# **ELSO Registry Form Submission Instructions**

Extracorporeal Life Support Organization (ELSO)

## I. Starting a New Patient Form

To begin entering a new patient, open the website www.elso.org and sign in with your user name and password. This must be assigned to you by your ELSO Administrator.

Your Center home page will load. Click on 'application settings' in the upper \* \* • ELSO Registry right hand corner to set Reports - Data Export your preferences for date, time and unit cation Home preference. Your Querall Rupp Runs per yea At any time in the Registry form you may click 'home' to return to this home screen. All patient data will be saved. You may also log out of the registry by clicking here. Select any tab to find your entered registry patients, reports that are available, or export data. Further down on the home page you will find a search box and a filter to sort through your incomplete registry records. These are all the records you have started, but have not yet Select this drop-down box submitted as final: to choose how your graph displays. Search: Sea Ouick Add - Sort By - + - Asc/Desc - + 🎨 📧 Click here to Quick Add a Unique Id: 0812017047 Birthdate: 12/20/2017 Run No: 1

Birthdate: 10/10/2017

patient record.

Click on an icon to update the run or patient information.

Note: Please refer to the ELSO Registry Data Definitions for specific details for the data fields to be entered.

Run No: 1

017 20:40

2017 21:09

Time On: 1

Unique Id: 081 Time On: 10/12 From the home page, after you have clicked "Quick Add" the following screen will load. This Panel must have all information fields filled out to Add a New Patient.

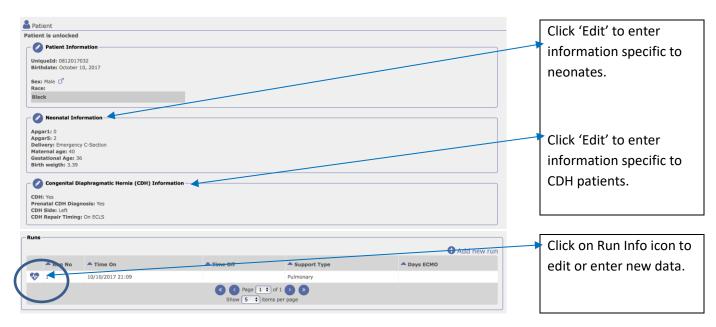
Add Patient			
Patient Information UniqueId*: UniqueId UniqueId is required	Birthdate*: Not Entered Month / Day / Year Birthdate is required	Sex: ( - Please Select - +)	
First Run Information Time On*: Not Entered Month / Day / Year Hour : Minute Time On is required Mode*: Please Select - * Mode is required	Time is only required for Neonatal	Race: Unknown Aaian Black Hispanic White Middle Eastern or North African Native American Native American Cother Support Type*: Please Select - Support Type is required	Once you complete this section, and click 'Save', it will save the identifier and may be returned to later on your home page as an
Cancel Save Please complete at least	the required fields or hit car	ncel to move to another tab.	incomplete record. 'Cancel' will return to the home page.

From the home page, once you click on the icon for patient information, the following screen appears:

UniqueId: 081 016300 Birthdate: Okober 01, Sex: Unknown Race:	2016				You may click 'Edit' icon t update the patient
Unknown				$\frown$	information.
Runs				• Add new run	You may click 'Add New
A Run No	A Time On	Time Off	Support Type	A Days ECMO	Run' to add an additional
<b>₹</b>	12/31/2016 00:00	Show 5 t			run for the same patient.
					You may click the 'Patient
					Run' icon to edit the run
					details.
					Multiple runs will list for
					the same patient. Select
					the appropriate run to

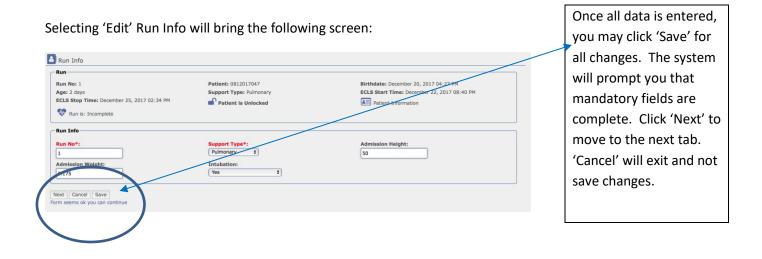
.

