

# One Page at a Time: JAMA's Patient Education Resource, The Patient Page

**Janet M Torpy**

A decade ago, the *Journal of the American Medical Association (JAMA)* published its first Patient Page. The Patient Page is easily found because it is the last page in each issue. More than 400 previously published Patient Pages are available for any reader on JAMA's Web site at [jama.ama-assn.org/cgi/collection/patient\\_page](http://jama.ama-assn.org/cgi/collection/patient_page).

Written for patients and others in the nonmedical public, each Patient Page addresses the topic of an article in the same issue of *JAMA*. In about 500 words and language appropriate for general reading, each topic is presented in a simple way to aid understanding of health problems and medical issues.

Inundated by health information from the World Wide Web, television, radio, print media, and books, many find it difficult to wade through the seeming morass. It is even more troublesome to distinguish good, evidence-based information from less-than-accurate "junk science". *JAMA*'s answer, in the spirit of its mission to promote the science and art of medicine and the betterment of the public health, is the Patient Page.

## Origins

The inaugural Patient Page was published in the 22/29 April 1998 issue of *JAMA* and introduced with an editorial by Richard M Glass. Glass has been the editor of the Patient Page since its inception and has shepherded it into its current incarnation. The idea of the Patient Page began when *JAMA* Editor George D Lundberg and Glass collaborated on a new section of *JAMA*. That section, begun in 1996 and titled *The Patient-Physician Relationship*, encompassed scholarly articles regarding

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JANET M TORPY, a *JAMA* contributing editor and an anesthesiologist, writes many of the *JAMA* Patient Pages.

patients, doctors, and their often complex relationships. Glass's long-standing interest in the subject and Lundberg's focus on the communication of medical information to the public intermingled not only in this *JAMA* section but in the birth of *JAMA*'s new educational tool, the Patient Page. "A big part of the patient-physician relationship is communication," Dr Glass said. "This includes medical news, and more specifically, medical news from articles in *JAMA*. Everybody is a patient or a potential patient, and is interested in accurate information."

Lundberg and the Department of Science News (later the *JAMA/Archives* Media Relations group) had been working together on press releases (for print and broadcast media) about *JAMA* articles; it was a logical transition to have that group work on the new Patient Page. There was physician-editor oversight from the beginning on all the Patient Pages because accuracy of the medical information provided was of utmost importance.

In the development process, focus groups were queried about what types of information should be provided and about the style of presentation. The separate groups comprised patients and physicians, mostly primary-care doctors. The patients' group thought, according to Glass, that "it was a really good idea. Patients wanted specific information [and] definitions of medical terms in straightforward language," and they preferred not to avoid use of medical terms they had heard before but not necessarily understood. The physicians' groups wanted a simple, easy-to-read format with large type and pictures.

After about 6 months of Patient Page publication, the focus groups were formed again of different participants, and the results were similar to the initial responses. The patients, said Glass, "were mostly high-school educated. They liked definitions of medical terms and wanted to have

more information." That conflicted with the doctors' opinion that larger type would be preferable. Glass explained that using larger type would mean less information per Patient Page, in direct contrast with what patients said they wanted. "The challenge", Glass said, "is to make the Patient Page easy enough to read, clear, and accurate and to provide useful information."

The issue of reading level of the Patient Page has been discussed since its beginning. In the early years, some criticism was leveled at the "high" reading level. However, when medical terms (which are always immediately defined) were removed from the text, the reading level decreased. Glass explained that because the patients and their focus groups had strong opinions about having the medical terms and their definitions included, the *JAMA* team has maintained the position that the overall reading level is appropriate for the audience.

## Evolution

There has been continuous evolution since the first Patient Page was published in 1998. Its current incarnation includes general and specific information on each topic, a high-quality medically related illustration, references to prior Patient Pages on related topics, and a list of publicly available resources for patients and physicians who want more information.

Each resource is carefully examined, and for-profit and commercial sites are excluded. The National Institutes of Health and its several institutes are commonly cited as resources because of their wealth of excellent science and health information. Other government agencies, such as the Centers for Disease Control and Prevention, provide recent data and useful recommendations. The American Heart Association and the American Cancer Society, which have good health information and present it well, are often named as reference

tools on the Patient Page. Other resources include nonprofit organizations, such as nationally recognized support groups and research consortia.

As online availability of *JAMA* and its articles has developed, the Patient Page has become a publicly accessible feature. The search engine can be restricted to the Patient Page, allowing easy access to the topics covered. Some Patient Pages are available in Spanish. New ones appear in *JAMA-français*, the online French-language edition of *JAMA* (accessible at [www.jamafr.org](http://www.jamafr.org)). Patient Pages from the print copy of *JAMA* and the *JAMA* Web site ([www.jama.com](http://www.jama.com)) are freely reproducible for distribution by health-care professionals to patients. Because *JAMA* views the Patient Pages as a resource for the public's health, they may be copied and distributed noncommercially when used in the spirit of patient education. Of the 1 million "hits" the *JAMA* Web site receives each week, about 6200 are for Patient Pages. Catherine D DeAngelis, editor in chief of *JAMA*, said that "the Patient Page is always free to all because it is for the patients. It is the one page in *JAMA* that may be used without specific copyright permission."

