Case 9

Improving the Health of the Poor in Mexico

**Geographic area:** Mexico

**Health condition:** Among the rural poor in Mexico, the incidence of preventable childhood and adult illnesses, poor reproductive outcomes (including low birth weight), and infant mortality are high—the result of unhygienic living conditions, poor nutrition, and social deprivation.

**Intervention or program:** The Programa de Educación, Salud y Alimentación (Progresa)—now known as Oportunidades—was designed to provide incentives in the form of cash transfers to poor families; to improve use of preventive and other basic health services, nutrition counseling, and supplementary foods; and to increase school enrollment and attendance. The program was designed to affect household-level decisions by providing incentives for behaviors that would result in improved social outcomes. The program was based on a compact of “co-responsibility” between the government and the recipients: The government would provide significant levels of financial support directly to poor households, but only if the beneficiaries did their part by taking their children to clinics for immunizations and other services and sending them to school.

**Cost and cost-effectiveness:** Expenditures on Progresa totaled about $770 million per year by 1999 and $1 billion in 2000, translating into fully 0.2 percent of the country’s GDP and about 20 percent of the federal budget. Of that, administrative costs are estimated to absorb about 9 percent of total program costs.

**Impact:** A well-designed evaluation revealed that Progresa significantly improved both child and adult health, which accompanied increased use of health services. Children under 5 years of age in Progresa, who were required to seek well-child care and received nutritional support, had a 12 percent lower incidence of illness than children not included in the program. Adult beneficiaries of Progresa between 18 and 50 years had 19 percent fewer days of difficulty with daily activities due to illness than their non-Progresa counterparts. For beneficiaries over 50 years, those in Progresa had 19 percent fewer days of difficulty with daily activities, 17 percent fewer days incapacitated, and 22 percent fewer days in bed, compared with similar individuals who did not receive program benefits.

That people with few financial resources tend to be poorly educated, unhealthy, and malnourished has been often observed and frequently bemoaned but rarely tackled head-on. In the case of an antipoverty program in Mexico, however, policymakers chose a comprehensive—and ultimately successful—approach to address the basic causes of social problems (including health) facing many of the country’s most underprivileged citizens. The program, which initially was aimed at rural populations, showed such strong positive results in improving health and education outcomes in a rigorous evaluation that the government decided to expand it to cover poor families in urban areas. The story of this program—originally
called Progresa, now known as Oportunidades—is one of innovation in social policy, reinforced by research.

**Starting Conditions**

In Mexico, an estimated 40 to 50 percent of the country’s 103 million citizens live below the poverty line, and about 15 to 20 percent are classified as indigent. Although progress was made in the 1960s and 1970s to reduce the incidence of poverty, those gains were quickly eroded during the economic crisis that began in 1982, and since then the government has searched for ways to effectively reduce the extent of poverty and to ameliorate its effects on people’s lives.

Although large numbers of poor people can be found in each of Mexico’s 32 states, poverty follows a rough gradient toward higher levels with distance away from the Mexico-US border, and from the three massive urban poles of Mexico City, Guadalajara, and Monterrey. In most of the states that are on or close to the US border, fewer than 35 percent of the families are poor; in 13 states of the country’s southwestern region, more than half the families fall below the poverty line.

Throughout the country, poverty is very much a rural phenomenon, with something on the order of three quarters of all rural families falling below the poverty line. Most of Mexico’s poorest citizens live in small villages with no paved roads, running water, or modern sanitation, where the only work is hard agricultural labor. Of the poor population, a large share is indigenous in origin and speaks little or no Spanish—disenfranchised, in important ways, from the mainstream of public services and civic participation. For many poor Mexicans, seasonal migration to the United States themselves or by family members, who send money home, represents the only chance at economic survival.

