

ORIGINAL RESEARCH

Distribution of Paycheck Protection Program to otolaryngology practices during the COVID-19 pandemic

Amy Q. Zhu BA  | Manish J. Patel BS | Richard Chiu  | Brandon R. Perez MS  | Robert T. Cristel MD  | Jeffrey Yu MD

Department of Otolaryngology-Head & Neck Surgery, University of Illinois at Chicago, Chicago, Illinois, USA

Correspondence

Jeffrey Yu, MD, Department of Otolaryngology-Head & Neck Surgery, University of Illinois at Chicago, 1855 W. Taylor, Suite 2.42, Chicago, IL 60612, USA. Email: jeffwyu@uic.edu

Abstract

Background: The Coronavirus disease of 2019 (COVID-19) has impacted physician practices in many ways with some ENT clinics reporting around a 50% drop in completed scheduled ENT visits during the first wave of the pandemic compared to 2019.

Aims: This study surveyed first round PPP loan disbursement to otolaryngology practices in the United States in response to COVID-19.

Methods: A cross-sectional study was conducted using publicly available data published on PPP by the SBA. Otolaryngology clinics receiving loans greater than \$0.15M were filtered using the following terms: “otolaryngology”, “otolaryngologist”, “sinus”, “head and neck”, “throat”, “ENT”, and “facial plastic”. 481 ENT clinics that received loans greater than \$0.15 M from the Paycheck Protection Program (PPP) were identified. Loan amount, business type, geographic region, owner race, owner gender, and the number of jobs per business were recorded for each clinic. Chi-square analysis was performed to determine significance ($P < 0.05$) of each characteristic.

Results: Loan distribution was significantly different based on jobs reported ($P < .001$) and business type ($P < .001$). 100% of loans ranging from \$0.15 M to \$0.35 M went to micro and small practices whereas 33% of medium-sized practices received loans greater than \$1 M. Higher proportions of Subchapter corporations (60.00%) received smaller loans of \$0.15 to \$0.35 M than Limited Liability Companies (39.13%) and Corporations (51.69%) which generally employ more people.

Discussion: Loan distribution was significantly different between businesses based on jobs reported ($P < 0.001$), with micro/small practices receiving smaller loans than their medium counterparts. All large businesses received loans in excess of \$2 M. This suggests proportional distribution of loans in accordance with jobs reported.

Conclusion: This study suggests PPP funding was objectively distributed to ENT clinics based on staff size.

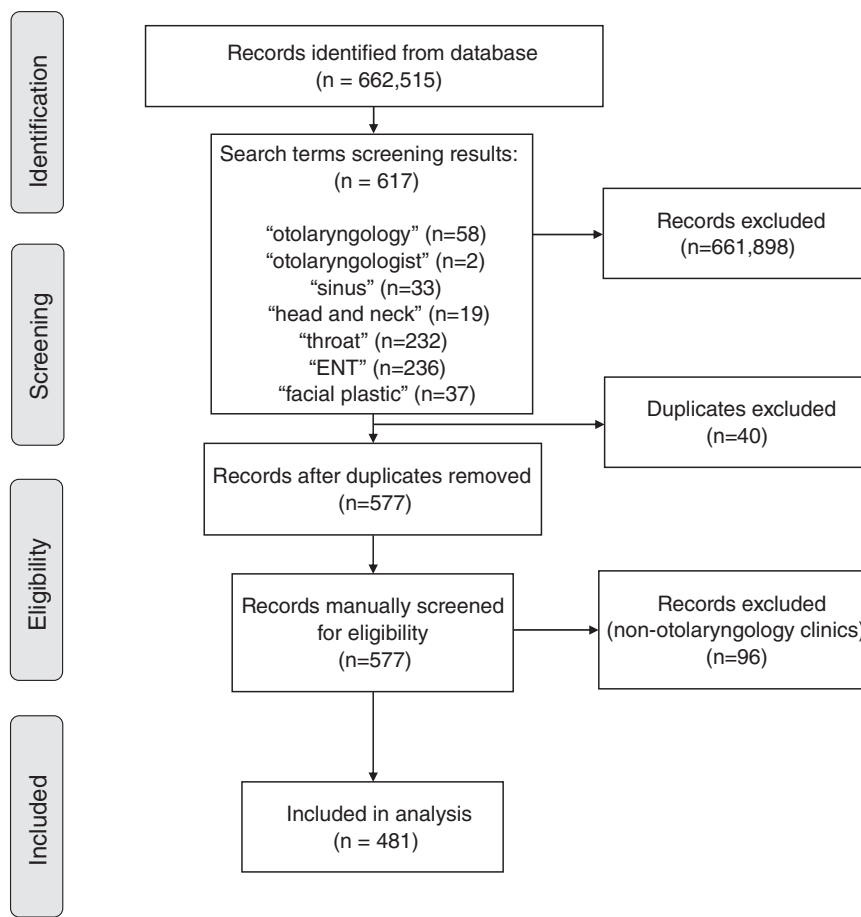
Level of Evidence: Level 4.

