

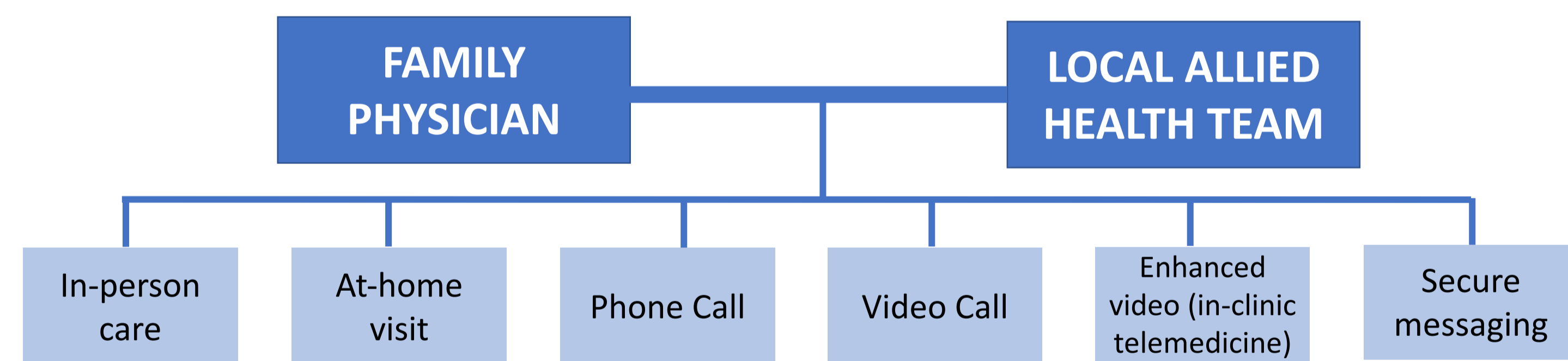
# Investigating Patient Satisfaction of Integrated Virtual Care (IVC)

## BACKGROUND

- A healthcare crisis exists in Renfrew County as an estimated 25000 people do not have access to a family physician.<sup>1</sup>
- The Integrated Virtual Care (IVC) project was designed to reverse this crisis by providing accessible, comprehensive primary care to patients currently unattached to any primary care provider. Care is delivered by a multidisciplinary team, led by a named physician who coordinates all aspects of care but predominantly works remotely. Patients always have access to in-person, at-home and virtual care options, depending on their needs and preferences.
- Some current virtual care options do not offer any local in-person care and have no connectivity with local health resources. Some options involve patients who previously had in-person care with their family doctor before their care became predominantly virtual.<sup>2-5</sup> IVC is different as it assigns patients to a new family physician, whom the patient interacts with predominantly virtually. Allied health professionals provide additional in-person and at-home care locally. The family physician is at all times fully responsible for their patients' comprehensive primary care.

## OBJECTIVES

- To evaluate overall patient experience and satisfaction when accessing comprehensive primary care through the IVC program.
- To investigate if a difference in satisfaction exists between patients who previously formed relationships with their family physician before IVC, and patients who met their family physician for the first time virtually.



## METHOD

We developed an anonymous satisfaction online survey with 5 components:

- Your experience with your family physician
  - Your level of trust in your family physician
  - Your experience with your allied health team
  - Your satisfaction with IVC primary care vs prior, in-person primary care
  - Feedback
- Combined to measure patient satisfaction*

### Satisfaction Survey

#### GROUP A

Patients who were already patients of their family physician before IVC  
N = 22

#### GROUP B

Patients who are new to their IVC family physician and have had more than one physician with IVC  
N = 47

#### GROUP C

Patients who are new to their IVC family physician and have only had one physician with IVC  
N = 51

