

# A Comprehensive Approach to Outpatient Transplant Pharmacy

*Robert N. McEwan*

The price tag on post-transplant pharmaceuticals is high, and patients who must rely on personal funds to pay for their drugs—or even their co-pays and deductibles—may not be able to afford them.

Second only to the importance of successful transplant surgery on the recipient patient is the need to treat the patient with a variety of prescription drugs successfully. Common prescription regimens include immunosuppressive and anti-infective drugs (a continuous balancing act), as well as drugs for hypertension, diabetes, hyperlipidemia, or gastrointestinal distress, which patients with chronic illness often take routinely.

As part of the precertification that is done at Johns Hopkins to ensure financial coverage of the transplant procedure, the center checks the coverage of medications by the patient's insurance plan or entitlement program. Depending on how long a patient is listed before transplantation, he or she may become disabled because of chronic disease, lose employment, and/or may lose insurance protection. Financial counselors are continually challenged to be vigilant of these changes and to ask the patient to keep the transplant center abreast of any possible or anticipated risk to coverage. Even so, it is a common occurrence for a transplanted patient to be in a position of not having the cost of his or her prescriptions covered. The price tag on post-transplant pharmaceuticals is high, and patients who must rely on personal funds to pay for their drugs—or even their copays and deductibles—may not be able to afford them. Centers may find themselves in a crisis as they work to help patients get the drugs necessary to keep their organ and remain as healthy as possible.

Some pharmacy solutions are less than ideal and might even be dangerous. In desperate situations, for example, some transplant centers may collect drugs that come from patients who have been switched to another regimen. Or they might recover drugs donated by the well-meaning families of

patients who have not survived their transplants. Great care is taken to make sure that the drugs are not expired and have been stored properly, in the hope that they can help another patient who is unable to pay for them.<sup>1</sup> Even if this is not sanctioned in the transplant center, it is often an active practice in transplant support groups, where patients are trying to “look out” for one another. But the practice is a dangerous one, even if examined from only a pharmaceutical perspective. Take, for example, the matter of the “appropriate storage” of a drug. A “recycled use” drug could have been in the custody of a patient who had taken a trip and left the drug in a car parked in the sun, in which case the drug might have been exposed to temperatures in excess of 400 °F. One must always assume the possibility that “recycled” drugs could be completely inactivated and worthless when passed on to another patient. This does not even take into consideration that the practice is illegal if promoted or supported by anyone. In short, there is no “legal dispense” permissible of one patient's drugs to another.

At the transplant center at Johns Hopkins, a 3-step process was put in place to help take care of patients that are underinsured and must take drugs for the rest of their lives. The 1st and easiest step of this arrangement was with the in-house, outpatient pharmacy. They allowed us to send any transplant patient to them as a transplant administrator-approved patient, to receive a 3-day supply of any or all of his or her drugs. This program was intended to provide medications to any patient that could not immediately afford them and needed coverage for a weekend, or until he or she could get home after a transplant center visit. In 1 year, this program was accessed only 5 times at a cost to the department of surgery of less than \$300.

Robert N. McEwan, M.B.A.  
The Johns Hopkins Hospital  
Administrative Director  
Comprehensive Transplant Center  
Baltimore, Maryland, USA 21287  
Fax: 410.614.9270  
email: mmcewan@jhmi.edu

The 2nd component involved an arrangement with our in-house, transplant specialty pharmacy, Stadtlanders (now CVS Procure). As part of a plan to provide more uniform pharmacy service to patients, Johns Hopkins sent a request for proposal (RFP) to mail-order pharmacy providers to ask for the programs/services they would provide if rented a space on the medical campus that was accessible by our transplant patients. After several companies responded, Stadtlanders was chosen on the basis of their responses and the reputation they held in the transplant community. Part of that service agreement required the pharmacy and the transplant center to show diligence from both sides in helping transplant patients maintain their pharmaceutical coverage and reduce the patients' anxiety when they could not find solutions easily, and to generally work together on behalf of the patients.

