Northern Health

Term Description – Handbook – ROVER

1. Term details:			
Health Service:	Northern Health	**Term duration:**	Maximum: 13 weeks
Location/Site:	Northern Hospital Epping	**Clinical experience - Primary**:	C: Acute and critical illness patient care
Parent Health Service:	Northern Health	**Clinical experience - Secondary**:	B: Chronic illness patient care
Speciality/Dept.:	Cardiology	**Non-clinical experience:**	*(PGY2 only)*
PGY Level:	PGY2	**Prerequisite learning:**	*(if relevant)*
Term Descriptor:	*Cardiology medicine term with ward-based management of general cardiology and heart failure patients, and care of critical care cardiology patients. Involves admission of patients and attendance in clinics. Exposure to procedures including echo/transthoracic echocardiogram/cath lab. Participation in case conferences and attendance at unit meetings.*		

2. Learning objectives:		
EPA1: Clinical Assessment	Domain 1	Obtains person-centred histories and examination tailored to the clinical situation in a culturally safe and appropriate way.
	Domain 2	Demonstrates professional conduct, honesty and integrity.
	Domain 3	Incorporates psychosocial considerations and stage in illness journey into assessment, acknowledging these factors can influence a patient's experience of illness and healthcare behaviours.
	Domain 4	Makes use of local service protocols and guidelines to inform clinical decision-making.
EPA2: Recognition and care of the acutely unwell patient	Domain 1	Identifies deteriorating or acutely unwell patients
	Domain 2	Recognises their own limitations and seeks help when required in an appropriate way.
	Domain 3	Recognises the importance of self-determined decision-making, partnership and collaboration in healthcare which is driven by the individual, family and community.
	Domain 4	Complies with escalation protocols and maintains up-to-date certification in advanced life support appropriate to the level of training.
EPA3: Prescribing	Domain 1	Appropriately, safely & accurately prescribes therapies (drugs, fluids, blood products, oxygen), & demonstrates an understanding of the rationale, risks & benefits, contraindications, adverse effects, drug interactions, dosage & routes of administration
	Domain 2	Works collaboratively with the multidisciplinary team, including pharmacists and nursing staff.
	Domain 3	Acknowledges and respects patients' cultural and religious background, attitude and beliefs, and how these might influence the acceptability of pharmacological and non-pharmacological management approaches.
	Domain 4	Demonstrates knowledge of clinical pharmacology, including adverse effects and drug interactions, of the drugs they are prescribing.
EPA4: Team communication – documentation,	Domain 1	Creates verbal or written summaries of information that are timely, accurate, appropriate, relevant and understandable for patients, carers and/or other health professionals.
	Domain 2	Maintains respect for patients, families, carers, and other health professionals, including respecting privacy and confidentiality.

handover and referrals	Domain 3	Includes relevant information regarding patients' cultural or ethnic background in the handover and whether an interpreter is required.
	Domain 4	Maintains records to enable optimal patient care and secondary use of the document for relevant activities such as adequate coding, incident review, research or medico-legal proceedings.

