

## Keeping diabetes on TRACK in resource-limited settings: the Zimbabwe experience

R Woodward and A Matimba

Closing the gap between evidence and practice in treating chronic diseases is especially challenging in resource-limited settings. There is growing awareness that translating evidence into user-friendly management algorithms, together with a one-off training session, can bring about improvement in the management of various medical conditions.<sup>1</sup> Infographics have recently become a popular way to simplify information in a visually engaging way in order to attract and inform a large audience. These powerful digital tools can provide insights into specific diseases, procedures and healthcare topics.

In the United States, The National Eye Institute (NEI) established the National Eye Health Education Program (NEHEP) in 1998 to help health and community professionals increase awareness about eye health. The NEHEP is designed to reach populations at higher risk for eye disease and vision loss, and to promote the use of vision rehabilitation services. The NEHEP Tool Kit for diabetes is a collection of educational modules that are available online, freely downloadable, and targeted for use by community diabetes educators. One acronym in particular, 'If You Have Diabetes, Keep Your Health on TRACK' was first used in 2005, and the related infographic is part of the current NEI online catalogue.<sup>2</sup>

Recognising that health literacy is vital in treating non-communicable diseases and preventing complications, the ZRTP (Zimbabwe Retinopathy Telemedicine Project) searched for a simple tool that could help patients keep track of their visits to the retinal screening clinic and minimise gaps in knowledge and reinforce the steps they needed to take to help prevent diabetic eye disease. Recognising the appeal of healthcare information presented visually and succinctly, the ZRTP adapted the acronym, 'If You Have Diabetes, Keep Your Health on TRACK' for use in our diabetes retinopathy screening clinic. Our goal was to translate a set of healthcare information messages into a simplified pictorial snapshot that used design elements to emphasise the importance of early detection of diabetic retinopathy, and the steps needed to help prevent diabetic eye complications. The card was designed in a culturally appropriate manner, translated into Shona and Ndebele, and printed on 3 × five inch thick paper stock (Figure 1).

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Figure 1: 'TRACK' cards in (from top to bottom) English, Shona, and Ndebele

The TRACK card system has been well received by patients. At each screening session each patient is given a TRACK card, and the patient number used in the screening clinic is written on the back of the card. The card can also be used to write down questions or take notes during the educational sessions that accompany each retinal screening clinic. Based on feedback from patients, the initial translation in Shona was modified to be more respectful in order to reduce the possibility of the message not appealing to older patients. A short survey from the diabetic clinic on patients' views about the TRACK card indicate that patients believe it is informative, simple to understand, and provides a reminder of the important aspects of self-care management; especially for those patients who have already gone through the initial educational process of understanding what diabetes is, the disease process, management, and possible complications. However, the card alone is not a substitute for a more comprehensive diabetes education. For newly diagnosed diabetes patients the TRACK card gives general guideline on self-management, but these patients still need further education in order to appreciate the importance of the guidelines.

The access to knowledge that the TRACK card system provided is most notable for glycosylated haemoglobin (HbA1c) testing. Of 190 patients who had an initial screening for diabetic retinopathy at the telemedicine diabetic retinopathy screening clinic at Harare Central Hospital between 15 July 2016 and 16 December 2016, only 51 patients (27%) reported ever having had their HbA1c checked.<sup>3</sup> Based on patient questions and comments, it was clear that providing patients with the TRACK card enhanced their knowledge of and interest in HbA1c testing, an area where understanding was previously lacking for many patients. Other param-

eters, such as blood pressure (BP) and cholesterol were already known by most of the patients to be diabetes control markers.

A future goal for the TRACK card system used by the ZRTP includes adding the normal ranges for HbA1c, BP, and cholesterol to the TRACK card. Patients requested this so that they could have an understanding of what constitutes normal and abnormal values. The normal ranges are covered during their education sessions, but many patients expressed the hope that the TRACK card could act as a reference for them for the normal ranges of these essential markers of diabetes control.

In conclusion, we have applied a relatively simple and inexpensive tool, i.e. the TRACK card, as part of an eye health programme contributing to a total diabetes health and educational programme well suited to low-resource areas.

### Acknowledgements

The authors are grateful to Dr S. Guramatunhu, Dr J. Mangwiro, Sister Patience Rwizi, and the Zimbabwe Ministry of Health and Child Care for their support.

### Author declaration

Competing interests: none.

Any ethical issues involving humans or animals: none.  
Was informed consent required: yes - documentation on file.

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