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BUSINESS PROJECT

EXPANDING TELEMEDICINE TO OFFSET COST OF MISSED APPOINTMENTS

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MEDICARE SURVEY DATA

INTRODUCTION

- ▶ **Motivation:** Midtown East Primary Care has a majority of older patients who often miss appointments, costing the practice \$200 on average per unused hour.
- ▶ **Business Opportunity:** During COVID, Medicare temporarily expanded telehealth coverage. Could this have accelerated the adoption of patients meeting with their doctor via phone or video?
- ▶ **Goal:** Explore interest in telehealth by older patients to see if investing in telehealth services infrastructure would offset the cost of missed appointments.



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MEDICARE SURVEY DATA

INTRODUCTION

- ▶ **Impact Hypothesis:**

- ▶ Offering telehealth services to patients would reduce costs the medical practice incurs due to no-shows.

- ▶ **Success Metrics:**

- ▶ 15 % cost reduction from missed appointments
- ▶ 10% increase in appointment retainment
- ▶ 15% increase in patient overall health due to continuity of care

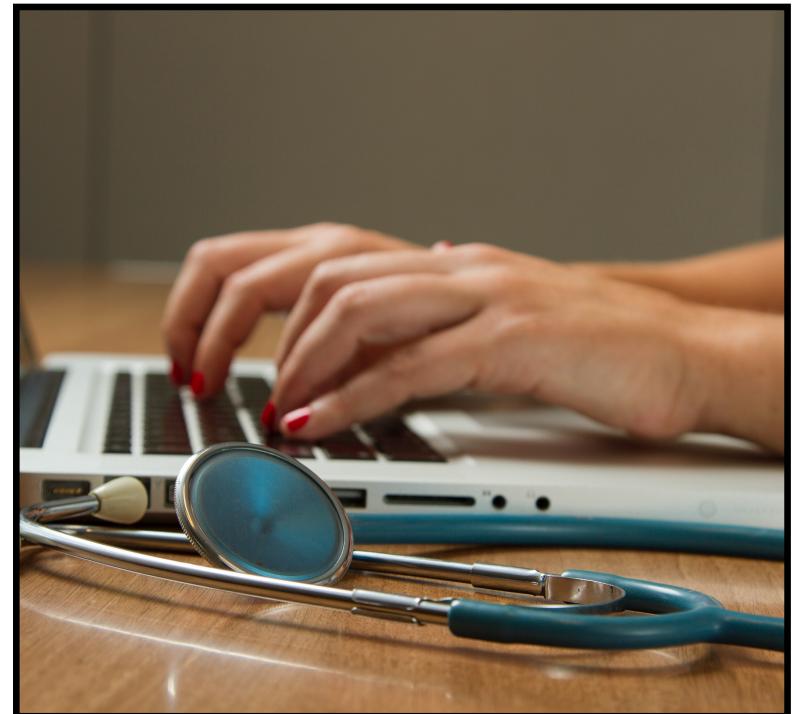


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MEDICARE SURVEY DATA

INTRODUCTION

► **Solution Path:**

- ▶ Exploratory data analysis to see how many Medicare patients over the age of 75 in urban areas used telehealth services during 2021 to inform a decision about investing in the technology.
- ▶ Classification model to identify what is the likelihood patients are interested in telehealth.
- ▶ Clustering for customer segmentation.
- ▶ **Alternative:** Surveying current patient population about their interest in telehealth services.

