

Remote Patient Monitoring (RPM) Part III

Dr. Huzefa Dossaji
CEO, Vivyo Group



The RPM “Holy Trinity”



Hardware
(Connected Devices)



Software (Portal)



FTE's (People)

Data

The Importance of Data
(Clinical & Financial)

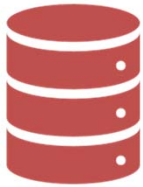
Ownership of Data

Raw Data

Structured Data

Case Studies

Data Data Data!



Raw Data



Structured Data



Pushing Data into
the Patient Chart

Raw Data

Blood Pressure Details

Recent readings

 = Entry other than default device

| Date Recorded | Value | Actions |
|---------------------|----------|---|
| 08/16/2021 2:07 PM | 137 / 82 |   |
| 08/15/2021 10:19 AM | 151 / 91 |   |
| 08/14/2021 11:19 AM | 142 / 78 |   |
| 08/13/2021 1:03 PM | 141 / 80 |   |
| 08/12/2021 9:53 AM | 141 / 82 |   |
| 08/11/2021 12:00 PM | 140 / 82 |   |
| 08/10/2021 10:46 AM | 136 / 81 |   |
| 08/08/2021 1:59 PM | 149 / 80 |   |
| 08/07/2021 1:38 PM | 152 / 82 |   |
| 08/06/2021 8:41 AM | 153 / 90 |   |

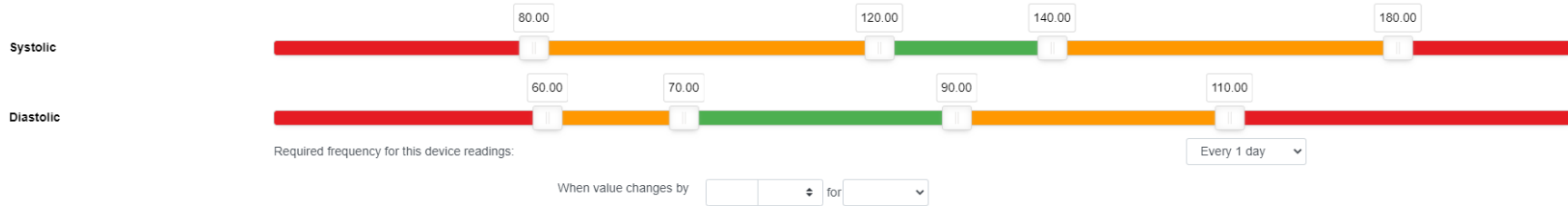
Previous **1** 2 3 4 Next

Average for last: 142.4 / 82.6

[+ Add Reading](#)

