

PERFORMANCE INCENTIVES FOR GLOBAL HEALTH

Potential and Pitfalls

Rena Eichler, Ruth Levine, and the
Performance-Based Incentives Working Group

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CENTER FOR GLOBAL DEVELOPMENT

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Preface

For decades, governments in developing countries and the donors that support them have engaged in a “command-and-control” approach in the health sector: providing funding or in-kind resources for training, infrastructure, medicines, and other supplies and generating norms about what health workers should do (here are the inputs; use them this way).

While this approach has contributed to many improvements in health, and while dedicated individuals throughout the world are hard at work providing care, close observers of the sector have had a lingering sense that far more could be achieved—even within the limits of current health spending—if health workers showed up to work on time (or at all), if expectant mothers were better motivated to show up for pre-natal care, and if the churches and nongovernmental groups that manage rural health clinics were somehow more efficient. Frustration with the limits of the command-and-control input-based approach has grown as progress in child and maternal health has stalled in the poorest countries and as health systems in many countries have turned out to be unequal to the task of dealing with HIV/AIDS and drug-resistant TB.

In response came some controversial experiments. Instead of focusing exclusively on inputs and guidelines, several nongovernmental organizations,

governments, and donors introduced payments linked to measured performance for health care providers and payments for mothers and other users of health services just for showing up.

In the spirit of CGD's signature "ideas to action" approach, Ruth Levine, a senior fellow and head of the Global Health Policy Program at the Center, and Rena Eichler, one of the pioneers in designing "pay-for-performance" programs in developing countries, document many of those experiences, on both the supply (provider) and demand (patient) sides. They acknowledge the risks associated with introducing explicit incentives and suggest ways to mitigate those risks. In the end, they recommend that donors pay far more attention to the potential of incentive payments—because they have real-world benefits when done right.

Understanding the promise and pitfalls of performance incentives fits squarely into the Center for Global Development's broader contributions to improvements in the effectiveness of development assistance. By bringing innovations to light, and providing policy guidance based on real-world experience, Eichler, Levine, and the contributors to this book highlight an alternative way for donors to support accelerated health improvements while inducing enduring changes in the way health care is financed, provided, and used. The authors do a great service by bringing together in one volume a discussion of incentives on the supply and demand sides and by tapping into knowledge from the United States and the United Kingdom. Seeing the growing interest in the application of performance incentives, I expect that this book will be a valuable resource for many years to come.

Nancy Birdsall
President
Center for Global Development
Washington, D.C.

Acknowledgments

The project that resulted in this book benefited from the involvement of many. We would like first to acknowledge the pioneers who designed and implemented performance-based incentive programs in developing countries. Their leadership and willingness to take the risk to deviate from “business as usual” are an inspiration; their willingness to share their experiences with a wider public is an act of generosity. Evidence from Afghanistan and Haiti inspires us all to believe that poor women and children can access essential maternal and child health services in the most challenged environments. Rwanda shows how committed national leaders can combine the best features of donor-funded pilots to create a national model that can be expanded to scale. Programs in Latin America and elsewhere that target the poorest by conditioning income supplements on the use of essential services teach us that motivating the poor with performance incentives can result in improvements in child health and nutrition. Innovations that have arisen from the “bottom up” in tuberculosis control programs, including incentives for both patients and health workers, have increased the likelihood that TB cases will be detected and cured.

We are deeply grateful to the members of the Center for Global Development’s Performance-Based Incentives Working Group, who brought their expertise and

passion to define the group's mandate and identify lessons and cases that showcase the best of existing knowledge. (See the profiles of working group members at the beginning of this book.) Composed of practitioners, policymakers, academics, and funders, this working group brought a wide spectrum of perspectives and experiences together. Our discussions about how to support the introduction of effective and appropriate incentives and how to understand and avoid problematic side effects produced the rich treatment of the issues covered in this volume. Contributing time and effort as committed volunteers, group members actively participated in meetings with a healthy dose of debate and contributed to and commented on countless drafts.

We would like to thank all the writers of cases for contributing the backbone of this book—the real-world cases that teach us what is possible and the lessons learned along the way. They present as concise a picture as possible of complex schemes and evidence of their impact.

Many reviewers helped us to present performance-based incentives in a manner understandable to broad audiences. George Schieber helped us to place the discussion of performance incentives within the policy discussions about health financing. Ricardo Bitran, Michael Clemens, Charles Griffin, April Harding, Marty Makinen, Mead Over, and Bill Savedoff provided valuable comments on specific case write-ups. All remaining errors are, of course, the responsibility of the authors and editors.