For Neonatal patients, you will see additional fields available for data entry:



Once you have clicked on the icon for Run Info, the following screen will appear:





ELSO Data Registry Instructions 2.0

# II. Pre -ECLS Assessment

Run			
Run	Patient: 0812017032		This page will allow you
Run No: 1 Age: 0 day	Support Type: Pulmonary	Birthdate: October 10, 2017 12:00 AM ECLS Start Time: October 10, 2017 09:09 PM	to view the information
CLS Stop Time: Not Entered	Patient is Unlocked	a Patient Information	
Most Recent Values within 6 hours prior to ECLS			you have previously
Arterial Blood Gases Date/Time:	pH:	PCO2:	entered as well as edit if
Oct / 10 / 2017 16 : 13	7.13	66 mmHg	unlocked.
FiO2 (%):	PO2: 25 mmHg	HCO3: 20.4 mEq/L	
Sa02: 31 %	<b>SpO2:</b> %	Lactate: 7.1 mmol/L	Units will generate as per
You can leave the data in the system as is, but the outside the usual data range for SaO2 (50 and 100	se are fields		your settings preference.
✓ Vent Settings	$\frown$		,
Date/Time:	Vent type:	High Frequency Rate:	The type of ventilator you
Oct / 10 / 2017 17 : 20 Amplitude/AP:	HFO ¢	10 Hz Mean Airway Pressure:	select will populate the
43 cm H <sub>2</sub> O	cm H <sub>2</sub> O	25 cm H <sub>2</sub> O	
Hand Bagging: No ‡			specific settings
Hemodynamics			associated with it.
Date/Time: Oct / 10 / 2017 20 : 44	Systolic BP: 35 mmHg	30 mmHg	
Mean BP:	Sv02:	PCWP:	Click 'Save' then 'Next'
32 mmHg Systolic PAP:	Sv02 %	PCWP mmHg Mean PAP:	for the next tab. 'Cancel'
SPAP mmHg Cardiac index:	DPAP mmHg	MPAP mmHg	will not save any changes
CI L/min/m2			and will close the 'Edit'
Back Next Cancel Save			window.
Form seems ok you can continue			willdow.
III. Pre -ECLS Support	ıpport		Note: Hovering over the field label will display the ranges allowed in
Run			
Run No: 1 Age: 0 day	Patient: 0812017032 Support Type: Pulmonary	Birthdate: October 10, 2017 12:00 AM ECLS Start Time: October 10, 2017 09:09 PM	green.
ECLS Stop Time: Not Entered	Patient is Unlocked	a Patient Information	
		Patient Information	
Bur FOLG Gurrant		Patient information	
Pre-ECLS Support Hospital Admit Date*:			
Hospital Admit Date*: 10/10/2017 14:37 Oct / 10 / 2017 14 : 37	(	Mechanical Cardiac Support Codes:	
Hospital Admit Date*: 10/10/2017 14:37 Oct / 10 / 2017 14:37 Patient transported to your center?	(		
Hospital Admit Date*: 10/10/2017 14:37 Oct / 10 / 2017 14:37 Patient transported to your center? Transported not on ECMO \$ Pre-ECLS Cardiac Arrest:	<	Mechanical Cardiac Support Codes:	Enter codes used for
Hospital Admit Date*: 10/10/2017 14:37 Oct / 10 / 2017 14:37 Patient transported to your center? Transported not on ECMO \$	<	Mechanical Cardiac Support Codes: Renal, Pulmonary and Other Supports Codes;	
Hospital Admit Date*: 10/10/2017 14:37 Oct / 10 / 2017 14:37 Patient transported to your center? Transported not on ECMO * Pre-ECLS Cardiac Arrest: No * Bridge to Transplant: No *	<	Mechanical Cardiac Support Codes: Renal, Pulmonary and Other Supports Codes; Medications (excluding vasoactive infusions);	pre-ECLS Support as per
Hospital Admit Date*: 10/10/2017 14:37 Oct /10 / 2017 14: 37 Patient transported to your center? Transported not on ECMO * Pre-ECLS Cardiac Arrest: No * Bridge to Transplant:	(	Mechanical Cardiac Support Codes: Renal, Pulmonary and Other Supports Codes; Medications (excluding vasoactive infusions);	
Hospital Admit Date*: 10/10/2017 14:37 Oct / 10 / 2017 14:37 Patient transported to your center? Transported not on ECMO • Pre-ECLS Cardiac Arrest: No • • Bridge to Transplant: No • Is Trauma the underlying reason this person went on ECMO? No • •	<	Mechanical Cardiac Support Codes: Renal, Pulmonary and Other Supports Codes; Medications (excluding vasoactive infusions);	pre-ECLS Support as per the ELSO Data Sheet.
Hospital Admit Date*: 10/10/2017 14:37 Oct /10 / 2017 14:37 Patient transported to your center? (Transported not on ECMO *) Pre-ECLS Cardiac Arrest: (No *) Bridge to Transplant: (No *) Is Trauma the underlying reason this person went on ECMO?	•	Mechanical Cardiac Support Codes: Renal, Pulmonary and Other Supports Codes; Medications (excluding vasoactive infusions);	pre-ECLS Support as per the ELSO Data Sheet. Click the drop-down list
