Recommendations on restoring elective cardiac procedures and diagnostic testing

The National Cabinet has approved health services to recommence more elective surgery from **Monday 27 April 2020,** with up to 25% of closed/restricted activity to resume. In light of this directive, the Cardiac and Cardiothoracic Surgery COVID-19 Expert Working Group (EWG) has provided additional information to facilitate a staged resumption of elective cardiac procedures and diagnostic testing.

This should be read alongside Recommendations on restoring elective surgery – Perioperative Expert Working group.

Staged increase in elective elective cardiac procedures and diagnostic testing

- Clinical urgency remains the most important principle in this resource limited time.
- Category 1 cases and urgent Category 2 cases whose condition will deteriorate should continue, with personal protective equipment (PPE) use following the latest DHHS guidance.
- ESIS Category 2 cases should be reintroduced first. More urgent Category 3 cases that are becoming Category 2 cases may also be considered, particularly where these would improve function or ability to work.
- All cardiology departments should establish local scrutiny of categorisation and urgency, using a methodology that is independent, fair and transparent (i.e. multidisciplinary meetings).
- Table 1 provides categorisation of procedures to assist with determining urgency.

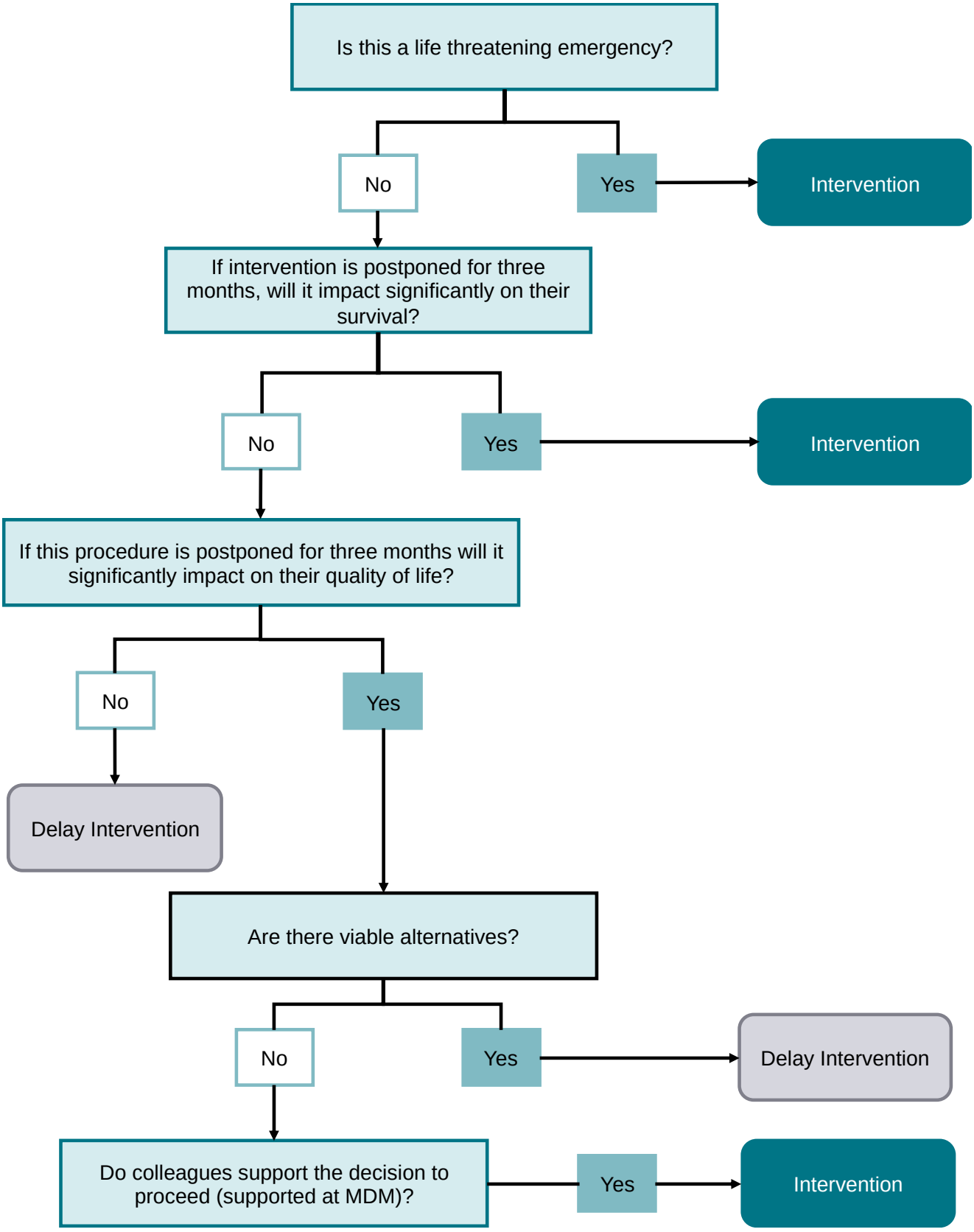
Table 1. Urgency of procedures and intervention categorisation

