ACCESS TO CGMS FOR EQUITY IN DIABETES MANAGEMENT

The ACCEDE Study

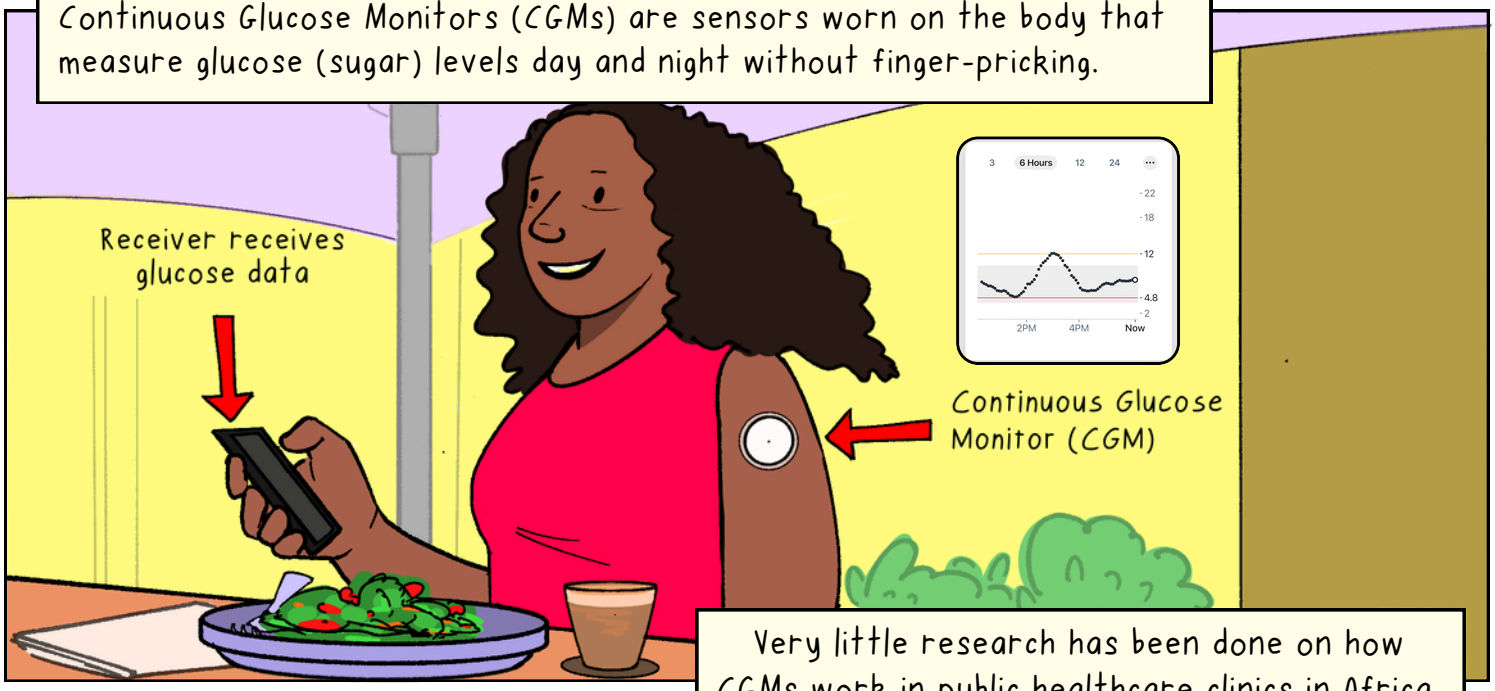
248 people took part

3 public sector clinics

9 months plus 6 months follow-up

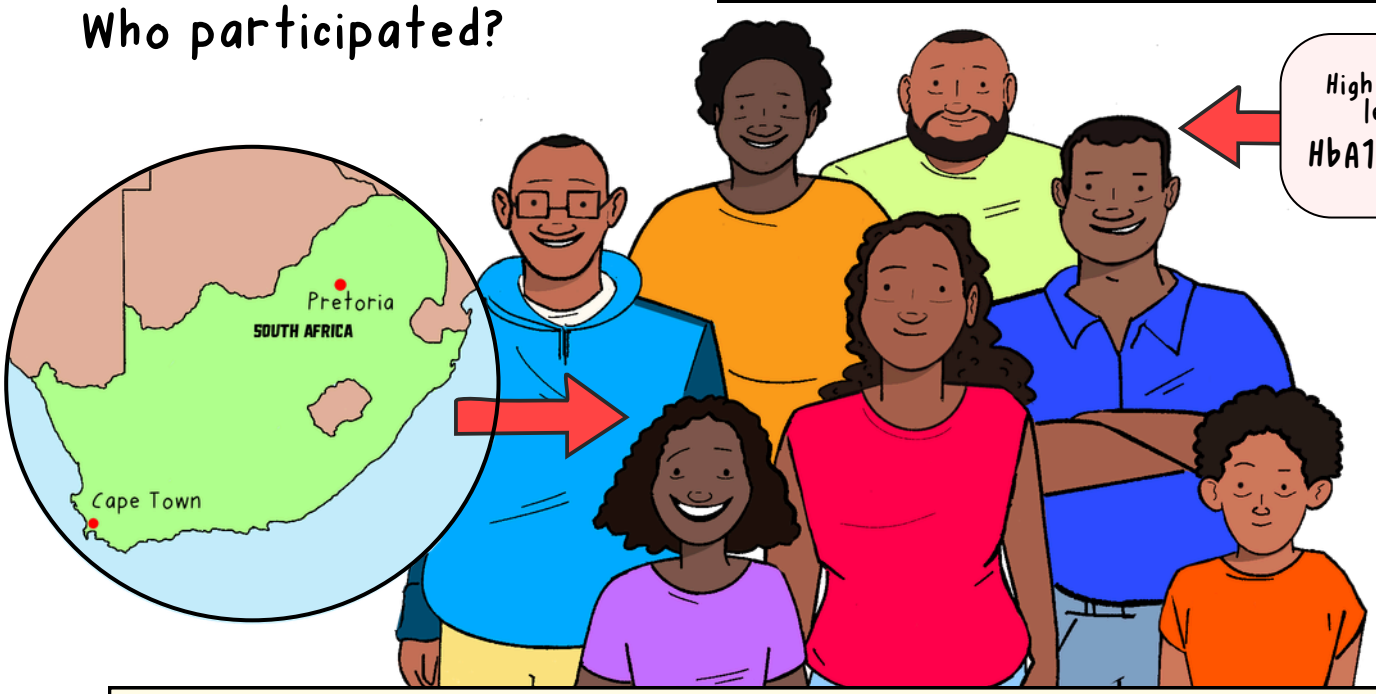
Why was this study done?

Continuous Glucose Monitors (CGMs) are sensors worn on the body that measure glucose (sugar) levels day and night without finger-pricking.



