

### Introduction

- Patient portal implementation by hospitals allows patients to have access to personal electronic medical records, medication refills, and increased health information
- Many benefits of patient portals have been noted as: increased efficiency within clinical practice, increased capacity for self care by patients, and increased coordination of care between healthcare staff and patients<sup>2</sup>.
- The major problems with patient portals include patient confusion, alienation of impoverished patients and older patients, and privacy and data concerns<sup>1</sup>.
- MyTruHealth is the patient portal system established at Truman Medical Center.
- The Infectious Disease clinics at TMC primarily treat patients with HIV.
- Viral Load is a method used to analyze whether the treatment for HIV is working affectively or not.
- Patient Outcome research comes in two forms, process outcomes and clinical outcomes.
- Process outcomes indicate what a provider does to maintain or improve health, either for healthy people or for those diagnosed with a health care condition. These measures are specific steps that lead to a particular outcome or metric.

### Methodology

- Created a seven question, multiple choice survey.
- Patients were voluntarily asked to complete the survey.
- The survey was distributed in an Infectious Disease HIV clinic at Truman Medical Center by a physician in the patient room during the encounter.
- The data was collected and analyzed for demographics, including age and gender, along with usage rate, common access barriers, and responsibility of communication.
- Viral load values were analyzed between patients that reported portal use versus patients who reported no portal use.
- Used Chi-Squared analysis on the data



### Results

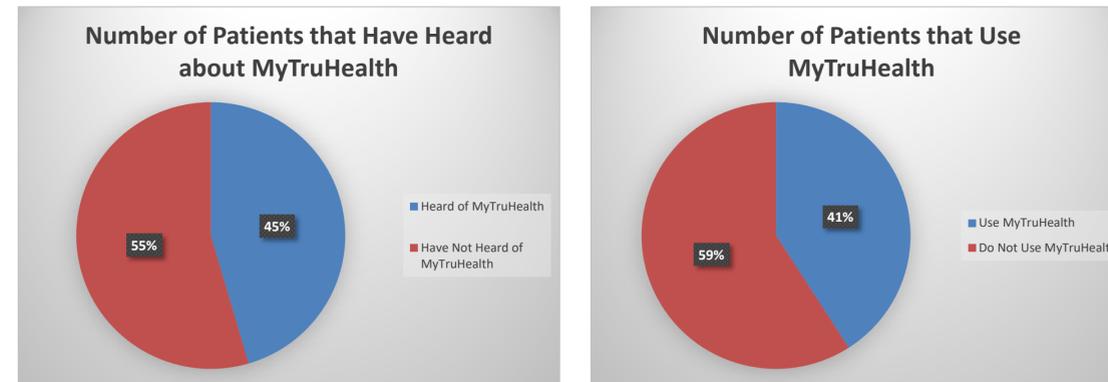
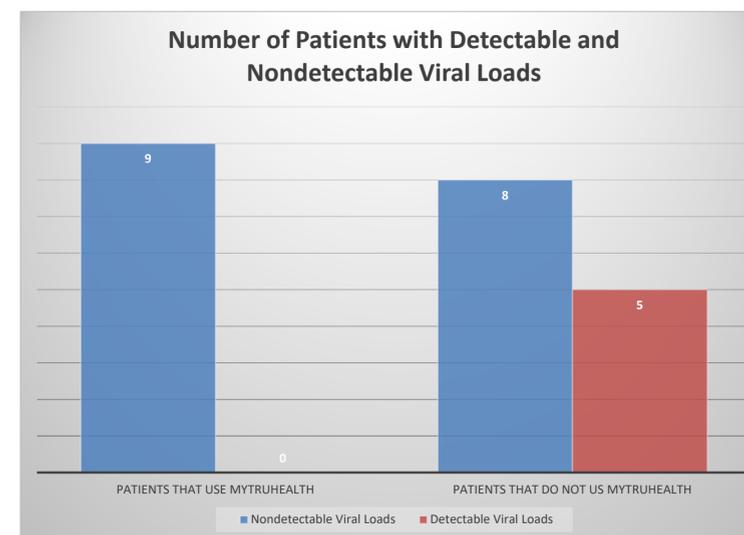


Table Showing the Percentage of Patients with a Nondetectable Viral Load

	Patients That Use MyTruHealth	Patients That Do Not Us MyTruHealth
Nondetectable Viral Loads	9	8
Detectable Viral Loads	0	5
Total Number of Patients	9	13
Percentage of Patients with a Nondetectable Viral Load	100	61.54



### Conclusion

- 45% of patients in the Infectious Disease HIV Clinic at Truman Medical Center have heard about the MyTruHealth patient portal system.
- Of the 45% of patients that have heard about MyTruHealth. 90% of them have used the system.
- The most common access barriers preventing the use of MyTruHealth in the Infectious Disease HIV clinic is the inability to access internet, followed by both the lack of knowledge of MyTruHealth and difficulty navigating MyTruHealth.
- 100% of the nine patients that use the patient portal system have a nondetectable viral load value.
- 8 of the 13 patients (61.5%) who do not use the patient portal system have a nondetectable viral load.
- The P value was greater than 0.10 ( $p > 0.10$ )
- The small sample size trended significance, but it was not significant due to  $p > 0.10$ .
- *The limitations of this study included a small sample size, as well as only multiple choice surveys were distributed. In addition, there was a lack of information about each patient's treatment plan, age, and compliance, along with their current and past medical history.*

### Future Plans

- Analyze more clinical outcomes, such as HbA1c, cholesterol, or blood pressure, between patients who use MyTruHealth versus patients who do not use MyTruHealth .
- Implement methods that will increase efficiency and effectiveness of patients and staff using the patient portals, such as a MyTruHealth phone app or placing kiosks in clinics.

### References

1. Zarcadoolas, Christina et al. "Consumers' Perceptions of Patient-Accessible Electronic Medical Records." Ed. Gunther Eysenbach. Journal of Medical Internet Research 15.8 (2013): e168. PMC. Web. 29 Apr. 2018.
2. Miller Jr, David P et al. "Primary Care Providers' Views of Patient Portals: Interview Study of Perceived Benefits and Consequences." Ed. Gunther Eysenbach. Journal of Medical Internet Research 18.1 (2016): e8. PMC. Web. 29 Apr. 2018.
3. Shah, Patel, Dall. (2018, May). *The Implementation of Patient Portals and its Effect on Patient Health*. Poster presented at Quality Improvement/Patient Safety, Kansas City, MO, USA.