

Is Reconstructive Plastic Surgery Appropriately Valued?

Comparison of Reimbursement per Unit Time for Reconstructive vs. Aesthetic Procedures

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Background

The Work Relative Value Units (wRVUs) system was developed and established in 1992 as a quantifier of physician labor, technical skill, medical decision making, and training time required to complete surgical procedures.

More challenging operations should theoretically result in higher reimbursement or compensation.

Plastic surgery is one of the unique fields where two forms of reimbursement are utilized:

- Fee for service
- Insurance reimbursement

Purpose

Highlight the discrepancies between microsurgical reconstructive and aesthetic procedures based upon dollars/unit time.

Methods

Retrospective analysis of deidentified patient data from the 2020 ACS NSQIP participant use data files to identify average length of Operative Room time for procedures for 8 reconstructive microsurgery and 3 aesthetic procedures.

Aesthetic Plastic Surgery National Databank Procedural Statistics Report 2020-2021 and Novitas – CMS (Centers for Medicare and Medicaid Services) were utilized to identify the average reimbursement for the above procedures. RVU data was assessed using the 2020 PFS.

For each procedure, calculation of:

- wRVUs per minute (wRVU/min)
- Dollars per minute (\$/min)

Statistics:

- Average operation time
- Dollars per minute



Results

Table 1. Reconstructive Procedures

CPT Code	Procedure	Median operative time in minutes (IQR)	wRVUs	wRVUs per minute	Average Surgeon Fees* (dollars)	Dollar per minute
19634	Free flap breast reconstruction	454 (186)	42.58	0.09	\$2840.43	\$6.26
19367	Breast reconstruction TRAM flap	296 (212)	26.8	0.09	\$1848.84	\$6.25
19357	Breast reconstruction with TE	189 (124)	14.84	0.08	\$1211.82	\$6.41
15734	Upper extremity - pedicled flap	174 (142)	23	0.13	\$1569.88	\$9.02
15733	H&N pedicled flap	168 (190)	15.68	0.09	\$1073.68	\$6.39
15738	Lower extremity - pedicled flap	161 (145)	19.04	0.12	\$1325.10	\$8.23
15736	Trunk - pedicled flap	127 (153)	17.04	0.13	\$1269.33	\$9.99
19350	Breast reconstruction with PI	99 (90)	9.11	0.09	\$868.94	\$8.78

* Novitas – CMS (Centers for Medicare and Medicaid Services), work relative value unit, interquartile range

Table 2. Aesthetic Procedures

CPT Code	Procedure	Median operative time in minutes (IQR)	wRVUs	wRVUs per minute	Average Surgeon Fees* (dollars)	Dollar per minute
15830	Panniculectomy /abdominoplasty	159 (106)	17.11	0.11	\$4,758.00	\$29.92
19316	Mastopexy	142 (112)	11.09	0.08	\$4,864.00	\$34.25
19325	Breast augmentation	83 (68)	8.12	0.10	\$4,235.00	\$51.02

* National Average values from Aesthetic Society Statistics 2020-2021, work relative value unit, interquartile range

Discussion

Average rate of reimbursement for microsurgical reconstructive cases was **\$6.72 per minute**, with an average surgical operative time of 233.52 minutes (~4 hours) per case. In contrast, the average rate of reimbursement for aesthetic cases was **\$31.99 per minute**, with an average surgical operative time of 150.23 minutes (~2 and ½ hours) per case.

This difference in remuneration translates to a **4.7x difference**, with an overwhelming gap of **\$25.26 per minute** between microsurgical reconstructive and aesthetic cases.

Conclusion

Based on national rates of reimbursement, there is a large discrepancy between reimbursement in microsurgical reconstructive procedures and aesthetic procedures. By demonstrating that **complexity and time are not directly related to compensation**, reconstructive plastic surgeons should be made aware of these inequalities that exist within their specialty.

Complexity



Compensation