# Glossary

- Census-based, impact-oriented (CBIO) approach: An approach to primary health care developed in Bolivia. It emphasizes house-to-house collection of data and repeat home visits depending on conditions found, with regular measurement of program impact.
- Community-based health care (CBHC): A system of health care in which community members and health professionals work together to assess and prioritize health problems and to define ways to solve them.
- Community-oriented primary care (COPC): First used by Sidney Kark to describe primary health care services that stress the socioeconomic and environmental factors underlying ill health; emphasize preventive medicine and health promotion; and promote community-based approaches to improving health.
- Conscientization: Term used by Paulo Freire in *Pedagogy of the Oppressed* to describe the development of critical consciousness that has "the power to transform reality" (Paul V. Taylor, 1993, *The Texts of Paulo Freire*, Philadelphia, PA: Open University Press).
- Lot quality assurance sampling (LQAS): A methodology for assessing small samples, which was adapted from industrial quality control methods to enable health workers and supervisors to monitor community-level activities and coverage of key programs.
- **Population medicine:** The provision of health services to a defined population.
- **Positive deviance:** Positive difference from the usual health status or behavior, for example, a well-nourished child in a community where many children are malnourished.

**Primary health care (PHC): "Primary health care is essential health** care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination.

Primary health care:

- reflects and evolves from the economic conditions and sociocultural and political characteristics of the country and its communities and is based on the application of the relevant results of social, biomedical and health services research and public health experience;
- addresses the main health problems in the community, providing promotive, preventive, curative and rehabilitative services accordingly;
- 3. includes at least: education concerning prevailing health problems and the methods of preventing and controlling them; promotion of food supply and proper nutrition; an adequate supply of safe water and basic sanitation; maternal and child health care, including family planning; immunization against the major infectious diseases; prevention and control of locally endemic diseases; appropriate treatment of common diseases and injuries; and provision of essential drugs....""Declaration of Alma-Ata," International Conference on Primary Health Care, Alma-Ata, USSR, Sept. 6–12, 1978.
- Primary medical care (PMC): "First-contact treatment of illness . . . with referral to institutional, specialist therapy at secondary, tertiary, and higher levels" (Taylor and Taylor, chapter 6).
- Scaling up or going to scale: Expanding a successful development program to reach a larger population and/or a higher administrative level.

Vertical program: A health program that functions independently of the normal health care system, having its own staff, budget, transport, and information system. A vertical program is usually aimed at a single health problem, such as malaria, bilharzia, or family planning. Many focused efforts, such as the Expanded Programme on Immunization (EPI), vitamin A supplements, or tuberculosis treated in the primary health care system, are given direction, extra resources, and emphasis from central authority but are *not* truly vertical.



# Selected Bibliography

- Abbott, Julie. 2000. "Community Health Report Card for Olmsted County." Rochester, MN: Mayo Clinic, Sept. 7, 2000.
- Abed, F. H. 1999. The BRAC Story: Development and Change in Bangladesh. Cambridge: Harvard Center for Population and Development Studies.
- Arole, Mabelle. 1988. "A Comprehensive Approach to Community Welfare: Growth Monitoring and the Role of Women in Jamkhed." *The Indian Journal of Pediatrics* (Suppl.) 55: S100–105.
- Arole, Mabelle, and Rajanikant Arole. 1994. Jamkhed: A Comprehensive Rural Health Project. London: Macmillan.
- Bhore, Josiah. 1941. "The Bhore Commission Report." New Delhi: Government of India.
- Bhuiya, Abbas, and Claude Ribaux. 1997. Rethinking Community Participation: Prospects of Health Initiatives by Indigenous Self-Help Organizations in Rural Bangladesh. Special Publication No. 65. Dhaka: International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B).
- Bhuiya, Abbas, et al. 1997. Community Participation in Health, Family Planning and Development Programmes: International Experiences. Special Publication No. 59. Dhaka: International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B).
- Bruce, Thomas, and Steven Uranga McKane. 2000. Community-Based Public Health: A Partnership Model. Waldorf, MD: American Public Health Association and the W. K. Kellogg Foundation.
- Chavez, Adolfo, and Celia Martinez. 1982. *Growing up in a Developing Country.* San Fernando y Viaducto Tlalpan, Mexico: Instituto Nacional de la Nutrición.
- Counts, Alex. 1996. Give Us Credit: How Small Loans Today Can Shape Our Tomorrow. New York: Times Books. About the Grameen Bank in Bangladesh.
- Cuéllar, Carlos, William Newbrander, and Gail Price. 2000. *Extending Access* to Health Care through Public-Private Partnerships. Stubbs Monograph Series No. 2. Boston: Management Sciences for Health.
- Daniels, Norman, Donald Light, and Ronald Caplan. 1996. Benchmarks of Fairness for Health Care Reform. New York: Oxford University Press.

- Deuschle, Kurt. 1982. "Community Oriented Primary Care: Lessons Learned in Three Decades." *Journal of Community Health* 8: 13–22.
- Evans, Timothy, et al. 2001. *Challenging Inequities in Health: From Ethics to Action.* New York: Oxford University Press.
- Farmer, Paul. 2001. "Infections and Inequalities: The Microbial Burden of Poverty." Testimony to US Congress. September 26, 2001.
- Gladwell, Malcolm. 2001. "The Mosquito Killer: F. Soper's Global Malaria Eradication Programme." *The New Yorker* 77 (July 2, 2001): 42–51.
- Gwatkin, Davidson R., Janet R. Wilcox, and Joe D. Wray. 1980. *Can Health and Nutrition Interventions Make a Difference*? Overseas Development Council Monograph No. 13. Washington, DC: Overseas Development Council.
- Halstead, Scott B., Julia A. Walsh, and Kenneth S. Warren, eds. 1985. *Good Health at Low Cost: Proceedings of a Conference Held at Bellagio Confer ence Center.* New York: Rockefeller Foundation.
- Institute of Medicine, The Committee for the Study of the Future of Public Health. 1988. *The Future of Public Health.* Washington, DC: National Academy Press.
- Kark, Sidney L. 1981. The Practice of Community-Oriented Primary Health Care. New York: Appleton-Century-Crofts.
- Kark, Sidney L., and Emily Kark. 1999. *Promoting Community Health: From Pholela to Jerusalem*. Johannesburg: Witwatersrand University Press.
- Kidder, Tracy. 2000. "The Good Doctor." *The New Yorker*, July 7, 2000, pp. 40–57.
- Kielmann, Arnfried A. 1983. Child and Maternal Services in Rural India: The Narangwal Experiment. Vol. 1: Integrated Nutrition and Health Care and Vol. 2: Integrated Family Planning and Health Care. Baltimore, MD: Johns Hopkins University Press.
- Knowles, J. H. 1977. "Introduction: Doing Better and Feeling Worse: Health in the United States." *Daedalus* Winter: 1–7.
- Kolehmainen-Aitken, Riitta-Liisa, ed. 1999. *Myths and Realities about the Decentralization of Health Systems*. Boston: Management Sciences for Health.
- Lewin, Marion Ein, and Stuart Altman, eds. 2000. America's Health Care Safety Net: Intact but Endangered. Committee on the Changing Market, Managed Care, and the Future Viability of Safety Net Providers. Washington, DC: Institute of Medicine, National Academy Press.
- Lovell, Catherine H. 1992. *Breaking the Cycle of Poverty: The BRAC Strategy.* West Hartford, CT: Kumarian Press.

- Mata, Leonardo J. 1978. The Children of Santa Maria Cauque: A Prospective Study of Health and Growth. Cambridge: MIT Press.
- McGinnis, J. M., and W. H. Foege. 1993. "Actual Causes of Death in the United States." *Journal of the American Medical Association* 270: 2207–12.
- Morley, David, Jon E. Rohde, and Glen Williams, eds. 1983. Practising Health for All. New York: Oxford University Press.
- Mosley, W. Henry, and Lincoln C. Chen, eds. 1983. *Child Survival: Strategies for Research*. Based on a workshop organized by the Rockefeller and Ford Foundations. Bellagio, Italy.
- Muñoz, Carlos, and Nevin S. Scrimshaw, eds. 1995. *The Nutrition and Health Transition of Democratic Costa Rica*. Boston: International Foundation for Developing Countries.
- Newbrander, William, David Collins, and Lucy Gilson. 2000. *Ensuring Equal* Access to Health Services: User Fee Systems and the Poor. Boston: Management Sciences for Health.
- Newell, Kenneth W., ed. 1975. *Health by the People*. Geneva: World Health Organization.
- Perry, Henry B. 1999. "Attaining Health for All through Community Partnerships: Principles of the Census-Based, Impact-Oriented (CBIO) Approach to Primary Health Care Developed in Bolivia, South America." Social Science and Medicine 48: 1053–67.

———. 2000. Health for All in Bangladesh: Lessons in Primary Health Care for the Twenty-First Century. Dhaka: University Press.

Rohde, Jon, Meera Chatterjee, and David Morley, eds. 1993. *Reaching Health* for All. New Delhi: Oxford University Press.

- Schauffler, Helen H. 1994. "Health Promotion and Disease Prevention in Health Care Reform." *American Journal of Preventive Medicine* 10: 1–31.
- Scrimshaw, Nevin S., ed. 1995. Community-Based Longitudinal Nutrition and Health Studies: Classical Examples from Guatemala, Haiti and Mexico. Boston: International Foundation for Developing Countries.
- Sen, Amartya. 1981. Poverty and Famines: An Essay on Entitlement and Deprivation. Oxford: Clarendon Press.

Slocum, R., et al., eds. 1995. Power, Process, and Participation: Tools for Change. London: Intermediate Technology Publications.

Streefland, Pieter, and Jarl Chabot, eds. 1990. *Implementing Primary Health Care: Experiences since Alma-Ata*. Amsterdam: Royal Tropical Institute.

Taylor-Ide, Daniel, and Carl E. Taylor. 1995. Community Based Sustainable Human Development: A Proposal for Going to Scale with Self-Reliant Social Development. New York: UNICEF.

——. 2002. Just and Lasting Change: When Communities Own Their Futures. Baltimore, MD: Johns Hopkins University Press, forthcoming.

