ORIGINAL ARTICLES

Reasons for Repeated Medical Visits Among Patients with Chronic Back Pain

Carol A. McPhillips-Tangum, MPH, Daniel C. Cherkin, PhD, Lorna A. Rhodes, PhD, Christine Markham, MA

OBJECTIVE: This study identifies the key motivations of patients repeatedly seeking medical care for chronic back problems.

DESIGN: We conducted one-on-one, in-depth interviews with patients to discuss their experiences with low back pain and its care. To validate our interpretation of the qualitative data, participants were mailed questionnaires listing the themes identified in the interviews and asked to rate the importance to them of each of the themes.

SETTING: Managed health care plans in Atlanta, Dallas, and Seattle.

PARTICIPANTS: Fifty-four patients (37% male, 63% female) who were 25 to 65 years of age and had three or more medically attended episodes of low back pain during the 3 years preceding the study.

MAIN RESULTS: In describing their motivations for seeking medical care for back pain, nearly all participants cited difficulty in performing normal activities and the desire to discover the cause of the pain. Other motivations for seeking medical care for back pain included increased pain and the desire for a diagnostic test or a new treatment. Many of the verbalized reasons for repeated medical visits among patients with chronic back pain are probably best understood as seeking validation of their suffering.

CONCLUSIONS: Patients with chronic back pain report many unmet needs and expectations. Overall satisfaction might be improved if clinicians elicit patients' views of underlying causes and their expectations from office visits.

KEY WORDS: back pain; low back pain; chronic pain; repeated medical visits.

J GEN INTERN MED 1998;13:289-295.

Low back pain is one of the most common health problems in the United States.^{1,2} It is estimated that 70% to 80% of American adults will experience back pain at some point in their lives.³ Back pain is the leading symptom prompting visits to orthopedic surgeons and neurosurgeons, and the second leading symptom prompting visits to primary care physicians.⁴ It is estimated that 5% to 10% of patients who initially visit a primary care physician for low back pain will ultimately develop chronic back pain.⁵ Those patients who develop chronic low back pain are likely to make repeated visits to various health care providers.

Although many chronic back pain sufferers repeatedly seek care from primary care physicians and other health care providers, they are unlikely to receive treatment that permanently relieves their pain and discomfort.^{6,7} Patients who visit primary care physicians for low back pain are often dissatisfied with the care, information, and treatment they receive.⁸ In fact, a survey by *Consumer Reports* (1995;60:81-8) found high rates of dissatisfaction with medical care for chronic back pain. Furthermore, primary care physicians are frequently frustrated by their inability to meet the needs of patients with low back pain. Many feel there is little they can do to prevent acute back pain from becoming chronic.⁹

Despite the fact that clinical trials have not produced strong evidence for the effectiveness of any particular treatment for low back pain, a growing body of literature suggests that primary care management of low back pain should involve early return to normal activities, selective use of imaging tests, and use of self-care interventions.¹⁰ With regard to self-care, the effort to design and implement effective interventions is hindered by inadequate information about the underlying needs of patients who repeatedly seek care for low back pain.

We conducted this study of the reasons for repeated medical visits to better understand the needs of persons who recurrently seek care for back pain. More comprehensive information about patients' reasons for repeated medical visits is essential for the identification of intervention strategies that have the potential for improving outcomes or decreasing costs. To date, no published studies have used qualitative methods or thematic analysis to examine the reasons for repeated medical visits among chronic back pain sufferers. In this study, a quali-

Received from The Prudential Center for Health Care Research, Atlanta, Ga. (CAMT); Center for Health Studies, Group Health Cooperative of Puget Sound, Seattle, Wash. (DCC); University of Washington, Seattle (LAR); and University of Texas, Houston Health Science Center (CM).

Address correspondence and reprint requests to Carol McPhillips-Tangum, MPH: The Prudential Center for Health Care Research, 2859 Paces Ferry Rd., Suite 820, Atlanta, GA 30030.

tative approach (interview) was used to collect data on these topics and ensure that all significant issues were identified, while a quantitative approach (questionnaire) was used to determine the relative importance of these issues.

METHODS

Setting

Interviews were conducted in three cities: Atlanta, Dallas, and Seattle. Participants interviewed in each of the three cities were enrolled in one of three types of managed health care plans at the time of the interview. Participants interviewed in Atlanta and Dallas were enrolled in an HMO of the independent practice association model. Participants interviewed in Seattle were enrolled in a staff-model HMO.

