

# Trends in Ambulatory Surgery in the Era of the Affordable Care Act 2011-2015



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## Abstract

**Educational Objective:** To observe the early impacts of the Affordable Care Act on the volumes of common otolaryngologic surgeries

**Study Design:** Database Review

**Methods:** The Office of Statewide Health Planning and Development (OSHPD) database of all outpatient surgery performed in a large US state was queried for the years 2011-2015 for 55 common otolaryngologic procedures by CPT code. Resulting trends were analyzed with linear regression. Contextual public health data was obtained from the Kaiser Foundation.

**Results:** 729,106 common otolaryngologic ambulatory surgeries were performed in the state from 2011-2015. During this time of ACA implementation 72% of previously uninsured in this state have obtained insurance. Nonetheless, there was no significant change in yearly surgical volume. When broken down by CPT code, 10 codes, mostly head and neck and reconstructive procedures, showed significant increases. Meanwhile 10 codes, including common codes such as for tonsillectomy showed significant decreases. Yearly surgical volume remained beneath 2011 levels in all years.

**Conclusions:** The Affordable Care Act has triggered far reaching changes in the American health care system. Despite millions of patients obtaining insurance in one large American state, there has not been a commensurate rise in ambulatory surgical volumes. While this may be partially due to changing practice patterns, these results raise troubling questions about access to surgical subspecialty care. The reasons behind this disparity should be the focus of further research.

## Results

From 2011 to 2015 729,106 outpatient surgeries were performed. During this time period 72% of previously uninsured state residents obtained insurance according to one major survey, a figure that would mean millions of patients now covered.<sup>3</sup>

When broken down by year there was no significant change in yearly surgical volume ( $p=0.18$ ). In fact, no year had a greater surgical volume than 2011.

When broken down by CPT code 10 procedures had significant declines, including common ones such as tonsillectomy and direct laryngoscopy. 10 procedures had significant increases, mostly head and neck and reconstructive codes