## RESULTS

Table 1. Participant Demographics

Characteristics	Respondents (n=121)
<b>Age, years</b>	
25-44	18 (14.9%)
45-55	5 (4.1%)
55-64	30 (24.8%)
65-74	39 (32.2%)
75 or older	29 (24%)
<b>Self-Identified Gender</b>	
Female	63 (52.5%)
<b>Race/Ethnicity</b>	
White	120 (99.2%)
Non-White	1 (0.8%)
<b>Self-Identified Indigenous</b>	
Yes	6 (5%)
No	115 (95%)
<b>Education</b>	
High School	31 (25.6%)
College or trade school	54 (44.6%)
Bachelor's degree	19 (15.7%)
Master's degree	5 (4.1%)
Professional degree	12 (9.9%)

Characteristics	Respondents (n=121)
<b>Self-perceived Health</b>	
Poor	11 (9.1%)
Average	51 (42.1%)
Good	49 (40.5%)
Excellent	10 (8.3%)

Figure 2. Self-Perceived Health

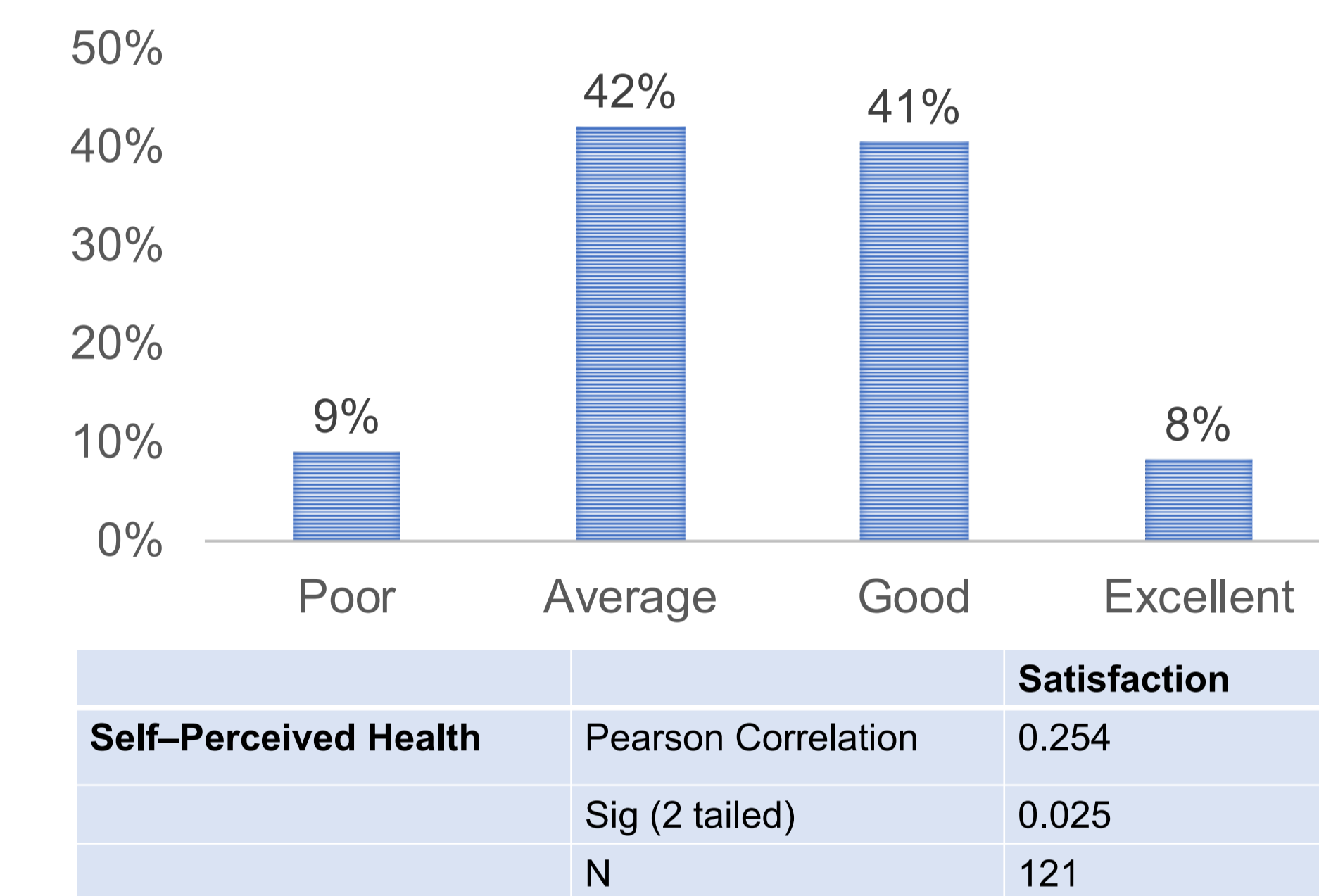


Figure 3 & 4. Patient Satisfaction

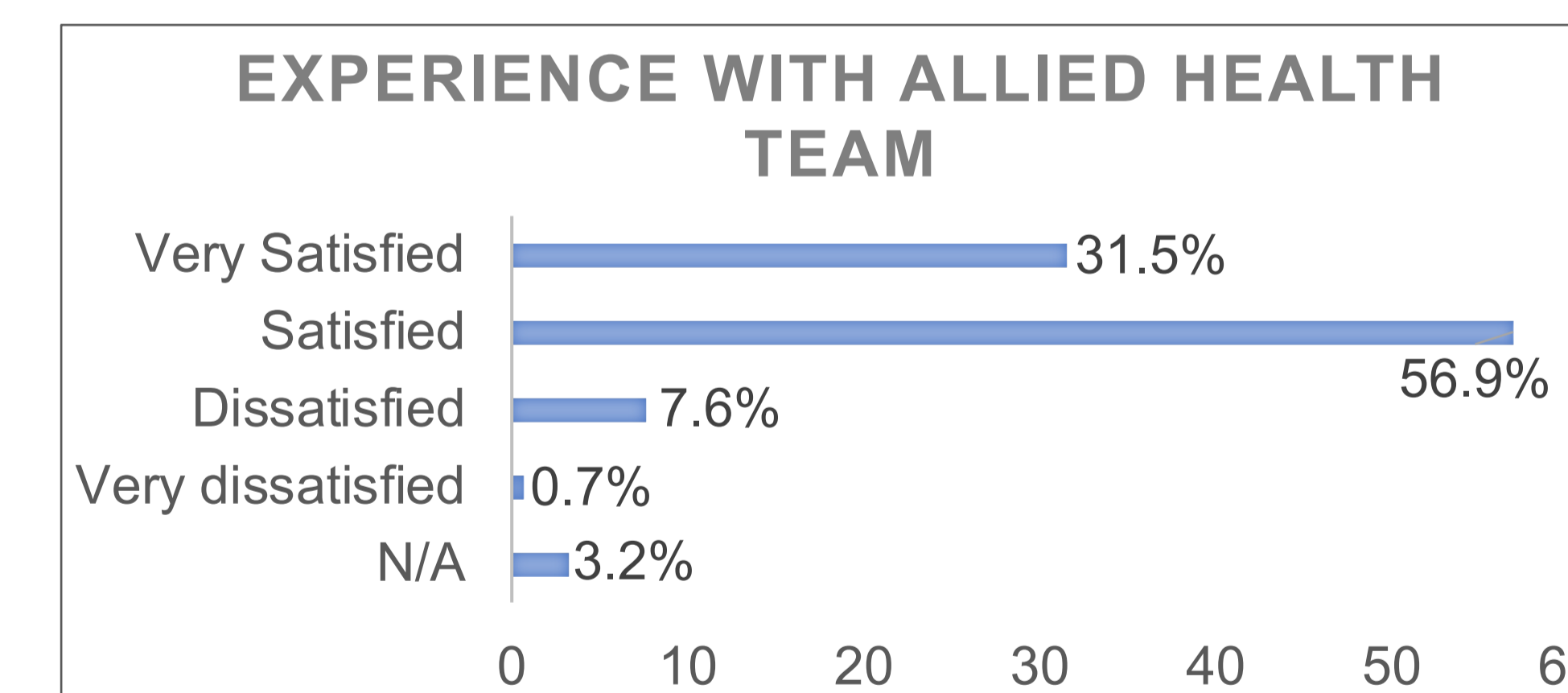
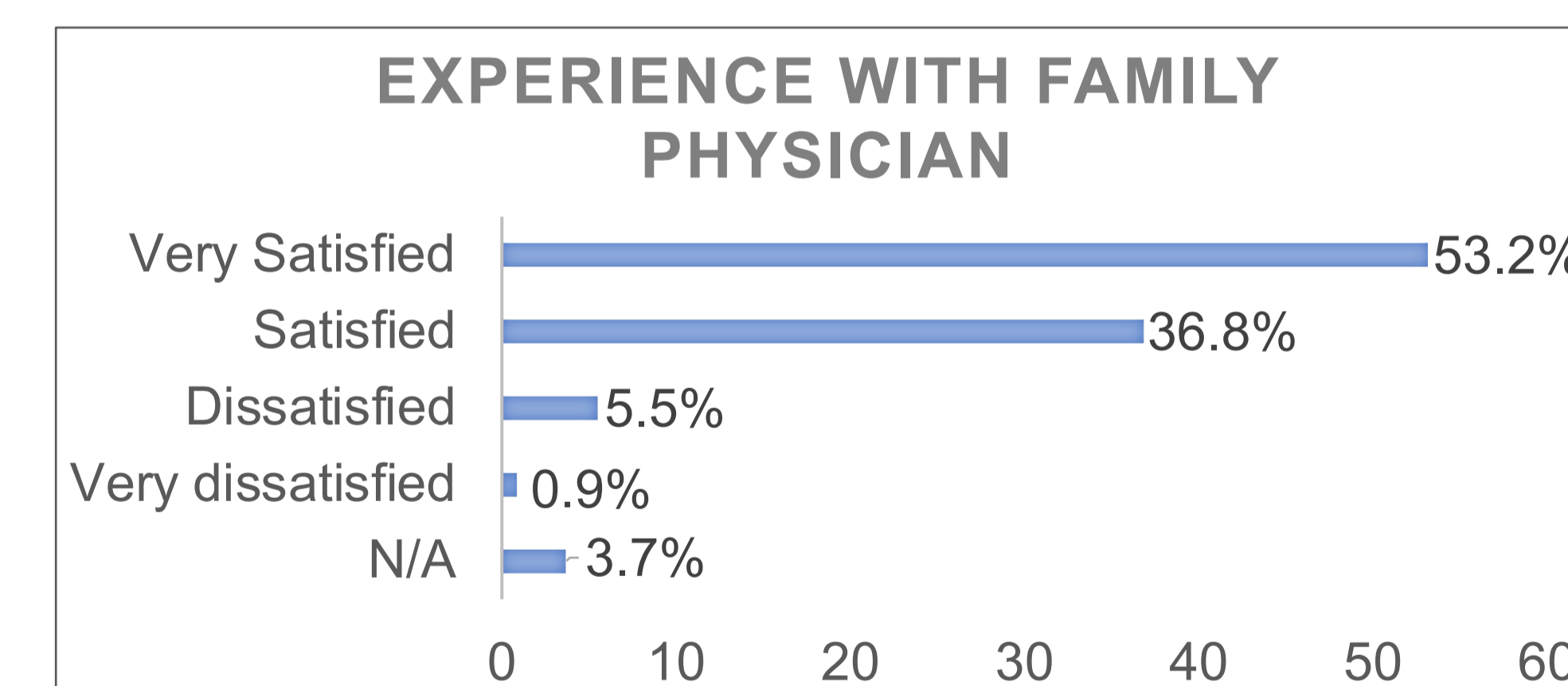


Figure 5 Satisfaction of IVC vs. prior, in-person primary care

IN COMPARISON TO PRIOR HEALTHCARE EXPERIENCES, HOW WAS YOUR HEALTHCARE EXPERIENCE WITH IVC?