Sample

Computerized databases at each of the three study sites were used to identify patients who were eligible to participate in the study. To be eligible, patients had to be between 25 and 65 years of age and have experienced three or more medically attended episodes of low back pain during the 3 years preceding the study. Medically attended episodes were defined as one or more visits for low back pain spaced at least 90 days apart from any other visit for low back pain. By using a preselected set of 23 ICD-9 codes, we included only patients with mechanical low back pain and excluded those with back pain from neoplastic, infectious, or inflammatory causes.¹¹ Our preselected set of ICD-9 codes included codes for conditions such as sprains and strains in the lumbar, sacral, and sacroiliac regions; sciatica; spondylolisthesis; lumbar stenosis; and degeneration of the lumbar or lumbosacral disk.

Random samples of 50 persons in Atlanta, 35 persons in Dallas, and 25 persons in Seattle who met these criteria were invited to participate in interviews to discuss their experiences with back pain. Thirty interviews were completed in Atlanta (60% of those sampled), 20 in Dallas (57%), and 20 in Seattle (80%). Sixteen of the 70 interviews conducted were excluded because they focused on experiences with chiropractors, and the focus of this study is on the traditional (i.e., medical) primary care setting. There is also evidence to suggest that patients who visit chiropractors differ significantly from patients who visit medical doctors.¹² Thus, the results presented here are based on the data obtained from the 54 patients who sought care primarily in the more traditional medical care setting.

Recruitment and Data Collection

Potential participants were mailed a letter stating that the purpose of the study was to identify ways of improving care for persons experiencing chronic or recurrent low back pain. The letter offered a \$40 incentive for

participation in an interview. Potential participants were then called by a member of the research team and invited to participate. Three trained interviewers with graduate degrees in anthropology or sociology conducted the in-person, in-depth, semistructured interviews. An interview guide consisting of general questions and prompts designed to encourage participants to describe their past and present experiences with back pain was used. Interviews were conducted in homes and work sites and typically lasted between 60 to 75 minutes. All interviews were conducted between May and June of 1995 and recorded on audiotape.

Analysis

The audiotapes produced during the interviews were transcribed verbatim. The members of the research team conducted a systematic analysis of the content of the transcripts. The content analysis followed a multistep procedure to discover major areas of similarity or agreement (i.e., themes) within the population of study participants. First, members of the research team were given several transcripts and asked independently to categorize passages within the transcripts by assigning descriptive codes (e.g., pain, depression, limitations). The research team then met to compare and discuss the coding process and generate a coding guide. The codes were then refined, and one author (CM) coded the content of all transcripts. The coded transcripts were entered into a computerized software package designed to organize the textual data and facilitate content analysis (Ethnograph, version 4.0: a program for the analysis of text-based data; Qualis Research Associates, Palm Desert, Calif., 1995). This software package permitted identification of the frequency with which groups of related codes and themes were mentioned by participants.

Questionnaires designed to validate the results of the qualitative analyses were mailed to all participants between 1 and 2 months after their interview. The questionnaires listed the 14 most frequently cited reasons for medical visits related to back pain as identified in the interviews. Participants were asked to rate the importance for them of each of the listed reasons for visiting a physician for back problems, using a symmetrical 5-point scale with statements anchored at each end ("not at all important" to "extremely important"). Participants were asked to rate separately the importance of the listed reasons at the time of their last medical visit for back pain and at past visits. Of the 54 mailed questionnaires, 41 (76%) were completed and returned.

The results of the interview data were compared with the results of the questionnaire. The most frequently mentioned reasons for seeking medical care for back pain were identified from the interview data and then ranked according to the percentage of participants who mentioned each. Similarly, the questionnaire data were ranked according to the percentage of respondents who indicated that a partic-

ular reason was at least moderately important in their decision to seek medical care for their back pain.

RESULTS

Characteristics of interview participants are described in Table 1. The majority of participants were female, white, and married. At the time of the interview, most participants were employed and less than 10% were on sick leave or receiving disability insurance. Most participants reported other recurrent pain problems, especially joint pain in the upper and lower extremities. Sixty-one percent were experiencing low back pain of moderate or greater intensity at the time of the interview (i.e., a score of at least 4 on a 0–10 pain scale). About one in three participants had had low back surgery, and a similar proportion reported that they usually had leg pain that was worse than their back pain (suggestive of a herniated disk).

