penis that's performing a sexual act?"

Alex Sanger, president of Planned Parenthood of New York City, agrees that the vagueness of the bill will create a problem. Sanger is also concerned about the new amendment to the Comstock law, which he believes was unconstitutional when it was enacted and is now. The fact that the law is being revived "shows the length to which the congressional republicans and their allies would go to try to criminalize abortion," he said.

Others concerned about the implications of the bill include Kiyoshi Kuromiya, the director of the Critical Path AIDS Project. The program's Web

page receives 10,000 requests for documents per day, many from people who are bedridden or are in rural areas, and would not otherwise have access to that information. Kuromiya points out that the Internet is particularly suitable for the dissemination of AIDS information because it allows for anonymity and confidentiality. These features are also important for sex education, and they will be compromised if some sort of access code is required to log on, an idea that is currently being debated.

As this debate hits the courts, both sides seem confident that they will be able to prove the other wrong. While the oppos-

ing sides disagree on what material the Act will prohibit, and in many cases should prohibit, ironically both sides seem to agree that medical information should be allowed to remain on the Internet. The Internet offers the medical community a timely means by which to provide medical information to many people who may not otherwise have access to it, and it would be a shame if this access were compromised in an attempt to protect minors in the United States. Says Benjamin, "It would be truly a tragedy not to be able to disseminate this sort of information that is obviously needed out there."

IRIS KEDAR

Medical records hit the "intranet"

What would you say if your doctor asked your permission to put your medical files on an "intranet"? An intranet (not to be confused with the Internet) is a private network of computers, accessible only to authorized users, and blocked off from the Internet by various security devices. It may be the wave of the future for information-sharing in medicine, according to Bruce Merkin, an internist and co-principal investigator of a National Library of Medicine-sponsored research study entitled "Collaboration Technologies for the Real-Time Treatment of Patients." The study, a collaborative venture between physicians at Valley Health System in West Virginia and researchers at the Concurrent Engineering Research Center (CERC) of West Virginia University, employs computer technology to make health care more effective and more affordable. The participants believe that placing patient files on a computer network (thus improving collaboration between health-care providers) will help achieve this goal.

Many hospitals and doctor's offices already have internal computer networks for their patients' files. This project, however, will create the first "community health network," a system that would span a wide area of rural West Virginia, connecting primary care offices to hospitals. A health-care provider at any one of these institutions, with an authorized password, would then be able to access patient records almost instantaneously. Currently, patient information is exchanged by phone, dictation, mail or facsimile. According to Ramana Reddy, a computer scientist and another principal investigator of the project, 30 percent of the costs associated with health care involve some form of information handling. Even more alarming, Reddy notes, is that "25 to 30 percent of the information the doctors get is not quite correct."

Although the technology for this project exists, no actual computerized patient files are yet complete. A patient's permission is required before a file goes on the network, and only one of the ten patients Merkin has approached did not consent, citing security concerns. Both Merkin and Reddy say security is a top priority, but Merkin acknowledges that, despite the security devices they plan to employ to keep out unauthorized users, there is still the

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Physician Bruce J. Merkin will put his patients' medical records on an "intranet" — with their consent.

chance that a seasoned computer hacker may be able to break into the network. He points out, however, that someone could also break into a clinic and steal a patient's paper files.

Bob Bickel, director of software products for Bluestone Inc., agrees that the relative risk of someone breaking into such an intranet is low, stating that it would be "extraordinarily difficult." He believes that the greatest security risk is much more likely to come from the inside, rather than from a hacker trying to break into the system.

But many are still concerned that not enough is known about computer technology to ensure protection of such sensitive information as medical records.

Deirdre Mulligan, staff council for the Center for Democracy and Technology, a civil liberties organization, believes that once information is connected to the Internet, access to information is very hard to prevent. "I think they're making information more vulnerable than they should be," said Mulligan, who adds that she would not want her medical records on this intranet. Reddy concedes that if unauthorized access were to be obtained, motivations for exploitation could include blackmail and discrimination by employers. Discrimination by insurers is also a possibility.

Another source of concern is the need for informed consent. Ernlé Young, professor of medical ethics at Stanford University, believes that, in order for patients to make an informed choice about whether or not to have their records on an intranet, they should be made aware that there is a remote possibility that their records may become accessible to unauthorized eyes.

Despite these risks, the potential benefits are great, including expanding access to resources for patients where a needed specialist may be hundreds of miles away. A real-time consultation between a primary care physician and a specialist, simultaneously looking at a patient's record, may soon be only a few mouse-clicks away. Merkin and Reddy believe that large metropolitan cities could also benefit from this technology, and networks that span several states are a real possibility. Merkin is aware that they may not get it right the first time, but says they'll keep trying until they do.

IRIS KEDAR