Very little research has been done on how CGMs work in public healthcare clinics in Africa.

Who participated?



People living with type 1 diabetes over the age of 4 years who attended public diabetes clinics in Cape Town and Pretoria and had high HbA1c levels (above 10%).

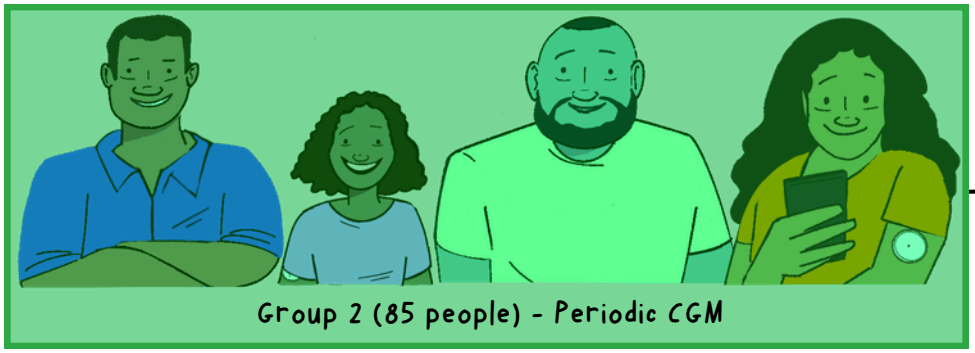
How was the study done?

248 people took part in the study. They were placed into 1 of the 3 groups below for 9 months.