Setting "Normal" Ranges and Alerts

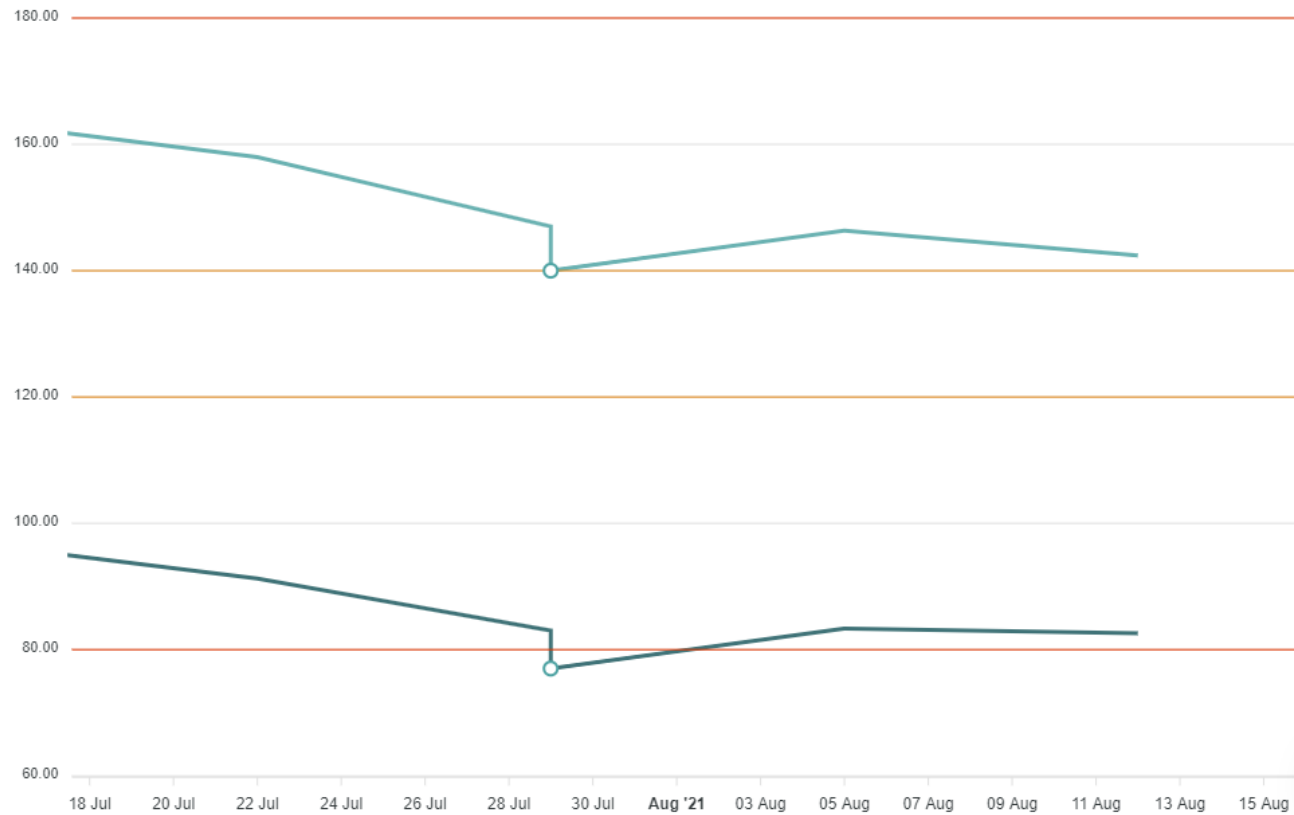
Targets and Alert Ranges - set the parameters for **Normal**, **Caution** and **Critical** levels using the controls below:



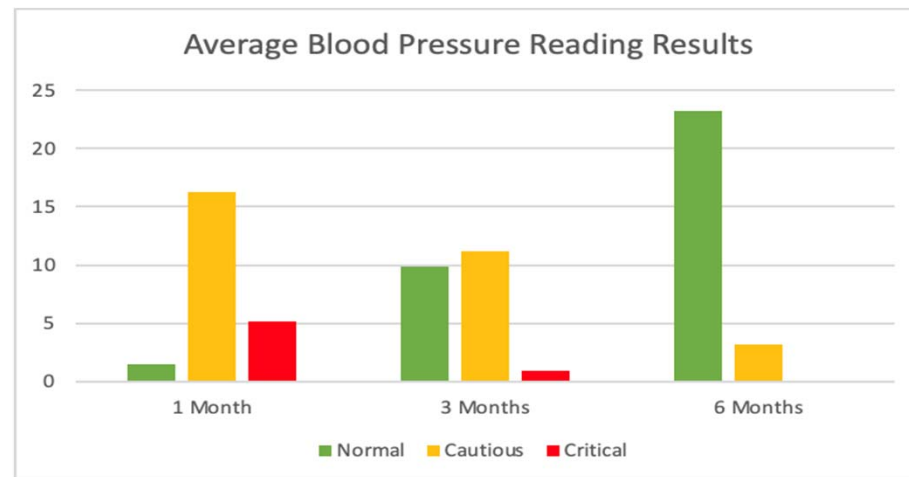
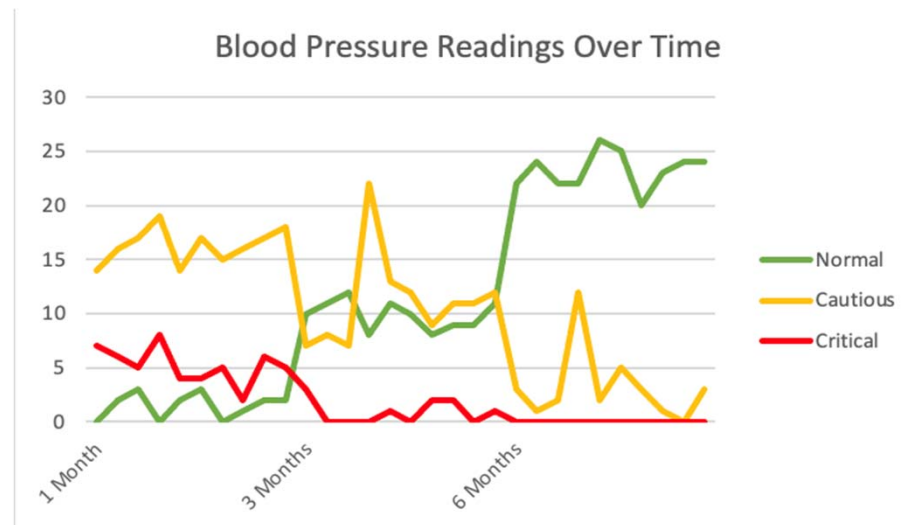
Utilizing RPM Data to understand Trends

