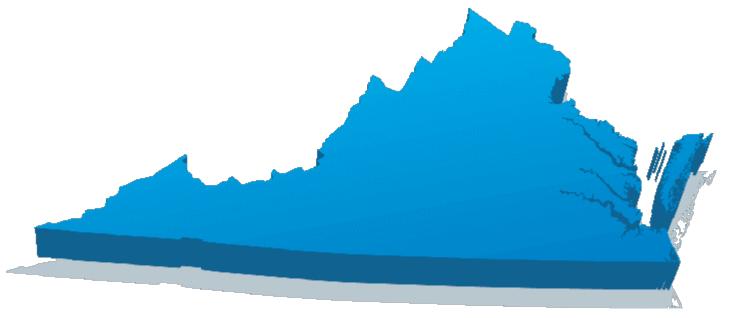
Integrating Lab and Follow-Up Staff







Overview of Newborn Screening



100,000 20,000 3,000

births in Virginia each year

infants need follow-up services each year

clinically diagnosed infants since 1966





Newborn Screening Disorders

- Amino Acid Metabolic Disorders
- Fatty Acid Metabolic Disorders
- Organic Acid Metabolic Disorders
- Galactosemia
- Biotinidase
- Congenital Hypothyroidism
- Congenial Adrenal Hyperplasia
- Cystic Fibrosis
- Sickle Cell Disease
- Severe Combined Immunodeficiencies





Virginia's Dried Blood Spot Card

 \mathbb{X}

		XXXXX	XXX	FOR UNSAT LAB CODE . USE DATE //NT					DGS- DCLS COPY
BABY'S NAME: LAST				CORD NUMBER	BIRTH DA	TE BIRT	H TIME (MIL	SEX () MALE) FEMALE) AMBIGUOUS
BIRTH WEIGHT GRAMS	2() N	ITY ISPANIC ON-HISPANIC NKNOWN	RACE 1() BLK. 2() WHT. 3() A SIAN	4() AMER. IN 5() MIXED/O	IDIAN 1 THER 2	EDING TYPE () BREAST () COW'S F () TPN	ORMULA	()SOYFORMU	
MULTIBIRTH () YES BIRTH ORDER (#)	DATE OF TIME OF	COLLECTION GE	STATION AL A		ED()N ()	2□PLASN		BABY'S TELEPH	HONE NUMBER
BABY'S ADDRESS		CIT	Υ	STAT	E ZIP (CODE	Ċ	OUNTY OF RESID	ENCE
MOTHER'S NAME: LA ST	FIRST		М	AIDEN	BIRTH DA	TE SSN	I (LAST 4 DI	G.) MASTER I	PATIENT INDEX
NATIONAL PROVIDER IDENTIFIER	TELEPHONE NUMBER	BIRTH HOSPITAL (☐ HOME BIR		EPHONE NUMBE	R	SUBMITTER SUBMITTER		()BIRTH HOSP. TELEPHONE NUM	
BABY'S HEALTH CARE	PROVIDER	BIRTH HOSPITAL	LNAME			SUBMITTER	NAME		
HEALTH CARE PROVIDER'S ADDRESS BIRTH HOSPITAL		L ADDRESS			SUBMITTER'S ADDRESS				
СІТҮ	STATE ZIP CODE	CITY		STATE Z	ZIP CODE	CITY		STATE	ZIP CODE
Common wealth of Virginia Department of General Services Newborn Screening Laboratory 600 N. 5th St. Richmond, VA 23219 Telephone: (866) 378-7730 Doc. #8615 (Rev.)		SPECIMEN C		Y (PRINT NAME)	F(ORM COMPLE		RINT NAME)	Use by XXXX-XX
			LAST, FIRST			LAST, FIRST			



Staffing

- Lab:
 - Approximately 30 scientists
 - Data Entry
 - Support Staff
 - Leadership
- Follow-Up:
 - 4 Follow-Up Nurses
 - Telecommute option
 - Support Staff
 - Leadership



Courier Transportation

- Courier services available 6 days a week across state to 59 hospitals
- Pickup in evening, arrive at laboratory in early AM
- Offer UPS Next-Day service for out of hospital birth providers