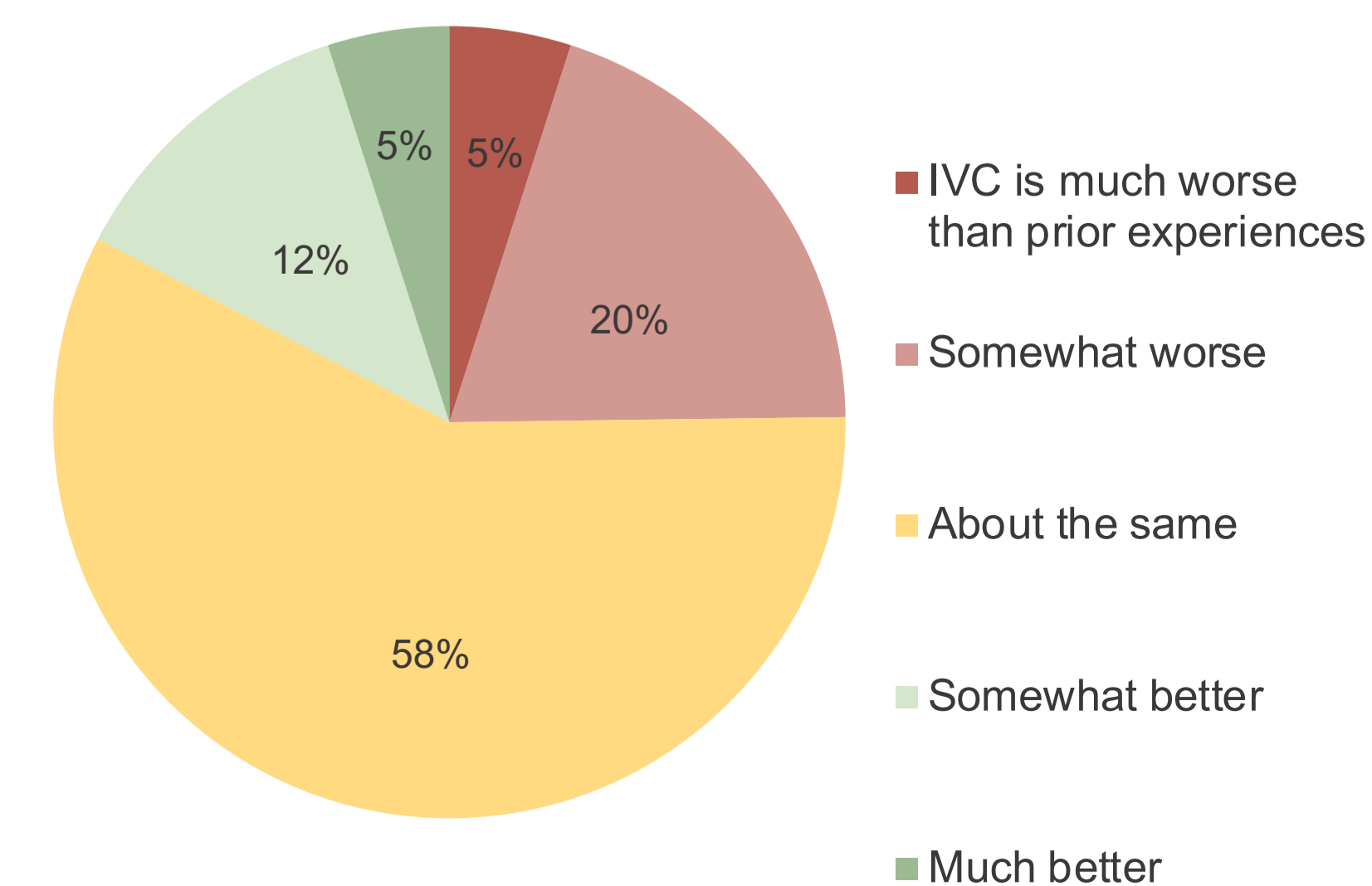