Our Center for Global Development colleagues have contributed constructive suggestions and provided support for this ambitious endeavor. In particular, sincere thanks are due to CGD President Nancy Birdsall and Vice President for Communications and Policy Lawrence MacDonald. Excellent research and organizational support was provided by Jessica Gottlieb, Danielle Kuczynski, and Scott Kniaz; we thank them very much for their dedication to this project.

We are grateful to the Bill & Melinda Gates Foundation for financial support and intellectual engagement in the working group process.

Abbreviations

ADB	Asian Development Bank
BTC	Belgian Technical Cooperation
CCT	Conditional cash transfer
CGD	Center for Global Development
DOT	Directly observed treatment
DOTS	Directly observed treatment, therapy short course
DTP	Diphtheria, tetanus, pertussis
EC	European Commission
ESIF	Emergency Social Investment Fund
FA	Familias en Acción, Colombia
FFSDP	Fully functional service delivery point
GAVI	Global Alliance for Vaccines and Immunization
HEDIS	Healthcare Effectiveness Data and Information Set
HIV/AIDS	Human immunodeficiency virus/acquired immunodeficiency syndrome
HMIS	Health Management Information System
IDB	Inter-American Development Bank
IFPRI	International Food Policy Research Institute
IHE	Institut Haitien de l'Enfance

IHMR	Indian Institute of Health Management and Research
MDG	Millennium Development Goals
ISDP	Institutional service delivery point
MoPH-SM	Ministry of Public Health strengthening mechanism
NGO	Nongovernmental organization
ORT	Oral rehydration therapy
PAHO	Pan American Health Organization
PATH	Poverty Alleviation through Health and Education, Jamaica
PBI	Performance-based incentive
PBF	Performance-based financing
PEPFAR	President's Emergency Plan for AIDS Relief
PMTCT	Preventing mother-to-child transmission
PNFP	Private not-for-profit
PPD	purified protein derivative
PRAF	Programa de Asignación Familiar (Family Allowance Program), Honduras
REACH	Rural Expansion of Afghanistan's Community Based Healthcare
RPM Plus	Rational Pharmaceutical Management Plus
RPS	Red de Protección Social, Nicaragua
SILAIS	Local System of Integrated Health Care
TB	Tuberculosis
UNDP	United National Development Programme
UNICEF	United Nations Children's Fund
USAID	U.S. Agency for International Development
VCT	Voluntary counseling and testing
WHO	World Health Organization

Working Group Members

Led by Ruth Levine, the Performance-Based Incentives Working Group comprised twenty-six individuals with expertise in institutional and household economics, health finance and management, quality of care, and program implementation from throughout the world. The working group included the following members, who served in their individual capacity:

Carola Alvarez, a principal education and safety nets specialist at the Inter-American Development Bank (IDB), is concerned primarily with poverty and inequality, safety nets, and the economics of education. With work spanning empirical research, policy analysis, and implementation of best practices, she has focused on connecting lessons from implementation with empirical research. Alvarez has worked extensively in developing rigorous impact evaluation and providing technical assistance to the ministries of education of El Salvador and the Dominican Republic, the Oportunidades cash transfer program in Mexico, and the Programa de Asignación Familiar (PRAF) in Honduras. She has been task manager for IDB's loans to Mexico's Oportunidades program for the past five years.

Paul Auxila is a specialist in implementation strategies with a history of devising and managing major health programs that exceed expectations. A member of the Management Sciences for Health corporate senior management team and an

industrial engineer with concentration in management engineering and systems design, he has been active in the field of international health management and development for the last twenty-six years. He is fluent in six languages and has worked extensively in more than thirty countries with both public and private sector colleagues and counterparts in the highest levels of government, academia, management, health services provision, and community work. Auxila is currently a Management Sciences for Health vice president and chief of party of the U.S. Agency for International Development (USAID) bilateral health project in Haiti.

Leslie Castro works with the Millennium Development Goals (MDG) Coordination and Territorialization Unit at the United Nations, which aims to strengthen the coherence of United Nations interagency efforts at the local level to achieve the MDG. She has extensive experience with the Ministry of the Family in Nicaragua, where she served as general director of programs and projects, overseeing three major World Bank programs: Red de Protección Social, Programa de Atención Integral a la Niñez, and the Attention to Crisis component. Before this, she served as director of the Red de Protección Social program as well as operations manager and technical manager, spending several years with this program. Castro holds two master's degrees, in sociology and in cooperation and development, both from Catholic University of Louvain-La-Neuve.

