

Location: Northern Roots Primary Care
Clinic, Smithers, BC
Contact: Dr. Kalah Blackstock
Date: October 2020 - May 2021

ACING THE A1C

NORTHERN ROOTS PRIMARY CARE PQI PROJECT

► BACKGROUND

The Canadian Diabetes Association guidelines recommend that specific lab testing be done quarterly for patients with diabetes to monitor glycemic control as well as to monitor for microvascular complications. Patients also benefit from a diabetes-specific physical exam to assess for early diabetic complications. By aiming to meet guideline-based monitoring of diabetic patients at Northern Roots Primary Care, we hope to improve patient's glycemic control, reduce micro- and macrovascular complications, and better support patient self-management.

► AIM STATEMENT

To improve management of the Type 1 and Type 2 diabetic patients at Northern Roots Primary Care so that 75% of these patients will have one physical exam and at least one set of lab work completed by end of April 2021

Our long term goal is to have a diabetes-specific exam completed on each patient annually and lab work completed every three months, with the intention of overall better DM control and fewer DM complications over time.

► MEASURES

- % of patients up-to-date on quarterly lab work, assessed monthly
- % of patients up-to-date yearly on physical exams, assessed monthly
- % of patients meeting both criteria, assessed monthly
- Minutes spent per week by MOAs with additional workload
- Patient feedback on project

