Health-Related Internet Access in Midwest Otolaryngology Patients

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ABSTRACT

Objective: No current studies of adult Internet use among United States ENT patients exists. Such data would provide guidance for Otolaryngology physicians in effectively communicating with their patients. Our study evaluated use of health-related Internet resources by Otolaryngology patients at two outpatient practice settings in Iowa.

Methods: A total of 1564 paper surveys were voluntarily filled out by patients attending the Otolaryngology Clinics at University of Iowa (n=957) and the Mason City Clinic of North Iowa (n=607). Demographic factors along with access and utilization of online resources were assessed. To determine which factors were associated with access to the Internet and with researching medical conditions, age distributions were compared by t-test and categorical variables (sex, level of education, residence, and medical condition) were compared by chi-square analysis.

Results: Overall, 8.8% of patients reported no Internet access, and an additional 4.9% reported access only at work or at a public location. Individuals with access to the Internet (mean age of 45.8, N=1526) were significantly younger (p<0.0001), more educated (p<0.0001), and lived in more urban counties (p<0.016). Among the Otolaryngology subspecialties, patients seen by Head and Neck oncologists were most likely to be without access (10.9%).

Conclusion: Electronic health care tools are accessible to a majority of Otolaryngology patients, but specific populations continue to lack on-line access. Practices with rural, less educated, and older populations may not benefit as much from implementation of online correspondence and educational materials. Additionally, Head and Neck patients have the least reliable access to the internet among subspecialized Otolaryngology clinics.

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INTRODUCTION

In the U.S., electronic/Internet based health resources, email specific patient/provider interactions, and electronic based medical records seem ubiquitous. In the rural populations served in Iowa Otolaryngology clinics, the proportion of patients without access to electronic health resources seemed disproportionate in certain groups. Previous studies in Europe found differences in access and health based usage of the internet between education status, with degree-holders far more likely to use the internet to obtain health information (Gurr 2009). Our study evaluated use of health-related Internet resources by Otolaryngology patients at two outpatient practice settings in Iowa.

METHODS AND MATERIALS

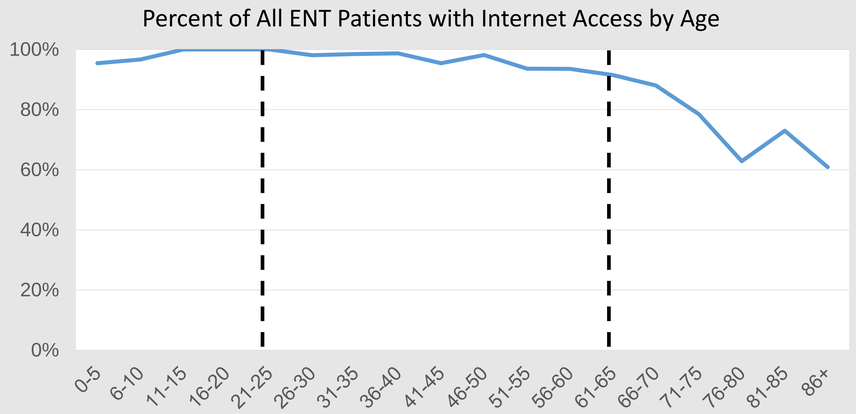
A total of 1564 paper surveys were voluntarily filled out by patients attending the Otolaryngology Clinics at University of Iowa (n=957) and the Mason City Clinic of North Iowa (n=607).

Demographic factors along with access and utilization of online resources were assessed. To determine which factors were associated with access to the Internet and with researching medical conditions, age distributions were compared by t-test and categorical variables (sex, level of education, residence, and medical condition) were compared by chi-square analysis using SPSS, version 19 (SPSS, Inc., Chicago, Illinois)

