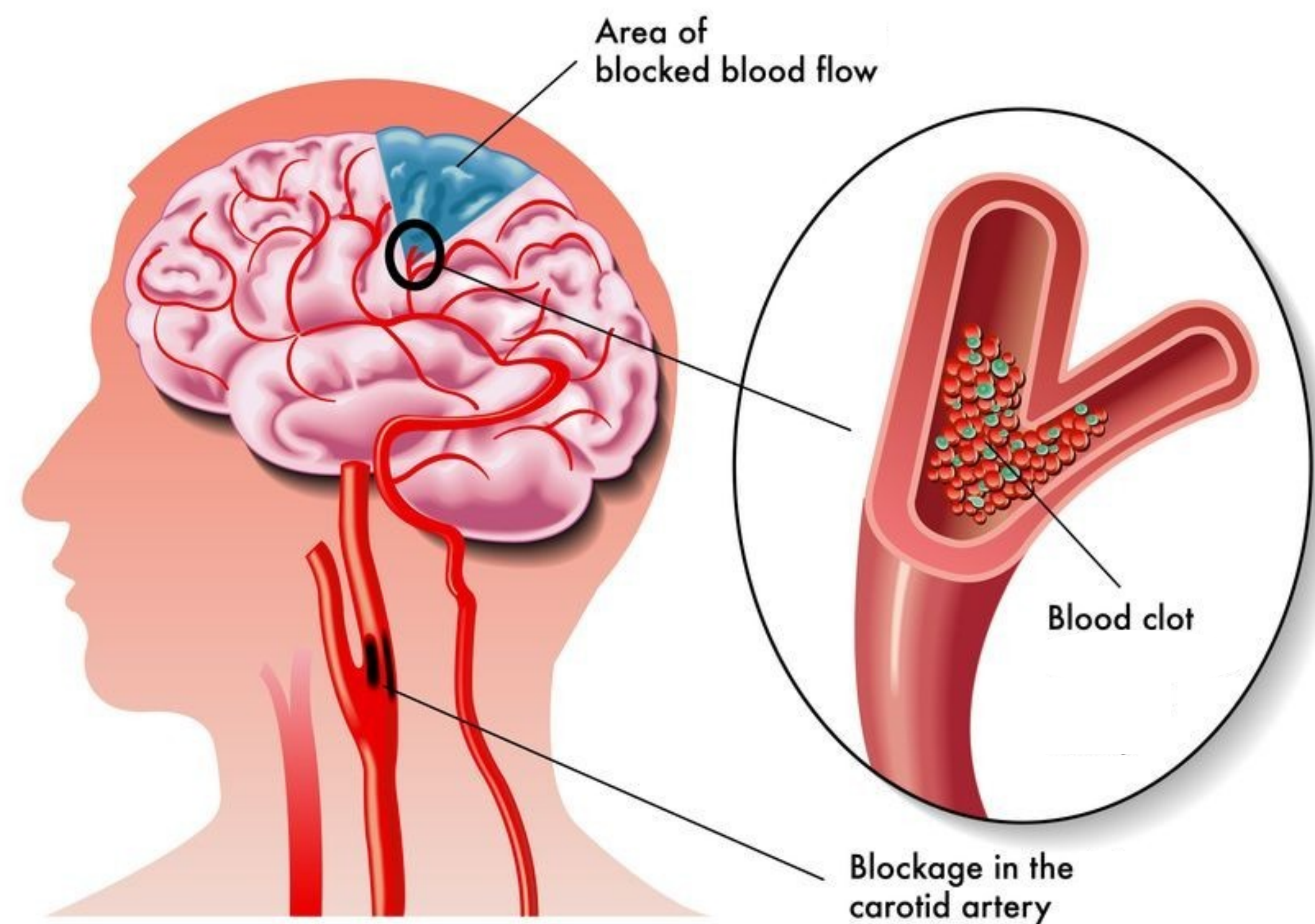


Background

- A stroke occurs every 40 seconds in the United States, and approximately 795,000 events occur annually¹
- Stroke is a leading cause of hospital readmission, 8.23 - 14.4% of stroke patients are readmitted within 30 days of discharge, leading to worse outcomes^{2,3,4}



