Pilot Studies Work Group

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Pilot Studies Work Group Members

- **Membership**
  - Andrea Atherton
  - Don Bailey
  - Joe Bocchini
  - Jeff Botkin
  - Anne Comeau
  - Carla Cuthbert
  - Kellie Kelm
  - Dieter Matern
  - Mark McCann
  - Melissa Parisi
  - Scott Shone
  - Tiina Urv
  - Mike Watson

Charge to the Committee

- Recognize and support current efforts regarding pilot studies and evaluation
- Identify other resources that could support pilot studies and evaluation
- Identify the information required by the Committee to move a nominated condition into the evidence review process (i.e., define the minimum pilot study data required for a condition to be accepted for evidence review)

Focus

- The question is what data are the minimal necessary to move a nominated condition to the evidence review process.
- NOT what evidence is necessary to approve a condition for the RUSP

ACHDNC Nomination Form

- For a nominated condition to be considered there are 3 core requirements
  1. Validation of the laboratory test
  2. Widely available confirmatory testing with a sensitive and specific diagnostic test
  3. A prospective population based pilot study

Report Outline

- **Introduction**
  - The charge to the workgroup
  - The SACHDNC evidence review process
  - Types of data necessary to support an evidence review
    - Condition characteristics: classic phenotypes, clinical variability, population frequency, and natural history
    - Feasibility: analytic validity for test modalities, clinical validity for test modalities, cost, program preparedness, CDC evaluation of the test modality (or contact of CDC before)
    - Benefit: evidence of benefit from early detection and intervention, evidence of harm
  - Changes in federal policy: the NBS Reauthorization Act
    - Challenges for the conduct of pilot studies

Outline cont.

- **Preliminary Studies/ Data Elements**
  - Definition of "pilot studies"
    - Keep the definition in Green/Comeau paper/NBSTRN paper
    - Preliminary studies
  - Models of parental permission
    - California
    - New England
    - Wisconsin
    - Recommendations of the NBSTRN regarding pilot studies
  - Experience of SACHDNC with pilot studies and their existence/adequacy
    - Conditions declined for review for inadequate data
      - SMA
      - Others
    - Conditions reviewed (brief description of what pilot study data was available)
  - Summary of experience

Outline cont

- **Recommendations**
  - Identify the information required by the Committee to move a nominated condition into the evidence review process (i.e., define the minimum pilot study data required for a condition to be accepted for evidence review)
    - Feasibility studies: Recommendations regarding the minimum criteria for an adequate evaluation of test modalities for analytic validity and clinical validity?
    - Benefit: Recommendations regarding prospective population-based screening of identifiable newborns
  - Recommendations to recognize and support current efforts regarding pilot studies and evaluation
    - NIH/NBSTRN
    - CDC
    - HRSA
    - FDA
    - States
  - Recommendations regarding the identification of other resources that could support pilot studies and evaluation
    - What sort of "system" should be in place to support NBS pilot studies?

Draft Recommendations

- Feasibility studies: Recommendations regarding the minimum criteria for an adequate evaluation of test modalities for analytic validity and clinical validity. (screening and confirmation)
- Analytic validity
  - Fulfills CLIA requirements
  - FDA verifications
  - Scalable to high-throughput platform

Draft Recommendations 1

- Feasibility studies: Recommendations regarding the minimum criteria for an adequate evaluation of test modalities for analytic validity and clinical validity.
- Clinical validity
  - Sensitivity: evaluation of test through analysis of NBS bloodspots from known true positives, carriers, and from clinically relevant variants
  - Specificity: evaluation of test through analysis of known true negatives

Draft Recommendations 2

- Benefit: Recommendations regarding prospective population-based screening of identifiable newborns
  - Population-based trial of identifiable newborns to evaluate the NBS system
  - Sufficient newborns screened to identify a case
  - Studies showing efficacy of early intervention necessary but such studies can be separate from the population-based study
  - Population-based study should be conducted using an NBS system similar to US systems

Draft Recommendations 3

- Recommendations to recognize and support current efforts regarding pilot studies and evaluation

- Recommendations regarding the identification of other resources that could support pilot studies and evaluation

Thank You!