KEYWORDS

COVID-19, ENT, otolaryngology, Paycheck Protection Program

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FIGURE 1 Flowchart of otolaryngology clinic selection process

1 | INTRODUCTION

In March 2020, the U.S. government declared a state of emergency to limit the spread of COVID-19.¹ Surgical practices nationwide cancelled appointments and operations, straining practices financially. Otolaryngology practices were especially vulnerable because of the elective nature of ENT procedures with increased risk of spreading COVID-19 through oral, oropharyngeal, nasal, and sino-nasal procedures. Economic fallout prompted Congress to pass the CARES act, which included the Paycheck Protection Program (PPP) to provide financial support for small businesses, including private otolaryngology practices.² This study surveyed first round PPP loan disbursement to otolaryngology practices in the United States in response to COVID-19. We identified 481 ENT practices that received loans of \$0.15 M and above, representing less than 5% of medical practices included in this program.

2 | METHODS

Beginning August 2020, the Small Business Administration (SBA) made records of PPP distributions greater than \$0.15 M available online. MATLAB (The MathWorks Inc., Natick, Massachusetts) was used to isolate otolaryngology clinics by searching for the seven terms

detailed in Figure 1. The following information was obtained after removal of duplicates and confirmation of remaining otolaryngology practices: jobs reported, business type, owner race, owner gender, and geographic region according to the U.S. Census Bureau.³ Jobs reported were categorized according to Organization for Economic Cooperation and Development (OECD) enterprise size guidelines.⁴ Raw data were exported into Microsoft Excel and Chi-square analysis was performed to determine significance ($P < .05$). Research planning, strategies, data collection, and analyses were completed according to the World Medical Association Declaration of Helsinki.⁵ IRB approval was not required.

3 | RESULTS

481 otolaryngology clinics were identified (Table 1). Most practices (66.74%) reported jobs within the 10 to 49 (small) range. Regionally, Southern clinics received the majority of loans (45.53%), with relatively even distribution among remaining regions. Most loans went to corporations (43.04%) and Subchapter S corporations (23.91%). Most clinics received loans in the \$150 000 to \$350 000 (54.89%) or \$350 000 to \$1 million (37.84%) ranges, and five clinics (1.03%) received \$2 to 10 million loans. Chi-square analysis of jobs reported

TABLE 1 Characteristics of database

Characteristics	Loan range (\$)					All loans (n = 481)
	0.15-0.35 M (n = 264)	0.35-1 M (n = 182)	1-2 M (n = 26)	2-5 M (n = 7)	5-10 M (n = 2)	
Jobs reported, no. (%)						<i>P</i> < .001
Unanswered	11	8	0	1	0	20 (4.16%)
0-9 (micro)	44	12	3	0	0	59 (12.27%)
10-49 (small)	209	111	1	0	0	321 (66.74%)
50-249 (medium)	0	51	22	3	0	76 (15.80%)
250+ (large)	0	0	0	3	2	5 (1.04%)
Region, no. (%)						<i>P</i> = .41
South	117	81	16	3	2	219 (45.53%)
Midwest	51	34	6	2	0	93 (19.33%)
Northeast	57	27	2	0	0	86 (17.88%)
West	38	40	2	2	0	82 (17.05%)
Virgin Islands	1	0	0	0	0	1 (0.21%)
Owner gender, no. (%)						<i>P</i> = .21
Male	56	22	2	1	1	82 (17.05%)
Female	5	2	0	0	0	7 (1.46%)
Unanswered	203	158	24	6	1	392 (81.50%)
Owner race, no. (%)						<i>P</i> = .07
White	24	3	0	1	0	28 (5.82%)
Asian	3	1	0	0	0	4 (0.83%)
Unanswered	237	178	26	6	2	449 (81.50%)
Business type, no. (%)						<i>P</i> < .001
Corporation	107	86	10	4	0	207 (43.04%)
Subchapter S Corporation	69	37	8	1	0	115 (23.91%)
Limited Liability Company (LLC)	45	32	4	1	2	84 (17.46%)
Partnership	17	10	0	0	0	27 (5.61%)
Limited liability partnership	10	0	2	0	0	18 (3.74%)
Professional association	10	5	2	1	0	18 (3.74%)
Sole proprietorship	3	4	0	0	0	7 (1.46%)
Non-profit	1	3	0	0	0	4 (0.62%)
Cooperative	1	0	0	0	0	1 (0.21%)
Self-employed individuals	1	0	0	0	0	1 (0.21%)

(*P* < .001) and business type (*P* < .001) suggest a relationship between these variables and loan ranges.