3. Outcome statements:

Domain 1: *The prevocational doctor as practitioner*	**Domain 2:** *The prevocational doctor as professional and leader*	**Domain 3:** *The prevocational doctor as a health advocate*	**Domain 4:** *The prevocational doctor as a scientist and scholar*
☒ 1.1 Place the needs and safety at the centre of the care process, working within statutory and regulatory requirements and guidelines. Demonstrate skills including effective handover, graded assertiveness, delegation and escalation, infection control, and adverse event reporting. *☒ 1.2 Communicate sensitively and effectively with patients, their family and carers, and health professionals, applying the principles of shared decision-making and informed consent.* *☒ 1.3 Demonstrate effective, culturally safe interpersonal skills, empathetic communication, and respect within an ethical framework inclusive of indigenous knowledges of wellbeing and health models to support Aboriginal and Torres Strait Islander patient care* *☒ 1.4 Perform and document patient assessments, incorporating a problem-focused medical history with a relevant physical examination, and generate a valid differential diagnosis and/or summary of the patient's health and other relevant issues* *☒ 1.5 Request and accurately interpret common and relevant investigations using evidence-informed knowledge and principles of sustainability and cost-effectiveness* *☒ 1.6 Safely perform a range of common procedural skills required for work as a PGY1 and PGY2 doctor.* *☒ 1.7 Make evidence-informed management decisions and referrals using principles of shared decision-making with patients, carers and health care team* *☒ 1.8 Prescribe therapies and other products including drugs, fluids, electrolytes, and blood products safely, effectively and economically* *☒ 1.9 Recognise, assess, communicate and escalate as required, and provide immediate management to deteriorating and critically unwell patients.* *☒ 1.10 Appropriately use and adapt to dynamic systems and technology to facilitate practice, including for documentation, communication, information management and supporting decision-making*	*☒ 2.1 Demonstrate ethical behaviours and professional values including integrity, compassion, self-awareness, empathy, patient confidentiality and respect for all.* *☒ 2.2 Identify factors and optimise personal wellbeing and professional practice, including responding to fatigue, and recognising and respecting one's own limitations to mitigate risks associated with professional practice.* *☒ 2.3 Demonstrate lifelong learning behaviours and participate in, and contribute to, teaching, supervision and feedback.* *☒ 2.4 Take increasing responsibility for patient care, while recognising the limits of their expertise and involving other professionals as needed to contribute to patient care.* *☒ 2.5 Respect the roles and expertise of healthcare professionals, and learn and work collaboratively as a member of an inter-personal team.* *☒ 2.6 Contribute to safe and supportive work environments, including being aware of professional standards and institutional policies and processes regarding bullying, harassment and discrimination for themselves and others.* *☒ 2.7 Critically evaluate cultural safety and clinical competencies to improve culturally safe practice and create culturally safe environments for Aboriginal and Torres Strait Islander communities. Incorporate into the learning plan strategies to address any identified gaps in knowledge, skills, or behaviours that impact Aboriginal and Torres Strait Islander patient care.* *☒ 2.8 Effectively manage time and workload demands, be punctual, and show ability to prioritise workload to manage patient outcomes and health service functions.*	*☐ 3.1 Incorporate disease prevention, relevant health promotion and health surveillance into interactions with individual patients, including screening for common diseases, chronic conditions, and discussions of healthcare behaviours with patients* *☒ 3.2 Apply whole-of-person care principles to clinical practice, including consideration of a patients physical, emotional, social, economic, cultural and spiritual needs and their geographical location, acknowledging that these factors can influence a patient's description of symptoms, presentation of illness, healthcare behaviours and access to health services or resources.* *☒ 3.3 Demonstrate culturally safe practice with ongoing critical reflection of the impact of health practitioner's knowledge, skills, attitudes, practising behaviours and power differentials in delivering safe, accessible and responsive healthcare free of racism and discrimination.* *☐ 3.4 Demonstrate knowledge of the systemic and clinician biases in the health system that impact on the service delivery for Aboriginal and Torres Strait Islander peoples. This includes understanding current evidence around systemic racism as a determinant of health and how racism maintains health inequity.* *☐ 3.5 Demonstrate knowledge of the ongoing impact of colonisation, intergenerational trauma and racism on the health and wellbeing of Aboriginal and Torres Strait Islander peoples.* *☒ 3.6 Partner with the patient in their healthcare journey, recognising the importance of interaction with and connection to the broader healthcare system. Where relevant, this should include culturally appropriate communication with caregivers and extended family members while also including and working collaboratively with other health professionals*	*☒ 4.1 Consolidate, expand and apply knowledge of the aetiology, pathology, clinical features, natural history and prognosis of common and important presentations in a variety of stages of life and settings.* *☒ 4.2 Access, critically appraise and apply evidence form the medical and scientific literature to clinical and professional practice.* *☒ 4.3 Participate in quality assurance and quality improvement activities such as peer review of performance, clinical audit, risk management, incident reporting and reflective practice.* *☐ 4.4 Demonstrate a knowledge of evidence-informed medicine and models of care that support and advance Aboriginal and Torres Strait Islander health.*

		(including Aboriginal Health Workers, practitioners and Liaison Officers).	

4. Supervision details:			
Supervision Role	***Name***	***Position***	***Contact***
DCT/SIT	***Dr Chiu Kang***	Supervisor of HMO Training	Chiu.Kang@nh.org.au
Term Supervisor	***Dr Larry Ponnuthurai***	Deputy Director of Cardiology	Larry.Ponnuthurai@nh.org.au
Clinical Supervisor (primary)	***Dr Larry Ponnuthurai***	Deputy Director of Cardiology	Larry.Ponnuthurai@nh.org.au
Cinical Supervisor (day to day)	***Allocated Consultant on ward service***	Click or tap here to enter text.	Click or tap here to enter text.
EPA Assessors *Health Professional that may assess EPAs*	• All Consultants • All Registrars • Click or tap here to enter name and role		

Team Structure **- Key Staff**		
Name	**Role**	**Contact**
Dr Larry Ponnuthurai	Deputy Director of Cardiology	Larry.Ponnuthurai@nh.org.au
Dr Willian vanGaal	Director of Acute Service	William.vanGaal@nh.org.au
Devanya Sinkeler	PA to Director of Acute Services	Devanya.Sinkeler@nh.org.au
Richard Ram	Cardiology & CCU NUM	Richard.Ram@nh.org.au
Geoff Gleeson	Cath Lab NUM	Geoffrey.Gleeson@nh.org.au

5. Attachments:	
R-over document	See below
Unit orientation guide	See below
Timetable (sample in appendix)	See below

6. Accreditation details *(PMCV use only)*	
Accreditation body:	Click or tap here to enter text.
Accreditation status:	Click or tap here to enter text.
Accreditation ID:	Click or tap here to enter text.

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Number of accredited posts:	PGY1: number	PGY2: number
Accredited dates:	Approved date: date.	Review date: date.

7. Approval		
Reviewed by:	Click or tap here to enter text.	Date:Click or tap to enter a date.
Delegated authority:	Click or tap here to enter text.	Date:Click or tap to enter a date.
Approved by:	Click or tap here to enter text.	Date:Click or tap to enter a date.