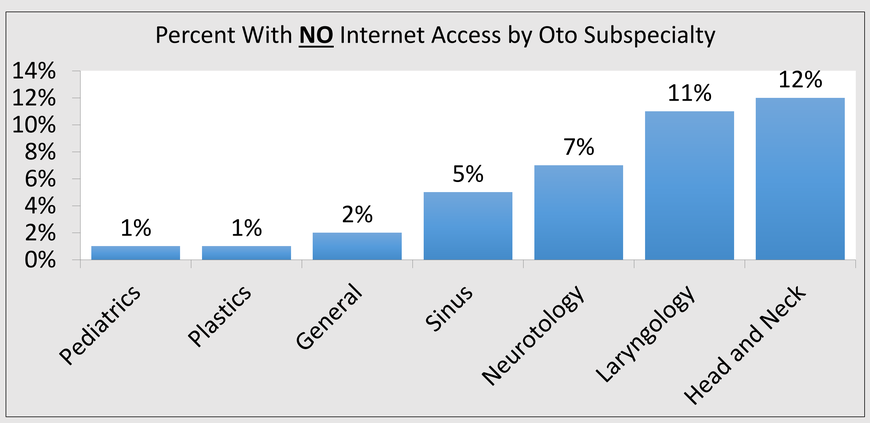
RESULTS

Who Has Internet Access?

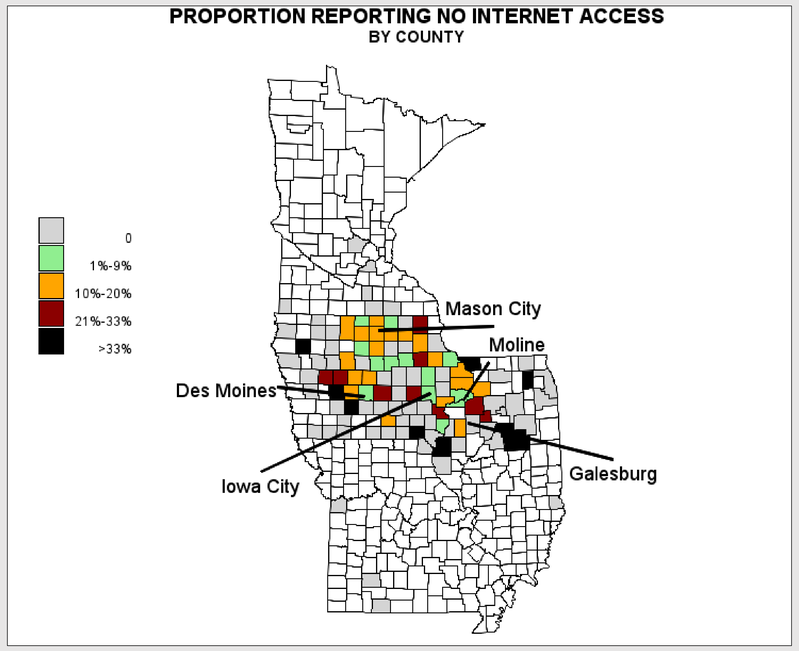
- 8.8% completely lack internet access. In addition, another 4.9% have access only in a public place or at work.
- Mean age is higher for patients without any internet access, p<0.0001. Older patients were progressively more likely to have no internet access, from 2.5% for patients under age 25 to 23.3% for patients over age 65.



- There were no differences in availability of internet access between men and women.
- When considering only the University practice, composed mostly of subspecialists, there was an association between internet access and the subspecialty seeing the patient, from 10.9% of head and neck patients without access to 1% of pediatric otolaryngology patients.



- There was a substantial difference between patients seen in Mason City and those seen in Iowa City, with the former being less likely to have internet access, 7.2% vs 11.3%, p=0.006.
- Similarly patients from more urban counties had a 7.4% chance of no access compared to 11.0% of patients from more rural counties, p=0.016.



Who Uses the Internet to Research Health?

- Despite the fact that a large majority of patients reported having internet access, only 35.4% reported using the internet to research their health condition. Additional statistically significant differences include:

Patient Characteristic	% Patients Who Researched Online
Age	
22-44 years old	53.4%
65+ year old	11.0%
Education	
Less than High School	11.0%
More than Undergrad	53.7%
Location of Clinic	
University	45.6%
Local Private Practice	19.8%
Local Population	
Urban	40.7%
Rural	27.6%

CONCLUSIONS

Electronic health care tools are accessible to a majority of Otolaryngology patients, but specific populations continue to lack on-line access

Additionally, even in populations *with* internet access, a much smaller percentage of patients actually use the internet to research their health.

General Otolaryngology practices with **rural**, **less educated**, and **older** populations may not from implementation of online correspondence and educational materials. In subspecialized practices, providers who specialize in **Head and Neck disease** should consider maintaining non-electronic means of patient communication

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REFERENCES

1. Gurr A, Schwaab M, Hansen S, Noack V, Dazert S. Use of the internet for health information by ENT patients. HNO. 2009 May;57(5):473-9.