Education and health indicators in rural areas are as poor as the people themselves: Although more than 90 percent of rural children attend primary school at some time, about half drop out after the sixth grade. Among those who continue, some 42 percent drop out after the ninth grade. High infant mortality and incidence of preventable childhood illnesses (many linked to poor sanitation), reproductive health problems, malnutrition, violence, and all manner of health problems characterize the lives of Mexico’s rural communities.

The use of modern health services in rural Mexico is low, averaging less than one visit per year per person. Poor people, although sicker than their better-off counterparts, use fewer health services: 0.65 visits per year for the poor, compared with 0.8 visits for the non-poor. Protein-energy malnutrition is widespread, with stunting (low height for age) affecting an estimated 44 percent of 12- to 36-month-old children in 1998.

**Change in Social Policy with Each President**

Sweeping changes in Mexican social policies designed to address the problems of poverty have roughly coincided with political moments. In the 1970s, for example, the Lopez Portillo administration invested heavily in the provision of social services and the bureaucracies behind them. About 2,000 rural health clinics were built under the government agency called IMSS-Complamar, and thousands of government-run stores were established to provide basic products to low-income families at subsidized prices.

In 1993, during the Carlos Salinas de Gortari administration, social spending increased dramatically, almost doubling in the case of the health sector. A large share of the social-sector spending was channeled through Pronasol, an umbrella organization that was intended to represent a transition away from general subsidies toward more targeted, cost-effective programs that fostered community involvement.

The sheer scale of the programs was impressive. The federal government provided funds and raw materials for social projects designed by 250,000 grassroots committees, and over the span of six years Pronasol created about 80,000 new classrooms and workshops and renovated 120,000 schools; awarded scholarships for 1.2 million indigent children; established 300 hospitals, 4,000 health centers, and 1,000 rural medical units; and improved water, sanitation, and housing in thousands of localities. Despite this vast investment, however, the government was persistently criticized for merely ameliorating the worst symptoms of poverty, rather than
addressing root causes, while at the same time creating bloated bureaucracies.

In the mid-1990s, President Ernesto Zedillo was encouraged by his advisers to think differently about how to help people raise themselves from poverty. Principal among those advisers was the Director General of Social Security, Santiago Levy, an economist who for many years had a vision of how to use the power of public policy to affect the daily choices in poor households that, in combination, help keep those households in poverty. In 1997, under the intellectual leadership of Levy, a new program was initiated—a program that sought to act simultaneously on the causes and consequences of poverty, attempting to break the transmission of economic and social vulnerability from one generation to the next.

On August 6, 1997, President Zedillo traveled to the state of Hidalgo to announce the start of Progresa, saying, “Today we begin a program to break the vicious cycle of ignorance, lack of hygiene, and malnutrition, which has trapped many millions of Mexicans in poverty. For the first time, the Government of the Republic sets in motion a program that will deal with the causes of poverty in an integral manner. With Progresa, we will bring together actions in education, health care, and nutrition for the poorest families in Mexico, centering attention on the family nucleus and the boys and girls, and placing a great responsibility on the mothers.”

The Progresa Approach

Progresa had the goal of increasing the basic capabilities of extremely poor people in rural Mexico. Progresa, a serendipitous acronym for Programa de Educación, Salud y Alimentación (Education, Health, and Food Program), represented a departure from traditional social programs for the poor in several ways. First, it was principally designed to affect the “demand side”—that is, instead of focusing primarily on the supply of services to the poor, such as health centers, water systems, schools and so forth, the program provided monetary incentives directly to families to help overcome the financial barriers to health services use and schooling and to induce parents to make decisions that would bring their children more education and better health (see Box 9–1). Second, the program was designed around a compact of “co-responsibility” between the government and the recipients. The government would provide significant levels of financial support directly to households, but only if the beneficiaries did their part by sending children to school and taking them to clinics for immunizations and other services. Third, Progresa was based on the notion that improvements in education, health, and nutrition would be mutually