Appendix

Timetable example

	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**	**Sunday**
Morning	Enter Time	Enter Time	Enter Time	Enter Time	Enter Time	Enter Time	Enter Time
	11am Virtual HF Journal Club per rotation Research articles presented HMO	2nd Tuesday & 4th Tuesday Monthly Cardiac conference 4th Tuesday monthly M&M meeting 1st Tuesday monthly PCI & EP meeting 11am Virtual HF Meeting	11am Virtual HF	11am Virtual HF	11am Virtual HF	Click or tap here to enter text.	Click or tap here to enter text.
Afternoon	Enter Time	Enter Time	Enter Time	Enter Time	Enter Time	Enter Time	Enter Time
	12:00 – 13:00 Reg-HMO teaching	10am Fortnightly ECHO meeting	Click or tap here to enter text.	12:30 – 13:30 HMO Education 12:15 – 13:15 Imaging & EP meeting	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
Evening	Enter Time	Enter Time	Enter Time	Enter Time	Enter Time	Enter Time	Enter Time
	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.

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Hours	Total	Total	Total	Total	Total	Total	Total

Cardiology Fellow														
Fellow 1	0830-1606	0830-1606	0830-1606	0830-1606	0830-1606			0830-1606	0830-1606	0830-1606	0830-1606	0830-1606		
	OnCPoCOn Call CARD PM													
Fellow 2	0830-1606	0830-1606	0830-1606	0830-1606	0830-1606			0830-1606	0830-1606	0830-1606	0830-1606	0830-1606		
Cardiology GMAT														
Reg	0800-1700	0800-1700	0800-1700	0800-1700	0800-1700			0800-1700	0800-1700	0800-1700			CPEU 1200-2200	CPEU 1200-2200
			OnCPoCOn Call CARD PM											
Cardiology HMO 1														
HMO 1	2000-0830					0800-2030	0800-2030	0800-1700		0930-2030	0800-1700	0800-1700		
HMO 2	CCU 0800-1700	CCU 0700-1700		CCU 0900-2030	CPEU 1400-2330						CPEU 2300-0830	CPEU 2300-0830	CPEU 2300-0830	CPEU 2300-0830
HMO 3	CPEU 2300-0830				CPEU 0800-1730	CPEU 0800-1730	CPEU 0800-1730		0930-2030	0800-1700	0800-1700	0800-2030		
HMO 4				CPEU 2300-0830	CPEU 2300-0830	CPEU 2300-0830	CPEU 2300-0830	CPEU 2300-0830				CPEU 0800-1730	CPEU 0800-1730	CPEU 0800-1730
HMO 5	CPEU 1400-2330	CPEU 1400-2330	CPEU 1400-2330	CPEU 1400-2330				0800-1730	0800-1730		0800-1730	CPEU 1400-2330		
HMO 6					2000-0830	2000-0830	2000-0900	2000-0900					0800-2030	0800-2030
HMO 7	0800-1700		0930-2030	0800-1700	0800-1700			CCU 0800-1700	CCU 0700-1700		CCU 0900-2030	CCU 0800-1700		
HMO 8				CPEU 2300-0830	CPEU 2300-0830	CPEU 2300-0830	CPEU 2300-0830	CPEU 2300-0830				CPEU 0800-1730	CPEU 0800-1730	CPEU 0800-1730
HMO 9		0930-2030	0800-1700	0800-2030	0800-2030				CPEU 2300-0830	CPEU 2300-0830			CPEU 1400-2330	CPEU 1400-2330
HMO 10	0800-2030	0700-1700	0800-1700	0800-1700				CPEU 0800-1730	CPEU 0800-1730	CPEU 0800-1730	CPEU 0800-1730			
HMO 11	CPEU 0800-1730	CPEU 0800-1730	CPEU 0800-1730	CPEU 0800-1730					2000-0830	2000-0830	2000-0900			
HMO 12		CPEU 2300-0830	CPEU 2300-0830			CPEU 1400-2330	CPEU 1400-2330	CPEU 1400-2330	CPEU 1400-2330	CPEU 1400-2330	CPEU 1400-2330			
HMO 13		2000-0830	2000-0830	2000-0900								2000-0830	2000-0830	2000-0900
Cardiology Advanced Trainee 1														