- The Medicare Hospital Readmission Reduction Program standardized a 30-day readmission window for improvement⁵
- Transitions of care (TOC) clinic provides continuity of care and effectively reduces readmissions by:
 - 1) Clarifying diagnosis and treatment
 - 2) Improving medication adherence
 - 3) Assuaging fears^{6,7}
- We explore the efficacy of TOC clinic for reducing stroke readmission at Thomas Jefferson University Hospital (TJUH)

Study goals:

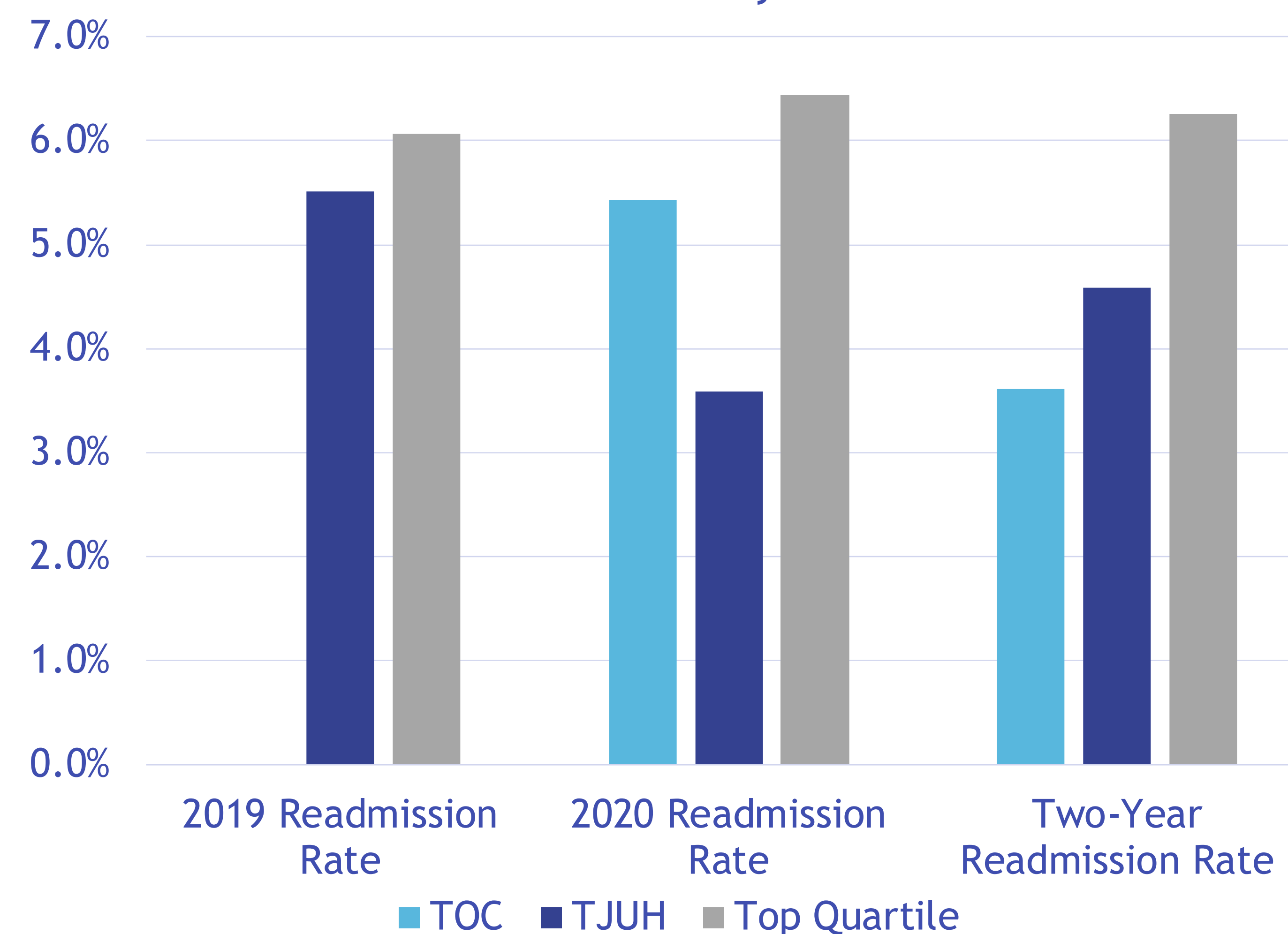
- ❖ **Aim 1:** Examine if there is a difference between 30-day stroke readmission with TOC clinic and the top quartile
- ❖ **Aim 2:** Examine if there is a difference between 30-day stroke readmission rate with TOC clinic and TJUH
- ❖ **Aim 3:** Determine if in-person and telemedicine TOC clinic elicit different results
- ❖ **Aim 4:** Use self-report measures of self-efficacy and perceived TOC value to identify areas for improvement

