An automatic pharmaceutical ordering system is required to improve efficiencies and to support the 'just in time' delivery of medications to the patient.

5.4.5. Bone bank and other tissue

An area to receive and store allogenic bone and other tissues (e.g. skin grafts) is required to support surgical procedures.

5.4.6. Clinical engineering

A room for equipment testing and repair is required because of the large number of theatres in SPIRE and Building 12. This room will be accessed by clinical engineering staff who require benches for equipment testing. Space is needed for storage of equipment and consumables. This includes space for medical gases and a range of perioperative equipment, including back-up anaesthetic machines.

Hybrid/complex/robotic theatres, because of their extensive equipment use, require additional space for a range of technical support staff.

5.4.7. SSD

Rinsing and sterilising of surgical equipment occurs in the SSD. The rinsing process removes organic material of instruments immediately after surgery by rinsing instruments under warm running water, prior to sterilisation. Sterilisation is currently undertaken on site to support a significant proportion of Building 12 theatre needs for sterilised tools and equipment.

The pre-rinse and sterilising functions within the operating theatre suite are to be retained in the redevelopment. It is proposed this function be renamed from Pre Rinse Sterilising Unit (PRSU) to the SSD, to reflect the extensive roles it undertakes. The SSD must have the capacity to deliver decontamination of used instruments together with capacity for steam, ethylene oxide and dry heat sterilisation.

Dedicated space is needed for undertaking checking, packing and storage of sterilised items. SSD in the future will be significantly automated.

5.4.8. Security

Detainee patients may present, in conjunction with two correctional officers. If a patient requires resuscitation or continuous physiologic monitoring, they will be managed in the most clinically appropriate area. Otherwise patients will be managed in single rooms or isolation rooms where possible. The rooms should be large enough to enable the patient to be accompanied by two correctional officers, should be located to enable ease of supervision and provide minimal

disturbance to other patients, protect the privacy and dignity of the patient and consider paths of access to and from the rooms.

6. Benefits (service innovation and efficiency)

Overall theatre capacity will be increased, along with pre and post-operative patient holding and recovery areas.

Hybrid/complex/robotic theatres will potentially lead to improvements in the patient experience, a reduced length of stay in hospital and peri-operative hospital stays. Fewer procedures will require general anaesthesia during patient treatment; some procedures will only require sedation – these procedures should be considered for completion outside the major theatre environment.

Traditional boundaries of the surgical space will blur. Endoscopic and endovascular procedures will replace certain surgery types. Many currently performed surgical procedures will only require an ambulatory setting, increasing demand for ambulatory/overnight facilities.

6.1. Qualitative benefits

Qualitative benefits of the SPIRE development include:

- increased access to single patient rooms with enhanced privacy and increased patient safety, improving Infection Prevention and Control (IPC) outcomes
- reduced waiting periods for both elective and emergency surgery because of increased perioperative capacity
- fit for purpose day surgery areas will streamline the admission process for day surgery, paediatric and miscarrying women provide greater privacy and general comfort levels e.g. access to more toilets
- an enhanced DoSA will enable separation of adult and paediatric patients, gynaecological miscarrying women from pregnant/surgically assisted birthing women
- additional theatre capacity will enable more theatres to have a specialised, streamlining theatre set-up, intraoperative procedural efficiency, access to the required equipment and more efficient post-operative cleaning e.g. dedicated theatres for emergency vascular procedures, digital subtraction angiograms
- greater staff satisfaction associated with improved working environment amenity
- increased ability to attract and retain quality multidisciplinary staff because of the enhanced facilities.

6.2. Quantitative benefits

Quantitative benefits of the SPIRE development Building 12 refurbishment include:

- greater surgical throughput due to greater capacity and streamlined patient flows to different theatre types (and supported by additional post procedural bed capacity), which will also reduce the number of procedure postponements
- enhanced support amenities
- reduced length of stay due to use of less invasive surgical techniques enabled by hybrid theatres (this may be offset by greater willingness to undertake surgical interventions for higher risk patients)
- reduced hospital acquired infections (and associated hospital readmissions) because of the greater number single rooms and improved hospital layout, enabling better separation of sterile and non-sterile areas in the perioperative suite
- reduced surgical waiting times

- improved perioperative patient flow
- improved preoperative opportunities to optimise surgical, anaesthetic and perioperative nursing care.

