

CMS Changes to US ECMO Reimbursement: The Financial Impact upon an ECMO Program
Rebecca Rose, BA, RRT-NPS, Pamela Combs PhD, RN, Ryan Piech, MBA, MS, CCP,
Colleen LaBuhn, RN, MSN, CCRN, Valluvan Jeevanandam, MD, Tae Song, MD
University of Chicago Cardiac and Thoracic Surgery¹

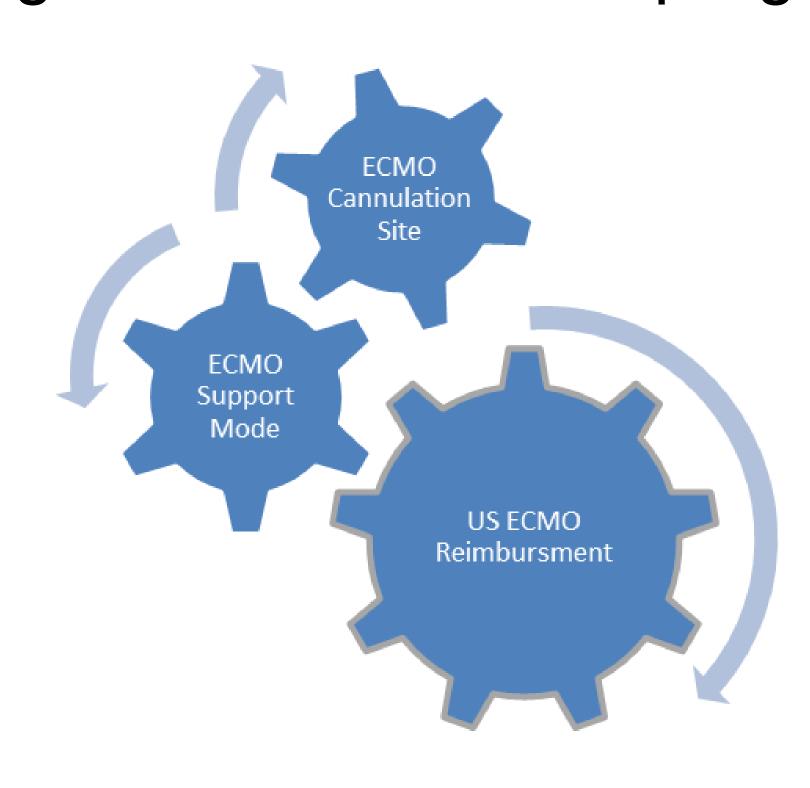


Background

- ◆ Countries who use single payer systems differentiate ECMO reimbursement based on support type and indication.
- ♦ Historically, the US has reimbursed all ECMO cases at the same rate regardless of support type or indication.
- ◆ Effective October 1st, 2018 the Center for Medicare Services (CMS) changed the ECMO associated Diagnostic Related Grouping (DRG) codes, varying reimbursement based almost exclusively on cannulation site and support mode.
- ◆ The changes may result in a decrease in US reimbursement for ECMO cases by 30%- 90%.

Aim

◆The aim of this study was to investigate the financial impact from the recently implemented DRG changes on a US ECMO program.



Methods

- ♦ We reviewed the number of adult cardiac ECMO cases performed at one institution during the years 2016 and 2017.
- ◆ Reimbursement for these cases was calculated by applying the 2017 US national average dollar amount for ECMO support, prior to the updated CMS DRG changes (plan A).
- ♦ Next these cases were categorized by cannulation site, and the presence of a Ventricular Assist Device (VAD).
- ◆ Reimbursement was again calculated, this time using the updated 2018 US CMS DRG and the associated national average dollar amount (plan B).
- Reimbursement amounts were compared.

Results

- ♦ When comparing both plans of ECMO reimbursement for the years 2016 and 2017, estimated losses of 1.2 and 3.3 million dollars were identified respectively.
- ◆ The losses would be directly attributed to the update 2018 CMS DRG reimbursement rates for ECMO.

	ECMO Type	# of Cases	Total Dollars
2016 Plan A	All ECMO Cases	38	3,871,896
2016 Plan B	Central VA ECMO	14	1,426,488
	Peripheral VA with pVAD	16	1,148,144
	Peripheral VA	8	64,168
			2,638,800
Difference in reimbursment 2016-2017			1,233,096
2017 Plan A	All ECMO Cases	57	5,807,844
2017 Plan B	Central VA ECMO	10	1,018,920
	Peripheral VA with pVAD	16	1,148,144
	Peripheral VA	31	248,651
			2,415,715
Difference in reimbursment 2016-2017			3,392,129

Conclusions

- ◆ The 2018 US CMS changes to DRG codes and payment for ECMO support are largely driven by cannulation site and may result in a significant decrease in revenue for hospitals caring for these patients.
- ◆ There are multiple factors that need to be considered when determining reimbursement for resources used during ECMO support.
- ◆ Further research is needed to fully understand the impact of these decreases in reimbursement, and how they will affect the care of these types of patients and their outcomes.