In the interviews, participants cited numerous and diverse reasons for seeking medical care related to back problems (Table 2). The six most frequently cited reasons for seeking medical care for back pain are described below.

Activity Limitations

Nearly all participants cited difficulty in performing normal activities as a reason for seeking medical care. In fact, participants cited activity limitation more often than increased pain.

Among participants in this study, pain that intrudes on sleep or occurs despite medication was often taken to be serious enough to warrant a visit with a physician. As one woman told us,

I've been living on pain pills. I leave [work] in the afternoon, and I can barely walk to my car. When I do get there, I have to sit for a little while before I can drive the car home. I cannot cook. I have to sit on a stool to do any cooking because if I try to stand for more than 5 minutes at a time, well, you wouldn't believe the pain.

This comment illustrates the interaction between pain and activity limitations.

Several other participants also provided examples of pain interfering with performance of important social roles and activities. Nearly all participants described frustration with their inability to perform crucial household tasks and their work. Both men and women talked of their distress when pain interfered with the ability to care for, or play with, children or grandchildren. As one participant described: "I got to the point where I couldn't pick up my grandchildren. I could not lift those kids because of my back. I couldn't even hold the baby. I wouldn't dare walk while holding the baby. I was afraid I'd stumble and fall."

Desire to Discover the Cause

Nearly all participants described seeking medical care to discover the cause of their back problems. Several par-

Table 1. Characteristics of Interview Participants (n = 54)

Characteristic	Value
Age in years, mean (range)	46.6 (26–65)
Gender, %	
Male	37.0
Female	63.0
Race/ethnicity, %	
White or Caucasian	72.2
Black or African American	18.5
Asian or Pacific Islander	7.4
Hispanic or Chicano	1.9
Marital status, %	
Married or living as married	72.2
Never married	5.6
Widowed	5.6
Divorced	14.8
Separated	1.9
Level of education, %	
Less than high school	9.3
High school graduate	14.8
Technical school	5.6
Some college	25.9
College graduate	44.4
Annual household income, %	
<\$25,000	16.7
\$25,000–\$50,000	38.8
>\$50,000	37.0
Missing	7.4
Current employment situation, %	
Employed	68.6
Homemaker	11.1
Student	3.7
Unemployed	1.9
Retired	7.4
Sick leave	3.7
Disability	3.7
Health as compared with others of same age, %	
Excellent	22.2
Very good	29.6
Good	29.6
Fair	13.0
Poor	3.7
Missing	1.2
Recurrent problems during last 3 years, %	
Severe headache/migraines	33.3
Stomach ache/abdominal pain	25.9
Joint pain (arms, hands, legs, feet)	63.0
Chest pain	13.0
Facial pain/jaw pain	16.7
Usually have leg pain worse than back pain, %	29.6
Ever had surgery for low back or leg pain, %	31.5
Bothersomeness of pain during interview, mean	5.5*
Years since first visit to a health professional for back pain, mean (range)	11.7 (1–45) [†]

*Mean on 0–10 scale.

[†]Data for this variable obtained from postinterview questionnaires (n = 40).

Table 2. Patients' Reasons for Seeking Medical Care for Low Back Pain (Most Recent Visit), by Data Collection Method

Reason	Interview Ranking (n = 54)	Identified as Important in Interview*, %	Survey Ranking (n = 41)	Identified as Important in Survey†, %
Difficulty performing normal activities	1	98.1	1 & 2 (tie)	97.4
Desire to discover cause of pain	2	94.4	1 & 2 (tie)	97.4
Increase in pain	3	68.5	3	97.2
Desire diagnostic test	4	44.6	4	81.0
Unanswered questions	5	38.9	5	79.4
Desire new treatment	6	25.9	6	64.8
Returning for a previously effective treatment	7	22.2	10	41.6
Went for other problem, but also treated for back pain	8	20.3	12	18.9
Desire referral to medical or surgical specialist	9	20.4	7	57.8
Symptoms changed	10	14.8	8	54.0
Dissatisfied with care	11	12.9	9	50.0
Maintenance visit	12	7.4	11	29.4
Desire to prove to family or employer that pain is real	13 & 14 (tie)	3.7	13	17.1
Refill a medication	13 & 14 (tie)	3.7	14	16.2

*Percentage of all patients who mentioned this reason during the interview.

