Military Health System Newborn Metabolic Screening

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An Air Force Medical Career

- □ Pediatric Residency: Mississippi
- Neonatology Fellowship: Texas
- Neonatology Practice:
 - Texas, Germany, Maryland
- Short-term backfill clinical assignments:
 - Mississippi, Illinois, Oklahoma
- Clinic Leadership:
 - Oklahoma



Military Healthcare System (MHS)

- 411 clinics and 70 hospitals around the globe
- **□** 9 million beneficiaries: 106,000 newborns annually
- "Federal supremacy" to exceed state requirements if true; default newborn screen (NBS) is the host state's NBS
- Overseas newborns, both on and off base, represent unique logistic challenges
- Military population and medical staff are constantly moving
- Any local military population genetic risk is likely different from the genetic risk of the local civilian population (e.g., sickle cell)



MHS NBS Challenges

- Literally 100s of local systems/processes
- Complicated lab-civilian-military communications scheme
- 49% of newborns delivered in civilian hospitals
- Likely little local institutional memory
- Program oversight, if it exists, turns over frequently
- Rural and overseas locations are "distant" from laboratory – could delay testing and resulting
- Mandated testing inappropriate to population risk
- **□** Test expenses born by "local" budget
- Inconsistent support for what to do with a "positive"



MHS Advantages for NBS

- MHS NBS services reimbursed: those endorsed by American Academy of Pediatrics
- Collegial global network of sub-specialty support and expertise for remote locations
- Carefully chosen uniform requirements
 - Quality & Prevention > Reimbursement
- Ability to control a large volume of testing
- Enterprise-wide single medical computer system and network with lab integration
- Ability to create/manage a NBS registry



MHS NBS Desired Outcome

- "To promote and facilitate the execution of a comprehensive, expanded and uniform newborn metabolic screening program for all Department of Defense (DoD) infants"
- □ Program Components:
 - Uniform MHS policy and requirement
 - Education regarding the testing program
 - Timely MS/MS testing and resulting
 - Registry for tests as well as follow-up of (+)s
 - Case management of patients with (+)s



Process Team Deliverables

- Recommendations for a TMA/HA expanded newborn screening policy,
- Recommendations for requirements for a centralized laboratory and Newborn Registry,
- Recommendations for a direct care implementation and training plan,
- Recommendations for civilian hospital participation



Task #1: Form a Committee

- **□** Expertise required:
 - Clinical care, clinical program management, laboratory contracting, computer systems and data management, policy
 - Geneticists
- Assistance from:
 - HRSA, Dr. Lloyd-Puryear and Dr. Mann



Tasks #2,3,4,5

- Recommendations to include financial "Independent Program Cost Estimate"
- Develop Statement of Work for Proposal Requests
 - Invaluable expertise from the lab contracting experts
- Development of Educational materials
 - Leverage publicly-available materials
- Service and facility financial impact estimates



The Near Future

- Gain approval of Tricare and Services
- Publish Request for Proposal
- Create mandate within direct care system
 - Implementation instructions within each Service
 - Program funding within each Service
- Registry active
- Develop implementation strategies for locations that "deliver downtown"



And Later

□ Re-evaluate, re-focus, and re-define.



Summary

- Military Healthcare System Advantages
 - We are the public health experts, policy makers, rule makers, reimbursement authorities, delivery hospitals, baby doctors, and genetic disease experts; all under one virtual roof around the world
 - We are held accountable by the family's employer for healthcare execution
 - Federal supremacy



Summary

- Military Healthcare System Disadvantages
 - Every situation is different, especially at smaller locations that depend on network delivery services
 - Logistic reach required for remote locations
 - Integrating state test results into military registry in states performing MS/MS
 - Performing MS/MS military test in network hospitals in states not performing MS/MS



Questions?