Hospital Admit Date*: 10/10/2017 14:37 Oct / 10 / 2017 14:37 Patient transported to your center? Transported not on ECMO ; Pre-ECLS Cardiac Arrest: No ; Bridge to Transplant: No ; Is Trauma the underlying reason this person went on ECMO? No ; Back Next Cancel Save	•	Mechanical Cardiac Support Codes: Renal, Pulmonary and Other Supports Codes; Medications (excluding vasoactive infusions);	pre-ECLS Support as per the ELSO Data Sheet. Click the drop-down list to see the list of codes –
Hospital Admit Date*: 10/10/2017 14:37 Oct / 10 / 2017 14:37 Patient transported to your center? Transported not on ECMO ; Pre-ECLS Cardiac Arrest: No ; Bridge to Transplant: No ; Is Trauma the underlying reason this person went on ECMO? No ; Back Next Cancel Save	•	Mechanical Cardiac Support Codes: Renal, Pulmonary and Other Supports Codes; Medications (excluding vasoactive infusions); Vasoactive Infusions:	pre-ECLS Support as per the ELSO Data Sheet. Click the drop-down list
Hospital Admit Date*: 10/10/2017 14:37 Oct / 10 / 2017 14:37 Patient transported to your center? Transported not on ECMO ; Pre-ECLS Cardiac Arrest: No ; Bridge to Transplant: No ; Is Trauma the underlying reason this person went on ECMO? No ; Back Next Cancel Save		Mechanical Cardiac Support Codes: Renal, Pulmonary and Other Supports Codes; Medications (excluding vasoactive infusions); Vasoactive Infusions:	pre-ECLS Support as per the ELSO Data Sheet. Click the drop-down list to see the list of codes –
Hospital Admit Date*: 10/10/2017 14:37 Oct / 10 / 2017 14:37 Patient transported to your center? Transported not on ECMO ; Pre-ECLS Cardiac Arrest: No ; Bridge to Transplant: No ; Is Trauma the underlying reason this person went on ECMO? No ; Back Next Cancel Save		Mechanical Cardiac Support Codes: Renal, Pulmonary and Other Supports Codes; Medications (excluding vasoactive infusions); Vasoactive Infusions:	pre-ECLS Support as per the ELSO Data Sheet. Click the drop-down list to see the list of codes –
Hospital Admit Date*: 10/10/2017 14:37 Oct / 10 / 2017 14:37 Patient transported to your center? Transported not on ECMO ; Pre-ECLS Cardiac Arrest: No ; Bridge to Transplant: No ; Is Trauma the underlying reason this person went on ECMO? No ; Back Next Cancel Save		Mechanical Cardiac Support Codes: Renal, Pulmonary and Other Supports Codes; Medications (excluding vasoactive infusions); Vasoactive Infusions: Vasoactive Infusions: Mechanical Cardiac Support Codes: Berlin Heart BrVAD Cardiac pacemaker Cardiapulmonary bypass CPB Intra-aortic balloon	pre-ECLS Support as per the ELSO Data Sheet. Click the drop-down list to see the list of codes –
Hospital Admit Date*: 10/10/2017 14:37 Oct / 10 / 2017 14:37 Patient transported to your center? Transported not on ECMO ; Pre-ECLS Cardiac Arrest: No ; Bridge to Transplant: No ; Is Trauma the underlying reason this person went on ECMO? No ; Back Next Cancel Save		Mechanical Cardiac Support Codes: Renal, Pulmonary and Other Supports Codes; Medications (excluding vasoactive infusions); Vasoactive Infusions: Vasoactive Infusions: Mechanical Cardiac Support Codes: Berlin Heart BrVAD Cardiac pacemaker Cardiac pacemaker	pre-ECLS Support as per the ELSO Data Sheet. Click the drop-down list to see the list of codes –
Hospital Admit Date*: 10/10/2017 14:37 Oct / 10 / 2017 14:37 Patient transported to your center? Transported not on ECMO ; Pre-ECLS Cardiac Arrest: No ; Bridge to Transplant: No ; Is Trauma the underlying reason this person went on ECMO? No ; Back Next Cancel Save		Mechanical Cardiac Support Codes: Renal, Pulmonary and Other Supports Codes; Medications (excluding vasoactive infusions); Vasoactive Infusions: Vasoactive Infusions: Mechanical Cardiac Support Codes: Berlin Heart BUVAD Cardiac pacemaker Cardiac pacemaker Cardiac pacemaker Cardiac pacemaker Intra-aortic balloon LVAD	pre-ECLS Support as per the ELSO Data Sheet. Click the drop-down list to see the list of codes –