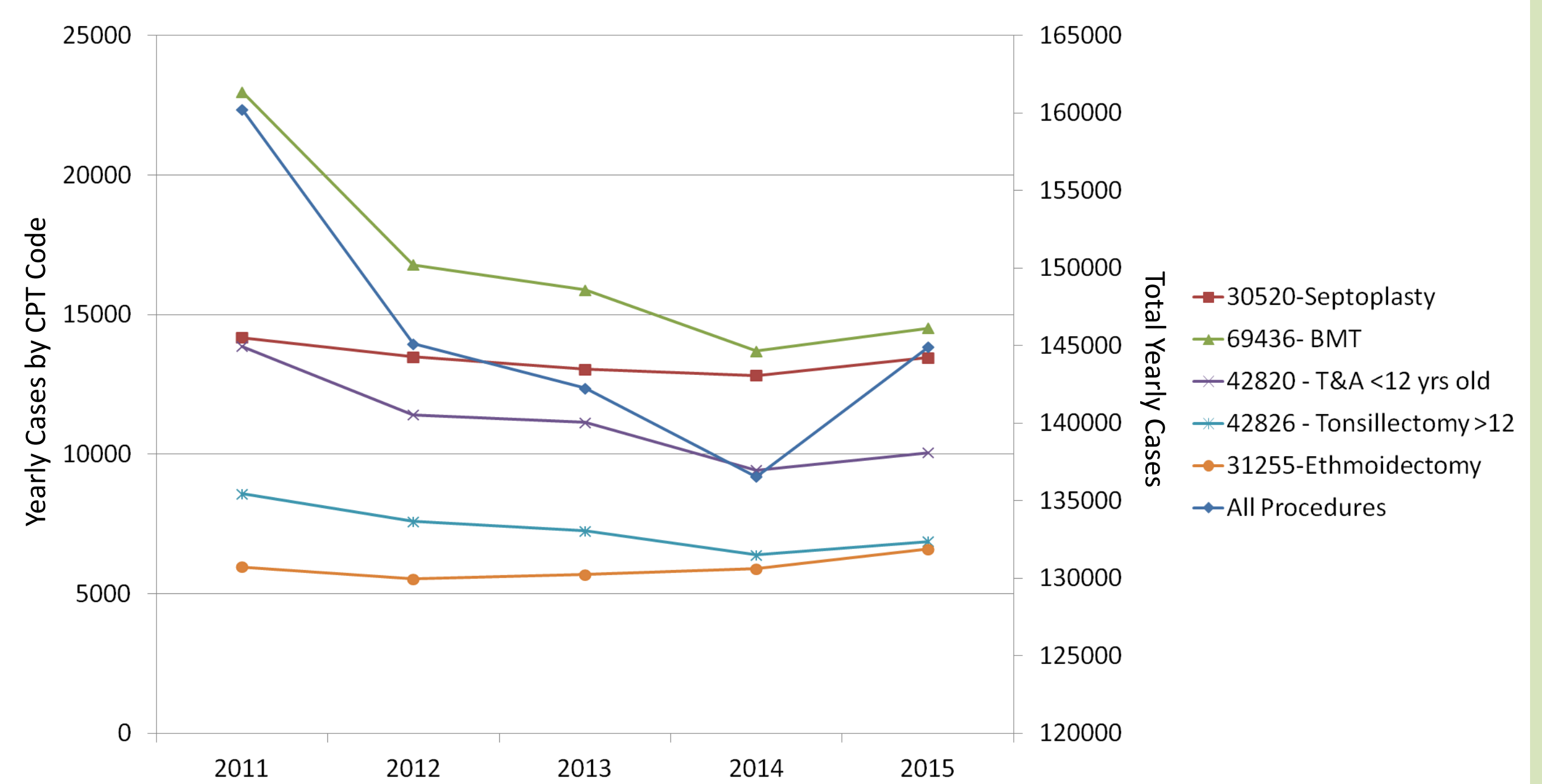


Chart 1. Surgical Volumes by Year

Increase		Decrease	
14041 - Adjacent tissue transfer 10-30cm	42420 - Total parotidectomy	42820 - T&A <12 years old	14040 - Adjacent tissue transfer <10cm
14301 - Adjacent tissue transfer 30-60cm	42415 - Superficial parotidectomy	42826 - Tonsillectomy >12 years old	11643 - Excision 2.1-3 cm malignant lesion
11042 - Debride subcutaneous tissue	60220 - Thyroid lobectomy	31525 - Direct laryngoscopy	15260 - Full thickness skin graft
20926 - Tissue grafts (e.g. fat)	60240 - Total thyroidectomy	31254 - Partial ethmoidectomy	43200 - Flexible esophagoscopy
38724 - Removal cervical nodes	60500- Parathyroidectomy	43450 - Esophageal dilation	11642 - Excision malignant lesion 1.1-2 cm

Figure 1. CPT codes with Significant Change

## Introduction

The Affordable Care Act has had far reaching effects on the American health care system. One major goal was to expand health insurance coverage to make health care accessible for more Americans. It has been difficult, though, to ascertain how successful the reforms have been as states have varied in how aggressively they have enacted the Act's provisions. Some rely on surveys of patients to determine if patients are satisfied with the care they receive under their new insurance plans.<sup>1</sup>

The state of California has vigorously expanded insurance coverage<sup>2</sup> and tracks surgical volumes at all hospitals and ambulatory surgery centers. Thus it provides a possibly useful test case to determine if expanding insurance coverage increases surgical volume. A rising figure would suggest that more patients are accessing surgical care. Such a finding would be of particular interest to otolaryngologists, who as surgical subspecialists provide surgical care for many common head and neck pathologies, from chronic otitis media with effusion to OSA to chronic sinusitis.

## Methods and Materials

The California OSHPD maintains a database recording all outpatient surgery performed in the state, tallied by CPT code. This database was queried for the years 2011-2015 for the frequency of 55 common otolaryngologic surgical procedures.

These CPT codes were obtained from the AAO-HNS list of 100 most frequently billed CPT codes to Medicare in 2015. We excluded codes that would not be performed as an outpatient surgery (e.g. flexible laryngoscopy). Codes limited to pediatric patients (e.g. 42820, T&A <12 years of age) were added in to provide greater context of the general otolaryngologist's practice

Resulting figures were analyzed with linear regression analysis using Graphpad software. Contextual public health data was obtained from Kaiser Foundation publications.

## Discussion

The lack of increase in surgical volume despite millions of newly insured patients is a striking finding. There have been lay media reports of patients having difficulty accessing physician care despite now having insurance.<sup>4</sup> These figures may provide objective validation of these accounts.

There are reports in the literature of an impending shortage of otolaryngologists, and concern has been raised that the Affordable Care Act may make the supply-demand mismatch more acute.<sup>5</sup> Our data suggests that this may now be occurring.

Of course, other factors may be at play in the lack of a surge of surgical cases. Practice patterns are changing (e.g. increasing utilization of in office balloon sinuplasty) and practice guidelines have helped more clearly identify those who would benefit from surgery. The varying impact of these factors vs a true shortage of otolaryngologists would be an interesting area of further research.

## Conclusions

The ACA has triggered far ranging changes to the American health system. In one large state millions more people have insurance coverage. Nonetheless, there has not been a similar rise in surgical volumes. This may suggest continued difficulty with patients receiving adequate care.

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