Results

- Analysis included 194 individuals (92 in-person, 102 telemedicine). Among these patients, 7 (3.61%) experienced readmissions
- Of the 7 patients readmitted, 1 was seen in-person (1.09%) and 6 were seen via telemedicine (5.88%)
- Chi Square did not reveal a difference between in-person and telemedicine performance ($X^2 = 3.29$, $p = 0.07$)

		TOC	TJUH	Top Quartile
2019	Readmissions	0	23	1,960
	Cases	65	417	32,218
	% Readmitted	0.00%	5.12%	6.08%
2020	Readmissions	7	14	2,222
	Cases	129	379	34,325
	% Readmitted	5.42%	3.69%	6.47%
2-Year	Readmissions	7	37	4,182
	Cases	194	796	66,543
	% Readmitted	3.61%	4.65%	6.28%

Percent Readmitted by Data Source



- Chi-square comparison of TOC to TJUH did not reveal a distinct difference ($X^2 = 0.24$, $p = 0.62$), nor did comparison of TOC to the top quartile ($X^2 = 1.77$, $p = 0.18$)
- In-person ($n = 19$, $u = 8.32$, $SD = 1.80$) and telemedicine ($n = 59$, $u = 8.00$, $SD = 1.88$) reported similar perceived value

Methods

- Participants identified at by ICD-10 codes
- Patients automatically scheduled for TOC appointment within 1 to 3 weeks of hospital discharge
- Questionnaires were delivered over telephone within 6 months and measured self-efficacy and perceived value
- Readmissions collected from the electronic health record
- Data analysis conducted using SPSS (version 27)

Discussion

- Results are encouraging when compared to 30-day readmission rates for TJUH and top-quartile
- Our combined figure (3.61%) also outperformed most recent CMS data (11.8%) from 2015-16⁸
- 2020 readmission rate is higher than 2019 (5.42% vs 0.00%)

Possible Causes:

- 1) Accessibility to healthcare was limited by covid
 - 2) Telemedicine has less influence on self-efficacy
 - 3) Telemedicine captures additional patients
- Number of monthly stroke discharges to home was not influenced by pandemic
 - Both in-person and telemedicine groups expressed satisfaction with TOC

Limitations & Future Directions

Limitations:

- ❖ Sample size for each group is smaller than intended
- ❖ Patients may experience recall bias on telephone surveys
- ❖ Comparing to top quartile does not convey full picture

Future Directions:

- ❖ Translate findings into practical institutional policy
- ❖ Perform qualitative study of barriers to telemedicine stroke clinic to make platform more accessible
- ❖ Continue data collection in post-covid era to determine if pandemic confounded findings

References furnished upon request:
evan.kolesnick@Jefferson.edu