7. Monitoring and evaluation

7.1. Nationally reportable KPIs

7.1.1. Australian Council Healthcare Standards (ACHS) Clinical Indicator Program

Monitoring and evaluation will occur via the ACHS Clinical Indicator Program on which the quantitative and qualitative indicators are based. See: https://www.achs.org.au/programs-services/clinical-indicator-program/

7.1.2. Australian Government; Australian Institute of Health and Welfare; Elective surgery waiting times

- numbers of additions to, and removals from, public hospital elective surgery waiting lists
- admissions from public hospital elective surgery waiting lists, by public hospital peer group, states and territories
- admissions from public hospital elective surgery waiting lists, by surgical specialty, states and territories.
- admissions from public hospital elective surgery waiting lists, by intended surgical procedure, states and territories
- waiting time statistics for admissions from public hospital elective surgery waiting lists, states and territories
- waiting time statistics for admissions from public hospital elective surgery waiting lists, by intended surgical procedure, states and territories.
- admissions from public hospital elective surgery waiting lists, by clinical urgency category, states and territories
- unplanned readmissions reported as following admission (a) from an elective surgery waiting list, states and territories.3

7.1.3. Australian Government Productivity Commission; Report on Government Services

- waiting times for elective surgery in public hospitals, by State and Territory, by procedure and hospital peer group (days)
- waiting times for elective surgery in public hospitals, by State and Territory, by remoteness area (days)
- waiting times for elective surgery in public hospitals, by State and Territory, by remoteness area (days)
- waiting times for elective surgery in public hospitals, by State and Territory, by SEIFA IRSD quintiles (days)
- classification of elective surgery patients, by clinical urgency category (per cent)
- ACT elective surgery waiting times, by clinical urgency category, public hospitals
- separations with an adverse event, public hospitals
- ACT selected sentinel events (number).

[3] Australian Government; Australian Institute of Health and Welfare; Elective surgery waiting times

8. Appendix

8.1. EDSU Model of Care Admission Criteria

The Extended Day Surgery Unit (EDSU) is an open surgical unit catering for Day Surgery and Extended Day Surgery patients. Patients who are identified as requiring an overnight stay, which does not exceed 23 hours, can be accommodated in EDSU. EDSU is a 12 bed unit with the capacity to flex up to 14 if required. Patients can be booked onto the Elective or Emergency Theatre lists.

EDSU is managed and funded by the Division of Surgery and Oral Health.

EXCLUSION CRITERIA	RATIONALE
1. Length of Stay(LOS) exceeding a 23 hour stay	To facilitate effective patient flow through the peri-operative unit, patients booked into EDSU should require only 1 night post operative stay.
2. Patient's Age (<15 years)	Patients less than 15 years old should be booked to the adolescent unit in WYC. The parents/carers may request to stay overnight with their child.
3. Non surgical patients 4. -with the exception of Medical Imaging patients.(2)	Patients not requiring a surgical procedure should be admitted into an appropriate unit to facilitate optimum patient care. Exception: 2 x Post procedural Medical imaging patients requiring an overnight stay can be allocated to EDSU as per agreement between SaOH and MI.
5. Infectious patients	As per the infection control policy; Patients with an MRO require single room accommodation with MRO precautions.
6. Patients with co-morbidities affecting their ADL's	Patient's with a complex medical history which affects their daily living activities require additional support and post operative care. **Assessment and Consideration** into: • Mobility/Falls risk/Lifter equipment • Cognition/Delirium/Dementia • Vision • Respiratory • Cardiac • Complex wounds/wound management regime • Chronic Pain • Swallowing issues • Pressure Injury/Skin integrity May affect the suitability of the patient to be admitted into EDSU
7. Major pre and post operative patients	Major pre and post operative care require additional clinical support and resources which cannot be accommodated within the environment and required functionality of EDSU.
8. Pre op patient's with a lower limb fracture	Lower limb fractures have a tendency to swell prior to theatre resulting in delayed surgery time and extended stay in EDSU. (Can be reviewed on an individual basis for patient anticipating surgery that day)
9. Patient's under guard	Patients requiring additional security cannot be accommodated in EDSU due to the open environment and decreased ability to provide privacy. The confined area of the