4 | DISCUSSION

The COVID-19 pandemic has been financially challenging for health care organizations with some studies showing an approximate 50% drop in completed scheduled ENT visits during the first wave of the pandemic.⁶ The first round of PPP extended \$669 billion in forgivable loans to small businesses such as private otolaryngology practices. SBA-partnered lenders facilitated the loans whereby businesses

requested up to 2.5 times their monthly payroll.⁷ 100% employee retention with greater than 75% of funds used for paychecks resulted in loan forgiveness.⁸

481 otolaryngology practices in the United States received loans of \$150 K or more with funds distributed objectively based on staff size. Loan distribution was significantly different between practices based on jobs reported (*P* < .001) and business type (*P* < .001). Micro/small practices were given smaller loans than their medium-sized counterparts, a third of which (32.89%) were given loans above \$1 M. All businesses employing greater than 250 people (*n* = 5) were granted loans in the highest two tiers of \$2 M+. Loan distribution also differed based on business type, with most going to corporations

(43.04%), Subchapter S corporations (23.91%), and LLC's (17.46%). Subchapter S corporations were given smaller loans than LLCs and Corporations, which generally employ more people.

This study suggests loans were allocated in accordance with jobs reported when approved. Lack of the literature on ENT private practice employee number makes it difficult to comment on equitable allocation. Drawing conclusions beyond this is outside of the scope of this study, as staff size does not reflect the number of otolaryngologists and patient volume of each practice.

Although the study observed a significant difference in loan disbursement based on business type, it is difficult to comment on the implications of this finding. Corporations are legal entities taxed through the business or the individual owner(s) and employees. In short, C corporations have double taxation meaning the business and receivers of dividends (owners and employees) both pay taxes. This business structure allows trading of public shares with greater flexibility in corporate equity distribution. S corporations are not taxed through the business and profits are passed to owners. LLC's have single taxation of owners and employees with no public shares. Its purpose is to shield owners from liability.⁹ Without literature surveying distribution of business structure among ENT private practices, we are unable to assess whether this variable conferred any advantage in securing PPP funding.

In the scope of PPP loan disbursements nationwide, economic analyses noted banks favored larger businesses like food services over smaller businesses like health care practices during round one.¹⁰ Furthermore, smaller businesses had lower awareness of funding, longer processing times, and lower approval rates. Thus, it is relevant to ENT practices that only small business under 300 people is eligible for the second round of PPP loans.⁷ Only 1.0% of ENT practices surveyed in our study have greater than 250 people, meaning this recently approved funding has substantial potential to aid otolaryngology clinics. Private ENT practices should be aware of PPP funding and act swiftly to obtain it.

4.1 | Limitations

Limitations of this study include lack of published data on otolaryngology practices that did not apply for funding, received no funding, or received under \$0.15 M. Therefore, differences in size, structure, owner, and region could not be assessed between practices that did and did not receive funding. Some practices may not have been included by our seven search terms. Insufficient data on owner gender and race limited analysis of disparities regarding these variables. Additionally, a nonsignificant but higher percentage of loans were given to southern practices (45.53%), but it is unclear if this reflects the proportion of ENT private practices in each region due to lack of literature on this topic. Although several articles have characterized the geographic areas in which individual otolaryngologists practice nationwide, no literature exists surveying

the regional distribution, size, and business structures of private ENT practices nationwide.^{11,12}

5 | CONCLUSION

This study found proportional distribution of PPP loans greater than \$150 K in accordance with jobs reported to otolaryngology practices. Improving awareness is crucial as the second round of PPP emphasizes forgivable loans to small businesses under 300 people, encompassing most independent ENT practices nationwide. Future research should identify the degree PPP loans mitigated COVID-19's financial impact.

ACKNOWLEDGMENTS

None.

CONFLICT OF INTERESTS

Authors have no conflict of interests to disclose.

ORCID

Amy Q. Zhu  <https://orcid.org/0000-0003-0527-1793>

Richard Chiu  <https://orcid.org/0000-0001-5653-8123>

Brandon R. Perez  <https://orcid.org/0000-0001-9535-7819>

Robert T. Cristel  <https://orcid.org/0000-0001-9350-0060>

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How to cite this article: Zhu AQ, Patel MJ, Chiu R, Perez BR, Cristel RT, Yu J. Distribution of Paycheck Protection Program to otolaryngology practices during the COVID-19 pandemic. *Laryngoscope Investigative Otolaryngology*. 2021;6(4):668-672. <https://doi.org/10.1002/lio2.614>