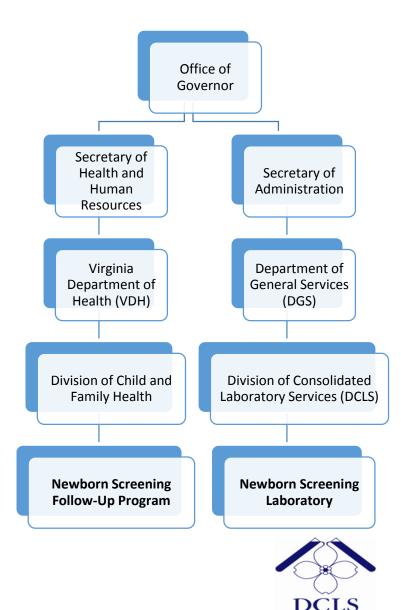


Co-Location in Virginia

Background:

 Laboratory and Follow-up staff are under two different agencies

Physical location about a mile apart





Communication:

Interface	Frequency
Face to Face	Monthly
Phone	Rarely, as needed





Steps Prior to Implementation:

- Evaluate strategies and barriers with implementation
- Evaluate advantages and disadvantages with co-location to move follow-up staff from the Department of Health (VDH) to the laboratory at the Division of Consolidated Laboratory Services (DCLS)





Steps Prior to Implementation:

- Multiple meetings with stakeholders including staff and leadership
- Identify workspace for Follow-up staff at laboratory
- Review potential barriers with implementation and identify strategies for resolution





	Barrier
Acces to Decourage	With move, potential loss of immediate access to resources at
Access to Resources	VDH (epidemiology, leadership, etc.)

Solution

Follow-up supervisor maintains presence in both facilities for access to resources and collaboration





	Barrier
Communication	Existing phone numbers for follow-up not transferable to DCLS
Communication	Access to electronic medical record on follow-up server at VDH

Solution

Procure cellular phones for follow-up staff to forward established program phone numbers for seamless communication with stakeholders

Coordinate remote access with I.T. support





	Barrier
Parking	DCLS newborn screening laboratory is approximately 1 mile from VDH

Solution

Transfer parking of follow-up staff to laboratory parking garage

Secure agency parking spot for Follow-up supervisor at laboratory





	Barrier
Processes	Obstruction in current workflows with absence of interaction with admin staff
770003503	Fax confirmations print at VDH

Solution

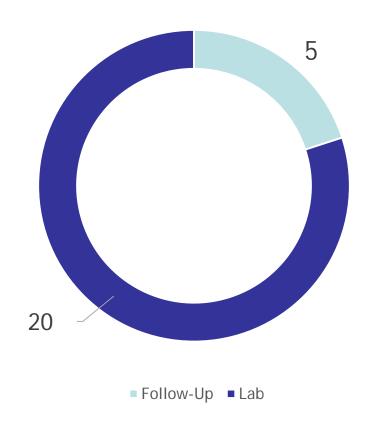
Use of intra-office mail, electronic folders, and collaboration with administrative staff for courier

Setup receipt of digital fax confirmations via secure email





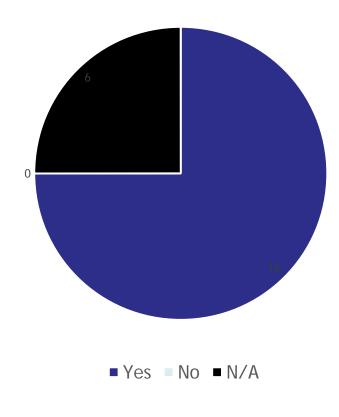
Survey Responses: Role In Newborn Screening