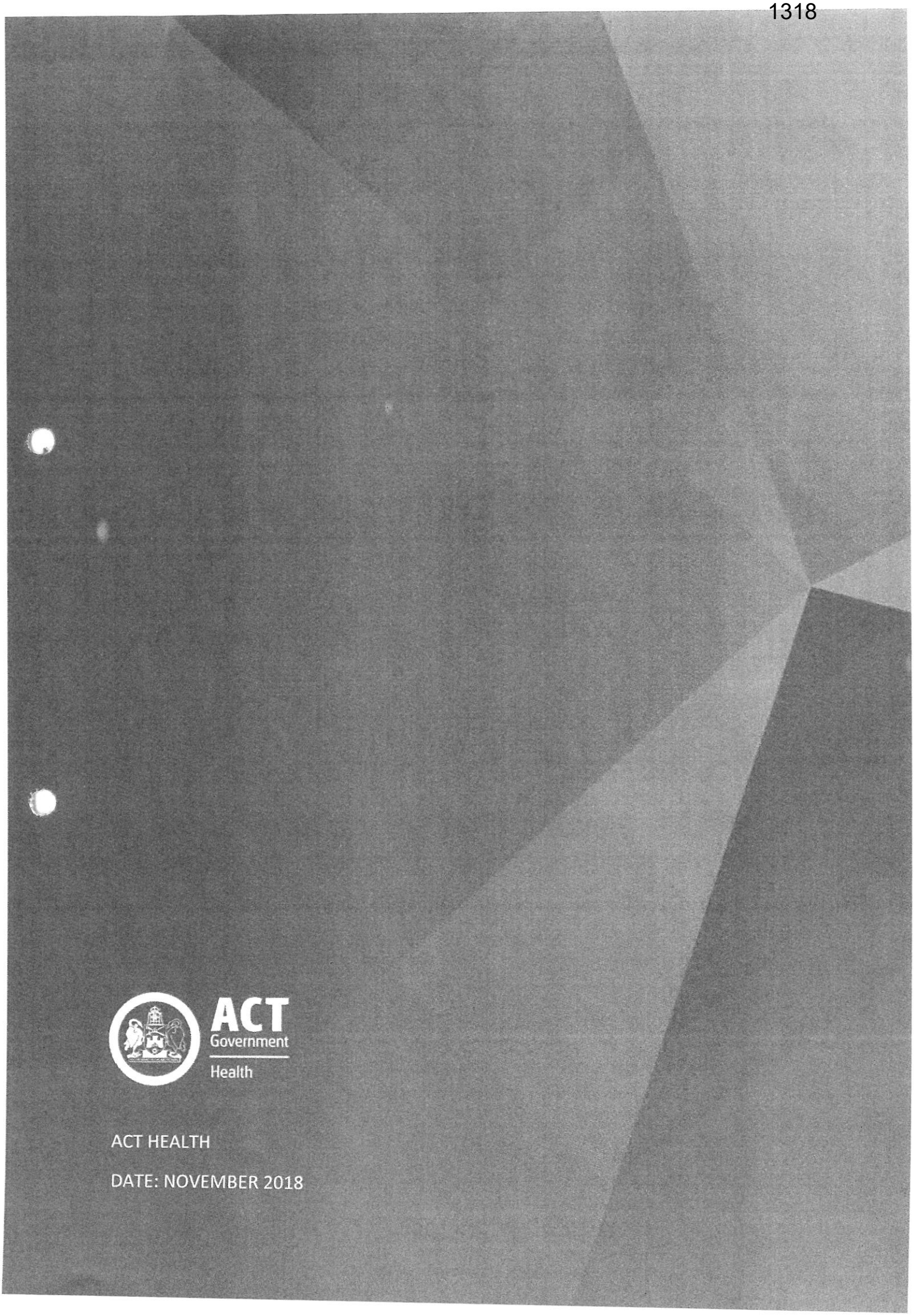
	bed spaces in EDSU cannot accommodate an additional person to remain overnight.
10. Patient's with Mental Health issues	Mental health clients can be unpredictable in their behaviours. The open environment of EDSU can be intimidating and distressing which can exacerbate their existing condition.
11. Patient's with an intellectual disability	Patients with an intellectual disability can be unpredictable in their behaviours. The open environment of EDSU can be intimidating and distressing which can exacerbate their condition. They will often require a known carer to assist them throughout their stay.
12. Bariatric patients >140kgs	Bariatric patients cannot be accommodated in EDSU due to their required specialised equipment. Specialised equipment such as lifters, bariatric commodes and wheelchairs are not available in EDSU. The trolleys and toilets in EDSU do not have the weight tolerance to accommodate bariatric patients. Bariatric patients also have contributing health issues and co-morbidities, which increase their LOS.
13. Gynaecological patients	Patients having gynaecological procedures requiring an overnight stay should be booked into WYC to receive the required specialised post operative care.
14. Patients requiring a carer to stay, 15. (or 'special')	Patients requiring an additional care person cannot be accommodated in EDSU due to the open environment and decreased ability to provide privacy. The confined area of the bed spaces in EDSU cannot accommodate an additional person to remain overnight.