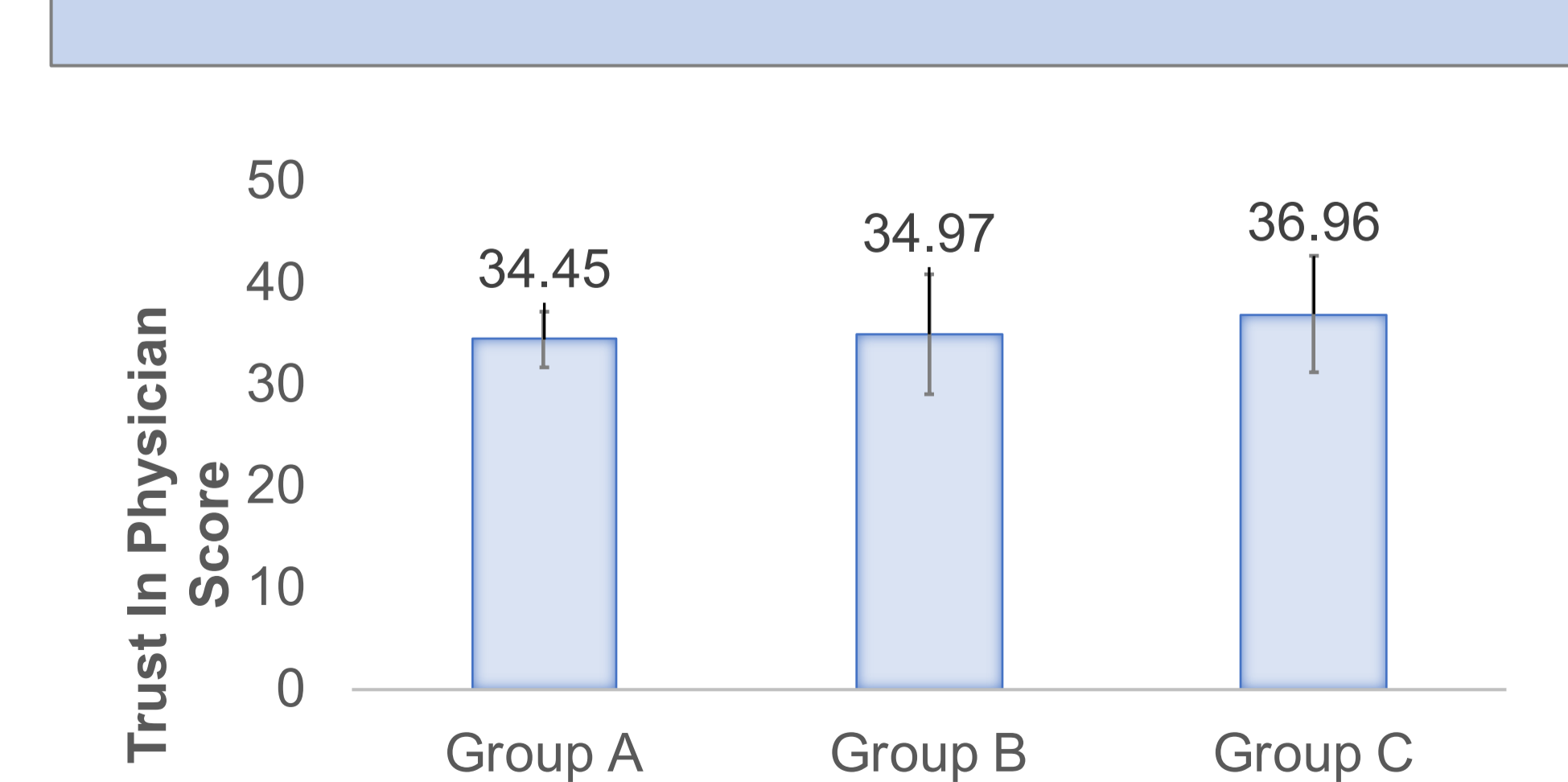


