

Integrated Impact Assessment Report for Clinical Commissioning Policies						
Policy Reference Number	1693	1693				
Policy Title	U U	Long term left ventricular assist device therapy for advanced heart failure (all ages) Proposal not for routine commission (ref A3.1)				
Lead Commissioner	Sarah Watson Clinical Lead Mr Steven Tsui			Mr Steven Tsui		
Finance Lead	Keith Moulds	3	Analytical L	ead	N/A	
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About this Impact Assessment: instructions for completion and explanatory notes

- Each section is divided into themes.
- Each theme sets out a number of questions.
- All questions are answered by selecting a drop down option or including free text.
- Free text boxes are provided to enable succinct relevant commentary to be added which explains the rationale for response or assumption. Please limit responses to 3 sentences of explanatory text.
- Data in this document is either drawn from one of the relevant policy documents or a source for the information is provided.
- Where assumptions are included where data is not available, this is specified.

Section A	A - Activity Impact
A1 Current Patient Population & Demography / Growth	
A1.1 Prevalence of the disease/condition.	There is no direct epidemiological evidence about the size of this target population. Evidence is available from the North American INTERMACS registry and from other countries where LVAD destination therapy is funded. Expert opinion in the UK suggests that the best comparator is the United States, where the rate of destination LVAD implant is 4.2 per million population in 2015-16. Germany is a recognised outlier with a rate of 12 per million population.
	From the US data 82.6% of patients were in Interagency Registry for Mechanically Assisted Circulatory Support (INTERMACS) Profile 1-3, i.e. inotrope dependent. Applying the US rate to England suggests a steady state of 3.5 per million population destination therapy (DT) implants.
	Source: Policy Proposition section 6
A1.2 Number of patients currently eligible for the treatment according to the proposed policy commissioning criteria.	0 Source: required
	Please specify
$\langle O \rangle$	Policy proposition – not for routine commissioning
A1.3 Age group for which the treatment is proposed according to	All ages
the policy commissioning criteria.	Please specify
	Click here to enter text.
A1.4 Age distribution of the patient population eligible according to	Not relevant
the proposed policy commissioning criteria	Source: required

A1.5 How is the population currently distributed geographically?	Not relevant		
	If unevenly, estimate regional distribution by %:		
	North	enter %	
	Midlands & East	enter %	
	London	enter %	
	South	enter %	
	Source: Policy Prop	osition section	0.6
	Please specify		
	Click here to enter te	ext.	
	Increasing		
A2 Future Patient Population & Demography A2.1 Projected changes in the disease/condition epidemiology, such as incidence or prevalence (prior to applying the new policy) in	Increasing		
A2.1 Projected changes in the disease/condition epidemiology,	If other, Click here to		
A2.1 Projected changes in the disease/condition epidemiology, such as incidence or prevalence (prior to applying the new policy) in			0.6
A2.1 Projected changes in the disease/condition epidemiology, such as incidence or prevalence (prior to applying the new policy) in 2, 5, and 10 years? A2.2 Are there likely to be changes in demography of the patient	If other, Click here to		6
A2.1 Projected changes in the disease/condition epidemiology, such as incidence or prevalence (prior to applying the new policy) in 2, 5, and 10 years? A2.2 Are there likely to be changes in demography of the patient	If other, Click here to Source: Policy Prope <u>Not known</u> Please specify	osition section	o 6
A2.1 Projected changes in the disease/condition epidemiology, such as incidence or prevalence (prior to applying the new policy) in 2, 5, and 10 years? A2.2 Are there likely to be changes in demography of the patient	If other, Click here to Source: Policy Prope Not known Please specify Click here to enter te	osition section	
A2.1 Projected changes in the disease/condition epidemiology, such as incidence or prevalence (prior to applying the new policy) in 2, 5, and 10 years? A2.2 Are there likely to be changes in demography of the patient	If other, Click here to Source: Policy Prope <u>Not known</u> Please specify	osition section	
A2.1 Projected changes in the disease/condition epidemiology, such as incidence or prevalence (prior to applying the new policy) in 2, 5, and 10 years? A2.2 Are there likely to be changes in demography of the patient population and would this impact on activity/outcomes? A2.3 Expected net increase or decrease in the number of patients	If other, Click here to Source: Policy Prope Not known Please specify Click here to enter te	osition section ext. osition section	
A2.1 Projected changes in the disease/condition epidemiology, such as incidence or prevalence (prior to applying the new policy) in 2, 5, and 10 years? A2.2 Are there likely to be changes in demography of the patient population and would this impact on activity/outcomes? A2.3 Expected net increase or decrease in the number of patients who will be eligible for the service, according to the proposed	If other, Click here to Source: Policy Prope Not known Please specify Click here to enter te Source: Policy Prope	ext.	
A2.1 Projected changes in the disease/condition epidemiology, such as incidence or prevalence (prior to applying the new policy) in 2, 5, and 10 years?	If other, Click here to Source: Policy Prope Not known Please specify Click here to enter te Source: Policy Prope	ext.	