Group 1 (83 people) - Continuous CGM

Wore a CGM for 9 months



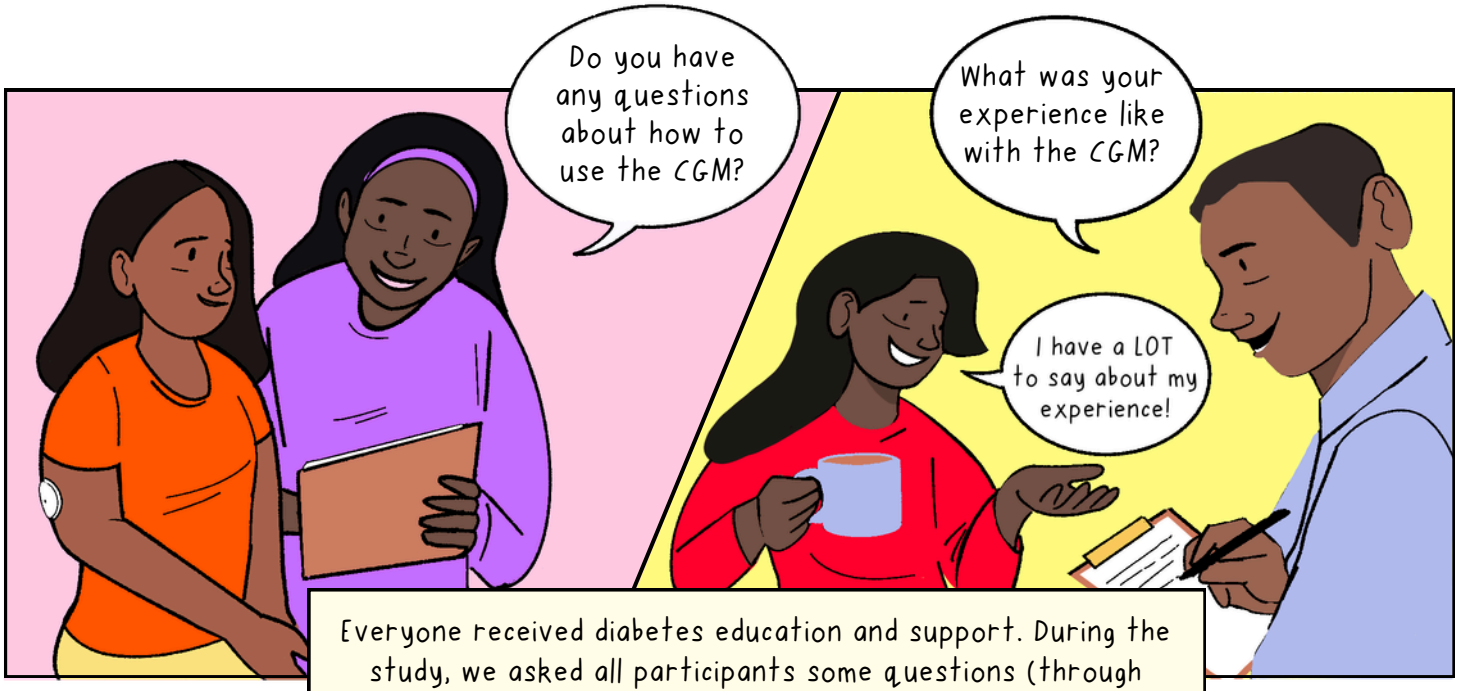
Group 2 (85 people) - Periodic CGM

Wore a CGM for 2 weeks every 3 months



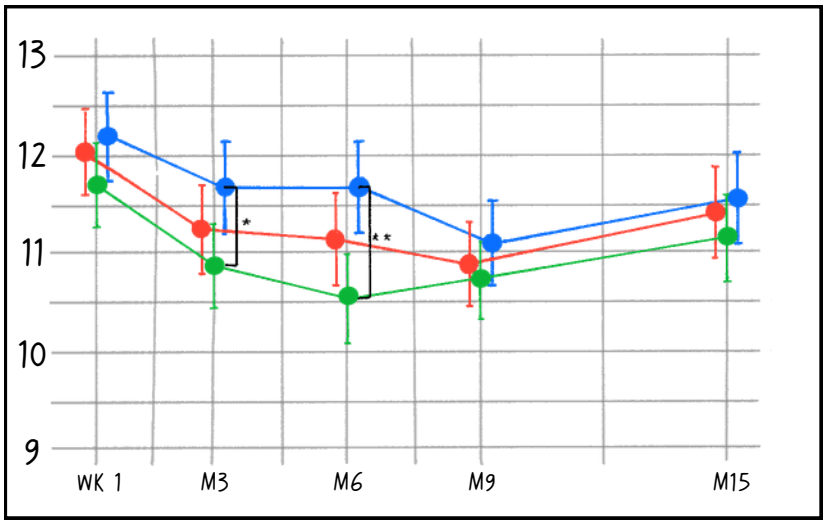
Group 3 (80 people) - Standard of care

Used finger-prick blood glucose testing



Everyone received diabetes education and support. During the study, we asked all participants some questions (through surveys and interviews) to hear from their experiences.