Box 9–1

Use of Health Services by the Poor

Empirical data generally shows that the poor in poor countries use health services less than their rich counterparts—even when services are available at no direct cost through the public sector and when the underlying health needs among the poor are greater. So, for example, immunization rates, use of oral rehydration therapy, and use of other basic maternal and child health care services are all lower for poor populations than for more privileged ones. The reasons for this have been traced to a complex interaction between supply and demand factors. In general, the services closest to low-income areas are in poor repair, with inadequate supplies of medicines and with health workers who have high rates of absenteeism from their posts. On the household side, many of the basic characteristics that typify poor families—low levels of education, social marginalization, lack of money to pay for transportation, and other costs related to seeking services—prevent the effective use of health services. So, while governments in developing countries typically have depended on the provision of free services to address the needs of the poor, sometimes augmenting fixed-site facilities with extensive outreach to help overcome some of the physical and economic barriers, these efforts have rarely closed the equity gap in the use of health services.
reinforcing; a program affecting all three dimensions of human welfare would equal more than the sum of the parts. In this way, it sought to break from the “silos” of social-sector ministries.\textsuperscript{3,4}

The program had three linked components: education, health, and nutrition. In the health component, cash transfers were given if (and only if) every member of the family accepted preventive health services, delivered through the Ministry of Health and IMSS-Solidaridad, a branch of the Mexican Social Security Institute. The relatively comprehensive health service package was aimed at the most common health problems and the most important opportunities for prevention, including basic sanitation at the family level; family planning; prenatal, childbirth, and postpartum care; supervision of nutrition and children’s growth; vaccinations; prevention and treatment of outbreaks of diarrhea; antiparasite treatment; prevention and treatment of respiratory infections; prevention and control of tuberculosis; prevention and control of high blood pressure and diabetes mellitus; accident prevention and first aid for injuries; and community training for health care “self-help.”\textsuperscript{4}

In parallel with the conditional cash transfers, the program sought to improve the quality of services available through public providers. In practice, this meant a steadier flow of medicines to public clinics, more training of doctors and nurses, and, importantly, higher wages for health care providers in Progresa areas.

In the nutrition component, the cash transfer was given if (and only if) children aged 5 years and under and breast-feeding mothers attended nutrition monitoring clinics where growth was measured, and if pregnant women visited clinics for prenatal care, nutritional supplements, and health education. A fixed monetary transfer of $11 per month was provided for improved food consumption. Nutritional supplements also were provided to a level of 20 percent of daily calorie intake and 100 percent of the micronutrient requirements of children and pregnant and lactating women.\textsuperscript{4}

In the education component, program designers attempted to promote school attendance and performance of children in school by providing monetary education grants for each child under 18 who was enrolled in school between the third grade of primary school and the third level of secondary school—the period when risk of school dropout was the greatest. Because children often dropped out so they could work to supplement the meager family income, the size of the monetary grants was calibrated to partially compensate for the lost wages while they were in school, gradually increasing as the children moved from grade to grade. Thus, monthly grants ranged from $7 for a child in the third grade of primary school to around $24 for a boy in the third grade of secondary school. Examination of school enrollment patterns revealed that girls were more likely to drop out of secondary school than boys, so a slightly higher incentive was provided for girls who remained in school—$28 compared with $24 per month for boys.\textsuperscript{4}

The monthly income transfers, received in the form of a wire transfer that could be cashed immediately, significantly increased the monthly income of poor families. The transfers constituted about 22 percent of household income, on average, thus effectively increasing a family’s purchasing power and feeding financial resources into the local economy.\textsuperscript{4}

