Newborn Screening for Cystic Fibrosis

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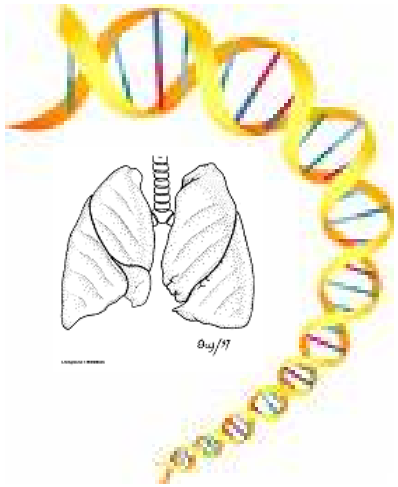
Michigan Department of Community Health
MDCH
Jennifer M. Granholm, Governor
Janet Olszewski, Director

Cystic Fibrosis



- Genetics
  - Autosomal Recessive
  - CFTR Gene
- Symptoms
  - Pancreatic and Pulmonary

Without NBS

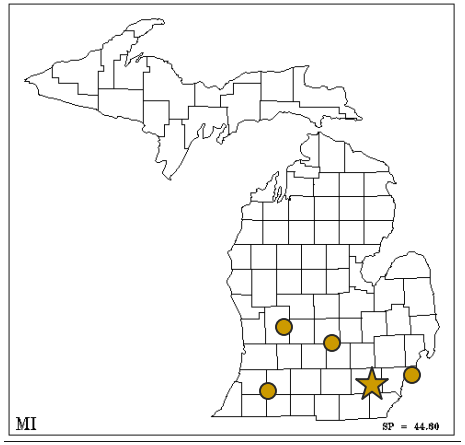
- Delayed Diagnosis

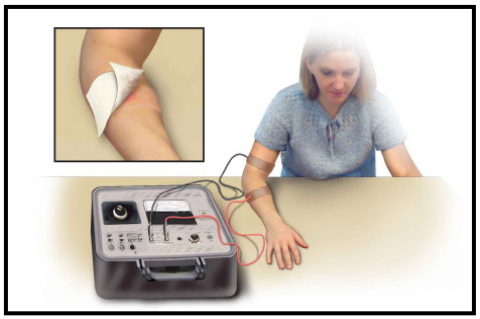
Rationale for Newborn Screening

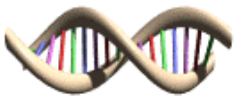
- *With NBS*
  - Earlier diagnosis of CF
    - Aggressive Prophylactic Treatment
      - Improved growth and nutritional status
      - Possible increase in survival