What did the ACCEDE study find?



Group 1 - Continous CGM use

Group 2- Periodic CGM use

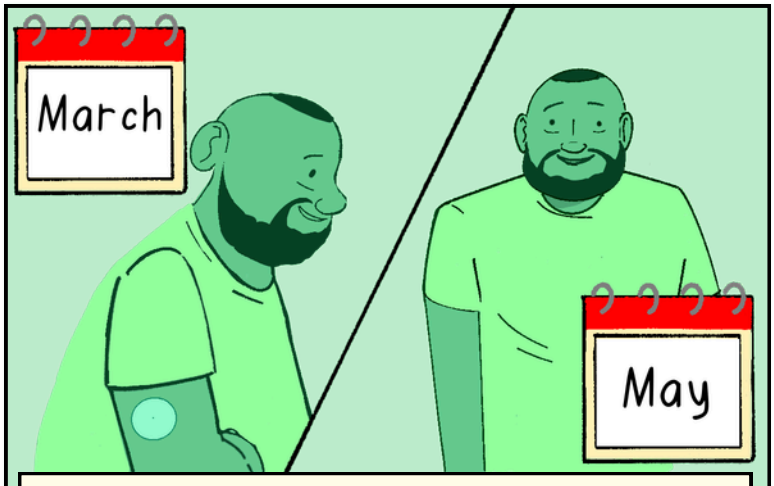
Group 3- Finger Prick Testing

WK = Week
M = Month

This graph shows the results of the study! But what does this mean?



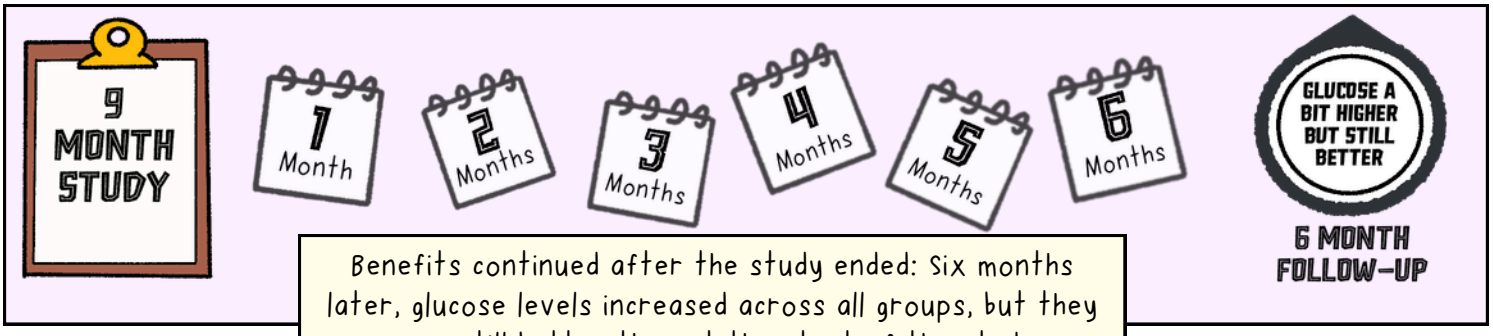
Glucose levels improved across all groups: People in all groups reduced their HbA1c by amounts considered important for diabetes' health.



