The global recognition of rights to treatment reflects a significant shift in mindset. Another shift is now needed to deliver on those aspirations. Health systems cannot be built from a patchwork of non-government, vertical, ad hoc services around a crumbling public sector core. For treatment access to become a reality for more than a minority, a further step needs to be taken towards explicit global and national commitment to refinance Africa's public health sector and district health systems (Loewenson & McCoy 2004).

he treatment of HIV has rapidly become one of the centre-pieces. if not the centre-piece, of the AIDS response in many African countries. By 2006, more than 200 000 people had accessed antiretroviral therapy (ART) through South Africa's public and private health care systems, close to 60 000 were receiving treatment in neighbouring Botswana, and in Uganda the figure stood at 70 000. From a health systems perspective, there are very important questions to be asked of these rapidly emerging, large-scale treatment programmes. What gains are being achieved, and how are these being organised and managed? Who is benefiting, at what cost, and with what prospects of universal access and sustainability? Can fragile public health systems — the vehicle by means of which treatment needs to be delivered if any degree of access is to be achieved — rise to the challenge? Who is doing the work and where do they come from? How are public-sector providers receiving and responding to the ART roll-out? Are populations being reached equally. Once initiated, are patients being retained in follow-up care?

Origins, scope and aims of this publication

This edition of *Acta Academica Supplementum* on the theme of ART has its origins in two processes. Firstly, it was planned at the beginning of a large longitudinal project, entitled *Public sector antiretroviral treatment:* documenting, monitoring, evaluating and facilitating implementation of the national treatment plan in the Free State, aimed at investigating the roll-out of

the ART programme in the province. A second event contributing to its publication was the conference on *Implementing the Comprehensive Care and Treatment Programme for HIV/AIDS patients in the Free State: sharing experiences*, convened by the University of the Free State in collaboration with the Free State Department of Health in Bloemfontein (South Africa) from 30 March to 1 April 2005. With 564 delegates in attendance some 95 papers were presented on various aspects of ART and related topics, and some presenters were invited to prepare contributions to this publication.

The articles in this volume, all on ART, provide an early record of the ART programme, focusing mainly, although not exclusively, on public-sector provision in the Free State and South Africa. All the articles address questions of health systems and policy relating to treatment access for HIV/AIDS in developing countries, spanning the micro-dynamics of care from the local and facility levels to global political economic concerns. They come from researchers involved in the day-to-day evolution of programmes as well as from more conventional research bases. Many touch upon similar issues, although not necessarily drawing the same conclusions. This reflects both the nature of the debates and the complexity of the issues at stake. For example, there are some who see in ART programmes a perpetuation of the health system distortions that have been historically associated with single purpose or "vertical" disease programmes, whereas others take a more optimistic view of the systemic benefits of HIV treatment programmes. The strength of the articles as a group is that they do not leave the reader with a closed set of ideas or easy answers, and we hope that the volume will provide a starting point for a more profound consideration of the health system and policy issues arising from ART access.

Obviously the first aim of this publication is a scholarly one, to make a meaningful contribution to the growing body of knowledge and insights on experiences in antiretroviral therapy, as well as to demonstrate the application of multiple methodologies within this field of research. The more practical aim is to document experiences and to offer lessons for more general implementation in the field of HIV care. Such experiences and lessons touch on most of the many dimensions constituting the ART initiative, including policy issues, programme management and challenges to the practice of care, health systems, personnel and patients. However, the aim of the publication goes further:

it was also intended to stimulate collaborative research, as well as to strengthen the capacity and skills of young and emerging researchers. Several of the articles are thus co-authored by several researchers, some experienced and others for whom it is a first-time publication. In this respect the thoughtful and detailed comments of the many reviewers of the individual articles have played an invaluable mentoring and coaching role.

Order of the contributions

The primary organising principle followed in sequencing the 14 contributions is thematic (rather than geographical). Policy issues are dealt with first. The articles which follow provide a more detailed focus on health system concerns, namely human resources, programme design, equity and retention in care. The final contributions address the demographic and social epidemiological context of ART and HIV.

