cost to achieve the goals described in this report. "I think the country is going to have quite a burden if it has to take care of 150,000 people with an artificial heart," Lenfant commented. And he wondered how many heart patients-or their families-are really eager to have this technology.

Doubts such as these may have played a part in Lenfant's decision in 1988 to cancel federal contracts for research on the artificial heart, while keeping the LVAD program alive (Science, 20 May 1988, p. 976, and 15 July 1988, p. 283). But Lenfant insists his main reason for acting was a shortage of money: His agency, he felt, just couldn't give adequate support to both a total artificial heart program and an LVAD, which in 1988 seemed more likely to yield practical results. But Lenfant's decision to cancel the contracts was effectively reversed when Senators Edward Kennedy (D-MA) and Orrin Hatch (R-UT), defending home-state research centers, stepped in and forced NHLBI to restore the funds.

Some day, says Lenfant, "somebody is going to look at all these [risks and costs], add them up, and see where we are going.³ This was precisely what NHLBI asked the IOM to do. But the Hogness panel has decided that it, too, is unqualified to pass final judgment on so large an issue, noting that it lacks adequate "hard information" on the risks and benefits of what is now an embryonic technology. The recommended solution, therefore: Stall for time and take a second look by 1995.■ ELIOT MARSHALL

Sullivan Overrules NIH on Sex Survey

The Public Health Service rarely bows to politics as completely as it did last week when-hounded by a group of conservative congressmen-the secretary of Health and Human Services (HHS), Louis Sullivan, killed a research grant for a 5-year study of teenagers' sexual behavior. Neglected in the wide publicity about Sullivan's veto was the threat it poses to peer-reviewed research at the National Institutes of Health (NIH).

This \$18-million project, run by sociologists Ronald Rindfuss and Richard Udry at the University of North Carolina, was an investigator-initiated proposal to collect data that might be useful in fighting AIDS and preventing teenage pregnancy. The authors planned to interview 24,000 children in grades 7 through 11, with parental consent. And, indeed, their project was fully "approved"it was put through peer review at the National Institute of Child Health and Human Development, passed by several layers of administration at NIH, personally cleared by NIH director Bernadine Healy, and okayed by James Mason, the assistant secretary of health. Scientists were particularly intrigued that Mason gave his approval, because he has carried the conservative banner in biomedicine-on fetal research, for example-for the Administration.

But then, the secretary of Health and Human Services did something no secretary seems to have done before. He revoked financing for the sex survey on 23 July, 2 months after Rindfuss and Udry had cashed their first check and begun work. Rindfuss says he still hasn't received any written notice that the project has been killed, although a public affairs person from HHS called him to say it is dead. According to an official statement released by HHS, Sullivan decided the study "could inadvertently convey a message undermining [Sullivan's] warnings about the dangers of promiscuous sex."

Healy was well aware of the controversy this research might provoke and apparently was ready to defend it. The Boston Globe quoted her before the furor broke saying that it was "a wonderful study....I knew it would be controversial....I read the whole thing myself and I think it's an excellent study." Later, she told Science that in cancelling the project, Secretary Sullivan had "exercised his authority under the law, and I honor his decision." Now this research can go forward only in the "private sector," she said. Has NIH lost some independence? "I cannot comment on that," replied Healy.

The reversal sent a shock wave through NIH, which has long sought to keep politics out of peer-reviewed research. One NIH official, speaking on condition of anonymity, said Sullivan's action could invite more political meddling. NIH staffers have begun combing the records for other recent grants that might draw political fire. The damage may be spreading already.

To one outside observer, Howard Silver of the Consortium of Social Science Associations, it looks as though Sullivan ignored the advice of a special panel put together to help recruit an NIH chief after James Wyngaarden's departure. One of the panel's main recommendations was to insulate NIH from politics and the HHS bureaucracy. But in this case, just the opposite happened, Silver says: Sullivan "caved in" to "knownothingism" and overrode NIH's leadership.



Louis Sullivan

Neither Sullivan nor Mason would discuss the decision. However, Paul Simmons, Mason's spokesman, brushed aside a suggestion that NIH is being politicized. "I wouldn't read anything into one action like this; there's no history of political decisions like this being made" at NIH, he said.

Sullivan learned about the project when he was asked about it by a viewer who called in during his appearance on a TV talk show run by the Coalition for America. Sullivan told the audience he hadn't been told about the study and would look into it. At this point, Representative William Dannemeyer (R-CA), a fervent opponent of abortion and of research involving human fetal tissue, obtained copies of some of the survey questions and excerpts soon appeared in the press. Dannemeyer also drafted an amendment to the NIH authorization bill, due to reach the floor of the House last week, blocking all sex surveys. But even before the debate began, Sullivan killed the North Carolina project.

To ensure that this survey—or another like it—would not be resurrected, Dannemeyer asked for a vote on his amendment, saying he feared the purpose of such studies was "to develop statistical data with a subtle inference to the interviewees that this perverse type of conduct [homosexuality] is okay." Rep. Henry Waxman (D-CA) proposed substitute language that would permit sex surveys, but only if they clear many layers of ethical and peer review. Waxman's amendment passed by a large margin (283-137).

What are the long-range consequences likely to be? Charles Turner, former chief of staff for studies of the AIDS epidemic by the National Academy of Sciences and the Institute of Medicine, worries about the toll in human terms. He says, "We still don't have many of the basic facts we need to understand the patterns of sexual behavior in the population that transmits the [AIDS] epidemic." Many panels have urged the government to collect such data. Without it, says Turner, "we're going to be less effective in preventing the spread of the epidemic; in short, more ■ ELIOT MARSHALL people are going to die."