Reg	0800-1700	0800-1700	0800-1700	0800-1700	0800-1700	0800-1200	0800-1200	0800-1700	0800-1700	0800-1700	0800-1700	0800-1700		
						OnCPoCCard ON CALL W/E	OnCPoCCard ON CALL W/E				OnCPoCOn Call CARD PM			
Cardiology Advanced Trainee 2														
Reg	0800-1700	0800-1700	0800-1700			CPEU 1200-2200	CPEU 1200-2200	CPEU 1300-2200	CPEU 1300-2200	CPEU 1300-2200	CPEU 1300-2200	CPEU 1300-2200		
Cardiology HF Registrar														
Reg	0700-1700	0700-1700	0800-1200	0800-1730	0800-1730			0700-1700	0700-1700	0800-1200	0800-1730	0800-1730		
					OnCPoCCard ON CALL W/E					OnCPoCOn Call CARD PM				
Cardiology Registrar														
Reg	CPEU 0800-1700	CPEU 0800-1700	CPEU 0800-1700	CPEU 0800-1700	CPEU 0800-1700			0800-1700	0800-1700	0800-1700	0800-1700	0800-1700		
		OnCPoCOn Call CARD PM						OnCPoCOn Call CARD PM						
Chest Pain Evaluation Short Stay Unit (CPEU)														
Reg	CPEU 1300-2200	CPEU 1300-2200	CPEU 1300-2200	CPEU 1300-2200	CPEU 1200-2200			0800-1700	0800-1700	0800-1700	0800-1700	0800-1700	0800-1200	0800-1200
												OnCPoCOn Call CARD PM	OnCPoCCard ON CALL W/E	OnCPoCCard ON CALL W/E
Reg	0800-1700	0800-1700	0800-1700	0800-1700	0800-1700			CPEU 0800-1700	CPEU 0800-1700	CPEU 0800-1700	CPEU 0800-1700	CPEU 0800-1700		
				OnCPoCOn Call CARD PM					OnCPoCOn Call CARD PM					

9. Hospital Orientation		
Hospital orientation occurs at the beginning of each term. Attendance is mandatory and paid non-clinical time. This is separate to the unit orientation. Follow the link for details, password: NorthernDoctors		
Location	NCHER, Northern Hospital – Epping	185 Cooper Street, Epping 3076
Facilitator	Medical Education Unit	Email: MedicalEducationUnit@nh.org.au
Date	First day of each term	
Start	08:00	

10. Unit Orientation	
Unit Orientation occurs at the beginning of each term. Attendance is mandatory and paid time. Orientation that occurs outside of your rostered hours should be submitted as overtime on the overtime reporting portal.	
Location	Ward 15 tutorial room
Facilitator	Registrars +/- NUM
Date	First day of rotation
Start	12:00 hours

11. Unit Overview	
Department	Emergency Services
Location	Ward 15, Northern Hospital - Epping
Inpatient Beds	28 – 30 (8 CCU beds, 20-22 ward/telemetry beds)
Outpatients Clinics	Thursday and Friday PM
Day Procedures	Daily (Interventional/Cath Lab)
Virtual Unit	Heart Failure Virtual Ward

12. Safety

Unit Specific Safety & Risks

- Critical care area
  - variety of patients with certain high-risk conditions and propensity for rapid deterioration (e.g. cardiac arrest, complete heart block, acute severe decompensated heart failure)
  - fast-paced environment in response to aforementioned conditions and rapid changes in patients' clinical states
- Safe medication prescribing
  - our patients are often prescribed a range of rate control and antiarrhythmic medications which, if care is not taken to ensure correct combinations and dosing, can result in adverse events
  - multiple infusion prescribing is common – become familiar with heparin, GTN and amiodarone infusions (infrequently we also use dobutamine, milrinone and levosimendan)
- Clear documentation
  - while a baseline requirement of our work, often our patients have very specific discharge plans for duration of antiplatelet or combined antiplatelet/anticoagulation therapy – care needs to be taken that we clearly document this and communicate it to patients

13. Communication	
Medtasker	CAGE resident, CAHF resident, CPEU resident, Cath Lab resident, Long day resident, Night resident
WhatsApp	Not in use as per hospital policy
Pager	CAGE resident (411), CAHF resident (310), night resident (310 and 411)
MS Teams	Day-to-day communication (doctors will be added at the start of the rotation)

14. Handover Process	
Morning	Registrar: Overnight handover on MS Teams chat and morning huddle Resident: Overnight handover on ward 15 at 08:00 hours
Afternoon	Registrar: Handover to PM Onsite registrar at 16:30 hours Resident: Handover to long day resident on ward 15 at 16:30 hours
Night	Registrar: Handover to on call registrar at 21:50 hours Resident: Handover to night resident on ward 15 at 20:00 hours

15. Shift Structure

2024 CARDIOLOGY HMO WEEKLY ALLOCATIONS

Roster	Mon	Tue	Wed	Thurs	Fri	Weekend
CAGE ()		CAGE	CAGE*	CAGE	CAGE	
CAHF ()	CAHF	CAHF*	CAHF	CAHF		
CPEU AM ()	CPEU AM	CPEU AM	CPEU AM	CPEU AM		
CPEU PM ()	CPEU PM		CPEU PM	CPEU PM	CPEU PM	
Cath Lab ()	CATH LAB*	CATH LAB	CATH LAB	CATH LAB		
CCU ()	Letters	Letters		AM: Letters PM: WVG clinic*	AM: CATH LAB PM: NS clinic	
Ward/CPEU PM ()	CAGE	CPEU PM			CAHF*	HF short shift
Weekend ()	NIGHT Ward					Ward cover
Night 1 ()		NIGHT Ward	NIGHT Ward	NIGHT Ward		
Night 2 ()					NIGHT Ward	NIGHT Ward
CPEU ND ()				NIGHT CPEU	NIGHT CPEU	NIGHT CPEU
CPEU ND/AM ()	NIGHT CPEU				CPEU AM	CPEU AM
CPEU ND/PM ()		NIGHT CPEU	NIGHT CPEU			CPEU PM