9. Abbreviations

Abbreviation	Description
ACHS	Australian Council Healthcare Standards
ACORN	Australian College Operating Room Nursing
ACT	Australian Capital Territory
ACTPAS	ACT Patient Administration System
ADON	Assistant Director of Nursing
ANU	Australian National University
ANZCA	Australian and New Zealand College of Anaesthetics
CCU	Coronary Care Unit
CH	Canberra Hospital
CHWC	Centenary Hospital for Women and Children
CNC	Clinical Nurse Consultant
CPHB	Calvary Public Hospital Bruce
CT	Computer Tomography
DoSA	Day of Surgery Admission
DPU	Discharge Planning Unit
DRG	Diagnosis Related Group
DSU	Day Surgery Unit
ECMO	Extracorporeal Membrane Oxygenation
ECT	Electroconvulsive Therapy
ED	Emergency Department
EDSU	Extended Day Surgery Unit
ENT	Ear, Nose and Throat
EVAR	Endovascular Aneurysm Repair
FTE	Full Time Equivalent
GESA	Gastroenterology Society of Australia
GP	General Practitioner
HARP	High Anaesthetic Risk Patient
HMA	Healthcare Management Advisors
HSPU	Health Service Planning Unit
ICU	Intensive Care Unit
IPC	Infection Prevention Control
MET	Medical Emergency Team
MoC	Model of Care
MRI	Magnetic Resonance Imaging
MRO	Multi-Resistant Organism
NSW	New South Wales
ORC	Operating Room Coordinator
PACU	Post Anaesthetic Care Unit
PIMS	Perioperative Information Management System
PRSU	Pre Rinse Sterilising Unit
RACS	Royal Australian College of Surgeons
RFA	Request for Admission
SET	Surgical Education and Training
SMAIS	Surgery Management and Anaesthetic Information System
SPIRE	Surgical Procedures Interventional Radiology and Emergency
SRG	Service Related Group
SSD	Sterilising Services Department
TWSS	Territory Wide Surgical Services

10. MoC development participants

Participants in the development of MoC	
Position	**Name**
A/g Executive Director Surgery and Oral Health (SAOH)	Daniel Wood
Assistant Director of Nursing (ADON) Perioperative	Kerri Reeves
A/g Director of Nursing (DON) SAOH	Cathy Burns
Director of Anaesthesia	Prof Thomas Brussel
Clinical Director of Surgery	Dr Frank Piscioneri
Perioperative Resource Manager	Kate Scott
Clinical Director of Women, Youth and Children	Dr Boon Lim
Paediatric surgeon	Dr Rajay Rampersad
A/g ADON Neonatology/Paediatrics	Donna Cleary
Perioperative Patient Flow Coordinator	Felicia Cooper
ADON Surgical Bookings and Pre-Admission	Nicole Larkin
Clinical Nurse Consultant (CNC) EDSU/DSU	Deanne Cole
A/g CNC PACU	Emma Riley
Perioperative Patient Flow Coordinator	Michelle Wright
Perioperative Nurse Manager	Margaret Lepper



ACT Government
Health

ACT HEALTH

DATE: NOVEMBER 2018

Lowes, Shannon (Health)

From: Culver, Jakob (Health)
Sent: Tuesday, 5 February 2019 8:15 AM
To: Evans, Kate (Health); JasonSmith, Rhona (Health); Kinghorne, Sally-Anne (Health)
Subject: RE: SPIRE HPUs Review and Discussion [SEC=UNCLASSIFIED]
Attachments: 20190205072116414.pdf

Hi all

This is the SoA that was informing the original scope.

Thanks
Jake

---Original Appointment-----
From: Culver, Jakob (Health)
Sent: Monday, 4 February 2019 6:41 PM
To: Culver, Jakob (Health); Evans, Kate (Health); JasonSmith, Rhona (Health); Kinghorne, Sally-Anne (Health); Burch, Brad (Health)
Subject: SPIRE HPUs Review and Discussion
When: Tuesday, 5 February 2019 9:00 AM-11:00 AM (UTC+10:00) Canberra, Melbourne, Sydney.
Where: ACTH-Bowes-Conf Room 4.05 (seats 12)

Pond, Aleks (Health)

From:	Culver, Jakob (Health)
Sent:	Tuesday, 5 February 2019 10:56 AM
To:	Evans, Kate (Health)
Subject:	FW: 20181011 Master SPIRE SOA.pdf [SEC=UNCLASSIFIED]
Attachments:	20181011 Master SPIRE SOA.pdf
Categories:	Actioned

From: Morgan, Sam (Health)
Sent: Thursday, 18 October 2018 5:04 PM
To: Culver, Jakob (Health) <Jakob.J.Culver@act.gov.au>
Cc: Bartholomew, Carolyn (Health) <Carolyn.Bartholomew@act.gov.au>; Burch, Brad (Health) <Brad.Burch@act.gov.au>
Subject: 20181011 Master SPIRE SOA.pdf [SEC=UNCLASSIFIED]

Jake

Attached is the revised summary with the Plant and Travel separated as discussed.