	YR5 +/- 0
	YR10 +/- 0
	Source: Service specification proposition section 3.1
Are these numbers in line with ONS growth assumptions for the age specific population? If not please justify the growth assumptions made.	
A3 Activity	
A3.1 What is the purpose of new policy?	Confirm non-routine commissioning position of an additional new treatment
	Please specify
	Click here to enter text.
A3.2 What is the annual activity associated with the existing pathway for the eligible population?	Not known
	Source: required
	Please specify Click here to enter text.
A3.3 What is the estimated annual activity associated with the	190 patients
proposed policy proposition pathway for the eligible population?	Source: required
	Please specify
	Click here to enter text.
A3.4 What is the estimated annual activity associated with the next	Not known
best alternative comparator pathway for the eligible population? If the only alternative is the existing pathway, please state 'not	Source: required

applicable' and move to A4.	Please specify
	Click here to enter text.
A4 Existing Patient Pathway	
 A4.1 Existing pathway: Describe the relevant currently routinely commissioned: Treatment or intervention Patient pathway Eligibility and/or uptake estimates. 	Optimal medical management (OMM) of heart failure involves drugs such as diuretics and inotropic agents. In addition to OMM, some patients may also have already undergone one or more of the following treatments before heart transplant or MCSD was considered: electrophysiological interventions such as pacemakers and implantable cardioverter defibrillators, revascularisation by percutaneous coronary angioplasty and stenting or coronary artery bypass grafting, valve replacement or repair, and temporary use of intra-aortic balloon pumps. These treatment options were reflected in the population characteristics of studies included in this review. The term OMM therefore included all the interventions above. <i>Source: evidence review</i>
A4.2. What are the current treatment access and stopping criteria?	Patients with advanced heart failure would have progressed through treatment with optimal medical therapy, cardiac re-synchronisation therapy and non-transplant cardiac surgery if indicated before being considered for heart transplantation. For patients with advanced heart failure who are not heart transplant candidates, the alternative treatments available include: a) repeated hospital readmission for a. intravenous therapy e.g. diuretics b. intravenous inotropes (Level 2 or 3 care) c. haemofiltration (Level 2 or 3 care) b) palliative care until deat <i>Source:</i> policy proposition section 3

 A4.3 What percentage of the total eligible population is expected to: a) Be clinically assessed for treatment b) Be considered to meet an exclusion criteria following assessment c) Choose to initiate treatment d) Comply with treatment e) Complete treatment? 	If not known, please specify Click here to enter text. a) 0 b) 0 c) 0 d) 0 e) 0 Source: policy proposition- not routinely commissioned
A5 Comparator (next best alternative treatment) Patient Pathway (NB: comparator/next best alternative does not refer to current pathway but to an a	
 A5.1 Next best comparator: Is there another 'next best' alternative treatment which is a relevant comparator? If yes, describe relevant Treatment or intervention Patient pathway Actual or estimated eligibility and uptake 	No If yes, Click here to enter text. Source: required
 A5.2 What percentage of the total eligible population is estimated to: a) Be clinically assessed for treatment b) Be considered to meet an exclusion criteria following assessment c) Choose to initiate treatment d) Comply with treatment e) Complete treatment? 	Total estimated eligible a) enter % b) enter % c) enter % d) enter % e) enter % Source: required

 A6.1 What percentage of the total eligible population is expected to: a) Be clinically assessed for treatment b) Be considered to meet an exclusion criteria following assessment c) Choose to initiate treatment d) Comply with treatment e) Complete treatment? 	If not known, please specify Click here to enter text. a) 0 b) 0 c) 0 d) 0 e) 0 Source: policy proposition – not routinely commissioned
A6.2 Specify the nature and duration of the proposed new treatment or intervention.	Not applicable For time limited treatments, specify frequency and/or duration. Click here to enter text. Source: required