Karen Cavanaugh, health systems management analyst in the USAID's Bureau for Global Health, has twenty-two years of experience in designing, directing, and evaluating projects, programs, and organizations to improve health and mitigate poverty for people in Asia, Africa, the Middle East, Latin America, and the Caribbean. A member of the Global Alliance for Vaccines and Immunization (GAVI) health system strengthening task team, she oversees USAID's five-year \$125 million Health Systems 20/20 project to strengthen health finance, governance, and operations worldwide and is engaged in creation of the new health systems action network. She is a member of the World Health Organization's steering committee on national health accounts.

David Cutler is Otto Eckstein Professor of Applied Economics in the faculty of arts and sciences and dean for social sciences at Harvard University. He served on the Council of Economic Advisors and the National Economic Council during the Clinton administration. Formerly with the National Institutes of Health and the National Academy of Sciences, Cutler is a research associate at the National Bureau of Economic Research and a member of the Institute of Medicine. He is the author of *Your Money or Your Life: Strong Medicine for America's Health Care System*.

Rena Eichler, president of Broad Branch Associates, concentrates on the application of incentives to improve health system performance. An economist with

fifteen years of experience in the health sector working on national and local level policy development, implementation, and evaluation in Africa, Latin America and the Caribbean, Asia, the Middle East, and Eastern Europe, she develops projects and leads teams that provide technical assistance and conduct applied research. Eichler served as technical lead for the Performance-Based Incentives Working Group and as technical advisor to the interagency working group on results-based financing. As a partner on the USAID Health Systems 20/20 project, Eichler leads the global work program on pay for performance. She provides technical support to the World Bank on implementing the results-based financing strategy and has supported results-based financing activities for the government of Norway. She is engaged with the Brookings Institution in a program to examine performance-based aid in health. She was formerly employed by Harvard University, the U.S. Agency for Health Care Policy and Research, Management Sciences for Health, and the World Bank and has consulted for a wide range of development organizations.

Maha El-Adawy is the policy adviser for health in the United Nations Development Programme (UNDP). A medical doctor by background, she was program officer for reproductive health and reproductive rights in the Ford Foundation Office for the Middle East and North Africa before joining UNDP. She also worked with the European Union, USAID, and the World Bank on health sector reforms, consulted for the United Nations Children's Fund on child health issues, nutrition, and communication for behavioral change, and worked with several nongovernmental organizations. She cofounded an association to raise awareness about HIV/AIDS and to reduce related stigma in low-prevalence countries. A member of the International Union of Scientific Studies on Population, El-Adawy has lectured at Cairo University and published in the field of international population and health policy.

Luis Fernando Rolim Sampaio, a medical doctor specializing in hospital management who also holds a master's degree in public health, has worked as a policymaker since 1993, with lead positions at the municipal, state, and national levels in Brazil, including national director of primary health care. He helped to develop the Core Competencies of Primary Health tool for the Brazilian health system and represented the Brazilian Ministry of Health in the primary health care section of EUROSOCIAL. Sampaio participated in projects with the United Nations Educational, Scientific, and Cultural Organization (primary health care), Pan American Health Organization (family health), and the World Bank (Strengthen Family Health in Brazil). He now works at the University of Toronto, Canada.

Thomas Foels, a graduate of the University of Rochester School of Medicine and Dentistry and the Tulane University School of Public Health and Tropical Medicine,

established and managed two large medical group practices in western New York and practiced clinical medicine at these sites for nearly sixteen years. He joined Independent Health, the region's largest health maintenance insurer, as director of practice management in 1994 and currently serves as medical director. Foels provides medical leadership in the design, development, and implementation of care management, quality management, clinical policy, and utilization management.

Mark Gersovitz is professor in the Department of Economics at the Johns Hopkins University. He specializes in development economics and has been working on marrying economics and epidemiology. He also continues long-standing interests in saving behavior and capital markets especially when willingness to repay is a constraint, agriculture, public finance, and international commodity markets. He has been a consultant to the World Bank, the International Monetary Fund, and the UNDP and served as editor of the *World Bank Research Observer* and the *World Bank Economic Review*.

