requires that researchers be sensitive to beliefs and values of the group to which prospective study participants belong. If, as all the documents require, study participants are to be adequately informed, the informed consent process must ensure that details of the research project are expressed in a way that is locally comprehensible. Thus, the disclosure process must take into account local beliefs, literacy, and education.

Must research subjects sign a consent document? This concern flows, in part, from the requirement in U.S. regulation to document the consent process. From a moral rather than regulatory perspective, however, what matters is the quality of the consent process, and not whether a form is signed. In some cultural and political contexts, signing an official form may be associated with different meanings than in the United States, and hence may be an inappropriate requirement. Thus, the CIOMS guidelines observe: ''Consent may be indicated in a number of ways. The subject may imply consent by his or her voluntary actions, express consent orally, or sign a consent form'' (CIOMS 4). In other cases, documentation of consent may pose a substantial risk to subjects if their medical condition is stigmatized. Thus, a waiver of documentation of consent ''may also be approved when existence of a signed consent form would be an unjustified threat to the subjects' confidentiality'' (CIOMS 4). Before these exceptions are invoked, however, locally acceptable ways of documenting the consent process should be explored. Careful consultation with the community may yield acceptable strategies for removing barriers to written informed consent (16).

2. Is there a role for community consultation and consent?

Historical approaches to research ethics have been criticized for being unduly individualistic, and failing to take into account the interests of communities (17). As a result, a novel principle of respect for communities has been proposed. The new principle's implementation, however, poses difficult challenges for the researcher working with communities. The CIOMS guidelines require that research be ''responsive to the health needs and the priorities of the population or community in which it is to be carried out'' (CIOMS 10). Ensuring that research is responsive to a particular community's health needs requires dialogue between community and researcher. Thus, ''trial sponsors should consult communities through a transparent and meaningful participatory process which involves them in an early and sustained manner in the design, development, implementation, monitoring, and distribution of results of . . . trials'' (UNAIDS 2).

In some communities, for instance aboriginal communities, the burden of decision making may rest traditionally more with community leaders than individual community members (17). As the CIOMS guidelines point out: ''In some cultures or groups, a researcher may enter a community to conduct research or approach prospective subjects for their individual consent only after obtaining permission from a community leader, a council of elders, or other designated authority. Such customs must be respected'' (CIOMS 4). The moral obligation to show respect for communities must be tempered with the simultaneous duty to demonstrate respect for persons. Community consent and individual consent have an asymmetrical relationship. The community's refusal may preclude a researcher's ability to approach community members for consent. ''In no case, however, may the permission of a community leader or other authority substitute for individual informed consent'' (CIOMS 4). In practice, stepwise processes for both community ''permission to enter'' and individual informed consent can be developed through consultation with local communities (16).

3. Where should clinical trials first be conducted?

For the outsider, one of the curious things about the rotavirus vaccine story, described above, is the fact that clinical trials of the vaccine were first conducted in developed countries, while the majority of mortality from the disease occurs in developing countries. A policy decision to test vaccines of interest to developing countries first in developed countries will predictably lead to two consequences (6). First, the adoption of useful vaccines in developing countries will be delayed as testing is first done elsewhere. Second, the practice has the unintended effect of setting the bar for adoption of a vaccine too high. A country with a low burden of disease will (appropriately) be less likely to accept even small risks associated with a vaccine than a country with a high burden of disease. Thus, any absolute requirement to test a new vaccine in developed countries before testing in developing countries will impede vaccine development.

In other areas of clinical research, it is generally accepted that clinical trials ought to be first conducted in high-risk populations, for if a new treatment fails, it is unlikely to be of use to any population. The same follows for vaccine clinical trials. It is important to recognize that there is no insuperable ethical obstacle to conducting early clinical trials in developing countries. The statement found in the UNAIDS document might well be generalized to all vaccine clinical trials. ''Generally, earlier clinical phases of HIV vaccine research should be conducted in communities that are less vulnerable to harm or exploitation, usually within the sponsor country. However, countries may choose, for valid scientific and public health reasons, to conduct any study phase within their populations, if they are able to ensure sufficient scientific infrastructure and sufficient ethical safeguards'' (UNAIDS 5). Differential burdens of disease or important biological differences between developed and developing country would satisfy the requirement for ''valid scientific and public health reasons''. As scientists and ethical review boards in developing countries gain experience with testing vaccines and establish the capacity to manage serious unexpected adverse events, they may become more comfortable with the idea of conducting the first trials of vaccines.

4. Which standard of care, of the host or sponsor country, is the right standard?

The perinatal HIV prevention trials, described above, highlight a deep divide in research ethics regarding the nature of the researcher's obligation to research subjects. A core norm in research ethics is that the medical care of the research subject ought not be disadvantaged by study participation. In the *Declaration of Helsinki*, this norm is expressed as follows: ''The benefits, risks, burdens and effectiveness of a new intervention must be tested against those of the best current proven intervention'' (WMA 32). As there are inequities globally in the distribution of health care resources, one might well ask: ''[T]he best current . . . intervention'' where?