***evening cover**

16. Shift Roles & Responsibilities		
	Resident	Registrar
Day	**CAGE** • Log on to MedTasker and carry pager 311.	

- CAGE consultant rotates weekly ie. Same consultant from Saturday to Friday
- Ensure patients awaiting an angiogram have their pre-medications charted.
- On admission remember to chart PRNs (GTN, ondansetron, slow K, mag, paracetamol) for new ACS/chest pain admissions

CAHF

- Log on to MedTasker and carry pager 284.
- CAHF alternates between A/Prof Gautam Vaddadi (Monday and Tues) and Dr Naveen Sharma (Wednesday, Thursday and Friday)
- Majority of HF patients are being discharged to HF HITH. MedTask HF fellow, HITH registrar, HF nurse practitioner, HF pharmacist.
- Acute decompensated HF patients should be investigated for cause of exacerbation on admission including TFTs, Fe studies, infective aetiology

CATH LAB

- Start at 07:30 hours
- Attend to jobs in Cath Lab
    - Chart pre and post procedure antibiotics for PPM/AICD/Loop recorder
    - Consents
        - Common: angiogram +/- PCI, PPM, ablation/EPS, Less common: TOE
        - Pre medication for procedures
    - Elective cases that need admissions
        - All elective PCIs, PPMs/AICDs, EPS Ablation, PVI for AF
        - Possible admissions:
            - Angio FFR studies – sometimes they do PCI and need admission
            - Electrophysiology studies (EPS) – sometimes they ablate and need admission
        - For overnight stay cases - prep the discharge summary, script and outpatient referrals before they go to the ward because they will be discharged without medical review the following morning.
        - Elective PCI: must get follow up in 4/52 in PCI clinic with interventional fellow as well

	as regular cardiologist 4-6/52 (this applies for PCIs done for STEMIs/NSTEMIs as well, but the ward residents do the follow up for these patients) • Elective PPM/AICD: will need 1 dose of IV 2g Cefazolin and 1g of IV Vancomycin prior to PPM following by 2 more doses of IV 2g Cefazolin, CXR to rule out pneumothorax 4/24 post, PPM check the next morning prior to discharge (will be organised by nurse), follow-up in 2/52 in PPM clinic and 4-6/52 with cardiologist • Outpatient referrals • All patients with elective procedures require follow up (routine is 4-6/52 with regular cardiologist / proceduralist if no usual cardiologist, check the prelim report to ensure plan) **LETTERS** • Write up referral letters using template for the two lists of patients (one each for Austin and St. Vincent's) • The lists can be found in the Cath lab office on the noticeboard • Always check for updates and discuss with the registrar if needed • Following preparation of list, go to the ward and check on your co-residents to see if they need any assistance on the ward or with MedTaskers **CPEU** • Registrar accepts patients for chest pain • Roles including documentation of plans from round, admissions, discharges and organising follow-up • In general good idea to document in admission plan for patients not to get caffeine pending consultant review in case they want a CT-CA	
Afternoon	**CPEU** • Start at 14:00hours • From 14:00 to 17:00 hours, to help out on ward 15 with discharge preparation (scripts and summaries for ward patients for the next day) • From 17:00 hours, to cover CPEU (please refer to CPEU role above)	
Night	**Ward Nights** • Get handover upon arrival from cover resident	

	- On weekdays one of the day cardiology residents will be on a 12.5 hour shift once per week. On weekends there is now one resident working 12.5 hours Saturday and Sunday • Admissions • Code STEMI. ED are responsible for the resus. You'll will likely be the first person from cardio on scene after hours. Take the relevant consent, GOP-C, charts, forms etc. with you to resus/ED as they can be hard to find there. Take a brief hx and exam as per the After Hours STEMI checklist in the Unit Handbook and chart relevant medications. It is most useful to get the handover from the AV Team directly and document medications (Aspirin/Morphine/Heparin) and time they were given. Call the on-call Reg with any immediate concerns. Consent for angio if possible from patient or NOK. • Attend to any unwell patients immediately and don't be afraid to call the registrar on call • Prepare any planned discharges for the next day if you have time • Prepare the list for CAHF and CAGE • Add new admissions **<u>CPEU Nights</u>** • Patients generally not to be discharged overnight without express permission of registrar or documented at time of admission clear parameters for discharge and follow-up plan • Between 22:00 – 06:00 hours, ED reg in charge can send patients to CPEU without discussing with cardiology reg but they do on occasion try to send inappropriate patients so all should be handed over to CPEU resident – if you are concerned patient is not suitable for the pod then tell them to ring the cardio reg to discuss. NB confirmed NSTEMIS should not be sent to pod overnight without prior discussion with cardio reg to have patient accepted under cardio.	
Weekend	**<u>Long day resident</u>** • Covers both CAGE till 13:00 hours, then covers both CAGE and CAHF • Works 12.5 hour days **<u>Short day resident</u>** • Covers CAHF and rounds on CAHF patients • Also helps out with admissions and discharges when able	

17. Common Conditions

CAGE stream	ACS, STEMI, NSTEMI, pericarditis, pericardial effusion
CAHF stream	HFrEF, HFpEF, valvular disease, AF, CHB, arrythmias, syncope for investigation, all other general cardiology
Chest Pain Evaluation Unit (CPEU)	Chest pain for investigation

18. Common Procedures

IVC, ABG and indwelling urinary catheters.