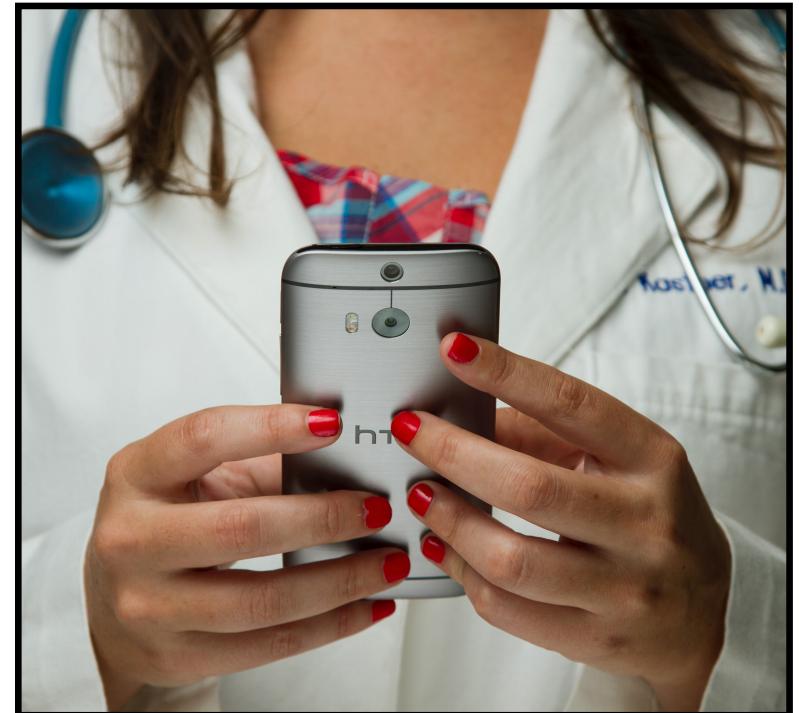


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MEDICARE SURVEY DATA

INTRODUCTION

- ▶ **Risks:**

- ▶ The Medicare data does not represent the patient population of the client practice and is not generalizable.
- ▶ Telehealth services have hidden costs that do not offset the income lost to no-shows.

- ▶ **Assumptions:**

- ▶ Patients with one or more chronic conditions are less likely to get around alone on public transportation.
- ▶ Physicians can assess patients via telemedicine as well as in-person visits.

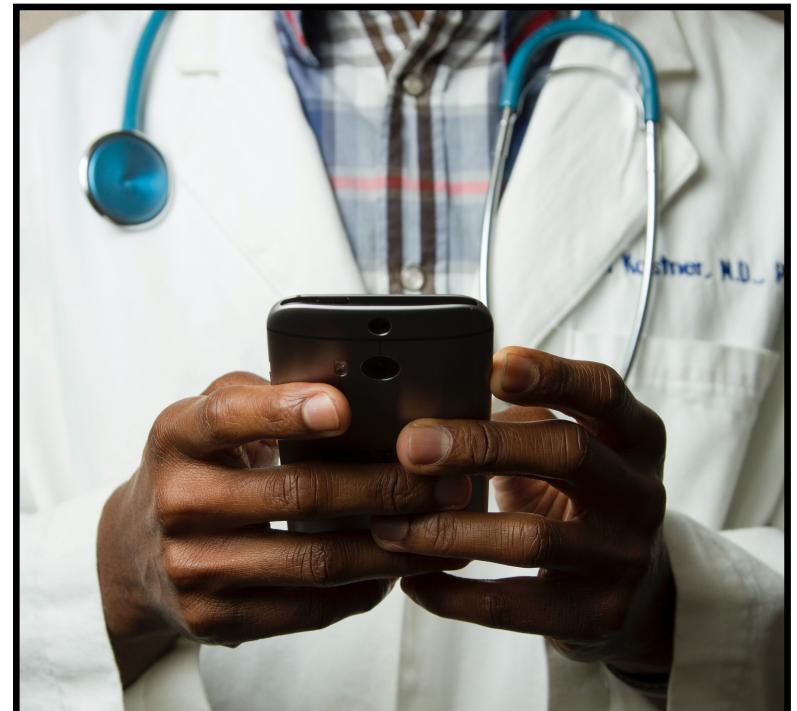


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MEDICARE SURVEY DATA

METHODOLOGY

- ▶ **Data:**
 - ▶ [Medicare Current Beneficiary Survey](#)
 - ▶ Subset: Northeast and West (n=...)
- ▶ **Responses:**
 - ▶ Telehealth use
 - ▶ Technology at home
 - ▶ Forgone medical care and reasons (n=331)



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MEDICARE SURVEY DATA

PRELIMINARY RESULTS

Figure 1.

- ▶ Something high
- ▶



MEDICARE SURVEY DATA

PRELIMINARY RESULTS

Figure 2.

- ▶ Something low
- ▶



CONCLUSIONS

- ▶ Insights:
 - ▶ ...
 - ▶ ...
- ▶ Recommendations:
 - ▶ ...
 - ▶ ...



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MEDICARE SURVEY DATA

FUTURE WORK

- ▶ ...
- ▶ ...
- ▶ ...



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MEDICARE SURVEY DATA

APPENDIX

- ▶ Summary, data, and slides are available at github.com/slp22/business-project
- ▶ Tableau Public Dashboard is available at ...



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