

## Process of developing the operations manual for delivery of HIV prevention, care and treatment at primary health centres in high-prevalence and resource-constrained settings

This Operations Manual was developed as part of a WHO-PEPFAR collaboration on health centre scale up. Its development involved experienced experts from many implementing partners, WHO and MOH staff active in implementing HIV and related primary health care services as well as other NGOs and FBOs, PLHIV activist groups, bilateral and multilateral agencies.

The process of developing this Operations Manual covers the period of 2007-2008. Each chapter is written by panel writers with a support from iterative expert panels. Electronic review of drafts and several expert meetings were organized to review the recommendations and reach consensus, and to summarize their technical basis and possible country adaptations (these will appear in the IMAI country adaptation guide).

The expert groups assembled all current references and source materials on a share point site. Individual experts contributed their implementation experience and all relevant source material for each chapter. Each chapter was shared with the expert group and all panelists for review. Review comments were assembled in a matrix, discussed when necessary from a technical point of view, then incorporated.

### Who was involved and their declaration of interests

The following experts were involved in the development of the Operations Manual. Their contributions are acknowledged. None of the experts declared any conflict of interest.

Organizing Committee of WHO-PEPFAR Scale Up Collaboration: Tedd Ellerbrock, Centers for Disease Control & Prevention (CDC) Global AIDS Program; Robert Ferris, USAID; Sandy Gove and Jos Perriens, WHO.

### Contributing writers (with technical input from many panellists)

Chapter 1-Introduction and guiding principles Mary Lou Lindegren, Sandy Gove, Miriam Taegtmeier	Chapter 7-Supply management Peter Graaff, Kenji Tamura, Heidi Mihm, Paul J, Weidle
Chapter 2-Planning for integrated HIV services at the health centre Sandy Gove, KJ Seung, Eyerusalem K, Negussie (paediatrics), Barb Marston (adult)	Chapter 8-Laboratory services Tom Spira, Vincent Habiyambere
Chapter 3-Service integration, linkages and Triage Steve Lee, KJ Seung, Sandy Gove	Chapter 9-Human resources KJ Seung, Estelle Quain, David Lowrance, Alexandra Zuber, Eileen Petit-Mshana
Chapter 4-Community Ana Bodipo-Memba, Kevin Moody, Kirsty McHarry	Chapter 10-Leadership and management Gundo Weiler, Lou McCallum
Chapter 5-Infrastructure Miriam Rabkin, KJ Seung, Sandy Gove, Yves Chartier	Chapter 11-Quality improvement Bruce Agins, KJ Seung, Jim Heiby
Chapter 6- Monitoring HIV Services, patients and programmes Tisha Mitsunaga, Renee Fiorentino, Laura Porter, Sisay Sirgu	Overall editing: Sandy Gove, Kirsty McHarry, Mary Lou Lindegren, Sandra Woods

