For many people who keep up with world events, the news from Afghanistan has long appeared to consist mainly of terror attacks, counter-insurgency campaigns and the opium trade. Behind the sensational reporting, however, another major story is unfolding: how one of the world’s poorest countries, after decades of brutal conflict that claimed more than a million lives and made millions more people into refugees, is working to build a modern health system. In a rugged land of mountain and desert that would present major obstacles even without the effects of war and widespread poverty, Afghanistan has made significant progress.

Central to this achievement has been the collaboration of the Afghan government with international donors including the World Bank in fashioning a system suited to the nation’s values, culture, priorities and geographic setting. Each of three major donors—the World Bank, the European Commission (EC), and the United States Agency for International Development (USAID)—has taken a different approach to funding and managing its contribution to the effort. The one chosen by the World Bank uses results-based financing (RBF), a system that provides rewards—in this case monetary ones—for improved performance. RBF has, some health experts believe, features well suited to the opportunities often present in countries with histories of conflict.

Unlike more traditional management methods that concentrate on inputs, RBF focuses on results. Health care is tremendously labor-intensive, so health system results depend “crucially on the productivity and motivation of health workers,” write Rena Eichler, Ruth Levine and colleagues. In situations such as rural Afghanistan, where many workers carry out their duties in isolated locations with little day-to-day supervision, “performance incentives can motivate individual health workers to provide more services through increased effort with the same level of resources,” they continue. In addition to connecting health organizations’ level of income to their performance, the Bank’s approach in Afghanistan also gives them wide latitude for decision making by putting authority into the hands of the people who daily face the realities of getting care to residents of a poor, rugged, war-torn country and encourages them to figure out how they can more effectively meet their organization’s goals. This has allowed innovative ideas to emerge to solve major challenges.

Interim evaluations reveal that in only a few years, the health system has managed to reach many more citizens throughout the country and deliver care of a higher quality than before. How much of the credit for this progress belongs specifically to RBF as opposed to other factors is as yet uncertain, however. In addition, enormous challenges remain before the nation’s ambitious goals are met. RBF already appears, however, to be a productive basis for delivering health services in a country whose historical context, resources and geography would severely test any system’s ability to provide a decent standard of care.
A New Approach to a Troubled Past

The fall of the Taliban regime in 2002 found much of Afghanistan’s health system in ruins, many of its facilities and equipment destroyed and its trained personnel poorly situated to meet the people’s needs. The disorganization and disarray that result from conflict, however, can make the building of institutions to support RBF in areas such as verification or community involvement less complicated, says Health Advisor Petra Vergeer. “In non-conflict situations, systems are much more developed and fixed while in the recovery stage post-conflict there is an opportunity to innovate and try to develop new systems…. People are more open to change.” A results-based system that does not supply overly detailed prescriptions for how to get things done can serve as a “catalyst” for new ideas appropriate to unprecedented conditions, she continues. “Health professionals are thinking about how are we going to get the results we want…. [They] are focused on results and what’s the best way of achieving them.”

But spending substantial funds on new programs in a war-torn developing country also offers ample possibilities for corruption, favoritism and other abuses that waste resources and torpedo effectiveness. Avoiding such problems, as well perverse incentives and other unintended consequences, requires extreme care in designing program goals and measurements as well as rigorous, independent and transparent evaluation of results. Goals must be stated with clarity and must directly and clearly relate to the desired outcomes. Goals must also be realistically possible for workers to attain through their best efforts.

Long before 1979 Soviet invasion and the armed conflict, civil disruption and oppressive Taliban rule that followed, however, Afghanistan’s health performance already ranked near the bottom of world comparisons. Maternal and child health statistics trailed those of neighboring countries and rural Afghans generally went without modern health care.iii By 2002, a quarter of children were dying before their fifth birthdayiv and the maternal death rate, 1800 for every 100,000 live births, was the world’s highest.v That rate was even worse in rural areas, reaching 6507 women dying for every 100,000 children born alive in the rugged mountains of Badakshan province in the nation’s northeast.vi
The state of health care delivery was equally grim. With 80% of the population in often-remote rural areas, health facilities clustered in cities and towns. What health services the rural people received came from non-governmental organizations (NGOs), many of them international groups working “cross-border” from neighboring countries.

The nation’s health care was a “Swiss cheese,” according to Dr. Benjamin Loevinsohn of the World Bank, with areas in the “holes” receiving no services at all. Wardak province near Kabul had a primary care facility for every 9000 residents—with some facilities less than a kilometer apart—but only four facilities served the 320,000 residents spread across Samangan province’s nearly 17,000 square kilometers. In early 2002, a total of fewer than 500 facilities—or one for every 50,000 rural residents—served the country, according to World Health Organization data.