ART policies and policy implementation

The first three articles critically examine ART policies and policy implementation at the global, national and provincial levels. David McCoy discusses developments in HIV/AIDS internationally, arguing that, if divorced from actions to rebuild health systems and lift sub-Saharan Africa out of poverty, treatment activism will lead to unsustainable and limited access for only a few. Helen Schneider then reflects on ART policy implementation in South Africa to date, identifying both opportunities (such as bottom-up mobilisation) and the challenges (national stewardship) to achieving the twin goals of health system strengthening and universal ART access, as spelt out in the *Comprehensive Plan*. Dingie van Rensburg's detailed account, as a participant observer in the Free State government's implementation of the *Comprehensive Plan*, provides insights into the internal workings of a provincial bureaucracy and how it has managed (and at times failed to manage) the strategic tasks associated with a major new programme.

Human resources and ART

An insufficient supply of skilled human resources is now universally regarded as the major constraint on the successful scaling-up of ART,

locally and internationally. Four papers, all from the Free State's experience, speak directly to this issue. Francois Steyn et al analyse the human resource dynamics of the ART programme in the Free State. They outline the difficulties of recruiting staff, and conclude that there has been a failure to provide either short- or long-term solutions to this core problem in the Free State. Shirley du Plooy and Ega Janse van Rensburg-Bonthuyzen & Christo Heunis report on interviews with nurses at the front-line of service provision. In contrast to other government policy initiatives, the ART programme appears to have the support of these providers. However, the programme has done little to change the perceived poor quality of management of providers, and many interviewees continue to express a deep mistrust of their employing organisation, the public health sector. Hlengiwe Hlophe's article, based on a series of interviews with home-based care workers, brings to the fore the crucial and growing role of lay workers in the HIV/AIDS response in this country, and the urgent need to create coherence in the training, remuneration and management of these groups.

Programme design for the scaling-up of ART

The main challenge (and concern) in successful ART programme implementation, both internationally and in South Africa, is how best to mobilise the existing health system capacity to expand access while not undermining (and preferably strengthening) other health systems activities. The design of programmes — their degree of verticality or integration, the nature of the human resources and facilities mix, referral relationships, and so on — will profoundly influence the impact of ART on health systems. The article by Peter Mugyenyi et al is an important case study on scaling up and its interface with healthy systems in the setting of a low-income country. It describes how rapid growth in ART access has been made possible in Uganda by the creation of a governmentsupported autonomous agency, the Joint Clinical Research Centre, which operates independently of the civil service, but seeks to strengthen the existing health system in order to increase access to ART. Andrew Boulle & David Coetzee discuss the challenges associated with scaling up the Médecins sans Frontières-supported Khayelitsha model of ART provision in the Western Cape Province and argue that without an integrated PHC approach to ART provision, the projected need for care is unlikely to

be met in this province. Christo Heunis & Helen Schneider focus on the ideas of integration and verticalisation in the light of ART, reviewing the international history of these concepts as well as their complex meanings-in-use by actors involved in the implementation of the South African *Comprehensive Plan*.

Equitable access to ART

Fears have been expressed that the ART programme will widen existing inequities in health and health care in South Africa, as it will be easier to implement in areas with greater capacity or where services are accessible to populations. Rob Stewart *et al* present a comprehensive framework for monitoring equity in ART access and utilisation, including consideration of equitable outcomes, as well as fair and accountable processes. This latter aspect is raised as a concern in a number of papers dealing with South Africa in the collection. While highlighting the weaknesses in monitoring systems and data availability in this country, the authors nevertheless point to emerging inter-provincial and gender inequities in ART uptake and raise important questions relating to the likely rationing processes as existing sites become saturated.

Retention in care

Adhering to complex regimens and attending follow-up visits for care over long periods of time lie at the heart of the complexity of ART. While experience of managing these dimensions is still in its infancy in South Africa, there is already much interest in and preoccupation with the issue. Drawing on Anderson's *Behavioural model of health care use*, Frikkie Booysen *et al* analyse the factors associated with attendance for follow-up visits. The data come from the first set of interviews with patients enrolled in the ART programme in the Free State province, who are being followed up in the longitudinal research project. In this initial analysis, the authors demonstrate how patients with lower socio-economic status have greater difficulty in attending follow-up visits, as well as the role of social support mechanisms — whether via lay workers, "treatment buddies" or support groups — in facilitating early retention in the programme.

