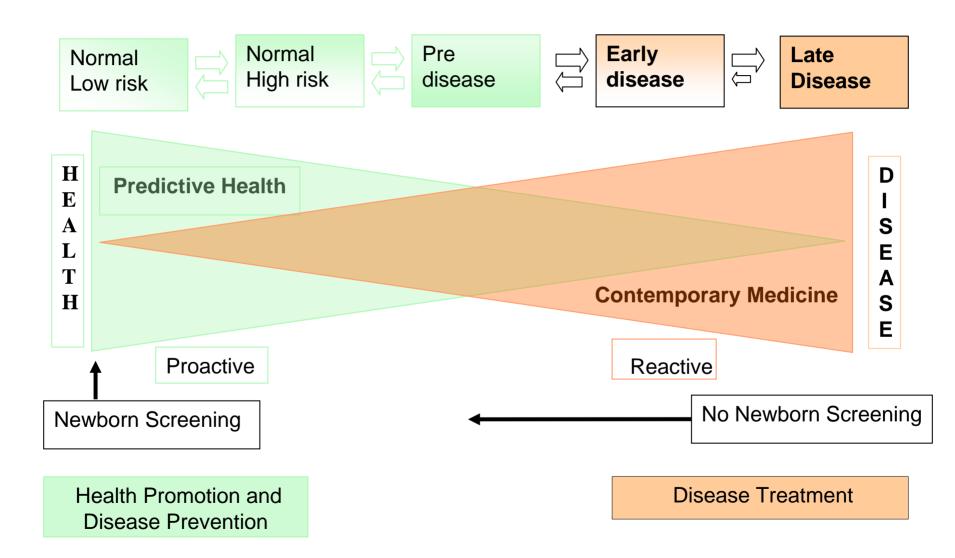


SERGG/Region 3 Long Term Follow-Up, An Overview

Presented by: Rani Singh, PhD, RD

The Health/Disease Continuum & Nutrition Intervention for NBS



HRSA/ACMG Uniform Panel (MS/MS)

Amino Acid Disorders

Fatty Oxidation Disorders Organic Acid Disorders

PANEL

U

Ν

F

0

R

М

Phenylketonuria
MSUD
Homocystinuria
Tyrosinemia type I
Argininosuccinic acidemia
Citrullinemia type I

MCAD deficiency
VLCAD deficiency
LCHAD deficiency
TFP deficiency
Carnitine uptake defect

Isovaleric acidemia
Glutaric acidemia type I
HMG deficiency
3MCC deficiency
BKT deficiency
Multiple carboxylase deficiency
Methylmalonic acidemia (MUT)
Methylmalonic acidemia (CbI A,B)
Propionic acidemia

S T E A C R O G N E D T A S R

Υ

Hyperphenylalaninemia
Tyrosinemia type II
Biopterin defects (Bios)
Tyrosinemia type III
Biopterin (Reg)
Argininemia
Hypermethioninemia
Citrullinemia type II

M/SCHAD deficiency
SCAD deficiency
MCKAT deficiency
CPT-I deficiency
Glutaric acidemia type II
CACT deficiency
Dienoyl red. deficiency
CPT-II deficiency

Methylmalonic acidemia (CbI A,B)
2M3HBA deficiency
IBG deficiency
2MBCAD deficiency
Methylglutaconic acidemia
Malonic acidemia

20 Primary targets22 "Secondary" targets



The Growing Need for tracking Long-Term Follow-up

- SERGE INC. 13
- Inequities among states in their long-term management of disorders
- Expansion of diagnosis with expanded NBS panel
- Lack of information, training, varying resources, inequitable access to care
- Poor transitioning throughout life cycle.
- Poor care coordination
- Lack of data tracking to build evidence

Outline of Region 3 Project



- Region 3 vision of long term follow-up
- Project activities planned

A long-term f/u program must:



- Integrate the public health infrastructure and private sector (public-private partnership)
- Incorporate medical home and support services, transitioning, emergency preparedness issues
- Provide timely management and treatment services
- Develop data systems for monitoring outcomes and quality improvements
- Utilize robust communications to facilitate and maintain access to services
- Remain flexible to accommodate rapid technology and knowledge change

