Covid-19 Video Visits Reduces Racial Barriers To Care: Sociodemographic Factors That Influence Access to Virtual Care

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Covid-19 video visits reduces racial barriers to care: Sociodemographic factors that influence access to virtual care

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Background/Introduction

- The traditional healthcare delivery was mostly shifted to telehealth, due to COVID-19.
  - The transition to virtual health has played different roles in the ‘world of medicine’
- Must address the role it has played on the underrepresented patients' access to family medicine care.
  - To make sure that this implementation won't be further exacerbating the gap in health care disparities.
- This will allow a possibility to provide a base on how to make family medicine more accessible, convenient and equitable for everyone.
Purpose

- To evaluate whether there are any unintended consequences or advantages by employing digitized health care based on patients' sociodemographic factors.

Methods

- Descriptive study
- Acquired medical records from EPIC EMR, and analyzed on Excel looking at demographic differences;
  - race, ethnicity, sex and age
- Data was from March 11th to June 30th, in both the year periods of 2019 and 2020
  - A total of 10340 visits in 2020 and 97365 visits in 2019
Results

Figure 1. Comparison of the average difference in percentage of visits based on age range and prominent race for a 3-month period (March-June) in 2020 vs. 2019.
Results

Figure 2. Comparison of the difference of percentage of visits based on sex and race for a 3-month period (March–June) in 2020 vs. 2019.
# Results

Table 1. Comparison of the difference of percentage and net n values of visits based on ethnicity (specifically Hispanics or Latinos) for a 3-month period (March-June) in 2020 vs. 2019.

<table>
<thead>
<tr>
<th></th>
<th>Females</th>
<th></th>
<th>Males</th>
<th></th>
<th>Overall</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% difference</td>
<td>net n</td>
<td>% difference</td>
<td>net n</td>
<td>% difference</td>
<td>net n</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>1.52%</td>
<td>711</td>
<td>157</td>
<td>1.26%</td>
<td>868</td>
<td>1.45%</td>
</tr>
<tr>
<td>Not Hispanic or Latino</td>
<td>-1.85%</td>
<td>-2310</td>
<td>-3546</td>
<td>-1.78%</td>
<td>-5856</td>
<td>-1.85%</td>
</tr>
</tbody>
</table>
Conclusion

- Adding virtual care opened up access for a cohort of patients that were unexpectedly limited in access previously.
  - Patients aged 20–60 had an net increase in visits compared to baseline.
  - Inversely, pediatric patients (<20 years of age) and geriatric patients (>60) experienced a net decrease in visits compared to baseline.
  - Some minority population groups had an increase in visits while Caucasian, experienced a decrease.

- Virtual care has shown a beneficial impact on bridging barriers, making health care more accessible.
FUTURE DIRECTIONS

- Can the decrease in pediatrics and geriatrics visits be wholly attributed to the intentional deferral of wellness visits?
- Further investigate the role that socioeconomic status plays on the access of telemedicine, using zip code details.
- Conduct formal statistical analysis to evaluate if the magnitude of the changes observed are non-random.
- Replicate this study on a broader scale to see if the results are generalizable on a regional or possibly even a national level.
INTRODUCTION

During this COVID-19 pandemic, the traditional healthcare delivery was mostly shifted to telehealth. Telehealth encompasses the provision of health services through a variety of information and communication technologies, which can be synchronous or asynchronous. This rapid transition to virtual health has played different roles in the "world of medicine," while it has many benefits it also has its disadvantages. So, all of these changes should be assessed as it is important to address the role and impact it has played on the underrepresented patients' access to family medicine care. Before moving forward with a long-term plan of telehealth, we want to make sure that this implementation won't be further exacerbating the gap in health care disparities. Investigating the role of the rapid adaptation of virtual models of care has a possibility to provide a base on how to make family medicine more accessible, convenient and equitable for everyone.

METHODS

Participants

A total of 10340 visits in 2020 and 9736 visits in 2019, based on the Lehigh Valley Health Network in the department of family medicine.

Research Methodology

Hypothesis-generating/descriptive study, in which we acquired medical records from all LVPG family encounters on EPIC EMR, and which we acquired medical records from all LVPG family encounters on EPIC EMR, and.

RESULTS

There was an increase in the percentage and net n value for the frequency of visits for the ages ranging from 21 to 60 overall, the same pattern is observed when looking at the larger populations of racial minorities and ethnicity.

Table 3. Comparison of the difference of percentage and net n values of visits based on ethnicity

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>2019</th>
<th>2020</th>
<th>Percentage Change</th>
<th>Net n Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanics</td>
<td>30%</td>
<td>32%</td>
<td>2%</td>
<td>200</td>
</tr>
<tr>
<td>Latinos</td>
<td>25%</td>
<td>27%</td>
<td>2%</td>
<td>200</td>
</tr>
<tr>
<td>Non-Hispanic</td>
<td>45%</td>
<td>43%</td>
<td>-2%</td>
<td>-200</td>
</tr>
</tbody>
</table>

Figure 1. Comparison of the average difference in percentage of visits based on age range and prominent race for a 3-month period (March-June) in 2020 vs. 2019.

CONCLUSIONS

In conclusion, adding virtual care opened up access for a cohort of patients that were unexpectedly limited in access previously. Patients aged 20-60, inclusive of race, ethnicity, and gender, had an increase in visits compared to baseline. Inversely, pediatric patients (<20 years of age) and geriatric patients (>60) experienced a net decrease in visits compared to baseline. A component of the decreased visits in these age cohorts, however, was likely due to the fact that during the pandemic, they were directed to hold off on the annual wellness/preventive care visits. Some minority population groups (African Americans, Hispanic or Latinos), had an increase in visits while Caucasian, experienced a decrease. Overall, by enabling virtual care, access improved in a population demographic previously assumed to have existing high access; younger working population and a demographic which we knew had lower access; minorities. Health care inequity has created barriers to access to care. Virtual care which was enabled during covid-19 has shown a beneficial impact on bringing barriers, making health care more accessible to minorities and the young, working population.

FUTURE DIRECTIONS

- Can the decrease in pediatrics and geriatrics visits be wholly attributed to the intentional deferral of wellness visits?
- Re-evaluate the data by first removing all preventive visit exam types to evaluate if the decrease of visits in cohorts still holds.
- Further investigate the role that socioeconomic status plays on the access of telemedicine, using zip code details.
- Conduct formal statistical analysis to evaluate if the magnitude of the changes observed are non-random.
- Replicate this study on a broader scale to see if the results are generalizable on a regional or possibly even a national level.

REFERENCES


Visit With the Same Primary Care Clinicians. JAMA Network Open, 3(6). doi:10.1001/jamanetworkopen.2020.5873


Questions?

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