Graph over time

H D W M

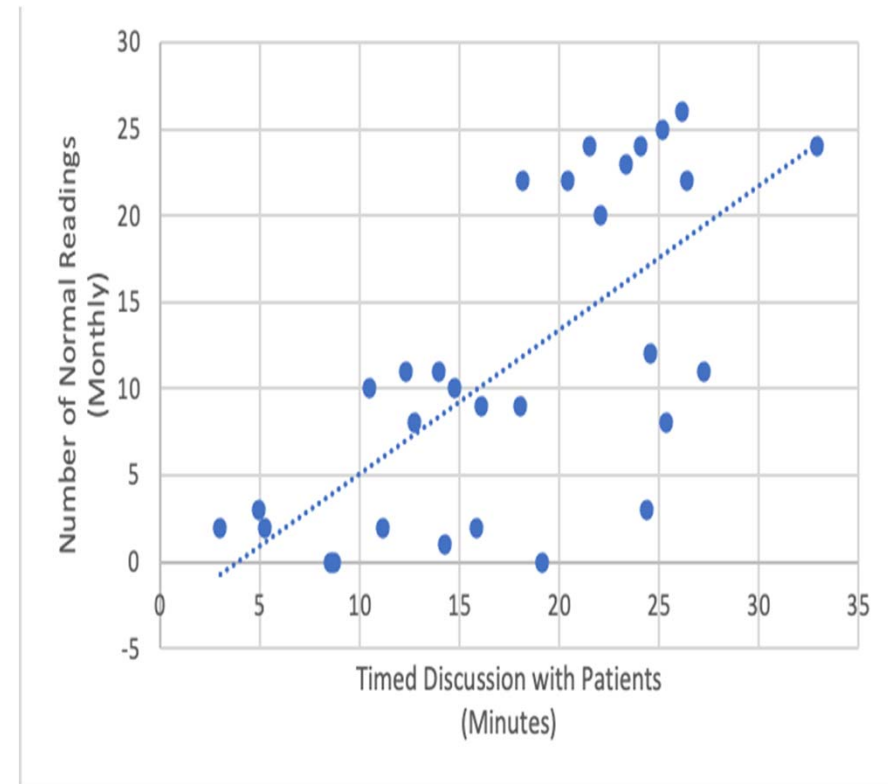


• **Figures 1 & 2.** The above graphs highlight the overall change of blood pressure readings recorded in patients in their first 6 months in the Remote Patient Monitoring program. Each patient had a predetermined range that would sort their readings between the categories of “Normal, Cautious, and Critical”. The longer the patient was enrolled in RPM, the “Normal” readings recorded increased in number while the “Cautious” and “Critical” readings decreased.

