Using Voucher Schemes for Output-Based Aid

This Note examines an innovative, donor-supported voucher scheme to treat and prevent sexually transmitted diseases in Nicaragua. Voucher schemes enable donors to purchase outputs rather than inputs while also offering beneficiaries a choice of provider, a feature that sets them apart from other output-based approaches, such as supply-side subsidies to providers operating under performance-based contracts. Choice creates incentives to lower prices or raise quality (or both).

A donor-supported voucher scheme in Nicaragua provides treatment and prevention services for sexually transmitted infections (STIs) to high-risk populations such as commercial sex workers and their partners and clients. Beyond detecting and treating STIs, these health services can also raise awareness of risks and promote safer behavior, leading to widespread benefits. Because STIs increase the transmission of HIV by a factor of three to five or more, the population groups that are extremely vulnerable to STIs and HIV infection facilitate the entry and spread of AIDS in the general population. Thus small interventions targeted to such high-risk groups can have a large impact on the spread of STIs and HIV. But these groups—sex workers, regular clients and partners of sex workers, adolescent glue-sniffers, migrant laborers, long-distance transport workers—tend to be difficult to reach and are often mobile.

In developed countries a range of special programs have been set up to address the health needs of high-risk groups. In developing countries governments have been less successful in reaching these groups and meeting their special needs. They often resort to counterproductive coercive measures, such as having the police oblige sex workers to attend government-run STI clinics. But sex workers shy away from dedicated STI clinics because the clinics are stigmatizing, tend to treat their patients discourteously, and are perceived as having scant respect for patient confidentiality. Sex workers tend to visit general outpatient clinics instead, choosing not to reveal their occupational risks. Consequently, they rarely receive adequate diagnosis or treatment for their sexual health problems.

In the absence of special client-friendly programs, the use of sexual health services among these vulnerable groups is low and usually inef-
factive. What these groups need is subsidized access to convenient, courteous, confidential services of high quality that identify their sexual health needs in a nonstigmatizing manner and provide appropriate counseling, diagnostic information, and treatment.

**How the scheme works**

The Central American Health Institute (Instituto Centroamericano de la Salud, or ICAS)\(^1\) has attempted to provide such services in Nicaragua through a voucher scheme since 1995. At six-month intervals ("rounds") the scheme distributes 2,000 vouchers to the vulnerable groups (in later rounds, including clients and partners of sex workers), some directly and some (at no cost) through community-based organizations in close contact with the groups (figure 1). The vouchers, which remain valid for two and a half months, entitle the bearer to a predefined package of “best practice” sexual health services free of charge at any one of about 10 contracted clinics. Clinic staff need not ask patients embarrassing questions about their membership in the targeted group, since this is declared with the presentation of a voucher.

To prevent counterfeiting, vouchers are individually numbered, stamped with the ICAS seal, and laminated. Their expiration date is printed on them. No measures are taken to make the vouchers nontransferable, for two reasons. First, preventing the vouchers from being used by someone other than the original recipient is costly. And second, the secondary recipient of the voucher might be at higher risk of having an STI than the primary one, so the transfer could serve the program’s objectives. Providers are unlikely to exchange vouchers for cash, because that would simply reduce their income and in any case each redeemed voucher must be accompanied by a blood test and other samples.

The government has no direct involvement in the scheme. ICAS acts as the voucher agency, contracting and monitoring clinical and laboratory services, training clinic staff (doctors, nurses, and receptionists) in handling sex workers in a nondiscriminatory manner, defining the service package covered by the voucher, analyzing data, and monitoring technical quality and patient satisfaction, both generally and for each clinic. In addition, its fieldworkers maintain a map of the 50–60 prostitution sites in and around the capital city of Managua where the vouchers are distributed.

Clinics compete for contracts on the basis of price, quality, and location. For the initial round of contracting clinics were individually invited to participate (since a newspaper advertisement generated little interest). Those responding were assessed against predefined criteria. With

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**Figure** Flow of vouchers and funds in the sex worker health scheme

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Source: Diagram adapted from Harper and others (2000).
each clinic that met the criteria ICAS negotiated a price for the service package, which consists of a medical consultation, follow-up visit, counseling, and the taking of test samples (treatment is dispensed separately).

For new clinics ICAS uses the range of prices paid under existing contracts as a benchmark, but it also considers their strategic importance to the program. ICAS gives particular weight to clinics’ location and the perceived quality of their service, both important determinants of use by sex workers. The contracts between ICAS and the providers require staff to follow a specified treatment protocol and to participate in training sessions. ICAS regularly invites new clinics to join the scheme, but to keep the administrative burden manageable it contracts no more than about 10 providers for each round. Clinics are paid according to the number of vouchers they return (along with data collection sheets).

ICAS reviews the performance of participating clinics in each round and does not renew the contracts of those judged to have been unsatisfactory. To monitor quality, it conducts semistructured interviews with 10 percent of the patients redeeming vouchers at each clinic, analyzes medical record-keeping, and looks at other indicators of quality, such as the number of vouchers redeemed and the share of women attending their follow-up consultation. (The interviews, conducted by a small, multidisciplinary team, also explore ideas for increasing the redemption of vouchers.) The voucher agency gives clinics feedback based on the results of the quality monitoring.

