Highlights of the Sixth Meeting of the

Secretary's Advisory Committee on Genetic Testing

August 4, 2000

Bethesda, MD

The sixth meeting of the Secretary's Advisory Committee on Genetic Testing (SACGT) was held in public session on August 4, 2000, in Bethesda, Maryland. The meeting had three main purposes: to be briefed by Dr. Beverly Malone, Deputy Assistant Secretary for Health, on the steps the Department of Health and Human Services (DHHS) will be taking regarding the Committee's final report, *Enhancing the Oversight of Genetic Tests*; to review a test classification methodology developed by a SACGT working group; and to plan a course of action for future projects.

SACGT's final oversight report was submitted on July 12, 2000, to Dr. David Satcher, Assistant Secretary for Health and Surgeon General, for transmittal to the Secretary.[1] Dr. Malone briefed the Committee on steps that Dr. Satcher is taking to review SACGT's recommendations on the oversight of genetic testing in preparation for transmitting them to the Secretary. A small working group composed of key representatives from the Food and Drug Administration (FDA), Centers for Disease Control and Prevention (CDC), Health Care Financing Administration (HCFA), as well as Dr. Bill Raub, Deputy Assistant Secretary for Science Policy and chair of the DHHS Working Group on Genetic Testing, will develop a coordinated response to the report. The small working group's recommendations will be forwarded to Dr. Satcher for consideration. He will then forward the SACGT report along with his recommendations to the Secretary. This process is expected to be completed in the next several weeks and the report will become public upon receipt by the Secretary.

One of the key recommendations in *Enhancing the Oversight of Genetic Tests* is that FDA should review all new genetic tests and correlate the level of review applied to each test with the level of scrutiny warranted by the test. To assist FDA in determining which tests warrant more thorough scrutiny, SACGT concluded that a classification methodology was needed. A SACGT Working Group on Genetic Test Classification, chaired by Dr. Wylie Burke (SACGT member) and composed of SACGT members and ad hoc experts, met on August 3, 2000, to develop criteria for assessing the risks and benefits of genetic tests that would serve as the basis for a classification scheme. Dr. Burke was asked by the SACGT chair to present the outcome of the Working Group's efforts and lead the Committee's discussion.

In order to clarify at which stage genetic tests would be subject to FDA review, Dr. Burke began by describing the different stages in the development of a genetic test and the review processes that are currently in place for each step. In step A, research is conducted on a genetic test but no data are returned to the research subject. At this stage, the institutional review board (IRB) would consider such studies. In step B1, research is conducted on a genetic test and the results are returned to the research subject. IRB and CLIA regulations apply to this step of test development. In step B2, a genetic test is approved for patient care but more data are still needed. In this step, CLIA and FDA review would apply. In step C, a genetic test is approved and established and no further data need to be collected. In this step, both CLIA and FDA review would again apply. In summary, most genetic tests would follow the sequential steps outlined and FDA review would occur between steps B1 and B2.

Dr. Burke then presented the test classification scheme developed by the Working Group. The Working Group identified two scrutiny levels of review and four criteria that should be used to determine which level of review a particular test would warrant. The four criteria relate to test volume; whether the test is to be used for population-based testing; the purpose of the test (predictive or diagnostic); and the availability or proven effectiveness of an intervention, the predictive value of a test, or significant risks associated with the test, either medical or social. The Working Group

developed a flowchart that shows how the criteria would be applied to determine whether a test falls into Scrutiny Level I or Scrutiny Level II (see Figure 1).

The Scrutiny Level I review process would be streamlined but would still involve assurances of pre-test/post-test information per standard template to determine if additional criteria warranted movement to Scrutiny Level II and could require data collection from existing resources. The Scrutiny Level II review process would include a detailed review of pre-test/post-test information and could require new data collection initiatives. Both review levels would include the use of standards developed in consultation with professional organizations, consumer representatives, and other relevant groups; adverse event reporting; and assurances for informed consent as to be determined. Both review processes would result in three possible outcomes. In Scrutiny Level I, tests are released, not released, or raised to Scrutiny Level II. In Scrutiny Level II, tests are released, released with conditions, or not released.

The Working Group also identified several issues that will require further deliberation and discussion including guidance for IRBs on genetic testing, determination of test volume cut-off, additional issues for review of low volume or orphan tests, data collection procedures, on-going review processes, and issues related to the review process such as the test information to be provided to health professionals and patients, social harms, counseling and informed consent, and panel testing.

SACGT voted unanimously to adopt the test classification scheme. An addendum to the report describing the classification scheme will be drafted for review by the Committee and forwarded to Dr. Satcher for transmittal to the Secretary by September 30, 2000. SACGT also voted to make public the transcripts from the August 3 Working Group meeting.

SACGT next addressed additional issues that might warrant the Committee's attention and which would benefit most from their involvement. Dr. Francis Collins, director of the National Human Genome Research Institute and a SACGT *ex officio* member, presented a brief overview of issues raised at the White House ceremony celebrating the completion of the working draft assemblies of the human genome. Dr. Collins stated that genetic discrimination, privacy, and improved public and health professional education were among the issues of concern raised. Other issues raised included the use of genetic knowledge for enhancement of human traits and how society would determine the boundaries between the use of genetics for health-related purposes and for enhancement of human characteristics, e.g., medical versus social uses of genetic information.

