Remote physiologic monitoring for improved diabetes care

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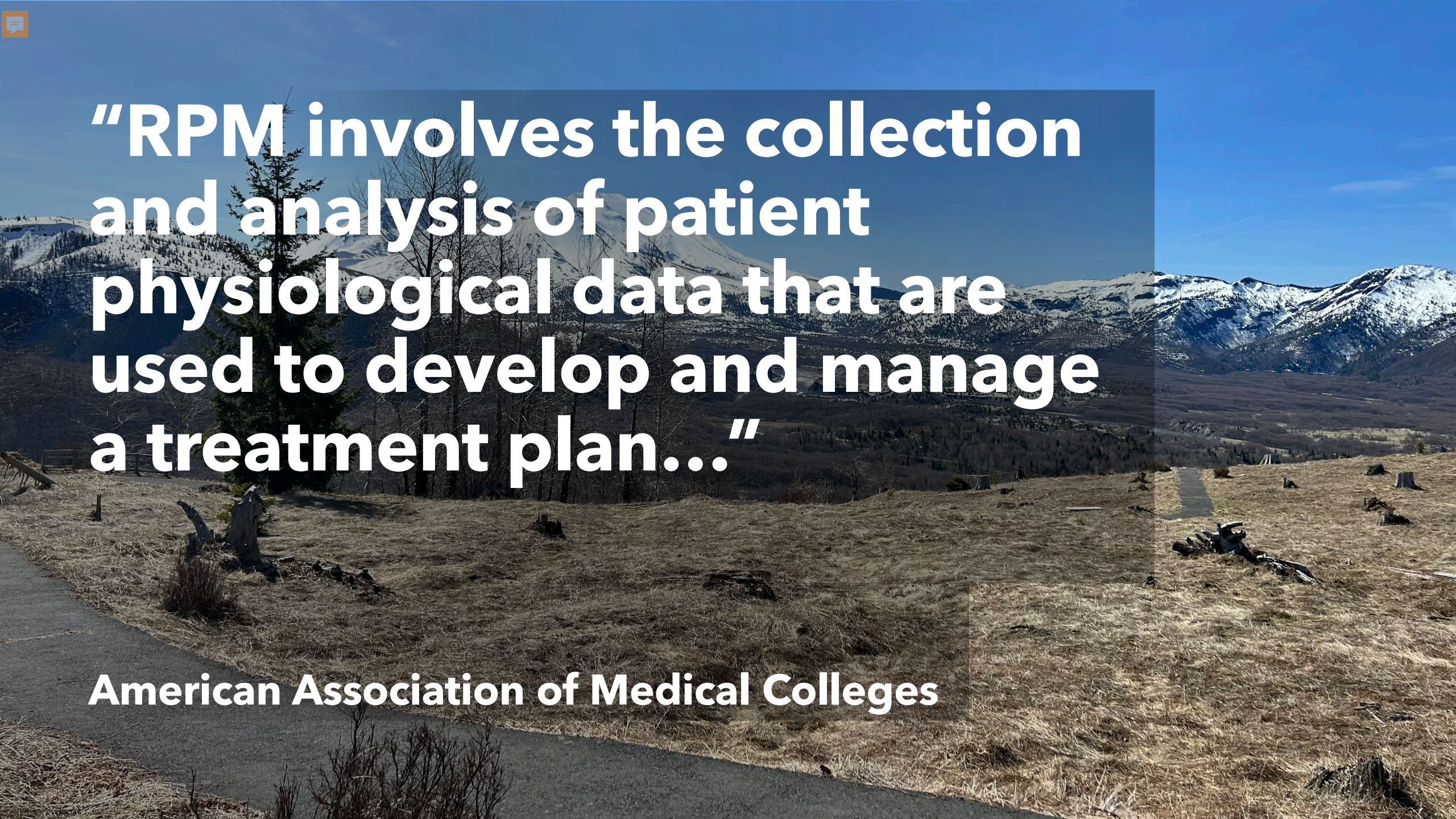
Objectives

After this presentation, attendees should be able to:

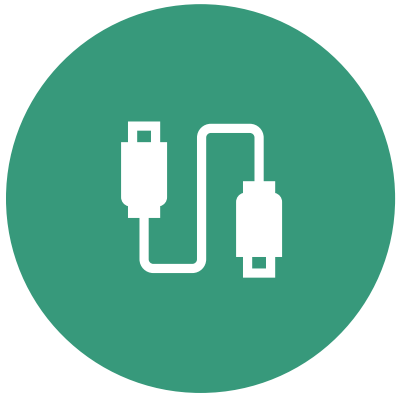
- Describe the benefits of cellular connected RPM devices for patients and clinicians
- Outline a process for incorporating RPM into the diabetes management workflow
- Assess the future of blood glucose RPM technology for diabetes management in the context of CGM and other limitations


“RPM involves the collection and analysis of patient physiological data that are used to develop and manage a treatment plan…”
American Association of Medical Colleges

Symptoms/Conditions

High blood pressure
Diabetes
Weight changes
Heart conditions
COPD
Sleep apnea
Asthma

Discussion: Experience with RPM



WHAT DEVICES/ CONDITIONS?

