Introduction: Plastic surgery to address congenital or acquired conditions can have a profound impact on children's well-being and psychosocial development. We conducted this study to estimate trends in plastic surgery procedures among United States population.

Methods: Using the 2000-2012 Kids' Inpatient Databases, we identified hospital discharges associated with a primary diagnosis or procedure within the pediatric plastic surgeon's scope of practice: cleft lip and palate, craniosynostosis, congenital hand or chest anomalies, vascular malformations, and soft tissue flap or facial fracture procedures. The primary outcomes were the frequency of discharges and associated hospital charges. Regression models were used to test for significance in trends while accounting for changes in the U.S. pediatric population.

Results: The final sample included 310,513 discharges between 2000 and 2012. During the study, there was a 16% increase in pediatric plastic surgery-related discharges (2000=56,389 vs 2012=67,054, $p < 0.001$) and a 2.83-fold increase in mean, hospital charges per encounter (2000=$27,216 vs 2012=$77,032, $p < 0.001$). The greatest growth was for vascular malformations (+76%; $p < 0.001$), congenital chest anomalies (+61%; $p < 0.001$), and craniosynostosis (+38%; $p < 0.001$), while the greatest decline was for facial fracture procedures (-41%; $p < 0.001$). The greatest growth in charges were for vascular malformations (+3.48-fold; $p < 0.001$) and congenital hand (+3.22-fold; $p < 0.001$). Dedicated children's hospitals experienced a 2.1-fold increase in discharges overall with growth noted in all areas.

Conclusion: Plastic surgeons are playing a growing role in the care of pediatric patients across the United States, especially at dedicated children's hospitals.