…..Consensus: Start NBS for CF

Cystic Fibrosis Advisory Council

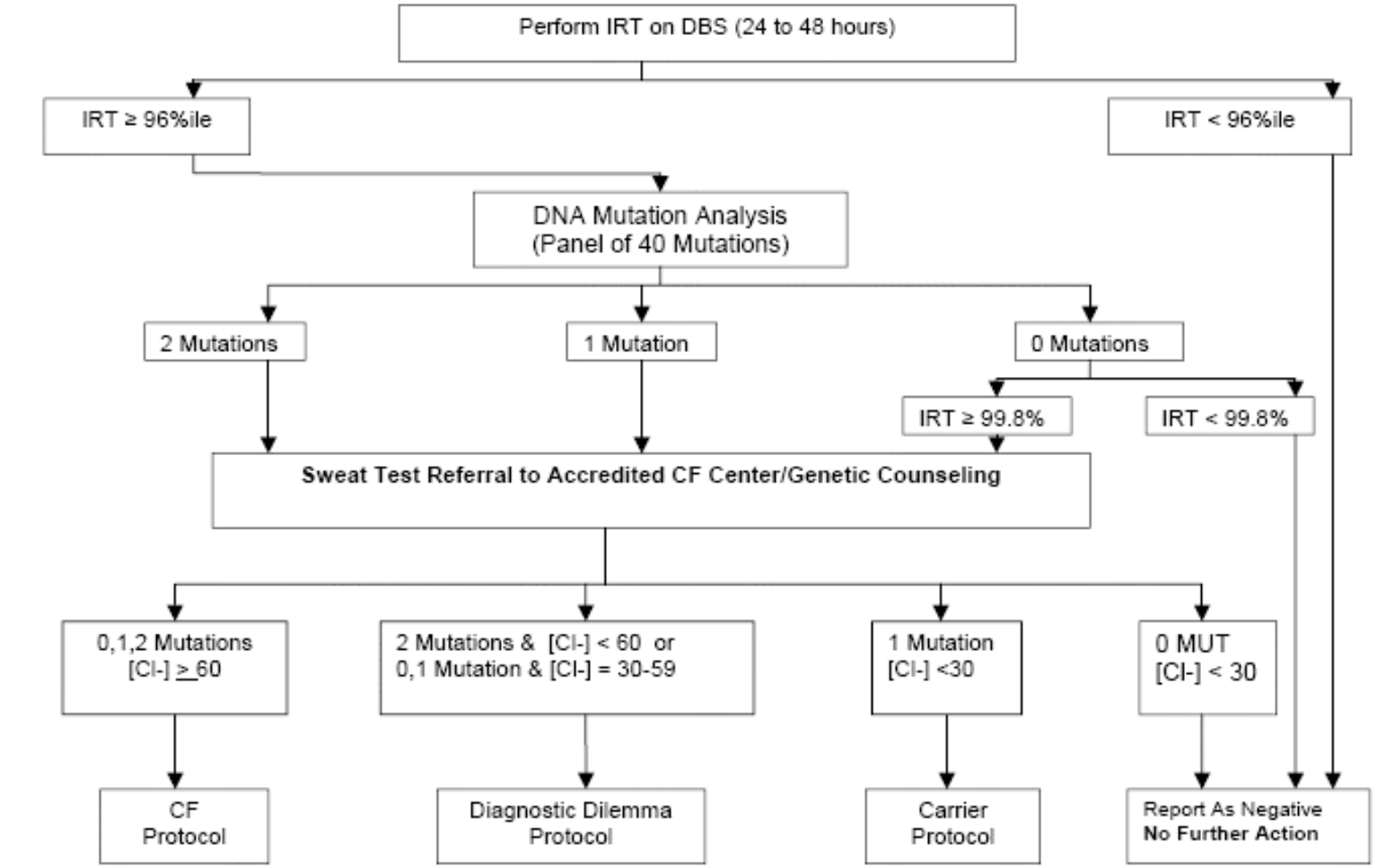






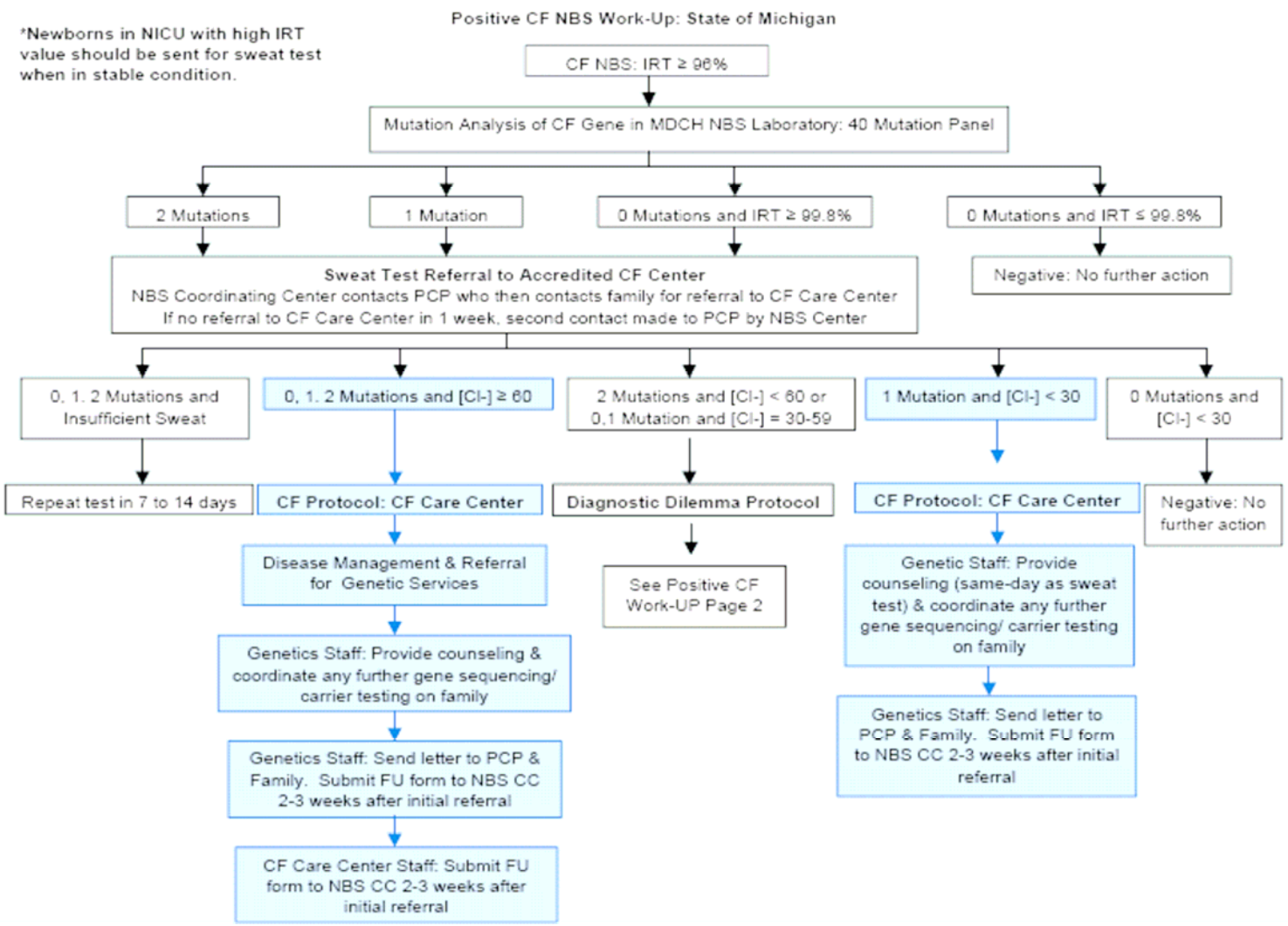
- Participants….
  - MDCH, NBS Laboratory, CF Center Directors, Genetic Counselors
- Charged with…..
  - Screening Process
  - Follow-up

Newborn Screening for CF



**Newborns in the NICU with high IRT value should be sent for sweat test when in stable condition.