Supportive of Co-Location Initiation in February 2017

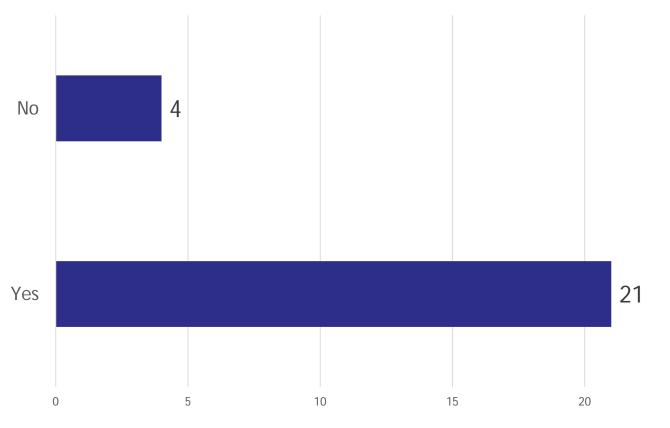


100% of staff in support





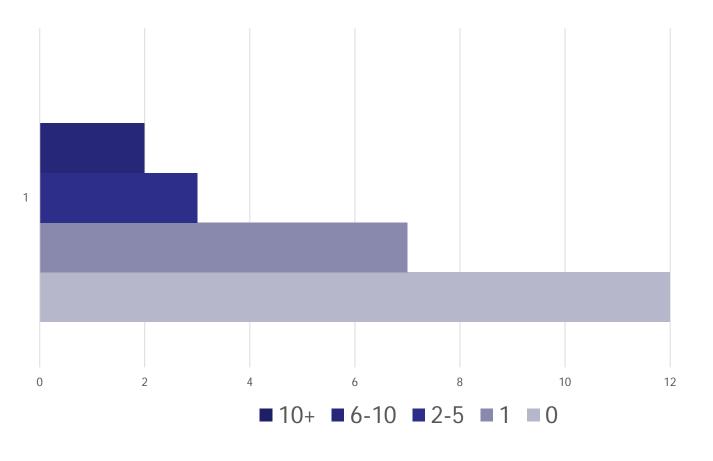








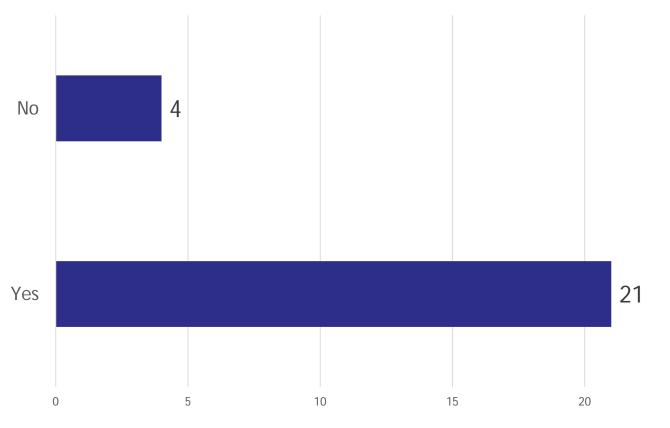
Number of Times of Intended Face-to-Face Interaction







