Data for Decision Making Project
Cooperative Agreement No. DPE-5991-A-00-1052-00
United States Agency for International Development

Final Report

Overall Lessons Learned

Report on Project Activities

October 1, 1999 through June 30, 2000

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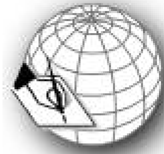

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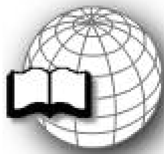

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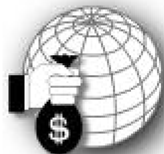

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Profile

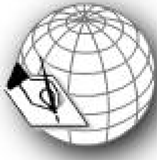
The Data for Decision Making (DDM) Project was a USAID-funded cooperative agreement that supported the development and application of tools and methods to improve national health policies through better application of data to policy design and assessment. The project was established in 1991 at Harvard University as a consortium with the Research Triangle Institute and Intercultural Communication, Inc. Faculty and research staff at Harvard's School of Public Health lead teams that include subcontractors with special analytical skills as well as participants from host countries.

Funding for DDM was through the Office of Health and Nutrition, Health Policy Reform Division, United States Agency for International Development under Cooperative Agreement number DPE-5991-A-00-1051-00. The program also received significant supplemental funding through USAID's Africa Bureau and the Latin America/Caribbean Bureau as well as several country missions including USAID/Egypt, USAID/Poland, USAID/Bolivia, and USAID/Ecuador.

DDM's mission was to help decision-makers in developing countries use and adopt appropriate tools and methods for the collection and analysis of data to improve the design, implementation, and evaluation of health sector policies. DDM worked closely with decision-makers at both the regional and national levels as they acquired and used data on which they based national health policies.

During the course of the project, which lasted nine years (1991-2000), DDM conducted basic and applied research in many countries around the world. Study topics included the organization of health systems; the role of government in providing health care; the public/private interface in health care delivery; the financing of health care; the demand for and utilization of health services; and the allocation of health care resources. The results of these studies made the DDM project a key component of USAID's efforts throughout the decade of the 1990s to improve health care delivery systems in developing countries and countries with transitional economies.

Director's Message



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The 1999-2000 fiscal year was the final one for the Data for Decision Making Project—completing nine years of work. Indeed, many of the project's long-term activities were brought to closure during this year with important results and significant lessons learned. The final nine months of the project (October 1, 1999 through June 30, 2000) increasingly emphasize reflection and synthesis along with writing and dissemination. We have learned a great deal through DDM and in the "Lessons Learned" section have seized the opportunity to crystallize that learning and highlight its results. But we have also taken care to assure that much of what has been accomplished will be sustained through ongoing IHSG activities. So this is truly our final report.

1999-2000 Highlights. The highlights of this year for DDM include:

DDM Close-Out Symposium. In March 2000, DDM held its final conference to share the results of our nine-years of work in the field of health sector reform and to help set the stage for the next decade of work. The all-day session was well attended by individuals representing many of the institutions active in the field. It was an expansive and constructive session with intense dialogue among the many panelists and members of the audience. With support from senior AID staff, we were able to address a variety of timely issues and topics in health sector reform, especially in the closing session in which members of the audience and panelists alike shared their concerns and views.

Applied Research in Latin America and the Caribbean. DDM closed out its participation in the Latin American and Caribbean Regional Health Sector Reform Initiative with the publication and distribution of a substantial number of research studies. The results included two sets of studies—one on decentralization and the other on the policy process of health reform. Each set included three country case studies, a synthesis report, and guidelines for policy makers.

Managed Care in Zimbabwe. DDM finished its project in Zimbabwe working with local medical aid societies on applying concepts and tools from managed care to help solve problems faced by local managers. In addition to developing materials for the workshop DDM organized in Zimbabwe, project staff completed a guidebook for managed care that further develops the approach of regarding managed care as a toolkit to be adapted and applied to local conditions.

I always like to close this message with a note of thanks to our supporters at USAID, both in Washington and the missions. I particularly recognize the great collaboration we have had with our COTRs, including Carl Abdou Rahmaan who guided us through the close out, and his predecessors, Katie McDonald and Jim Shephard. We would also like to thank the senior staff in the PHN Center who supported the DDM Close-out Symposium and made many valuable contributions.

Peter Berman, Ph.D.
Director

Lessons Learned

DDM's work over nine years included about 30 countries and a broad range of issues. Results and conclusions are described in detail in our approximately 130 project publications and a variety of other dissemination materials we have produced over this period. The DDM Symposium "Appraising a Decade of Health Sector Reform in Developing Countries" stimulated us to reflect further on overall lessons learned. The following section of this report provides a final opportunity to summarize key findings and their implications. We have organized this according to a selected set of major themes, followed by lessons learned regarding specific elements of health reform on which DDM worked.

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General Topics

1. Health Sector Reform: What Have We Learned?

For most of the last decade (1990-00) the DDM Project worked to create and use evidence for the design and management of health sector reform in lower income countries. We began this effort in the early 1990s, a period of great interest and excitement in health reform, led by active reform programs in many European countries. In the U.S., the debates over the "Clinton Plan" were raising awareness of health systems issues. The World Bank's World Development Report in 1993 focused new energy on health in developing countries and highlighted many systems issues.

DDM helped USAID put health reform on the PHN radar screen with an international conference in 1993. That meeting defined "health sector reform" as strategic, purposeful change to improve *health system* performance. Strategic was used to mean reforms addressing significant, fundamental dimensions of health systems. Purposeful meant that reform should have a rational, planned basis, using evidence. This concept led directly to the development of DDM's work over the following 7 years. Country-based, regional, and core activities all focused on creating the tools and methods for analyzing health systems, designing change programs, and making evidence useful in the policy and implementation process.

At the conclusion of the project, we paused to step back and review what had been learned about health reform.

Major Types of Reform

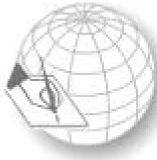
Our review of efforts at health sector reform in developing countries highlights three major types:

❶ "Imposed Reform" driven by changes external to the health system; i.e., the collapse of communist governments; major state reforms; and structural adjustment programs.

❷ "Big R" reform derived from strategic, purposeful reform programs that introduced change in two or more of the "control knobs"[1] affecting health system performance across several parts of the system.

❸ "Small r" reform—still strategic and purposeful, but more narrowly focused on only one "control knob" and only one part of the system.

[1] Hsiao, William. (2000) "Inside the Black Box of Health Systems." Program on Health Care Financing, Harvard School of Public Health: Boston, MA.



The Critique of Health Sector Reform

The term "health sector reform" has been widely used to title or describe projects in many countries. In recent years, strong criticism of reform has emerged, with researchers attributing negative impact on health and equity from national reform programs.

Our experience suggests that much of what has been criticized in health sector reform to date is the result of rushed efforts to respond to change imposed from without, not well-designed programs of system change. The critics may be correct about negative effects, but we disagree that these should be interpreted as challenges to the concept of well-planned and implemented health sector reform and system change.

Many African nations, for example, introduced user charges in public health facilities in the late 1980s and early 1990s, in response to falling real currency values and budget cuts resulting from structural adjustment. These responses were often labeled "health sector reform" programs and severely criticized for their negative impact on equity and failure to generate revenue. But can this imposed change be equated to health sector reform as strategic, purposeful change? We think not.

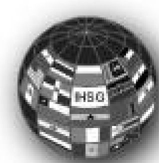
Have we really given health sector reform a chance?

We find that "Big R" reform is not that common in developing countries. Our list of "Big R" reform countries in the 1990s includes Colombia, the Czech Republic, Poland, China (parts), Zambia, South Africa, and the Philippines. On this list, only China and Zambia could be considered lower income countries.

This is not surprising. Major reform demands a great deal of information and evidence as well as substantial institutional and human capacity—conditions not available everywhere and at all times.

Although "little r" reform has been promoted as being simpler and more focused, international experience suggests otherwise. DDM studies of hospital autonomy programs in five developing countries showed that even change on this scale was often not successful. Translating autonomy goals into effective legislation and changed administrative rules was not straightforward, nor was the actual movement from *de jure* autonomy to *de facto* autonomy at the hospital level.

Our main conclusion from this review is that there is not yet enough evidence on the impact of well-designed reform programs in developing countries to draw strong conclusions about whether reform works. We have learned some important lessons from the experiences of the last decade, but they are not sufficient to provide us with a comprehensive assessment.



Can we ignore the need for system strengthening?

The critique of health sector reform should not discourage more and better work on system strengthening. DDM's work has highlighted several justifications for this, including:

- In many developing nations, the demand for better health systems is increasing, fueled by rising expectations resulting from income growth, better education, more information, and demographic change.

- Emerging health priorities and intervention technologies require better health systems to achieve success. We are moving beyond the "low hanging fruit" that could be picked by vertical interventions. New program priorities, like IMCI, reproductive health, HIV/AIDS, and resurgent infectious diseases like TB require health systems to work better.

The old models will not likely be up to the task. In short, it will simply not be possible to ignore the need for strengthened health care systems. We will need to strengthen the capacity to deal with the continuing health and epidemiological transitions; health priorities that demand more complex interventions; and the dim prospects for new or increased resources for the health sector in the immediate future.

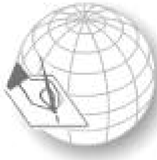
Additional Lessons Learned

❶ "Big R" and "little r" reforms require more serious efforts in building local capacity. Much more emphasis should be placed on organizational development and training in the implementation of reforms.

❷ "Little r" reforms, while seemingly less demanding, have also had mixed results. "Little r" reform does not eliminate the need for sound systems analysis.

❸ Health sector reform, big or little, cannot be developed from a single global or even regional policy formula. Nevertheless, we need to strive to identify those lessons and approaches that can be generalized to guide our efforts.

❹ Reformers have not always focused enough on the actual outcomes of reform— improvements in health, equity, financial protection, and patient satisfaction. We need to develop better monitoring and evaluation.



2. Developing an Evidence Base for Health System Change

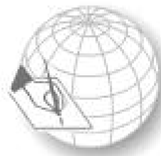
National and international organizations have become increasing aware of the need for better evidence on health and health systems in recent years. As part of this movement, DDM has been a leader in the development and application of tools and methods for analyzing health systems and their performance. DDM's "toolbox" includes national health accounts, political mapping for health policy, cost-effectiveness analysis for priority setting, and the "decision-space" methodology for analyzing decentralization and autonomy.

The World Health Report 2000 Health Systems: Improving Performance is the latest example of global attention to health systems and evidence about their performance. WHR 2000 highlights some of the progress made in developing an evidence base, particularly the work on health status measures (DALYs and DALES). But it also highlights some of the persistent gaps, including:

- NHA and health expenditure data is still lacking for most developing countries. Much progress has been made on this in the last several years.
- Evidence about the financial impact of health problems and health systems on households and nations is insufficient.
- Evidence about the organizational structure of health care delivery and health manpower is grossly lacking internationally. There is especially poor understanding about the role of the private sector.
- Information about consumer satisfaction and stakeholder views of health systems is inadequate.

  Based on the DDM and others' experience, we can highlight the following key lessons related to developing an evidence base on health systems.

- Developing better evidence is feasible and cost-effective. Many countries have available data that is poorly analyzed and used. NHA, for example, can be developed in a typical lower income country in 6-12 months at modest cost, including local capacity building.
- More needs to be done to develop sound and comparable measures of key health system characteristics, both in terms of outcomes as well as inputs and throughputs. The poor state of data on health care delivery is perhaps one of the most striking examples. The lack of information on system outcomes other than health status is another.
- With better information, we need to develop more systematic approaches to the use of evidence to answer pressing health system and reform questions. Better development of causal models of health systems, linking the determinants of performance with outcome measures is needed.
- Conceptual models and cross-sectional analysis are not sufficient as evidence to answer key questions about how to strengthen health systems for greater impact. More attention should be given to the evidence generated from field trials, natural experiments, and case studies.

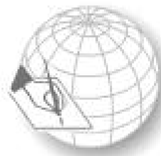


3. Using Data for Decision Making in Health System Change

DDM carried out three major country projects in Egypt, Poland, and Bolivia. In Egypt, DDM was given a broad mandate to develop an evidence base for health system analysis and the development of health reform strategies. In Poland, the project initially focused on analyzing health system interventions at the provincial and municipal levels and improving local capacity. Later, we were asked to participate actively in national policy debates about health reform. In Bolivia, DDM's work focused on the development of a national computerized information system and linking that system to executives in the government for more effective use.