*

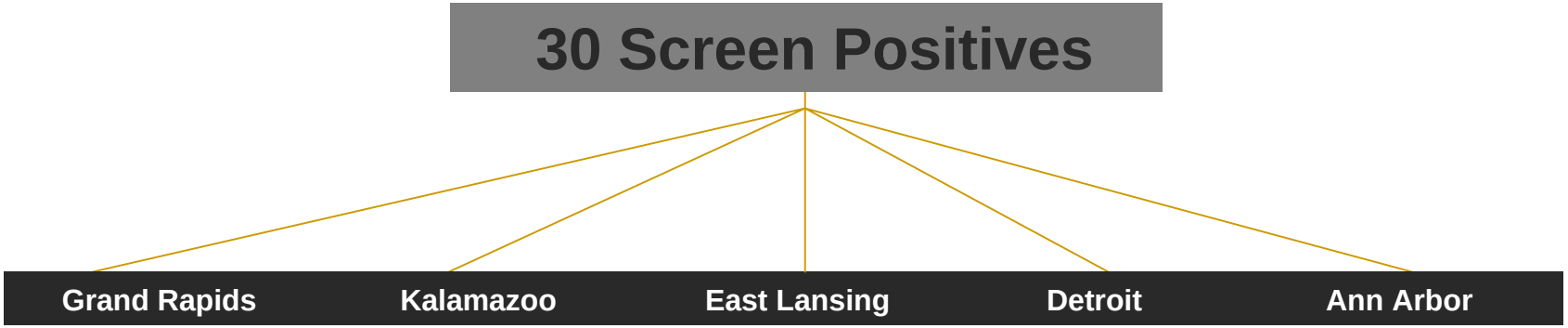
Newborn Screening for CF



Newborn Screening for CF:
Nationwide Experience

- Predictions for MI
  - 350 Screen Positives
  - 35 Cases of CF
  - Sensitivity ~97%
    - Missing 1 case
  - Specificity ~99.7%

Newborn Screening for CF:
Michigan's Experience



Continued Collaboration & Communication