

Use of handheld device to enhance patient reported outcome measure data collection in an academic rheumatology practice



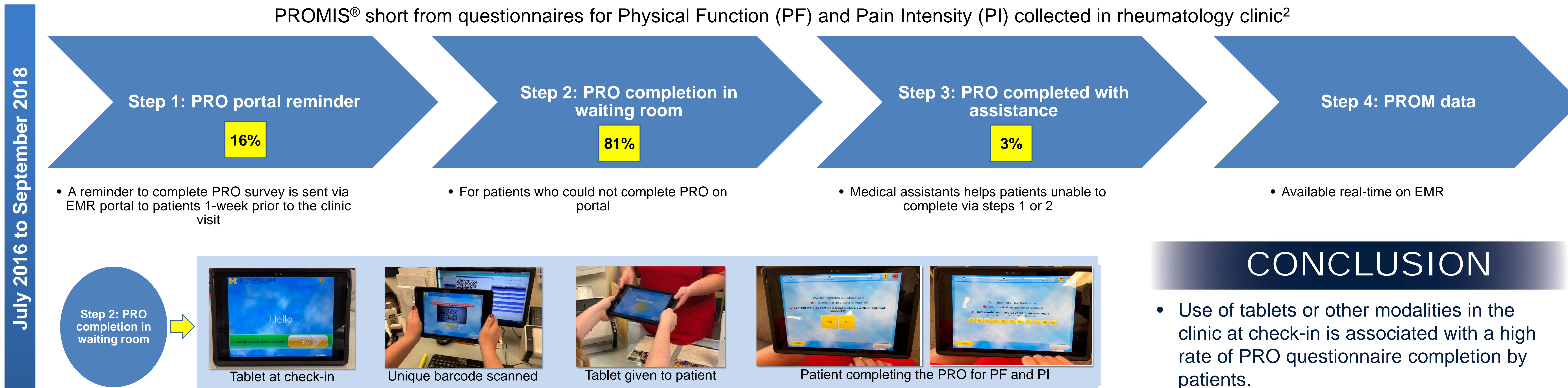
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INTRODUCTION

- Patient-reported outcome measures (PROMs) are accepted modalities of gathering patient self-report of their health status in the realms of physical, mental and social well-being.
- PROMs are endorsed as metrics of quality of care. For example, pain assessment and follow-up is an important quality metric for rheumatology office visits, in the Merit-based Incentive Payment System (MIPs) introduced by the Centers for Medicare & Medicaid Services (CMS)¹.
- For easier workflow, PROM data need to be captured electronically with real time interphase into electronic medical records (EMR) during office visits.

METHODS continued...



CONCLUSION

- Use of tablets or other modalities in the clinic at check-in is associated with a high rate of PRO questionnaire completion by patients.
- Routine use of PROM data collection at check-in may encourage patients to complete PROMIS[®] questionnaires on EMR portal accessed at home.
- Around 13% of patients did not complete questionnaires due to various reasons lack of portal access, limited tablet availability at check-in, time constraints for MAs in a busy clinic, and rarely, patient refusal to complete. Given the increased acceptance, the routine of PROM data in the clinic using a tablet with EMR integration should be explored as a preferred modality.

RESULTS

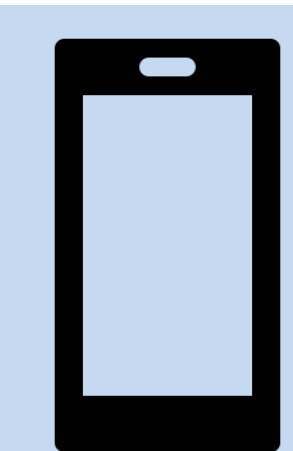
OBJECTIVES

Our project aimed to examine collection rate of PROMs using portable devices (Tablets) at the time of check-in a rheumatology clinic

METHODS

- At University of Michigan Hospital (UM), the EMR in use is Epic[®] software which interfaces with the Patient-Reported Outcomes Measures System –PROMIS[®].

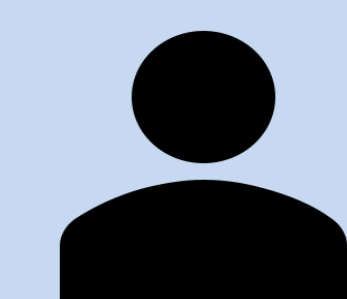
86% completed questionnaires



81% tablets



16% portal



3% MA assisted

Table 1: PROMIS[®] questionnaire completion rates

Quarter (year)	Total patients seen	Completed Questionnaires							
		Total N	Total %	At Home		In Office			
				Portal N	Portal %	Tablet N	Tablet %	Assisted by MA* N	Assisted by MA %
Q3 (2016)	1127	941	83.5	83	8.8	817	86.8	41	4.3
Q4 (2016)	868	705	81.2	81	11.5	590	83.7	34	4.8
Q1 (2017)	866	825	95.3	104	12.6	708	85.8	13	1.6
Q2 (2017)	613	541	88.2	80	14.8	436	80.6	25	4.6
Q3 (2017)	764	656	85.9	112	17	532	81.1	12	1.8
Q4 (2017)	777	687	88.4	122	17.8	545	79.3	20	2.9
Q1 (2018)	747	671	89.8	130	19.4	514	76.6	27	4.0
Q2 (2018)	860	724	84.2	152	14.5	545	63.4	39	4.5
Q3 (2018)	747	616	82.5	143	19.1	460	61.6	13	1.7
Net	7369	6366	86.4	1007	13.7	5147	69.8	224	3.0

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REFERENCES

1. <https://qpp.cms.gov/>
2. Nagaraja, V., Mara, C., Khanna, P. P., Namas, R., Young, A., Fox, D. A., ... & Almackenzie, M. (2018). Establishing clinical severity for PROMIS[®] measures in adult patients with rheumatic diseases. *Quality of Life Research*, 27(3), 755-764.