Cheers

Attwood, Courtney (Health)

From: Catanzariti, John
Sent: Tuesday, 5 February 2019 10:51 AM
To: Burch, Brad (Health)
Cc: Culver, Jakob (Health); Esau, Lloyd; Gray, Sophie; Busic, Babita
Subject: FW: SPIRE information request [SEC=UNCLASSIFIED]
Attachments: Working Paper_Information Request_SPIRE Business Case_as at 040219.docx

Brad,

EY have developed an information/documentation tracking schedule to communicate and track the data they require to inform the detailed business case. Could you please distributes to your team as necessary.

Regards,
John

From: [redacted]
Sent: Monday, 4 February 2019 6:53 PM
To: Catanzariti, John <John.Catanzariti@act.gov.au>
Cc: [redacted]
Subject: SPIRE information request

Hi John

As flagged last week, we have attached an information request (working document as at this week intended to be iterative throughout the process) that outlines additional documentation to assist with the development of the Business Case.

For reference, the request outlines the information already received by Jakob a couple of weeks ago. We will also be going over this request when we meet with Brad and Jakob this week on needs analysis and economic approach and will update following that as required.

Thanks
[redacted]

[redacted] Manager | Infrastructure Advisory

Ernst & Young Pty Limited
Level 11, 121 Marcus Clarke St, Canberra ACT 2600, Australia
[redacted]
Website: http://www.ey.com

Attwood, Courtney (Health)

From: Burch, Brad (Health)
Sent: Tuesday, 5 February 2019 11:43 AM
To: Doran, Karen (Health)
Subject: FW: SPIRE Program Director [SEC=UNCLASSIFIED]

UNCLASSIFIED

Hi Karen – FYI, we have a good field of people showing interest in the role.

Thanks and regards

Brad Burch | Executive Branch Manager, Strategic Infrastructure
Strategic Infrastructure and Procurement
Corporate Services
☎ (02) 5124 9719 or [redacted] brad.burch@act.gov.au
ACT Government | ACT Health

From: Catanzariti, John
Sent: Tuesday, 5 February 2019 11:33 AM
To: Burch, Brad (Health) <Brad.Burch@act.gov.au>
Cc: Gray, Sophie <Sophie.Gray@act.gov.au>; Esau, Lloyd <Lloyd.Esau@act.gov.au>; Culver, Jakob (Health) <Jakob.J.Culver@act.gov.au>; Busic, Babita <Babita.Busic@act.gov.au>
Subject: RE: SPIRE Program Director [SEC=UNCLASSIFIED]

Brad,

Below is an updated list of companies who have the RFT documents:

1. [redacted]
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.
13.
14.
15.
16.

Regards,
John

From: Catanzariti, John
Sent: Wednesday, 30 January 2019 7:45 AM
To: Burch, Brad (Health) <Brad.Burch@act.gov.au>
Cc: Gray, Sophie <Sophie.Gray@act.gov.au>; Esau, Lloyd <Lloyd.Esau@act.gov.au>; Culver, Jakob (Health) <Jakob.J.Culver@act.gov.au>; Busic, Babita <Babita.Busic@act.gov.au>
Subject: SPIRE Program Director [SEC=UNCLASSIFIED]

Brad,

Just as an update, executed Deeds of Confidentiality have been submitted by the following companies and RFT documents for the Program Director have been released to them:

1. [redacted]
2.
3.
4.
5.
6.

Regards,
John

Attwood, Courtney (Health)

From: Culver, Jakob (Health)
Sent: Tuesday, 5 February 2019 3:52 PM
To: Burch, Brad (Health)
Subject: 190205 Moderation for SPIRE - DRAFT v0.2.xlsx [SEC=UNCLASSIFIED]
Attachments: 190205 Moderation for SPIRE - DRAFT v0.2.xlsx

Brad

As discussed, please find attached calculations in regards to SPIRE. For provision to STH for validation, as will need review on their end and outline in a detailed structured cost plan.