DDM was created with the assumption that better data made accessible and useful to policy makers would result in better decisions. In the course of these efforts, some important lessons did emerge concerning the process of generating and using data for decision-making.

- Data and evidence should be seen as an "almost necessary" condition for policy improvement, but certainly are not a sufficient condition. Data and evidence *per se* do not create the motivation or capacity for sound decision-making, although they can help mobilize forces for change. Good policy decisions can be made in the absence of evidence, but evidence increases the chances of making sound decisions. System strengthening is a process that depends on solid evidence, routinely collected and analyzed.
- Adequate data and evidence for health sector reform does not have to be expensive. Most countries have a lot of information that is being poorly used. Natural experiments and other opportunistic designs offer many opportunities for developing useful evidence.
- Some evidence is better than no evidence. More is not always better than less (but it usually is).
- Local counterparts must participate in the process of design, collection, analysis, and presentation of evidence. If not, it is likely that decision-makers will not believe, accept, or use the results. There is mistrust of data generated by outsiders and presented from a "black box," especially if it appears to be leading to unpopular decisions.
- Investments in creating data and evidence must be linked with capacity-building investments in both government and non-government organizations, which creates the potential for a sustainable evidence base.
- Effective linkages are needed between micro-level and program-specific data (for example, on programs like EPI) and province or national-level health system policy. Health systems evidence and policy development needs to do better in terms of focusing on system changes that make a difference for health outcomes.
- It is possible to develop and maintain adequate information systems in developing countries accessible to national decision-makers and even global users of the world wide web.



4. Applied Research

Objectives of Applied Research

Applied research should provide strong evidence, that will stand up to serious scrutiny, to support the policy recommendations that technical experts and health reformers are making. It is no longer the case that we can assume that policy makers are unaware of the major arguments of health reform. Nor can we assume that policy makers are not skilled in assessing the technical quality of recommendations that consultants and advisors assistance make. In the health field both the educational level of policy makers and the experience they have had with failed "expert" recommendations make it even more important that high quality, credible research support these recommendations.

It is also important to demonstrate how policies will work in the diverse country (or regional) contexts in which they are initiated. Research designed to demonstrate the effectiveness and limitations of pilot projects in different environments is a major task.

Therefore, the central objective of applied research is to provide:

- High quality evaluation of key health reform issues
- Specific country assessments to see how general policies respond to different country contexts

Problems and Lessons from Applied Research in DDM

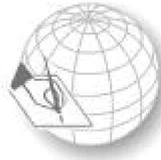
The DDM applied research studies have been specifically designed to answer key questions; e.g., about actual expenditure patterns using NHA data, about the effects of user fees on the provision of services, about the impact of decentralization, about costs of services, and about policy processes. Each required a significant investment of time in research design and in actual implementation of the studies. Many were comparative studies that showed uniformity across different contexts as well as differences in specific cases.

Opportunistic research—add-ons to projects with other objectives—may also be effective if there is sufficient investment in the research activity itself. These studies tend to place an important emphasis on base line data collection, both to produce evidence for country policy makers (as in the surveys DDM carried out in Egypt and Poland) as well as for later evaluation of impacts.

We have found evidence that our applied research is used in some policy processes (Bolivia, Egypt, Poland) as well as in training programs of the World Bank, USAID, and others.

Specific Topics

1. Decentralization of Health Systems in Latin America



Decentralization, which is being implemented in a growing number of countries, has been welcomed by many as a means of improving the equity, efficiency, quality, and financial soundness of health systems. It has also been feared by many as an invitation to chaos, disruption of effective priority programs, local patronage, and waste. Until recently there have been few studies that show whether the advocates or the detractors are right.

DDM, with funding from the LAC Health Sector Reform Initiative of the LAC Bureau, has completed an applied research project on decentralization in three countries—Chile, Colombia, and Bolivia—that have recent experience implementing policies in this area. The results of this comparative research provide useful guidance in evaluating the effectiveness of decentralization.

"Decision-Space" comparisons

The research was carried out with a "decision-space" methodology to determine the range of choice (from narrow to wide) that was allowed to local officials for different functions such as financing, service provision, human resources, and governance. We found that the “decision-space” varied among countries as well as over time within countries. The tendency was for countries to give wider choice initially, but to reduce the decision space over time. In Chile, for example, municipalities were initially allowed to determine salaries and to hire and fire staff. Eventually, however, many of the national civil service protections were restored, thus reducing the choice allowed municipalities.

In general, greater choice was allowed over contracting of private services and governance decisions, while the decision space for financial allocations tended to be moderate. Human resources, service provision, and targeting of priority programs usually remained centralized. This tended to limit local control over those functions most likely to affect the efficiency of health services.

Performance

In each country we developed a national database with a minimum of three years of data for municipalities in order to examine the impact of decentralization on equity, efficiency, quality, and financial soundness. The most important and reliable findings were related to changes in equity indicators at the municipal level.

In all three countries, we found that per capita health spending was increasing during the period of decentralization. In Chile and Colombia, although wealthier municipalities were spending more per capita than poorer municipalities, the gap between them was narrowing over time, resulting in more equitable allocations. In addition, per capita utilization

of health services was increasing and the gap between wealthier and poorer municipalities was also declining.

There are three important mechanisms that were likely responsible for greater equity of allocations. In Chile, there is a horizontal equity fund called the Municipal Common Fund, which reassigned up to 60% of the "own-source" revenues from the wealthier municipalities to the poorer municipalities using a formula based on population and municipal own-source income. In Bolivia, the mechanism is the earmarking of central government transfers to municipalities, which requires that 3.2% of these transfers be assigned to fund a priority benefits package for mothers and children. And in Colombia, there is a mechanism requiring that a minimum percentage of central government transfers be assigned to health in general by municipalities.

Since the formulae in the three countries for intergovernmental transfers were largely based on population, these various mechanisms appear to have resulted in more equitable spending patterns. We also found some evidence that these mechanisms were protecting priority programs. In Chile, the municipalities were only responsible for primary health care, so spending increases did not go to hospital-based care. In Colombia, a proportion of one type of intergovernmental transfer was assigned to prevention and promotion, which resulted in a doubling of per capita expenditures on these programs and a narrowing of the gap between wealthy and poor municipalities.

Conclusion

These research findings suggest that neither the advocates nor the detractors of decentralization policies are 100% right. In most cases, decentralization is neither likely to lead to radical improvement in a health system, nor to produce a disaster. However, forms of decentralization that include mechanisms to improve equity, like the Municipal Common Fund in Chile and the earmarking of central funds in Bolivia and Colombia, can definitely improve resource allocations and utilization.

The range of choice allowed to municipalities is quite limited for certain functions that might be needed to improve performance—such as hiring and firing, payments to providers, and decisions about health service norms. It seems likely that experimenting with wider decision space, and appropriate incentives for guiding those choices might be worth evaluating for their impact on efficiency and quality.

Finally, it is clear that central authorities need more accurate information about what is happening at the municipal level. This will enable them to develop monitoring systems in order to adjust the decision space, incentives, and use of central funding to achieve national policy objectives in health.

2. Policy Process and Politics of Health Reform

How do governments adopt major health reform programs?

Few countries have successfully made major systematic changes in their health systems, despite the wave of international interest in health reform. In Latin America, two countries have embarked on major reforms—Chile's private insurance reform in the early 1980s and Colombia's managed competition insurance reform in the early 1990s. By contrast, Mexico has experienced several attempts to initiate major reforms, none of which have been successfully implemented.

The DDM project, with support from the USAID LAC Bureau's Health Sector Reform Initiative, has studied these three experiences in order to develop lessons for the policy process of health reform in other countries. The studies have revealed significant similarities in the Chilean and Colombian "success stories"—factors lacking in the Mexican case that did not produce reform. Rather than evaluating the success or failure of the reform policy itself, the analysis focused on the political strategies that proved successful for the adoption of a significant reform.

Politics happens in all regimes

Political processes occur irrespective of type of regime. It is often argued, for example, that it should be easier to implement broad reforms in authoritarian regimes. They may be able to make decisions without having to respond to different interest groups that, in democratic systems, can often block reforms.

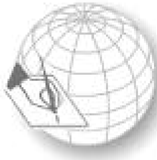
Contrary to this expectation, we found that reforms occurred in both democratic Colombia and in Chile during the Pinochet dictatorship, while the limited democratic regime of Mexico did not produce reforms.

Furthermore, we found that even within the restricted range of political actors in Pinochet's Chile, there was significant bargaining and negotiating among major stakeholders who were able to delay reforms as well as limit their scope during the adoption and implementation of the changes.

"Change teams" matter

We found a major factor in the success of reforms was that a relatively stable and coherent "change team" was formed. This team was formed with individuals drawn from, and with continuing links to, a macro-economic "change team" that had successfully developed policies of economic reform. The health sector change team was made up of technical experts with a coherent shared ideological commitment, but who did not primarily see themselves as politicians.

These change teams were supported by the presidents and other major political actors in both Chile and Colombia. Their members were drawn from the Ministry of Planning and the Ministry of Finance and had initially



worked on macro-level reforms and pension reforms, often with significant success.

Successful teams were initiated and recruited in a conscious effort, usually by cabinet level officials or their immediate subordinates. In some cases, members of the macroeconomic change team then turned their attention to the health sector and sent key members to work in the Ministry of Health. Mexico failed to produce reform, in part, because efforts to create a change team in health were frustrated by internal competition among key macroeconomic change team members over the anticipated selection of the next president.

Political strategies for reform

The health sector change teams pursued different strategies to get their policies adopted. One of their strategies was to isolate the change team from the broader political process until it had developed a significant, technically defined package of reforms. This strategy appears to have been more successful than the broad public debate that is often recommended before the development of a health reform package.

The reform package was then presented as a complete reform and as the president's own proposal for legislative attention. During the legislative process (which occurred even in the Pinochet dictatorship) the change team was able to overwhelm the opposition with well-developed technical arguments. It was important throughout for the change team to demonstrate full technical command of the issues and present evidence-based arguments. The team's own legitimacy and effectiveness in building and maintaining high-level support depended on credible rational arguments.

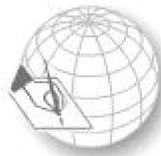
Lessons for USAID health reform efforts

The studies suggest the following lessons for major health reform efforts:

1. Develop support for health reform at **the presidency, cabinet, and in the planning and finance ministries**. Reform initiated only in the health sector is unlikely to have sufficient support to be pushed through the executive and legislative processes.
2. Pay attention to **recruitment of a like minded, technically competent "change team"** with strong vertical links to high-level officials and horizontal links to other sectors.
3. In political processes, **sound technical arguments and good data matter**. The legitimacy and effectiveness of change teams depend on their ability to marshal strong arguments based on credible data. This is the source of their power.
4. **Isolation of the change team in the formulation of policy** may be an effective strategy to create a single and coherent reform package that has the support of major political actors.

3. Health Care Management

Applying the Tools of Managed Care

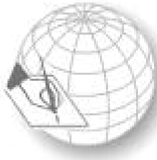


DDM worked for several years with medical aid societies in Zimbabwe. There non-profit organizations provide health insurance for approximately eight percent of the total Zimbabwean population. They suffer the same cost pressures as payers face around the world: technological change, provider demands for increased reimbursement, and consumer demands for the latest treatments, which are difficult challenges to meet in any country. In addition, approximately twenty-five to thirty percent of the adult population of Zimbabwe is infected with HIV, and the resulting AIDS epidemic has already effectively reduced the population growth rate to zero. Also the country is facing both political and economic crises that have combined to seriously reduce the ability of governments and private companies to pay increased premiums for health insurance for their employees.

A number of medical aid managers in Zimbabwe have looked to managed care in the United States for solutions to their increasingly untenable position between rising costs and declining ability to pay. In the past many "managed care" international assistance programs were framed as "health maintenance organization" experiments. Overseas managers sought (and assistance agencies offered) information on the various models of HMOs developed in the U.S. The Zimbabwean managers and their American counterparts in this project found this approach to be inappropriate. First, the marked political, economic, and social differences between the two countries meant that such a technology transfer based upon organizational models (e.g. HMOs to PPOs) would at best probably be "off the mark," and in the worst-case scenario be potentially harmful. Second, such a "broad brush" approach obscured a much more fruitful model, that of perceiving managed care as a "tool-bag" of useful concepts and skills for improving health system performance.

