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## BUSINESS PROJECT

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# EXPANDING TELEMEDICINE TO OFFSET COST OF MISSED APPOINTMENTS

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# 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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# 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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# 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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# 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.

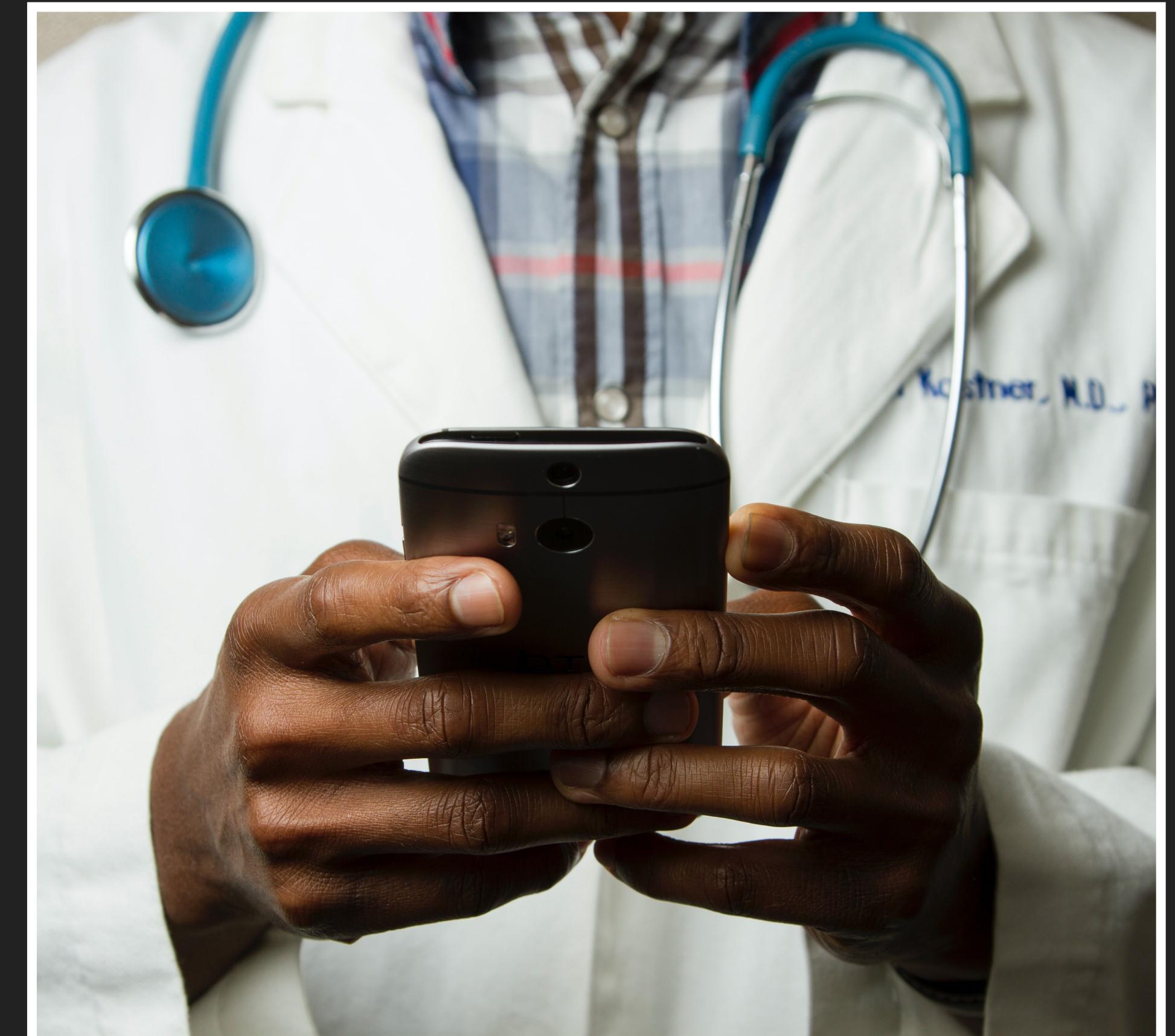


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# METHODOLOGY

- ▶ **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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## PRELIMINARY RESULTS

Figure 1.

- ▶ Something high
- ▶



## PRELIMINARY RESULTS

Figure 2.

- ▶ Something low
- ▶



# CONCLUSIONS

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



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## FUTURE WORK

- ▶ ...
- ▶ ...
- ▶ ...



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## APPENDIX

- ▶ Summary, data, and slides are available at [github.com/slp22/business-project](https://github.com/slp22/business-project)
- ▶ Tableau Public Dashboard is available at ...



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