A “fairly dire” misdistribution of health workers further complicated service delivery. The supply of trained personnel suffered from what Loevinsohn terms the “3 wrongs—wrong gender, wrong skills and wrong location.”

In a culture that frowns on women receiving health care—and, most decidedly, maternal and reproductive health care—from men, only one rural facility in four had even a single trained female provider on staff. The people desperately needed public health, reproductive and child health services, but health professionals generally overwhelmingly lived and worked in the cities or their outskirts.

Relatively few people outside of cities or towns, therefore, received even rudimentary health services. A 2003 survey of more than 20,000 households in 6 cities and 32 of the nation’s 36 provinces found only one child in five with the full course of diptheria-pertussis-tetanus vaccinations, only one child in four suffering symptoms of pneumonia receiving medical treatment, and fewer that one woman in ten reporting having a skilled attendant when she last gave birth.

Building for the Future

Improving this dismal situation was a top priority of the government that came to power in 2002. The Ministry of Health, known since 2004 as the Ministry of Public Health (MOPH), quickly undertook far-reaching reforms. To focus effort on the most pressing needs, it formulated the Basic Package of Health Services, a list of 7 high-impact, high-priority primary care areas that a national expert consensus agreed were both basic to public health and feasible to deliver through a system built on primary care. The list emphasizes giving children a good start in life and helping their mothers maintain good health. (See Box 1)

“Everyone who needs care must receive care, regardless of ability to pay. Quality of care must be the same for paying and nonpaying patients,” says the MOPH’s official statement of BPHS.

The document also laid out the structure of the health care delivery system, specifying the types of health care facilities slated to bring the Basic Package to communities nationwide. The plan

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**Box 1 | The Basic Package of Health Services**

Originally devised in 2003, the BPHS was revised in 2005. If consists of seven elements. “Six are basic services and the seventh element is necessary for the six service elements to succeed,” states the MOPH official description. The elements are:

- Maternal and newborn health
- Child health and immunization
- Nutrition, including prevention, assessment and treatment of malnutrition
- Control and treatment of communicable diseases, especially tuberculosis, malaria and HIV
- Mental health services
- Disability services
- Regular supply of essential drugs
specifies a ladder of facilities, each with its own defined competencies, responsibilities and staff structure and the ability to refer patients needing higher levels of care. Facilities delivering the BPHS range from small community health posts in remote villages to fully staffed and equipped regional hospitals. (See Box 2)

The MOPH decided, rather than trying to provide services itself, to contract with NGOs, some of them already working on the ground, to bring the Basic Package to specific geographic areas. The Bank, the EC and USAID all backed this project, but each adopted a management approach that differed from the others in a number of respects. (See Box 3). Only the Bank opted for performance-based monetary incentives. MOPH recruited its own staff of skilled Afghans, who were paid market wages, to manage the contracts. It also made large investments to pay for monitoring and evaluation by impartial third parties.

NGOs working under 42 separate MOPH contracts were given responsibility for health care in areas that are home to 90% of the country’s rural population. Together these contracts provide primary care to about 18 million people. Just under half of the contractors are local Afghan NGOs, with the remainder split between international NGOs and consortia of organizations. Over time, however, Afghan NGOs have gained an increasing share of the contracts. Eight provinces are served by contracts supported by Bank funds between MOPH and NGOs, which include local Afghan organizations, international organizations, and consortia of organizations. Three other provinces are served under contracts supporting by Bank funds in which elements of the Ministry of Public Health provide specific services. EC- and USAID-supported contracts cover 10 and 14 provinces, respectively.

EC and USAID contracts reimburse for budgeted expenditures. The Bank-supported contracts, known as “performance-based partnership agreements” (PPAs), on the other hand, provide each NGO a lump sum to deliver the BPHS within the contracted area for a year. The NGO makes almost all spending decisions. The agreements, however, specify the population ratios and staffing of the various health facilities as well as salary standards for the various types of workers. The MOPH also determines the required standard of performance. Under the Bank-supported PPAs, NGOs earn bonuses of up to 10% a year for specific amounts of improvement in specified performance indicators. Contracts going into effect in 2009 also link bonuses to the performance of specific facilities. Provincial health officials can also receive bonuses “to align incentives.” Inadequate performance can bring serious consequences, including termination, as has happened to one international NGO, and expiration without renewal, as happened to a local NGO.