Thanks
Jakob

Jakob J Culver

Commercial Advisor | Strategic Infrastructure, Corporate Services | ACT Health Directorate
P: +61 2 5124 9707 | M: [redacted] | E: Jakob.J.Culver@act.gov.au | A: 2-6 Bowes Street PHILLIP ACT 2606

Pond, Aleks (Health)

From: Kinghorne, Sally-Anne (Health)
Sent: Tuesday, 5 February 2019 5:06 PM
To: Burch, Brad (Health); Culver, Jakob (Health)
Cc: JasonSmith, Rhona (Health); Evans, Kate (Health)
Subject: AHFG's [SEC=UNCLASSIFIED]

Categories: Actioned

I have checked the dates for updates of the Aus HFG's.
New OR's have been 55m2 since 2010. They increased to 60m2, 5 July 2018 – and I know that Rhona scoped the HPU Brief to be 60m2 because I had forwarded her the (at that time) yet to be fully endorsed by all the jurisdictions updated HPU 520 Operating Theatres and we thought it prudent to scope them to the new guideline.
Circulation. We generally use an average across clinical spaces of 32% but in fact the HFG's apply different % circulation rates for different clinical areas/departments dependent on their layout/configuration and use. In September 2018 they issued the latest rates which were not much different to the 2016 and 2010. Some went up and some went down. In general the more open plan the area is and the less clinical it is the less % applied for circulation. So staff amenities are 10%, education and training 15% and an ED is 40 -45%. Most of the acute clinical departments are between 32-40%. Interestingly Sterilising is only 16% - because it is basically 3 single large, open spaces!
T&E is calculated by the height of the building that the service is located in. 1-2 Storeys 23%, 3-4 storeys 28%, 5-6 storeys 33%, 6 plus (anything in Building 1) 36%.

Circulation is applied to all FECA (fully enclosed covered area). It is not applied to courtyard/outdoor space. Circulation is however applied to all UCA (unenclosed covered area).

T&E is applied to all FECA with circulation added and UCA with circulation added. It is not applied to courtyard/outdoor space.

I hope this is useful for our discussion/planning.
sak

Sally-anne Kinghorne
Senior Health Facility Planner
ACT Health : 2-6 Bowes Street : Woden
PO Box 11 Woden 2606
E: sally-anne.kinghorne@act.gov.au
P: 02 51249747

Pond, Aleks (Health)

From: Slater, Amanda (Health)
Sent: Wednesday, 6 February 2019 9:16 AM
To: Evans, Kate (Health)
Subject: FW: MOC, HPU, SoA [SEC=UNCLASSIFIED]

Categories: Actioned

UNCLASSIFIED

FYI

Amanda Slater
enior Project Officer
Territory Wide Health Service Planning
ACT Health Directorate
Level 4, 4 Bowes St, Woden, ACT 2601
Ph: (02)51249671 Email: Amanda.Slater@act.gov.au

ACT Government | ACT Health

PLEASE CONSIDER THE ENVIRONMENT BEFORE PRINTING THIS EMAIL

From: Slater, Amanda (Health)
Sent: Friday, 4 May 2018 8:41 AM
To: Hollis, Gregory (Health) <Gregory.Hollis@act.gov.au>
Subject: RE: MOC, HPU, SoA [SEC=UNCLASSIFIED]

Thank you Greg.
Awesome yourself! Once again it has been a pleasure working with you. In the next phase I believe Kate will be progressing with ED – but if there is anything I can do for you, or help in any way, please let me know.

Thanks
Amanda

Amanda Slater

Senior Project Officer
Ph: 02 62076599
E: amanda.slater@act.gov.au

Health Services Planning Unit I ACT Health I ACT Government
Level 5, Building 2-6 Bowes St, Woden, ACT 2601

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ACT Government Health

CANBERRA HOSPITAL AND HEALTH SERVICES

From: Hollis, Gregory (Health)
Sent: Thursday, 3 May 2018 6:53 PM
To: Slater, Amanda (Health) <Amanda.Slater@act.gov.au>; Boyd, Narelle (Health) <Narelle.Boyd@act.gov.au>; Slater, Nicole (Health) <Nicole.Slater@act.gov.au>
Subject: MOC, HPU, SoA [SEC=UNCLASSIFIED]

Comments:

Thanks Amanda.
Getting very close to done I reckon. I've attached updated with my inserted/tracked changes as documented below (very few).

MOC (attached):
Amanda – I see what you mean about the change in layout(!). . . anyway:
In comparing Narelle's version and this one, it's almost perfect.
I've made almost no changes:

1. Title page – CHHS
2. Issues list – have inserted Narelle's comment re costing there
3. 2-3 other edits – just formatting.

HPU
Great. Awesome work on the Functional relationships diagram amendment.
Title page - Inserted CHHS to be consistent with Narelle's change to the MOC title.
Page 12 – changed U/S from 2 to 3 in line with agreements with Medical Imaging today.
Page 17 – changed "registrar" to "medical officer" for the WAC, as I don't think they're completely sorted (unless Amanda – if you have had
Page 26/27 – very minor tracked changes
I remain concerned as to how MHSSU plan to contain patients who become agitated, but I guess that's their problem (as long as they don't make it ours!)