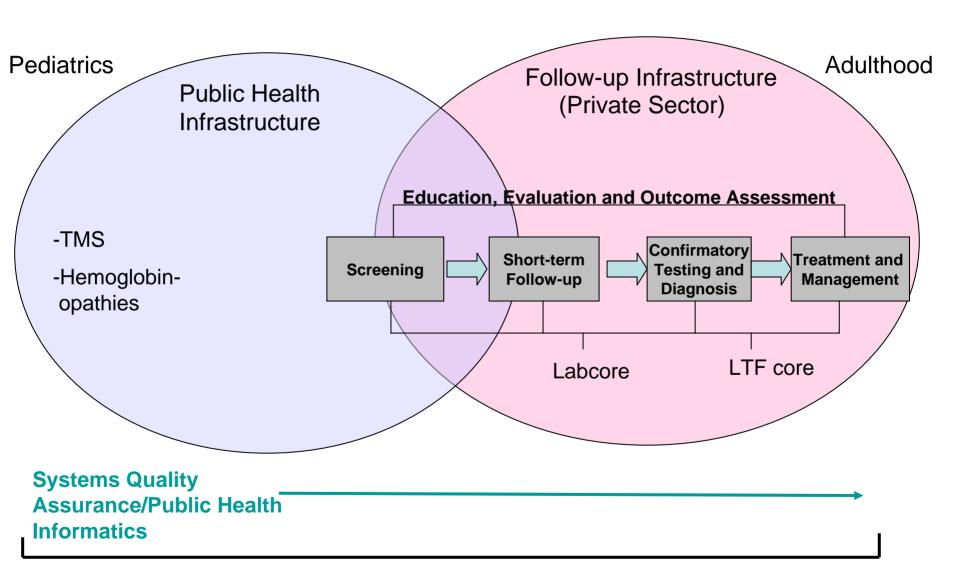
Goals



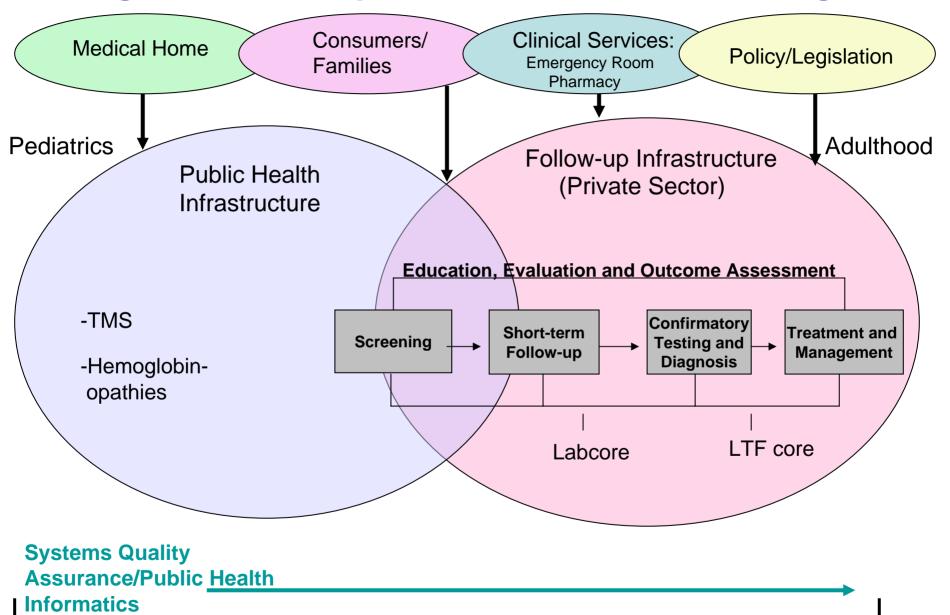
Construct an information system to:

- Provide care coordination, and
- Address stakeholders information needs, and
- Create data linkages, and
- Build evidence for standards of practice and infrastructure for research