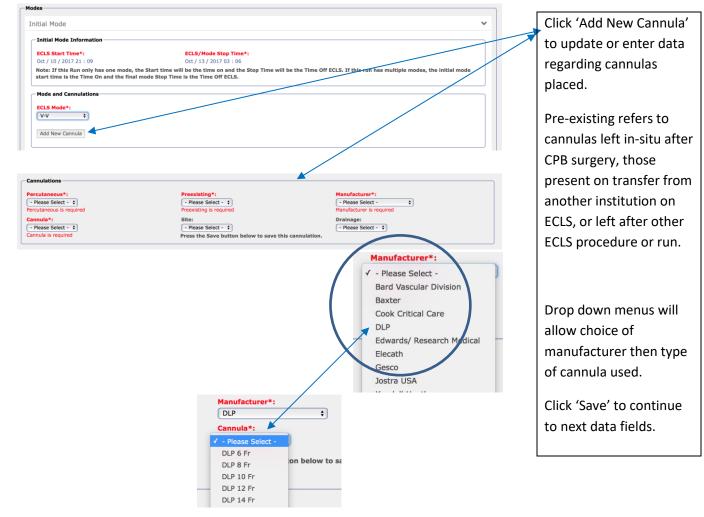
# **IV. ECLS Assessment**

ECLS Assessment			-	Enter all data as
Run				
Run No: 1 Age: 0 day	Patient: 0812017032 Support Type: Pulmonary	Birthdate: October 10, 2017 12:00 AM ECLS Start Time: October 10, 2017 09:09 PM		requested.
ECLS Stop Time: Not Entered	Patient is Unlocked	Patient Information		
💎 Run is: Incomplete				Nata Funancia data
Values Closest to 24 hours on ECMO				Note: Errors in data
Date/Time: Not Entered	pH:	PC02:		entry will result in
Month / Day / Year Hour : Minute	pH	PCO2 mmHg	1	massagas ta avalain
FiO2 (%):	PO2:	HCO3:		messages to explain.
FI02	PO2 mmHg	HCO3 mEq/L		This is an example of
SaO2:	SpO2:	Lactate:		
Sa02 %	Sp02 %	Lactate mmol/L	/	entering a date too far
Vent Settings			/	in the future for the 24
Date/Time:	Vent type:	Hand Bagging:		In the future for the 24
Month / Day / Year Hour : Minute	- Please Select - 🗘	- Please Select - 🗘		hours on ECMO data.
Hemodynamics				
Date/Time: Month / Day / Year Hour : Minute	SBP mmHg	Diastolic BP:		Please correct any red
Mean BP:	SVO2:	PCWP:		
MAP mmHg	Sv02 %	PCWP mmHg		messages, as they will
Systolic PAP:	Diastolic PAP:	Mean PAP:		not allow you to
SPAP mmHg	DPAP mmHg	MPAP mmHg		not anow you to
Cardiac index:				continue or save.
- Blood Pump Flow Units				
Pump flow at 4hrs (L/min)	Pump flow at 24hrs (L/min)			
Pumpflow4hrs	Pumpflow24hrs			
ECLS Care				
ICU where ECLS received	Enteral Feeding Date/Time: Month / Day / Year Hour : Minute	Level of Mobilization		
Maximum Level of Mobilization during ECLS O Nothing (lying in bed)	Honey bay fear tour trinuce	( Thus Sheet		
Back Next Cancel Save Form seems ok you can continue				
	Da	ite/Time:		
		/ 02 / 2018 01 : 02		
		is date should be AFTER the time on ECMO October 10, 201	.7	
		:09 PM but not more than 48h.		/
		is date can be AFTER the time on ECMO but no more than h after the time on ECMO October 10, 2017 09:09 PM		/
		is date can not be in the future		Note: if you do not
				correct the data entry,
				the system prompts you
				with a different message
Back Next Cancel	Save			at the bottom of the
		ancel to move to another tab.		screen.
ricuse complete at least	and required fields of fill d	ancer to move to another tab.		

## V. Mode and Equipment

Run Details			
Initial Mode		*	Run Details for the Initia
Run Detail Information			Mode of ECMO are
ECLS Start Time: 10/10/2017 21:09			loaded. Click on 'Edit' t
ECLS/Mode Stop Time: Not Entered			Iddueu. Click off Luit t
Mode and Cannulations			update or enter data.