A7 Treatment Setting

A7.1 How is this treatment delivered to the patient?	Select all that apply: Not applicable		
	Emergency/Urgent care attendance		
	Acute Trust: inpatient		
	Acute Trust: day patient		
	Acute Trust: outpatient		
	Mental Health provider: inpatient		
	Mental Health provider: outpatient		
	Community setting		
		·	

	Homecare	
	Other	
	Please specify: Click here to enter text.)
A7.2 What is the current number of contracted providers for the	NORTH number	
eligible population by region?	MIDLANDS & EAST number	
	LONDON number	
	SOUTH number	
	Not applicable	
A7.3 Does the proposition require a change of delivery setting or capacity requirements?	No Please specify: Policy proposition – not routinely commissione	d
A8 Coding		
A8.1 Specify the datasets used to record the new patient pathway	Select all that apply: Not applicable	
activity.	Aggregate Contract Monitoring *	
*expected to be populated for all commissioned activity	Patient level contract monitoring	
	Patient level drugs dataset	
	Patient level devices dataset	

	Devices supply chain reconciliation dataset	
	Secondary Usage Service (SUS+)	
	Mental Health Services DataSet (MHSDS)	
	National Return**	
	Clinical Database**	
	Other**	
	**If National Return, Clinical database or other Click here to enter text.	selected, please specify:
A8.2 Specify how the activity related to the new patient pathway will	Select all that apply:Not applicable	
be identified.	OPCS v4.8	
	ICD10	
	Treatment function code	
	Main Speciality code	
	HRG	
	SNOMED	
	Clinical coding / terming methodology used by clinical profession	
A8.3 Identification Rules for Drugs:	Not applicable	
How are drug costs captured?	If the drug has already been specified in the cu List please specify drug name and drug indicat Click here to enter text.	
	If the drug has NOT already been specified in Drug List please give details of action required	

	been discussed with the pharmacy lead:
	Click here to enter text.
A8.4 Identification Rules for Devices:	Not applicable
How are device costs captured?	If the device is covered by an existing category of HCTED please specify the Device Category (as per the National Tariff Payment System Guidance).
	If the device is not excluded from Tariff nor covered within existing National or Local prices please specify details of action required and confirm that this has been discussed with the HCTED team.
A8.5 Identification Rules for Activity:	Not applicable
How are activity costs captured?	If activity costs are already captured please specify the specialised service code and description (e.g. NCBPS01C Chemotherapy). If activity costs are already captured please specify whether this service needs a separate code. Choose an item.
50	If the activity is captured but the service line needs amendment please specify whether the proposed amendments have been documented and agreed with the Identification Rules team.
	If the activity is not captured please specify whether the proposed identification rules have been documented and agreed with the Identification Rules team. Choose an item.
A9 Monitoring	

A9.1 Contracts	None
Specify any new or revised data flow or data collection	Please specify
requirements, needed for inclusion in the NHS Standard Contract Information Schedule.	Click here to enter text.
A9.2 Excluded Drugs and Devices (not covered by the Zero	Select all that apply: Not applicable
Cost Model)	Drugs or Device MDS
For treatments which are tariff excluded drugs or devices not covered by the Zero Cost Model, specify the pharmacy or device	Blueteq
monitoring required, for example reporting or use of prior approval	Other prior approval
systems.	
	Please specify: Click here to enter text.
A9.3 Business intelligence	No
Is there potential for duplicate reporting?	If yes, please specify mitigation:
	Click here to enter text.
A9.4 Contract monitoring	No
Is this part of routine contract monitoring?	If yes, please specify contract monitoring requirement:
	Click here to enter text.
A9.5 Dashboard reporting	No
Specify whether a dashboard exists for the proposed intervention?	If yes, specify how routine performance monitoring data will be used for dashboard reporting.
	Click here to enter text.
	If no, will one be developed?
	Click here to enter text.
A9.6 NICE reporting	No

Are there any directly applicable NICE or equivalent quality standards which need to be monitored in association with the new policy?	If yes, specify how performance monitoring data will be used for this purpose. Click here to enter text.
Section B	- Service Impact
B1 Service Organisation	
B1.1 Describe how the service is currently organised? (i.e. tertiary	Tertiary centres
centres, networked provision etc.)	Source: required
B1.2 Will the proposition change the way the commissioned service is organised? B1.3 Will the proposition require a new approach to the organisation of care?	No Please specify: Click here to enter text. Source: required No change to delivery of care Please specify: Click here to enter text.
B2 Geography & Access	
B2.1 Where do current referrals come from?	Select all that apply:
	GP 🗆
	Secondary care
	Tertiary care