Focus on Incentives

Program designers carefully constructed incentives that would achieve program goals, using state-of-the-art social science research as the foundation for the design. So, for example, the monetary benefits were given directly to adult female beneficiaries because a wealth of social science analysis has shown that mothers in developing countries are more likely than fathers to spend additional household resources on children’s health and welfare, rather than on consumption goods like alcohol and cigarettes. In addition, designers capped monthly benefits at $70 per family, recognizing that an unlimited per-child benefit might create an unintended incentive among the poor to have more children. Unlike many cash transfer programs, in Progresa beneficiaries were not penalized if family members got jobs or earned more than they did at the start of the program, which might have discouraged people from looking for employment. Once needs-based eligibility was established at the outset, the family could remain in the program.
for three years. During that 3-year period, additional income did not make families ineligible. Eligibility was reassessed at the end of the 3-year period.4

Although some critics accused the government of patronizing poor people in Progresa because it attempted to encourage choices deemed by social policymakers to be correct, program designers rejected this concern. In the words of Santiago Levy, “Compared with giving a kilo of tortillas or a liter of milk as we used to do in the past, Progresa delivers purchasing power. But even poor parents must invest in their children's futures—that's why the strings are attached.”6

**Tiered Targeting**

As with any cash transfer program, the challenge of targeting was significant. Good targeting means that selection criteria are established so that they permit the inclusion of all those who need the program, yet keep to a minimum “leakage” of benefits to individuals and households who are not the intended program participants. And all this has to be done while keeping the administrative and information costs of the program within a reasonable level.

Progresa employed a 3-stage targeting strategy. In the first stage, geographic targeting was used to select poor localities, or communities, within poor regions of the country. To do this, program designers used data from the 1990 census and the 1995 population count to create a “marginality index,” a composite of information about the communities' average levels of adult illiteracy, living conditions (proportions of households with access to water, drainage systems, and electricity; types of building materials; and the average number of occupants per room), and the proportion of the population working in agriculture. Communities were selected for inclusion in Progresa if they ranked as “high” or “very high” in terms of marginality but also had a primary school, a secondary school, and a clinic and were not so small and isolated that it would be virtually impossible for potential participants to reach health services and schools.7,8

In the second stage, eligible households were selected using census data on per capita income. All those classified as “poor” were deemed eligible for the program and invited to participate.7,8

The third stage tapped into community knowledge and was designed to increase the transparency and fairness of the program. Within each Progresa community, the list of selected families was made public at a meeting, and comment was taken about whether the program had accurately identified the poor families in the area. Families who had not been selected could ask to be reevaluated if they believed they had been excluded unfairly. In practice, this third stage rarely changed the list of households that were eligible but may have contributed to the sense that the program was truly aimed at the poor and was not a program of political patronage.7,8

Using this multilevel strategy, Progresa was able to effectively target its considerable resources at the poor and marginalized, although by design it did leave out the relatively small number of people living in very remote areas without access to even the most rudimentary public services. Progresa beneficiaries were indeed very poor: On average, a beneficiary family had a per capita income of $18 per month, or a mere one quarter of the average Mexican per capita income. Among Progresa beneficiaries who were employed, most were agricultural day laborers earning the minimum wage of $3 per day. Less than 5 percent of beneficiaries' homes had running water; more than three quarters of beneficiary families had dwellings with a mud floor. Many were of indigenous origin and did not speak Spanish.9

Although quantitative measures have shown the targeting strategy to be effective, qualitative studies have identified substantial dissatisfaction. Focus group discussions have revealed that in many rural communities, virtually every person tends to think that she or he is “poor,” and making fine distinctions between the “poor” and “nonpoor” based on income and other objective characteristics is unwelcome and seen as unfair. There are some indications that the Progresa approach of household-level targeting may in fact exacerbate social divisions.10

**Evaluation, Built In from the Start**

One of the signature features of the Progresa design was its elaborate monitoring and evaluation. In fact, the two basic ingredients of the program were cash and information. The program itself depended for its day-to-day functioning on up-to-date and accurate information
Box 9–2

The Progresa Evaluation

Researchers at the International Food Policy Research Institute conducted the Progresa evaluation under a contract with the Mexican government. The evaluation employed a quasi-experimental design, in which a sample of 505 of the 50,000 Progresa communities, including more than 24,000 households, formed the evaluation sample and were randomly assigned in 1998 to 320 “treatment” and 185 “control” groups. The program was scaled up so that households in “treatment” communities received benefits immediately; benefits to households in the “control” communities were delayed until close to two years later, although no information was provided to local authorities at the outset about the intention to eventually include those communities.

