dorsed years ago but now often ignore. Third, the group recommended that NIH send all grantees a set of guidelines laying out what NIH considers to be "reasonable terms" for licensing patents and sharing research tools.

In an appendix, the authors list 12 illustrative guidelines. For example, they suggest that NIH-funded researchers should be told not to impose exclusive licenses on research tools. NIH-funded scientists should also be advised not to sign agreements containing so-called "reach-through rights," which attempt to stake a claim on any invention resulting from the use of a patented tool such as a genetically engineered animal.

Varmus endorsed these ideas in principle at the meeting last week, although he said that another suggestion to create a standing forum to debate intellectual property issues will need further study. According to NIH staffers, Varmus has asked the director of NIH's technology transfer office, Maria Freire, to draft a set of licensing guidelines and plan to implement them within 6 months. The new guidelines will be published for comment before NIH acts on them.

–Eliot Marshall

RESEARCH ETHICS

NIH Examines Standards for Consent

The safeguards meant to protect human subjects in U.S. biomedical research could get tighter, particularly for studies of psychiatric patients who may not fully understand the risks. Several inquiries are scrutinizing the quality of oversight provided by independent panels, called Institutional Review Boards (IRBs), that grant recipients must establish to protect volunteers who take part in studies funded by the National Institutes of Health (NIH) and other federal agencies. And last week, NIH released a flurry of new findings and recommendations.

The National Institute of Mental Health (NIMH)—the largest source of government funds for psychiatric research—endorsed broad new guidelines for the human experimentation it supports. At the same time, NIH officials released data suggesting that IRBs may not be operating as uniformly or as efficiently as they should. And on 11 June, the House government reform and oversight subcommittee on human resources, chaired by Representative Christopher Shays (R–CT), was expected to interrogate NIH officials about a far more critical report on the monitoring of clinical studies, written by the inspector-general of the Department of Health and Human Services (HHS), NIH's parent agency.

Informed consent. Steven Hyman embraced new rules for psychiatric studies.

This activity is being driven in part by a series of well-publicized complaints from patients' families over the past 2 years. Last September, for example, several patients and their advocates appeared at a public session of the National Bioethics Advisory Commission to condemn some NIMH-funded clinical trials for enrolling volunteers who may not have been competent to understand the risks they were accepting. And speaking at a House hearing on 22 April, Adil Shamoo, a biologist and ethicist at the University of Maryland, Baltimore, criticized so-called "washout studies," in which patients are abruptly taken off drugs or given a placebo to test the efficacy of a new therapy. Shamoo, who was speaking for the Citizens for Responsible Care in Psychiatry and Research of New York City, claimed that the relapse rate for patients whose medication is withdrawn rapidly is "as high as 80%." He and others have documented suicides among participants in such studies, and advocacy groups are asking NIH to intervene.

Citing the need to protect patient confidentiality, NIMH has declined to comment on specific cases. However, NIMH associate director for clinical research David Shore has said that every allegation of improper research management is being investigated. Shore also said NIMH intends to hold meetings this year to develop new guidelines on the conduct of research that involves the withdrawal of medication or the use of stressful "challenge" protocols.

NIH director Harold Varmus, meanwhile, set aside the afternoon session of his external advisory council on 4 June to discuss NIH's policies on protection of human subjects. At that session, NIMH director Steven Hyman announced that an NIH expert panel, which has been investigating this topic since December, had proposed new guidelines to cover "individuals with questionable capacity to give consent."

The panel, chaired by psychiatrist Edwin Cassem of the Massachusetts General Hospital, made seven recommendations, all of which Hyman embraced. Cassem's panel urged that all IRBs include at least one voting member willing to act as a representative of the mentally impaired when such subjects are being recruited for clinical trials. It also recommended a "sliding scale" of additional safeguards, depending on the degree of subjects' impairment, such as bringing in outside observers to monitor IRB decisions and requiring that a volunteer's consent be backed up by permission from a legally authorized "surrogate," such as a family member. The panel asked NIH to develop standards for determining whether a research volunteer is capable of understanding the risks involved in a study, a task that Hyman said "will require more research." And, in a final recommendation that is beyond NIH's ability to carry out, the panel said that private research (much of which is not required to undergo IRB review now) should be held to the same standards as NIH-funded research.

These recommendations are now being studied by a half-dozen NIH institutes and by Varmus himself. In addition, NIH deputy director for extramural research Wendy Baldwin told the 4 June meeting that NIH is evaluating data from a survey of IRB members it began 3 years ago. Baldwin said the study found "tremendous variability" in the workload and performance of the nearly 500 panels from which it obtained information. She said many IRB members are concerned about a "tension" between the need to handle reviews quickly and the responsibility to protect volunteers. However, more than 90% of the respondents said they felt that the workload was manageable and had not impaired reviews.

The HHS inspector-general's report, which will be released at Shays's hearing this week, is expected to be much more critical. According to one government official, the HHS report—a draft of which was leaked to *The New York Times* and *The Wall Street Journal*—labels the entire IRB network "a system in jeopardy," as IRBs are overburdened with paper and pressured to meet short deadlines. HHS investigators also reportedly learned that IRB members often appear to have a conflict of interest—such as a financial or personal stake in the research reviewed by their IRB.

At least one outcome is certain: NIH will be funding more research on bioethics. Baldwin said last week that NIH will soon be funding 14 research projects on informed consent and $3 million worth of extramural bioethics training programs.

–Eliot Marshall