HIV, AIDS and ART — the broader context

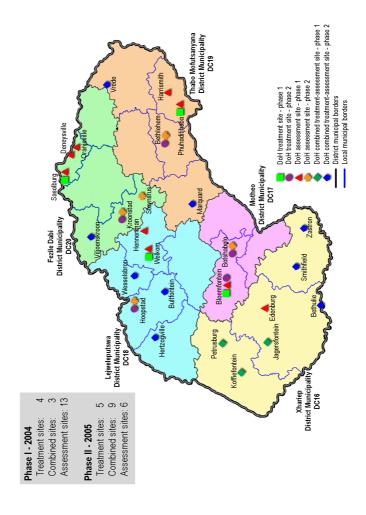
The last two contributions in the collection are an important reminder that an excessive focus on the mechanics of ART access, decontextualised from the challenges of prevention and the social and developmental impacts of HIV, is bound to fail. André Pelser examines the interaction between declining fertility, shifts in the economy (particularly in relation to the mining industry) and HIV/AIDS in the Free State, which have dramatic demographic and developmental consequences for this province. He argues for the need to view HIV first and foremost as a development challenge, and for better mainstreaming of HIV into an integrated development strategy. In similar vein, Nola Redelinghuys explores the social context (in terms of cultural, gender and socioeconomics) of HIV transmission in the Free State — a context which is likely to influence the implementation of the *Comprehensive Plan*.

The focus on the Free State

The majority of the contributions (nine of the fourteen articles) originate from research conducted on the public-sector ART programme in the Free State. This research began with baseline studies before the commencement of the actual roll-out in the province, and has three components. The first comprises regular surveys among ART patients in the five districts of the province, including six-monthly surveys of a cohort of the first patients to access the service, and six-monthly crosssectional surveys of patients subsequently entering the programme. In both survey modes the aim was to record the views, experiences and responses of patients. The second component comprises regular appraisals of facilities rendering ART services, in order to determine the impact of the programme on these facilities, on other health programmes and on staff, as well as to determine how the facilities and the staff respond to the ART programme. The third component focuses on the contexts, processes and policies amid and by means of which the ART programme is offered and critically analyses the challenges arising during its roll-out and scaling-up.

The map of the Free State above will orientate the reader as to the five districts and twenty sub-districts of the province, and the location of the ART sites. It also indicates the localities in which the research

The location of ART facilities in the Free State province, its five districts and 20 sub-districts



reported on in this volume is being conducted. In order to understand the broader frame of reference and the terminology of the Free State-focused articles, it may be helpful to know that ART is offered in the province at three types of health care sites (either referral and/or referring facilities), namely treatment sites, assessment sites and combined treatment-assessment sites (cf Van Rensburg in this volume). On the map both Phase I sites (operative since 2004) and Phase II sites (operative since 2005/6) are indicated. However, the research reported here was conducted only in the twenty Phase I sites.

Acknowledgements

This publication would not have been possible without the contributions of many people and institutions. We are indebted to the following:

The managers, providers and patients of the Free State Department of Health

The Free State Department of Health, its many provincial, district and facility managers, and in particular the staff at the ART sites, for encouraging, supporting and facilitating our research, for their openness to the research process, for their generosity in sharing their knowledge, insights and experiences with the researchers, and for their receptivity to the research results. In addition, we acknowledge the indispensable contributions of the large numbers of patients on ART who were prepared to serve as sources of information and frankly shared their views, often in difficult circumstances. We trust that this publication, and the research that underlies it, may benefit them in some way.

The authors and collaborators

All the authors and co-authors who contributed to this volume, along with their colleagues who diligently collected and managed the information on which the individual articles depend.

