Outpatient medication assistance program in a rural setting

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Purpose. Efforts to provide medication assistance to the rural poor in central Louisiana are described.

Summary. The Central Louisiana Medication Access Program (CMAP) began functioning in 2001 with the objective of providing medication assistance and medication education to the rural poor in the community. The program serves individuals who use the outpatient clinic at the state-run public hospital in central Louisiana. Patients receive prescription drugs for a variety of chronic conditions, paying only a processing fee of $3 per prescription, with a maximum outlay of $15 per visit. A pharmacist counsels the patients about their medications. The medications are funded both through the program and through assistance programs run by pharmaceutical companies. A total of 5307 patients were enrolled in the CMAP between May 2001 and March 2003, and they received over 140,000 prescriptions at a cost saving to them in excess of $2.5 million.

Conclusion. The CMAP has been able to provide prescription medications and medication counseling to needy patients in a rural environment at little cost to them.

Index terms: Copayments; Costs; Industry, pharmaceutical; Patient information; Patients; Pharmaceutical services; Pharmacists; Pharmacy, institutional, hospital; Prescriptions; Sociology

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Prescription drug expenditures in the United States increased by 16.4% during 2001 compared with 2000.[1] This is a major problem for Americans who lack health care insurance. In 2001 alone there were 2.5 million more Americans without health insurance, bringing the total to 41.2 million (14.6% of the population).[2] In the South, the uninsured rate is almost 20%.[3]

The uninsured are generally low-income working adults and their dependents who cannot obtain coverage from the workplace or who cannot afford the coverage that is offered.[2] While representing only 12.4% of the U.S. population, people over 64 years of age consume 35% of prescription drugs.[4,5] Nonelderly people below 200% of the federal poverty level are over three times as likely to be uninsured as those with higher income.[3] Only 78.1% of nonelderly people in rural counties are insured, compared with 85.7% in urban counties.[2,6] The rural elderly are more likely than their urban counterparts to report a functional problem and to rate their health as poor.[6,7]

This report describes efforts to provide medication assistance to the rural poor in central Louisiana.

Background

Louisiana has a particularly large uninsured population, ranking among the five states with the most uninsured residents under age 65.[8] In central Louisiana, most residents living below the federal poverty level do not qualify for prescription drug benefits. Louisiana has a larger percentage of Medicare participants living at or below the federally defined poverty level (16%) than any other state.[9] Forty-nine percent of Medicare beneficiaries in Louisiana have

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annual incomes below $15,000, versus 38% nationally.[10] In central Louisiana, 40% or more of the population has no prescription drug benefits, and the public hospital system's outpatient clinics serve roughly 70% of those with no insurance.[9] In the past, the public hospital system has not been able to help patients afford outpatient medications.

A recent study identified three specific problems for the uninsured with respect to medication: getting appropriate medications, having an adequate supply of needed medications, and using medications appropriately.[11] Many programs have begun, in the past 10–15 years, to help the uninsured obtain free or low-cost medications. In 1992, Congress enacted section 340B of the Public Health Service Act to allow public hospitals, health centers serving migrant workers and the homeless, community health centers, AIDS clinics, and other safety-net providers to purchase outpatient pharmaceuticals at a discount.[12] This act of Congress opened the door for large community-based access programs designed to assist those uninsured who are most in need of prescription drug coverage.

Medication assistance programs often rely on pharmaceutical manufacturer assistance programs to serve indigent populations.[13] Through these philanthropic programs, eligible patients receive prescription medications at little or no cost.[14] Eligibility for the programs is determined by patients' income. In 2001, drug companies helped an estimated 3.6 million patients fill more than 10 million prescriptions with a wholesale value of some $1.5 billion.[15]

The goal of medication assistance programs is to give the uninsured greater access to health care in order to better manage illness and reduce morbidity.[16] A key component of these patients' disease management is the ability for them to see a physician to help them understand their illness and help them manage it with a daily regimen that includes regular medication use, self-care practices, and risk awareness and prevention.[11] Therefore, a good medication assistance program includes physician visits.[17]

Evidence suggests that free or low-cost prescription drugs help to improve medication compliance and reduce hospitalization rates and emergency room visits.[17,18] This is especially important in the case of the elderly, who are heavy users of the emergency room because of their poorer general health and greater need for emergency care.[19]

The Central Louisiana Medication Access Program

In 2000, The Rapides Foundation, a nonprofit hospital conversion foundation in Alexandria, Louisiana, sponsored a study to identify medication-access and education issues in its community. It collaborated with the executive director of Senior PHARMAssist to conduct a community-needs assessment in six parishes in central Louisiana. Senior PHARMAssist is a program in Durham County, North Carolina, that assists the elderly by providing prescription medications and coordinating with their physicians to make sure that the drug regimens are appropriate and affordable. On the basis of its study, The Rapides Foundation recommended a medication-access program centered on the local public hospital clinic and pharmacy. Another suggestion was providing an option to use outside community pharmacies for those patients who were under the care of private-practice physicians. As a result, the Central Louisiana Medication Access Program (CMAP) was begun in 2001 to provide prescription drugs and medication education to people who cannot afford them.