- US Public Health Service. 2000. *Healthy People 2010: Understanding and Improving Health*. 2d ed. Washington, DC: Government Printing Office. Available at www.health.gov/healthypeople/document.
- Valadez, Joseph J. 1991. Assessing Child Survival Programs in Developing Countries: Testing Lot Quality Assurance Sampling. Cambridge: Harvard University Press.
  - ———. 1998. A Manual for Training Supervisors of Community Health Workers to Use LQAS: A User's Guide. Arlington, VA: OMNI Research.
- Valadez, Joseph J., and M. Bamberger. 1994. Monitoring and Evaluating Social Programs in Developing Countries. Washington, DC: World Bank.
- White, Kerr L., ed. 1992. *Health Services Research: An Anthology*. Washington, DC: Pan American Health Organization.
- White, Kerr L., and Julia E. Connelly, eds. 1992. *The Medical School's Mission* and the Population's Health: Medical Education in Canada, the United Kingdom, the United States, and Australia. New York: Springer-Verlag.
- World Health Organization. 1978. Primary Health Care: Report of the International Conference on Primary Health Care, Alma-Ata, USSR, 6–12 September 1978. Geneva: World Health Organization.
- Wyon, John B., and John E. Gordon. 1971. *The Khanna Study: Population Problems in the Rural Punjab.* Cambridge: Harvard University Press.

# About the Contributors

Anthony I. Adams, MD, MPH, is Professor of Public Health at the National Center for Epidemiology and Population Health at the Australian National University, where he helped establish a public health training program for indigenous students. He earned his medical degree from the University of Adelaide and an MPH in Tropical Public Health at Harvard. After finishing his MPH, Dr. Adams established the International Clerkship Program in the Department of Community Medicine at the University of Kentucky. He then taught public health at the University of Sydney for eight years before becoming Chief Medical Officer of the New South Wales State Health Department in Sydney. Dr. Adams served as Secretary of the International Epidemiological Association from 1977 to 1981. From 1988 to 1997, he was Australia's Chief Medical Officer, leading the Australian delegation to World Health Organization meetings and other international visits.

"While I was always interested in international health, my commitment was strengthened during my MPH year at Harvard, thanks to the influence of Thomas Weller and Carl Taylor. Returning to Australia in the mid-1960s, I found myself helping to change public health services at the national level. This included assisting with the introduction of community health services to meet the public health and health care needs of defined regional communities. Later, I was in charge of handling the AIDS pandemic in the focal city of Sydney. Representing Australia at WHO meetings and serving on regional and global commissions on polio eradication have maintained my involvement in international health."

Joan M. Altekruse, MD, MPH, DrPH, MDS, is the past president of the Harvard School of Public Health Alumni Council and Professor Emerita in Preventive Medicine at the University of South Carolina. She earned her MD degree from Stanford, an MPH from Harvard, a DrPH from UC-Berkeley, and an MDS from Loyola University Institute of Ministry.

"A desire to combine a career in medicine with public service motivated me to enter the US Public Health Service as a medical officer. I became increasingly aware of the need for preventive and restorative health care, which made it clear to me that each person's rightful claims to health care were far from realized. This recognition gave me the personal impetus to extend public health practice to encompass social justice issues.

"I have had the good fortune to be associated with innovative models that bring health and related services to specific communities. The first, in post-World War II Germany, was a comprehensive social rehabilitation experiment responding to the homeless and mentally ill. The second was in Northern Ireland, where I worked with the Irish Peace Institute to assist those suffering from conflict. As Chair of Preventive Medicine and Community Health at the University of California, I worked with students, residents, and faculty to adopt a community-based learning approach. This helped them gain technical proficiency, skills in the application of intellectual content, and sensitivity to the perspectives of different populationsall requisite for medical specialists preparing for service and leadership in public health. Since 'retiring,' I have earned a graduate degree in pastoral ministry and worked as a lay volunteer on a comprehensive approach for the care of populations such as hospital patients and incarcerated women in central Tennessee. I am committed to integrated, community-based care that responds to those in greatest need."

Ron J. Anderson, MD, President and Chief Executive Officer of Parkland Health & Hospital System in Dallas, became CEO of Parkland in 1982. He previously served as Parkland's Medical Director for Ambulatory Care and Emergency Services. Dr. Anderson has remained on the faculty of the Medical School as Professor of Internal Medicine.

Dr. Anderson served on the executive committee of the State Task Force on Indigent Health Care and in 1985 played a major role in the passage of landmark legislation concerning indigent health care in Texas. He was appointed Co-Chair of the Attorney General's Task Force to study not-forprofit hospitals and unsponsored charity care in 1988, and he served as a member of Governor Richards' Health Policy Task Force in 1991–92. Dr. Anderson is past chairman of the Dallas-Fort Worth Hospital Council, the Texas Association of Public and Non-Profit Hospitals, the Texas Board of Health, the National Association of Public Hospitals, the National Public Health and Hospital Institute, and the Texas Hospital Association. Dr. Anderson was also a member of the Kaiser Commission on the Future of Medicaid.

"My interest in community-based primary health care began perhaps because I had the opportunity to run Parkland Memorial Hospital's central clinic and emergency room. It was clear to me that to be effective, we had to create more accessible and accountable delivery systems. We had to move into the community if we were to create healthier communities."

Mabelle Arole (and her husband, Rajanikant Arole) graduated from Christian Medical College in Vellore, determined to serve the poor of India.

They prepared themselves with medical and surgical residencies, respectively, in the United States, and study at Johns Hopkins in public health before returning to central India in 1970 to establish a small hospital among the poorest, remote communities around Jamkhed. In its first 15 years, the Comprehensive Rural Health Project grew to embrace a full range of community development activities that transformed the lives of over 200,000 people. The Aroles' success influenced first the State of Maharashtra to train doctors and health managers at Jamkhed, and later, the Government of India to introduce the Health Guide Scheme in an effort to bring the benefits of community-based primary health care to all of India's 600,000 villages. Mabelle and Raj were articulate spokespersons for primary health care, especially the central role of women in development. She joined UNICEF as the Regional Advisor for Health, turning over the leadership of Jamkhed to her husband and their daughter, Dr. Shobha Arole, who has followed in her footsteps. Dr. Mabelle Arole, who died in 1999, has left a legacy of quiet, persuasive leadership and a model that has influenced thousands of workers across South Asia and the world.

Heidi Louise Behforouz, MD, is an attending physician at the Brigham and Women's Hospital in Boston and a fellow of the Open Society Institute's Medicine as a Profession advocacy program. A graduate of Harvard Medical School, Dr. Behforouz has focused her career on the health issues of the urban indigent. In her work as a primary care doctor at the Women's Health Center at the Brigham and Women's Hospital, Dr. Behforouz treats a large number of HIV-positive individuals. She also serves as the medical director of the Prevention and Access to Care and Treatment (PACT) Project in Roxbury, Massachusetts. Sponsored by Partners in Health, this program uses community health promoters to advocate for the health and well-being of inner-city residents infected with HIV.

Gretchen Glode Berggren, MD, MSc, is a semi-retired international health consultant who specializes in practical approaches to nutrition and women's health. She was trained at the University of Nebraska College of Medicine, the Institute of Tropical Medicine and Hygiene in Antwerp, Belgium, and the Harvard School of Public Health (HSPH). She began her career in 1959 as a medical missionary to the Congo and later concentrated on management of family planning programs and on census-based, community-oriented primary health care programs in developing countries. Dr. Berggren's work to develop methods to reach poor families has been recognized through a 1993 Presidential citation as a Health Hero for Children, the Donald McKay Medal of the American Society of Tropical Medicine, and honorary degrees from universities in the United States and overseas. As a faculty member of HSPH and the Harvard Center for Population Studies, Dr. Berggren taught in field project sites in Haiti and the Dominican Republic. As a visiting scientist under the direction of Dr. Nevin S. Scrimshaw at MIT, she directed an international research project on homeand village-prepared weaning foods. Her publications include documentation of reduced age-specific and disease-specific mortality rates, age-specific fertility rates, and migration rates in Haiti. She has undertaken training and management assignments for Save the Children in more than 26 developing countries.

"My husband Warren and I met at the University of Nebraska School of Medicine, where both of us were preparing to become medical missionaries. Together we sought opportunities for service and found one when we helped open a clinic for the homeless under the Open Door Mission of South Omaha. Working together in service was a satisfaction that never left us.

"Warren went to the Belgian Congo, and I later joined him. We were assigned to an interdenominational hospital near Kinshasa, where we trained Congolese auxiliary workers in the face of the drastic changes of political independence. We realized that most of the diseases we treated could have been prevented by such workers if given the chance to bring services to the village level. A turning point for us was the arrival of Dr. C. Everett Koop, then a well-known pediatric surgeon, who came to help. He encouraged us to go into preventive medicine. We studied at the Harvard School of Public Health and then became faculty members while commencing community-health field projects in Haiti."

Abbas Bhuiya, PhD, is Head of the Social and Behavioral Sciences Program at the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) in Dhaka.

"I am a Bangladeshi who grew up in a village in the central east side of the country bordering India. After receiving a degree in statistics from Chittagong University, I joined ICDDR,B in 1980 and had a chance to work with the Matlab Demographic Surveillance System. Subsequently I earned my MA and PhD in Demography from the Australian National University, Canberra. During the fieldwork for my theses, I was faced with difficulties while weighing children because around 6% of the mothers reported not having had a full meal for a couple of days. I was bothered by this and subsequently convinced ICDDR,B to collaborate with the Bangladesh Rural Advancement Committee (BRAC) to implement BRAC's poverty alleviation programs in Matlab and to study the joint and independent effects of the health and poverty alleviation programs on health and human well-being. This is an ongoing study. While studying many of the poverty alleviation and health programs, I realized that they are not participatory in the real sense of the term. From my own experience in my village of birth, I knew that there exists a lot of social capital in Bangladeshi society that can be fruitfully utilized for the betterment of health of the villagers. This contention of mine encouraged me to take up a project to promote self-help for health in a remote rural area in my country called Chakaria. The project has been ongoing since 1994 and is trying to activate village-based self-help organizations to take health initiatives. I feel privileged to share our experiences from that project."

Paul Boumbulian, DPA, MPH, is an associate professor in the MPH program at the University of Texas in Dallas. Throughout his career, he has been involved in working with communities to develop community-based solutions for the delivery of medical and health services. He earned his MPH from Berkeley and his doctorate in public administration from the University of Georgia. He served for 15 years as the Senior Vice-President for Strategic Planning for the Parkland Health & Hospital System, and he held a similar position at the University of California Davis Medical Center. Preceding his work with health systems, he directed comprehensive community-based health planning initiatives in Utah and in the Appalachian region of Georgia. Dr. Boumbulian has published widely and received numerous awards for his work, including a fellowship from the Fetzer Institute.