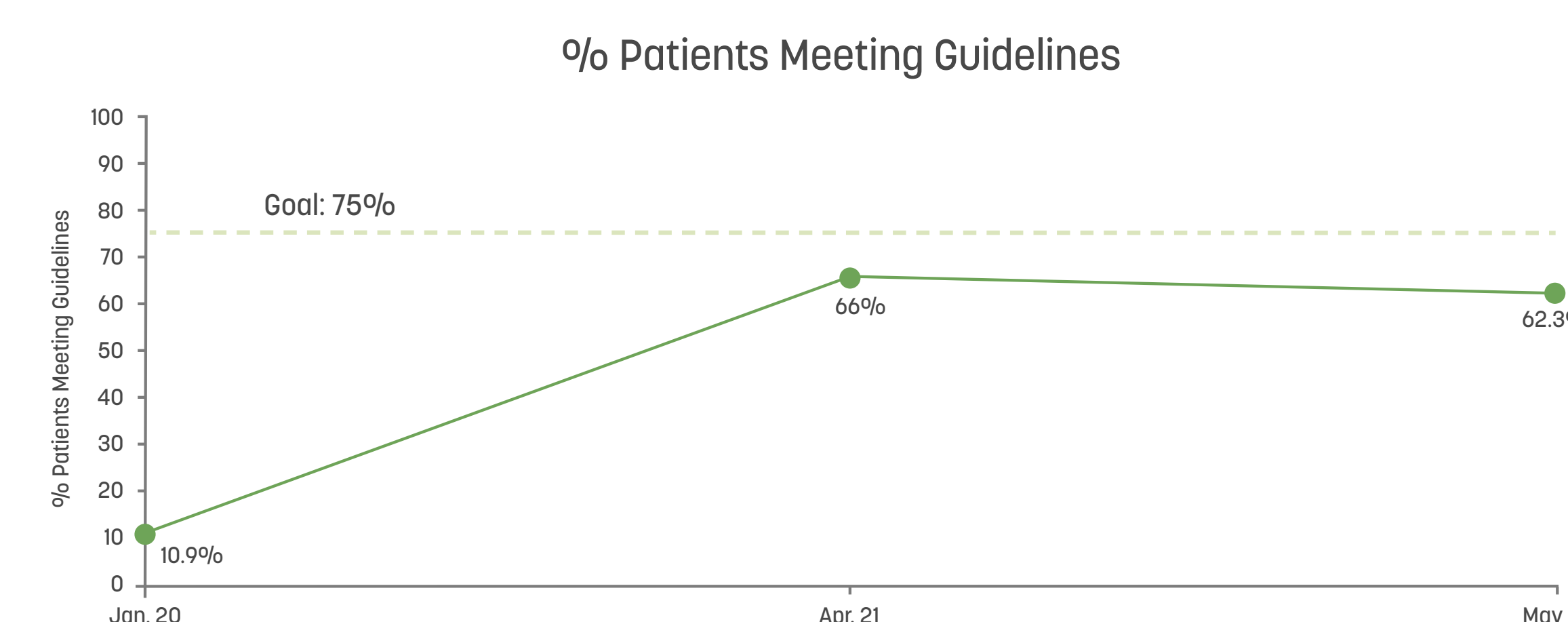
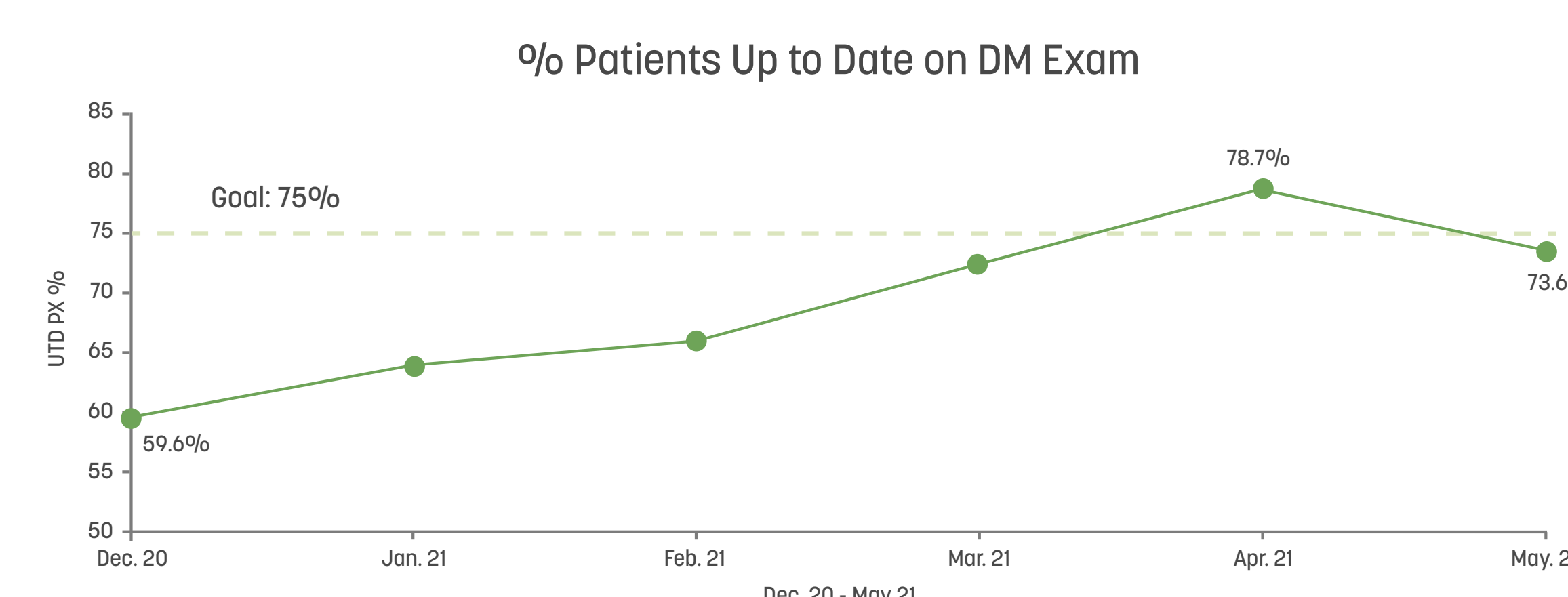
