

COVID-19 Pandemic

Diabetes Monitoring

? How has the COVID-19 pandemic affected diabetes monitoring?

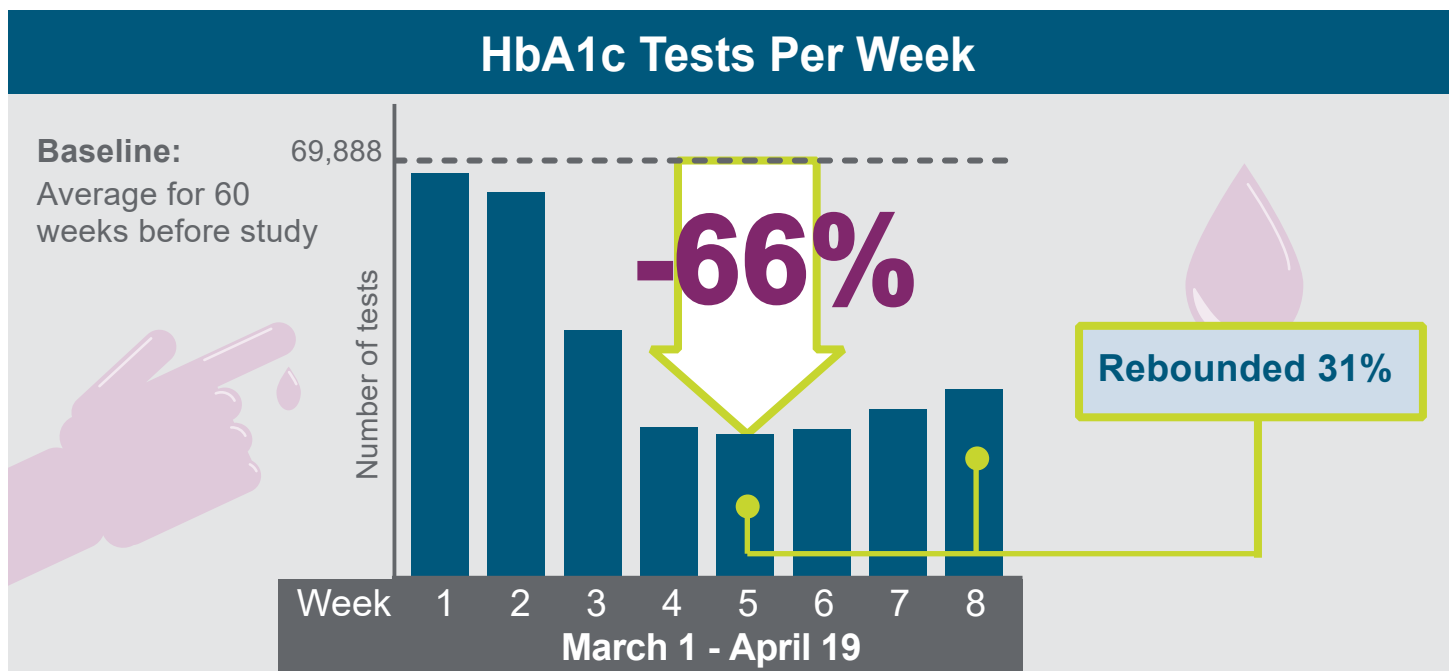
Background

The COVID-19 pandemic has disrupted routine healthcare visits and may have interfered with a crucial component of diabetes management: regular HbA1c monitoring.

Study Design

Changes in HbA1c testing volumes during the pandemic were evaluated by comparing against data from the previous 60 weeks.

Results



→ Lower HbA1c testing volumes during the pandemic indicate that patients were missing monitoring tests, which can lead to higher blood glucose and increased risk of complications from diabetes.

COVID-19 Pandemic Diabetes Monitoring

Article Title: Consequences of the COVID-19 Pandemic: Reduced Hemoglobin A1c Diabetes Monitoring

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Background

- The American Diabetes Association recommends monitoring glycated hemoglobin (HbA1c) levels 2 to 4 times per year for the management of diabetes.¹
- With recent stay-at-home orders issued in response to the COVID-19 pandemic, patients may miss or delay testing, which can disrupt monitoring and impair diabetes management.
- **Objective:** In this study, investigators examined whether HbA1c test volumes had changed during the stay-at-home period in the United States.

Methods

- Using testing data from Quest Diagnostics laboratories, weekly HbA1c test volumes during the 8-week stay-at-home period (March 1, 2020–April 19, 2020) were compared to baseline levels.
- Baseline levels were defined as the mean weekly HbA1c test volume from January 6, 2019 through February 29, 2020; the study population during this period consisted of 1.9 million patients who had ≥ 2 HbA1c tests in 2018.
- Changes in weekly HbA1c testing volumes during the stay-at-home period were also analyzed by sex and age group.

Results

- Weekly HbA1c test volumes decreased each of the first 5 weeks of the study period; week 5 (March 29, 2020) had the lowest volumes, which were 66% lower than baseline.
 - The decrease was larger for women than for men (69% vs 62%; $P < 0.001$).
 - The decrease was largest for patients ≥ 80 years (75%) compared to other age groups ≥ 30 years.
- Weekly HbA1c test volumes then rebounded 31% from week 5 to week 8 of the study period (from 34% of baseline to 45% of baseline).
 - The rebound from week 5 to week 8 was larger for women than for men (37% vs 27%; $P < 0.001$).
 - The rebound was largest for patients ≥ 80 years (56%) compared to all individual age groups, and smallest for patients 30 to 39 years (5%) compared to all individual age groups.

Conclusions

- Based on data from a large national laboratory, HbA1c test volumes markedly decreased after stay-at-home orders were issued in response to the COVID-19 pandemic.
- Continued impairment of diabetes monitoring may contribute to poorer health outcomes and increased medical costs among US patients with diabetes.^{2,3}

References

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