Current Medicare Reimbursement for Complex Endovascular AAA Repair (Fene/Chevar) is Inadequate and Causes Harm to the Patient, the Surgeon, and the Hospital... and the majority of the cost are devices

Samuel Money MD, MBA

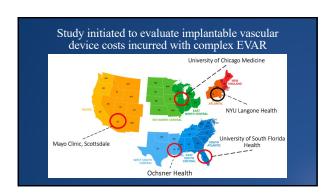
Disclosures

None financial...but a bulk of this work was done by Clay Brinster and the aortic surgeons at 5 different centers

Background

Financial analyses in the past have repeatedly demonstrated a slim or negative net financial operating margin with EVAR.

But there is limited financial data on complex AAA – Fenestrated and Chimney repairs



Aortic Consortium - Design

- Implantable aortoiliac and branch/target vessel stent device data from 25 consecutive, complex EVAR performed between January 2020 and July 2022 included. (25 at each institution)
- Treatment of juxta-, para- and suprarenal aortic aneurysms at each center were analyzed for the index operation only.
- Outside IFU for infrarenal EVAR.
- Cases of rupture, thoracic/thoracoabdominal aneurysms, reinterventions, and physician-modified EVAR excluded.

Methods

- Respective product identification numbers for each component referenced with an independent purchasing consortium:
- ECRI (Plymouth Meeting, PA), obtained median national device costs for aortoiliac devices and branch stents.

Methods

- Data was further divided in two distinct cohorts, yielding median cost per case groups for patients undergoing either FEVAR or chEVAR.
- Median cost/case for each respective group then compared to Medicare reimbursement/case for CMS-DRG codes 268/269, aortic and heart assist procedures.

Results

- Median Medicare reimbursement was calculated as \$35,755 per case utilizing CMS MS-DRG codes 268/269 as a universal standard
- Combined average implantable device (aortoiliac + target vessel stents) cost for all 125 analyzed cases was \$28,470 per case

Represents 80% (\$28,470/\$35,755) of median

Medicare reimbursement per case

Complex EVAR Device Costs

Device cost was 74% (\$26,499/\$35,755) of total reimbursement for FEVAR, and 90% (\$32,122/\$35,755) for chEVAR.

Cost Summary Complex EVAR Implants

	chEVAR	FEVAR	Cost chEVAR vs FEVAR	P value
Number of cases	53	70	· ·	-
Average Cost per Case, Aortoiliac Implants Average Cost per Case, Target Vessel Stents Average Total Cost, All Implanted Devices	\$ 23,490	\$ 20,744	-\$ 2,746	.003
Average Cost per Case, Target Vessel Stents	\$ 8,6332	\$ 5,755	-\$ 2,877	.003
Average Total Cost, All Implanted Devices	\$ 32,122	\$ 26,499	-\$ 5,623	.002

Per case summary: total cost of implanted devices with chEVAR and FEVAR

	Average Cost	Medicare Reimbursement	Cost/ Reimbursement (%)
chEVAR	\$32,122	\$35,755	90%
FEVAR	\$26,499	\$35,755	74%
chEVAR + FEVAR Total	\$28,470	\$35,755	80%
Aortoiliac Device, chEVAR	\$23,490	\$35,755	67%
Aortoiliac Device, FEVAR	\$20,744	\$35,755	58%

Conclusions

- Results from this multi-institutional analysis show implantable device costs alone represent the majority of total reimbursement/case with complex EVAR.
- chEVAR is significantly more costly than FEVAR.
- Inadequate Medicare reimbursement for these cases puts high-volume, high-complexity aortic centers at a distinct financial disadvantage.

What does this mean to the Patients?

Will some hospitals will limit the placement of these devices?

What does this mean to the Surgeon

- Most hospitals evaluate Contribution To Indirects....CTI
- If the hospital is losing \$\$\$ on these cases and our CTI drops, less resources as Vascular Surgery becomes a lesser profit center
- How Do We Care FOR These Patients...



Thank you