19. Clinical Guidelines

The My Favourite Links page on the intranet contains the links to a number of useful clinical guidelines
https://intranet.nh.org.au/applications/
ETG- Electronic Therapeutic Guidelines
AMH- Australian Medicines Handbook
Up to Date

PROMPT- This site contains the hospital policy and procedure manuals. It can only be accessed from the intranet - https://intranet.nh.org.au/departments-and-services/prompt-policy-procedures-guidelines/prompt-policies-procedures-and-forms/

20. Routine Orders

Pathology

All patients need basic pathology (FBE, UEC) ordered. In addition, the following pathology needs to be ordered for:

- ACS (STEMI/NSTEMI): Troponin till peak, fasting lipids, HbA1c, CMP, LFT, coagulation
- Chest pain for investigation: Troponin till peak if abnormal or serial troponin if negative, fasting lipids, HbA1c, CMP, LFT, D-dimer, amylase
- Arrythmia: Troponin till peak, CMP, LFT, CRP, coagulation
- Heart failure: Troponin (only if presenting with chest pain), HbA1c, CMP, LFT, iron studies (if not done within 3 months), TFT (if not done within 3 months), BNP

Radiology

All patients need CXR on admission. Other images to be discussed with registrar.

Pharmacology

MEDICATION	INDICATION	DOSE	LOADING
Aspirin	ACS	100mg daily	300mg
Clopidogrel	PCI/ACS	75mg daily	300mg
Ticagrelor	PCI/ACS	90mg BD	180mg

		GTN Spray	Chest pain	400mcg PRN, 5 minutely	-
		Fentanyl	Chest pain	25mcg PRN, 5 minutely (max 75mcg)	-
		NOACs	AF	Depending on NOAC (check CrCl, Cr, age and weight)	-
		Statin	ACS	Depending on statin AMIs get Atorvastatin 80mg/Rosuvastatin 40mg + ongoing	-
		Metoprolol, atenolol, sotalol, carvedilol, nebivolol	AF, rate control, ACS, heart failure	Dependent on medication	-
		Perindopril, ramipril	ACS, HTN	Dependent on medication	-
		Digoxin	AF	62.5microg daily	500mcg, followed by 250mcg 6 hour later, and another 250mcg 6 hours post
		Amiodarone	AF	400mg TDS PO with always a weaning plan	IV – 300mcg over 20 minutes, followed by 900mcg over 24 hours PO – 400mg TDS
		Entresto	HFrEF	24/26mg	*Needs washout 36 hours from ACEI-bridge with Valsartan
		Dapagliflozin, Empagliflozin	HFrEF	Dependent on medication	*beware of contraindications
		Iron Carboxymaltose	Fe Deficiency in HF patients	1000mg	Just prior to discharge (needs consent + script)
		Heparin infusion	ACS	Base on weight – please refer to PROMPT	No loading needed if post angiogram, otherwise requires loading (clarify with registrar if uncertain)
		GTN infusion, Dobutamine infusion, Levosimendan infusion,	Unwell patients	Please chart in consultation with registrar	

		Acetazolamide infusion, Metaraminol infusion, Frusemide infusion			

21. IT Programs	
EMR	The EMR is in use for documentation, medication ordering and radiology/pathology requests. It is being used for all inpatients, as well as maternity clinics and pre-anaesthetic clinics. Located in the intranet > My Favourite Links > EMR Live Environment EMR Training courses are located on the LMS- https://mylearning.nh.org.au/login/start.php Training is compulsory; you will need to complete the elearning within the first week of commencing. Please contact medical workforce, or check the EMR website for more information on how to complete EMR training https://emr.nh.org.au/ When starting a new rotation, please reach out to Term Supervisor to ensure you are oriented to the EMR specific workflows for that unit as well. EMR is NOT a primary communication system. Please use Medtasker and phones for referrals and communication.
CPF	The source of information for all outpatients' clinics, investigations, GP referrals and scanned admission notes prior to September 2023. Located in the intranet > My Favourite Links > CPF https://cpf.nh.org.au/udr/
PACS	XERO Viewer Pacs- https://nivimages.ssg.org.au/ or located in My Favourite Links, look for the CXR icon This is where you can find radiology images
My Health Record	Centralised health record https://shrdhipsviewer.prod.services/nhcn
Safe Script	Monitoring system for restricted prescription medications https://www.safescript.vic.gov.au/

22. Documentation	
Admission	Utilise the admission templates on S Drive and use the admission workflow on EMR. Often need look through CPF for letters/who patient is known to, pathology and cardiac investigations. May need to acquire correspondence from private cardiologist or other hospital networks.
Ward Rounds	Use the ward round workflow on EMR. Please ensure you have the correct diagnosis and an impression is required for all ward round notes.
Discharge Summary	Utilise the discharge summary templates on S Drive and use the discharge workflow on EMR. Signing and submitting will send an electronic copy to the GP and upload to My health record. Note there is a specific deceased patient discharge summary form.
Outpatient Clinics	Outpatient clinics, prescriptions and investigations remain on CPF
CDI Queries	CDI queries will be emailed and registrars will action the necessary query
Death Certificates	Death certificates are completed online. Hard copies are to be printed out for the patient file/funeral director, in addition to electronic submission. https://www.bdm.vic.gov.au/medical-practitioners