ICAS contracts a single laboratory to perform diagnostic tests, to simplify the logistics and allow some economies of scale. The laboratory provides swabs and transport media, collects samples daily, reports results, and distributes treatment. A second laboratory provides quality control. Drugs, condoms, medical supplies, and health education material are centrally procured by competitive tender.

**Results**

By 2001 the program had contracted 20 service providers at one time or another. These have been a mix of public and private providers, including nonprofit, nongovernmental organizations (NGOs). Since round four, however, only private and NGO clinics have participated. The program dropped the public sector clinics because they attracted few voucher redeemers and had long waiting times and unfriendly “gatekeepers.” The private for-profit clinics survive on their fees, but most of the NGOs also receive subsidies and can therefore charge lower prices. The public clinics charged nominal user fees.

Since 1995, in 12 rounds, the scheme has distributed more than 15,000 vouchers, provided more than 6,000 consultations, and treated countless cases of STIs. Of a dynamic population of about 1,150 female sex workers active at any one time, more than 40 percent have redeemed their voucher. More than 2,500 sex workers have participated, with the highest rates of redemption among the poorest women and among the groups with the highest initial rates of STIs.

The program reduced the prevalence of gonorrhea in the female sex worker population by an average 5.25 percent a year, and the incidence in repeat users by 11.5 percent a year. It reduced the prevalence of syphilis by an average 10.25 percent a year. The poorest sex workers had the highest initial prevalence rates for gonorrhea and syphilis; these rates fell by an average 9.4 percent and 8.6 percent a year. Although prevalence at follow-up consultations was not zero, these women remained free of STIs longer, which considerably reduces the risk of being infected with HIV or infecting their clients. HIV prevalence in sex workers in Managua was 0.8 percent in 1991, 1.3 percent in 1997, and 2.0 percent in 1999, a rate of increase well below that observed in the sex worker populations of other major cities.

Today the voucher scheme is sustained at a cost of US$60,000 a year, reflecting the relatively low cost of patient visits. While a baseline study estimated the cost of an outpatient consultation in public facilities to be US$7.65, the average price the voucher scheme paid to clinics for a consultation and follow-up visit was initially only US$6.70. And despite increasing slightly at first, the average price was only US$5.15 in the 12th round. This cost reduction was due mostly to the gradual devaluation of the currency, but also in
part to competitive pressures and effective negotiation. In fact, contracted prices may be quite close to the clinics’ marginal costs. Reducing costs further through cost recovery from the sex workers is unrealistic and would exclude the poorest, who also have the greatest health needs. As it is, the costs to sex workers in transport and lost income are significant, and for some a reason not to use their voucher.

The direct cash benefits to the clinics participating in the scheme are not large. The largest provider has received only about US$10,000 in six years. But the program offers clinics steady, reliable income. Moreover, some clinic directors report that the presence of voucher-bearing clients has helped to fill the clinics and attract paying clients. And participation has improved the technical quality of services, since the clinics usually apply the lessons learned in the training to their services for all clients. Participation also confers a certain status on the clinics, improving their prospects when competing for other contracts, such as with the national social insurance program. For these reasons providers were prepared from the outset to offer services at prices well below their standard rates.

**Conclusion**

The voucher scheme has provided access to—and increased the use of—high-quality, tailored sexual health services in a nonstigmatizing manner for commercial sex workers and their regular sexual contacts. It has used scarce public resources cost-effectively to provide services to a group whose members have major health needs and are generally unable to pay for care. And it has reduced the risk of STIs, including HIV, among the general population. Few input-based programs of HIV/AIDS prevention can lay claim to such success.

But the voucher scheme also has some limitations and risks. The scheme’s administrative costs account for a large share of total spending, although this share might decline if the program’s geographic coverage expanded. In addition, the scheme’s price formation, through individual negotiations with each clinic, might raise questions about transparency. Fixing the number of clinics to be contracted and selecting just the lowest bidders might be more transparent. But this approach would be vulnerable to collusion between clinics and probably would not achieve the broad geographic coverage necessary to ensure high redemption rates. Moreover, the current process allows the program to take advantage of the subsidies received by some of the NGO clinics by contracting the NGOs at a lower price than the private providers and thereby “leveling the playing field” to some degree.

Some of the potential problems of voucher schemes have not arisen. One is counterfeiting. In theory a counterfeiter could reproduce the vouchers, selling them to users or service providers. But because of the measures taken to reduce this risk, a counterfeiter would need some sophistication in producing vouchers as well as confidence that the vouchers could be sold (or, if sold to a provider, redeemed by the voucher agency). A related risk is black market sales of vouchers. The market would probably be significant only if the vouchers covered a broad range of services of value to a large part of the population or interventions that are particularly costly. Moreover, black market sales are not necessarily a bad thing in this case. The secondary recipients of vouchers would probably be members of the target population or at least poorer or at higher risk than the general population.

**Note**

1. ICAS is an independent, nonprofit, nongovernmental organization with no political or religious affiliation whose sole aim is to improve the health of Central Americans. Its health programs are funded primarily by donor agencies.

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