

Population-Based Carrier Screening Work Group Interim Report

Meredith Weaver, PhD, ScM, CGC ACMG September 14, 2012

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Charge from SACHDNC, 2010 (supported by SACGHS)

 To engage a multidisciplinary stakeholder group using the modified Delphi process to collect and document perspectives on public health, personal health, and healthcare system readiness and needs for expanded population-based carrier screening for genetic conditions

End product

- Outline of recommendations
- Roadmap of considerations needed prior to implementation of population-based carrier screening



• May, 2010 SACHDNC approved project:

 Examine carrier screening issues and put forth guidelines for test selection and possible implementation strategies for screening

• September, 2012 reality:

- Points to consider when screening for a condition have been identified
 - Both general to the screening process and condition specific
 - Not currently intended to be used as a list of which conditions to screen for and when to screen



Parameters used

- Four criteria for each issue: desirability, feasibility, importance, confidence in judgment
- Five components
 - Social issues
 - Economic issues
 - Psychological issues
 - Education and communication issues
 - Test issues
- Consensus = <20% disagree ("super majority")</p>
- Non-consensus = >20% disagree with the majority



Results

(30,000 foot view)

Consensus

- (1) <u>Social issues</u>:
 - Consensus around the desirability to consider certain issues, sometimes consensus around the desirability and feasibility of issues
 - Including:
 - Level of detail of informed consent
 - Determine whether disparities exist in insurance coverage
 - Disclosure of conflicts of interest



• (2) <u>Economic issues</u>:

- Consensus around the desirability to consider certain issues
 - Including:
 - Consider the cost of screening to the individual
 - Consider the cost to follow-up service(s)
 - Consider the cost effectiveness of the screening to the healthcare delivery system



(3) <u>Psychological issues</u>:

- Consensus around the desirability to consider certain issues
 - Including:
 - Whether psychological support is available
 - Understanding the psychological implications of carrier identification
 - Potential harms and benefits



- (4) Education and communication issues:
 - Consensus around the desirability to consider certain issues (to accompany screening)
 - Including:
 - Educating the public and healthcare professionals about carrier screening
 - Providing comprehensive genetic counseling
 - Engaging in shared decision making
 - Performing outreach activities



(5) <u>Test issues</u>:

- Consensus around the desirability and importance to consider certain issues
 - Including:
 - Robustness
 - Wide availability
 - Reducing the cost
 - Preferred timing for screening is preconception
 - Understanding the natural history of the disease
 - Frequency of a mutation (from which population?)



Non-consensus

- In general, non-consensus was found when querying the feasibility of certain issues
 - Including:
 - Determining individual perceptions of risk
 - Providing comprehensive genetic counseling
 - Non-exclusive licensing
 - Return, ownership, access and storage of carrier test results
 - Determining burden carrier screening puts on healthcare system
 - Re-testing when new information about a test or condition becomes available



<u>Summary</u>

- The results from the modified Policy Delphi are consistent with popular discourse on population-based carrier screening → similar issues and red flags
 - Can be related to carrier screening in general or specific to individual conditions
- General agreement existed for the *desirability* and (sometimes) *importance* of issues
- Conversely, there was little agreement regarding the feasibility of (assessing, determining, considering, etc.) an issue



Anticipated SACHDNC actions:

- Report with recommendations about carrier screening in general and criteria for specific conditions will be circulated prior to January, 2013 meeting → please review and comment
- During January, 2013 meeting there will be a vote to support the report with recommendations as a product of SACHDNC
- Determine final disposition of report
- Use the report to inform subsequent discussions



• Work Group Members (29 people):

- Don Bailey
- Jeff Botkin
- Amy Brower
- Alan Fleischman
- Michelle Fox
- Mary Frederickson
- Elena Gates
- Jonathan Gitlin
- Aaron Goldenberg
- Susan Gross
- Scott Grosse
- Kathy Hassell
- Deborah Heine
- Rod Howell
- Lanetta Jordan

- Steve Keiles
- Gabriel Lazarin
- Elisa Levin
- Thomas Musci
- Shivani Nazareth
- Margaret Piper
- Tom Prior
- Mark Rothstein
- Larry Sernovitz
- Elaine Sugarman
- Judith Tsipis
- Tiina Urv
- Mike Watson
- Andrea Williams

Co-leaders: Sara Copeland (HRSA) & Meredith Weaver (ACMG)



Questions?

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