	Other 🗆
	Please specify:
	Click here to enter text.
B2.2 What impact will the new policy have on the sources of referral?	No impact
	Please specify:
	Click here to enter text.
B2.3 Is the new policy likely to improve equity of access?	No impact
	Please specify:
	Click here to enter text.
	Source: Equalities Impact Assessment
B2.4 Is the new policy likely to improve equality of access and/or	No impact
outcomes?	Please specify:
	Click here to enter text.
	Source: Equalities Impact Assessment
D2 Implementation	
B3 Implementation	
B3.1 Will commissioning or provider action be required before	No action required
implementation of the proposition can occur?	Please specify:
	Click here to enter text.
B3.2 Time to implementation:	<u>No - go to B3.4</u>
Is a lead-in time required prior to implementation?	If yes, specify the likely time to implementation: Enter text

B3.3 Time to implementation:	Choose an item.			
If lead-in time is required prior to implementation, will an interim plan for implementation be required?	If yes, outline the	plan:		
	Click here to ente	r text.	0	
B3.4 Is a change in provider physical infrastructure required?	No Please specify: Click here to ente	r text.		
B3.5 Is a change in provider staffing required?	<u>No</u> Please specify: Click here to ente	r text.		
B3.6 Are there new clinical dependency and/or adjacency requirements that would need to be in place?	<u>No</u> Please specify: Click here to ente	r text.		
B3.7 Are there changes in the support services that need to be in place?	<u>No</u> Please specify: Click here to ente	r text.		
B3.8 Is there a change in provider and/or inter-provider governance required? (e.g. ODN arrangements / prime contractor)	No Please specify: Click here to enter text.			
B3.9 Is there likely to be either an increase or decrease in the	No change			
number of commissioned providers? If yes, specify the current and	Please complete	table:		
estimated number of providers required in each region	Region	Current no. of providers	Future State expected	Provisional or confirmed

			range	
	North	0	0	<u>C</u>
	Midlands & East	0	0	<u>C</u>
	London	0	0	<u>C</u>
	South	0	0	<u>C</u>
	Total	0	0	<u>C</u>
	Please specify: Not routinely comm	nissioned policy		
33.10 Specify how revised provision will be secured by NHS	Select all that apply: Not applicable			
England as the responsible commissioner.	Publication and notification of new policy			
	Market intervention required			
	Competitive selection process to secure increase or decrease provider configuration			
	Price-based selection process to maximise cost effectiveness			
	Any qualified provider			
	National Commercial Agreements e.g. drugs, devices			
	Procurement			
	Other			\boxtimes
	Please specify:			
	Click here to enter	text.		

B4.1 Is this service currently subject to, or planned for, place-based commissioning arrangements? (e.g. future CCG lead, devolved commissioning arrangements, STPs)	No Please specify: Click here to enter text.		
Section C	- Finance In	npact	
C1 Tariff/Pricing			
C1.1 How is the service contracted and/or charged?	Select all	that apply: Not applicable	
Only specify for the relevant section of the patient pathway		Not separately charged – part of local or national tariffs	
	Drugs	Excluded from tariff – pass through	
		Excluded from tariff - other	
		Not separately charged – part of local or national tariffs	
		Excluded from tariff (excluding ZCM) – pass through	
	Devices	Excluded from tariff (excluding ZCM) – other	
		Via Zero Cost Model	
		Paid entirely by National Tariffs	
		Paid entirely by Local Tariffs	
		Partially paid by National Tariffs	
	Activity	Partially paid by Local Tariffs	
		Part/fully paid under a Block arrangement	
		Part/fully paid under Pass-Through arrangements	
		Part/fully paid under Other arrangements	