The reviewers

The peer-reviewers who assisted us in ensuring scientific rigour, and who also, by means of constructive criticism and creative recommendations, enabled the authors to improve the quality of their contributions:

Max Bachmann, School of Medicine, University of East Anglia, UK Peter Barron, Health Systems Trust, South Africa

Alok Bhargava, Department of Economics, University of Houston, USA

Debbie Bradshaw, Medical Research Council, South Africa

Ron Chapman, Free State Department of Health, South Africa

Helen de Phino, Heilbrunn Department of Population and Family Health, University of Columbia, USA

Stephen Dike, Westcon International, USA

Jane Doherty, Centre for Health Policy, University of the Witwatersrand, South Africa

Leah Gilbert, Department of Sociology, University of the Witwatersrand, South Africa

Lucy Gilson, Centre for Health Policy, University of the Witwatersrand, South Africa

James Hakim, Department of Medicine, University of Zimbabwe, Zimbabwe Mark Heywood, AIDS Law Project, University of the Witwatersrand, South Africa

Leigh Johnson, Centre for Actuarial Research, University of Cape Town, South Africa

Mary Kawonga, School of Public Health, University of the Witwatersrand, South Africa

Julia Kim, Rural AIDS & Development Action Research Programme, University of the Witwatersrand, South Africa

Steven Koch, Department of Economics, University of Pretoria, South Africa Uta Lehmann, School of Public Health, University of the Western Cape, South Africa

Pat Mayers, School of Health and Rehabilitation Sciences, University of Cape Town, South Africa

Suzanne McCoskey, US State Department, USA

Herman Meulemans, Department of Sociology, University of Antwerp, Belgium

Nicoli Nattrass, Centre for Social Science Research, University of Cape Town, South Africa

Ashnie Padarath, Health Systems Trust, South Africa

Loveday Penn-Kekana, Centre for Health Policy, University of the Witwatersrand, South Africa

Paul Pronyk, Rural AIDS & Development Action Research Programme, University of the Witwatersrand, South Africa

Acta Academica Supplementum 2006(1)

Sydney Rosen, Center for International Health and Development, Boston University, USA

Robert Salata, Case Western University, USA

Helen Schneider, Centre for Health Policy, University of the Witwatersrand, South Africa

Celicia Serenata, Center for Disease Control and Prevention (CDC), South Africa

Dewald Steyn, Department of Medicine, University of the Free State, South Africa

Liz Thomas, Medical Research Council, South Africa

Carel van Aardt, Bureau of Market Research, University of South Africa, South Africa

Wim Van Damme, Department of Public Health, Institute of Tropical Medicine, Antwerp, Belgium

Dingie van Rensburg, Centre for Health Systems Research & Development, University of the Free State, South Africa

Marlene Viljoen, Free State Department of Health, South Africa

Dr Ronald Chapman (Executive Manager: Health Support, Free State Department of Health) for his support of this publication and for reviewing all the articles on behalf of and in the interests of the province.

The supporters

The generous financial support from the following donor agencies and institutions for the research project as a whole, the many sub-projects, and specifically for this publication: CIDA (Canadian International Development Agency), DCI (Development Co-operation Ireland), DfID (Department of International Development, UK), Ford Foundation, HIVCare (a company of NetCare), IDRC (International Development Research Centre, Canada), JEAPP (Joint Economic and Poverty Programme, with support from USAID, AUSAID and DfID), MRC (Medical Research Council of South Africa), NRF (National Research Foundation of South Africa), PEPFAR (President's Emergency Plan for AIDS Relief), Research Matters (IDRC) and SDC (Swiss Agency for Development and Co-operation).

The editorial staff

The Editor and Deputy Editor of *Acta Academica*, Dirk van den Berg and Margaret Raftery, respectively, for constant advice and support, but more so for meticulously taking care of the editorial aspects of the publication. We are also much obliged to Marie-Thérèse Murray for her dedication and thoroughness in driving the many technical and administrative processes which have ultimately brought the individual manuscripts together into a coherent publication.

Dingie van Rensburg and Helen Schneider Guest editors September 2006