An important aspect of that program is that it permits the social worker to quickly identify patients who have extenuating circumstances. Both social worker and pharmacy then work to find solutions for the patient to cover his or her drugs long term. For a period of up to 8 weeks, the department of surgery will cover the costs of the patient's drugs while applications are made for Medicaid, other entitlement programs, or pharmaceutical industry patient assistance programs (PAPs). In 1 year, 19 patients have received just over \$17000 in medications covered by the department of surgery. All of these patients have now found alternative sources of pharmaceutical coverage—including those enrolled in the last component of the pharmacy arrangement that the transplant center put in place, MEDBANK of Maryland, Inc.

MEDBANK grew out of the realization that using the pharmaceutical PAPs was both laborious and time-consuming to nurses and social workers doing the paperwork on behalf of the physicians. Although those programs have been available for more than 20 years, overall, they have never been easy or straightforward; and physicians who lacked the staff to do this paperwork simply could not offer to help their patients in this way. After reading a February 1999 article in the *Wall Street Journal* about The MedBank Foundation in Savannah, Georgia—a coordinated program that provided this work for their physicians—we studied the pro-

gram and brought it to Baltimore. That program became the nonprofit foundation, MEDBANK of Maryland, Inc. After obtaining a grant from the Maryland Health Care Foundation, MEDBANK of Maryland went into business in February 2000 and processed its first patients in May of that year.

MEDBANK of Maryland was created originally to help Johns Hopkins transplant patients, but it soon became clear that we had discovered a solution to a greater community problem—obtaining medications for chronically ill, low-income, underinsured, or uninsured patients. MEDBANK works by having a trained staff of volunteers process the pharmaceutical PAP forms for physicians, who only need to refer the patient and sign the forms to obtain all or most of a patient's drugs free or for a small copay. It takes in any patient from the community referred by any health care professional. In the first 12 months of its existence, MEDBANK provided free medications to more than 2200 patients. The volunteers have come from many sources, including Johns Hopkins Hospital and our own transplant patients, who, aware of the need, have reached out to help other patients. MEDBANK has relieved the social workers and nurses at Johns Hopkins and the other hospitals in Baltimore of having to process the paperwork for the patients followed long-term by physicians. This allows them to devote more time to clinical and social work responsibilities.

The average number of drugs taken by the average MEDBANK patient is 5, but the range is from 1 to 12 drugs per day. The savings to the patients are tremendous, but the savings to the community should be even greater because of the expected decrease in emergency department visits, as well as unscheduled hospitalizations attributable to involuntary noncompliance. The program should also forestall the unnecessary loss of transplanted organs for the same reason.

To track health care utilization and the subsequent renewals necessary for each of the PAPs, MEDBANK built a patient-tracking database in SQL 7 called *Patient Bridge*. Created by Keyware Solutions, Inc., *Patient Bridge* is capable of informing MEDBANK staff of the current status of a particular patient's drugs in the PAP process and also helps them prepare the paperwork ahead of the

date necessary to have new drugs shipped before a patient runs out. This program and the automated approach created by Keyware, Inc., helped MEDBANK of Maryland to obtain a grant of \$2.5 million this year to expand the program statewide. With new features in the next phase of development, it will be possible to print most of the necessary forms directly out of the Internet-based system and make information accessible to any health care professional in the state of Maryland through Web referral. MEDBANK's target for the 1st year of the expansion is to reach 20000 Maryland patients.

Transplantation represents a solution to many types of end-stage disease. Through thoughtful pharmacy programs, Johns Hopkins has sought to help all patients maintain their new organs longer with less stress related to the costs of the medications and more patient focus dedicated to compliance, and to working with the transplant team. MEDBANK of Maryland, Inc., was born of this concern and, in the process, became a long-term solution for the community that may even slow the disease progression to transplantation in the state of Maryland.

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**REFERENCE**

1. Lagnando L. Do or die—transplant patients ply an illicit market for vital medicines—drugs they need to survive are costly, and insurance is often not available—the drop off at the bakery. *Wall Street Journal*.