WHAT WAS SUCCESSFUL?

WHAT WAS CHALLENGING?

The CIT Health Clinic

- Tribally-run outpatient clinic
- Staffed by:
  - 2 full-time nurse practitioners
  - 1 part-time MD
  - 2 RNs
  - 3 MAs
- Wellness & Diabetes Program:
  - 1 CDCES
  - 1 Health Education Assistant
  - 3 Garden Staff
- About 120 active patients with diabetes, mostly type 2

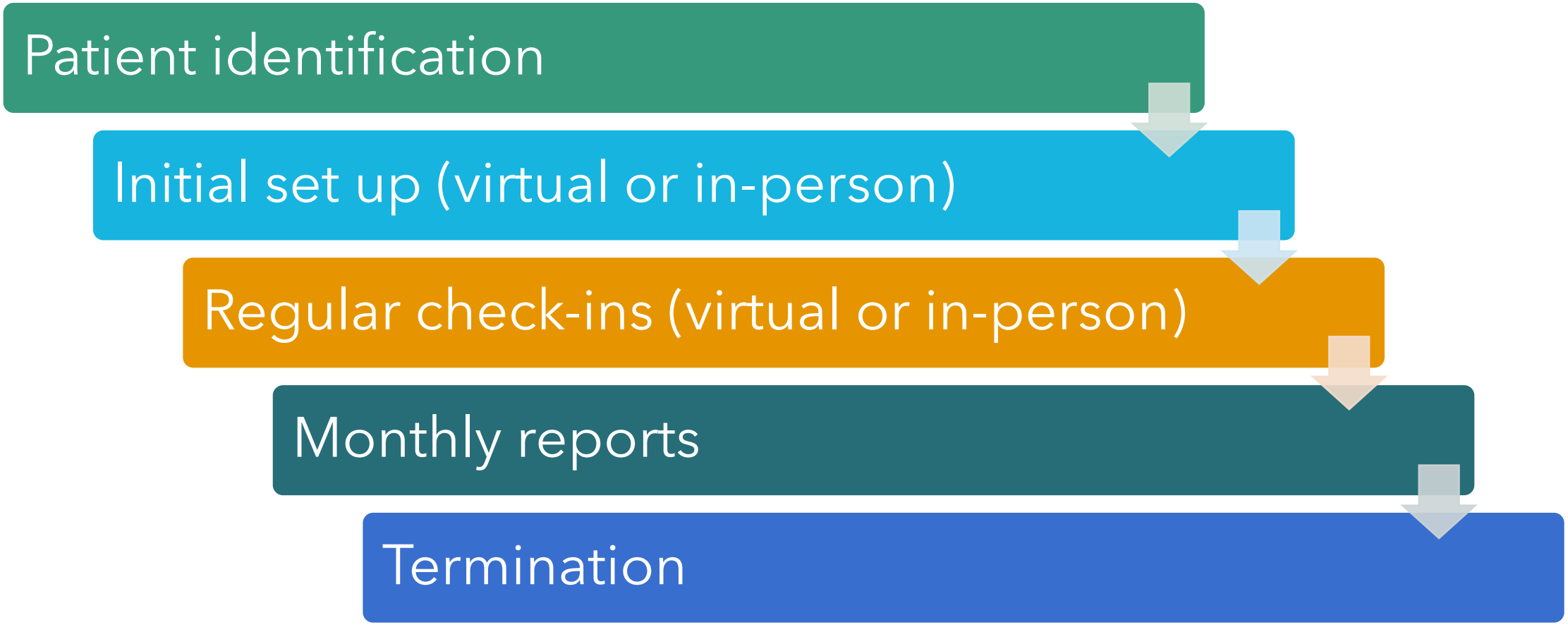
The CIT RPM Program began in 2020 in response to the pandemic.

- Fewer in-person visits
- Unable to download glucometers
- Link between diabetes and COVID
- Patient isolation from family, caregivers

Selecting a Meter

- Ease of use – clients
- Ease of use - clinicians
- Cost
- Integration with system

Clinic Processes



Patient Identification

- Benefit from close monitoring or increased accountability
- Willing to check blood glucose at least daily
- Willing to connect over the phone at least monthly
- Frequent medication or care plan changes
- Not eligible/appropriate for continuous glucose monitoring

Initial Set-Up

Conducted by CDCES

Supplies provided or shipped to patient

- Device registered to patient's profile

Instructed on:

- Use of device
- BG check frequency & targets
- Program requirements
- How to request more supplies
- When to contact clinic

Charted in standard note template

CPT code: 99453

RPM_INITIAL May 02,2023@08:00 Fine,Alyssa C Change
Vst: FINE,A

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START TIME: 1pm
END TIME: 1:30pm

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POV: Diabetes type 2 with hyperglycemia ;

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Patient presents for initial device set-up and education on
remote physiological monitoring system for blood glucose.