"I was humbled early in my career when I learned that professional expertise was not sufficient to create a sustainable improvement in a community's health. Effective change required professionals working within the values, beliefs, and priorities of the community. Luckily, I learned this lesson early. It has served me well."

John H. Bryant, MD, PhD, is former Dean of the Columbia University School of Public Health and former Chair of the Department of Community Health Sciences at the Aga Khan University in Karachi. Dr. Bryant has also worked at Mahidol University in Bangkok, the Office of International Health in the US Department of Health and Human Services, and with the Council of International Organizations for Medical Sciences. While at DHHS, he was responsible for treaty relationships in health between the United States and other countries, including India, China, and Russia. In 1969, Dr. Bryant authored *Health and the Developing World*. With Halfdan Mahler and Carl Taylor, he played a formative role at the Alma-Ata Conference on Primary Health Care in 1978. Presently he is on the Board of Trustees of the Hôpital Albert Schweitzer in Haiti.

"In 1994, I was asked to write an article for *Health Policy and Planning*, entitled "Stepping Stones: Reflections on Careers in Health." In that article, I listed critical events in my professional life and six guiding concepts for working toward health development: (1) *equity*: A concept as old as justice, given new life at Alma-Ata, and the fundamental challenge for health systems development in all countries; (2) *ethics*: There, often unused, like a silent scream, waiting to call attention to violations of human rights and sensibilities. Important for both individual and institutional thinking and action; (3) *values*: Respect the indigenous values, culture, and religion of a society, and beware of importing values uncritically from the developed world; (4) *trust*: I asked Raj and Mabelle Arole in Jamkhed, India, to what they attributed their remarkable success. 'The community trusts us!' they replied. To encourage the vulnerable to enter into a relationship of trust is at the heart of development; (5) *patience*: Personal and institutional patience for the development process to allow the integration and consolidation necessary for sustainability; and (6) *vision*: So you know where you are going, and have the support of clear vision for work on the complexities of the development process."

A. Mushtaque R. Chowdhury, MSc, PhD, is Deputy Executive Director and Director of Research at the Bangladesh Rural Advancement Committee (BRAC) in Dhaka. He earned MSc and PhD degrees at the University of London.

"The War of Liberation in 1971 that led to the creation of Bangladesh was the most important event of my career. This motivated me to think about the country and its people, particularly the poor. Considering the population explosion to be a major problem facing Bangladesh, I decided to study demography in graduate school. But soon I discovered that there were other underlying and probably more important reasons that the people were so poor. This led me to concentrate on public health, primary education, environment, and poverty alleviation.

"Having read statistics as an undergraduate major, I was constantly faced with its limitations in explaining human behavior. Use of ethnography solved some of it. While studying the reasons for low usage of oral rehydration therapy (ORT) in rural Bangladesh, I discovered how the villagers perceived diarrhea and its causes, which was entirely different from what is taught in medical schools. This clearly explained to me why many villagers were not using ORT even when knowing very well how to prepare it with home ingredients. BRAC, which was implementing the ORT program nationwide, quickly incorporated this finding; and the usage rate shot up fast. This confirmed two things for me: first, the value of integrating qualitative and quantitative methods into research; and, second, that BRAC is a unique organization that listens to research findings. The Research and Evaluation Division (RED), developed over the years at BRAC, has derived its existence and excellence from the applied creativity of the BRAC organization. With more than 125 interdisciplinary staff, RED is an important department at BRAC and is playing increasingly important roles nationally and internationally. I have been with BRAC for all 23 years of my professional career, and the joy of seeing one's own research being implemented nationally is certainly an important reason for this continued association."

Hugh S. Fulmer, MD, MPH, is Executive Director of the Center for Community Responsive Care, Inc. (CCRC), a national organization whose board of directors is made up of institutions representing medicine and public health. Dr. Fulmer, who is trained in family practice, internal medicine, and public health, believes that the education of health professionals must focus on integrating community health into undergraduate, graduate, and continuing medical and public health education. While working toward this goal, he has held faculty appointments at Syracuse and Cornell Universities and the Universities of Kentucky and Massachusetts.

As Director of Ambulatory and Community Services at the Carney Hospital in Boston from 1983 to 1988, Dr. Fulmer designed and directed the COPC multidisciplinary fellowship at Carney and a network of community health centers. In 1993, he and colleagues founded, and have continued to direct, the CCRC, which trains multidisciplinary health professionals to merge medicine and public health in caring for communities. As a consultant to the Griffin Hospital (1995–98), a Yale-affiliated community hospital in Derby, Connecticut, he was involved in the design of the now fully accredited four-year combined residency in medicine and preventive medicine. He has been the founder and/or director of five residencies in preventive medicine throughout the country. Most recently, he has become associated with a new medical school, St. Eustasius, which will train 21st-century physicians from the United States and developing countries in the five-step COPC process to improve community health in their countries of origin.

Philip T. Hagen, MD, MPH, has provided community-based primary care to diverse populations at Mayo Clinic for the past 15 years. Dr. Hagen learned the science and art of providing population-based care and individual care through fellowships in internal medicine and preventive medicine at the Mayo Graduate School of Medicine and through public health training at the University of Minnesota School of Public Health. He is currently Vice-Chair of Clinical Preventive Medicine at Mayo Clinic Rochester, Director of the Mayo Preventive Medicine Residency Program, and Medical Director of Mayo Health Management Services.

Dr. Hagen has led the development of a number of innovative projects, including a comprehensive health promotion program for populations. This includes a monthly newsletter, self-care book, Web site (MayoClinic.com),

online Health Risk Appraisal, and training in implementation. He has helped develop a computerized structured medical questionnaire, called Patient Provided Information, which has been administered to more than 500,000 people and supports the Rochester Epidemiology Project with data on symptoms and behavior to assess health and disease profiles of the community.

"I feel the guiding hand of many bright people in Mayo's past 100 years, people who by dint of diligence, creativity, and dedication to their community developed a system to care for that community that is simultaneously caring and cutting edge. This care takes both the big picture and the personal perspective into account. I was drawn to it like a kid to a candy shop. I have the privilege daily of moving from looking a patient in the eye, to planning a population health initiative, to teaching residents, to tinkering with an experimental high-tech tool."

C. William Keck, MD, MPH, FACPM, is Director of Health for the City of Akron, Ohio, and Professor and Director of the Division of Community Health Sciences at the Northeastern Ohio Universities College of Medicine. Dr. Keck is past president of the American Public Health Association, the Ohio Public Health Association, the Association of Ohio Health Commissioners, and the Summit County Medical Society. Dr. Keck is board certified in preventive medicine/public health. He is a Fellow of the American College of Preventive Medicine and a member of the Association of Teachers of Preventive Medicine. His career has focused on providing quality public health services, teaching community health sciences to medical and other students in the health professions, and linking public health practice with its academic base.

Jim Yong Kim, MD, PhD, is a physician-anthropologist and trustee of Partners in Health (PIH), a public charity that works to make a "preferential option for the poor" in health care. Dr. Kim and colleagues founded PIH in 1987. Dr. Kim earned his MD degree and a PhD in social anthropology at Harvard University. He completed his residency in internal medicine at the Brigham and Women's Hospital in Boston, where he is now Chief of the new Division on Social Medicine and Health Inequalities. Dr. Kim is also Director of the Program in Infectious Disease and Social Change at Harvard Medical School.

In 1994, Dr. Kim, with PIH and Peruvian colleagues, founded Socios en Salud (SES), a nongovernmental organization based in a poor urban-squatter settlement on the outskirts of Lima, Peru. In addition to providing food and health care for children and building both latrines and more than a dozen community pharmacies, PIH/Socios en Salud has successfully treated patients suffering from multidrug-resistant tuberculosis (MDR-TB). The World Health Organization had previously recommended to national TB programs that patients suffering from MDR-TB not be treated. After the results of the PIH/SES project were announced, WHO initiated TB control projects that included the treatment of MDR-TB. As a result of PIH's successful MDR-TB treatment project in Peru, the Bill & Melinda Gates Foundation awarded a \$45 million grant to the organization for further work on drug-resistant TB in Peru and other countries, including Russia. Dr. Kim is principal investigator of this grant, which is the largest private gift for TB control in history.

Dr. Kim has authored papers in various scholarly journals and served as editor-in-chief of *Dying for Growth: Global Inequality and the Health of the Poor.* This book, which includes case studies from Haiti, Peru, Cuba, Senegal, Mexico, and Russia, explores the relationship between neoliberal economic policies and the health of poor people.

Judith Kurland, BA, has, since 1997, been Regional Director of the US Department of Health and Human Services Region I, comprising the six New England states. From 1988 to 1993, Ms. Kurland served as Commissioner of Health and Hospitals for the City of Boston, the only woman ever appointed to that position. Previously she was Vice-President for Strategic Planning at New England Medical Center and a founding member of the Neighborhood Health Plan (an HMO based in community health centers) and the International Society for Technology Assessment in Health Care. She has been a faculty member at Tufts University Medical School, Boston University Medical School, and Simmons College, and presently teaches at the Harvard School of Public Health.

Ms. Kurland's career has been guided by two fundamental principles: first, communities possess the strength and integrity to create and sustain social change; and second, powerful institutions must be led to act in ways that support and advance that change. Working at the federal, state, and local levels, she has shaped public policy, generated fresh political discourse, and developed innovative health and human service programs, all of which have been directed at harnessing the power of these principles to improve peoples' lives and strengthen their communities.

Ms. Kurland is recognized as the architect of Healthy Boston, a widely hailed and much-copied model of urban social change. It integrates community empowerment, economic development, service delivery, and population-based health and education programs. Her commitment to local empowerment has also taken Ms. Kurland overseas, where she has advised the North and West Belfast Health and Social Services Trust, the Department of Health and Social Services of Northern Ireland, and the Institute of

Public Health in Ireland on the use of public health as a vehicle for community renewal. Since 1998, she has served as the Acting Editor of *Public Health Reports*, the journal of the US Public Health Service.

Joyce C. Lashof, MD, FACP, DMSci (Hon.), is currently Professor Emerita of Public Health at the University of California at Berkeley, where from 1981 to 1991 she was also Dean of the School of Public Health. Dr. Lashof's distinguished career has combined academic medicine with public service. In 1965 she carried out a study of health care needs of populations living in poverty in Chicago, where she was instrumental in establishing, and then directed, the Mile Square Neighborhood Health Center. She served on the Institute of Medicine Committee on Community Oriented Primary Care and has maintained a lifelong interest in the relationship of public health and primary care.