SoA
Changed 2 resus bays from 35 to 40m2 as discussed with Amanda (line 35), and added comments
Changed U/S from 2 to 3 (line 354) in line with discussions with Amanda and Mark Duggan
Added OPG comment in Line 351
Removed "Can also be used for other patients." From the comments on line 275, as only MH patients will be in MHSSU.
I remain concerned as to how MHSSU plan to contain patients who become agitated, but I guess that's their problem (as long as they don't make it ours!)

Greg

Greg Hollis
Clinical Director, Emergency Medicine,

Senior Specialist, Capital Region Retrieval Service
Canberra Hospital

Phone: 02 62443309
E-mail: gregory.hollis@act.gov.au

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Pond, Aleks (Health)

From: Evans, Kate (Health)
Sent: Wednesday, 6 February 2019 10:31 AM
To: Burch, Brad (Health)
Cc: Culver, Jakob (Health); JasonSmith, Rhona (Health)
Subject: ED HPU v0.11
Attachments: 20190205 Emergency Department HPU v0.11.docx

UNCLASSIFIED Sensitive

Good Morning Brad,

As per our conversation this morning, please find attached the ED HPU, version 0.11. The SoA embedded in the document is consistent with the Master SoA.

Kind regards

Kathleen Evans | Clinical Liaison SPIRE | Senior Project Officer
Phone: (02) 5124 9668 Email: kate.evans@act.gov.au
Strategic Infrastructure | Strategic Infrastructure & Procurement | ACT Health Directorate | ACT Government
2-6 Bowes Street, Phillip, ACT 2606 | GPO Box 825, Canberra, ACT 2601 | www.health.act.gov.au

ACT Government | ACT Health

HEALTH PLANNING UNIT BRIEF

EMERGENCY DEPARTMENT CHHS

ACT HEALTH

DATE: FEBRUARY 2019

Approvals

Name	Position	Signature	Date
Narelle Boyd	Executive Director, Critical Care Division		
	Deputy Director General, Canberra Hospital and Health Services		
	For Information - Executive Sponsor, Chief of Clinical Operations, ACT Health		

Outstanding Issues

Subject	Issue
ED total Bed Numbers	Awaiting Hardes data and consultation with ED to validate or revise total ED bed numbers
Fast track	Increase scope from 13 to 20 beds. Awaiting Hardes data prior to scope change
Resus room size	AHFG indicate 25m^2. 2 x 40m^2 requested. Strong validation based on national benchmarking. Included in SoA
Paediatric EMU	Further validation of bed numbers required
Governance	The Mental Health Short Stay Unit (MHSSU), Clinical Forensic Medical Service and Women's Assessment Centre are to be co-located with ED but are not under the governance of the ED. The operational arrangements are TBC.
Women's Assessment Centre	1. Functional relationship to ED 2. Women's, Youth and Children's Division yet to advise on Workforce
CT Scan	CT usage data and trends required to validate CT scanner numbers

Document Version History

Rev No	Issue Date	Issued By	Issued To	Reason for Issue
Draft v0.1	23/3/2018	Capital Insight	ACT Health	Draft for review
Draft v0.2	27/3/2018	ACT Health	Capital Insight	Client feedback prior to User Group
Draft v0.3	30/3/2018	Capital Insight	ACT Health	Updated for Client and User Group Feedback
Draft v0.4	6/4/2018	Capital Insight	ACT Health	Updated from User Group 4 April 2018
Draft v0.5	10/4/2018	ED Users	Capital Insight	User Group feedback on v0.4
Draft 0.6	15/4/2018	Capital Insight	ACT Health	Updated for Client and User Group Feedback
Draft v0.7	19/4/2018	ACT Health	Capital Insight	Client feedback
Draft v0.8	21/4/2018	Capital Insight	ACT Health	Updated for Client and User Group feedback
Draft v0.9	8/10/2018	HSPU	BHSP	For Proof of Concept
Draft v0.10	15/11/2018	HSPU	BHSP	For Proof of Concept – updated Circulation
Draft v0.11	6/2/2019	Strategic Infrastructure	STH	For Proof of Concept

Table of Contents

1. Introduction

In September 2016, ACT Government announced the construction of a Surgical Procedures, Interventional Radiology and Emergency (SPIRE) Centre to be built at Canberra Hospital (CH). This infrastructure project is part of the ACT Government's 10-Year Health Plan and is in response to the increasing demand on ACT hospitals and health services across the territory.

The ACT Government 2017 Budget provided funding for the first stages of the SPIRE project which includes planning and the commencement of design. A Health Planning Unit (HPU) Brief is a planning document that defines the activities and functions to be undertaken within a unit/ service. This HPU Brief has been developed as part of the SPIRE planning component and articulates the operational requirements, functionalities and relationships for which the prospective design consultant can develop a suitable design response.