The CMAP has three distinct components: the initiation and ongoing operation of a subsidized outpatient pharmacy at the region's public hospital, the formation of a community-based prescription card benefit system utilizing existing community pharmacies, and the establishment of community-based liaisons among clients, manufacturers' patient assistance programs, and physicians' offices. This article focuses on the first component, the subsidized outpatient pharmacy at the region's public hospital.

This program serves individuals who use the outpatient clinics at the state-run public hospital in central Louisiana, Huey P. Long Medical Center (HPLMC), a member of the Louisiana State University Health Sciences Center—Health Care Services Division. The hospital opened in 1939 and provides care to the medically indigent population of central Louisiana. This is a public health facility that, under section 340B of the Public Health Services Act, may purchase medications at 51% off the wholesale cost. It is the oldest health care facility in the state system and is staffed by 542 employees, including 117 registered nurses, 38 licensed practical nurses, 4 inpatient pharmacists, 4 outpatient CMAP pharmacists, 43 active-contract physicians (including 23 regular full-time physicians), and 30 privileged emergency medicine physicians, as well as 9 medical residents each month. In the 2001–2002 fiscal year, the hospital had 4,323 inpatient admissions, which accounted for 18,744 inpatient census days, and a daily inpatient census of 60–75 patients. During that year, the emergency room reported 51,954 visits, while outpatient visits totaled 60,644. The patient population consists primarily of low-income uninsured people.

Description of the program

Members of the community use the outpatient clinic at HPLMC for their health care needs. Physicians see patients in the outpatient clinic

and may write prescriptions to be filled. The patient is then invited to enroll in the CMAP through the hospital's social services department. Social services staff collect information on income, current health status, and general demographics. Once the person is verified as being eligible for the CMAP, he or she is sent to the clinic pharmacy, also located on site. At the pharmacy, the patient is given a one-month supply of medication and asked to return for a refill in one month. Participants must reenroll in the CMAP every six months and are expected to make regular clinic visits and to return to the pharmacy for refills as needed. The CMAP also provides medication education through a pharmacist.

HPLMC already had a system in place for determining who was eligible for "free care" at the hospital and clinic, and this program was utilized by the CMAP. Social services workers collect information establishing a patient's income, which is updated every six months. The hospital's pharmacy and therapeutics committee was asked to help determine the formulary to be used by the CMAP. Any physician may request an addition to the formulary, which is reviewed by the committee. Criteria used in making formulary decisions include safety, existing formulary medications, indications, adverse effects, and cost. The outpatient formulary for the CMAP emphasized meeting the needs of patients with chronic conditions, such as diabetes, hypertension, hyperlipidemia, congestive heart failure, and asthma.

In April 2001, the program began to be advertised on posters throughout the clinic, as well as in print ads, billboards, and public service announcements on TV.

Eligibility and enrollment

To be eligible for the CMAP at HPLMC, patients must (1) be seen at HPLMC in a primary care clinic or a selected specialty care clinic, (2) not have a third-party payer for outpatient medication benefits (patients eligible for Medicaid or other government-sponsored outpatient pharmacy benefits are not eligible), (3) have income at or below 200% of the poverty level, which is $1496 a month for an individual and $2020 a month for a couple (higher income is allowed if there are dependents), and (4) require medication that is on the formulary.

Once a patient is determined to be eligible, he or she must sign an informed-consent form detailing the release of personal health information; the form meets the requirements of the Health Insurance Portability and Accountability Act of 1996. The enrollment process consists of a 30-minute interview with a social services staff member. The patient is asked to provide proof of income, answer questions about his or her health overall and health in the previous year, list all medications being taken (prescription and nonprescription), and describe his or her activities of daily living (ADLs [ability to bathe, dress, walk indoors, use the bathroom, get in and out of bed, and feed oneself]) and instrumental activities of daily living (IADLs [ability to use transportation, use the telephone, take medicine, manage money, shop, do housework, and prepare meals]). At reenrollment after six months, patients are asked to report any changes in income, answer questions about their health during the previous six months, update information on drugs being taken, report any changes in ADLs and IADLs, and fill out a questionnaire on their satisfaction with the program.