C1.2 Drug Costs	Not applicable
Where not included in national or local tariffs, list each drug or combination, dosage, quantity, list price including VAT if applicable and any other key information e.g. Chemotherapy Regime.	
NB discounted prices or local prices must not be included as these are subject to commercial confidentiality and must not be disclosed.	
C1.3 Device Costs	Not applicable
Where not included in national or local tariff, list each element of the excluded device, quantity, list or expected price including VAT if applicable and any other key information.	
NB: Discounted prices or local prices must not be included as these are subject to commercial confidentiality and must not be disclosed.	
C1.4 Activity Costs covered by National Tariffs	Not applicable
List all the HRG codes, HRG descriptions, national tariffs (excluding MFF), volume and other key costs (e.g. specialist top up %)	
C1.5 Activity Costs covered by Local Tariff	Not applicable
List all the HRGs (if applicable), HRG or local description, estimated average tariff, volume and any other key costs. Also indicate whether the Local Tariff(s) is/are newly proposed or established and if newly proposed how is has been derived, validated and tested.	
C1.6 Other Activity Costs not covered by National or Local Tariff	Not applicable
Include descriptions and estimates of all key costs.	
C1.7 Are there any prior approval mechanisms required either during implementation or permanently?	No Please specify: Click here to enter text.

C2 Average Cost per Patient

C2.1 What is the estimated cost per patient to NHS England, in	YR1	0
years 1-5, including follow-up where required?	YR2	0
	YR3	0
	YR4	0
	YR5	0
Are there any changes expected in year 6-10 which would impact		
the model?	If yes, please spe	ecify:
	No	
C3 Overall Cost Impact of this Policy to NHS England		
C3.1 Specify the budget impact of the proposal on NHS England in	Cost neutral	
relation to the relevant pathway.	Please specify:	
	Click here to ente	er text.
C3.2 If the budget impact on NHS England cannot be identified set out the reasons why this cannot be measured.	Click here to ente	er text.
C3.3 If the activity is subject to a change of commissioning responsibility, from CCG to NHS England, has a methodology for the transfer of funds been identified, and calculated?	Not applicable	

C4.1 Specify the budget impact of the proposal on other parts of the NHS.	Budget impact for CCGs: <u>No impact on CCGs</u> Budget impact for providers: Choose an item. Please specify: Click here to enter text.
C4.2 Taking into account responses to C3.1 and C4.1, specify the budget impact to the NHS as a whole.	<u>Cost neutral</u> Please specify: No change to current commissioning position
C4.3 Where the budget impact is unknown set out the reasons why this cannot be measured	Click here to enter text.
C4.4 Are there likely to be any costs or savings for non-NHS commissioners and/or public sector funders?	No Please specify: Click here to enter text.
C5 Funding	
C5.1 Where a cost pressure is indicated, state known source of funds for investment, where identified, e.g. decommissioning less clinically or cost-effective services.	Not applicable

C6 Financial Risks Associated with Implementing this Policy	
C6.1 What are the material financial risks to implementing this policy?	There are no financial risks to implementing this policy
C6.2 How can these risks be mitigated?	Not applicable
C6.3 What scenarios (differential assumptions) have been explicitly tested to generate best case, worst case and most likely total cost scenarios?	Not applicable
C6.4 What scenario has been approved and why?	Not applicable
C7 Value for Money	
C7.1 What published evidence is available that the treatment is cost effective as evidenced in the evidence review?	Published evidence indicates the treatment is not cost-effective Please specify:
	The evidence review referenced three cost effectiveness studies identified were based on outcomes at 2 years modelled over a lifetime (approximately 5 years). The model will have estimated a projected survival as well as QoL (including the impact of adverse events on QoL) based on indirect data from more than one study, and based on assumptions beyond the period of observed data. There was a wide variation in the estimated quality adjusted life years (QALY) and life years gained (LYG) over a lifetime. Despite the weakness of the models, the estimated ICER was consistently high in all studies (£91,299 to £162,388 per QALY). This is not surprising as the LYGs are associated with numerous and serious adverse events which in turn reduce quality of life for the patient and increase the ongoing cost of care.

C7.2 Has other data been identified through the service specification development relevant to the assessment of value for money?	Select all that apply:			
	Available pricing data suggests the treatment is equivalent cost compared to current/comparator treatment			
	Available pricing data suggests the treatment is lower cost compared to current/comparator treatment			
	Available clinical practice data suggests the new treatment has the potential to improve value for money			
	Other data has been identified			
	No data has been identified	\boxtimes		
	The data supports a high level of certainty about the impact on value			
	The data does not support a high level of certainty about the impact on value			

C8 Cost Profile

C8.1 Are there non-recurrent capital or revenue costs associated with this policy?	<u>No</u> If yes, specify type and range: Click here to enter text.
C8.2 If yes, confirm the source of funds to meet these costs.	Click here to enter text.