Paul Gertler is a professor of economics and health services finance and faculty director for the graduate program at the University of California, Berkeley. A faculty research associate for the National Bureau of Economic Research, Gertler has written extensively on health financing in developing countries for various publications and institutions, including the Pan American Health Organization and the RAND Corporation, where he was a senior economist for eight years. Among other honors, he received the Kenneth Arrow Award for Economics in 1996.

Amanda Glassman, a health financing specialist with more than fifteen years of experience in health and social protection financing issues in Latin America and elsewhere in the developing world, is lead health specialist at the Inter-American Development Bank and a nonresident fellow at the Brookings Institution. Before her current position, Glassman was deputy director of the Global Health Financing Initiative at Brookings and carried out policy research on aid effectiveness in the health sector in lower-income countries. Before joining Brookings, Glassman designed, supervised, and evaluated health and social protection loans at the Inter-American Development Bank. Glassman holds a master of science degree from the Harvard School of Public Health, has published on health finance and policy topics, and is coauthor of *The Health of Women in Latin America and the Caribbean* (World Bank 2001).

Markus Goldstein, a development economist with experience working in Sub-Saharan Africa, East Asia, and South Asia, is currently with the Africa Region of the World Bank, where he works as a senior economist on poverty and gender issues. His research interests include HIV/AIDS, intrahousehold allocation, risk, poverty measurement, public services, and land tenure. Before coming to the World

Bank, Goldstein taught at the London School of Economics and the University of Ghana, Legon. Author of several of articles and books on development issues, most recently he coedited the volume *Are You Being Served? New Tools for Measuring Service Delivery* (World Bank 2007).

Davidson Gwatkin serves as an adviser on health and poverty to the World Bank, United Nations Children's Fund, and other agencies. From 2000 to 2003, he was the World Bank's principal health and poverty specialist. Before joining the World Bank, he directed the International Health Policy Programs, a cooperative effort among two American foundations, the World Bank, and the World Health Organization to strengthen health policy research capacity in Africa and Asia. Gwatkin had previously been with the Ford Foundation in New Delhi, New York, and Lagos and with the Overseas Development Council in Washington.

Akramul Islam, currently program coordinator for tuberculosis (TB), malaria, and HIV/AIDS, Bangladesh Rural Advancement Committee Health Programme, has more than twenty years of experience working on TB in Bangladesh. Since 2005, he has held a faculty position at the School of Public Health at BRAC University, and in 2005 he was nominated for the Global Development Award 2000 by the World Bank in the category of environment and social sustainability for his research paper "Tuberculosis Control by Community Health Workers in Bangladesh: Is This More Cost-Effective?" Islam holds a doctorate of philosophy from Tokyo University in Japan, a master's degree in primary health care management from Mahidol University in Thailand, and a master of science degree from Bangladesh.

Daniel Kress is deputy director for policy and finance with the Global Health Delivery Team at the Bill and Melinda Gates Foundation in Seattle, Washington. Before joining the foundation, he worked at the World Bank as senior health economist in the Middle East and North Africa Region, and before that, he worked at Abt Associates on a variety of health care financing and health reform projects. As project director for the Sustainability and Financing of Immunizations Project, funded by the Children's Vaccine Program at Program on Appropriate Technologies in Health, he participated in a number of GAVI financing task force assignments and activities. Coauthor of a chapter for the Disease Control Priorities Project, Kress received his doctorate in economics from the University of North Carolina at Chapel Hill.

Kenneth Leonard is an assistant professor at the University of Maryland and a faculty associate at the Maryland Population Research Council. His research has focused on the delivery of key public services to rural populations in developing countries, specifically the delivery of curative health services, examining both supply and demand. Leonard has conducted research in Cameroon, Gabon, Kenya,

Tanzania, Ethiopia, and Uganda, and his work is published in economics journals (such as *Econometrica* and the *Journal of Economics Perspectives*), development journals (such as the *Journal of Development Economics*), and health economics journals (such as the *Journal of Health Economics*, *Social Science and Medicine*, and *Health Affairs*).

Ruth Levine, vice president for Programs and Operations at the Center for Global Development (CGD), is a health economist with more than fifteen years of experience working on health and family planning financing issues in East Africa, Latin America, the Middle East, and South Asia. Before joining the CGD, Levine designed, supervised, and evaluated health sector loans at the World Bank and the Inter-American Development Bank. From 1997 to 1999 she served as adviser on the social sectors in the Office of the Executive Vice President of the Inter-American Development Bank. Levine is the coauthor of *The Health of Women in Latin America and the Caribbean* (World Bank 2001) and *Millions Saved: Proven Successes in Global Health* (Center for Global Development 2004).