## Contributing experts panels for the Operations Manual

Panel CHAIRS are indicated in capitals

Adult HIV care and treatment		Human resources and community mobilization expert panel	
Anthony Amoroso	AIDS Relief	Ana Bodipo-Memba	USAID
Yibeltal Assefa	Ministry of Health, Ethiopia	David Lowrance	CDC
Carmen Casonova	WHO NUT	Kevin Moody	GNP+
Bruce Dick	WHO CAH	Ruth Maginoh Olwit	Ministry of Health, Uganda
Julia Downing	African Palliative Care Association, Uganda	Eileen PETIT-	
Wafaa El-Sadr	ICAP, Columbia University	MSHANA	WHO HIV
Richard Marlink	EGPAF	Estelle Quain	USAID
Barb MARSTON	CDC GAP	KJ SEUNG	Harvard Brigham & Women's Hospital
Kirsty McHarry	WHO HIV	Alexandra Zuber	CDC GAP
Johanna Ncala	Treatment Action Campaign		
Lennah Nyabiage	Ministry of Health, Kenya		
Tim Quick	USAID		
David Stanton	USAID		
Patient monitoring		Paediatric HIV care and treatment	
Abdikamal Alislad**	WHO AFRO	Siobhan Crowley	WHO HIV
Andrew Boullé	University of Western Cape	Bob Ferris	USAID
Kevin Bellis	HLSP	Robert Gass**	UNICEF
Batya Elul	ICAP, Columbia University	Sanjiv Lewin	AIDS Relief
Renee FIORENTINO	MEASURE Evaluation/JSI	Lulu Muhe	WHO CAH
Christian Gunneberg	WHO/STB	Eyerusalem K, NEGUSSIE	WHO HIV
Lisa Hirschhorn**	JSI/Harvard	Molly Rivadineira	CDC GAP
Tisha MITSUNAGA	MEASURE Evaluation/JSI	Diana Silimperi**	MSH
Sara Pacqué-Margolis	EGPAF	Denis Tindyebwa	EGPAF, Tanzania
Laura Porter	CDC GAP	Nathan Tumwesigye	ANNECA
KJ Seung**	Harvard Brigham & Women's Hospital		
Diana Silimperi **	MSH		
Kristen Stafford**	AIDS Relief		
Andrea Swatzenruber	CDC GAP		
Paul Bouey	OGAC		
Fatu Forma	CDC GAP		
Reuben Granich	WHO HIV		
***Panellists also on the quality expert panel			
Integration		Laboratory	
Carmela Abate	AIDS Relief	Bob Colebunders	Institute of Tropical Medicine, Antwerp
Dominique Egger	WHO HSS/HDS	Joyelle Dominique	AIDS Relief
Robin Flam	ICAP Columbia University, New York	Sandy Gove	WHO HIV
Sandy Gove	WHO HIV	Vincent Habiymbere	WHO HIV
Reuben Granich	WHO HIV	Patrick Ikani	FHI, Nigeria
Donna Higgins	WHO HIV	John Ridderhof	CDC
Steve Lee	EGPAF	Anita Sands	WHO EHT
Barb Marston	CDC GAP	Leland Schuller	EGPAF
Kirsty MCHARRY	WHO HIV	Tom SPIRA	CDC GAP
Kevin Moody	GNP+	Amilcar Tanuri	ICAP Columbia University
KJ Seung	Harvard Brigham & Women's Hospital	Gaby Vercauteren	WHO EHT
Miriam Taegtmeier	CDC GAP	Karin Weyer	WHO STB

PMTCT		Prevention	
Mathew Chersich	International Centre for Reproductive Health, Kenya	Pam Bachanas	CDC GAP
Halima DAO	CDC GAP	Rejoice Nkambule	MOH Swaziland
Rene Ekpini	UNICEF	Innocent Ntaganira	WHO AFRO
Fatu FORNA	CDC GAP	Kevin O'REILLY	WHO HIV
Peggy Henderson	WHO CAH	Vladimir Poznyak	WHO MSD
Viviana Mangiaterra	WHO MPS		
Razia Pendse	WHO MPS		
Nathan Shaffer	CDC GAP		
Tin Tin Sint	WHO HIV		
Elizabeth Stringer	CIDRZ, Zambia		
Fatima Tsiouris	ICAP Columbia University		
Cathy Wilfert	EGPAF		

Quality		Supply Chain Management	
Bruce AGINS	HIVQUAL	James Batuka	Catholic Relief Services
Margaret Palumbo	HIVQUAL	Yasmin Chandani	JSI
Clemons Steinbeck	HIVQUAL	Karen Day	MSF
Rick Berzon	USAID	Peter GRAAFF	WHO HIV, Afghanistan
Robin Flam	ICAP, Columbia	David Hoos	ICAP, Columbia University
Yujiro Handa	JICA, Kenya	Mike Hope	USAID
La Mar Hasbrouck	CDC GAP	Bianca Kamps	UNICEF
Jim Heiby	USAID	Thomas Lapnet-Moustapha	WHO AFRO
Dennis Israelski	Pangaea Global AIDS Foundation, SF	Heidi Mihm	USAID
Babajide Keshinro	FHI/GHAIN, Nigeria	Atieno Ojoo	UNICEF
Wuleta Lemma	Tulane University, Ethiopia	Eva Ombaka	EPN
Rashad Masoud	URC-CHS	Rich Owens	Partnership for Supply Chain Management
Binod Mahanty	MEASURE Evaluation/JSI	Fernando Pascual	MSF
Jose Morales	HRSA	Rose Shija	WHO Tanzania
Nilu Rimal	US Department of Defense	Kenji TAMURA	WHO HIV
Sue Willard	EGPAF	Helena Walkowiak	Management Sciences for Health
Kristen STAFFORD	AIDS Relief	Paul J. Weidle	CDC
		Lee Yerkes	EGPAF, Drug Procurement and Logistics

