

# Remote Patient Monitoring (RPM): Advantages and Challenges of Implementation of TeleMedicine Systems in a Community Healthcare Setting

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## BACKGROUND

- At the start of the pandemic, Universal Community Health Center (UCHC) piloted a new RPM software, iHealth, which added new clinical workflows, integrated RPM technology and clinical decision supports, that facilitated information exchange between provider and patient
- To date, iHealth is used by 202 UCHC patients
- UCHC is initiating new diagnostic technologies from TytoCare to increase the functionality of RPM and allow for diagnostic medical exams from the comfort of patient's homes

## OBJECTIVES

- Efficiently address healthcare issues with real-time non-urgent care consultation and treatment options
- Improve healthcare access by providing patients with the necessary equipment to facilitate televisits
- Increase patient engagement and autonomy in their own care by self-examination with real-time provider feedback
- Develop effective QA/QI RPM workflows based on results

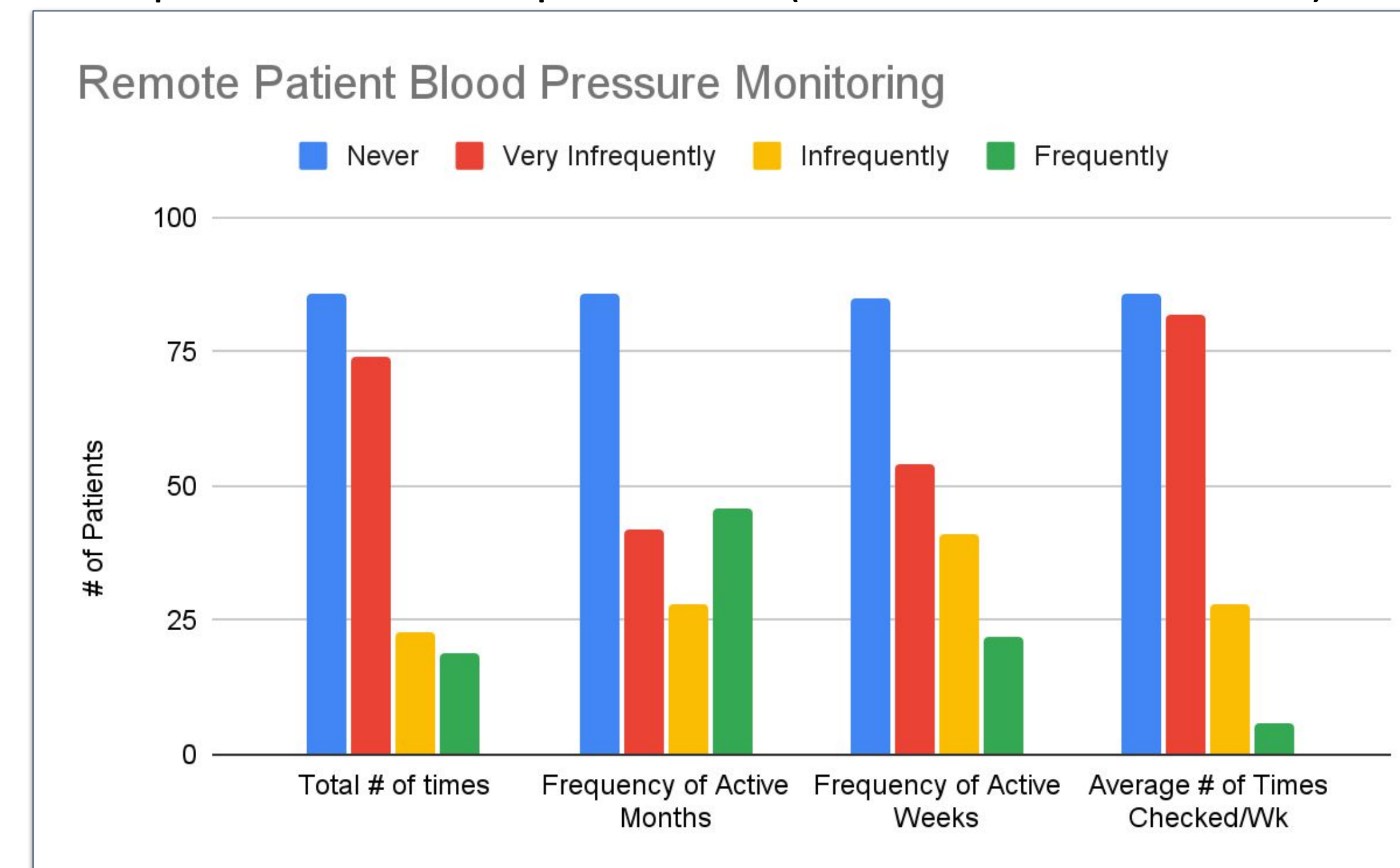
## METHODOLOGY

- Extensive chart reviews for identification and follow-up of potential RPM enrollees between January to July 2022
- In-person clinic enrollment into RPM systems
- Phone and video call visits by provider and clinic staff
- Regular follow-up by phone call to ensure compliance
- Graph weekly and monthly active rates of patients using iHealth
- Patient surveys to measure efficacy of intervention

## RESULTS

Within a 6 month time span (Mid-Jan 2022-Mid-Jul 2022):

- 86 enrolled patients in iHealth did not utilize the Blood Pressure Monitoring device
- 74 patients were very infrequent users (1-50 at home measurements)
- 23 patients were infrequent users (50-100 at home measurements)
- 19 patients were frequent users (more than 101 at home)



## CONCLUSION

- Current data evaluation seems to show that many patients are not utilizing the RPM as much as would prove useful for the enrolled patients. A number of challenging factors proved influential in these results:
- Challenges: Limited Staff for patient enrollment; Difficulty of use of iHealth Devices Assistance in measurement of vitals and other objective patient information; Patient understanding of device instructions; Access to high speed internet; Chosen Patient Demographic for TytoCare

## RECOMMENDATIONS

- Increase number of trained clinic staff to identify potential candidates for enrollment into RPM Programs
- Have detailed patient training in RPM device use
- Provide group support: have weekly check-ins with provider, nutritionist, and RPM Staff
- Incentives for patients: Weekly leaderboards with BP checks and prizes for individuals who meet goals
- **Future Research Considerations:**
  - Cost analysis: potential to reduce cost of care by decreasing frequency of non-urgent ED visits and other miscellaneous visit-related costs
  - Need analysis: implications for identifying patients in need and addressing barriers to care via RPM program
  - Health outcomes: identify trends in blood pressure in relation to level of patient engagement and explore outcomes related to having community programs or regular RPM care team reminders

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## REFERENCES

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