Our managed care experts offered the following "tool-bag" of concepts and tools to the Zimbabwean managers:

- Primary care provider (PCP)
- Enrolled population (panel)
- Broad coverage
- Selected provider network
- Budget for total cost of care
- Performance incentives
- Active care management (including clinical care guidelines as well as disease and utilization management)
- Communication and education
- Continuous measurement and improvement.



The Zimbabwean managers believed that among their most serious problems were fraud and abuse. Both doctors and beneficiaries were gaming the system in ways that sent costs spiraling out of control. Beneficiaries, for example were sharing cards with friends and relatives and visiting myriad primary care and specialist physicians for the same problem. Meanwhile providers were billing the companies for exorbitant numbers of visits (as many as 120) per day. The medical aid managers involved in our project decided that while they might be interested in most of the managed care concepts and tools over time, they needed to begin by focusing upon the relationship between patients and primary care physicians. They designed an experimental plan that for the first time assigned every member in the plan to a single primary care physician. The plan requires that all subsequent care be managed (by referral) by the PCP. The patients are receiving increased drug benefits as an enhancement, and the physicians are receiving a small fee to compensate them for their PCP responsibilities.

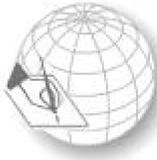
It is too soon to measure the effectiveness in the above pilot project. It is clear, however, that the managed care assistance model described above is a substantial improvement over the organizational model too often used in previous international assistance programs.

Quality Improvement

DDM focused on the issue of quality improvement in societies undergoing a transition from communism to a more democratic system in our long-term project in Poland in the late 1990s. DDM staff worked with the city government of Krakow where policy-makers decided that the city was ready for reform in social services. The goals of this reform would be to increase consumer satisfaction with city-owned and managed health services, while not measurably increasing city expenditures. Krakow City was responsible only for outpatient facilities both in primary and specialty care, for diagnostic as well as treatment purposes.

The larger issue the project faced had to do with the national movement for health sector reform. Providers, especially physicians and nurses, were increasingly agitated about their low government salaries and were organizing for strikes and demonstrations at government offices throughout the country. Ordinary citizens were upset that government health services were still mired in the Communist era delivery mode that had been eclipsed in most other sectors of the economy. Increasingly they were utilizing a rapidly growing private sector despite the often-high fees charged by the doctor-owners. Voters let their now democratically elected national and local government officials know of their frustration in the ballot box.

The first major lesson learned was that motivation to improve consumer quality could be enhanced by decentralizing the health system structure. Krakow city health officials took advantage of the traditional “ZOZ” structure to create four relatively autonomous management structures. A fairly high level of autonomy was granted to each ZOZ manager concerning both financial and budgetary matters, as well as organizational strategy. Second, the city invested in a system to measure



consumer satisfaction. They utilized the expertise of the Harvard School of Public Health, as well as the Polish Institute for Health Care Quality based in Krakow. Together, experts from both organizations designed face-to-face survey tools that could provide cost-effective baseline information, as well as feedback on the success or failure of the changes made. Third, the Krakow health officials raised public awareness of the changes made through regular weekly television shows, posters exhibited throughout the city, and articles in the local print media. This step included the creation of a contest among the outpatient clinics in the city where individual citizens voted for the best facility.

At the facility level we learned again about the importance of quality outcome measures to effective management. The surveys have now been repeated with basically the same questions on three different occasions in Krakow. These surveys have been put to use by the ZOZ (clinic network) and individual clinic managers, as well as by city officials.

We learned that all of the above can combine to produce increased consumer satisfaction with health services. This result was documented by the repeated surveys mentioned above. Objective measurement of the success or failure of reforms is all too often missing in the reform processes. This is especially difficult in health care which, given its complexity, is more difficult than other services to measure. The Krakow results did appear to provide further impetus for the reform movement at the national level. We also learned that effective pressures to improve consumer satisfaction bring to the surface "staff" barriers to change that must be dealt with. For example, managers in one ZOZ took down the heavy wooden barriers that separated consumers and receptionists in the outpatient facilities. Some receptionists were outraged by the development. They filed an official protest with the city and with their union officials. Changing the system and introducing autonomy and incentives to senior managers is not sufficient; fundamental change requires attention to people issues down to the lowest paid person on staff.

Transition from Bureaucratic Administration to Strategic Management

DDM worked for four years in Poland on health sector reform issues, first working with local government officials, and later with policy-makers and senior managers at the national level. The reforms in Poland included the introduction of increased autonomy to individual health care facility managers. This strategy was part of a larger set of policies designed to introduce greater responsiveness to the health care system, and to diversify the sources of financing.

Increased autonomy has been introduced to Polish health care managers over the past few years, in both outpatient and inpatient facilities. The program, entitled "independent unit" certification, was at first offered on an experimental basis, and then became required of all facilities by the Health Insurance Act that took effect on January 1, 1999.

In the highly centralized Polish health care system that was in effect from the 1950s, managers largely enforced rules established by their superiors, ultimately determined by top bureaucrats in Warsaw. Policy makers, through health reform, want to replace these "bureaucratic administrators" with "strategic managers." They want health care managers to be as motivated and performance-driven as their peers in other sectors.

The DDM research found that the "independent unit" program suffered from a lack of clear goals and indicators that made it difficult to provide a comprehensive set of directives and support services to facilitate the change. It was also difficult to assess. The interviews with facility managers found that they had indeed gained some increased measure of autonomy, but that most of the managers were not taking advantage of these new freedoms.

We developed a number of hypotheses drawn from our experiences, admittedly early on in the Polish health reform process. First, both policy-makers and individual managers need to pay more attention to the goal and objective-setting process. They need to formulate a vision of what success will look like, and how it will be measured in objective ways. Second, senior officials need to focus upon the organizational change process. They have not established an effective process for determining which health care managers are capable of making the revolutionary change in thinking and acting that they seek. Nor have they adequately dealt with incentives (financial and otherwise) and other key ingredients (length of contracts, etc.) that will guide the performance of managers. Finally, they have not made the investments in training and education in health care management that they must to make this strategy effective.

Polish health care managers need to learn many skills (e.g. strategic planning, financial management, marketing, information systems) that were not previously required. New managers also need to be recruited from the private sector, individuals who can provide role models to others staying and making the transition within health. It is not well known that the British made extensive investments in health care management in the 1980s before embarking on the reforms of the 1990s. The Griffith NHS Management Inquiry of 1983 was necessary to provide the foundation, and provide the expertise necessary for the system changes introduced later by the Thatcher and Blair governments. Similar investments, adjusted for Polish realities, will be required in Poland.

4. Understanding the Supply Side in Priority Service Delivery

Despite decades of public investment in priority public health services, it is a striking fact that in many developing nations the majority of these services are NOT provided by the primary care facilities that were created for this purpose. For most priority problems in many countries, non-government providers and even public hospitals are the major source for interventions like primary treatment of major diseases such as diarrhea, tuberculosis, and sexually transmitted diseases, and even for important preventive services such as antenatal care.

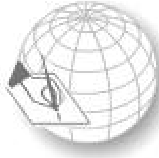
USAID has been the leading donor working internationally that has recognized this important fact. USAID programs in many countries include strong components designed to work with non-government providers to enhance quality and coverage of priority services.

Over the life of the DDM project, we have completed a number of activities to develop the evidence base on the organization of health care delivery for priority services and to advance the application of this knowledge to improve health policies. These activities include:

- Development of methodologies and tools, including rapid assessment of the role of the private sector (Berman and Hanson, DDM Report No. 9) and analysis of the organization of ambulatory care at a system level (Chawla, Berman, Windak, and Kulis, DDM Report No. 73).
- Applied research on the size, composition, and functioning of private and public health care facilities in Kenya, Zambia, Egypt, and Poland.
- Policy dialogue and design of reform strategies in these countries, especially with more in-depth policy design and implementation in Egypt and Poland.
- Advancing international awareness of these issues through journal publications and conference presentations.

In reviewing this experience, there are a number of important lessons learned:

1. There is growing widespread awareness of the importance of diverse health care providers in priority services that this could be a major factor in expanding the coverage and impact of these services in many countries. New evidence, including many studies developed through DDM, indicates that some of the widely held views about non-government provision may be incorrect. Non-government providers in many countries account for much if not most of contacts for priority services. They reach into rural areas and serve lower income groups in both rural and urban areas, and they account for a major share of health spending. Even within government services, there could be better understanding of the relative roles of hospitals, primary care facilities, and community-based services. In general, these have received far too little attention in public health policy. They have



important implications for health outcomes, financial protection of the poor, and public satisfaction.

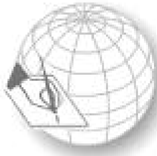
2. There is still insufficient evidence to quantify the significance of this situation and to mobilize policy attention to address it. International and national statistics on health care delivery and organization are grossly inadequate. Some of the key gaps are:

   a. Lack of a standard typology or nomenclature for measurement of the organization of health care delivery
   b. Lack of representative data on the technical quality of care and implications for health outcomes for different provider types and different priority services, to assess the potential health impact of reform strategies.
   c. Insufficient understanding of the determinants of utilization patterns which motivate consumers to use non-government providers even when free or low cost public services are available.

   There is need and scope for major new efforts in this area, in collaboration with international organizations like WHO and the World Bank.

3. While USAID has been a leader in working with non-government providers through its projects, its focus has largely been limited to the services emphasized in each project; for example, family planning services, control of diarrheal diseases, respiratory infection control and treatment, etc. This approach has limited the scope for reform to address underlying system factors that cut across several different types of interventions. Such factors could include the overall regulation of non-government provision or human resource policies in the public sector that affect multiple practice of government health workers. Our work suggests that more effort should be put into these crosscutting issues.

4. In addition to the need for better evidence, there is a need for more field-based innovation and experimentation to develop and test new approaches to making health care work better. The agenda should include reforms of organization and governance in public sector health care, as well as regulation and quality insurance in non-governmental service provision. Increasing the role of communities should also be part of this agenda.



5. Health Information Systems

DDM developed a general conceptual and technical framework for a Management Health Information System (MHIS), which was implemented by a DDM subcontractor, Informed Decisions, Inc., in two countries: Bolivia and El Salvador. Both systems have been adopted by the respective Ministries of Health, and have been functioning for over a year without any external technical assistance, and with little or no external financial assistance. Both systems are accessible through the web pages of the two ministries (WWW.SNS.GOV.BO for Bolivia, and WWW.MSPAS.GOB.SA for El Salvador), which were also developed with technical assistance by the DDM project. Thus, the first "lesson learned" is that it is possible to develop sustainable information systems in developing countries, under certain conditions.

The Management Health Information Systems implemented in Bolivia and El Salvador have the following characteristics:

- Integrated: They integrate the different information subsystems under one common technical platform, with an interface that allows users to access all the subsystems from one screen and analyze data from all subsystems in an integrated fashion.

- Direct access and easy to use: Non-technical users have direct access to all the data bases and can easily find the data they need as well as define their own tables, indicators, and graphs. The systems can be accessed through several entry points: local area network (LAN), modem, or Internet. (For the technically-minded: the results can also be disseminated in the form of OLAP hypercubes to users with no connection to the server(s) hosting the data bases).

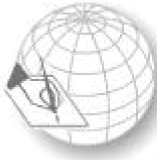
- Interactive: An easy to use interface allows users to find the data they need, select different sub-populations, make different comparisons, and construct their own tables and graphs.

- Management capabilities: The systems permit monitoring of timeliness and completeness of data reporting, evaluation and improvement of data quality, and updating on a regular basis of the different databases.

- Open and transparent: The MHIS maximizes direct access by all relevant users to all the data. This results in well-informed stakeholders, promotes consensus building for health sector reform, and facilitates monitoring of progress.

- Flexible: The basic system can be easily adapted to different local conditions and needs, as can be seen in the Bolivian and Salvadoran applications. It can be implemented both at the national and regional levels, with built-in coordinating capabilities at the central level.

- Sustainable: As can be seen at the respective web sites, the MHIS is both technically and financially sustainable.