"From academic internist to dean of a school of public health may seem like a strange route but there is some logic to it. I have always had an interest in issues related to the health care system and universal health insurance. With the advent of the War on Poverty, I had the opportunity to develop and run an Office of Economic Opportunity Neighborhood Health Center. This experience served to demonstrate forcefully the importance of social and economic factors in determining health status. So moving to become Illinois State Director of Public Health was a logical step, which led to my further governmental positions. Throughout I worked to integrate public health and medical care. I owe a great deal to Mark Lepper, who served as a mentor throughout, and to Jack Geiger, from whom I learned much about community-oriented primary care."

**Rebecca Marshall, MA**, is a writer and editor at Management Sciences for Health. She earned her BA in English literature from Smith College and was awarded a two-year fellowship to pursue graduate studies at Clare College, Cambridge University. Since beginning work with MSH in 1998, she has worked with health programs around the world, including programs in Bangladesh, India, Kenya, and Boston.

"I decided to forgo further graduate studies in literature to pursue my interest in health, particularly in relation to issues of poverty and human rights. But even now, working to understand complicated issues related to international health care, I'm drawn most strongly to people's stories, rather than other kinds of evidence. Such compelling truths emerge from the voices and experiences of individuals. In working with domestic and international organizations, most recently the PACT Project through Partners in Health, I've been convinced by the stories I've encountered—from clients, case managers, health care providers, and volunteers—that a communitybased approach to care is not only the most ethical, but also the most effective way to increase equity in health care."

William Newbrander, MA, PhD, is the Director of MSH's Center for Health Reform and Financing. He is a health economist and hospital administrator, with master's degrees in hospital administration and economics as well as a PhD in health economics from the University of Michigan.

Dr. Newbrander served with the World Health Organization for eight years in Papua New Guinea, Thailand, and Switzerland. He managed hospitals in the United States and Saudi Arabia prior to his work with WHO. Today, in addition to managing the Center for Health Reform and Financing, he provides technical assistance for MSH in health reform and health policy, social health insurance, issues of equity and the poor, hospital management, and decentralization. Dr. Newbrander teaches health financing at universities and international organizations, and directs international teams of technical experts. He directed the Asian Development Bank's Second Regional Conference on Health Sector Reform: Issues Related to Private Sector Growth.

Dr. Newbrander has published widely on health reform, health financing, decentralization, and issues of equity. His most recent book is *Ensuring Equal Access to Health Services: User Fee Systems and the Poor.* 

"My family's involvement in international work came naturally from my childhood, since I was born in Japan of missionary parents and spent my early years in Asia, and my wife was born in Afghanistan and lived there for nearly 20 years. Having people from many countries in our home gave our family a global perspective. I was also influenced to become involved with public health generally, and management and international work specifically, by those I worked with earlier in my career: Dr. Avedis Donabedian not only taught me the importance of quality health care but also helped me bring intellectual rigor to my work. Colonel Richard Hansen of the US Army taught me much about managing people and health institutions. And Dr. Dragan Stern of WHO inculcated in me the importance of public health issues in national health systems."

Robert R. Orford, MD, MS, MPH, a native of Canada, earned his medical degree from McGill University in Montreal, Canada, in 1971. He earned his MS degree from the University of Minnesota and an MPH from the University of Washington, Seattle. He is board certified in internal medicine, general preventive medicine and public health, aerospace medicine, and occupational medicine. He joined Mayo Clinic, Rochester, in 1988, and moved to Mayo Clinic, Scottsdale, Arizona, in 1996, where he is Chair of the Division of Preventive and Occupational Medicine.

Dr. Orford has extensive experience in public health, as a member of the Alberta Board of Public Health from 1979 to 1986 (Chairman 1985–86) and as Deputy Minister of Community and Occupational Health for the Province of Alberta from 1985 to 1987. While in Rochester, he worked closely with the Olmsted County Public Health Department, where he served as a member of the Olmsted County Environment Commission from 1991 to 1996 (Chairman 1993–94). He was the Director of the Mayo Preventive Medicine Residency Program from 1992 to 1996 and plans to develop a preventive medicine residency in Phoenix, with the Maricopa County Department of Public Health.

"As a Canadian, I have lived and worked for many years in a country with a strong public health tradition, and was privileged to work within that system at a senior level. Following my return to Mayo in Rochester in 1988, I was struck by the many similarities between the public health system in Alberta and the system in Olmsted County. The basis for both systems is the love for the community of both county residents and health care professionals. Support from volunteers was strong in both areas. Both systems are models for the practice of community-oriented preventive medicine."

John C. Pearson, MA, MD, MPH, is Professor Emeritus of Community Medicine at West Virginia University, where he was Chairman of the Department for 20 years. His original goal was family medicine, but after two years as Medical Officer, he appreciated having a wider role as a physician and pursued an MPH at Yale to add to his pediatrics training. He had a wonderful succession of preceptors and colleagues: John Paul, Ig Falk, and Dick Weinerman at Yale; Bob Logan at Manchester, UK; Kerr White and Osler Peterson; and John Last at Ottawa. His three greatest professional joys have been working in Manchester with the inspirational Bob on multiple regional and cross-national studies, working in West Virginia shepherding the state to a higher level of health and health care, and being able to work and lecture around the world.

Henry B. Perry, MD, is an international public health specialist whose major focus is on community-based primary health care. Dr. Perry worked in Bangladesh from 1994 to 1999 with ICDDR,B, the BASICS Project, and the World Bank. He holds honorary faculty appointments at Emory University and Johns Hopkins.

"I visited the Hôpital Albert Schweitzer in Haiti in 1979, when I learned about its innovative community-based health program that reached out to every household in the population through routine systematic home visits. By this process, a register was maintained of everyone, and the health information system made it possible to determine which persons were in need of basic services. Furthermore, vital events (births, deaths, and migrations) could be recorded on a prospective basis, making it possible to determine mortality and fertility rates in the population. In addition, the most frequent, serious, preventable, or readily treatable conditions could be identified along with those persons at greatest risk; and program activities could be directed to them. I was inspired at that time by this fresh new approach and learned that Warren and Gretchen Berggren had developed it with guidance from their professor at Harvard, John Wyon.

I lived in Bolivia from 1981 until 1984, trying to establish a similar community-based health care program on the rural altiplano with the guidance of John Wyon. Although the start-up proved to be terribly slow and difficult, the seeds sown eventually took root. Today, an organization has arisen from this effort—Andean Rural Health Care—and ARHC has as its central focus what we call the census-based, impact-oriented approach. This approach continues to guide my own professional thinking as well. I believe that it has enormous potential for maximizing the benefits of communitybased health care among impoverished and difficult-to-reach populations. My own time in Bangladesh as a technical advisor and researcher has convinced me further of the validity of this approach. My current role as Director General and CEO of the Hôpital Albert Schweitzer in Haiti is giving me further opportunities to develop this methodology and to document its effectiveness."

S. Sue Pickens, MA, Director of Strategic Planning at Parkland Health & Hospital System, has worked in health planning and community needs assessment for the past 25 years. She is a graduate fellow in the Healthy Communities Program sponsored by the Healthcare Forum and serves on many committees assessing the health of populations and working to improve the determinants of health for all populations. She holds a master's degree in education from the University of Texas and is currently a PhD student in sociology at the University of North Texas. Sue has published widely in the area of community health and community health assessment.

"I have discovered that my purpose in life is to create a world of joy and learning. To reach this goal, I see myself working on projects that create a community environment healthy enough to support learning as a natural course of community and individual growth. I am also creating this world by teaching and learning at the University of North Texas, Texas Woman's University, and the University of Texas Southwestern School of Allied Health. I am very fortunate to be able work in an organization such as Parkland Health & Hospital System that is mission driven and allows me to live my values."

Niels Pörksen, MD, now retired, was from 1984 to 1999 the Director of Psychiatric Services at Bethel, in the city of Bielefeld, Germany. Before that he was the director of a psychiatric hospital at Lüneburg in northern Germany.

Dr. Pörksen completed his postgraduate training at the Laboratory of Community Psychiatry at Harvard Medical School. In 1970, he founded the German Society of Social Psychiatry, also serving as a member of the board and the president. He was a member of the Mental Health Commission of the German Federal Government from 1970 to 1975 and from 1980 to 1988. He is a member of the board of the German Psychiatric Association, president of an organization of psychiatric hospital directors, and current President of the German-Polish Association of Mental Health. From 1986 to 1994, he was President of the German-Italian Association of Mental Health. He received the Friendship Prize awarded by both governments in 2000. Dr. Pörksen is a member and past President of the Mental Health Board of Bielefeld.

Gail Price, MS, has spent much of her career identifying ways in which the health care systems in different countries can learn from each other. Ms. Price completed her master's degree at the Harvard School of Public Health in 1986. She joined Management Sciences for Health (MSH) in 1994. At MSH, she has led several projects to improve community-based services in the United States by adapting international models for the domestic environment. Before joining MSH, Ms. Price worked for the Boston Department of Health, where she was instrumental in launching Healthy Boston, a citywide project to improve community-based health and human services. Ms. Price is President of the Harvard School of Public Health Alumni Council. She has written several articles on innovative health and development projects, and she has co-authored an article on transferring the lessons of international health to the United States. Ms. Price has traveled in 23 countries and speaks Spanish fluently.

"My interest in community-based primary health care began when I was working with a team at the Harvard Institute for International Development to evaluate a community development project in Cali, Colombia. Healthy Boston was, in part, based on the Cali model. I later became involved in enhancing the use of lay community health workers (CHWs) in the United States and have educated policymakers about the importance of CHWs. I am currently leading a project to improve community-based services for culturally diverse populations in the United States."

Ashok Reddy, BA, completed his bachelor's degree in anthropology at Emory University in 2000. In 2001, he joined the Boston-based community health project, Prevention and Access to Care and Treatment, of Partners in Health. As a case manager, Mr. Reddy has contributed a unique perspective to the project, having worked as an emergency medical technician and seen the effects on the urban poor of the inability to access proper health care. He intends to attend the University of Washington School of Medicine in the fall of 2002. In his career in medicine, he is committed to calling upon his background in anthropology and social work to help him provide outstanding service and to facilitate long-term follow-up care among the underserved.