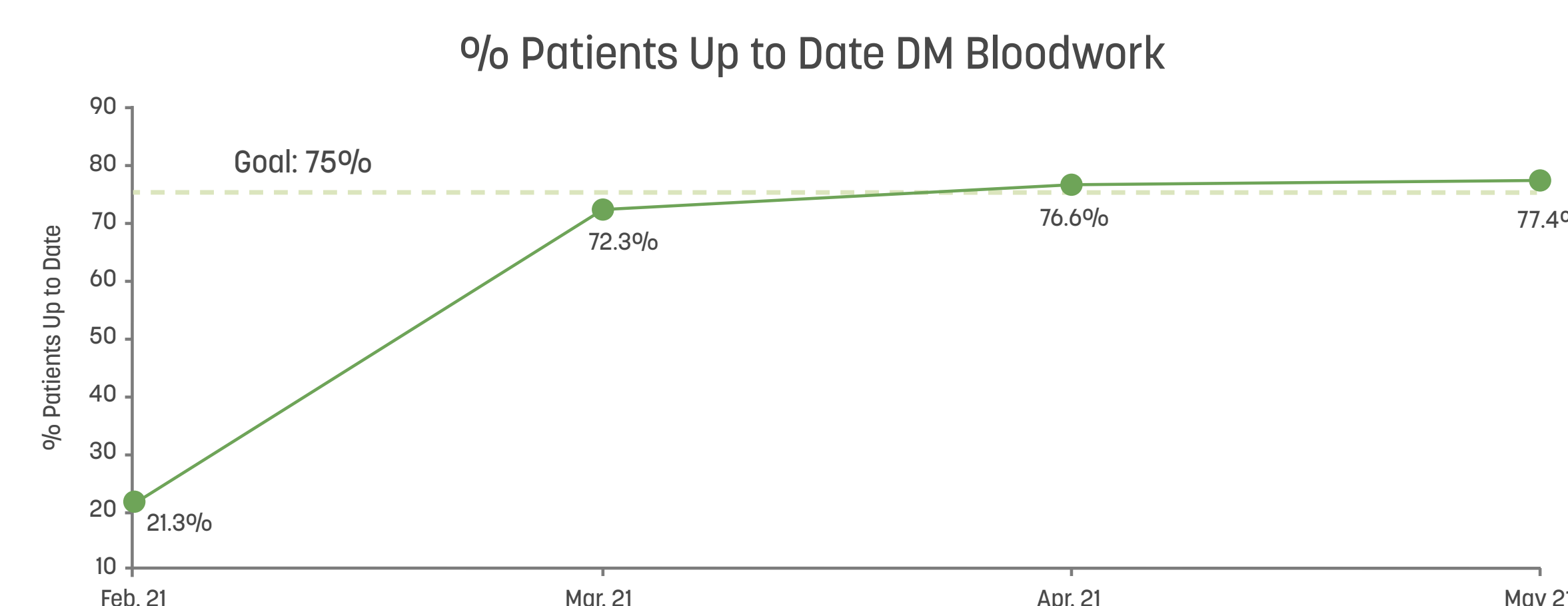
► CHANGE PROCESS