During the implementation of the MHIS, DDM employed the following strategic principles, which can be read as “lessons learned” in practice:

1) Instead of starting from scratch, build on the existing MHIS. Once the system is implemented, further measures can be gradually taken to improve the different subsystems and increase the efficiency of the whole system.

2) Develop a general plan for the integrated MHIS, but implement the different subsystems in stages, according to a set of priorities defined by the client, instead of trying to do it all at once. Have at least one subsystem working in a short time period, which can be used to start training technical users and building political support from the leadership of the institution.

3) Involve users at all levels and local technical staff in the process from day one. Make hands-on training an integral part of implementation.

4) Look for opportunities to collaborate with other donor agencies and projects working in related areas, to complement efforts and leverage resources.

Other Lessons Learned

1) One of the first implementation steps should be an in-depth evaluation of all the existing MHIS and the information needs of the different users. Many users (or potential users) do not have a clear idea of the data available, and they may have strong beliefs about the quality and/or relevance of the existing data.

2) Based on this evaluation, develop a general plan for an integrated MHIS with a list of information subsystems and a schedule of implementation. User's input should be a key component, both in terms of the type of data to be collected, outputs to be generated, and of testing the "user-friendly" characteristics of the system.

3) The need to have a basic national MHIS covering the whole health sector was clearly demonstrated in both countries.

4) A good MHIS can help to fight the battle to reduce the amount of data being collected. Much of the data being collected was unnecessary and it became very clear that the time required to fill out all these forms was an unacceptable misuse of scarce resources.

5) One of the most difficult problems was the fact that different HIS were managed by different departments, with little coordination and no common standards.

6) Once part of the MHIS was in place, technical users will tend to have positive reactions to the system. But success with higher level decision makers tends to be more modest, as the idea of using data as a daily tool for decision making is alien to many of them.

Some Recommendations

Our experience has shown that it is possible to develop and implement a sustainable modern MHIS in developing countries. The MHIS has helped to make better decisions, improve the quality of health services, rationalize the use of scarce resources, and start developing a "data culture" in the whole health care system. In both countries the process was not completed due to lack of continuity.

However, the MHIS in Bolivia and El Salvador remain somewhat incomplete. The projects ended before the process of integrating all the planned information subsystems was completed. Our experience has shown that the lack of understanding of the importance of continuous information systems is not exclusive to local professionals and executives, it also affects donor agencies. The level of resources allocated to information systems in most health projects is not adequate. Continuous information systems require time and resources to build and need to be developed within a general framework, not on a piecemeal and ad hoc basis.

At the technical level we have shown that it is possible to develop within a reasonable time frame a "data culture" that is fairly sustainable; the real problem is at the higher levels of decision making. Sustainable progress will not be achieved unless external requirements compel them to improve their management capabilities, with information requirements similar to those applied in the financial area.

An effective strategy for developing a "data culture" requires two elements external to the health sector. The first element is that donor agencies need to build into the projects reporting and monitoring requirements, which necessitate the existence of continuously operating information systems that meet certain standards. General plans for integrated MHIS need to be built into the projects, with the necessary time frame and resources. The current piecemeal approach is neither effective nor efficient. One strategy might be for one donor agency to take the technical lead for the whole MHIS area in a country, with close collaboration from the other agencies with health projects in the country.

The second element is to strengthen the connection between the MOH and the government agency responsible for allocating resources to the health sector. The MHIS should be able to provide the financial entity the auditing elements for evaluating how the resources are spent, and the MOH the tools for a more efficient monitoring of their resources and activities. It is almost a certainty that with a good MHIS most ministries can make more efficient use of available resources, and prepare well-documented requests for badly needed additional resources. An MHIS that is open and transparent provides the necessary checks and balances for reducing the effects of the political pressures customary in these decisions. An integrated, national, open and transparent MHIS is also a prerequisite for any meaningful initiative for health sector reform.

Staffing

During the reporting period (Oct. 1, 1999 – June 30, 2000), numerous Harvard faculty, technical, and support staff have worked on the various country and regional projects under DDM. All of the projects active during the past fiscal year in the various global regions have been completed.

DDM had a compact and efficient staffing structure, with each project being led by a capable technical expert. Regional oversight was maintained through senior members of the IHSG staff, who participated in the close-out of the project.

Staffing and
Partnerships
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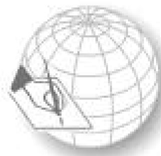
Staffing by Region/Activity for the Period 10/1/98 through 9/30/99

Region/ Activity	***Team Leaders***	***Faculty Collaborators & Research Staff***	***Other Staff and Consultants***
Latin America/ Caribbean	Thomas Bossert	Alejandra Gonzalez-Rossetti Diana Bowser Mukesh Chawla	Patricia Ramirez Olivia Mogollon Tomas Chuaqui Carlos Cruz-Rivero Elena Carrera Osvaldo Larranaga Antonio Infante Joel Beauvais Consuelo Espinosa Ursula Giedion Jose Jesus Arbelaez Alvaro Lopez Villan Fernando Ruiz Mier Scarlet Escalante Marina Cardenas Bruno Guisani Katherina Capra John Massey Ricardo Bitran
Poland	Paul Campbell	Peter Berman Thomas Bossert Mukesh Chawla Ann Lawthers	
Africa	Peter Berman	Paul Campbell Alessandro Magnoli	Arlen Collins Karen Quigley Pano Yeracaris Priya Bery Alan Fairbank



Region/ Activity	***Team Leaders***	***Faculty Collaborators & Research Staff***	***Other Staff and Consultants***
Administration	Seedang Simonin James Ito-Adler Nerissa Majid		Katherine Anderson Nicola Cummings Al Robinson Geraldine St. Louis

Staffing Report by Region/Activity: Personnel working for the Data for Decision Making program during the report period are listed by activity. The staff list does not include sub-contractors or other non-Harvard payroll.

Partnerships

DDM always sought to identify and work with qualified collaborators in developing projects, implementing solutions, and disseminating results. The accompanying list includes those institutions that worked closely with us during the final reporting period. Past partners in collaborative relationships during the project have included:

- the Institute for Policy Studies (Sri Lanka)
- the National Institute for Health Services (Indonesia)
- the University of Zimbabwe
- Data Processing Services Co. (Egypt)
- the Cairo Demographic Center (Egypt)
- the African Medical & Research Foundation (Kenya)
- the University of Ghana
- the Institute of Health Systems (India)
- Unidad de Análisis de Políticas Sociales (Bolivia)
- the Institut National de Santé Publique (Côte d'Ivoire).
- University of California, Berkeley
- Encuestas y Estudios (Bolivia)
- Institute for Qualitative Studies
- John Snow, Inc.
- Data Processing Services
- Universidad de Chile (Chile)

Collaborating Institutions

Several major DDM projects, particularly those funded by the Africa and LAC bureaus, asked us to give attention to local capacity building and institutional strengthening. Sometimes, this objective was difficult to fulfill, given limited funding and short time periods available for specific activities. But we always successfully sought local collaborators for field studies and subsequent policy dialogue. Some of these relationships have been sustained through ongoing projects or through other Harvard opportunities, including as our educational and training programs.

Collaborating Institutions during the Period 10/1/99 through 6/30/00*

Region	***Collaborating Organization***
Latin America/Caribbean	Informed Decisions, Inc.
Poland	Jagiellonian University

* Subcontractors and in-country organizations participating in the Data for Decision Making program, but not on Harvard payroll, are identified in this chart.

Country and Regional Activities

Eastern and Central Europe

Poland

The Data for Decision-Making Project first became involved in health sector reform in Poland in FY 1996. From the outset DDM worked through a partnership with the Jagiellonian University School of Public Health based in the southern city of Krakow. The two universities created the *Harvard – Jagiellonian Consortium for Health*. The Consortium, (as well as many other local government and provider partners spread across the country) was united by the common goal of improving the quality and efficiency of health care in Poland.

The Consortium was initiated at the close of 1995 and was funded through June of 1999, and later extended through December 1999. Its first work plan revolved around technical assistance in both policy and management provided at the local government level. This focus resulted from the fact that in 1995 officials in both the Polish Ministry of Health and the local USAID mission believed the real potential for system change was at the municipal government level. The situation has evolved as the central government in Warsaw has taken a stronger leadership position.

Health sector reform has both been enabled and made more challenging by rapid and substantial change in all areas of Poland's economy and society. In January, 1999 the national Health Insurance Act was implemented following many years of debate (often including DDM input). On the same day new regional (or provincial) and county-level governments were put in place, the educational system was transformed, and the national pension system was revised. The national government, many local governments and a large share of the electorate are open if not impatient for change. That was a powerful enabler for the Consortium's efforts to reform the health system. The challenge faced by the project was that fundamental elements of the health infrastructure, such as the regional or local governments that are very involved in the new health system, were only then being constructed. It was difficult for the new leaders to manage complex change processes while simultaneously hiring staff, ordering stationery and equipping new offices.

The Ministry of Health sought to reform the health sector according to the following principles:

1. *Decentralization*: Since the initial political changes of 1989 many responsibilities previously under the total control of the central government have been devolved to local authorities. Responsibility for outpatient primary and specialty care services, as well as in some cases inpatient care, was transferred to large cities and local government service zones. In a further dimension, strategic authority previously held by central government officials was granted to managers of officially "independent" (and relatively autonomous) health institutions, including hospitals and ZOZs.

Decentralization has now been taken a step further with the development of regional insurance funds. Planning, coordination and accountability to a large degree have been passed to these new bodies.

2. *Separation of payer and provider*: The new regional health insurance funds are not providing services, as the central government had done under the previous (Communist) system. The regional funds from the outset are contracting with services provided by hospital, physicians and other providers of care.

3. *Market and market like-incentives*: Policy initiatives have reflected the government's multi-sector acknowledgment of the need for organizational and individual economic incentives in order to gain widespread and sustainable improvements. With the separation of payers and providers, local government health authorities began to take advantage of the opportunity to compensate providers on a performance basis.

The Consortium, based upon an examination of international experience, strongly supported those principles, and attempted to facilitate their implementation in many ways.

1. *Being involved in the policy-making process.* Through involvement in the Ministry of Health, selected *gminas*, zones, and municipal government associations, as well as direct contact with both elected and appointed government at all levels, project participants have influenced legislative and executive (regulatory) activity. A DDM contract extension to December of 1999, and a subsequent new contract with the USAID Mission through June 30, 2000, financially facilitated the extension of this effort.

   Working with the Ministry of Health, the new regional health insurance authorities and local governments to develop and test models of health delivery. The Consortium assisted Krakow Gmina, for example, as it developed and implemented a strategic plan applying all three of the above listed principles to its local health system. Later, DDM shifted the focus of its technical assistance from local governments to the regional insurance units and the Ministry of Health. In March of 1999 the leaders of three of the more advanced regional funds came to Boston with our Jagiellonian colleagues for a strategic planning workshop. This mirrored the planning previously completed for the local government in Krakow.

   The Consortium also initiated a series of conferences for the so-called "16X4+1" group of organizations. This was an attempt bring together the significant players in each region for discussion of key topics. Attendees represent the regional insurance fund, the *voivod* (regional governor), the city health department, and the national government.

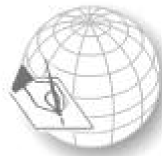
2. *Increasing managerial capacity at all government levels*. Throughout the evolution of the health system the Consortium sought to improve the capacity of the leaders. This includes officials responsible for financing and regulation as well as those responsible for the provision of care. Project experts, from both the United States and Poland,

provided on-site consultation and training, as well as workshops in a variety of relevant areas, including: provider contracting, cost accounting, planning and control methods, quality monitoring and policy analysis. Manuals on these subjects were prepared for publication and are available for use throughout Poland.

During the years it was in operation the DDM Poland project made a number of important contributions to small-scale improvements:

1) contributed a great deal of expertise and manpower to extensive health sector reform in Krakow City;
2) project staff developed some of the initial tools and analysis for the rational design of hospital and physician payment systems in collaboration with colleagues in Krakow City and Voivodship and the Suwalki Voivodship;
3) studied patient satisfaction and perceptions of quality of care in Krakow City and Leczyca;
4) developed substantial new capacity in Poland to train Polish health financing and care managers in new concepts and tools;
5) contributed to the strengthening of national associations of local governments;
6) contributed to some of the first efforts to assess and measure such new issues for the Polish health system as household spending and preliminary estimates from NHA on the importance of private and informal spending;
7) contributed to the development of individual leaders whose expertise and experience will have an impact for years to come; and
8) reached out in an effort to develop a learning network with other countries in the region actively engaged in the health sector reform process.