Nathan Robison, BA, was born and raised in Bolivia and has spent all of his professional life working in rural development on the high plains of Bolivia. Mr. Robison earned his bachelor's degree in economics from Vanderbilt University in 1974. For 11 years, he worked in assorted rural development efforts, including rural electrification, the organization of cooperatives, and the management of nongovernmental organizations. In 1986, he became field director for Andean Rural Health Care's activities in Bolivia, eventually engineering its transition from a US-based private voluntary organization to a prestigious national nonprofit specializing in communitybased primary health care. Mr. Robison has participated on Bolivian Ministry of Health commissions for restructuring the national health information system and for monitoring the EPI program. He is a recognized leader in the national NGO community, particularly among those dedicated to public and community health.

"I became interested in community health as a result of my association with Andean Rural Health Care, which I joined primarily because of the organization's keen interest in measuring the results of its work. Henry Perry and John Wyon, pioneers of ARHC's census-based, impact-oriented approach to community health care, rapidly brought me to the cutting edge of this vital field."

Jon E. Rohde, MD, is the Senior Technical Advisor to the EQUITY Project in South Africa. He graduated from Harvard Medical School and completed a pediatrics residency at Children's Hospital in Boston. Following his medical training, he joined the Rockefeller Foundation as Visiting Professor of Pediatrics in Indonesia. He came to MSH as the Chief of Party for the Rural Health Delivery Project in Haiti and then served as the Chief Technical Advisor for Child Survival for the PRITECH Project, funded by USAID, in India. His subsequent work in India included working as the Special Advisor to the UNICEF Executive Director and serving as the UNICEF Representative.

"When I left Boston for Dhaka in 1968 with the USPHS to do research on cholera, I didn't expect to stay 'out there' for the next 30 plus years; but 'way leads on to way' and the challenges of the poor countries have been exciting and rewarding. The avoidable plight of mothers and children has continued to seem such a solvable problem, and also such a deplorable injustice that

can be set right, requiring robust available as well as affordable technology, good management, and some common sense. All too often it is the latter that is in shortest supply! The lessons are all around us, most readily learned not in classrooms but in villages and slums, and applied by people close to the problems. Oh, to immerse all experts and bureaucrats in reality once in a while (as Carl Taylor used to do annually at Narangwal)!

I left Boston for a challenge, to apply the gifts of my good fortune in an education and to get away from the crushing materialism of a system that seemed to be losing its soul. In the cyclone of 1970 and the War of Liberation that freed Bangladesh, I found I could bring science to large numbers of people and have fun in the process. I could raise my family with value systems I believe in and sleep well each night."

Samuel Ross, MD, has put the community-oriented primary care concept into practice in Dallas County through expanded access to primary care and a comprehensive community services program that incorporates health center advisory boards and local coalitions to better define community needs and implement effective interventions.

Since completing his residency in family medicine in 1983 at St. Paul Medical Center in Dallas, Texas, Dr. Ross has completed a 4th-year Chief Residency in Family Medicine, served 2 years on the faculty of the Family Medicine Residency Program of the St. Paul/University of Texas Southwestern Medical School, and spent 5 years in private practice. For the past 11 years, he has worked at Parkland Health & Hospital System in various medical and administrative leadership roles. He is currently the Senior Vice-President for Ambulatory Services.

David S. Shanklin, MS, is the Director of International Programs at Curamericas (formerly Andean Rural Health Care), where he has worked for the past 11 years. He has been active in public health research and programming for the past 22 years, specializing in health program evaluation, and nutrition program policy, planning, and evaluation. He holds two master's of science degrees: one in clinical dietetics from the University of Kentucky (1977) and one in public health from the Harvard School of Public Health (1979).

"My interest in and passion for community-based primary health care have come directly from my experiences in Bolivia, and through my association with such consummate public health practitioners as Henry Perry and John Wyon. I have seen firsthand the enormous effect that simple, effective community-based health services have and now feel compelled to share my experiences with all who are interested and care. At present, I am very interested in the improvement of childhood nutritional status in marginalized populations, as well as the reduction of maternal and neonatal deaths through appropriate, field-based actions."

Carl E. Taylor, MD, DrPH, is Emeritus Professor of International Public Health at the Johns Hopkins School of Public Health, where he chaired his department for 15 years. A graduate of Harvard Medical School, Dr. Taylor directed the celebrated Narangwal Study in the rural Punjab of India until 1973. He played a catalytic role—with John Bryant and Halfdan Mahler in convening the Alma-Ata Conference on Primary Health Care in 1978 and has been an equally strong influence behind USAID's focus on child survival. After retiring from Johns Hopkins, Dr. Taylor served as UNICEF's Representative in China for 5 years. Throughout his career, he has contributed extensively to the literature on public health and primary care.

"Going back to Narangwal days, I like to define myself as a simple Punjabi villager. Actually, I learned most of what I have tried to implement from my medical missionary parents, who served Terai jungle villages in the United Provinces of India for 54 years. Then I learned from John Gordon, my academic guru. I was privileged to sit at the feet of John B. Grant (the father of primary health care) for a week every year in Puerto Rico with my class of Professors of Community Health while I ran that program at Harvard during the late 1950s. Jimmy Yen, the founder of the Ding Xian Experiment and of IIRR (International Institute of Rural Reconstruction), was a role model through the 1960s. It was a privilege to have the inspiration provided by Jim Grant and Halfdan Mahler through the years. I have been blessed by these associations."

Henry G. Taylor, MD, MPH, was raised in Boston, Baltimore, and the Indian subcontinent, and is now a West Virginian by choice. He received his undergraduate degree from Haverford College, then spent a year on a National Geographic project studying temple monkeys in Nepal. He graduated from Harvard Medical School and did his residency in general internal medicine at the Francis Scott Key/Bayview Medical Center of Johns Hopkins University.

Dr. Taylor and his wife, Nancyellen Brennan, a family nurse practitioner, came to West Virginia in 1982. They helped establish Pendleton County Community Care, 1 of 13 national demonstration sites for community-oriented primary care. Dr. Taylor spent 13 years in Pendleton County as a "modern country doctor," practicing internal medicine without a hospital, and developing community-based programs in workplace wellness and elderly care.

Taylor became involved with the West Virginia Public Health Advisory Council and was instrumental in promoting the establishment of an MPH program "without walls" for West Virginia. In 1995, Taylor left clinical prac-

tice to earn his MPH at Johns Hopkins. There, he refined his career-long interest in "helping people in communities identify and address their own unique health issues." Central among his successes is the Public Health Transitions Project, which is helping state and local health departments focus on how to provide and pay for essential public health services for the citizens of West Virginia.

Joseph J. Valadez, PhD, MPH, ScD, is Senior Advisor for Monitoring and Evaluation in the NGO Networks for Health Project funded by USAID. He is also Health Programs Coordinator for PLAN International and a Senior Associate in the Department of International Health at the Johns Hopkins School of Hygiene and Public Health. He has more than 15 years of experience working in 36 countries and has authored or edited eight books and written numerous journal articles and monographs.

"I came to the field of public health through a circuitous route. Following an undergraduate social science degree, I studied for a PhD in International Relations in the UK at the Richardson Institute for Peace and Conflict Research. My postdoctoral studies focused on program monitoring and evaluation, and on computer simulation. In 1980, I realized that I wanted to focus my life's work on public health, and I decided to study for an MPH at the Harvard School of Public Health. During my first hour at Harvard, I met John Wyon, my advisor. When I began studying for a second doctoral degree, this one focused on international health, John Wyon again served as my advisor.

After serving on the faculty of the Harvard Institute for International Development for four years, I became the Director of Projects for the African Medical and Research Foundation, an NGO based in Nairobi, Kenya. For four years I developed and managed community-based projects in Tanzania, Sudan, Ethiopia, Uganda, and Nigeria, as well as Kenva. In 1995, I joined Johns Hopkins School of Hygiene and Public Health and worked in JHPIEGO in clinical contraception. During 1996, I returned to work with NGOs by joining Plan International but retained my affiliation with the Department of International Health at Johns Hopkins. Since that time, I have aided PLAN to apply the community-oriented approach in child survival, safe motherhood, family planning, and HIV/AIDS prevention programs throughout the world. In 1998, I was elected as the first Chairman of the Board of the Child Survival Collaborations and Resources Group, a consortium of 35 leading US private voluntary and nongovernmental organizations working in the health sector in developing countries. The members of CORE work together to improve community-based public health practice by sharing resources and experiences."

John B. Wyon, MB/BCh, MPH, is retired Senior Lecturer at the Harvard School of Public Health, where from 1953 to 1988 he was in the Department of Population Sciences and International Health. He earned his medical degrees from Gonville and Caius College, Cambridge University, and an MPH from the Harvard School of Public Health. Dr. Wyon served as a Medical Officer in Ethiopia during World War II and then as a medical missionary in Uttar Pradesh, India, from 1949 to 1952. In 1953 he became Field Director of the India-Harvard Ludhiana Population Study, better known since as the Khanna Study, which he authored—with John Gordon—in 1971. Dr. Wyon received the Distinguished Alumnus Award from Harvard School of Public Health in 1995 and, also that year, a Lifetime Achievement Award for Excellence in International Health from the American Public Health Association.

"In 1943, I was a conscientious objector to military service, but I was permitted to join a Quaker organization. They sent me to join a group already in Ethiopia. I became the only Western qualified doctor in the Province of Tigre, with a government hospital of 100 beds and six outpatient clinics for about 1 million people. Our team included about 20 fine male "dressers," the only woman nurse in Ethiopia, and two briefly trained British staff. In 1945, waiting for boat passage home, I worked in a flooded area around Calcutta. The medical conditions among the villagers were little better than in Ethiopia. I left these two experiences with the conviction that we had contributed little to these people for a limited time and with no lasting effect. I wondered how might it be possible to practice scientific medicine effectively among a poor illiterate people.

As a medical missionary, I set out with my wife for India in 1949. Our missionary society wanted us to find out how to practice medicine in rural India without a hospital. Hospitals had become too expensive. Within three months I had met Carl Taylor, another medical missionary. Two years later, I was invited to join him as an MPH student to prepare myself to work with Carl's adviser, the epidemiologist John Gordon, to test the possibility of changing the birth rate through application of birth control in some Punjabi villages. Gordon had practiced community-based epidemiology in a small town in Romania, where he had recorded an epidemic of scarlet fever from its first case.