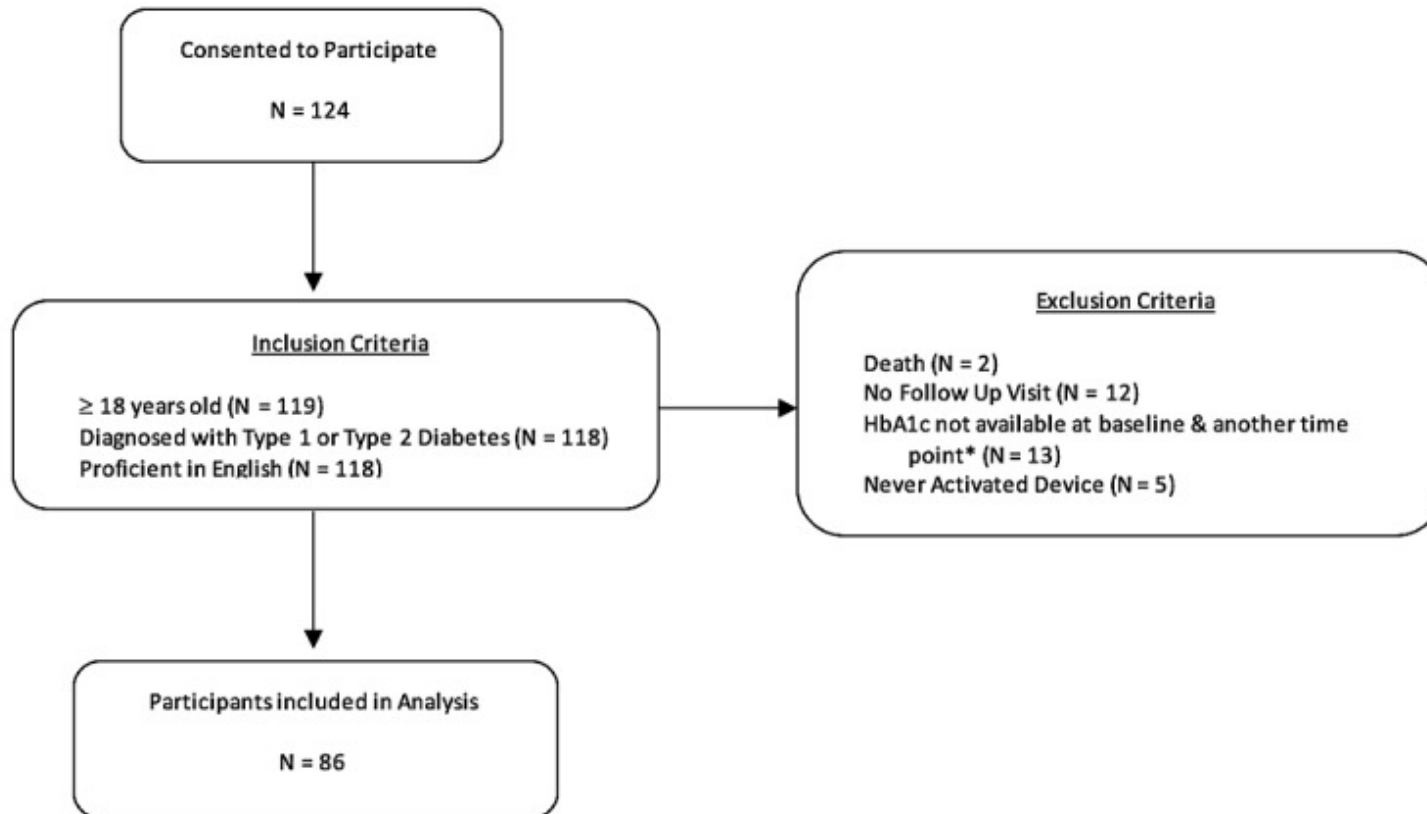


The Power of RPM Data

- **Figure 3.** The graph shows the correlation between the time a health coach spent discussing the data inputted into RPM and the number of normal readings that patient then recorded for the month. The graph shows a positive linear relationship. This means that the more time the health coaches spent discussing or reviewing patient results, the more likely the patient was to have a higher number of normal readings. The outliers that fall underneath the trendline align with patients who required more time assistance setting up their RPM devices.