A preintervention survey was conducted among about 19,000 households, covering more than 95,000 individuals; four follow-up surveys at 6-month intervals of the same households were also conducted during the 2-year experimental period. In addition to the household surveys, service utilization and health data from clinics and test scores, attendance measures, and other data from schools were used for the evaluations, as were observational studies, focus groups with stakeholders, and community questionnaires.11,12

This evaluation strategy elegantly took advantage of the fact that no program can reach all beneficiaries simultaneously; randomizing the staged entry into the program and measuring the difference between those “in” and those “not yet in” provided an incomparable base of information for evaluators. Because the “treatment” and “control” communities were randomized, investigators were able to say with confidence that differences observed between the households in the two types of communities were due to the effects of the program and not to unobserved differences between those two groups. At the same time, the fact that the “control” households were deemed eligible for the program at a later stage in implementation helped designers manage a potentially very difficult political situation that occurs when some households or individuals are included in a program while others with similar characteristics are excluded. Together, the randomization approach and the intensive data collection eventually permitted evaluators to end up with analyses that met extraordinarily high-quality standards.

about beneficiary behavior and for its long-term sustainability on credible information about its impact.

Because mothers received a month’s benefits only if children used the education and health services according to established norms during the previous month, reliable information about school attendance and health service utilization was essential. And, while school attendance and clinic visits were monitored for individual beneficiary families, overall program implementation was monitored through indicators that were collected and assessed on a bimonthly basis: incorporation of new families, number of children receiving education grants, families who fulfilled their education and health commitments, and other indicators of operation. These indicators were scrutinized at all levels in the program management, with adjustments made when problems appeared.4

Among the several unusual aspects of Progresa, the impact evaluation strategy stands out (see Box 9–2). From the start, Levy and others involved in the program design saw the value of an external, independent evaluation employing rigorous methodology; such an evaluation was seen as a way to establish the program’s credibility within Mexican (and international) policy circles and to help ensure its continuation—in the event that it was shown to be successful—during future political transitions.
Rapid Scale-Up, High Coverage

In 1997, early in its implementation, Progresa had enrolled about 400,000 households. By the end of 1999, Progresa covered 2.6 million families, or one tenth of all families in Mexico. Operating in 50,000 localities in 32 states, the program had a national reach, although it was confined to rural populations. The program was reaching some 40 percent of the rural Mexican population.\(^1\)

The Mexican government’s strong commitment set the stage for rapid scale-up. More than that, however, the program could be rapidly expanded because it did not depend on drawing up blueprints, issuing bidding documents, writing contracts, pouring cement, enrolling trainees, developing curricula, and procuring drugs and equipment—in short, all of the time-consuming tasks required when the public sector builds and operates new schools and health centers. Once program managers worked out the basic mechanics of identifying beneficiaries, transferring funds, and maintaining a flow of information, expansion was relatively uncomplicated.

The scale of the program was large, and so was the budget. Expenditures on Progresa totaled about $700 million per year by 1999 and $1 billion in 2000, translating into fully 0.2 percent of the country’s GDP. Of that, administrative costs are estimated to absorb about 9 percent of total program costs.\(^3,7,8\)

To date, no cost-effectiveness assessments have been conducted on the health interventions—and, in fact, the analytic challenges in doing such studies would be great. Unlike single-intervention programs, Progresa was intended to affect multiple sectors and even generations. These features do not easily lend themselves to comparison with investments that have more limited and time-bound outcomes.

Impact on Adult and Child Health, Education, and Nutrition

The well-designed evaluation revealed that Progresa resulted in a significant improvement in both child and adult health, which accompanied an increase in the use of health services.