For a more detailed discussion of the background and accomplishments of the DDM Poland Project, please see, “Strengthening Polish Central and Local Government in Health Sector Reform and Management: Final Project Report Covering the Period: December, 1995 – December, 1999.”



Africa

Ethiopia

In June 20-27, 2000, DDM collaborated with local counterparts from the Government of the Federal Democratic Republic of Ethiopia (FDRE), and the USAID Mission to work on completing 1996 National Health Accounts (NHA) report and disseminating its results. They also worked on preparing for the potential next step of implementing regional health accounts on a disaggregated basis, possibly developing a projection model of the Ethiopian health system.

The NHA activity was intended to support the FDRE and donor efforts to strengthen the public health care financing program and to improve the FDRE's capacity to monitor and measure the impact of health care financing reforms. The NHA team has carried out the study with technical assistance from the Data for Decision Making (DDM) Project. It was decided by the team to obtain data for 1996 as this is the most recent year for which a relatively complete set of data—including a household survey—was available.

DDM provided technical assistance and worked with NHA team members appointed from the Ministry of Health (MOH) and the Ministry of Development and Economic Cooperation (MODEC) on several items:

- NHA 1996 data review and analysis;
- preliminary work on possible regional health accounts using a disaggregated approach to data compilation and analysis, including a possible projection model; and
- preparation for a dissemination workshop held on June 26-27, 2000 in Nazreth, Ethiopia.

The two-day NHA workshop was organized with the goal of disseminating the NHA methodology and uses and the 1996 results in Ethiopia. Senior FDRE officials were invited as well as senior representatives of the Ethiopian Regional Governments (ERG). The idea was to inform the ERG about the initiative and to have them developing Regional Health Accounts (RHA).

Findings

The Income, Consumption, and Household Expenditure Survey, which is conducted every four years by the Central Statistical Authority (CSA), was just completed and the results were being tabulated. The results of the 1996 Survey were used as the basis for private health expenditure estimates in the NHA. One unresolved question stemming from that survey is that overall per capita household expenditure estimates were at least twice the level of estimates of per capita household income—

estimated using standard national income accounts methods--during the same period. The discrepancy and the implication for the NHA estimates has not yet been satisfactorily explained, but it is an issue which will have to be looked at more closely when results of the current survey are analyzed.

There is considerable interest among regional officials in implementing regional health accounts (RHA) using a disaggregated approach to data compilation. It is hoped that financing can be found to support the training required to take advantage of this interest.

There is the possibility that support for RHA could complement proposed support of development of a projection tool (computer-based model) for estimating future values of national health accounts (as proposed by the ESHE Project's health financing adviser.

Zimbabwe

Beginning in 1998 the Data for Decision-Making Project provided technical assistance for medical aid societies in Zimbabwe. These non-profit societies are the only significant organized payers for health care services outside of the government. Their enrollees account for approximately eight percent of the total population of Zimbabwe.

The DDM Zimbabwe project worked most extensively with CIMAS, one of the country's two largest medical aid societies. CIMAS was responsible for approximately half a million people. DDM staff and consultants helped CIMAS adopt measures to improve the efficiency with which it operates. During the period of the project, the company hired the first-ever medical director in the country to follow up on the DDM recommendations, and members of our project staff were involved in his orientation.

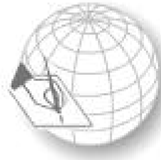
DDM support reached beyond the assistance provided to CIMAS. The project provided a number of training programs aimed at physicians as well as the leaders of other medical aid societies. A guidebook was drafted for use in future training programs and as a general resource on managed care development. To reach beyond CIMAS, the DDM Zimbabwe project staff coordinated their efforts with the National Association of Medical Aid Societies (NAMAS).

During the reporting period, DDM was involved in a number of activities:

- Carried out training on managed care, organized by the National Association of Managed Aid Societies (NAMAS). The participants included physicians and administrators from outside CIMAS, especially those from smaller medical aid societies.

- Consulted with CIMAS on managed care products, and supported the new Medical Director with training and technical assistance.
- Completed the final work on the Guidebook on Managed Care.

- Development of an article to be submitted on managed care.
- Presentation on Managed Care in Zimbabwe at the DDM Close-Out Symposium in Washington, DC in March, 2000.



Latin America/Caribbean

DDM teams supervised by Dr. Thomas Bossert implemented two multi-country applied research projects designed to:

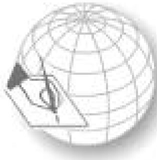
- evaluate the process and impact of decentralization of health systems
- analyze the policy process of health reform.

Results from the studies of decentralization in Chile, Bolivia, and Colombia suggest that decentralization as implemented in these countries may not have resulted in major changes in performance of health systems. An innovative equalization fund in Chile appears to have moderated the tendency for richer communities to allocate more funding per capita to health than do poorer communities. In Bolivia, where the enforcement capacity of the central government is weak, those communities that do follow the rules of decentralization appear to be doing better than those that made decisions beyond their official "decision space." In Colombia, the decentralized municipalities appear to have higher levels of utilization than do municipalities that have not yet been decentralized.

The studies of policy processes of health reform in Chile, Colombia, and Mexico suggest that a crucial element is the formation of a politically protected "change team," able to provide both technical and bureaucratic support for the reform. The role of the political economic context of a corporatist system in transition toward more democratic practices and the changes in the normal process of policy making appear to have played a significant role in limiting reform in Mexico.

The decentralization studies were used in developing a Module on Decentralization for the World Bank Flagship Course on Health Reform in Washington, D.C. and in China. The innovative approach, "Decision Space Analysis," has been published in *Social Science and Medicine*. There has been strong demand for the decentralization Concept paper from DDM publications and on the DDM Website. The approach is also being used in a Major Applied Research study carried out in Zambia under the Partnerships for Health Reform project.

The policy process of health reform studies were presented in workshops in Chile and Mexico and were discussed in a conference on policy processes in social sectors at the Overseas Development Council in June 1999.



Latin America/Caribbean Regional Health Sector Reform Initiative.

The Latin America Equitable Access Initiative that emerged from the Summit of the Americas in 1994 has evolved into a clearly defined series of objectives and activities to be implemented in a coordinated manner by three USAID CAs—DDM, PHR, and FPMD—and PAHO. USAID's LAC Bureau is providing funding for this four-year effort, now denominated the Latin America and Caribbean Regional Health Sector Reform Initiative, that is designed to promote and assess the progress of sustainable health reform in the region. The DDM contribution was finalized during this past reporting period.

Thomas Bossert led this initiative for DDM and coordinated the activities with PHR and PAHO. DDM's responsibilities in the LAC HSRI were specifically to develop an applied research program in two major areas:

1. Decentralization case studies to develop rapid assessment tools, applied research methodology for evaluating processes and impact of decentralization, and guidelines on decentralization policy.

2. Comparative analysis of policy process to enhance the political feasibility of health reform in Latin America.

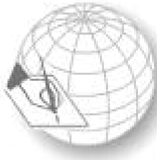
Applied Research on Decentralization of Health

Decentralization is a major initiative of health reform throughout the Latin American and Caribbean region. While there were many descriptive and proscriptive reports on decentralization in selected countries, there had not yet been detailed studies of the process and impact of decentralization. It was particularly important to determine how decentralization processes can be designed and implemented so that the broader goals of health reform—equity, efficiency, quality of services, and financial soundness—can be achieved. Despite decades of promotion of the idea of decentralization, there are few countries that have actually transferred significant authority and funds to their municipal and regional governments to run local health services.

The objective of the applied research studies was to develop a methodology to systematically describe the processes and impacts of decentralization on central and local governments and to draw lessons from a small set of case studies. These lessons were then used to draft guidelines for designing and implementing decentralization processes in the health sector in other countries. They have also been used to prepare teaching materials for training in decentralization such as the World Bank Flagship Course and a planned PAHO training module.

DDM implemented studies on the experiences of three countries in Latin America—Chile, Bolivia, and Colombia—which have decentralized their health systems over the past decade. These studies attempted to answer three basic questions: how much authority and responsibility is actually transferred to local decision makers? What choices do these local officials make when they have increased authority and responsibility? How effective have their choices been in improving equity, increasing the quality of care, and achieving efficiency and financial

soundness? The concept paper for these studies, "Decentralization of Health Systems: Decision Space, Innovation and Performance," was prepared by Thomas Bossert and was presented at a seminar at the Global Bureau of USAID in June, 1999. The paper is available from the publications office at DDM. An article based on this paper was published in *Social Science and Medicine.*



The first study was been completed in Chile, one of the pioneer countries in decentralization with has over ten years of experience with primary health care services that are operated at the municipal level. A team of highly qualified local researchers at the University of Chile helped revise the final report and prepared a local seminar on the results.

The second study was being implemented in Bolivia where, for the past three years, local governments have had significant control over the investment budgets in all sectors. The local research team was comprised of economists and public health analysts with long experience in the sector.

The third country study was undertaken in Colombia, where municipal governments have had control of primary care and some hospitals since 1994. The research team had been part of the health reform technical assistance group at the Ministry of Health. The national level data base that the team assembled is remarkably rich and has been analyzed for the report. It provides the most complete data source on health reform and decentralization in the three studies.

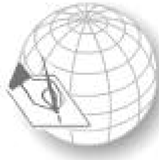
Preliminary results were presented by Dr. Bossert in seminars for LAC PHN officers in Miami and at the Global Health Council in June 1999. The final results from these studies were presented in a DDM seminar held in June 2000 in Washington, DC. Using the decision-space approach developed by Thomas Bossert, the studies on decentralization found that the "decision space" available to local authorities varies considerably from country to country as well as over time within each country. The prevailing tendency is to allow moderate choice in allocations and contracting, narrow choice in human resources and service norms, and wide choice in local accountability and community participation. The single most important finding was that inequalities in per capita health expenditures among wealthy and poor municipalities in the three countries were narrowing over time during the period of decentralization. This seems to be due to two important mechanisms: a horizontal equalization fund among municipalities in Chile, and forced assignments of fixed percentages to health of intergovernmental transfers based on per-capita formula in Bolivia and Colombia.

These results have been incorporated in the World Bank Flagship Course on Health Reform and Sustainable Financing and were presented in the LAC regional course in Santiago, Chile in June, 2000 as part of collaborative effort involving the World Bank, DDM, and the LAC HSRI.

Comparative analysis of policy process

For the last decade and a half, several countries in the Latin America Region have embarked on a period of governmental reform with

consequences for their social, political, and economic spheres. The definition of the problems to be solved, the means to solve them, as well as the speed and scope of policy change are all contentious issues as they each affect the interests of different groups and individuals. As a result, the political dimension of health reform formulation and implementation has come to the forefront as a key factor in determining the feasibility of health policy change as well as its final outcome.



A careful analysis was needed of the political context and policy process within which health reform initiatives have evolved in countries that have enjoyed varying degrees of success in initiating and implementing reform. This brought to light important lessons for the formulation of political management strategies to increase the political feasiblity of current health reform efforts in other countries in the region.

DDM prepared a concept paper which combined political economic, institutional and stakeholder approaches to policy analysis. It also introduced an innovative approach, analysis of the “change team,” to the research. The three country study includes Chile, a country with a long period of implementation of a health reform; Colombia, which has implemented a wide ranging reform; and Mexico, which has only recently attempted to initiate reforms. The findings suggest that “change teams” are crucial to the effectiveness of reform adoption and implementation, that bureaucratic politics are important even in a military dictatorship, and that wide participation in the policy process may not be related to success.

The major research was implemented by Alejandra Gonzalez Rossetti, under the direction of Thomas Bossert, who presented preliminary findings at a conference on policy process of social sector reforms at the Overseas Development Council in 1999.

The research on policy process highlighted several critical issues. The first was the difficulty and rarity of major health reform coupled with the importance of having “change teams” of politically connected technocrats in several key ministries in those instances where major reform did occur. Another important factor in implementing major health reform was the carefully calibrated involvement of other stakeholders (not going for wide participation so much as selecting potential supporters).

The mid-term LAC HSRI evaluation team found that in Honduras—a country where the preliminary results of the decentralization and policy process activities had been disseminated— policy teams were aware of the concepts presented and were using them to move toward implementing some of the recommendations.