Figure 6. Patient's Trust in Family Physician Scale



- The Trust in Physician scale is a previously validated scale that rates patient's level of trust out of a max of 44 points<sup>6</sup>. Higher scores are associated with higher patient satisfaction<sup>5</sup>
- We discovered no statistically significant difference in trust between the 3 groups, however levels of trust were high across all groups.

## CONCLUSIONS & NEXT STEPS

### Conclusions

- Overall, levels of satisfaction of primary care from the Integrated Virtual Care project are high across all survey components. **90% of respondents said they were very satisfied or satisfied** with their primary care from their IVC family physician, and 88.4% said they were very satisfied or satisfied with their care from the allied health team.
- A previous 2020-2021 satisfaction survey patients in Petawawa region indicated that 81% of respondents were satisfied with their virtual primary care. In comparison, 9% more respondents felt very satisfied or satisfied with their care as delivered through IVC.<sup>8</sup>
- Satisfaction level did not differ across Groups A, B, or C in any of the . **Therefore, satisfaction was not influenced by having formed a previous relationship with their family physician.**
- Of the demographic variables, only **self-perceived health was positively correlated to satisfaction** ( $p < 0.05$ ). In our population, over 50% of respondents rated their health as "poor" or "average", which could have negatively impacted the average satisfaction rating.
- No other demographic variables were found to have an influence on patient satisfaction
- When comparing to previous healthcare experiences, 75% of respondents believe that their encounters with IVC were better than or the same as any prior, in-person healthcare encounters.

### Next Steps – Short Term

- The internationally recognized Quadruple Aim framework defines an effective healthcare system as one that (1) improves the patient experience; (2) improves the health of populations; (3) reduces the per capita cost of health care; and (4) improves the work life of providers.<sup>7</sup>
- Our results show that IVC has successfully met the first objective of the Quadruple Aim framework as patient satisfaction is high with all aspects of IVC.
- Future studies will seek to evaluate the remaining 3 objectives of the Quadruple Aim framework, starting with provider satisfaction of the IVC project.

### Next Steps - Long-term

- IVC has already received regional support for the further development of this model throughout Ontario and beyond. By demonstrating its effectiveness in patient satisfaction, we are moving closer to be able to implement this model across a wider region.
- Our ultimate goal is to use this innovative approach to improve attachment to primary care in rural, remote, and underserved communities across the region.
- With continued expansion, IVC can help address the worsening crisis of lack of attachment to primary care, and will provide an integrated, efficient and patient-centered model for healthcare delivery.

## REFERENCES

- Ontario Ministry of Health and Long-term Care. IntelliHealth Ontario. Published 2015.
- Gustke SS, Balch DC, West VL, Rogers LO. Patient Satisfaction with Telemedicine. Vol 6. Mary Ann Liebert, Inc; 2000.
- Volcy J, Smith W, Mills K, et al. Assessment of Patient and Provider Satisfaction with the Change to Telehealth from In-Person Visits at an Academic Safety Net Institution during the COVID-19 Pandemic. J Am Board Fam Med. 2021;27(1):107-112.
- Holtz BE. Patients Perceptions of Telemedicine Visits before and after the Coronavirus Disease 2019 Pandemic. Telemed e-Health. 2021;27(1):107-112.
- Wetmore S, Boisvert L, Graham E, et al. Patient satisfaction with access and continuity of care in a multidisciplinary academic family medicine clinic. Can Fam Physician. 2014;60(4):e230.
- Orange S, Patel A, Mack WJ, Cassetta J. Patient Satisfaction and Trust in Telemedicine During the COVID-19 Pandemic: Retrospective Observational Study. JMIR Hum Factors. 2021;8(2):1-10.
- Anderson LA, Dedrick RF. Development of the Trust in Physician scale: A measure to assess interpersonal trust in patient-physician relationships. Psychol Rep. 1990;67(3 Pt 1):1091-1100.
- A healthy Ontario: Building a sustainable health care system: Chapter 2: The vision for health care in Ontario | Ontario.ca
- Petawawa Centennial Health. Detailed Item Analysis Report.