†Percentage of all patients who indicated on the questionnaire that this type of impact was at least moderate, as indicated by assigning a score of ≥ 3 on a scale of 1 to 5 where 1 represents no impact and 5 is severe impact.

ticipants expressed frustration over not receiving any diagnosis from their physician. As one man described,

The initial diagnosis was just—well, you know, there really wasn't one. I had some x-rays, and they said they weren't really certain what was going on. All they told me was to lie flat on my back for 4 days and see what happens.

Another participant told us: "I am really concerned about my back because there must be something that is causing me to have this pain. Sometimes the pain is so severe that it is like somebody is just breaking me in two."

Even when a diagnosis was provided, it was sometimes perceived by the patient as inadequate. For example, receipt of a symptomatic descriptive diagnosis (i.e., low back pain) was considered inadequate by some participants. After making several medical visits to determine the cause of his back pain, one man described his frustration over receiving a diagnosis he perceived as describing his symptom rather than explaining it. As he told us,

The diagnosis from my primary care provider was back pain. He then referred me to an orthopedic doctor. [He] took a series of x-rays, and then he asked me to do some motions, such as bend over to see how far I could reach before the pain kicked in. He tested my muscle strength, and so on, and so on. Then his diagnosis was back pain, too.

Some participants also described frustration over receiving different diagnoses over time. As one participant told us,

First, the doctor told me that it was arthritis and there was nothing that could be done about it. Then after tak-

ing the x-rays he said that what had happened was that my pelvis had shifted like so . . . and it had pinched the sciatic nerve. [He said] that caused the pain down my leg.

Another participant described her reaction to receiving different diagnoses from different physicians:

I went to the new doctor, and I took my MRI [magnetic resonance imaging] results with me. He looked at them for 1 minute, and he said, 'Honey, you have fractured your disk into pieces, and they have fallen down and are pinching a nerve.' I wonder why my other doctor never told me that?

Increase in Pain

Many participants described their back pain as a back "attack" or "flare-up." For most participants, onset of pain or an increase in pain intensity signaled the need to seek medical care. For some participants, an increase in pain was noted within a functional or social context that made the pain "unbearable." One woman described how her back pain became intolerable after her daughter's wedding:

My daughter got married at 4:00 in the afternoon. I went to the wedding and I wore high heels. I danced and did everything because I told myself that I would do nothing to spoil my daughter's wedding. No matter how uncomfortable I was, I was not going to ruin her wedding. We came home from the wedding at about a quarter to nine in the evening. I walked into the house, went upstairs, put on my sweat pants, and asked my husband to take me to the hospital. I couldn't tolerate the pain anymore.

Nearly all participants described coping strategies they used to manage or eliminate their back pain. Many participants attributed pain to failure of one or more of the coping strategies that had worked for them in the past. Failure of coping strategies prompted many participants to make return visits to their physician. As one participant described, "During the past several weeks, there have been several nights when I have had difficulty going to sleep because the legs hurt. In the past, if I wanted to get rid of the pain in my legs I'd just lie down. It doesn't work anymore."

Desire for Diagnostic Test

Minimization of the seriousness of back pain by doctors, family, and employers led some participants to seek a diagnostic test as a means to prove that some physical cause was underlying the pain. Many participants described their efforts to convince their physicians of their "need" to receive a diagnostic test such as an x-ray, computed tomographic (CT) scan, or MRI. One man described his experience after being involved in an automobile accident: "The x-rays didn't show anything broken, so they didn't believe anything was wrong with me. They sent me home and told me to stay on my back for 5 days. I went back a couple of days later and asked for an MRI."

Some participants believed that positive results from a diagnostic test constituted "evidence" that their back pain was "real." After numerous medical encounters and diagnostic tests culminated in a diagnosis, one participant described her feelings: "I kind of felt relieved. I felt like, well, here's proof. It's not just me going crazy or complaining. This is proof. It's black and white, and anybody can see it."

Unanswered Questions

Many participants reported feelings of frustration and confusion when their questions were not answered by the physician during the course of one or more office visits. Among those participants who spoke explicitly about the need to have answers to their questions, one told us: "I need more knowledge or a direction from somebody. I need to know what to do. I'm trying to call the shots myself, and it's very frustrating." Another said, "I messed with Dr. H for quite a long time. He just, to my satisfaction, never explained why I still was in pain. And so I traveled again to another doctor."

Several patients told us stories that indicated they had given up hope of finding a doctor who could answer their questions. As one patient told us,

I don't feel satisfied with the care I've received because I still don't know if it's something I did, if it's a pinched nerve, or if it's something that I'm going to have to live with the rest of my life. I mean, there are a lot of questions that I never get answers for. I don't think the doctors really even know.