Philip Musgrove is a deputy editor of *Health Affairs*, the journal of health policy published by Project HOPE. Until his retirement in 2002, Musgrove served in a variety of capacities with the World Bank, the Pan American Health Organization, and the World Health Organization. He has worked on health reform projects in Argentina, Brazil, Chile, and Colombia as well as on a variety of issues in health economics, financing, equity, and nutrition. Widely published and author of more than fifty articles in economics and health journals and contributor to twenty books, Musgrove is adjunct professor in the School of Advanced International Studies, Johns Hopkins University, and has taught at George Washington University, American University, and the University of Florida.

Natasha Palmer has a master's degree in health policy and finance from the London School of Hygiene and Tropical Medicine, where she also completed her doctorate of philosophy. Since 1997, she has worked on health financing and contracting. She is a lecturer in health economics at the London School of Hygiene and Tropical Medicine, where she is affiliated with the Health Economics and Finance Programme.

John W. Peabody is medical director and senior vice president for Sg2, where he leads the Clinical Intelligence Programs, focusing on research development and program enhancement for the global health care market. Peabody is also a professor at the University of California, where he has been on the faculty since 1995 as the deputy director of the Institute for Global Health, part of the university-wide Global Health Sciences Program. He holds a rare joint appointment at University of California, San Francisco, in the Department of Epidemiology and Biostatistics

and the Department of Medicine and at University of California, Los Angeles, in the Department of Health Services in the School of Public Health.

Miriam Schneidman, a senior health specialist at the World Bank, has more than twenty-five years of experience in health and human development issues in Africa and Latin America. Most recently, she was named coordinator of the Africa Regional TB Team at the World Bank, where she is leading an effort to scale up support for TB control in the region. With degrees in economics from the University of Maryland and in public health from Johns Hopkins University, Schneidman has written on vulnerable youth, demographic issues, community financing of health care, health problems of women, and HIV/AIDS. She is coauthor of *The Health of Women in Latin America and the Caribbean* (World Bank 2001).

Robert Soeters is a public health doctor with 30 years of experience in health service delivery, management, and finance in 30 countries. Trained in health economics, Soeters has been involved in performance-based financing in Afghanistan, Rwanda, Burundi, the Democratic Republic of Congo, and the Central African Republic. He is a specialist in baseline and evaluation studies, and in the development of instruments for performance-based programs and training.

Sally Theobald is a senior lecturer in social science and international health at the Liverpool School of Tropical Medicine, United Kingdom. With a doctorate in gender, health, and development from the University of East Anglia, she works on gender equity and international health. Theobald has worked collaboratively on qualitative research projects on gender equity, HIV, TB, sexual and reproductive health, and health systems in Thailand, South Africa, Burkina Faso, Malawi, and Kenya.

Kevin Volpp, whose research focuses on the impact of financial and organizational incentives on health outcomes, has been working to use insights from behavioral economics to improve health behaviors. In several federally and privately funded randomized controlled trials, he has been testing the effectiveness of different incentive designs for reducing smoking, obesity, and failure to complete treatment. Recipient of the Presidential Early Career Award for Scientists and Engineers, the Outstanding Junior Investigator of the Year Award from the Society of General Internal Medicine, the John Thompson Prize from the Association of University Programs in Health Administration, and the Alice S. Hersh New Investigator Award from AcademyHealth, Volpp is director of the Center for Health Incentives at the Leonard Davis Institute, serves on the faculty of the University of Pennsylvania School of Medicine and the Wharton School, and is a board-certified internist and staff physician at the Philadelphia Veterans Affairs Medical Center.

Diana E. C. Weil, coordinator of policy and strategy for the Stop TB Department of the World Health Organization, has twenty years of experience in global public health policy analysis, program support, and disease control strategy development. Working with the World Health Organization, the Pan American Health Organization, and the World Bank, she has conducted analyses on the impact of development policies on health, the impact of health system reforms on disease control, the role for incentives and enablers in service delivery, anti-TB drug supply systems and markets, and priorities in operational research. Weil has served on numerous interagency panels and committees to devise innovative solutions in drug supply, health systems delivery and financing, and TB care and control.