	The discharge summary on EMR should still be completed on the day of death.
Coroners	For reportable deaths, death certificates should not be completed if it is a Coroner's case. This will require a phone call to the Coroner's office followed by an e-medical deposition. Patients' whose death is reportable will need to have a statement of identification completed by the next of kin, and attachments such as butterfly cannulas etc are left in situ. Any uncertainty about whether a death is reportable should be escalated to the consultant. https://www.coronerscourt.vic.gov.au/report-death-or-fire/reportable-deaths

23. Referrals	
Internal	Clinic referrals to be made electronically via e-referrals on CPF. • Please ensure the patient is booked into the appropriate clinic (ie. If seen by a cardiologist previously, needs to be referred to the same cardiologist) Investigations: • All requests need your name and signature as well as consultant patient was admitted under
External	Clinic referrals and investigations to be made to the relevant external cardiologist practive • Please ensure the patient is booked into the appropriate practice (clarify with your registrar) • All requests need your name and signature as well as consultant patient was admitted under

24. Clinical Deterioration	
Escalation Process	Via MedTasker or MET/CODE response
PreMet	Residents to review and escalate to registrar
Code	Resident and registrar to attend

25. Night Shift Support	
Unit	Onsite cardiology registrar till 22:00 hours, and on call there after
Periop	As per hospital responsibility
Take 2 @ 2	As per hospital responsibility

26. Assessments: PGY1 & PGY2	
All forms are located on the Northern Doctors website under the Assessments tab	
Beginning of Term	Meet with Term Supervisor to set learning goals for the term using the Term Description Learning Objectives as a basis for the discussion.
Mid-Term & End of Term	To be completed at the mid and end of term meetings
EPAs	Minimum of x2 EPA assessments to be completed per term

27. Mandatory Training

- Mandatory Training is located on the LMS- https://mylearning.nh.org.au/login/start.php
- Mandatory training is compulsory and part of your contract with Northern Health and needs to be completed by the first month of your start date. If not completed, you will come off the floor to complete.
- Hand Hygiene needs to be completed by the end of your first week.
- If you have completed the mandatory training elsewhere you may be able to apply for recognition of prior learning

28. Unit Education

All teaching sessions are for an hour, in Ward 15 tutorial room (unless otherwise stated)

Journal Club	Monday, 12:00 hours Registrars will present and discuss two journal articles from peer-reviewed journals
Case Based Presentation	Tuesday, 12:00 hours Residents will prepare interesting cases from recent weeks with guidance from A/Prof Chiew Wong. Include clinical aspects, associated features and investigations and follow up
Echo teaching	**Aimed at registrar level but all welcome* Wednesday, 12:00 – 12:30 hours Echo case-based teaching
Imaging/ Electrophysiology tutorial	Thursday, 12:00 hours Registrars will presentation cardiac imaging/electrophysiology and/or discussion of recent interesting cases
Interventional teaching	**Aimed at registrar level but all welcome* Thursday, 16:00 – 16:30 hours (Cath Lab) Interventional case-based teaching
Electrophysiology teaching	**Aimed at registrar level but all welcome* Friday, 12:00 – 12:30 hours ECG case-based teaching

29. Unit Meetings

Daily huddle	Daily, 08:00 hours • Short meeting to discuss planned inpatient procedures and flag issues/complexities with interventionalists/proceduralists (angiogram/electrophysiology/TOE)
Cardiac Surgical/ Structural Conference	Alternate with Austin Hospital (2nd Tuesday of each month, 08:10 – 08:40 hours) and St Vincent's Hospital (last Tuesday of each month, 07:30 – 08:00 hours) • Registrars will present over Teams • Letters resident will prepare patients for conference as well as complete post conference jobs (see unit orientation slides and handbook for resident responsibilities)
Morbidity & Mortality Meeting	Occurs last Tuesday of each month – prepared and presented by registrars Each mortality will then be classified by unit consensus based on Northern Health Mortality Audit requirements.
Department Education Evenings/Dinners (every quarter)	Registrars and residents will present a journal article (10-15min) to cardiology medical, nursing and technical staff.

30. Research and Quality Improvement	
PCI Meeting	Occurs first Tuesday of each month – prepared and presented by the interventional fellow and the following is discussed: • Summary of all STEMI cases in previous month (including door-balloon time analysis). • Discussion of difficult cases for shared decision making (e.g. CTO PCI). • Discussion of any significant procedural complications – as learning opportunity.
Victorian Cardiac Outcomes Registry (VCOR)	Standardised assessments collected statewide as part of Victorian Cardiac Outcomes Registry (VCOR). VCOR collects highly standardised data about patients undergoing relevant cardiac treatments, procedures and interventions, and follow up data on medical outcomes and complications up to 30 days after a patient has been discharged from hospital. To read further, refer to https://www.monash.edu/medicine/sphpm/vcor
Clinical Trials Research	Please contact research lead Prof William van Gaal for further information

31. Career Support
Discuss with Head of Unit – Prof William van Gaal or Deputy Head of Unit – Dr F A (Larry) Ponnuthurai

32. Medical Students on the Unit
MD2, MD4 and overseas elective students through University of Melbourne – will rotate through the different streams and participate in CWR/RWR followed by shadowing the resident on for that stream.