Other evidence of results was the use of the framework by Fernando Lavadenz, the head of Bolivia's health reform team. This was done in a meeting with Ministry officials, donors, and university professors during the presentation of the results of the Bolivia study. Lavadenz learned of the “decision space” approach as a participant in Thomas Bossert’s decentralization module in the November Flagship Course in Washington.

For a listing of the research reports produced under this initiative, please refer to the Publications section of this Final Report. They are available through the IHSG website: www.hsph.harvard.edu/ihsg/ihsg.html or the LAC HSR Initiative web page: www.americas.health-sector-reform.org

Conferences and Training Courses

The DDM Project held its final symposium, "Appraising a Decade of Health Sector Reform in Developing Countries," at the International Trade Center in Washington, D.C. in March, 2000. Over 125 participants registered and attended the all-day symposium along with the members of the three major panels and speakers at the opening and closing sessions, bringing the total attendance to almost 150.

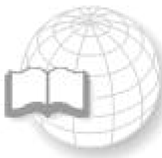
The Symposium drew from a wide range of organizations—donors, multilateral funders, international health agencies, CAs, consulting firms and major projects, universities, NGOs, and independent consultants. Staff from a wide range of offices and bureaus at USAID attended, including senior leaders from the Center for Population, Health and Nutrition. The World Bank, IADB, and PAHO were also represented.

Panels/Sessions

The panelists were equally diverse with speakers and presenters from USAID, Harvard School of Public Health, Abt Associates, Global Health Council, Informed Decisions, Inc., and the Ministry of Health/Poland. The first session was chaired by Paul Ehmer (AID/W) and the opening remarks by Duff Gillespie (AID/W) set the stage for a lively discussion of critical issues in health sector reform. Gillespie stressed the point that the AID is vitally interested in gaining a strong voice among the global leaders in health sector reform and is moving to enhance the Agency's role in the policy debates that are currently underway.

Peter Berman, Director of IHSG and of the DDM Project, then responded with a retrospective analysis of the past decade of health sector reform in developing countries. He emphasized the role of research that is comparative and long-term as we learn from past experience in order to improve our future efforts. He also drew a distinction between Big "R" reform that is strategic, purposeful change involved several parts of the health system and small "r" reform that is still strategic and purposeful, but limited and more narrowly focused.

This distinction was the basis for two of the panels. The first was **Major Country Reforms: What Have We Learned?**, chaired by Paul Campbell (HSPH), which presented case studies of countries that have undergone major health sector reform: Colombia by Thomas Bossert (HSPH); China by William Hsiao (HSPH), Zambia by Sara Bennett (PHR/Abt), and Poland by Andrzej Rys (MOH/Poland).



This was followed by a panel on **Reform with a Small "R": Some DDM Experiences**, chaired by Thomas Bossert (HSPH). Presentations included "Translating Managed Care to Zimbabwe" by Paul Campbell (HSPH), "Executive Health Information Systems in Bolivia" by Oleh Wolowyna (ID), and "Developing an Evidence Base for Egypt" by A.K. Nandakumar (PHR/Abt).

The DDM work over the past decade was also featured in a panel on selected tools and activities of the project. Michael Reich (HSPH) reported on "Applied Political Analysis," Peter Berman (HSPH) discussed

“Launching National Health Accounts as a Global Tool,” and Mukesh Chawla (World Bank) delivered a paper on “Analyzing Health Care Provision” based on his work with DDM in Poland.

The Conference ended with the **Closing Session: System Reform or Incremental Change?**, chaired by Peter Berman (HSPH). Each of the four speakers—William Hsiao (HSPH), Nils Daulaire (Global Health Council), Nancy Pielemeier (PHR/Abt), and Robert Emrey (AID/W) addressed the themes that had emerged earlier in the day. This led into an exciting and far-ranging discussion with spirited participation from the floor and among the panelists.

Publications

The Data for Decision Making Project (DDM) has produced and distributed over 130 technical publications over the lifetime of the project. During the current reporting period, members of the project staff have been extremely active in disseminating the results of DDM work around the globe. In this section we highlight the output in the current fiscal year as well as include a complete listing of DDM Reports over the life of the project. There are several categories of output including DDM Reports, *Issue Briefs*, and publications under the Latin America and Caribbean Regional Health Sector Reform Initiative.

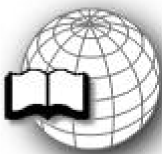
DDM *Issue Briefs* are succinct accounts that communicate important findings of our research and experience on critical issues in health sector reform. The intended audience includes key health policy makers, counterparts in countries where we work, and colleagues in the field of international public health. The six *Issue Briefs* in circulation include:

1. Policy Process of Health Reform in Latin America
2. Decentralization of Health Systems in Latin America
3. Enhancing Managerial Autonomy in Polish Health Facilities
4. Provider Market Analysis and the Health Sector in Transitional Economies
5. Public Relations in Health Sector Reform: The Krakow Experience
6. A Decade of Health Sector Reform: What Have We Learned?

We published eight additional DDM Reports during FY 2000, which brings the total to 109, including translated versions in French and Spanish.
(for the complete list see pp. 42)

DDM Report No. 73. Provision of Ambulatory Health Services in Poland: A Case Study from Krakow
Mukesh Chawla, Peter Berman, Adam Windak, and Marzena Kulis, March 2000

DDM Report No. 74. Unpredictable Politics: Policy Process of Health Reform in Poland
Thomas Bossert and Cesary Wlodarczyk, January 2000



DDM Report No. 75. Managed Care Guidebook
Karen Quigley, Arlen Collins, and Claudia Corra, March 2000

DDM Report No. 76. Privatization and Payments: Lessons for Poland from Chile and Colombia
Tom Bossert, March 2000

DDM Report No. 78. Public Relations in Health Sector Reform: The Krakow Experience
Paul Campbell, Andrzej Rys, and Witoslaw Stepien, June 2000

DDM Report No. 84. Applying Managed Care Concepts and Tools in Zimbabwe
Paul Campbell, Karen Quigley, Arlen Collins, MacDonald Chaora, and Pano Yericaris, June 2000

DDM Report No. 85. A Decade of Health Sector Reform in Developing Countries: What Have We Learned?
Peter Berman and Thomas Bossert, March 15, 2000

DDM Report No. 86. Prioritizing Children's Health Care Needs: The Egyptian Experience With School Health Insurance
A.K. Nandakumar, Michael R. Reich, Mukesh Chawla, Peter Berman, and Winnie Yip

DDM also successfully completed its participation in the Latin America and Caribbean Regional Health Sector Reform Initiative with the publication and distribution of 15 reports stemming from two major applied research projects. These publications are available through IHSG as well the LAC HSRI web site: www.americas.health-sector-reform.org

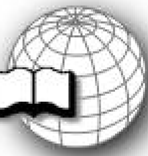
17. **Decentralization of Health Systems: Decision Space, Innovation, and Performance**
    Thomas J. Bossert, November 1999 (concept paper)
    (previously issued as DDM publication No. 54)

18. **Comparative Analysis of Policy Processes: Enhancing the Political Feasibility of Health Reform**
    Alejandra González Rossetti and Thomas J. Bossert, November 1999 (concept paper)

29. **Decentralization of Health Systems in Latin America: A Comparative Study of Chile, Colombia, and Bolivia (English and Spanish)**
    Thomas J. Bossert, June 2000

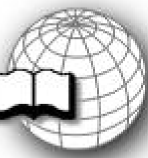
30. **Guidelines for Promoting Decentralization of Health Systems in Latin America (English and Spanish)**
    Thomas J. Bossert, June 2000

31. **Methodological Guidelines for Applied Research on Decentralization of Health Systems in Latin America**
    Thomas J. Bossert, June 2000



32. **Applied Research on Decentralization of Health Care Systems in Latin America: Colombia Case Study**
    Thomas J. Bossert, Mukesh Chawla, Diana Bowser, Joel Beauvais, Ursula Giedion, Jose Jesus Arbelaez, Alvaro Lopez Villan, June 2000

33. **Applied Research on Decentralization of Health Systems in Latin America: Chile Case Study**
    Thomas J. Bossert, Osvaldo Larrañaga, Antonio Infante, Joel Beauvais, Consuelo Espinosa, and Diana Bowser, March 2000



34. **Applied Research on Decentralization of Health Care Systems in Latin America: Bolivia Case Study**
Thomas J. Bossert, Fernando Ruiz Mier, Scarlet Escalante, Marina Cardenas, Bruno Guisani, Katherina Capra, Joel Beauvais, and Diana Bowser, June 2000

35. **La Descentralización de los Servicios de Salud en Bolivia**
Thomas J. Bossert, Fernando Ruiz Mier, Scarlet Escalante, Marina Cardenas, Bruno Guisani, Katherina Capra, Joel Beauvais, and Diana Bowser, June 2000

36. **Enhancing the Political Feasibility of Health Reform: A Comparative Analysis of Chile, Colombia, and Mexico (English and Spanish)**
Thomas J. Bossert and Alejandra González Rossetti, June 2000

37. **Guidelines for Enhancing the Political Feasibility of Health Reform in Latin America**
Thomas J. Bossert and Alejandra González Rossetti, June 2000

38. **Methodological Guidelines for Enhancing the Political Feasibility of Health Reform in Latin America**
Thomas J. Bossert, June 2000

39. **Enhancing the Political Feasibility of Health Reform: The Colombia Case**
Alejandra González Rossetti and Patricia Ramírez, April 2000

40. **Enhancing the Political Feasibility of Health Reform: The Chile Case**
Consuelo Espinosa, Tomas Chuaqui, and Alejandra González Rossetti June 2000

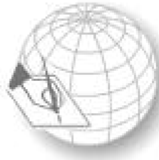
41. **Enhancing the Political Feasibility of Health Reform: The Mexico Case**
Alejandra González Rossetti, Olivia Mogollon, Carlos Cruz-Rivero, and Elena Carrera June 2000

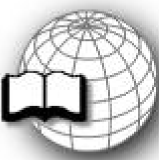
DDM Publications continue to be in high demand. The top ten most frequently requested publications were:

1. **DDM Report No. 85. A Decade of Health Sector Reform in Developing Countries: What Have We Learned?**
Peter Berman and Thomas Bossert, March 15, 2000

2. **DDM Report No. 80. The Relative Importance of Price and Quality in Customer Choice of Provider: The Case of Egypt**
Winnie Yip and Aniceto Orbeta, September 1999

3. **DDM Report No. 31.2. Experiences with Resource Mobilization Strategies in Five Developing Countries: What Can We Learn?**
Mukesh Chawla and Ravindra Rannan-Eliya, May 1996





4. **LAC HSRI Report No. 29. Decentralization of Health Systems in Latin America: A Comparative Study of Chile, Colombia, and Bolivia**
   Thomas Bossert, June 2000

5. **DDM Report No. 31. Resource Mobilization: Methodological Guidelines**
   Mukesh Chawla and Peter Berman, August 1997

6. **DDM Report No. 32. Improving Hospital Performance through Policies to Increase Hospital Autonomy: Methodological Guidelines.**
   Mukesh Chawla and Peter Berman, August 1996

7. **LAC HSRI Report No. 31. Methodological Guidelines for Applied Research on Decentralization of Health Systems in Latin America**
   Thomas J. Bossert, June 2000

8. **DDM Report No. 7.1. Democracy and Democratization in Developing Countries**
   Stanley Samarasinghe, July 1994

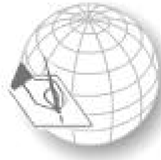
9. **DDM Report No. 42. Resource Mobilization for the Health Sector in Sri Lanka.**
   Ravindra Rannan-Eliya, Nishan de Mel, Daya Samarasinghe, Harsha Aturupane, Hema Wijeratne and Research International (Pvt.) Ltd., February 1997

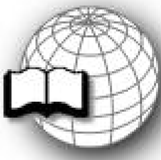
10. **DDM Report No. 38. Hospital Autonomy in Zimbabwe.**
    Jack Needleman and Mukesh Chawla, July 1996

Since July 1998 Nicola Cummings the IHSG Webmaster and Technology Specialist has been working to make the publications available to be downloaded directly from our web site. This has resulted in a sharp decline in requests for publications by mail even while the overall demand has grown. Between 1999 and 2000, for example, 3,898 publications were requested—3,130 were downloaded directly from the web site and 668 were mailed out in hard copy. This has not only shortened the period between requesting and receiving of publications, but it has also reduced the cost of production and mailing.