In 1996, before Progresa’s implementation began, the utilization of health services was identical in the localities identified as “treatment” and “control,” as were measures of health status. During 1998, the first complete year of implementation, health service utilization increased more rapidly in the Progresa “treatment” areas than in the areas where no transfers were provided. Nutrition-monitoring visits, immunization, and prenatal care increased significantly, as did overall average use of health services. Importantly, prenatal care started earlier in pregnancy, on average, in the Progresa areas compared with the others. This trend continued as program implementation expanded.\(^11\)

Child health improved in the Progresa areas. Children under 5 years of age in Progresa, who were required to seek well-child care and who received nutritional support, had a 12 percent lower incidence of illness than children not included in the program.\(^11\)

Adult beneficiaries of Progresa between 18 and 50 years had 19 percent fewer days of difficulty with daily activities due to illness than their non-Progresa counterparts. For beneficiaries over 50 years, those in Progresa had 19 percent fewer days of difficulty with daily activities, 17 percent fewer days incapacitated, and 22 percent fewer days in bed, compared with similar individuals who did not receive program benefits.\(^11\)

In addition to a striking impact on health, nutritional status also was better for Progresa children than for those outside the program. Progresa resulted in a reduced probability of stunting among children 12 to 36 months of age; researchers estimated that the impact of the program was equivalent to an increase of 16 percent in the average growth rate per year among those children.\(^13\) Beneficiaries reported both higher calorie consumption and consumption of a more diverse diet, including more fruits, vegetables, and meat. Iron-deficiency anemia decreased by 18 percent.\(^14\)

In education, Progresa’s impact was even more dramatic. The program caused 11 to 14 percent increases in secondary school enrollment for girls and 5 to 8 percent for boys. Transitions to secondary school increased by nearly 20 percent, and child labor declined.\(^15\)
Although it is possible to imagine interventions that would be as successful in any one of the sectors (education, health, and nutrition), it is not easy to envisage an alternative that could act so effectively in all areas at the same time. Emmanuel Skoufias, who served as coordinator of the International Food Policy Research Institute evaluation, commented, “The results of the evaluation show that after only three years, poor Mexican children living in the rural areas where [the program] operates have increased their school enrollment, have more balanced diets, are receiving more medical attention, and are learning that the future can be very different from the past.”

From Progresa to Oportunidades, and Other Countries

As a result of the favorable evaluation findings, the program survived the transition from the Zedillo administration to the Fox administration. In fact, the Mexican government decided to extend the program to urban areas, assisted by a $1 billion loan from the Inter-American Development Bank. (The program’s name also was changed in 2002, from Progresa to Oportunidades, to reflect an expanded mission.) Education grants were extended to the high school level, and a new component was added. The “Youth with Opportunities” component is a savings plan for high-school students, in which savings grow each year from ninth grade through graduation.

The Progresa evaluation also brought the program to the attention of policymakers in other Latin American countries and in major development agencies. Although Progresa was not the first of the so-called conditional cash transfer programs, it is arguably the most well evaluated and thus has inspired similar efforts in Argentina, Honduras, Nicaragua, Colombia, Bangladesh, and other countries.

It now appears that Oportunidades will be a part of Mexican social policy for many years to come and has the potential to make a difference on a massive scale. The program covers more than 4 million families and represents close to 50 percent of Mexico’s annual anti-poverty budget.

Just as the program evaluation was hailed for being able to compare those “with” and those “without,” it is also important to think about Mexico “with” and “without” the program. Without question, Mexico “with” Progresa has a better future than “without.” While no social program can erase centuries of deprivation and structural lack of access to credit and markets—all serious problems that continue to face Mexico’s most marginalized populations—Progresa did far better than the traditional supply-side efforts in obtaining genuine results and giving hope.

References


6. Egan J. Mexico’s welfare revolution. BBC News (Friday, October 15, 1999).


