



**ADULT CARDIAC
DATABASE**

EACTS Adult Cardiac Database *Quality Improvement Programme*

List of changes to Database Dictionary

Version 2.0, 13th Dec 2018, compared to version 1.0, 1st May 2014.

INTRODUCTORY NOTES

This document's purpose is to list the major changes in the 2018 version of the ACD dataset, compared to the previous version dating back to 2014.

For the full list of variables, with level of importance, acceptable ranges, options and full definitions, please refer to the Data Dictionary document, version 2.0, 13th December 2018, available at EACTS website.

Legend:

New additions/amendments are written **in red**.

Removals are marked with ~~strikethrough~~.

Importance of data:

All the variables are now classified in the following three categories:

1. **Mandatory**
2. **Essential**
3. **Optional**

Please note: Centres must provide all mandatory and at least 75% of essential variables, to join and remain in the ACD.

Contents

1 Patient demographics and other identifiers

Import Link ID	Race
Patient identifier	Country code
Age at operation	Hospital code
Gender	

2 Hospitalisation

Date of admission	Date of discharge / death
Date of surgery	

3 Cardiac history

Angina	Number of previous MIs
Dyspnoea	Time of most recent MI
Symptomatic status at time of surgery-at admission	Type of most recent MI
	Congestive-Heart failure within 2 weeks

4 Previous interventions

Previous PCI	Number of previous heart operations
Date of last PCI	Date of last cardiac surgery
Previous cardiac surgery	

5 Pre-operative risk factors

Weight	Extra-cardiac arteriopathy
Height	Peripheral vascular disease details
Smoking history	Type of Cerebrovascular events disease
Diabetes treatment	GVA when
Hypertension	TIA when
Hypercholesterolaemia	Neurological dysfunction
Renal disease Dialysis/CVVH	Poor mobility due to any non-cardiac reason
Last pre-operative creatinine	Carotid bruits
GFR	Preoperative Heart rhythm at admission
Chronic lung disease	Pre-operative Pacemaker
Degree of COPD	History of Atrial Fibrillation
	Critical pre-operative status

6 Pre-operative haemodynamics and catheterisation

Left main stem disease	Ejection fraction value
Coronary artery disease - LAD	PA systolic category
Coronary artery disease - Circumflex	PA systolic value
Coronary artery disease - Right	RV dysfunction
Endocarditis	AV gradient mean
Left or right heart catheterisation	AV gradient peak
Date of last catheterisation	LVEDP

Ejection fraction category

~~Mean PAWP / LA~~**7 Pre-operative status and support**

IV nitrates

Cardiogenic shock

IV inotropes

Immunosuppressive therapy within 30 days of operation

Ventilated

Resuscitation / cardiac massage within 1 hour of operation

8 Operation

Operation urgency

Acute Aortic Syndrome (Type A) ~~Main reason for urgency~~

Procedure group

Segments of the aorta treated

Other cardiac procedures

Aortic procedure

~~Other~~ Non-cardiac procedures

Aortic root enlargement

9 Coronary surgeryCABG **targets** ~~procedure~~

Conduits used as grafts

Distal Coronary Anastomosis - number of arterial conduits

Target of LIMA (in situ)

Distal Coronary Anastomosis - number of venous conduits

Target of RIMA (in situ)**10 Valve surgery**

Valve treated

Valve procedure

Indication for valve surgery

Valve repair

~~Valve pathology~~

Implant type

~~Pathology grade~~

Implant code

~~Insufficiency~~

Implant code other

Explant type

Valve / ring size

Native valve pathology

Reason for repeat valve surgery

11 Perfusion and myocardial protection

Cardio-pulmonary bypass

Extracorporeal Life Support (Veno-Arterial ECMO/ECLS)

Predominant form of myocardial protection

Ventricular Assist Device used

Cardioplegia - solution

Bypass time

Cardioplegia - temperature

Cumulative cross-clamp time

Cardioplegia - infusion mode

~~Total~~ Circulatory arrest time

Cardioplegia - timing

Surgical access

Non-cardioplegia myocardial protection

Arterial cannulation site

Intra-aortic balloon pump used

Venous cannulation site~~Reason for IABP use~~

12 Post-operative course

New permanent pacemaker implanted

Post-operative Atrial Fibrillation

Rhythm at discharge

AMI postop

New CerebroVascular Event ~~stroke~~

New post-operative dialysis

Peak post-operative creatinine

Prolonged ventilation >48hrs

Tracheostomy

Sternal wound dehiscence

Pneumonia

Urinary tract infection (UTI)

Sepsis

Re-operation

Blood transfusion

~~Multi-system failure~~

13 Discharge details

Patient status at discharge

~~Primary cause of death~~

Discharge destination

Date of latest follow-up

Status at latest follow-up

Operative mortality

Short stay (<6 d)

Long stay (>14 d)

Patient demographics and other identifiers

Import Link ID

New field

Age at operation

Upgraded to **Mandatory**

Race

Deleted field

Hospitalisation

Date of admission

Downgraded to **Optional**

Date of discharge / death

Upgraded to **Mandatory**

Cardiac History

Angina

Added option: **0** - unspecified

Symptomatic status at admission changed to Symptomatic status at time of surgery

Downgraded to **Optional**

Type of most recent MI

Downgraded to **Optional**

Number of previous MIs

Deleted field

Most recent MI changed to Time of most recent MI

Congestive heart failure changed to Heart failure within 2 weeks

Previous interventions

Date of last PCI

Deleted field

Number of previous heart operations

Downgraded to **Optional**

Moved up from section "operation"

Pre-operative risk factors

BMI

Optional

New field

Auto calculated

Smoking history

Upgraded to **Essential**

SingleChoice: the code only.

