

To: Office of Science Policy
RE: NOT-OD-10-101
RFI: NIH GTR

I have reviewed the outlined "request for comments" and you will find my comments below.

Sincerely
Sharon F. Suchy, Ph.D.

The NIH is seeking input and advice on the following items:

1. Are there any types of genetic tests that should not be included in the GTR?

-Direct to consumer tests should not be included. However, a definition of direct-to-consumer testing and its' limitations should be on the GTR webpage (see #4). Tests included should be limited to those for a disease or pharmacogenetic application.

2. What are the potential uses of the GTR for (1) researchers, (2) patients/consumers, (3) health care providers, (4) clinical laboratory professionals, (5) payers, (6) genetic testing entities/data submitters, (7) policy makers, and (8) electronic health records?

-Could be used for all the above to identify testing centers.
-There should be attempt to prevent potential abuses by individuals lacking appropriate knowledge. For example payers may use selective/partial information to deny appropriate claims.

3. What data elements are critical to include for use by (1) researchers, (2) patients/consumers, (3) health care providers, (4) clinical laboratory professionals, (5) payers, (6) genetic testing entities/data submitters, (7) policy makers, and (8) electronic health records?

-For 1, 2, 3, 4, 6 the most critical issue is to be able to keep the information provided by the submitters accurately listed in the registry and up to date. That will require adequate staffing and follow up. Any data element that requires frequent updating, or if inaccurate would serve as an annoyance to the testing center (price errors) should instead be offered as a link to a testing center's website.

4. What are the potential benefits and risks associated with facilitating public access to information about the:

1. Availability and accessibility of genetic tests?
2. Scientific basis and validity of genetic tests?
3. Utility of genetic tests?

-Information about availability of genetic testing potential benefits and risks is currently available to the public.

-Statement should be made on "GTR homepage" about need for consultation with a physician or genetics professional for appropriate interpretation of results and the potential risks of "direct to consumer" testing.

5. What is the best way to distinguish between data fields left blank because of an absence of data/evidence and those left blank for other reasons? How important is this distinction for enhancing transparency, including for the purpose of identifying research opportunities?

-No response

6. To adequately and accurately describe a genetic test, which of the following data elements should be included in the GTR? Are there other data elements that should be added? What information is necessary to represent adequately each data element?

1. Contact information (e.g., location, name of the laboratory director, and contact information for the laboratory performing the test)

Yes

2. Laboratory certifications (e.g., Federal or State certification of the laboratory that performs the test)

Yes

3. Name of the test (e.g., common test name, commercial name, marketing materials about the test and/or genetic testing entity, standard identifier (e.g. CPT codes, LOINCii))

Yes

4. Regulatory clearances (e.g., for tests reviewed by the Food and Drug Administration, the 510(k) or premarket approval (PMA) number)

Yes

5. Intended use of the test (e.g., diagnosis, screening, drug response)

This and other similar questions should be assessed before including, because of potential issues with payers.

6. Recommended patient population

Yes, if appropriate.

7. Limitations of the test (e.g., is the test validated only for certain subpopulations or limited to particular uses such as screening but not diagnostic testing?)

Yes, if appropriate.

8. Test methodology

Yes

9. Analyte(s)—What is being measured in the test (e.g., genetic sequence)

Yes

10. Specimen requirements (e.g., blood, saliva, tissue samples, amniotic fluid)

Yes

11. Availability (e.g., is the submitter the sole provider of the test or are there multiple providers?)
-Duplicated information this is listed in (1) above, providers would be listed.

12. Accessibility (e.g., accessible through a health provider, public health mandate, and/or direct-to-consumer)
Do not include direct to consumer tests.

13. Performance characteristicsi
1. Analytical sensitivity
2. Analytical specificity
3. Accuracy
4. Precision
5. Reportable range of test results
6. Reference range
7. Method used for proficiency testing (e.g., formal PT program, alternative assessment) and score
-Yes, as much as possible, with current information, for very rare disorders this information will be limited.

14. Clinical validityi
1. Clinical sensitivity
2. Clinical specificity
3. Positive and negative predictive value
4. Prevalence
5. Penetrance
6. Modifiers

-Yes, as much information as possible for very rare disorders.
-Also relevant, is this test the correct test or the only test for this disorder, are there other/ or more appropriate tests.

15. Utility (e.g., clinical and/or personal utility) or outcomes

1. Benefits
2. Harms
3. Added value, compared with current management without genetic testing

16. Cost (e.g., price of the test, health insurance coverage)

-There are several areas including "price structuring", "specimen requirements" and "other appropriate tests" that are best handled by referring to the testing center's website.

-The insurance coverage for a particular test is known only to the particular insurance company and is related not only to the policy but to the family relationship (carrier test, prenatal test).

7. What types of information might be difficult for test providers to submit and why?

- The GTR should be appropriately staffed with trained individuals to be able to extract much of the information requested from the website of the testing centers. For updates the GTR should be notified and updates posted within 5 business days. The GTR will only be successful if the information is accurate and up to date.
- Proprietary information will not be provided.
- Information about test performance may be limited for some of the more rare genetic disorders.

8. What are the advantages and disadvantages of collecting and providing information on the molecular basis of genetic tests, such as detailed information about what the test detects and the specific methods employed?

- Brief information about the method should be sufficient for the GTR.

- If the GTR would like to put more specific generic information about test methods, it should do so separately and not ask for this to come from the testing centers.

9. In addition to the data elements, would it be helpful to reference other resources, and if so, which ones (e.g., published studies, recommendations from expert panels such as the Secretary's Advisory Committee on Heritable Disorders in Newborns and Children, U.S. Preventive Services Task Force, or Evaluation of Genomic Applications in Practice and Prevention Working Group)?

- Relevant references of particular importance should be cited, as well as government task force recommendations.

10. As the GTR is being designed, what are the important processes to consider to make the submission of data as easy as possible for the data provider (e.g., the capability of linking to information that has been submitted to other agencies, such as the Food and Drug Administration and the Centers for Medicare and Medicaid Services, or a master file of data common to particular tests)?

This is a key element.

- There needs to be a mechanism to update test information.

- There should be a rapid response by the GTR if a correction /change needs to be made.

- Duplicate information or information publicly available should not be requested separately of the testing laboratory.

- The GTR should insure that the data submitted is accurately represented in the GTR.

Consider referring to websites of testing centers.

11. Which potential benefits and risks would be most likely to affect the decisions of researchers, test developers, and manufacturers on whether to submit data to the GTR, and what

factors will best encourage submission of complete and accurate data?

-To the last point, data in the GTR will need to be accurate, need to be updated frequently, If this is not done, it will quickly become clear to all users that there are other ways to get the information they want that are more accurate and current.

12. What are the most effective methods to ensure continued stakeholder input into the maintenance of the GTR?

-accuracy of information and prompt response when changes are required

-Engage the people involved. There should be an advisory board consisting of individuals from genetic testing labs, even though these may be commercial entities.

13. For what purpose(s) would you use the Registry to support your professional efforts?

-Notify providers about the availability of tests.

14. Are there any other issues that NIH should consider in the development of the GTR?

-Consider how the information provided may be used by individuals who are not genetic professionals, with particular scrutiny for potential misuse of the information, particularly by payers that may be interested in using this resource to avoid reimbursing for genetic tests.

-Should not assume that all clinicians know genetics. Need to have links to genetic counselors or genetics clinics on the homepage so that consumers will be able to follow-up on their own if necessary with a positive or negative result.

-Should include whether prenatal testing is available, since some labs offer full sequencing for particular genes but do not offer prenatal testing.