Copies of DDM publications are available upon request from:

International Health Systems Group
Department of Population and International Health
Harvard School of Public Health
665 Huntington Avenue
Boston, MA 02115 USA
Telephone 617-432-4610
FAX 617-432-2181
WWW http://www.hsph.harvard.edu/ihsg/publications.html





Data for Decision Making Publication Series

1. **Human Resources Planning: Issues and Methods**
   Riita-Liisa Kolehmainen-Aitken, July 1993 (no longer available)

2. **National Health Accounts in Developing Countries: Improving the Foundation.**
   Ravindra Rannan-Eliya and Peter Berman, August 1993

2S. **Cuentas Nacionales de Salud: Mejorando los Bases Metodológicos.**
   Ravindra Rannan-Eliya y Peter Berman, 20 de Octubre de 1995

3. **Health Sector Reform in Africa: Lessons Learned**
   Dayl Donaldson, March 1994 (no longer available)

4. **Poverty Measurement for Russia: A Briefing Paper**
   Patricia Langan, March 1994 (no longer available)

5. **Selecting an Essential Package of Health Services Using Cost-Effectiveness Analysis: A Manual for Professionals in Developing Countries.**
   Logan Brenzel, July 1993

7. **Democracy and Health Series: An Overview of Issues Presented in Four Papers.**
   Michael Reich, January 1994

7.1. **Democracy and Democratization in Developing Countries**
   Stanley Samarasinghe, July 1994 (no longer available)

7.2. **Democracy, Communism and Health Status: A Cross-National Study**
   Ramesh Govindaraj and Ravindra Rannan-Eliya, March 1994 (no longer available)

7.3. **Democratization and Health: Implications for MOH Policies**
   Charlotte Gardiner, February 1994 (no longer available)

7.4. **PVOs and NGOs: Promotion of Democracy and Health**
   Adrienne Allison and James Macinko, November 1994 (no longer available)

8. **Political Mapping of Health Policy: A Guide for Managing the Political Dimensions of Health Policy.**
   Michael Reich, June 1994

8.1. **PolicyMaker Computer Aided Political Analysis: Improving the Art of the Feasible Ver. 2.0.**
   Michael Reich and David Cooper, 1996

9. **Assessing the Private Sector: Using Non-Government Resources to Strengthen Public Health Goals: Methodological Guidelines.***
Peter Berman and Kara Hanson, February 1994

10. **Health Resources Planning Model (HRP): User's Guide and Software.**
Oleh Wolowyna, Gustavo Angeles and Erin Newton, October 1993

11. **A General Cohort-Component Population Project Model in Host (NPROJ): User's Guide and Software Ver. 3.5.**
Oleh Wolowyna, Gustavo Angeles and Erin Newton, October 1993

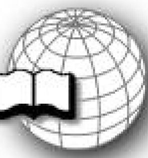
12. **Conference Report - Health Sector Reform in Developing Countries: Issues for the 1990s, Durham, NH, September 10-13, 1993**
Peter Berman and Julia Walsh, Editors (no longer available)

13. **Workshop Proceedings - Using Demographic and Health Survey Data for Health Sector Reform, Boston, MA, August 2-20, 1993**
Allan Hill and David Anderson (no longer available)

14. **Egypt: Health Sector Brief**
Dayl Donaldson, November 12, 1993

15. **Summary of Proceedings - Consultation on the Private Health Sector in Africa, Washington, DC, September 22-23, 1993**
Peter Berman and Kara Hanson (no longer available)

17. **Workshop Report: Using Cost-Effectiveness Analysis to Identify a Package of Priority Health Interventions, Ismailia, Egypt, July 3-7, 1994**
Julia Walsh and Hassan Salah (no longer available)

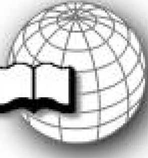


17.1. **Workshop Report: Using Cost-Effectiveness Analysis to Identify a Package of Priority Health Interventions, Port Said, Egypt, January 8-13, 1995**
Julia Walsh and Hassan Salah (no longer available)

18. **The Role of Private Providers in Maternal and Child Health and Family Planning Services in Developing Countries: Analysis of DHS Data from 11 Countries.**
Laura Rose and Research Triangle Institute, November 1994

19. **Zambia: Non-Governmental Health Care Provision.***
Peter Berman, Kasirim Nwuke, Ravindra Rannan-Eliya and Allast Mwanza, January 12, 1995

*/ Reports Health and Human Resources Research and Analysis project (HHRAA) of USAID's Africa Bureau



20. **Kenya: Non-Governmental Health Care Provision.***
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23. **Case Studies of Mosque and Church Clinics in Cairo, Egypt.**
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24. **Proceedings of Zambia National Conference on Public/Private Partnership for Health, Siavonga, Zambia, June 8-11, 1995.***
Kasirim Nwuke and Abraham Bekele (no longer available)

25. **National Health Accounts of Egypt.**
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25S. **Cuentas Nacionales de Salud: El Caso de Egipto.**
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26. **Egypt: Strategies for Health Sector Change.**
Peter Berman, Michael Reich, Julia Walsh, A.K. Nandakumar, Nancy Pollock, Hassan Salah, Winnie Yip, Nihal Hafez and Ali Swelam, August 1995

27. **Health Budget Tracking System - Phase I Pilot Study Results: Alexandria 1992/93.**
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28. **Health Budget Tracking System - Phase I Pilot Study Results: Bani Swayf 1992/93.**
Gordon Cressman and Oleh Wolowyna, April 18, 1995

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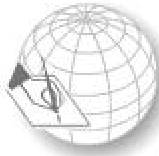
*/ Reports Health and Human Resources Research and Analysis project (HHRAA) of USAID's Africa Bureau

29. **Health Budget Tracking System - Phase I Pilot Study Results: Suez 1992/93.**
Gordon Cressman and Oleh Wolowyna April 18, 1995



30. **Workshop Report - Cost and Cost-Effectiveness of Health Services, La Paz, Bolivia, May 9-11, 1995**
Julia Walsh and David Anderson (no longer available)

31. **Resource Mobilization: Methodological Guidelines.***
Mukesh Chawla and Peter Berman, August 1997

31F. **La Mobilisation des Ressources: Guide Méthodologique.***
Par Mukesh Chawla et Peter Berman, Août 1996

31.1. **Developing and Implementing a Resource Mobilization Strategy.***
Mukesh Chawla and Peter Berman, September 1996

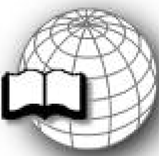
31.1F. **Stratégie de Mobilisation des Ressources: Développement et Mise en Oeuvre.***
Mukesh Chawla et Peter Berman, Septembre 1996

31.2. **Experiences with Resource Mobilization Strategies in Five Developing Countries: What Can We Learn?***
Mukesh Chawla and Ravindra Rannan-Eliya, May 1996

31.2F. **Expériences en Matière de Mobilisation des Ressources dans Cinq Pays en Développement—Que Peut-on en Tirer?***
Mukesh Chawla et Ravindra Rannan-Eliya, Mai 1996

32. **Improving Hospital Performance through Policies to Increase Hospital Autonomy: Methodological Guidelines.***
Mukesh Chawla and Peter Berman, August 1996

32F. **L'Autonomie Hospitalière: Guide Méthodologique.***
Mukesh Chawla et Peter Berman, Août 1996



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Mukesh Chawla and Ramesh Govindaraj, August 1996

32.1F. **L'Autonomie Hospitalière: Guide de Mise en Oeuvre.***
Mukesh Chawla et Ramesh Govindaraj, Août 1996

32.2 **Recent Experiences with Hospital Autonomy in Developing Countries-What Can We Learn?***
Ramesh Govindaraj and Mukesh Chawla, September 1996

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32.2F. Récentes Expériences en Matière d'Autonomie Hospitalière dans les Pays en Développement – Que Peut-on en Tirer?*
Ramesh Govindaraj et Mukesh Chawla, Septembre 1996

33. School Health Insurance --The Experience in Egypt: A Case Study.
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34. Workshop Proceedings: First Health Budget Tracking System Workshop, Cairo, Egypt, June 18-20, 1995
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36. National Health Accounts in Developing Countries: Appropriate Methods and Recent Applications
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36S. Cuentas Nacionales de Salud: Métodos y Aplicaciones.
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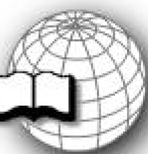
David H. Collins, Grace Njeru and Julius Meme , June 1996

38. Hospital Autonomy in Zimbabwe.*
Jack Needleman and Mukesh Chawla, July 1996

39. Hospital Autonomy in Indonesia.*
Thomas Bossert, Soewarta Kosen, Budi Harsono and Ascobat Gani, April 1997

40. Hospital Autonomy in India: The Experience of APVVP Hospitals.*
Mukesh Chawla and Alex George, July 1996



41. Hospital Autonomy in Ghana: The Experience of Korle Bu and Komfo Anokye Teaching Hospitals.*
Ramesh Govindaraj, A.A.D. Obuobi, N.K.A. Enyimayew, P. Antwi and S. Ofosu-Amaah, August 1996

42. Resource Mobilization for the Health Sector in Sri Lanka.*
Ravindra Rannan-Eliya, Nishan de Mel, Daya Samarasinghe, Harsha Aturupane, Hema Wijeratne and Research International (Pvt.) Ltd., February 1997

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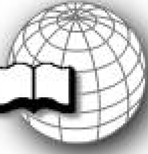

43. **Resource Mobilization for the Health Sector in Bolivia.***
Marina Cárdenas Robles, Jorge A. Muñoz and Mukesh Chawla, July 1996

44. **Resource Mobilization for the Health Sector in Senegal.***
Moustapha Sakho, Malick Cisse, Laurence Codjia, Soumaïla Compaore and Mukesh Chawla, August 1996

44F. **Etude des Stratégies de Mobilisation des Ressources dans le Secteur de la Santé: Le Cas du Sénégal (Premier Draft).***
Moustapha Sakho, Malick Cisse, Laurence Codjia, Soumaïla Compaore et Mukesh Chawla, Août 1996

45. **Resource Mobilization for the Health Sector in Zimbabwe.***
Charles Normand, Glyn Chapman, Oliver Mudyarabikwa, Mukesh Chawla and Jack Needleman, December 1996

46. **Resource Mobilization for the Health Sector in Côte d'Ivoire.***
Ministry of Public Health and the National Institute of Public Health, Côte d'Ivoire, September 1996

46F. **Mobilisation des Ressources de Santé en Côte d'Ivoire (Premier Draft)***
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47F. **L'Autonomie Hospitalière: Sommaires des Expériences de Cinq Pays.***
Septembre 1996

48F. **La Mobilisation des Ressources: Sommaires des Expériences des Etudes.***
Septembre 1996

49. **Health Budget Tracking System – Egypt Phase I: Final Report**
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50. **Health Budget Tracking System – Egypt Phase I: Software Guide**
Gordon Cressman, October 1996 (no longer available)

51. **Popular Partcipation in Bolivia**
Oleh Wolowyna, August 1996 (no longer available)

52. **Health Care Utilization and Expenditures in the Arab Republic of Egypt**
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53. **Egypt Provider Survey Report**
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54. **Decentralization of Health Systems: Decision Space, Innovation and Performance**
Tom Bossert, March 1997

55. **Initiatives in Health Care Financing: Lessons Learned, HHRA/DDM East/Southern Africa Regional Workshop Proceedings Harare, Zimbabwe May 26-29, 1997**
Mark McEuen, et al, August 1997

56. **Cost Analysis and Efficiency Indicators for Health Care: Report Number 1 Summary Output for Bani Suef General Hospital, 1993-1994**
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57. **Cost Analysis and Efficiency Indicators for Health Care: Report Number 2 Summary Output for Suez General Hospital, 1993-1994**
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58. **Cost Analysis and Efficiency Indicators for Health Care: Report Number 3 Summary Output for El Gamhuria General Hospital, 1993-1994**
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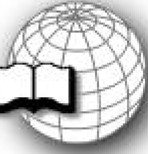
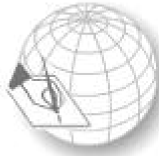