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**BOX 2 | THE LADDER OF CARE**

- Health posts, located in isolated rural communities and often in private homes, are ideally each staffed by a male and a female community health worker (CHW) and serve 1000 to 1500 persons.
- Basic health centers, called “the foundation of the health system” by MOPH, serve 15,000 to 30,000 persons and generally have staffs including a physician, either male or female; a male nurse; a community health midwife; and two vaccinators.
- Comprehensive health centers, serving 30,000 to 60,000 people, are staffed by a male and a female physician, a male and a female nurse, and 2 community midwives, and have inpatient beds, a laboratory, a room for minor surgery, a delivery room, holding beds, a health education area, a wound dressing area and a pharmacy.
- District hospitals, serving between 100,000 and 300,000 persons, include an operating theater, a recovery room, an emergency room, a nursery, inpatient beds, exams rooms, a pharmacy and a laboratory. Staff includes 2 female and 2 male general physicians, a surgeon, an anesthetist, a pediatrician, a dentist, a pharmacist, 5 male and 5 female nurses, 4 midwives, a community health supervisor, a pharmacist, 2 laboratory technicians, an x-ray technician, a pharmacist and two vaccinators.
Surveys by an independent third party organization assess performance. Since 2004, Johns Hopkins University Bloomberg School of Public Health has evaluated over 600 facilities each year, scoring them zero to 100 on each of the 29 indicators in the “balanced scorecard,” (BSC) a survey instrument developed with the participation of many stakeholders. Indicators include patient satisfaction; availability of staff, equipment and medications; health workers’ knowledge; patient loads; quality of interactions between patients and providers, and much more.\textsuperscript{xvi} Household surveys using other methodologies also evaluate citizens’ health and health care experience.

**Healthy Progress**

“The results [of MOPH contracting] thus far have been encouraging,” write Loevinsohn and Sayed.\textsuperscript{xxii} “Through contracting…the MOPH could rapidly expand equitable and standardized health care services to nearly all Afghanistan,” says Bashir Ahmad Hamid, M.D., Program Director for Care of Afghan Families, a local NGO. “Having clear, concrete, measurable and achievable output indicators…had a great impact on the performance of the NGOs [in] achieving the output indicators and motivated the NGO staff to focus their efforts [on] achieving the targets.”

Between 2004 and 2007, quality of care, as measured by the BSC, improved 32%, even as the number of primary care facilities more than doubled from 496 in 2002 to 1169 in 2007.\textsuperscript{xix, xx} In 2002, only a quarter of these facilities had a female doctor, nurse or midwife, but over 80% did in 2007. Over that period the number of outpatient visits quadrupled, from one for every four residents each year, to almost one per resident.

Household surveys also showed marked improvement, with the rate of skilled attendance at births more than doubling between 2003 and 2006, the prevalence of contraceptive use tripling, and the percentage of pregnant women receiving prenatal care more than quadrupling. The rate of immunization with DPT almost doubled and the under-five mortality rate fell from over 250 per 100,000 live births in 2002 to 191 in 2005.

Professional evaluators are not the only ones sizing up the system and its design. The flexibility permitted by the PPAs has allowed NGO staff members to suggest innovative solutions to challenges. Some argued, for example, that many rugged and sparsely populated areas needed a new level of health facility, with capabilities greater than the village health post designed to serve 1000 persons but closer and easier to reach than the nearest basic center, which must be located in order to serve a population of 15,000 to 30,000 persons. Based on this suggestion, a pilot study is examining a new form of intermediate sub-center designed to serve an intermediate-sized population of 3,000 to 7000.

Finding qualified staff, and especially female staff, for isolated rural facilities was another challenge that inspired innovative solutions. One idea is recruiting couples rather than individuals, and, if necessary,
arranging suitable employment for the health worker’s spouse. Another is recruiting female physicians in neighboring Tajikistan, where they are more plentiful and speak the same Dari language. And perhaps most significant of all, the shortage of qualified midwives for rural areas led to a program of recruiting and training local women to provide professional-level services. Unlike the untrained traditional birth attendants who serve at many rural deliveries, the new cadre of community midwives are rural women with at least 8th grade education who undergo an 18-month clinical training program run by NGOs under provincial supervision. They must pass an official provincial examination upon completing the program and must, before their training beings, provide both their own promise and their community’s assurance that they will return home to work once they qualify.

Despite the progress since 2002 on these and other fronts, however, the challenges still facing Afghanistan’s health system remain as forbidding as the nation’s rugged landscape. Nor can it be asserted that RBF is necessarily the best approach to attaining the goal of universal, equitable and effective health care for the country, because the projects funded by the other major donors and based on other management systems have also produced significant improvements in services and care. As Afghanistan continues to build for its future, however, RBF appears to be a feasible and productive approach to motivating and empowering health workers to produce better results for their fellow citizens.
Footnotes


ii Eichler and Levine. 38


iv Sondrop et al.

v Summary sheet for RBF Scheme


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ix Loevinson and Sayed, Development

x Loevinsohn, B. Some Practical Lessons on Implementing RBF from Afghanistan, 2008.

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