Desire for New Treatment

Even when treatment was sought and received, it was sometimes perceived as unsatisfactory, causing the patient to seek a new type of treatment. Participants told us that dissatisfaction with a treatment could be related to either its process or its outcome. For example, the treatment may be too expensive, too inconvenient, or simply not alleviate symptoms. As one patient told us,

I went to the doctor, and they gave me traction for a while but the pain wouldn't go away. When I went back again, they gave me a TENS [transcutaneous electrical nerve stimulation] unit. I use it when the pain is severe, but the batteries only last for 1 day, and that gets expensive.

Another patient reported, "At first my back felt better with the brace on it, but after awhile it didn't work. So I went back to the doctor, and I said, 'What else can we do, doc?'"

A third patient told us,

They sent me to a chronic pain doctor who told me he could teach me how to live with the pain. And I said, 'But, I don't want to live with this pain.' I mean, it just hurt too much. So I started my little quest of trying to find [another doctor] to help me.

Postinterview survey data indicated that the themes identified in the interviews to describe reasons for seeking medical care related to back pain accurately reflected the thoughts and experiences of participants in this study (Table 2). Participants' ratings of the relative importance of the various reasons for seeking medical care were virtually identical when applied to their most recent visit or to previous visits in general. As a result, only data for the most recent visit are presented. The six most frequently mentioned reasons in the interview for seeking medical care for back pain were the same six reasons most often considered to be important by respondents to the postinterview survey. Three reasons for seeking medical care for back problems were noted as at least moderately important by nearly all of the respondents to the postinterview survey: difficulty in performing normal activities, desire to discover the cause of their back pain, and increase in pain. In addition, more than 60% cited a desire to receive a diagnostic test, to obtain answers to unanswered questions, or to receive a new treatment.

DISCUSSION

This study makes it clear that persons who repeatedly seek medical care for chronic back pain bring more than pain and impaired physical functioning to their physician visit. Many have back problems complicated by emotional, family, and social difficulties. As 81% of participants in this study described their health as good, very good, or excellent as compared with others their age, it is possible that chronic back pain patients do not recognize the connection between their overall health and emo-

tional, family, and social difficulties. It is not surprising that many providers find such patients difficult and frustrating to deal with. Such patients are unlikely to feel much benefit from brief visits with their family doctor or from prescriptions of medications or exercise.

The reasons patients give for seeking care provide some useful insights. In this study, increased pain and inability to function were both viewed by a large majority of participants as important motivations for seeking care and are probably highly interconnected. Because of pain or the fear of pain, individuals may avoid certain activities. It is noteworthy that, despite years of experience with pain, remarkably large percentages of participants were still looking for the cause of their pain and for a more effective treatment. Specifically, most still wanted a diagnostic test, a new treatment, or a referral to a specialist. Many reasons for repeated medical visits (i.e., looking for the cause of pain, seeking a diagnostic test or referral to a specialist) may be associated with the patients' need to validate their suffering.

What are the implications of all this for the development of clinical strategies for improving outcomes of care or decreasing costs? Treating these patients with the standard primary care approach used for most patients with low back pain (e.g., brief visits, medications, exercise, physical therapy) is likely to continue to fail. Patients who have long-term back pain problems that have had a major impact on their lives need something different. Although the available research provides little guidance in this area, the results of this study suggest that clinicians should consider certain actions that might lead to improvements in patient outcomes.

First, it is important for clinicians to recognize that patients who visit for recurrent episodes of low back pain may require more time for their underlying needs to be made clear. Eliciting the patients' views about the underlying causes of their pain and of possible solutions might help the clinician focus on the patients' primary concerns, thereby increasing the chances that these patients will leave the visit feeling that their concerns were heard and needs met. Careful inquiry into patients' expectations of a diagnosis or a diagnostic test may help clarify misconceptions about the value of tests. Laying out several of the numerous reasonable (though mostly unproven) options for treatment and letting the patient choose which one to try may help dissipate a sense that nothing can be done and make the patient feel more control. There is empirical evidence that these approaches can have beneficial effects. Although it may be difficult to do, studies have found that providing patients with a clear and confident diagnosis and treatment plan improves patient outcomes.¹³ Similarly, agreement between the patient and provider about the nature of the problem is a stronger predictor of outcomes than are clinical measures.¹⁴

