USAID FROM THE AMERICAN PEOPLE | HEALTH CARE IMPROVEMENT PROJECT

BUILDING ON THE SUCCESSES OF HIV AND TB PROGRAMS TO IMPROVE CARE FOR NON-COMMUNICABLE DISEASES IN UGANDA

BACKGROUND

Until recently, malaria and other acute infectious diseases were the leading causes of mortality and morbidity in East Africa. The health systems in the region are, therefore, designed to manage acute conditions. Now with the advent of the human immunodeficiency virus (HIV) pandemic and increasing prevalence of non-communicable diseases, these health systems are being forced to manage people with chronic conditions.

The needs of patients with chronic conditions are very different from those with acute conditions, and health systems are struggling to adapt. Patients with acute illnesses come to the clinic when they have a problem. They then require a diagnosis and short-term treatment which is carried out entirely by the provider (e.g., surgery) or involves the patient for a short period of time (e.g., short-term antibiotics); long-term follow-up is usually not required. People with chronic conditions have different needs. After the initial diagnosis and prescription of treatment, the patient becomes the primary care taker and is responsible for managing his or her health at home. Treatment of chronic conditions is often complicated. For instance, a patient with diabetes mellitus will need to adjust insulin dosage based on home glucometer readings, make changes related to diet and exercise, and take precautions to prevent infection.

Helping health systems change from the current model which is designed to make diagnoses and deliver short-term care to one which has structures and processes in place to help people living with chronic conditions manage their condition at home will require transformation at many levels. The USAID Health Care Improvement Project (HCI) is working with the Uganda Ministry of Health to make these changes. We are promoting the use of the Chronic Care Model, an evidence-based set of principles for improving chronic condition care that has been endorsed by the World Health Organization.

Flow chart developed by QI team at Buikwe Hospital in Uganda showing care process for patients with diabetes or hypertension, including triage to decide if they need medical or psychosocial support. *Photo by Martin Muhire, URC.*

DESCRIPTION OF THE PROBLEM

Buikwe District in central Uganda is home to 407,000 people and provided 270,000 outpatient visits in 2010. Last year, 44,000 (17%) visits were for patients with HIV, tuberculosis (TB), hypertension (HTN) or diabetes mellitus (DM)(this proportion was as high as 34% in some of the hospitals in the district). HIV was the most common chronic condition (81% of all chronic care visits), followed by TB (13%), HTN (4%) and DM (1%).

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An assessment carried out in Buikwe by HCI in December 2010 found that care is substantially better for patients with HIV or TB compared to those with HTN or DM: 1) estimated unmet need among the four conditions was 27%, 58%, 88% and 99% for TB, HIV, DM and HTN respectively; 2) HIV and TB services are available in more facilities; 3) provider knowledge is better; 4) documentation is better; 5) patient education and self-management support are more readily available.

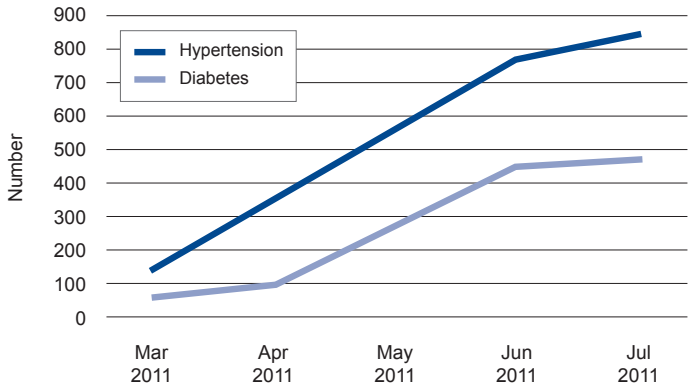
INTERVENTION

HCI is working with clients, providers and managers in Buikwe District and the central Ministry of Health to change how care is provided. Since January 2011, we have trained patients and providers from 14 clinics about the principles of good chronic care and helped form quality improvement teams in each facility to change their systems to be more responsive to the needs of patients with chronic conditions. The teams are focusing on: 1) improving the knowledge, skills and motivation of patients with chronic conditions, 2) re-organizing the clinics to ensure that more provider time is available for supporting patient and 3) improving data systems so that longitudinal patient information is collected and used for patient management and for reviewing quality of care.

RESULTS

The lessons from HIV and TB have been transferred within the facilities to improve care for HTN and DM. Clinics have started routine screening of hypertension for all adults, now have dedicated clinic days for DM and HTN, spread messages via radio of the importance of HTN screening, have set up systems to educate patients and support them to manage their conditions at home, and are developing clinical records to collect, store and analyze patient data. These interventions have led to a six-fold increase in the number of patients receiving care for hypertension and diabetes (Figure 1).

Figure 1. Number of patients with HTN and DM ever enrolled in care, Buikwe District, Uganda

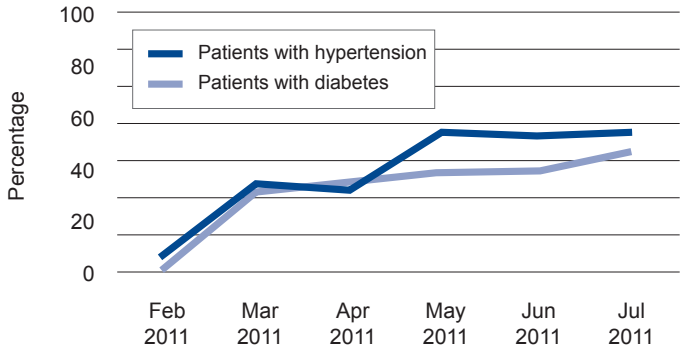


I no longer spend a lot of money seeing consultants for my diabetes. Now I know what to do to keep my blood sugar stable.

– A patient with diabetes in Uganda about the changes in her clinic

In addition to larger number of patients being enrolled in care, facilities are also seeing improved blood pressure and blood glucose control. Initially very few patients in care were meeting blood pressure targets of <140/90 mmHg or fasting blood glucose targets of 4.5-7.0 mmol/L. By July 2011, among patients returning to the clinic, targets were met in 55.4% of patients with HTN and 48.3% of patients with DM (Figure 2). The main priority for facility teams at this point is to improve retention of patients. Despite the six-fold increase in patients enrolled in care, monthly appointments have only increased three-fold. Teams are currently working to understand the reasons patients are not reliably keeping appointments.

Figure 2. Percentage of patients meeting blood pressure or blood glucose targets, Buikwe District, Uganda



CONCLUSIONS

Facilities in Uganda have been able to change their clinics to improve care for patients with HTN and DM. Technical assistance in the form of training on care for HTN and DM and on-site quality improvement coaching assisted with this process, but no additional staff or resources were provided from external sources. The success of this work has been facilitated by previous work to strengthen clinics' ability to provide high quality HIV and TB services. Further efforts to build on the successes of vertical HIV and TB programs can help transform health systems so that they are better able to meet the needs of people living with both infectious and non-communicable chronic conditions.

USAID Health Care Improvement Project

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