I worked with John Gordon for 7 years in India and for 10 years at Harvard analyzing and reporting the results of the Khanna Study in 11 villages in the Punjab, India. After that, I developed a seminar at the Harvard School of Public Health called the Student Project Design Seminar. Each student had to identify a community and a problem, and report to the seminar on

his or her definition and analysis of the community and how to address the selected problem in that community. Several of the students went on to implement their projects.

Since 1970, I have been closely connected with community-based projects as a consultant: in India for 2 years; in Sri Lanka for 6 years, working on malaria control with Oxfam America and the Sarvodaya Shramadana Sangamaya of Sri Lanka; and in Bolivia for 18 years, with Henry Perry and Andean Rural Health Care. Currently I am involved with the Greater Boston Interfaith Organization, which guides faith-based organizations to find common goals among their members and to pursue them. In Boston, 100 religious institutions have selected affordable housing and elementary and high-school education as their present focus. This approach has the potential to contribute to the solution of numerous public health problems."

# Index

### A

Abbott, Julie, 241 Abdullah, A., 75 Abed, F. H., 88, 90, 110 Abramson, Joseph, 290 Academic-public health partnerships, 279-87 Access assurance plan, 263 Adams, Anthony I., 215, 216 Adherence, 274 Africa, 270 Ahmed, M., 65 AIDS. See HIV/AIDS Akron Health Department, 285-86 Aktion Psychisch Kranke, 307 Alcohol, 227 Alexander Community Health Model, 5 Alma-Ata conference, 14-15, 26-28, 216, 317 Altekruse, Joan M., 235, 302 Am I My Parents' Keeper?, 21 Andean Rural Health Care (ARHC), 152-54, 166 See also Consejo de Salud Rural Andino (CSRA) Anderson, Ron J., 247, 249, 250, 251, 253, 256, 265 Antiretroviral therapy. See Highly active antiretroviral therapy (HAART) Armenia, 194 Arole, Mabelle, 8, 47, 48n, 170, 311, 318Arole, Rajanikant, 8, 48n, 170, 311, 318

Arole, Shobha, 8, 60, 311, 318 Arsenic poisoning, 66, 82–83 Asvall, Jo, 16 Augustin, A., 136 Australia, 218 Aymaran Indians, 152

#### B

Baby Friendly Hospital Initiative, 209 Bamberger, M., 190n Bangladesh, 7-11, 31-44 Chakaria project, 88–109 Cholera Research Laboratory, 38 - 40drug policy, 36-37 education, 79, 80, 81 environment, 80-83 family planning, 36, 39, 41, 65, 68, 70,91 fertility, 40, 77-79 food production and nutrition, 68-70,74-77 Gonoshasthaya Kendra, 8, 37, 208 Grameen Bank, 37–38 human development index (HDI) rank, 83-84 immunization, 33, 40, 41, 66, 77 at independence, 32-36 infant mortality, 32-33, 40, 77, 78 Matlab study, 7-8, 38-39, 66-68 NGOs, 37, 42-44 and Pakistan, 33, 34, 35, 42 poverty levels, 73-74, 75, 76 self-help organizations, 89, 92-93 shasthya shebikas, 41-42

Bangladesh, cont. See also International Centre for Diarrhoeal Disease, Bangladesh (ICDDR,B) Barefoot Doctors movement, 4, 10, 126, 318, 319 Basic Minimum Needs, 205 Bass, P., 249 Beaglehole, Robert, 27 Beaudry-Darismé, M. M. N., 138 Behforouz, Heidi Louise, 269, 271, 272, 275 Benchmarks of Fairness for Health Care Reform, 21-23, 25 Berger, Peter, 253 Berggren, Gretchen Glode, 129, 132, 133, 135, 136, 138, 140, 144 Berggren, Warren, 130, 132, 135n, 136, 138, 146 "Bericht zur Lage der Psychiatrie," 304 Berkson, Joseph, 239 "Bestandaufnahme zur Rehabilitation," 306 Bhattacharyya, K., 194 Bhishi system, 54-55 Bhuiya, Abbas, 87, 91, 105 Bialek, R. G., 282 Bielefeld, 304–5 Birth control. See Family planning Birth of the Chaordic Age, 265 Birth rate. See Fertility Bismarck, Leopold von, 3 Blacklow, R. S., 282 Bolivia, 152, 206-8 Bonita, Ruth, 27 Boston, 217, 219 HIV rates, 271, 272 See also Roxbury Boulter, Arnold, 103 Boumbulian, Paul, 217, 247, 249, 250, 251, 253, 256, 265

BRAC (Bangladesh Rural Advancement Committee), 37-38, 61-73, 207, 317 arsenic testing, 82 child nutrition and survival, 68-71 education, 65 evaluation, 66-68, 315 family planning, 68, 70 ICDDR,B Joint Research Project, 67-68 loans, 65 management, 311 oral rehydration therapy, 39-41, 65-66, 77, 209 poverty alleviation, 63-65 Rural Development Program, 63 violence against women, 71-72 Brazil, 320 Breastfeeding, 180, 191-92, 209, 316 Brigham and Women's Hospital, 276 Brundtland, Gro Harlem, 15 Bryant, John H., 13 Budetti, Peter P., 264 Burkhalter, Barton R., 138, 145, 146 Bushnell, F. K. L., 218, 219

## C

Caldwell, John, 109 Campbell, Donald T., 190n Caplan, Gerald, 302, 303 CardioVision 2020, 241 Carter Center, 227 Case manager, 273–74 Cash, Richard A., 36, 40, 41, 66 Cashman, S. B., 218, 219 Census-based, impact-oriented (CBIO) approach, 152–67 community health workers (CHWs), 153–54 CSRA, 152, 154–56, 163–64

defined, 323 home visitation, 158-59 infant/childhood mortality, 160-61 steps in, 157-60 Center for Community Responsive Care (CCRC) program, 219 Centers for Disease Control and Prevention, 232, 282 Central Institute of Mental Health, 302 Chakaria (Bangladesh) project, 88-109, 315, 319 community relationships, 93, 101-4,107-8 curative services, 104-5, 108 data collection and analysis, 94-95 health posts, 99, 105 immunization, 91, 99-100 People's Participatory Planning, 97 - 98preventive issues, 96, 104-5 public-sector support, 106 relief mentality, 102-3 replicability, 106-7 school-based activities, 97 staff, 91-92, 101 training, 92-93 Chatterjee, Meera, 88, 170 Chaulik, C. P., 282 Chen, C. C., 116 Chen, M. A., 71 Child health insurance programs (CHIPs), 260, 263, 264 Childhood mortality Bangladesh, 70-71 Bolivia, 159-61 Nepal, 175 Children's Medical Center of Dallas, 258 China, 3-4, 10, 116, 126, 318, 319 Cholera Research Laboratory, 38-40,313

Chowdhury, A. Mushtaque R., 40, 41, 61, 65, 66, 79, 88, 109 Chowdhury, R. K., 65, 79 Chowdhury, Zafrullah, 8, 36-37 Churchill, Winston, 3 Cluster sampling, 171, 173, 192-94, 196, 314 Codman Research Group, 228 Cohen, Stephanie, 271, 275 Cogestión, 156 Comités de Vigilancia, 156 Comités Locales de Administración Salud (CLASes), 121-22 Community Based Sustainable Human Development, 119 Community Health and Medical Primary and Preventive Service, Inc. (CHAMPPS), 255 **Community Health Centers** (CHCs), 225 Community health workers (CHWs), 153-54 Community-Based Longitudinal Nutrition and Health Studies, 137 Community-based health care (CBHC), defined, 323 Community-based primary health care (CBPHC), 309 principles, 116-19 terminology, 114-15 Community-oriented primary care (COPC), 5, 223-26, 250, 309 "community orientation," 130, 218, 316 COPC National Rural Demonstration Project, 291 COPC Toolkit, 290 partnerships, 290 University of Mexico model, 291 Community participation, 87, 88, 117-18, 316-17

Community participation, cont. Bangladesh, 88-89, 107-8 Bolivia, 161-63, 165-66 Haiti, 140, 142 US, 317 Complexity theory, 265 Compliance, 117, 273, 274 Conscientization, 323 Connor, E. M., 250 Consejo de Salud Rural Andino (CSRA), 152, 154-56 community participation, 161-63, 165-66 decentralization, 155-56, 164 Local Health Boards, 155-56 Ministry of Health (MOH), 155, 163, 166 Contraception. See Family planning Contreras, Maria, 204 Cortisone, 241 Cross-subsidization, 208, 259 Cuba, 154 Cuéllar, Carlos, 207

## D

Dallas-Fort Worth area, 250-51 Children's Medical Center of Dallas, 258 Dallas Area Coalition to Reduce Diabetes and Heart Disease, 254 Dallas County Hospital District, 248Dallas-Forth Worth Faith Health Partnership, 254 Dallas-Forth Worth Hospital Council, 251-53 Injury Prevention Center of Greater Dallas, 254-55 Presbyterian Health System of Greater Dallas, 255 See also Parkland Health & Hospital System

Dana Sehat program, 208 Daniels, Norman, 18, 21, 22 Data collection, 276, 312-16 Chakaria project, 94-95 scaling up, 117-18 See also Lot Quality Assurance Sampling (LQAS) de Glanville, H., 130 Decentralization, 155-56, 164, 249-50 De-institutionalization, 304-5 Demographic Surveillance System (DSS), 67-68 DeSweemer, Cecile, 125 Deuschle, K., 216 Devkota, Babu Ram, 169 Diarrhea Bangladesh, 39-41, 65, 77, 209 Nepal, 180 Tibet, 120 Diet. See Nutrition Directly observed therapy (DOT), 274-75 Disproportionate share funds, 264 Dodge, Cole, 90 Dodge, H. F., 171 Doll, R., 227 Douglas, Bruce E., 242 Drug abuse, 228, 271, 273 D'Souza, S., 66 Dubuisson, S. E., 144 Duza, M. Badrud, 109

## Е

Earle, A. M., 132 Education, medical, 216, 241–44, 283–85, 312 Engle, P. L., 142 Eppler, Peter, 87, 105 Equity, 163, 210, 309–10, 320, 321 Equity Gauge, 20–21, 25 of outcomes, 298, 309–10 scaling up, 118, 123 Surveillance for Equity, 20, 25 Espada, Sara, 161 Evaluation, 66–68, 197, 209, 238, 256–58, 315 Evans, Timothy, 118 Ewbank, Douglas, 136 Expanded Programme on Immunization (EPI), 40, 41, 314

