Medical Xpress

Cleft lip and palate surgery procedures are undervalued, study suggests

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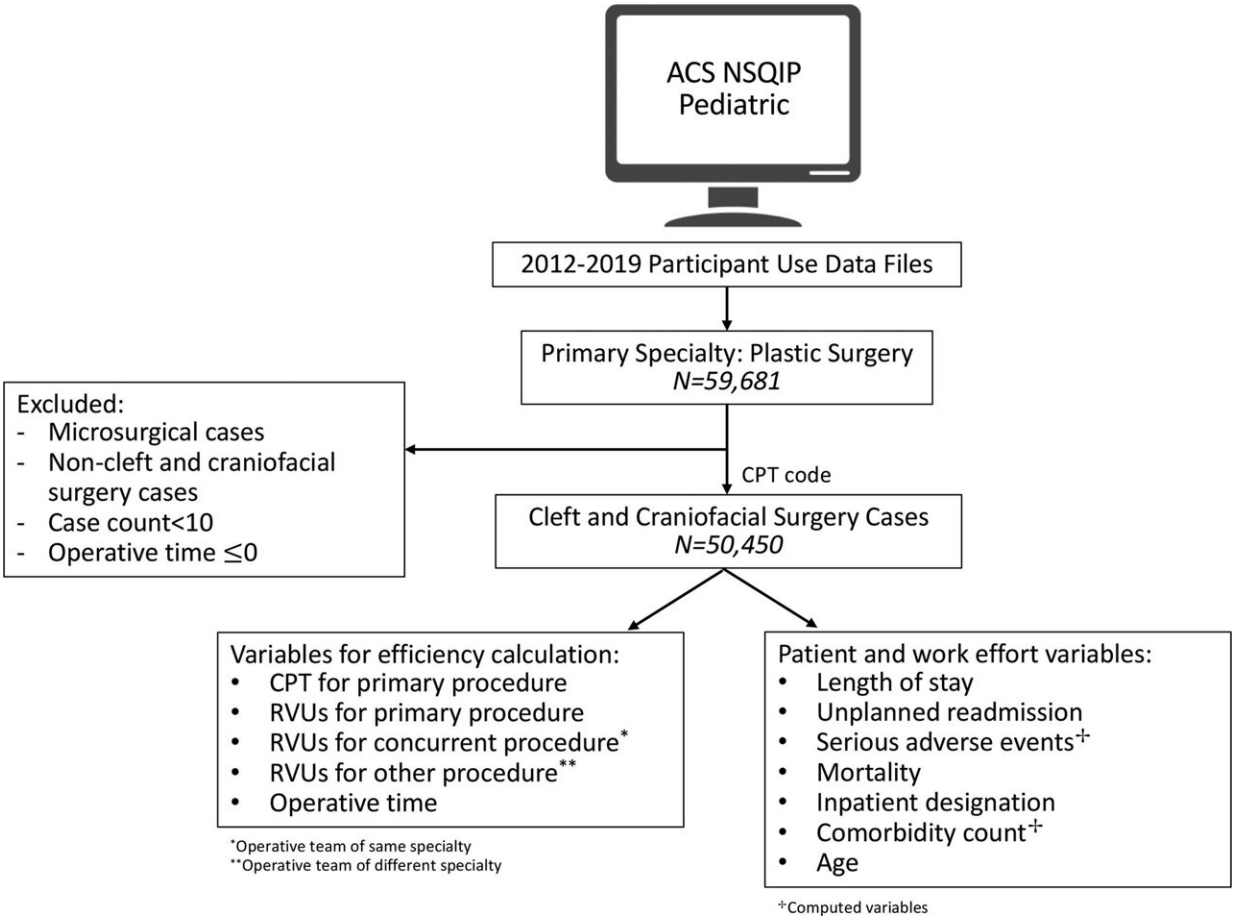

Flowchart of cohort selection. Credit: *Plastic & Reconstructive Surgery* (2023). DOI: 10.1097/PRS.0000000000009922

Plastic surgery procedures performed to correct cleft lip and palate

deformities in infants and children are economically undervalued, relative to pediatric craniofacial procedures, concludes an analysis in the March issue of *Plastic and Reconstructive Surgery*.

The study finds unbalanced allocation of relative value units (RVUs) used in billing and compensation for cleft surgery in children, compared to craniofacial procedures, report Roberto L. Flores, MD, of Hansjörg Wyss Department of Plastic Surgery, New York University Langone Health, and colleagues. "The current RVU allocation to cleft and craniofacial procedures creates arbitrary disparities in physician efficiency, with cleft procedures disproportionately negatively affected," the researchers write.

Procedures with the lowest RVUs are mainly for cleft surgery

The RVU system is a standardized coding method to account for a wide range of factors affecting the value of physicians' work, such as the time, effort, and risks of specific procedures and services. Each surgical procedure (or component of a complex procedure) has a specified RVU. The values assigned to RVUs have important implications for surgeons' reimbursement and productivity.

Using a national database, the researchers identified 50,450 pediatric cleft or craniofacial surgery cases performed by plastic surgeons between 2012 and 2019. For each of 69 different procedures, efficiency was assessed by dividing the total RVUs by the total operative time, to arrive at RVUs per hour. The analysis accounted for a range of variables affecting patient complexity and surgeon effort.

Four of the five most frequently performed procedures involved primary or secondary repair of cleft palate. Yet most procedures in the top

quartile (one-fourth) of efficiency were craniofacial procedures: average efficiency 15.65 RVUs per hour.

In contrast, most procedures in the bottom quartile of efficiency were cleft procedures, with an average efficiency of 7.39 RVUs per hour. Average operating time was 167 minutes for craniofacial procedures versus 108 minutes for cleft procedures.

Thus even though they accounted for some of the most frequently performed plastic surgery procedures in children, cleft procedures were rated as having an average efficiency roughly half that of the most-efficient procedures. The researchers note that a relatively simple procedure such as performing a local skin flap would be rated more efficient than a more complex procedure such as palatal lengthening for cleft palate correction.

'Arbitrary disparities' may create disincentives to perform cleft surgery

RVUs were correlated with operative time, as well as with serious adverse events, other patient health conditions (comorbidity), patient age, and hospital readmission risk. However, these factors accounted for just 38% of the variance in RVUs—"suggesting that other factors are at play in explaining RVU allocation," the researchers write.

The study builds on a previous analysis of adult plastic surgery procedures published in *Plastic & Reconstructive Surgery* in 2021, which concluded that "RVU allocation did not confer a consistent accurate representation of physician efficiency." The new analysis extends the analysis to pediatric plastic surgery cases—most of which consist of cleft surgery or craniofacial surgery to correct congenital malformations such as craniosynostosis.

"[T]he current RVU allocation system undervalues cleft surgical services relative to craniofacial procedures," Dr. Flores and colleagues conclude. "In order to avoid disincentivizing surgeons from performing cleft procedures and thus constructing artificial barriers to quality care for children with cleft lip and palate, the current RVU allocation should be re-evaluated."

"Cleft lip and palate disproportionately affects vulnerable patient populations," Dr. Flores comments. "Therefore, addressing RVU inequities is all the more important in with regards to the service of the underserved."

More information: Danielle H. Rochlin et al, National Undervaluation of Cleft Surgical Services: Evidence from a Comparative Analysis of 50,450 Cases, *Plastic & Reconstructive Surgery* (2023). DOI: 10.1097/PRS.0000000000009922

Jared A. Blau et al, Disparities between Operative Time and Relative Value Units for Plastic Surgery Procedures, *Plastic & Reconstructive Surgery* (2021). DOI: 10.1097/PRS.0000000000008276

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