Economics

A feasibility study to assess the economic implications of introducing antiretroviral therapy (ART) within a mining environment in South Africa

LSHTM investigators: Lilani Kumaranayake, Alison Grant, Katherine Fielding
Collaborators: Debbie Muirhead, Charles Hongoro, Surita Roux, Salome Charalambous, Gavin Churchyard, Aurum Institute, South Africa
Funding bodies: Aurum Institute, South Africa

In conjunction with a practical and therapeutic feasibility study, the aim of this study is to undertake economic analyses related to the costs and benefits of care and treatment of HIV/AIDS relating to the provision of ART in 22 companies in Southern Africa.

The economic analysis will generate implications of wider-scale implementation of ART, including the development of a cost-benefit model. To-date, ART implementation has been undertaken for 18 months. Data on the first year of implementation are being analysed including costs of start-up as well as impact on labour force absenteeism. More detailed studies on the impact of ART on productivity are underway, with preliminary modelling on overall cost-benefit of ART planned as well.

Keywords: costs, cost-effectiveness, economics, ART, HIV, AIDS, South Africa.

LSHTM contact: Lilani.Kumaranayake@lshtm.ac.uk

Cost-effectiveness of preventive tuberculosis therapy for HIV-infected South African mineworkers

LSHTM investigators: Lilani Kumaranayake, Alison Grant, John Day, Katherine Fielding, Richard Hayes
Collaborators: Surita Roux, Salome Charalambous, Gavin Churchyard
Aurum Institute, South Africa
Funding bodies: Aurum Institute, South Africa

In parallel with a randomised trial, the aim of this study is to assess the cost and cost-effectiveness of a special clinical service ('The Prevention Clinic) established at Ernest Oppenheimer Hospital, Welkom. Interventions include the delivery of Isoniazid Preventive therapy (IPT) to employees at high risk of tuberculosis and Cotrimoxazole (CT) to those with HIV disease and a CD4 count less than 200. The study evaluates the cost and cost-effectiveness of IPT and CT in preventing tuberculosis and other opportunistic infections among South African mineworkers. The study evaluates direct costs related to health service provision and indirect costs and potential savings or benefits to the employer.

Keywords: costs, cost-effectiveness, economics, TB preventive therapy, cotrimoxazole, HIV, South Africa

LSHTM contact: Lilani.Kumaranayake@lshtm.ac.uk

Impact of HIV/AIDS in the private sector – focus on mining companies with high TB/HIV prevalence

LSHTM investigators: Lilani Kumaranayake
Collaborators: Debbie Muirhead, Gavin Churchyard, Aurum Health Research, South Africa
Funding bodies: Aurum Health Research, South Africa

The aim of the project is to undertake both a short term and long-term study of the impacts of HIV/AIDS high TB/HIV prevalence settings. Estimates of impact on 20-22 private sector companies will be undertaken before the implementation of ART. Projections for future HIV/AIDS impact will also be modelled. To-date, HIV/AIDS impact has been estimated for 10 firms, and data collection is being undertaken in the remaining firms. Labour force characteristics which mitigate or increase impact will be identified across firms.

Keywords: costs, cost-effectiveness, economics, ART, HIV, AIDS, South Africa

LSHTM contact: Lilani.Kumaranayake@lshtm.ac.uk

Economic evaluation of VCT/Cotrimoxazole Provision in Thyolo, Malawi

LSHTM investigators: Lilani Kumaranayake
Collaborators: Agnes Muvira, Consultant; Rony Zachariah, Marie-Paule Spielmann (Medecins Sans Frontieres- Luxembourg, Blantyre); Felix Salaniponi, Tony Harries (Malawi National Tubercuolsis Control Programme (NTP); Christina Chinji (Ministry of Health and Population, Malawi); Patrick Gomani (Malamulo Mission Hospital, Thyolo Districtand Malawi NTP); Paul Nunn (WHO)
Funding bodies: WHO

In conjunction with an effectiveness study of a district-based initiative in Thyolo district Malawi, the study undertakes an economic evaluation of this intervention in order to estimate cost-effectiveness. The initiative introduced voluntary counselling and HIV testing within an existing TB control programme setting as well as the provision of cotrimoxazole to HIV positive patients. An analysis of this combined package is being undertaken.

Keywords: costs, cost-effectiveness, economics, cotrimoxazole, HIV, Malawi

LSHTM contact: Lilian.Kumaranayake@lshtm.ac.uk

Public-Private Partnerships for the delivery of TB services in high TB/HIV settings

LSHTM investigators: Lilani Kumaranayake
Collaborators: Edina Sinanovic, Health Economics Unit, University of Cape Town, South Africa
Funding bodies: World Health Organisation, Alliance for Health Policy and Systems Research Alliance

South Africa is experiencing a TB/HIV epidemic that has serious implications for public health system resources. There is increasing interest in public-private partnerships (PPPs) for the provision of tuberculosis (TB) treatment but very little is known about the motivations for participation in partnership that are required to achieve a desirable outcome of the partnerships. Using the new institutional economics approach, this research examines the motivations for participation in existing and potential models of PPPs for the provision of TB treatment in South Africa, as well as cost-effectiveness and quality of different PPP models. Studies have been completed on the cost-effectiveness of alternative TB mechanisms.

A scaled-up response will require the involvement of both for-profit and non-profit models for tuberculosis (TB) treatment. Current research is being undertaken to estimate future resource requirements for a scaled-up response of TB care and prevention in South Africa, assessing the role of private and public sectors in alternative financing strategies in the light of the emergence of the dual HIV/TB epidemic. The research will lead to greater elaboration of options related to different financing and delivery of services structures. Both quantitative and qualitative methods will be used in order to investigate complex situations fully and to validate the findings. Some of the data will be collected at the national level while the other data at the provincial level.

Keywords: public private partnerships, TB treatment, cost-effectiveness, resource requirements.

LSHTM contact: Lilani.Kumaranayake@lshtm.ac.uk

Epidemiology