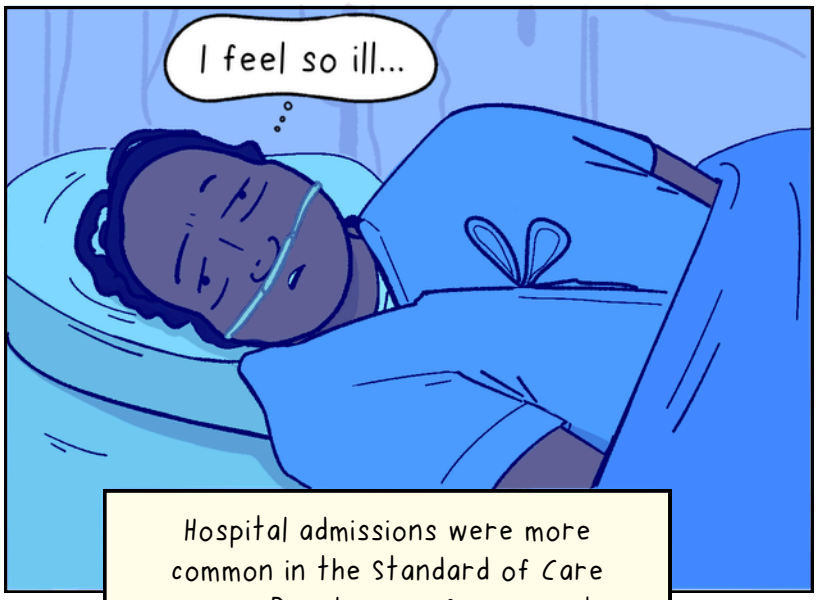
Periodic CGM showed the strongest early benefit: Using CGMs for short periods every few months still helped people lower their glucose levels.



People using Continuous CGMs spent less time with very low glucose levels, reducing hypoglycemia.



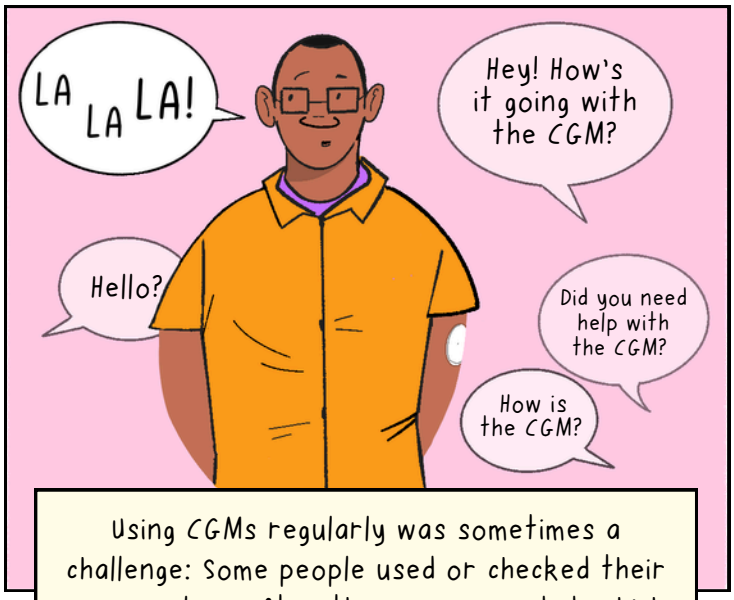
Benefits continued after the study ended: Six months later, glucose levels increased across all groups, but they were still better than at the start of the study.



Hospital admissions were more common in the Standard of Care group: People using finger-prick testing went to hospital more often.



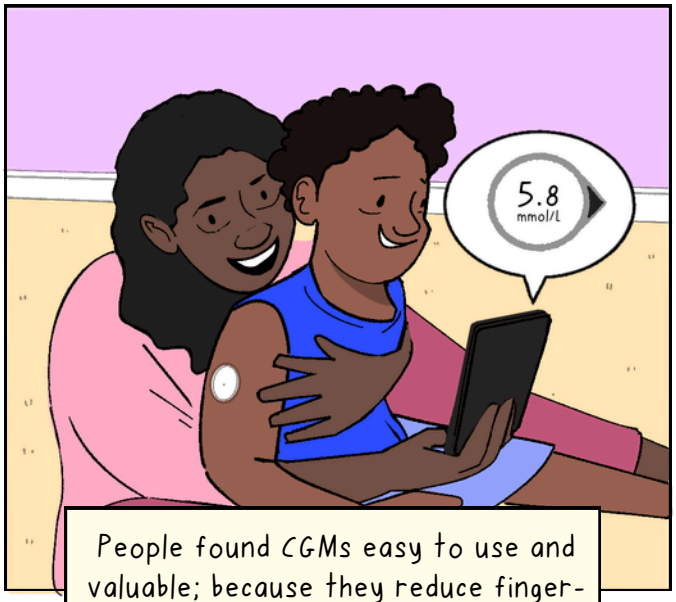
People reported positive experiences using CGMs: Most people said they liked using the CGMs and felt they helped them better understand and manage their diabetes.