\*\*additional panellists on patient monitoring and paediatric expert panel

Infrastructure		Leadership, Administration and Fiscal Management	
Patrick Balcazar	Engineers without Borders, Puerto Rico	Dela Dovlo	WHO HSS/HDS
Miriam Rabkin	ICAP Columbia University	Dominique Egger	WHO HSS/HDS
KJ Seung	Harvard Brigham & Women's Hospital	Paul Mahanna	USAID
Chartier Yves	WHO PHI	Lou McCallum	AIDS Projects Management Group
		Deus B Mubangizi	AIDS Relief
		Tshi Neluheni	EGPAF, RSA
		Gundo Weiler	WHO Ukraine
		Isaac Zulu	CDC Zambia

TB/HIV		Testing and Counselling	
Amy BLOOM	USAID	Naomi Bock	CDC GAP
Anand DATE	CDC GAP	Kadidiatou Gouro	WHO AFRO
Ritta Dlodlo	IUATLD	Donna HIGGINS	WHO HIV
Haileyesus Getahun	WHO STB	Elizabeth MARUM	CDC GAP
Amy Ginsburg	EGPAF	Buhle Ncube	WHO AFRO
Reuben GRANICH	WHO HIV	Bharat Parek	CDC GAP
Bess MILLER	CDC GAP	Gloria Sangiwa	FHI Arlington, VA
Alwyn Mwinga	CDC Zambia	Allison Schilsky	CDC GAP
Rose Pray	WHO STB	Daphne Spencer	British Columbia Center For Disease Control
	Infectious Diseases	Alison Surdo	USAID
Papa Salif Sow	Fann Hospital, Senegal	Miriam Taegtmeier	Liverpool School of Tropical Medicine
KJ Seung	Harvard Brigham & Women's Hospital	Rhoda Wanyenze	Mulago-Mbarara Teaching Hospitals' Joint AIDS Programme/Makerere University Faculty of Medicine
Marco Vitoria	WHO HIV		
Mukadi Ya Diul	FHI Arlington, VA		

The HIV/AIDS Department at WHO, plans to review the need to update this Manual in December 2009 after field-testing and closely monitored adaptation and early use by countries and partners.

Graphics: L'IV Com Sarl, Le Mont-sur-Lausanne, Switzerland

Logo drawings: Claudio Afonso

Credits for specific chapters:

- Chapter 5 Infrastructure: John Snow, Inc./DELIVER in collaboration with the World Health Organization. Guidelines for the storage of essential medicines and other health commodities. 2003. Arlington, Virginia, USA Dr Rod Escombe, Imperial College London; Blackwood Solar Systems.  
USAID.: ohn Snow, Inc./DELIVER, for the USAID.  
Cecile Arnaud, consultant, WSH-WHO
- Chapter 7 Supply Management: WHO, Handbook of supply management at first-level health care facilities released - 1st version country adaptation. 2006, Geneva.  
John Snow, Inc. /DELIVER in collaboration with the World Health Organization. Guidelines for the storage of essential medicines and other health commodities. 2003. Arlington, Virginia, USA  
Va.: John Snow, Inc./DELIVER, for the US Agency for International Development.
- Chapter 8 Laboratory: AFB smear staining poster - a joint effort by WHO, RIT, IUATLD, CDC,  
How to do the rapid test for malaria - a joint effort of TDR, WHO, USAID, Quality Assurance Project.  
CDC editor Amy S Elkavich CDC illustrators - Alissa Eckert, Don Freggens, Dan Higgins, James Archer  
Technical support during consultation and production: Tonia Poteat, CDC and Biya Berhanu, Etehiwot, WHO  
Management support to panels: Louise Perry, CDC



IMAI Team  
HIV/AIDS Department  
World Health Organization  
20 avenue Appia  
CH-1211 Geneva 27  
Switzerland

E-mail: [imaimail@who.int](mailto:imaimail@who.int)  
<http://www.who.int/hiv/capacity/>

ISBN 9 78924159 743 2



9 789241 597432