## F

Fairness, 22-23, 25 Family planning, 6-7, 9-10 Bangladesh, 36, 39, 41, 65, 68, 70, 91 Indonesia, 10 Narangwal (India) Project, 124-26 Nepal, 180-82, 190-91 Tibet, 120 Farmer, Paul, 219, 274 Farmers' Clubs, 51-52 Federal grants, 276 Fees, 208 Female Community Health Volunteers (FCHVs), 123, 176 Fendall, N. R. E., 36 Fertility Bangladesh, 40, 77-79 India, 48 Field area supervisors (FASs), 176, 195-97 Financing, 202-10, 258-60. See also Bhishi system; Fees; Funding; Sustainability Firearms, 227 Foege, W. H., 227 Foundation for Medical Education and Research, 243 Foundations, 206, 275-76 Four Great Rivers Nature Preserve, 120 Foyers d'Apprentissage et de Réhabilitation Nutritionnelle (FARN) program, 140

Foyers de démonstration nutritionnelle (FDNs), 138–40 Framework for Assessing Health System Performance, 19–20, 24 Freire, Paulo, 63 Frenk, Julio, 19, 20 Fulmer, Hugh S., 215, 216, 218, 219 Funding, 43, 319–20 HIV/AIDS, 275–76 sustainability, 203–8 vertical programs, 165 Future of Public Health report, 217, 280–82

### G

Gale, J. L., 282 Geiger, H. Jack, 116, 224, 225, 290 Gender bias, 51, 68, 72-73, 79 George, Lloyd, 3 German Association for Social and Community Psychiatry, 307 Germany, 218 health service law, 305 psychiatry, 302-7 "Gesetz zur Reform," 305 Gibson, Count, 224 GOBI, 207, 316 Goiter, 80, 241 Gonoshasthaya Kendra, 8, 37, 208 Gordon, A. G., 282 Gordon, John E., 7, 38, 44, 170, 312 "Gossip," 131, 145 Government sector, 205-6, 210, 319-20 Grameen Bank, 37–38 Grant, James, 6, 116, 119, 126, 207, 311, 316, 321 Grant, John B., 3-4, 7, 116 Guatemala, 154

#### Н

Habte, Demissie, 109 Hagen, Philip T., 235, 240 Haider, Syed J., 36 Haiti, 17-18 CBIO, 154 FARN program, 140 FDNs, 138-40 **HAART**, 270 Hearth program, 137-40, 144-46 HIV/AIDS, 320 Hôpital Albert Schweitzer, 17-19, 132-37, 209, 315 infant mortality, 133, 137, 144 marketplace immunization, 131-37, 145, 313 Mothercraft centers, 137-38, 313 Halstead, S. B., 137 Halverson, P.K., 282 Hag, Mahbub ul, and Khadija, 32, 33,35 Harvard Medical School, 276, 302 Harvard School of Public Health, 218,302 Harwick, Harry, 243 Hashemi, S. M., 64 Hatch, John, 290 Health maintenance organization (HMO), community-based, 260-66 accountability, 265-66 characteristics, 261-62 dividends, 265 governance and management, 264-65 ownership, 262 services, 265 underwriting and capitalization, 262 - 64"Health Promotion and Disease Prevention in Health Care Reform," 229

Health Services Training Activity, 297 HEALTHfirst, 259-60 HEALTHplus, 259-60 Healthy Communities movement, 216,232 Healthy People 2010, 228 Healthy Start, 258 Healthy Summit 2000, 286 Healthy West Virginia Objectives for 2010, 292-93 Healton, C. G., 282 Hearth program Haiti, 137-40, 144-46 Vietnam, 140-46 Henderson, R. H., 171, 173n, 174n, 181 Hepatitis B, 228 Highly active antiretroviral therapy (HAART), 270, 274 Hinman, A. R., 126 HIV/AIDS, 11-12, 27, 228, 320 Australia, 218 Boston, 217, 271, 272 funding, 275-76 PACT Project, 271-77 Thailand, 218 Hock, Dee, 265 Home visitation, 43-44, 158-59 Hôpital Albert Schweitzer (HAS), 17-19,209 marketplace immunization, 132-37,315 Hospitalization rates, 228 Hossain, Hamida, 90 Hossain, Moazzem, 105 Howen, Sara, 245 Human development index (HDI), 83-84,309 Human resources, 204, 207 Hug, Mujibul, 40 Hydrick, John L., 4

### I

Illiteracy, 18, 32, 79 Immunization Bangladesh, 33, 40, 66, 77 Bolivia, 161 Chakaria (Bangladesh), 91, 99-100 China, 126 Haiti, 131-37, 145, 313 Narangwal (India) Project, 125 Nepal, 123 India, 302 Baby Friendly Hospital Initiative, 209 Bhore Commission, 4 castes, 53-55 infant mortality, 48 Narangwal (India) Project, 124-26 VHWs, 8-9, 53-54 See also Jamkhed (India) program Indonesia Dana Sehat program, 208 family planning, 10 posyandus, 204, 207, 311-18 passim Infant mortality Bangladesh, 32-33, 40, 77 Bolivia, 159-61 Dallas, Texas, 256, 258 Haiti, 133, 137, 144 India, 48 Nepal, 175 US, 228 Infectious diseases, 5, 125, 315 Bangladesh, 41-42 Narangwal (India) Project, 124-25 Injury Prevention Center of Greater Dallas, 254-55 Institute of Medicine, 225-26, 250, 280 Insurance CHIPs, 260, 263, 264 HMOs, 260-66

International Centre for Diarrhoeal Disease, Bangladesh (ICDDR,B), 7, 40, 314 BRAC Joint Research Project, 67–68 Chakaria project, 88–109 Cholera Lab, 38–40, 313 Demographic Surveillance System, 67–68 International Monetary Fund, 115 Iodine deficiency, 80

# J

Jahnke, Art, 271 Jamkhed (India) program, 8, 47–60, 311, 316, 318 bhishi system, 54–55 expansion, 47, 58 Farmers' Clubs, 51–52 loans, 55–56 MVMs (Women's Development Associations), 54–58 sanitation, 50, 52 VHWs, 53–54 Johnson, Lyndon B., 224, 290 Just and Sustainable Change, 119 Just Health Care, 21

### ĸ

Kadakia, Mitul, 271, 275 Kadam, Lalanbai, 48, 56 Kala-azar, 78 Kaltenbach, L., 305 Kaplan, Ronald, 21 Karim, M. Azizul, 36 Kark, Emily, 4 Kark, Sidney, 4–5, 7, 116, 216, 224, 290 Kazandjian, V. A., 282 Keck, C. William, 217, 279 Keiss, Lynnda, 34, 40 Kenya, 23 Khan, M. Mahmud, 41 Khandker, S. R., 64 Khanna Study, 7, 38–39, 312 Khosa, Solani, 27 KIDS*first*, 259–60 Kielmann, Arnfried A., 124 Kim, Jim Yong, 269 King, K. W., 138 Kissinger, Henry, 10, 36 Klevens, M., 218, 219 Kretzmann, John, 253 Kunze, H., 305

Kurland, Leonard, 240, 242

### L

Lanzenderfer, M., 103 Lashof, Joyce C., 216, 223 Lasker, Roz D., 298 Laskowski, Robert J., 266 Leadership, 203, 209-10, 238, 243-44, 310-12 Lemeshow, S., 171, 195 Leprosy, 41 Ley de Participación Popular, 155 Light, Donald W., 21 Lindberg, Curt, 265 Lindemann, Erich, 302 Literacy rates, 18, 32, 79 Lot Quality Assurance Sampling (LQAS), 169-98, 314  $\alpha$  error/ $\beta$  error, 172 assessment, 183-92 and cluster sampling, 171, 173, 192-94, 196 cost analysis, 192-94, 196 coverage benchmarks, 171-73, 177-78, 182 decision rules, 171, 177-78, 182 defined, 323 field area supervisors (FASs), 176, 195-97

parallel sampling, 180–82 performance benchmarks, 186–88 program manager, 188 questionnaires, 180–82 sample sizes, 177–78 and seven-step approach, 196–97 supervision area (SA), 172 tables, 178–79 terminology, 171–74 time assessment, 188–92 training, 180, 195 weighting, 173 Lovell, C., 88 Lucas, Andrew, 245 Lwanga, S. K., 171, 195

### м

McCord, Colin, 8, 312 McCoy, David, 27 McDermott, W., 216 McGinnis, J. M., 227 McKnight, John, 253 Mahila Vikas Mandals (MVMs), 54-58 Mahler, Halfdan, 311 Mahmud, S., 71 Malaria, 5, 9, 98, 102 Malnutrition Bangladesh, 68, 70 Haiti, 137-40, 145-46 Vietnam, 140-46 Management BRAC, 311 HMOs, 264-65 organic, 265 sustainability, 208-9 Marketplace immunization, 131-37, 145, 313 Marsh, David L., 146 Marshall, F. N., 133 Marshall, Rebecca, 269 Maternal and child health, 93, 124, 126

Matlab (Bangladesh) study, 7-8, 38-39,66-68 Maxwell, John C., 203 Mayo, Charles H., 236, 239, 241 Mayo, William J., 236, 239 Mayo, William Worrall, 238-39 Mayo Clinic, 217, 235-45 education and training, 241-44 evaluation, 238 financial stability, 243 history, 238-40 mission, 236 organization, 237 record system, 239, 315 Rochester Epidemiologic Project, 240 Measurably Enhancing the Status of Health (MESH), 266 Mellish, Maud, 242 Mellon, Gwen, 17 Mellon, Larimer, 17, 132, 133 Menager, H., 136, 144 Mental health care, 302-7 Mexico, 154 Microbial agents, 227 Mile Square Health Center, 224 Mitra, S. N., 34, 91 Mobilizing for Action through Planning and Partnership (MAPP), 232 Monitoring and evaluation, 66-68, 169-98, 209, 238, 256-58, 315 Morley, David, 88, 170 Mothercraft centers, 137-38, 313 Motor vehicle accidents, 228 Mound Bayou, 225 Mullan, F., 225 Murray, Christopher J. L., 19, 20