ECLS Mode: V-V			
Add New Cannula			
Starting Equipment			
Equipment	Manufacturer	Device	
Membrane Lung			
Blood Pump			
Heat Exchanger			
Hemofilter			
Temperature Regulation			

Once you select 'Edit', fields may be entered or updated.



Starting Equipment Drop down menus will mbrane Lung ufacti allow choice of - Please Select -\$ e Luna Device is required manufacturer then type Blood Pump of device used in each nufacturer - Please Select -\$ - Please Select -\$ category. ump Heat Exchanger Note: the required fields Manufacturer Device: - Please Select -\$ - Please Select - 🗘 are in red, and must be Hemofilter completed before you Manufacturer Device: - Please Select - 🗘 - Please Select - 🗘 can move to another Temperature Regulation tab. Click 'Cancel' if you Device: - Please Select - + Manufacturer - Please Select - 🛊 do not enter data at this time. Add New Conversion Click 'Add New Back Cancel Save Next Conversion' to enter a or hit cancel to move to another new mode of ECMO. To add new conversion, first select Start Time, Stop Time and Note: a message will Mode for last existing Conversion appear if you do not first Close enter a stop date/time - Please Select - 🗘 for the first mode of ECMO. Click 'Close' and Initial Mode Information ECLS Start Time\*: Oct / 10 / 2017 21 : 09 ECLS/Mode Stop Time\*: return to the top of the Note: If this Run only has one start time is the Time On and rill be the time on and the Stop Time will be the is the Time Off ECLS. as multiple m page to enter the date/time. Then click version 1 'Add New Conversion' Conversion Information -- 🛍 Start Time must be before Stop time again. ECLS Start Time\* ECLS/Mode Stop Time\* Oct / 27 / 2017 03 : 02 Month / Day / Year Hour : Minute Stop Time is required Note: If this Run only has one mode, the Start time will be the time on and the Stop Time will be the Time Off ECLS. If this run has multiple modes, the initial mode start time is the Time On and the final mode Stop Time is the Time Off ECLS. The red titled field will Mode and Cannulations load. Enter the start ECLS Mode\* - Please Select - + Mode is required date/time for the new Add New Cannula mode. Often this will be one minute later than Add New Conversion the previously entered Back Cancel Save Next stop date/time. (i.e. Please complete at least the required fields or hit cancel to move to another tab Oct/27/2017 02:03) Add the new cannulas for the new mode. Click 'Save' to move to the

Starting Equipment is also available upon clicking 'Edit'.

next tab.