The Effect of a Cellular-Enabled Glucose Meter on Glucose Control for Patients With Diabetes (October 2019)



Stanford University School of Medicine & The University of South Florida

Objective:

- The purpose of this study was to examine health outcomes measured by changes in HbA_{1c} in time in target blood glucose range, and in depression symptoms for patients enrolled in a remote digital diabetes management program in a Diabetes Center of Excellence setting.

Results:

- The mean HbA_{1c} drop amongst the group was 0.66% ($P=.17$), with all participants showing a decline in HbA_{1c} at 12 months.
- Participants with type 2 diabetes not using insulin had blood glucose values within target range (70-180 mg/dL) 89% of the time. Participants with type 2 diabetes using insulin were in target range 68% of the time, and type 1 diabetes 58% of the time. Average PHQ-2 scores decreased by 0.56 points during the study period.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6803884/>

Case Study #1

Patient

- 77 year old male
- History of hypertension, hyperlipidemia, arthritis, asthma, chronic back pain, obesity
- Enrolled in RPM (BP cuff and weight scale)

Goals

- Less pain
- More positive self-image
- Exercise more
- Eat well

Outcome

- Cut back on cappuccinos and ice cream
- Increased energy
- Able to now mow the lawn
- Patient and provider satisfied with BP and weight loss

Objective Data - Case Study #1

Initial Average Weight

204.7 lbs

Average Weight 4 Months Later

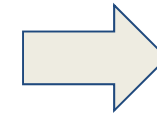
197.2 lbs

Initial Average BP

148/86

Average BP 4 Months Later

119/74



Continuing with
Program!

Case Study #2

Patient

- 82 year old female
- History of hypertension, hyperlipidemia, GERD, Type II DM, Vitamin D deficiency, obesity
- Enrolled in RPM (BP cuff and weight scale)

Goals

- Less pain
- Exercise more
- Eat well

Outcome

- Focused on eating healthier to lose weight
- BMI has dropped a full point (31.1 to 30.1) in 3 months

Objective Data - Case Study #2

Initial Average Weight

181.4 lbs

Average Weight 3 Months Later

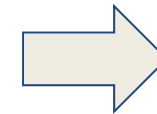
175.4 lbs

Initial Average BP

151/48

Average BP 3 Months Later

137/60



Continuing with
Program!

Case Study #3

Patient

- 73 year old male
- History of hypertension, hyperlipidemia, obesity, arthritis, atrial fibrillation
- Enrolled in RPM (BP cuff and weight scale)

Goals

- Exercise more
- Eat well
- Lose weight
- Increase focus and motivation

Outcome

- Decreased arthritic pain
- Added stretching to exercise
- Aware of nutrition labels

Objective Data - Case Study #3

Initial Average Weight

232.3 lbs

Average Weight 8 Months Later

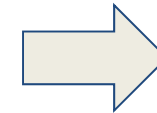
224.2 lbs

Initial Average BP

172/104

Average BP 8 Months Later

141/82



Continuing with
Program!

Case Study #4

Patient

- 34 year old male
- History of obesity, anxiety, depression
- Enrolled in RPM (weight scale)

Goals

- Focus on physical activity
- Healthier food choices

Outcome

- Motivated by receiving calls and texts from health coach
- Feels more upbeat
- Lost 32.9 pounds in 7 months

Objective Data - Case Study #4

Initial Average Weight

260.6 lbs

Average Weight 7 Months Later

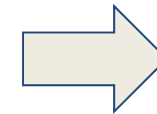
227.7 lbs

Initial BMI

34.3

BMI 7 Months Later

29.9



Continuing with
Program!

Case Study #5

Patient

- 73 year old male
- History of hypertension, obesity, CAD, CVA, osteoporosis, arthritis, depression
- Enrolled in RPM (weight scale and BP cuff)

Goals

- Keep BP in range
- Lose weight

Outcome

- Healthier food choices and increased exercise
- Lost 3 points in BMI

Objective Data - Case Study #5

Initial Average Weight

237.6 lbs

Average Weight 7 Months Later

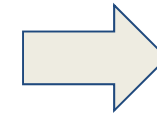
220.4 lbs

Initial Average BP

146/98

Average BP 7 Months Later

115/70



Continuing with
Program!

Questions?

Huzefa@vivyogroup.com

504 400 7473