ACT Health engaged Capital Insight Pty Ltd to undertake the HPU development in collaboration with staff from Health Services Redesign and Building Health Service's Program. Development of this document occurred between April and May 2018 with internal ACT Health stakeholders who have been identified within this document. Outstanding issues that require resolution over the next design phases are noted at the beginning of this document.

This Health Planning Unit (HPU) Brief defines the activities and functions to be undertaken in the ED and co-located short stay inpatient units. It is not the role of the HPU Brief to design the space, but rather to articulate the operational requirements, functionalities and relationships for which the architect can develop a suitable design response.

2. Description of the service

The Canberra Hospital Emergency Department (ED) is a Level 4 Emergency Department as defined by Australasian College for Emergency Medicine (ACEM), characterised as a large, multifunctional tertiary or major referral hospital with capabilities for managing a wide range of complex conditions, and have a significant level of sub-specialty services. The ACEM Emergency Department Guidelines are intended to support clinicians in the design process and inform Government, health planners, architects and designers in the planning phase.

The CH Emergency Department has department designation according to the Role Delineation guidelines as a level 6 Tertiary Service and Trauma Centre, with a Territory-wide and regional role. The level 6 role delineation provides a framework that describes the minimum support services, workforce and other requirements for clinical services to be delivered safely. It delineates the level of clinical services, not hospitals or health facilities as a whole and informs strategic service, clinical and capital planning. It provides timely, accessible and appropriate health services to people with acute illness or injury.

The ED will receive, triage, stabilise and provide acute health care to patients. This includes patients requiring resuscitation and those with emergent, urgent, semi-urgent and less-urgent conditions. The department includes a number of co-located short stay inpatient units as identified above, for patients that require additional time for assessment and treatment, but do not require an acute ED bed. The ED also requires the capacity to deal with mass casualty and disaster situations.

3. Scope of service

ED has a mixed cohort of elderly, adult and paediatric patients who present with a wide range of conditions of varying urgency and complexity. The unit provides care for adults and children in designated areas. There are particular patient types seen in the Emergency Department that may

have specific psychosocial and treatment needs requiring consideration of treatment spaces to support these needs.

Presentation occurs via ambulant entry, ambulance or police, helicopter and correctional services. The patient presentations types include: major trauma; medical and surgical – including neonatal, paediatric, adult and elderly; acute, complex elderly patients; patients with physical and intellectual disabilities; forensic presentations including victims of child abuse, domestic violence, or sexual assault; psychosocial including mental health; infectious diseases and immunocompromised; custodial patients, patients affected by chemical, biological or radiological contaminants.

A child requiring a multi organ Paediatric ICU admission and individuals with a major burn, head injury or spinal injury may bypass the CH and be transported to an appropriate facility for definitive care. However, these patients can present and require initial management prior to transfer.

A major function of the ED is to support education, training and research within the ED, to enable and support the delivery of a high quality service to both adults and children. Ongoing training of this team is a major focus of the ED into the future. Facilities for training and education will be provided within the Department to facilitate easy access by staff. These facilities will also be used to provide venues for internal meetings and family conferences.

In 2018, it is estimated that ED will manage 89,000 presentations, with strong growth projected into the future (noting that from 2008 to 2018 CH yearly average growth in ED presentations was 5.7%). While the caseload may be predictable, changing levels of demand must be anticipated.

The following table outlines the scope of ED treatment spaces required to 2026/27within the SPIRE project. Further demand modelling is required to identify final treatment spaces and types required across the territory.

Health Planning Unit	Current FPUs	Future FPUs (2026/27)
Emergency		
Resuscitation (incl. 1xClass N)	5	6
Resuscitation (Paeds)	0	1
Acute Adult (incl. 3 Class N & 1 Class P)	30	34
Acute Paediatric (incl. 2 Class N & 2x consults)	8	14
Fast Track Adult- Treatment spaces	10	8
Fast Track Adult Consult	0	5
Behavioural Assessment rooms	0	2
Emergency Department Total	**60**	**70**
Short Stay and Assessment Units		
EMU Adult (incl 2 Class N)	12	26
EMU Paediatric (incl 1 class N)	0	6
Mental Health Short Stay Unit	6	10
Clinical Forensic Medical Service	1	2
Womens Assessment Centre	0	2
Short Stay and Assessment Units Total	**19**	**46**
Ambulance Bays	8	12

4. Model of care summary

The focus of care provision within the ED will be to provide streamlined assessment of patients and subsequent access to the most appropriate area for treatment as quickly as possible.