Anesthesiologist Jack F Lay finds the Patient Pages excellent tools for review of medicine in general. He incorporates their topics into resident and medical-student education at Scott & White Clinic in Temple, Texas. "It is important for specialists to have a good foundation with general medical knowledge and keep up with the new developments," Lay said. He thinks that the Patient Page is a tremendous resource for busy specialists and a spark for discussion with students, as well as beneficial information for the public. Although most Patient Pages are not specifically related to the specialty of anesthesiology, Lay noted that almost everyone having an operation has at least one complex medical problem unrelated to the surgical issue. He said, "I find the Patient Pages to be simple ways to review, for myself as well as the residents, the most recent evidence about common medical problems." Finding

the Patient Page "useful and grounding", Thomas L Whittaker, an oncologist in Indianapolis, said, "There are many ways to approach a patient or a problem—the Patient Pages reinforce this. I find that they make me think about why I'm doing what I'm doing. The Patient Page reminds one to do things well."

Although the original intended audience for the Patient Pages was patients, physicians have become a secondary audience in that they select the Patient Pages to use in their practices. DeAngelis commented, "The docs like it, and they trust the information because it comes from *JAMA*. We want it [the Patient Page] to get to as many people as we can reach."

### Artists and Authors

The simple cartoonlike illustrations of the original Patient Pages have been replaced with sophisticated, accurate, and precise drawings by *JAMA*'s medical illustrators Cassio Lymn and Alison Burke. Lymn, with a master's degree in medical and biologic illustration from Johns Hopkins University School of Medicine Department of Art as Applied to Medicine, has been working on the Patient Page since he joined *JAMA* in September 2000. Lymn and Burke (since July 2005) work with not just Glass but the writer of the Patient Page and the peer reviewer to produce a visually appealing and accurately depicted illustration.

Commenting on his initial involvement in production of the Patient Page, Lymn said, "We planned on January of the year after my arrival to be a logical time, giving us time to acclimatize and determine the artistic and informational direction and technical considerations." Lymn added that he enjoys the combined challenge of conveying useful, accurate information with limited space and time. "Every week is a new topic, allowing me to delve, briefly, into a variety of subjects and pick up new knowledge," he said. "We take the opportunity to expand on details that may be of interest both to the patient-level reader and to the physician who may use the Patient Page and its illustration to explain a concept or a process."

DeAngelis said that since bringing Lymn onboard, "we have a real artist. Look at the art, and you can see that the illustrations are completely different; they are more sophisticated." Glass added, "One of the biggest changes we have made through the years is the addition of our own medical illustrators. Now the illustrations themselves are medical: they reveal anatomy or something related to the topic, not just something of general interest."

Topics of the Patient Page range from broad concepts, such as stroke (the subject of the first Patient Page), to specific disease states, such as ehrlichiosis. Patient Pages in *JAMA*'s theme issues (five or six per year) reflect the theme and present the most up-to-date information with a general review of the subject of the issue. Patient Pages on such topics as randomized clinical trials, health-care insurance, and evidence-based medicine provide helpful information for the public that is not usually found in medical journals. Some Patient Pages are repeated with minor changes if the editor feels that the topic is worthy of republishing, is of great interest to the public, or is timely; others are rewritten to reflect new evidence or information.

Initially, the Patient Pages were written by staff of the Department of Science News. As transition occurred, the medical writers in the *JAMA/Archives* Media Relations group produced the information for the Patient Page. Through more evolution, the writers now are physicians who are part of *JAMA*'s editorial contingent. Janet M Torpy (*JAMA* contributing editor and anesthesiologist) assumed responsibility for writing half the Patient Pages each year after she completed the Fishbein Fellowship at *JAMA* in 2002. The remaining Patient Pages became part of the Fishbein Fellow's assignment in 2005. John L Zeller, the 2006-2007 Fishbein Fellow, is an orthopedic surgeon. The clinical expertise of the physician-writers makes the Patient Pages relevant to what patients and their doctors need: a simple, informative one-page educational tool.

Referring to his orthopedic practice, Zeller said, "In my office I had, in addi-

## *Patient Pages continued*

tion to the usual magazines, slots for the *JAMA* Patient Page. My patients particularly liked the references that accompanied each topic." He added that after almost a year of working with *JAMA*, "formulation and writing of the Patient Pages has been an education. The writer is forced to decide what is important: you cannot ramble."

### **Producing the Pages**

Production of each Patient Page begins with Glass, who selects the topic on the basis of the content of the issue of *JAMA* under consideration. The subject is always linked to an article in the issue. Once selected, the topic is assigned to one of the writers. Using publicly available resources, the writer researches the topic and gleans important nuggets of information and the

basic knowledge required for explanation. Each Patient Page has about 500 words and usually includes an illustration, a list of resources available for more information, the sources used for research, and a statement allowing free, noncommercial copying and distribution to patients.

Once the writer submits the draft to Glass, it is edited for style and space limitations. Then it is sent out for peer review. The reviewer is often the author of the article to which the Patient Page is linked. Sometimes, it is sent to *JAMA*'s editorial staff for review because of their special expertise. Once those processes are complete, it goes to the illustrator for layout and graphics. As with all sections of *JAMA*, the Patient Page undergoes final scrutiny by the editorial staff, includ-

ing DeAngelis, before transmission to the printer.

As the Patient Page enters its second decade, the careful attention to fulfilling its mission continues. The last page of *JAMA* has become a first-line resource for patients, their doctors, and any other people interested in improving their health. 🌱