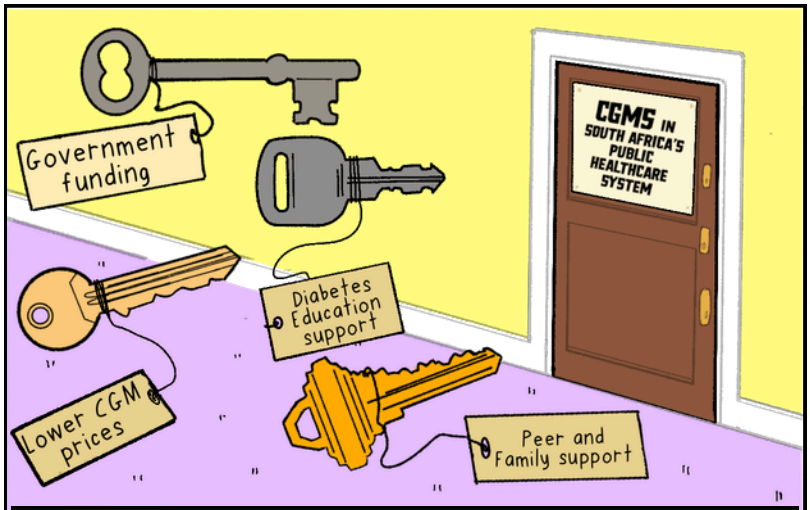
Using CGMs regularly was sometimes a challenge: Some people used or checked their sensors less often than recommended, which may have reduced the benefits of the CGM.



CGM users reported great satisfaction and wellbeing: People using CGMs reported improved satisfaction with glucose monitoring and lower levels of diabetes-related distress.



People found CGMs easy to use and valuable; because they reduce finger-pricking and gives instant feedback for proactive management.

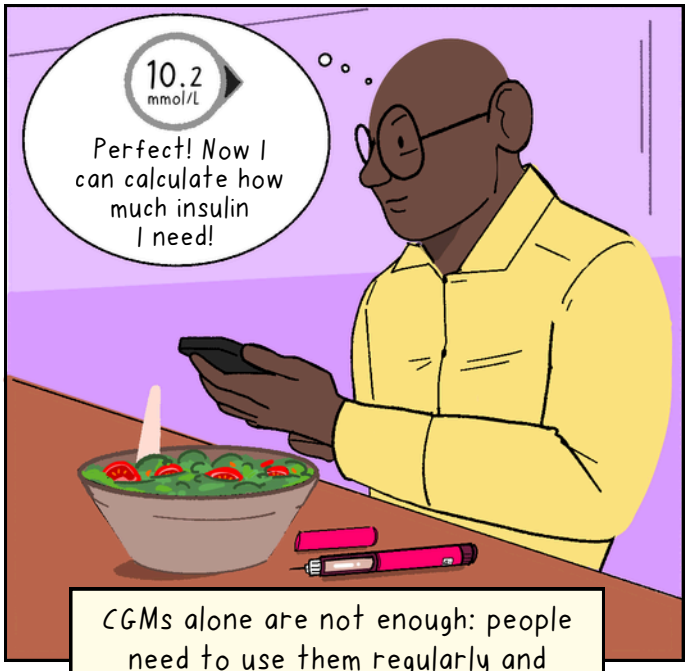


CGMs can help people with diabetes in South Africa. To make them available to more people, government funding, less stigma, diabetes education support and stronger support from families and communities are needed.