The team initially completed a process map of the current state of diabetes care at Northern Roots Primary Care, then went on to develop change ideas and test them through the use of PDSA cycles. Examples include:

- **PDSA:** Standardized lab requisition to ensure all required tests were ordered consistently for every diabetic patient
 - **Outcome:** This eliminated the variability of tests ordered between providers and ensured all patients had standard of care tests ordered according to the Canadian Diabetes Association guidelines. This process was implemented.
- **PDSA:** MOA's call patients weekly when due for bloodwork
 - **Outcome:** This greatly increased the percentage of patients who had their lab work done. We were able to drop the calls down to monthly, and implemented this process.
- **PDSA:** Assess patient impression of project
 - **Outcome:** MOA's conducted phone surveys with randomly selected patients. The overall theme was that patients were satisfied with the process, but we determined that we need ongoing evaluation of the process with better blinding (ie paper surveys vs phone calls)

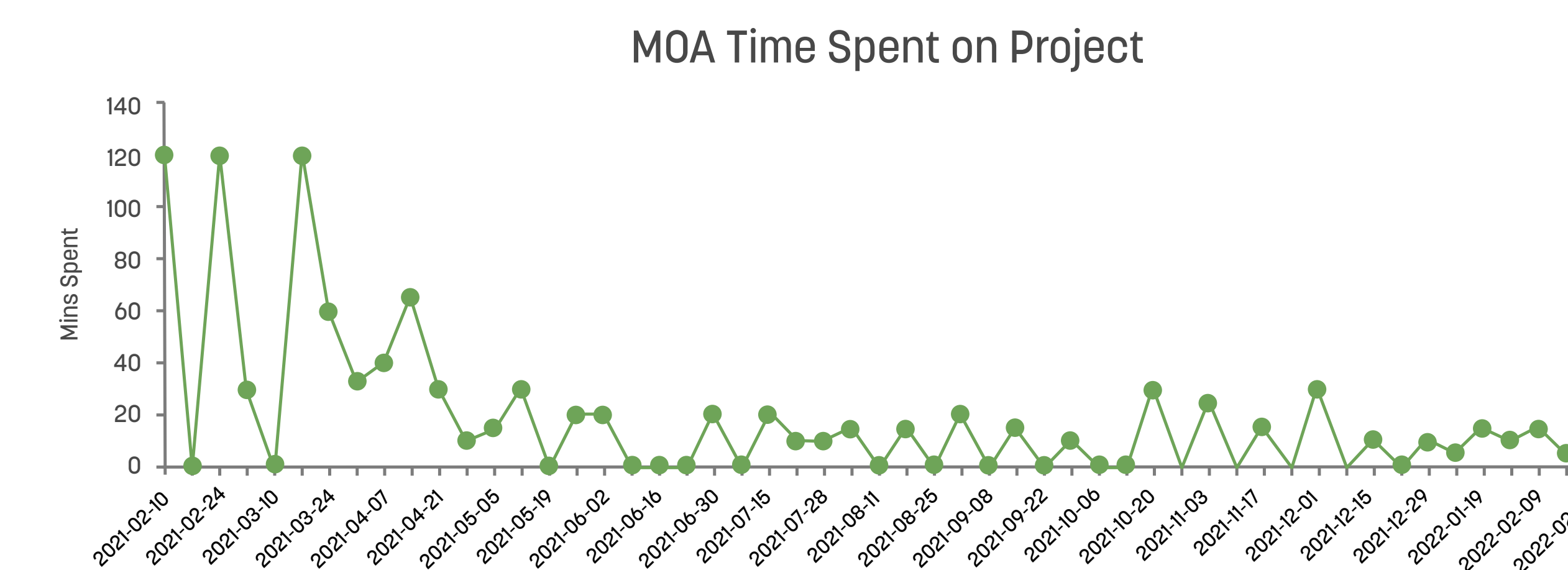
► RESULTS

By the end of the project timeline, we were able to increase the percentage of patients who were up-to-date on bloodwork from **21.3% to 76.6%**, the percentage of patients who were up-to-date on a diabetes-specific physical exam from **59.6% to 78.7%**, and percentage of patients meeting guideline-based monitoring (quarterly bloodwork and annual physical exam) from **10.9% to 66%**.



► LOOKING FORWARD

We have successfully implemented a number of the change ideas we tested through PDSA cycles and have shown sustained improvement in our diabetic patients receiving guideline-based care. **As of February 2022, the percentage of patients up-to-date on bloodwork was 85.2%, up-to-date on physical exam was 85.2% and patients meeting guidelines was 70.4%.** The time dedicated by our MOA staff to this important work also decreased substantially which allows us the capacity to continue this work as well as potentially spread our changes to the management of patients with other chronic diseases.



► TEAM MEMBERS

Dr. Kalah Blackstock
Dr. Mallory Quinn
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Verena Briker-Schewgler
Dorothy Webster
Tara Henry
Lee Cameron
PQI team



ACING the A1C;
Improving management
of diabetes at the
Northern Roots Primary
Care Clinic in Smithers,
BC - Featuring
Dr. Kalah Blackstock