Patient consents to participating in remote physiological
monitoring program to assist with diabetes management.

Order placed for meter distribution on 02-May-2023
by T. Taylor for the management
of type 2 diabetes.

iGlucose Blood Glucose Monitoring System set-up for patient,
including setting proper date and time and registering device
on population management software.

The serial number of the device is xxxxxx.

Device and supplies were provided to the patient via mail at
a previous date. Patient has meter to reference during this
educational visit.

The following education was provided to the patient regarding use
of the device:

+ How to use device to check blood sugars
+ How and when to charge device
+ How to log-in to online account and set up alerts for testing
+ How to access device support/help services

Patient was instructed to test their blood sugars 2
times per day at the following times:

Fasting, Post-prandial

Explained to patient that device support may be discontinued
if testing schedule is not followed as prescribed or patient
does not engage in monthly treatment management sessions.

Patient has adequate understanding of device use and
expectations. Provided with contact number for questions
or concerns.

Regular Check-Ins & Data Review

- Conducted at least monthly by CDCES
- Review of blood glucose data
- Telephone calls or in-person visits with client as appropriate
- Charted using standard note template
- Patient tracked on i-care
- CPT code: 99457/99458

RPM_CHARTING May 02,2023@08:14 Fine,Alyssa C
Vst: FINE,A

**********Visit location Information**********

Visit Location:

Visit Type:
Audio Only

Provider Location
Longview Office

Patient Location
Patient Home - Washington State

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START TIME: 1pm
END TIME: 1:30pm

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Diabetes type 2 with hyperglycemia ;

Reviewed recent RPM blood glucose results and patient's current self-management activities. Identified the following patterns:
Patient has been checking BG 1x per day, always fasting. Almost all are in target, with intermittent higher readings. Average of 112 and range of 80-143 over the last 30 days. No post-prandial checks.

Patient reports that he has been taking metformin as prescribed. Has been working on preparing more meals at home. He remains fairly sedentary but is still interested in increasing walking. Worked with patient on setting goal of increasing activity - walking 15 minutes in the evening 3x per week.

Patient has not yet scheduled dental exam. Reviewed available resources. Patient reports he will reach out to local dental clinic.

Based on the data and patient discussion, the following diabetes management suggestions were identified:
1. Increase physical activity
2. Schedule dental exam

Patient expresses understanding and agreement with plan of care.
Will follow up with patient in 1 months

RPM_CHARTING May 02,2023@08:19 Fine,Alyssa C
Vst: FINE,A

RPM DATA REVIEW

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Diabetes type 2 with hyperglycemia ;

Reviewed patient's RPM blood glucose results for last 30 days.
The following patterns were identified:

Patient has been checking BG 2-3 times per day. Checking fasting daily and then also checking post-prandial after lunch or dinner. Readings are generally in target, fasting is 80-110 and post-prandial generally 130-150. Occasional higher readings post-meals, over 200. No evidence of hypoglycemia. Range of 77-220 and average of 135.

Will discuss the following diabetes management suggestions with patient and/or provider:
-Dietary changes to reduce post-prandial readings

8 minutes spent in data review.

Monthly Reports

- Conducted by the Health Education Assistant
- Required elements:
  - Number of days of data collected
  - Treatment plan changes
- Charted using standard note templates
- Uploaded reports into EHR
- CPT code: 99454

RPM_MONTHLY
Vst: FINE,A

May 02,2023@08:22

Fine,Alyssa C Change...

RPM MONTHLY SUMMARY REPORT

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Data from patient's RPM blood glucose device was received 28
days in Apr 2023. See attached report.

25 minutes were spent in utilizing the data results
to make treatment management decisions, including discussion these
results with the patient.

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The following diabetes management decisions were identified by
the patient's care providers this month:

Medication changes, Nutrition changes, Referrals provided for specialty or
follow-up care

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Termination

- Not utilizing meter
- Not answering phone calls/engaging with care providers
- Care plan changes no longer required
- SBGM replaced with CGM

Successes

- Ease of use for clinicians and clients
- Connection with patients during the pandemic
- No more forgotten glucometer at visits
- Remote patient welfare check
- Accountability for patients
- Reinforces importance of SBGM
- Billable service

Challenges

- Poor cellular service
- Tech glitches
- Integration with EHR
- Monthly report
- Patient supply request process

What's next?

- Move toward CGM technology
- Smaller cohorts for shorter times
- Continued emphasis on self-monitoring and remote data collection

Discussion

- Would this be applicable for your clinical practice?
- What is your opinion on the use of cellular devices?
- What may get in the way of implementing a similar program?

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Thank you