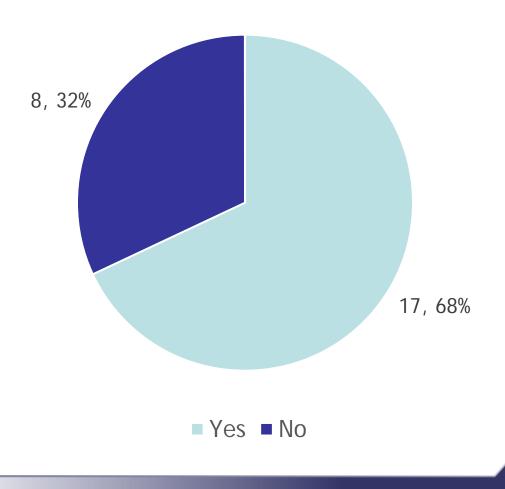








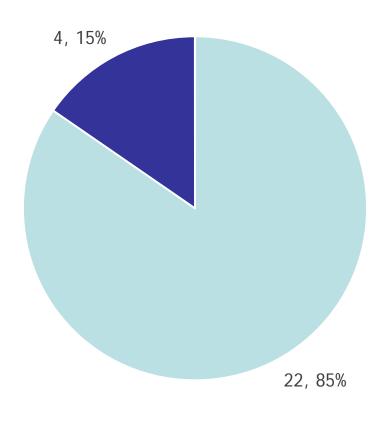
Improved Formal Communication







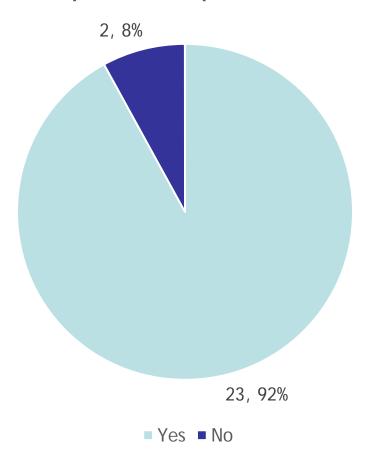
Improved Informal Communication







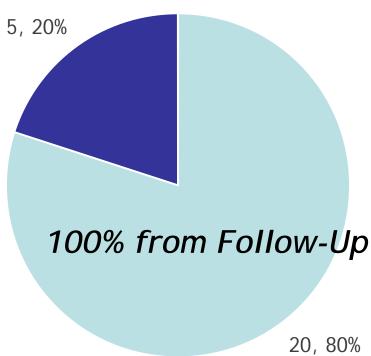
Improved Operations







Improved Engagement









Comments:

I enjoy having the nurses on site.

I can easily transfer a call or run upstairs to ask them a question.

It is also nice to get to know each personally.

I feel like we are all part of the same team.

It would be beneficial to eventually have the entire Follow-up team co-located



Co-Location in Virginia: Outcomes

Co-location Strengths

Improves communication around reporting newborn screening results

Frequent face-to-face interaction

Faster resolution of problems (i.e. data entry discrepancy, question regarding follow-up recommendation)

Novel informal communication

Improves understanding/linkage of broader newborn screening program

Increases learning opportunities

Improves engagement of follow-up staff





Co-Location in Virginia: Outcomes

Co-location Challenges
Added expense for second location (hardware, rent, IT support)
Co-location may result in loss of resources
Increases demand on follow-up supervisor to maintain presence in multiple locations
Co-location does not guarantee improved communication





Co-Location in Virginia: Recommendations

Allow time to plan for barriers and solutions for seamless integration
NBS programs not able to co-locate should implement regular meetings and consider utilization of video conferencing to imitate face-to-face interaction.





Co-Location in Virginia: Next Steps

Continue to work on communication and face-to-face interaction
Utilize co-location to initiate notification of unsatisfactory samples more quickly





www.NewbornScreeningEducation.org





Newborn Screening Education Offers 4 Online Learning Opportunities

Critical Congenital Heart Disease Screening

Approximately 1 in 100 infants is born with some type of congenital heart disease (CHD). Some forms of CHD cause little or no problems, but other forms, referred to as critical congenital heart disease (CCHD), present a significant risk of morbidity or mortality if not diagnosed soon after birth. To identify those infants at risk, all infants should be screened using pulse oximetry prior to discharge from the nursery. This educational module offers evidence-based content for healthcare providers on the identification and implications of CCHD, assistance in establishing a screening program, and resources for helping parents understand the testing process and results.



Newborn Dried Blood-Spot Screening

Newborn Screening is a public health activity used for early identification of infants affected by certain genetic, metabolic, hormonal and/or functional conditions. Screening detects disorders in newborns that, if left untreated, can cause serious illness, disability, and even death. Currently, the U. S. Department of Health and Human Services recommends screening for 29 heritable disorders and genetic diseases performed through dried blood-spot screening.

SCID: This module now includes learning content on Severe Combined Immunodeficiency Disorder (SCID). This rare group of inherited disorders is almost always fatal but can be successfully treated if detected early.





Contact Information

Christen F. Crews, MSN, RN

Public Health Nurse Supervisor

Dried Blood Spot and Critical Congenital Heart Disease (CCHD)

Newborn Screening Program

Virginia Department of Health

Ph: (804) 864-7700 Fax: (804) 864-7807

Email: christen.crews@vdh.virginia.gov