33. Rostering	
Shift Swap	The doctor initiating the roster swap is responsible for arranging with an appropriate colleague. Once you have arranged a colleague to perform the swap, please email your MWU coordinator and cc in the colleague. All swaps should be kept to within the pay period fortnight where possible. In exceptional circumstances where this cannot be achieved, please discuss with the MWU coordinator prior. All shift swaps should be like hours for like hours. Proposed shift swaps must be emailed to your MWU coordinator for approval.
Unplanned Leave- Notification and documentation process	**Personal Leave documentation required:** For 3 single absences per year, the doctor will not be required to provide any supporting evidence to substantiate their personal leave. For other days absent due to personal illness or injury the doctor is required to provide evidence of illness. To be eligible for payment, the doctor is required to notify the Health Service **two hours** before the start of their shift, or as soon as practicable.

<table>
<tr><td></td><td>
<table>
<tr><td>In hours Monday to Friday
0730 - 1630</td><td>Step 1:
Medical Workforce Reception
8405 8276</td><td>Step 2:
Notify unit</td><td>Please ensure you notify both MWU & your unit</td></tr>
<tr><td>After hours Monday to Friday
Between 1630 – 2200

After hours Monday to Friday
Between 2200-0730</td><td>Step 1:
Between 1630 – 2200
Medical Workforce On-call Phone
0438 201 362

Between 2200-0730
Hospital / After Hours Coordinator
(8405 8110 or via switch)</td><td>Step 2:
Notify unit (at a suitable time)</td><td>Please ensure you notify both MWU or After Hours (depending on the time) & your unit at a suitable time.</td></tr>
<tr><td>In hours Weekends & Public Holidays
0700 - 2200</td><td>Step 1:
Medical Workforce On-call Phone
0438 201 362</td><td>Step 2:
Notify</td><td>Please ensure you notify both MWU & your unit</td></tr>
<tr><td>After hours Weekends & Public Holidays
2200-0700</td><td>Step 1:
Hospital / After Hours Coordinator
(8405 8110 or via switch)</td><td>Step 2:
Notify unit</td><td>Please ensure you notify both MWU & your unit</td></tr>
</table>
</td></tr>
<tr><td>Overtime</td><td>All overtime should be submitted into the Overtime Portal
This can be accessed via the intranet whilst onsite at Northern Health
Please include the reason for your overtime- i.e. ward workload, delayed handover, include UR where relevant.</td></tr>
</table>

34. JMO Rover

Please speak with your registrars at the commencement of your rotation for an orientation to some of the specific challenges you may encounter during this rotation, as well as for support during your term. Northern Health has a support pathway available for junior doctors experiencing difficulties (for details, please see the Junior Doctor Handbook (password: NorthernDoctors), as well as wellbeing services available to all staff including the Employee Assistance Program.

TIPS:

1. Ensure all patients have been tested for COVID prior to transfer to the inpatient ward (RAT sufficient if asymptomatic)
2. Always chase serial troponin until peak levels (post-angiograms as well if troponin yet to peak), angiogram reports, post ablation and TTE reports
3. Cease therapeutic Enoxaparin post PCI and double check if the patient needs to be on heparin or integrilin (eptifibatide) infusion.
4. Early morning discharges should happen before 9:00hours. Handed over to the night resident if unable to prep discharge summary and script during the day.
    a. For elective PCIs/staged PCIs/Elective ablations – Cath lab resident to prepare the admission, discharge summaries.
5. Consents should always be taken at time of admission to save any potential future issues and delays.
    a. Pre-medications for procedures should also be charted at time of consent.
6. Transfer of patient to another centre:
    a. Preparation of CD, transfer letter and discharge summary should be done as early as possible.
    b. CDs should be burned using the cath lab office computers (Refer to instructions stuck on wall "How To Burn CD's"). All relevant CD and documents should be placed in the yellow envelope in the drawer situated in registrars office.
7. Seek help when needed. Sustained VT? Symptomatic bradycardia? Persistent chest pain? Dynamic ECG changes? Haemodynamically unstable? Arrhythmias in the setting of NSTEMI planned for angiogram? Call your registrar immediately! Having multiple co-residents on this term is amazing and helping each other out is key as well.
8. The proforma for admission and discharge summaries can be found in S Drive.
9. The NIC and CCU Nurses know heaps, if you're not sure about a medication or ecg etc. just ask!
10. Queensland Government Informed Consent website is helpful for understanding risks for different procedures (https://www.health.qld.gov.au/consent/html/sub_specialties/cardiac)

35. Document Status		
Updated by	Dr Ragani Velusamy	30/01/2024
Reviewed by	Dr Natina Monteleone	01/02/2024
Next review date		April 2024