Procedure	Category
Ischaemic heart disease	
Angiography/PCI for STEMI	1
Angiography/PCI for NSTEACS	1
Angiography/PCI for unstable angina	1 to 2
Angiography/PCI for stable angina refractory to med Rx	2 to 3
Angiography/PCI for asymptomatic/positive stress test	2 to 3
Valvular heart disease	
Trans Aortic Valve Implant (TAVI)	1 to 2
Valvuloplasty	1 to 2
Mitral clip	2
Valve in valve	2
Cardiac Tachy Arrhythmias	
ICD +/- CRT for secondary prevention	1
DCR for atrial fibrillation or flutter	1 to 2
TOE + DCR for atrial fibrillation or flutter	1 to 2
VT RFA	1 to 2
AV node ablation for any tachyarrhythmia	2 to 3
AVNRT Radiofrequency ablation (RFA)	2 to 3
AVRT RFA	2 to 3
Pulmonary vein isolation (PVI) for atrial fibrillation	2 to 3
Atrial flutter ablation	2 to 3
VPB RFA	3

Procedure	Category
Cardiac Brady Arrhythmias	
Pacemaker for CHB or high degree AV block	1
Pacemaker for symptomatic sick sinus syndrome	1 to 2
CRT for symptomatic heart failure	2
ICD +/- CRT for primary prevention in heart failure	2 to 3
Pacemaker for asymptomatic sick sinus syndrome	3
Congenital heart disease	
Full heart study/angiography	2
PPVR	2
Coarctation stenting	2
Valve in Valve	2
Balloon valvuloplasty	2
Branch pulmonary artery (PA) stenting	3
Closure of V-V collaterals (venous to venous)	3
Closure of Major aortopulmonary collateral arteries (MAPCAs) / fistulas	3
Atrial Septal Defect (ASD) device closure	3
Patent ductus arteriosus (PDA) device closure	3
Other	
Lead extraction for endocarditis	1
Lead extraction for pocket infection	1
Pericardiocentesis	1
Left atrial appendage device closure	2 to 3
Alcohol septal ablation for HCM	3
PFO closure	3

- Reviewing staged increases or decreases in elective cardiac procedures and diagnostic testing should occur at fortnightly intervals. A 25% increase at this stage does not mean resume normal activity, and is to be monitored on the volume of cases done.
- The EWG propose the following framework for escalating and de-escalating cardiac procedures and diagnostic testing during the pandemic:
    - **Category 1** procedures will need to continue through the pandemic, i.e. <25% normal capacity
    - **Category 2** procedures should continue when workload is at 25-50% capacity
    - **Category 2-3** procedures should continue when workload is at 50-75% capacity
    - **Category 3** procedures should continue when workload is at >75% capacity
- A decision tree (Figure 1) has been adapted from 'the Decision Tree for considering general surgery during the pandemic' from the General Surgeons of Australia. In the current context where only emergency or urgent procedures should be performed, two separate patient groups should be considered; those who are confirmed or suspected to have COVID-19, and those who are not. Decisions made during this time need to deliver services equally to both groups.

Figure 1. Decision Tree* for cardiology procedures



*Adapted from the Decision Tree for considering General Surgery during the pandemic, General Surgeons Australia