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
“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
- 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?