#### N

Narangwal (India) Project, 124–26 Nath, S. R., 65, 79

National Association of County and City Health Officials (NAC-CHO), 232 National Immunization Days (NIDs), 123 National Institute of General Medical Sciences, 240 Navajo-Cornell Field Health Research project, 216 Neighborhood Health Center Program, 225 Neonatal tetanus, 132-37, 145 Nepal, 122-24, 171, 175 breastfeeding, 180, 191-92 family planning, 180–82, 190–91 See also Lot Quality Assurance Sampling (LQAS) Neuhaus, John, 253 New River Family Health Center, 292 Newbrander, William, 201, 207 NGOs, 37, 42-44 Nonprofit trusts, 263 Northeastern Ohio Universities College of Medicine (NEOUCOM), 285-86 Northup, Robert S., 138, 145 Ntuli, Antoinette, 21 Nutrition, 232 Bangladesh, 68-70, 75-77 Haiti, 137-40, 144-46 Narangwal (India) Project, 124-25 US, 227 Vietnam, 140-46 Nutting, Paul A., 250, 290, 291

### 0

Ohio, 285 Oral rehydration therapy (ORT) Bolivia, 161 BRAC, 39–41, 65–66, 77, 209 Narangwal (India) Project, 125–26 Tibet, 119–20 Orford, Robert R., 235 Osiniski, Petra, 109

#### Ρ

PACT Project, 204, 271-77 Pakistan, 23; compared to Bangladesh, 33, 34, 35, 42 Parallel sampling, 180-82 Parkland Health & Hospital System, 248 - 60community assessment, 251-52, 256-57 community health care, 255-56 decentralization, 249-50 disease diagnosis, 257 financing, 258-60 partnerships, 253-55 prioritization, 252-53 utilization studies, 257-58 Partners for Prevention, 229 Partners in Health, 219, 270, 272, 274,276 Partnerships, 314 academic-public health, 279-87 Akron-NEOUCOM, 285-86 government-NGO, 42-44 PACT, 276 Parkland Memorial Hospital, 253-55 public-private, 263 West Virginia, 289-98 Patient Provided Information, 240 Paul, Benjamin, 290 Pearson, John C., 217, 289 Peckham experiment, 290 Pendeba Project (Tibet), 119-20, 127 Performance assessment, 19-23 BRAC, 66-68, 315 Parkland Memorial Hospital, 251-52, 256-57 See also Data collection; Lot Quality Assurance Sampling (LQAS)

Perry, Henry B., 18-19, 31, 37, 38, 39, 40, 109, 114n, 115, 137, 152, 157 Peru, 121-22 Peto, R., 227 Pholela (South Africa) project, 290 Pickens, S. Sue, 247, 251, 256, 265 Pitt, M. M., 64 Plan International, 175, 198 Plsek, Paul, 265 Plummer, Henry, 239 Pneumonia, 41-42, 125 Population medicine, 323 Pörksen, Niels, 218, 301, 303 Positive deviance, defined, 323 Positive deviance inquiry, 131, 140 - 46Posyandu system, 10, 204, 207, 311-18 passim Poverty alleviation, 63-65, 141, 318 Poverty-gap index, 74 Pradhan, A., 175 Prepaid voucher system, 264 Presbyterian Health System of Greater Dallas, 255 Prevention and Access to Care and Treatment (PACT) Project, 204, 271-77 Preventive services, 229, 231 Chakaria (Bangladesh), 96, 104-5 Mayo Clinic, 242, 244 psychiatry, 302-3 Price, Gail, 207, 223, 235, 247, 279, 289,301 Primary health care (PHC), 14, 114, 223, 309; defined, 14, 324 Primary medical care (PMC), 114, 324 Principles of Preventive Psychiatry, 302 Privatization, 115, 123, 126 Projet Integré de Santé et de Population (PISP), 138-39

PROSALUD, 206–8 Protein-energy malnutrition (PEM), 68, 129 Pruitt, Raymond D., 245 Psychiatric services, 302–7 Public Health Service (PHS), 225, 228 Public policy, 230–31 Public-private partnerships, 263 Public sector, 205–6, 210, 319–20

# Q

Qomolangma National Nature Preserve (QNNP), 119 Quality assurance. *See* Lot Quality Assurance Sampling (LQAS)

### R

Ravallion, M., 75 Reddy, Ashok, 269, 271, 275 Regional collaborative, 263 Reinke, W. A., 171 Rhyne, Robert, 218, 221, 291 Ribaux, Claude, 87, 91 Riley, P., 64 Robert Wood Johnson Rural Practice Project, 292 Robertson, S. E., 174, 194 Robison, Nathan, 151 Rochester Epidemiologic Project, 240 Rockefeller Foundation, 118, 312 Rohde, Jon, 3, 13, 31, 47, 60, 61, 87, 88, 113, 116, 129, 151, 169, 170, 201, 321 Romig, H. G., 171 Ross, James, 109 Ross, Samuel, 247 Rotary International, 154 Roxbury, 272, 311, 313, 316 Roy, R. D., 68

Rural Development Program, 63 Rural Health Education Program (RHEP), 296–97

#### s

Safe Communities model, 254 Salber, Eva, 290 Sanderson, David R., 245 Sarubai, 53, 54, 57 Save the Children, 139, 140 Scaling up, 113-27, 318-19 behavior change, 118 Bolivia, 166-67, 206-7 CLAS, 121-22 community participation, 117-18 data collection and analysis, 117 - 18defined, 324 equity, 118, 123 Narangwal (India) Project, 124-26 Nepal, 122-24 Pendeba Project (Tibet), 119-20, 127 polarization, 117 principles, 116-19 privatization, 115, 123, 126 Schauffler, Helen H., 216, 223, 229n Schuler, S., 64 Schulmeier, Greg, 258 Schweitzer, Albert, 17 Scrimshaw, N., 137 Sculley, John, 203 Seat belt use, 257 Seifer, S. D., 282 Selective PHC, 114–15 Self-Help Centers for Action Learning and Experimentation, 122, 124 Self-help organizations (SHOs), 89, 92-93 Sen, Amartya, 11, 62, 63, 118, 310 Sen, B., 73, 75

Service learning, 215 Shahabuddin, Q., 75 Shanklin, David S., 151, 160 Shasthya shebikas, 41-42 Sidel, Victor W., and Ruth, 290 Sillan, Donna, 141, 142, 144 Sindicatos agrarios, 156 Singh, J., 192 Smallpox, 5, 77 Smoking, 227, 231 Social mobilization, 64-65, 134-35, 145 Soldiers of Health, 272, 313 Sorensen, A. A., 282 South Africa, 216 COPC, 4-5 Equity Gauge Project, 20-21 Pholela, 290 Speth, James, 309 Stanley, Julian C., 190n Stark, Marg, 271 Stein, Zena, 5 Sternin, Jerry, and Monique, 140-41, 146 Stewardship, 19 Streatfield, Kim, 36 Stroh, G., 171, 194 Suharto, Raden, 10 Summit County's Assessment Process for Excellence in Public Health, 286 Sundaresan, T., 171, 173n, 174n, 181 Supervision. See Lot Quality Assurance Sampling (LQAS) Supplemental Food Program for Women, Infants, and Children, 232,256 Surveillance for Equity, 20-21, 25 Susser, Mervyn, 5 Sussman, Elliot J., 266 Sustainability, 201-10, 319 evaluation and expansion, 209 funding, 203-8

human resources, 204, 207 integration, 207 leadership, 203, 209–10 management, 208–9 public-private sector, 205–6 scaling up, 206–7 technology, 204 *See also* Scaling up

### Т

Taylor, Carl E., 8, 20, 113, 118, 122, 125, 136, 170, 180, 196, 316, 318 Taylor, Henry G., 113, 217, 289, 316 Taylor-Ide, Daniel, 119, 170, 180, 196 Technology, appropriate, 6-7, 129, 204, 313 Teen pregnancy, 231 Tetanus, neonatal, 132-37, 145 Thailand Basic Minimum Needs, 205 benchmarks, 23 HIV/AIDS, 218, 320 Thomas, C., 218, 219 Tibet, 119-20, 127 Tietz, Michelle, 258 Tipping factor, 265 Tobacco settlements, 264 Tollman, S. M., 290 Toxins, 227 Toynbee, Arnold, 44 Traditional birth attendants (TBAs), 132, 176 Training, 218–19 "community orientation," 218 Mayo Clinic, 241-44 partnerships, 283-85 service learning, 215 Tuberculosis, 41, 315

### U

Uganda, 320 UNICEF, 6, 207 United Hospital Fund of New York, 228 United Mine Workers of America, 292 United States, 205, 206, 319 causes of death, 227-28 community participation, 317 COPC in, 224-25 HIV/AIDS, 320 hospitalization rates, 228 Mental Health Movement, 302 US Preventive Services Task Force, 229 Universities and public health, 282-87, 290-98, 314 University of Heidelberg, 302, 303 University of New Mexico, 291 University of North Carolina (UNC), 292 University of Texas Southwestern (UTSW) Medical Center, 248 US Agency for International Development (USAID), 154 "Use of Health Service Facilities in Medical Education, The," 216

### v

Valadez, Joseph J., 169, 171, 173n, 174, 178, 182, 183, 190n, 192, 194, 195 Van Ginneken, J., 66 Vargas, W. V., 194 Vaughn, J., 130 Vector control, 5 Vertical programs, 7, 9, 165, 207; defined, 325 Vietnam, 131, 140–46 Village Development Committees (VDCs), 175 Village Health Workers (VHWs), 8–9, 53–54, 176 Village organization (VO), 64–65 Villegas, H., 170 Viravaidya, Mechai, 320 Vitamin A deficiency Bangladesh, 40–41 Nepal, 123

#### W

Walsh, J. A., 137 West Virginia Healthy People 2010, 217 West Virginia University, 292–98 Department of Community Medicine, 292-96 Health Sciences Center, 293-95 HSTA, 297 partnerships, 291-92 RHEP, 296-97 Why Things Work, 136-37 WIC program, 232, 256 Williams, G., 88 Wollinka, Olga, 144 Women BRAC, 63 Chakaria (Bangladesh) project, 104 education, 318 Female Community Health Volunteer program, 123, 176 gender bias, 51, 68, 72-73, 79 Jamkhed (India) program, 53-58 violence against, 71-72 as village organization members, 65 Wood, C. H., 130 World Health Organization (WHO), 229, 310 EPI, 314 Framework for Assessing Health System Performance, 19-20, 24 Safe Communities model, 254

Wright, Graham, 109 Wyon, John, 3, 6, 7, 38, 44, 114, 152, 170, 312

# Y

Yahia, Mohammad, 103 Yen, Jimmy, 4, 116 Yoder, Richard A., 41 Young, Mark J., 266

# Z

Zaza, S., 282 Zeitlin, Marion, 146 Zimmerman, B., 265

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