The results reported here are not without potential weaknesses and limitations. Although several members of the research team independently coded a sample of tran-

scripts and then met to generate the coding guidelines, only one researcher coded all the transcripts, and no further efforts were made to assess coding reliability. In addition, the majority of participants in this study were employed, homemakers, or students, and therefore our findings may not be generalizable to chronic back pain patients who are disabled or receiving worker's compensation. Because this study was undertaken to better understand patients' reasons for repeated medical visits to traditional (i.e., medical) care settings, patients who primarily sought chiropractic care were excluded from the analyses, and therefore our results are not generalizable to chiropractic patients. Although the sample size was not large ($N = 54$), the generalizability of this study was enhanced by its respectable participation rate (64%) and by its inclusion of randomly selected samples of clearly defined groups of recurrent users of medical care for low back pain from three separate geographic regions of the country.

In summary, this study found that patients repeatedly seek care, not because past care was remembered as having been helpful, but because past care failed to answer fundamental questions about the cause of their pain, or the value of diagnostic tests or referrals to specialists. The needs of this subset of patients with chronic back pain are complex. This study provides initial insights into possible ways of better meeting the needs of this challenging group of patients. However, further research will be required to determine which approaches are in fact effective. We hope that studies such as this will encourage other researchers to recognize the legitimacy and value of combining the approaches, particularly in situations in which there is an incomplete understanding of the range of potentially important issues involved.

Funding for this study was provided by Prudential Health Care.

The authors express their appreciation to Rebecca Klenk, Tracy Scott, and Barbara Tunney for conducting the interviews; Toyia Arrington for data management and analysis; and Janet Street for assistance in project management.

REFERENCES

1. Deyo RA, Yuh-Jane TW. Descriptive epidemiology of low-back pain and its related medical care in the United States. *Spine*. 1987;12: 264-8.
2. Deyo RA, Cherkin D, Conrad D, Volinn E. Cost, controversy, crisis: low back pain and the health of the public. *Annu Rev Public Health*. 1991;12:141-56.
3. Frymoyer JW. Back pain and sciatica. *N Engl J Med*. 1988;318: 291-300.
4. Cypress BK. Characteristics of physician visits for back symptoms: a national perspective. *Am J Public Health*. 1983;73:389-95.
5. Andersson GBJ, Pope MH, Frymoyer JW, Snook S. Epidemiology and cost in occupational low back pain. In: Pope MH, Andersson GBJ, Frymoyer JW, Chaffin DB, eds. *Occupational Low Back Pain: Assessment, Treatment and Prevention*. St. Louis, Mo: Mosby-Year Book; 1991:95-113.

6. Deyo RA. Conservative therapy for low back pain: distinguishing useful from useless therapy. *JAMA*. 1983;250:1057-62.
7. Spitzer WO, LeBlanc FE, Dupuis M. Scientific approach to the assessment and management of activity-related spinal disorders. A monograph for physicians: report of the Quebec Task Force on Spinal Disorders. *Spine*. 1987;12(suppl):S1-59.
8. Cherkin D, Deyo RA, Berg AO. Evaluation of a physician education intervention to improve primary care for low-back pain, II: impact on patients. *Spine*. 1991;16:1173-8.
9. Cherkin D, Deyo RA, Berg AO, Bergman JJ, Lishner DM. Evaluation of a physician education intervention to improve primary care for low-back pain, I: impact on physicians. *Spine*. 1991;16:1168-72.
10. US Department of Health and Human Services. Acute Low Back Problems in Adults: Clinical Practice Guideline. Washington, DC: US Government Printing Office; 1994. AHCPR publication 95-0642.
11. Cherkin DC, Deyo RA, Volinn E, Loeser JD. Use of the International Classification of Diseases (ICD-9-CM) to identify hospitalizations for mechanical low back problems in administrative databases. *Spine*. 1992;17:817-25.
12. Shekelle PG, Markovich M, Louie R. Factors associated with choosing a chiropractor for episodes of back pain care. *Med Care*. 1995;33:842-50.
13. Thomas KB. General practice consultations—is there any point in being positive? *BMJ*. 1987;294:1200-2.
14. Bass MJ. The physician's actions and the outcome of illness in family practice. *J Fam Pract*. 1986;23:43-7.

ANNOUNCEMENT

You can reach JGIM on the Internet!

For more information
about submitting manuscripts to JGIM
or if you would like to submit a
Letter to the Editor or a
short creative writing piece
for possible publication in the Journal,
please e-mail us at

jgim@mail.med.upenn.edu