Medications

Outpatient pharmacy. The outpatient pharmacy at HPLMC operates five days a week from 8 a.m. to 4:30 p.m. Patients come to a walk-up window to ask to have their prescriptions filled. Patients who do not have any more refills are asked to make an appointment to see their clinic physician. The pharmacist attempts to contact a nurse practitioner at the clinic to obtain a prescription for enough medication to last the patient until he or she can be seen at the clinic. A patient is sent to social services to reenroll if the computer tells the pharmacist that it has been at least six months since enrollment or reenrollment.

Formulary. CMAP patients are eligible to receive formulary medications for a $3 processing fee per prescription, up to a maximum of $15 out-of-pocket per month. Many of the drugs on the formulary are obtained through drug company medication assistance programs. CMAP patients are spared the lengthy application process normally required by these programs because all the necessary information is forwarded to the drug companies electronically. The companies send the drugs directly to the pharmacy at the outpatient clinic, and the pharmacy dispenses the medication.

Medication education. A pharmacist counsels all patients receiving a new medication. Patients who are taking four or more medications are considered high-risk and receive a more in-depth review of all medications. The pharmacist warns of possible adverse effects or interactions and discusses the importance of compliance. The uninsured may be more likely than other patients to reduce dosages without physician approval, take a drug less frequently than prescribed, and share medications with others.[5] Medication reviews have been shown to combat these problems by improving compliance, health outcomes, and patient satisfaction.[20,21]

Program evaluation

The CMAP has joined with the School of Public Health and Tropical Medicine at Tulane University to assess the program's ability to give the rural poor access to health care. Data

are being collected on patient satisfaction with the program, emergency room visits, hospital admissions, ADLs, medical outcomes (including blood pressure, blood glucose levels, hemoglobin A_{1c} levels, and blood lipid levels), and patient perceptions about health as rated on the SF-8 Health Survey.

Initial funding for the CMAP consisted of a three-year grant of $2,010,194. Through the end of March 2003, over 140,000 prescriptions had been filled, with a cost saving to patients in excess of $2.5 million for long-term prescription medications. Cost savings were calculated as the amount a medication would have cost had it been purchased by the patients at Public Health Service prices, which are discounted prices offered to outpatient clinic pharmacies. Medications from manufacturer assistance programs accounted for $1.4 million of the $2.5 million saved. (As the program has continued, there has been increasing use of manufacturer assistance programs. In May 2001, 6.7% of the total retail cost saving derived from these programs; by March 2003 this figure was up to 54.7%.)

In the first 22 months of its operation, over 5000 patients were enrolled in the CMAP. Table 1 reports selected demographic characteristics of the 5307 individuals enrolled in the program from May 2001 through March 2003. Patients were mostly women (71.6%) with a mean ± S.D. age of 50.1 ± 27.0 years. Almost 46% of the participants were African-American. The mean ± S.D. number of prescription medications received by participants was 4.2 ± 3.1. Over 42% of patients were unemployed, and 11% were disabled. The mean ± S.D. monthly income was $840 ± $490, well below 200% of the federal government's definition of poverty.

Table 1.
Characteristics of Patients Enrolled in Central Louisiana Medication Access Program, May 2001 through March 2003

Characteristic	No. (%) Patients (*n* = 5307)
Age at initial interview (yr)	
<18	0 (0.0)
18–29	289 (5.5)
30–39	732 (13.8)
40–49	1560 (29.4)
50–59	1553 (29.3)
60–69	923 (17.4)
≥70	250 (4.7)
Sex	
Female	3798 (71.6)
Male	1509 (28.4)
Race	
African-American	2423 (45.7)
White	2789 (52.5)
Other	89 (1.7)
Unknown	6 (0.1)
Work status	
Employed	1663 (31.3)
Unemployed	2276 (42.9)
Retired	400 (7.5)
Disabled	577 (10.9)
Other	8 (0.2)
Unknown[a]	383 (7.2)
Diagnosis[b]	
Hypertension	2717 (30.4)
Diabetes mellitus	1516 (17.0)
Hyperlipidemia	506 (5.7)
Arthritis	384 (4.3)
Gastroesophageal reflux disease	368 (4.1)
Other	3433 (38.5)

[a]Some patients chose not to report their work status.
[b]Because patients were allowed to report more than one diagnosis, the total exceeds 5307.

Future of the program

The CMAP started as an initiative of a nonprofit foundation seeking to address the lack of access to health care of the rural poor people in its community. The program is now moving toward becoming a stand-alone nonprofit entity. Encouraging the community to take some responsibility for funding the CMAP should allow the program to continue without sole funding from this one foundation. Establishing the CMAP as a community-funded nonprofit program may promote its replication in other poor areas of the United States.

Conclusion

The CMAP has been able to provide prescription medications and medication counseling to needy patients in a rural environment at little cost to them.

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