# VI. Diagnoses

10			
Diagnoses			Click 'Add New
Run No: 1	Patient: 0812016301	Birthdate: December 30, 2016 12:01 AM	Diagnosis' to enter a
Age: 1 day ECLS Stop Time: June 16, 2017 12:00 AM	Support Type: Pulmonary  Patient is Unlocked	ECLS Start Time: December 31, 2016 12:00 PM	new diagnosis for
Kurris: Incurrolete			
- Diagnoses			ECMO.
OAdd New Diagnosis			
Back Next			Note: Required data is in
Dack Next			Red.
Diagnoses			
ICD10 Codes*:	Primary Diagnosis:	<del>Click here for common Diagnoses codes list</del> Press the Save button below to save this diagnosis.	One diagnosis must be
Search - Please Select -		Freas the save button below to save this diagnosis.	selected as the primary
			diagnosis. The Diagnosis
			Codes will be available
ICD10Code is required			by searching in the drop
Back Cancel Save			down field. The most
lease complete at least the required fields or hit cancel t	to move to another tab		common ICD 10 Codes
			will populate as you
Diagnoses			
ICD10 Codes*:	Primary Diagnosis:		begin to type the code.
- Please Select - J10 Influenza due to other identified influenza vir	rus		
J10.0 Influenza due to other identified influenza J10.00 Influenza due to other identified influenza	virus with pneumonia		You may enter as many
J10.01 Influenza due to other identified influenza J10.08 Influenza due to other identified influenza	a virus with other specified pneumonia	virus pneumonia	diagnoses as you like.
J10.1 Influenza due to other identified influenza J10.2 Influenza due to other identified influenza	virus with gastrointestinal manifestations		
J10.8 Influenza due to other identified influenza J10.81 Influenza due to other identified influenza			Click 'Save' to move to
ICD10Code is required			the next tab. You may
			also 'Cancel' which will
			not save your work, and
			allow you to move to

## VII. Procedures

Procedures			
Run		]	Click 'Add New
Run No: 1 Age: 1 day	Patient: 0812016301 Support Type: Pulmonary	Birthdate: December 30, 2016 12:01 AM ECLS Start Time: December 31, 2016 12:00 PM	Procedure' to enter a
ECLS Stop Time: June 16, 2017 12:00 AM	Patient is Unlocked	all Patient Information	new procedure
Procedures • Add New Procedure			performed on ECLS.
Back Next			Enter the date and time
Dack Next			the complication
Procedures			occurred, and select
Date/Time*: Month / Day / Year Hour : Minute Date/Time is required	Estimated*: ( - Please Select - Estimated is required	CPT Codes*: () Search - Please Select -	whether this estimated.
			Note: Required data is in
			Red.
<u>Click here for common CPT codes list</u> Press the Save button below to save this proces	dure.	CPT Code is required	CPT Codes are available
Back Cancel Save			in the drop-down field
ease complete at least the required fields or hit cance	el to move to another tab		and will begin to
CPT Codes*: ()			populate as you type.
909			Select the correct code.
- Please Select - 25909 - Re-amputation of forearm thr			You may enter as many
36909 - Permanent endovascular occlu 67909 - Reduction of overcorrection of			complications, or
69090 - Ear piercing 90901 - Biofeedback training by any n 90911 - Biofeedback training of urethr			repetitive complications
90935 - Hemodialysis procedure with 90937 - Hemodialysis procedure requi	single physician evaluation		
90940 - Hemodialysis access flow stud CPT Code is required			as you like.
			'Save' to move to the
			next tab. You may also
			'Cancel' which will not
			save your work, and
			allow you to move to
			anow you to move to

another tab.

#### VIII. Infections

	Patient: 0812016301	Birthdate: December 30, 2016 12:01 AM
Age: 1 day	Support Type: Pulmonary	ECLS Start Time: December 31, 2016 12:00 PM
ECLS Stop Time: June 16, 2017 12:00 AM	Patient is Unlocked	Patient Information
Run is: Incomplete		
Infections		
OAdd New Infection		
ack Next		
fections		
ate/Time*:	Estimated*:	Culture Site*:
onth / Day / Year Hour : Minute	- Please Select - +	- Please Select - 🛟
	Estimated is required	Culture Site is required
ate/Time is required		Click here for list of all Organisams
	Organisms	Press the Save button below to save this infection

Click 'Add New Infection' to enter any pre and on ECLS infections on ECLS.