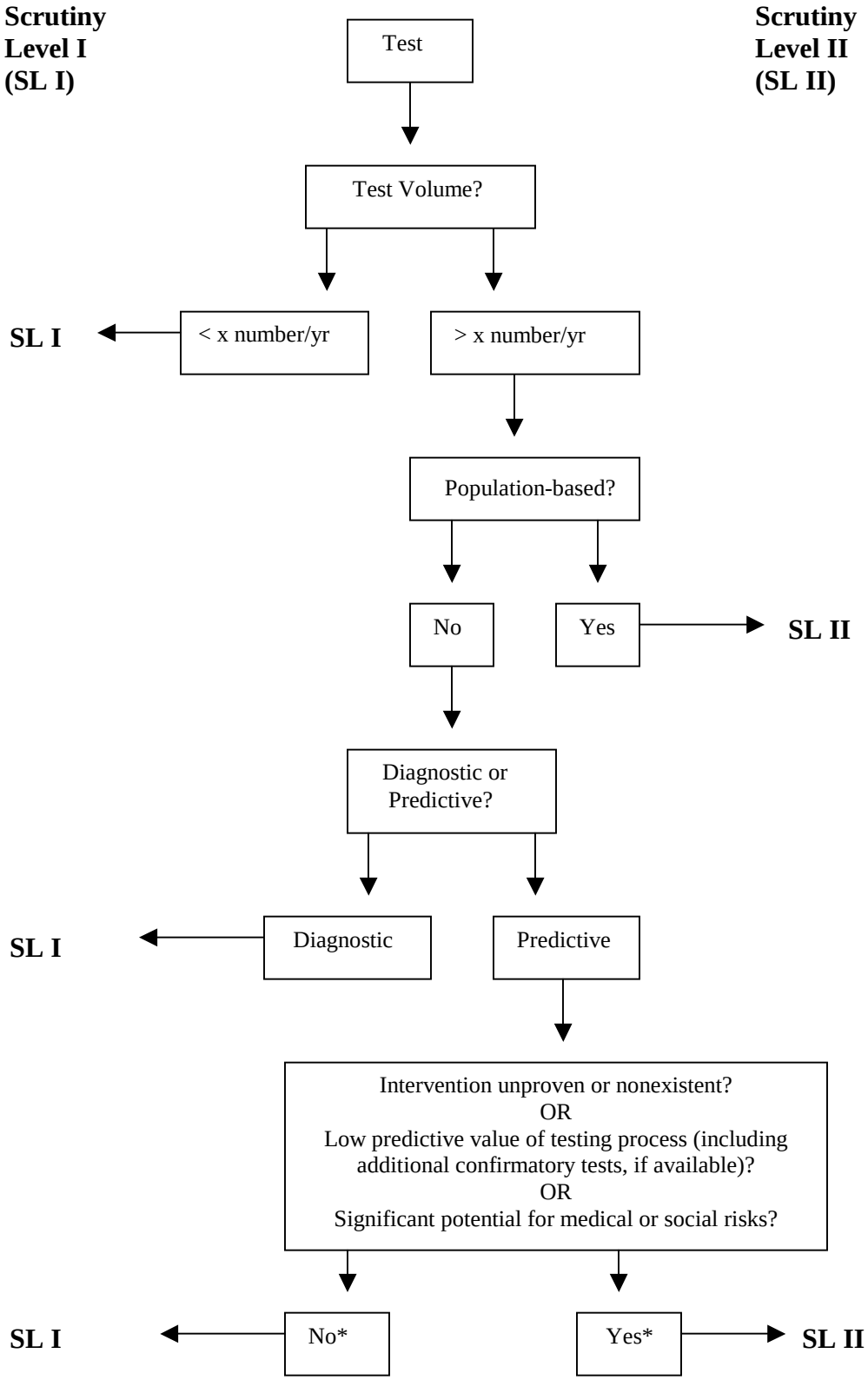
SACGT then embarked on an extensive discussion of which issues warranted their attention and how the work could be accomplished. The Committee identified a number of issues that were important to ensuring a quality test experience including access, particularly to rare disease testing, reimbursement, issues of concern for disadvantaged or small communities, workforce issues, discrimination, licensing practices, genetic counseling and informed consent, and education of professionals, including IRB members, and the public.

SACGT decided to focus their efforts in five areas: IRB and consent, data elements/data collection, rare disease/low volume tests, access, and education. Teams were formed for the first three issues, which were viewed as short-term projects, and workgroups were formed for the latter two issues, which were thought to be longer term projects. Over the course of the next several months, the teams and workgroups will further define the issues to be addressed and begin exploring those issues. The progress of the teams and workgroups will be reported back to the full Committee at the next meeting (November 2-3, 2000) for discussion by SACGT and the public.

SACGT also is planning to request a briefing from FDA and the Federal Trade Commission on current regulations governing information used in promotional materials for direct marketing of genetic testing, an update from the Health Resources and Services Administration on workforce analysis, and a briefing from HCFA on reimbursement policy for genetic tests.

[1] During the Committee's first meeting in June 1999, Dr. Satcher requested that SACGT assess, in consultation with the public, the adequacy of oversight of genetic tests. In the fall of 1999, SACGT drafted a document, *A Public Consultation on Oversight of Genetic Tests*, and solicited public comment in December and January. Public comments were reviewed at SACGT's February meeting and preliminary conclusions and recommendations were drafted. Public comments were solicited on the preliminary conclusions and recommendations in April and May 2000. The Committee reviewed the second round of public comments and finalized the conclusions and recommendations at its June 5-7, 2000 meeting.

Figure 1. Flowchart for determining level of review for genetic tests



* An answer of "Yes" to any of these questions moves the evaluation to Scrutiny Level II. For the test to receive Scrutiny Level I, the answer must be "No" to all three questions.