

## SCIENTIFIC ABSTRACT

South Africa has a high and rising prevalence of hypertension. Previous research in the rural Agincourt sub-district, covered by a high-functioning health and demographic surveillance system (HDSS), has found a prevalence of 61% in adults, many affected individuals not using any medication and very few of them (9%) with controlled blood pressure. Until recently, primary care clinics focused on management of acute conditions, but recent government initiatives are shifting the focus to management of chronic disease including HIV and hypertension.

This cluster randomised controlled trial will test the effectiveness of a new clinic-based lay health worker to supplement government initiatives and support care of chronic disease. Eight health facilities that provide care for the population of the Agincourt sub-district, together with the communities they serve, will be randomised to usual care or to the provision of one or more chronic-care focused lay health workers.

The principal outcome will be the percentage of people who have a blood pressure and risk profile that indicates Moderate or greater Added Risk of cardiovascular disease as defined by a modified version of the South African Hypertension Guideline 2011<sup>1</sup>. The principal outcome will be assessed in two population level surveys at baseline and at the end of the intervention. A clinic/census link set up in all clinics will provide detailed information on changing patterns of clinic use, and an extensive realist evaluation of processes will provide greater understanding of the barriers and facilitators to effective management of hypertension. The finding from this trial will be relevant for improving the care of all chronic diseases.

<sup>1</sup>. Seedat YK, Rayner BL, Southern African Hypertension S. South African hypertension guideline 2011. *South African medical journal = Suid-Afrikaanse tydskrif vir geneeskunde* 2012; 102(1 Pt 2): 57-83.