Enter the date and time the culture was drawn, and select whether this estimated.

Organism types are available in the dropdown field and will populate the organisms associated with the type. Select the culture site.

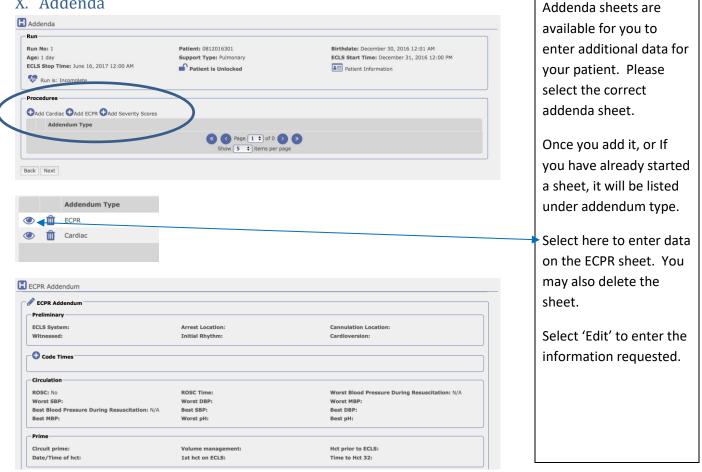
Note: required data is in red. You may enter as many infections as you like.

'Save' to move to the next tab. You may also 'Cancel' which will not save your work, and allow you to move to another tab.

#### **IX.** Outcomes

#### E Outcome Run No: 1 Patient: 0812016301 Birthdate: December 30, 2016 12:01 AM ECLS Start Time: December 31, 2016 12:00 PM Age: 1 day upport Type: Pulmonary ECLS Stop Time: June 16, 2017 12:00 AM Patient is Unlocked E Patient Information 💎 Run is: Incomplete Outcome Discontinuation reason: Extubated : Oral endotracheal tube removal: Not Entered Cannula site repair: Discharged Alive: ICU Discharge Date: Not Entered Discharge Date: Not Entered Discharge Location: Death Date: Not Entered Outcome Extubated: Oral endotracheal tube removal: tinuation: - Please Select -÷ - Please Select -+ Month / Day / Year Hour : Minute Cannula site repair: Discharge Date\*: Month / Day / Year Hour : Minute Discharge Date is required Discharged alive\*: - Please Select - ICU Discharge Date: Month / Day / Year Hour : Minute harged Alive is required Death Date: Month / Day / Year Hour : Minute Discharge Location: - Please Select -: Back Next Cancel Save at least ed fields or hit cancel to move to another tab mole

## X. Addenda



Click 'Edit' to enter the

outcome data for this

Note: required data is in

'Save' to move to the

next tab. You may also

'Cancel' which will not

save your work, and

allow you to move to

another tab.

patient.

red.

### XI. Submission

Submission			Click 'Edit' to complete
Run No: 1 Age: 1 day	Patient: 0812016301 Support Type: Pulmonary	Birthdate: December 30, 2016 12:01 AM ECLS Start Time: December 31, 2016 12:00 PM	the submission
ECLS Stop Time: June 16, 2017 12:00 AM	Patient is Unlocked	E Patient Information	process for your
C Submission			patient record.
Completed by:	Completed date:		Fatantha waara wha
			Enter the name who
Submission			completed the form,
Completed by:			the date will
Completed by Note: The Completed date is added automatic	ally		automatically add.
ØValidate Data ◀	Submit and lock		
Back Cancel Save			Click 'Validate Data'.
Form seems ok you can continue			The program will
			review all data
		Pre ECLS Support	entered to verify no
		Hospital Admit Date is required.	errors. If errors occur,
		Discharge Date must have some value.	you will be directed to
		Discharge Alive must have some value Submission	the errors that need
		The Completed by field is required.	correction

Once data is validated, click 'submit and lock'. No further data entry will be allowed.

correction.

Contact ELSO for the run to be unlocked for further data entry.