Long-term Follow-up for Patients and Families-Region III



Long-term Follow-up for Patients and Families-Region III

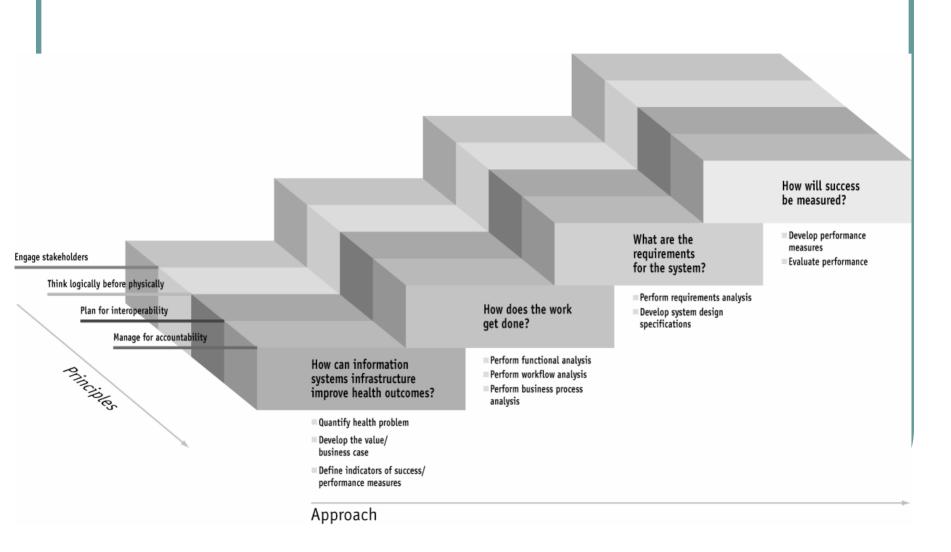


Planned Project Activities

- SERCE INC.
- Capacity and performance evaluation of long-term follow-up systems
- Using a phased approach in partnership with Public Health Informatics Institute (PHII) the region will determine, engage, and utilize stakeholder groups to ascertain an information system usable by practitioners, patients, state public health departments, and consumer groups.

The PHII Approach





Activity 1: 5-year plan



- Year 1: Charter the project and recruit participants.
- Year 2: Core workgroup convened to ascertain the essential functions of the information system.
- Year 3: System design and build contract.
- Year 1 & 4: Screen-positive cases and identified information entered and tabulated by condition.
- Year 5: All states and territories within Region 3 using the information system + system evaluation strategies

Planned Project Activities



2. Development of a regional information system for all analytes of positive screens and treatment protocols.

Planned Activities: Nutrition care and medical management plans will be gathered and compiled. Results will be shared and used to assist in development of best practice models for medical management and nutrition protocols.

Activity 2 5-year plan



- Year 1: Contact and survey of NBS clinicians from each Region 3 state and territory to ascertain information about management strategies and care plans. Simultaneous committee formation of clinicians and dietitians and three external experts to begin planning for nutritional plan guidelines.
- Year 2: Comparison of Region 3 with Mountain States RC management strategies and care plans. Survey of regional current nutrition care plans.
- Year 3: Best practice models developed for both management and nutrition plans.
- Year 4: Both models piloted and evaluated.
- Year 5: Both models disseminated and applied within the region.

Planned Project Activities



Positive-screen outcome analysis to improve management practices and decrease inequities in Region 3.

Management guidelines may be improved if they take a more formal, evidence-based approach.

Planned Activities:

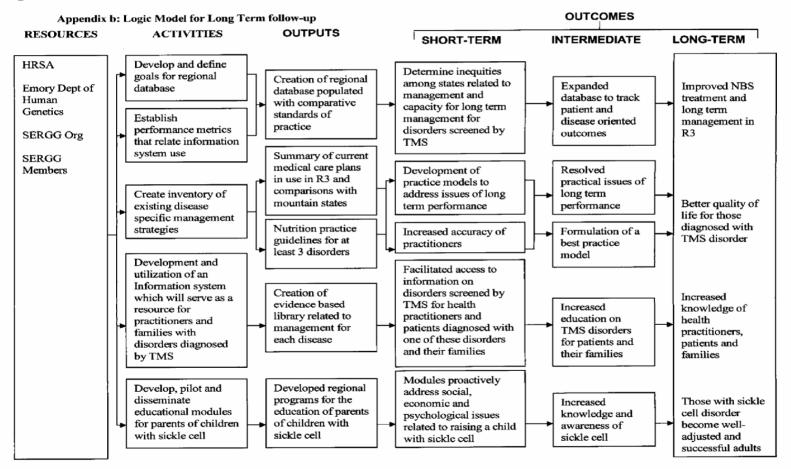
- Literature review and library creation to catalogue articles and research related to disorders detected by TMS.
- Health professionals, 4-5 per topic, will be asked to form a regional journal club.
- Implementation and evaluation of a family-focused resource available in a multi-media format to permit communication beyond the typical clinical setting.

Activity 3 5-year plan



- Year 1: Conduct literature review. Families and health care professionals invited to participate in semi-structured interviews.
- Year 2: Library of literature formed. Links and other information developed and available to patients, families, and practitioners.
- Year 3: Journal club of experts formed.
 Information system log and content analysis, ongoing through end of project.
- Years 4-5: Action model developed and shared inter-regionally and nationally.

Overarching Outcomes of the Region's Long-Term Follow-Up Activities



<u>Outcomes</u>



- Identification and initiation of components of NBS information system as a resource for improving care coordination
- Data Tracking System
 - Including:
 - Positive cases
 - Analyte biomarkers, screening, diagnosis, and management
 - Evidence based library:
 - Regional journal club
 - Partnerships with organizations such as GMDI and ADA
- Management Protocols
 - Medical and nutrition management