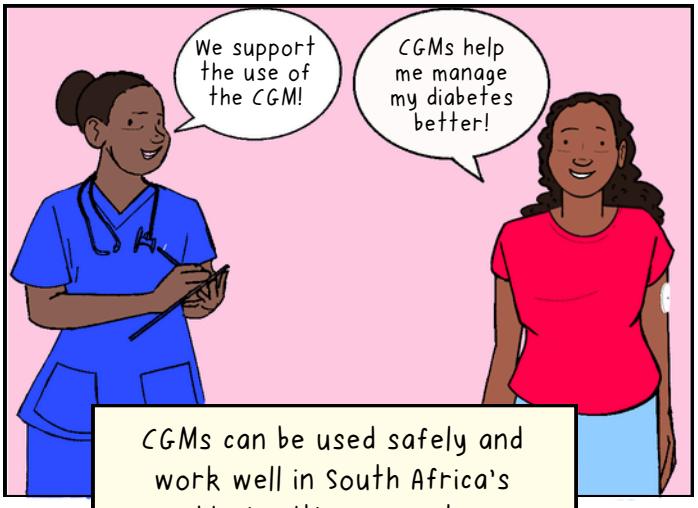
What does this mean?



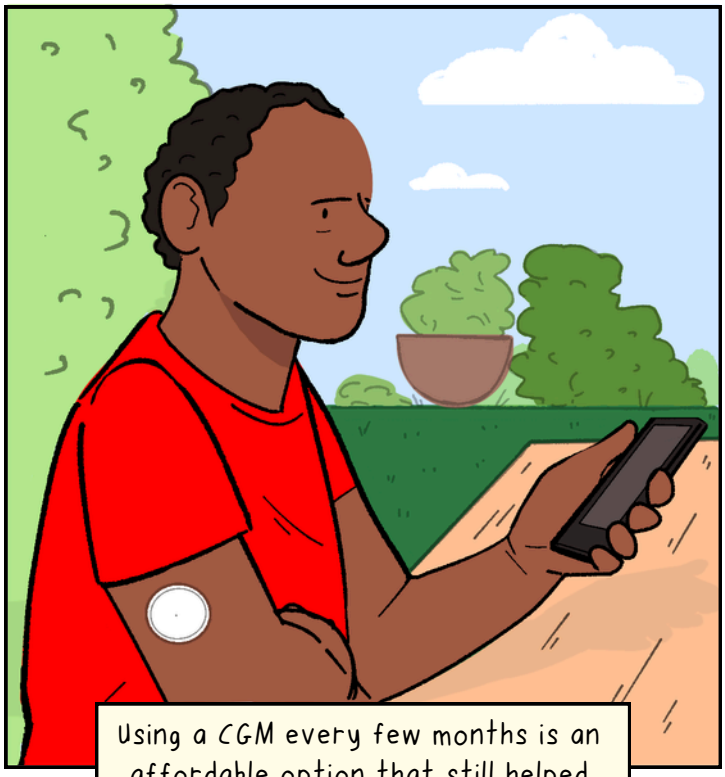
CGMs can support diabetes care in public healthcare settings.



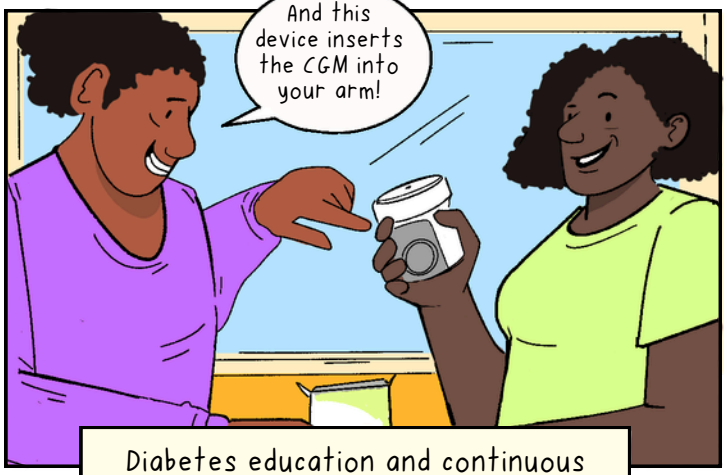
CGMs alone are not enough: people need to use them regularly and act on the information they provide.



CGMs can be used safely and work well in South Africa's public healthcare system.



Using a CGM every few months is an affordable option that still helped many people improve their diabetes.



Diabetes education and continuous support are important for success.

Illustrated by Miss Diabetes

Supported by

FIND

UNIVERSITY OF CAPE TOWN
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

ISGlobal Barcelona Institute for Global Health

THE LEONA M. AND HARRY B. HELMSLEY CHARITABLE TRUST

The ACCEDE study is sponsored by FIND, with a grant from The Leona M. and Harry B. Helmsley Charitable Trust.