Diabetes treatment

Added option **4** - Subcutaneous (non-insulin)

Renal disease

Changed to

Dialysis/CVVH

Essential

GFR

Optional

New field

Auto calculated

Degree of COPD

Downgraded to **Optional**

Extra-cardiac arteriopathy

Added option **3** - Yes (type unknown/not coded)

Peripheral vascular disease details

Deleted field

Type of cerebrovascular disease

Changed to

Cerebrovascular events

Optional

CVA when and

TIA when and

Carotid bruits

Deleted fields

Neurological dysfunction and

Poor mobility due to any non-cardiac reason

Deleted fields, merged into:

Poor mobility

Essential

New field

Pre-operative heart rhythm

Deleted field

Heart rhythm at admission

Optional

New field

Pre-operative Pacemaker

Optional

New field

History of Atrial Fibrillation

Optional

New field

Critical pre-operative state

Essential

New field

Pre-operative haemodynamics and catheterisation

Coronary artery disease – LAD and

Coronary artery disease – Circumflex and

Coronary artery disease – Right and

Downgraded to **Optional**

Carotid artery disease and
Left- or right-heart catheterisation and
Date of last catheterisation and
Deleted fields

Ejection fraction value
Downgraded to **Optional**

PA systolic category
Essential
New field

PA systolic value
Downgraded to **Optional**

RV dysfunction
Optional
New field

AV gradient mean and
AV gradient peak and
LVEDP and
Mean PAWP / LA
Deleted fields

Pre-operative status and support

Immunosuppressive therapy within 30 days of operation
Downgraded to **Optional**

Operation

Main reason for urgency
Deleted field

Number of previous heart operations

Moved up to section “previous interventions”

CABG procedure changed name to **CABG targets**

Moved down to section “coronary surgery”

Other non-cardiac procedures changed name to **Non-cardiac procedures**

Upgraded to **Mandatory**

Acute Aortic Syndrome (Type A)

Essential

New field

Segments of the aorta treated

Upgraded to **Mandatory**

Added option **0** - Not applicable

Aortic root enlargement

Downgraded to **Optional**

Coronary surgery

CABG targets

Moved down from section “operation”

Distal Coronary Anastomosis (DCAs) - number of arterial conduits and

DCAs - number of venous conduits and

Conduits used as grafts

Upgraded to **Essential**

Target of LIMA (in situ) and

Target of RIMA (in situ)

Optional

New fields

Valve surgery

Valve treated

Upgraded to **Mandatory**

Valve pathology changed name to **Indication for valve surgery**

Added new options

5 - Active Endocarditis

6 - Prosthesis dysfunction

7 - Other

Pathology grade and

Insufficiency

Deleted fields

Valve procedure

Upgraded to **Mandatory**

Valve repair

Downgraded to **Optional**

Implant type

Upgraded to **Essential**

Perfusion and myocardial protection

Cardio-pulmonary bypass

Upgraded to **Essential**

Added option 3 - Yes (unspecified)

Extracorporeal Life Support (Veno-Arterial ECMO/ECLS)

Essential

New field

Bypass time and

Cumulative cross-clamp time and

Circulatory arrest time

Upgraded to **Essential**

Surgical access**Essential**

New field

Arterial cannulation site**Optional**

New field

Venous cannulation site**Optional**

New field

Post-operative course

New permanent pacemaker implanted**Essential**

New field

Post-operative AF**Essential**

New field

Rhythm at discharge**Optional**

New field

AMI postop**Optional**

New field

New post-operative stroke Changed name to New CerebroVascular EventUpgraded to **Essential****New post-operative dialysis**Upgraded to **Essential****Peak post-operative creatinine****Optional**

New field

Prolonged ventilation >48hrs

Essential

New field

Tracheostomy

Optional

New field

Sternal wound dehiscence

Optional

New field

Pneumonia

Optional

New field

Urinary tract infection (UTI)

Optional

New field

Sepsis

Optional

New field

Re-operation

Upgraded to **Essential**

Blood transfusion

Optional

New field

Multi-system failure

Deleted field

Changed option 5 - Re-operation for other reasons

Discharge details

Primary cause of death

Deleted field

Discharge destination

Upgraded to **Essential**

Date of latest follow-up

Optional **Date:** ODBC date with format yyyy-mm-dd.

New field

Status at latest follow-up

Optional

New field

Operative mortality

Optional **Auto calculated**

New field

Short stay (<6 d)

Optional **Auto calculated**

New field

Long stay (>14 d)

Optional **Auto calculated**

New field