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Rising drug costs prompt new uses for old pills

Several efforts to recover unused medicines and redistribute them are under way.

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Each year, Americans waste at least \$1 billion worth of unused prescription drugs, flushing them down the toilet, tossing them out with the trash or letting them pile up at home.

At the same time, people who desperately need those drugs go without, unable to keep up with the rising costs. Some turn to underground networks to find medications.

"We hear all the time that someone with AIDS has passed away and still has unused medications, and we hear anecdotally that these medications are shared with others," says Jeff Graham, advocacy director for AIDS Survival Project, a Georgia-based group for people with HIV. "People are desperate."

For years there's also been an informal network of activist groups and scientists who surreptitiously carried discarded drugs and medical supplies to the needy, often in the poorest parts of the world. But that approach is becoming more mainstream: there are several efforts under way, including at the level of state governments, to recover unused medicines and redistribute them.

"I think we ought to be looking at this issue from the public standpoint," says Jay Pomerantz, a psychiatrist at Harvard Medical School who is trying to launch a



Patricia A. Sampson

Down the drain: Moshe Alamaro says recycling could save billions of dollars of drugs.

nonprofit pharmacy for recycling drugs in Boston. "The cost of pharmaceuticals is a real problem, and one way of getting at that problem might be recycling."

Billions of dollars of drugs are going to waste each year.

Moshe Alamaro Massachusetts Institute of Technology



The US Food and Drug Administration (FDA)'s policy doesn't allow drugs once doled out to be recycled. But individual states can set their own policies.

Since 2003, at least 26 states have passed laws to create recycling programs for drugs that accumulate in healthcare institutions when people change their prescriptions, get better and leave, or die. The programs vary by state, but in most cases, only drugs in original packaging, sealed and labeled with expiration dates, can be returned to pharmacies.

The federal government is also giving states another incentive to recycle: as of 1 April, nursing homes are required to return to pharmacies unused drugs issued to patients on Medicaid, the federal health insurance program for the poor and disabled.

So far, recovery has been modest. In North Carolina, one of the states with an advanced program, licensed nursing home pharmacies collect unused meds, which are sorted by volunteers and distributed to free clinics. Louisiana, another leader, has at least 12 pharmacies that distribute unused prescription drugs. But in Ohio, Missouri and other states, programs have been slow to start because of a lack of interest at clinics and nursing homes.

Still, supporters hope the massive potential benefit of recycling will help the schemes catch on. California officials estimate that a law passed in 2005 allowing the recycling of unused pills from the state's nursing homes may save \$100 million in drugs.

The savings could reach several times that if everyone—and not just certified healthcare workers—could donate drugs, says Moshe Alamaro, a research associate at the Massachusetts Institute of Technology.

"Billions of dollars of drugs are going to waste and could be recovered each year," he says. "We recycle other things—bottles, paper—why not drugs?" Alamaro, Pomerantz and others are designing a nonprofit pharmacy to collect unused drugs, certify and repackage them, and then redistribute them. Unlike most state programs, which rely on leftovers from healthcare centers, Alamaro's system would allow individual consumers to return drugs to a nonprofit pharmacy.

Convincing people to donate drugs is the easy part. After Alamaro's idea appeared in stories in *AARP The Magazine* and the *Boston Globe*, leftover drug donations began

trickling in. People often contact Alamaro by email and he then directs the drugs to the Action for Post-Soviet Jewry, a nonprofit outside Boston that sends the prescriptions abroad, mostly to Ukraine. One woman who contacted him had 90-day supplies of 11 blood pressure medications. In another instance, when the father of a friend of Alamaro died, he left behind \$40,000 worth of drugs.

But there are many hurdles, including drug safety, liability and regulation issues, to making drug recycling a broader reality in the US. Alamaro says changing the way drugs are packaged is part of the answer: he suggests they be dispensed in tamper-proof packs with five pills each, have dosage amounts and expiration dates, and include a chemical agent that could indicate heat exposure.

Alamaro is talking with Boston city officials about starting a pilot program there. The endeavor will involve getting the state legislature to approve the program, as current laws prevent the redistribution of drugs. If successful, the program could be replicated in other states, he says.

He already has strong support in Tennessee.

"I'm very intrigued with the possibility of recycling drugs," says Scott Morris, executive director of the Church Health Center in Memphis, a nonprofit that serves 40,000 residents without health insurance. "If we can get over the legal hurdles, a drug recycling program could help the 46 million uninsured Americans."

Another benefit of such programs would be reducing the number of unregulated prescription drugs brought into the country.

"Right now, we have no idea what's going on with drugs coming in across the borders. We don't know if they're safe, we don't know if they're counterfeit," says Pomerantz. "[Drug recycling] would be an open, legitimate enterprise that the FDA could more easily police."