60. **Quality of Outpatient Services, Krakow Gmina**
Ann G. Lawthers and Bogdan S. Rózanski, May 1998

61. **Health Care Options for Polish Municipalities: The Implications of International Experience**
Marc Roberts and Thomas Bossert, May 1998

62. **Notes on Health Sector Reform in Poland**
Peter Berman, Andrzej Rys, Thomas Bossert, and Paul Campbell, May 1998

63. **National Health Insurance in Poland: A Coach without Horses?**
Peter Berman, April 1998



64. **Poland Health Policy: Democracy and Governance At Local Levels In International Perspective**
Thomas Bossert, May 1998

65. **Financing Health Services in Poland: New Evidence on Private Expenditures**
Mukesh Chawla, Peter Berman, and Dorota Kawiorska, April 1998

66. **Economics of a Family Practice in Krakow**
Mukesh Chawla, Tomasz Tomasik, Marzena Kulis, and Adam Windak, April 1998

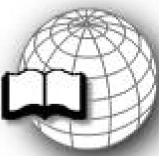
67. **Enrollment Procedures and Self-Selection by Patients: Evidence From a Family Practice in Krakow, Poland**
Mukesh Chawla, Tomasz Tomasik, Marzena Kulis, Adam Windak, and Dierdre A. Rogers, April 1998

68. **Innovations in Provider Payment Systems in Transitional Economies: Experience in Suwalki, Poland**
Mukesh Chawla, Peter Berman, and Dariusz Dudarewicz, May 1998

69. **Physician Contracting in Suwalki**
Dariusz Dudarewicz and Mukesh Chawla, April 1998

70. **Paying the Physician: Review of Different Methods**
Mukesh Chawla, Adam Windak, Peter Berman, and Marzena Kulis, February 1997

71. **Contracting Family Practice in Krakow: Early Experience**
Adam Windak, Mukesh Chawla, Peter Berman, and Marzena Kulis, February 1997



72. **The Impact of Economic and Demographic Factors on Government Health Expenditures in Poland**
Mukesh Chawla, Dorota Kawiorska, G. Chellaraj, February 1997

73. **Provision of Ambulatory Health Services in Poland: A Case Study from Krakow**
Mukesh Chawla, Peter Berman, Adam Windak, and Marzena Kulis, March 2000

74. **Unpredictable Politics: Policy Process of Health Reform in Poland**
Thomas Bossert and Cesary Wlodarczyk, January 2000

75. **Managed Care Guidebook**
Karen Quigley, Arlen Collins, and Claudia Corra, March 2000

76. **Private Health Care Provision in Developing Countries: A Preliminary Analysis of Levels and Composition**
Kara Hanson and Peter Berman, July 1997

77. **Privatization and Payments : Lessons for Poland from Chile and Colombia**
Tom Bossert, March 2000

78. **Public Relations in Health Sector Reform: The Krakow Experience**
Paul Campbell, Andrzej Rys, and Witoslaw Stepien, June 2000

79. **Perception of Health Status and Limitations in Activities of Daily Living among the Egyptian Elderly**
A.K. Nandakumar, Maha El-Adawy, Marc A. Cohen, December 1998

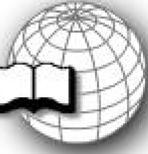
80. **The Relative Importance of Price and Quality in Consumer Choice of Provider: The Case of Egypt**
Winnie Yip and Aniceto Orbeta, September 1999

81. **The Distribution of Health Care Resources in Egypt—Implications for Equity: An Analysis Using A National Health Accounts Framework**
Ravindra Rannan-Eliya, September 1999

82. **Understanding the Supply Side: A Conceptual Framework for Describing and Analyzing the Provision of Health Care Services With an Application to Egypt**
Peter Berman, September 1999

83. **When is Syndromic Management of Sexually Transmitted Diseases Useful? An Analysis of the Literature**
Catherine Gergen, Victoria Wilkins, Pratyma Ragunathan, and Julia Walsh, September 1999

84. **Applying Managed Care Concepts and Tools in Zimbabwe**
Paul Campbell, Karen Quigley, Arlen Collins, MacDonald Chaora, and Pano Yericaris, June 2000



85. **A Decade of Health Sector Reform in Developing Countries: What Have We Learned?**
Peter Berman and Thomas Bossert, March 15, 2000

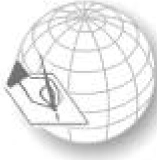
86. **Prioritizing Children's Health Care Needs: The Egyptian Experience With School Health Insurance**
A.K. Nandakumar, Michael R. Reich, Mukesh Chawla, Peter Berman, and Winnie Yip

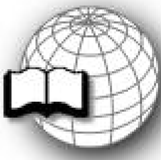
Highlighted papers are new for 1999-2000

Health Sector Reform in Developing Countries:
Making Health Development Sustainable
Peter Berman, Editor, 1995

Harvard Series on Population and International Health
Harvard School of Public Health
Harvard University Press

This book contains the final versions of papers presented at the DDM conference Health Sector Reform in Developing Countries: Issues for the 1990s held in Durham, New Hampshire on September 10-13, 1993. The conference and this publication were supported by the Agency for International Development, Office of Health and Nutrition, through Cooperative Agreement No. DPE-5991-A-00-1052-00.





Web Site

The Data for Decision Making Project's web site was originally created by Christina Oltmer in 1995. As the project closes, the International Health Systems Group (IHSG) at the Harvard School of Public Health carries forward much of the work begun under the DDM Project. The IHSG web site, which incorporates the substance of the DDM web site, is an excellent source of reliable information about DDM research, training, country and regional activities, staff profiles, copies of past and current newsletters, and publications.

In the past 3 months the IHSG web site has had 18,824 hits averaging 206 hits per day. The most visited feature of the web site is the publications section.

Making publications available for downloading as well as encouraging communication through a discussion board, are just some of the methods being used to meet the growing needs of the international health community.

The IHSG web site can be visited at:

http://www.hsph.harvard.edu/ihsg/ihsg.html

Summary Financial Report

Financial Report by Region/Activity for the period 10/1/99 through 6/30/00
Data for Decision Making

Account	*Activity*	*Budget Amount*	*Spent through end of project*	*Spent through 09/30/1999*	*Expended in Report Period*	*End of Project Balance*
	Latin America					
7010	Bolivia	146,566.00	188,457.74	188,457.74	0.00	(41,891.74)
7092	Research Triangle Institute	1,602,085.00	1,602,085.00	1,602,085.00	0.00	0.00
7120	Decentralization	522,150.00	500,568.64	309,386.34	191,182.30	21,581.36
7129	University of California	386,732.00	290,975.00	290,975.00	0.00	95,757.00
7095	Policy Process	338,850.00	426,157.68	373,538.80	52,618.88	(87,307.68)
7116	Informed Decisions	703,140.00	680,756.31	678,476.65	2,279.66	22,383.69
7184	Encuestas y Estudios	15,442.00	23,337.63	29,405.41	(6,067.78)	(7,895.63)
7040	UDAPSO - Bolivia	5,000.00	5,000.00	5,000.00	0.00	0.00
	TOTAL	**$3,719,965.00**	**$3,717,338.00**	**$3,477,324.94**	**$240,013.06**	**$2,627.00**
	Poland					
7125	Harvard	1,783,713.00	1,794,392.95	1,702,439.34	91,953.61	(10,679.95)
7147	Inst. For Qualitative Studies	9,700.00	9,700.00	9,700.00	0.00	0.00
7149	Jagiellonian University	89,209.00	89,209.00	89,209.00	0.00	0.00
7163	Jagiellonian University	1,033,509.00	1,054,053.03	977,025.48	77,027.55	(20,544.03)
7172	Healthshare	65,080.00	36,580.32	36,580.32	0.00	28,499.68
7173	John Snow	62,208.00	63,263.00	63,263.00	0.00	(1,055.00)
	TOTAL	**$3,043,419.00**	**$3,047,198.30**	**$2,878,217.14**	**$168,981.16**	**($3,779.30)**
	Egypt					
7091	Harvard	2,010,586.00	2,035,855.34	2,033,590.34	2,265.00	(25,269.34)
7094	Cairo Demographic Center	292,178.00	289,938.47	289,938.47	0.00	2,239.53
7129	University of California	147,942.00	142,491.00	142,491.00	0.00	5,451.00
7168	Data Processing Service	38,242.00	32,505.00	32,505.00	0.00	5,737.00
7218	Johns Hopkins University	22,192.00	22,192.00	22,192.00	0.00	0.00
	TOTAL	**$2,511,140.00**	**$2,522,981.81**	**$2,520,716.81**	**$2,265.00**	**($11,841.81)**
	Africa					
7017	Reproductive Health	110,637.00	98,696.00	98,696.00	0.00	11,941.00
7019	Pub/Priv Health - Zambia	125,719.00	99,371.00	99,371.00	0.00	26,348.00
7052	Institut National de Sante Publique	16,775.00	16,795.00	16,795.00	0.00	(20.00)
7073	Abt Associates	23,952.00	23,952.00	23,952.00	0.00	0.00
7089	HHRAA	763,780.00	819,249.47	819,249.47	0.00	(55,469.47)
7124	Centre Afr D'Etudes - Senegal	86,167.00	72,592.00	72,592.00	0.00	13,575.00
7126	Technical Support	584,618.25	497,381.34	431,975.84	65,405.50	87,236.91
7129	University of California	91,338.00	74,765.00	67,390.71	7,374.29	16,573.00
7155	Zimbabwe	299,600.00	276,951.58	207,164.77	69,786.81	22,648.42
7076	African Med & Research Fdn	28,997.00	28,997.00	28,997.00	0.00	0.00
7090	Intercultural Comm Inc	244,718.00	244,718.00	244,718.00	0.00	0.00
7121	Mgt Sciences for Health	31,763.00	28,544.33	28,544.33	0.00	3,218.67
7088	Team Technologies	24,281.00	23,657.35	23,657.35	0.00	623.65
7132	University of Ghana	9,500.00	9,500.00	9,500.00	0.00	0.00
7146	University of Zimbabwe RM	7,400.00	7,725.00	7,725.00	0.00	(325.00)
7135	University of Zimbabwe HA	8,700.00	8,375.00	8,375.00	0.00	325.00
--	JSI Ethiopia	20,490.75	21,387.88	0.00	21,387.88	(897.13)
	TOTAL	**$2,478,436.00**	**$2,352,657.95**	**$2,188,703.47**	**$163,954.48**	**$125,778.05**

(cont. on p.54)

Financial Report by Region/Activity for the period 10/1/99 through 6/30/00
Data for Decision Making (cont.)

Account	*Activity*	*Budget Amount*	*Spent through end of project*	*Spent through 09/30/1999*	*Expended in Report Period*	*End of Project Balance*
	Asia					
7115	Inst. For Policy Studies	18,860.00	18,660.00	18,676.91	(16.91)	200.00
7133	Nat Inst of Health Rsch - Indonesia	17,888.00	20,733.92	20,733.92	0.00	(2,845.92)
7128	Inst of Health Systems - India	5,884.00	5,884.00	5,884.00	0.00	0.00
7093	Cameron Associates	7,500.00	7,500.00	7,500.00	0.00	0.00
	TOTAL	**$50,132.00**	**$52,777.92**	**$52,794.83**	**($16.91)**	**($2,645.92)**
7088	**Administration/Core**	3,121,413.00	3,181,066.90	2,987,683.39	193,383.51	(59,653.90)
	TOTAL	**$3,121,413.00**	**$3,181,066.90**	**$2,987,683.39**	**$193,383.51**	**($59,653.90)**
	GRAND TOTAL	**$14,924,505.00**	**$14,874,020.88**	**$14,105,440.58**	**$768,580.30**	**$50,484.12**

Acknowledgements

The International Health Systems Group/DDM Project staff would like to acknowledge the strong support we have received throughout the course of the year from many hardworking, capable individuals at the US Agency for International Development in Washington, D.C., and in the USAID Missions in the countries where we have worked. Special thanks must go to Carl Abdou Rahmaan, who has served as COTR during this final period.

LAC
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Africa (HHRAA)
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- Alex Ross
- Hope Sukin

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- Robert Emrey
- Joy Riggs-Perla

Poland
- Rebecca Black
- Bill Frei
- Michael Lee
- Bruce Odell
- Tomasz Potkanski