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VIRGINIA DEPARTMENT OF HEALTH

FAMILY HEALTH SERVICES

Virginia Infant Screening and Infant Tracking System

Author:	Raj Kocherlakota
Creation Date:	October 12, 2005
Last Updated:	March 20th, 2008
Version:	5.4.2

Approved by:

Joanne Boise
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Project Manager, OIM — Signature — date

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Joanne Boise Director of Children and Adolescent Health	_____ Signature	 date
Nancy Ford Director of Pediatric Screening And Genetics Services	_____ Signature	 date
Diana Malik Project Manager	_____ Signature	 date

Document Control

Change Record

Date	Author	Version	Change Reference
10/12/2005	Raj Kocherlakota	1.0	Create document
01/31/2006	Raj Kocherlakota	2.0	Submitted to Design team
10/03/2006	Raj Kocherlakota	3.0	Changes from the user group
03/05/2007	Raj Kocherlakota	5.0	Eliminated unwanted references and redundant information. Modified the document to reflect the integration with EBC application
03/29/-4/19/07	Pat Dewey	5.1	Made edits and corrections
04/20/2007	Raj Kocherlakota	5.2	Changes per Allison Schrieber on automatic referrals for VaCARES and Cause of Death (ver 5.1 is solely PD's document. Those changes are included in ***ver 5.2. Ver 5.1 physically doesn't exist***
06/06/2007	Raj Kocherlakota	5.3	Acceptance of previous changes Changes discussed in/after meeting on 04/26/2007 Changes per Pat Dewey's input through meetings and emails
10/17/2007	Raj Kocherlakota	5.4	Changes suggested by user group after beta testing. Changes sent by development team and user group between 6/14/07 and 10/15/07
01/28/2008	Raj Kocherlakota	5.4.1	Accepted all the changes (made by me). This is the copy that Susan Tlusty will work on from now on.
1/28/2008	Susan Tlusty	5.4.2	Adding changes from DCAH communicated to OIM from 10/16/07 through 1/27/08
3/20/2008	Susan Tlusty	5.4.2	Adding changes from DCAH communicated to OIM between 1/28/08 through 3/19/08

Reviewers

Name	Position
Diana Malik	Development Project Manager
Nancy Ford	Grant Project Manager
Susan Tlusty	DCAH Policy Analyst

Distribution

Date	Name	Position

Contents

Objective

Virginia Department of Health's (VDH) mission is to achieve and maintain optimum personal and community health by emphasizing health promotion, disease prevention and environmental protection. The Virginia Department of Health is located at 109 Governor Street, Richmond, VA 23219, with 35 district health departments located throughout the State that contain approximately 119 local health department sites.

Virginia Infant Screening and Infant Tracking System - VISITS is a Web-based integrated database system that tracks and supports screening results for four programs and services which are mandated by the Code of Virginia and administered by the Virginia Department of Health (Early Intervention Services provided through Part C are provided through multiple state agencies with the Virginia Department of Mental Health, Mental Retardation, and Substance Abuse Services as the lead agency):

1. Virginia Congenital Anomalies Reporting and Education System (VaCARES) mandated by §§ 32.1-69.1 and 32.1-69.2 of the Code of Virginia;
2. Virginia Hearing Impairment Identification and Monitoring System mandated by §§ 32.1-64.1 and 32.1-64.2 of the Code of Virginia. This system is referred to as the Virginia Early Hearing Detection and Intervention Program (VEHDIP);
3. Virginia Newborn Screening Services (VNSS) mandated by §§ 32.1-65 and 32.1-67.1 of the Code of Virginia; and
4. Early Intervention Services provided through Part C of the Individuals with Disabilities Education Act (20 U.S.C. § 1431 et seq) as defined in §§ 2.2-5300 through 2.2-5308 of the Code of Virginia. VDH duties related to Early Intervention Services are mandated and defined by § 2.2-5300 and § 2.2-2664 of the Code of Virginia.

The purpose of the VISITS software is to create a single record for each child in Virginia enrolled in any one of these programs and services so that VDH can provide these infants and their families with necessary follow up and enhanced care coordination. In addition, child health workers and policy makers can use VISITS to extract aggregate, non-identifiable data for conducting needs assessments, planning services for children with special health care needs, targeting prevention efforts, providing surveillance and evaluation, responding to constituent questions, and satisfying state and federal funding requirements.

Project Scope and Deliverables

The VISITS II project scope includes the implementation of all necessary hardware, software, and services to develop, implement, and provide training for a Web-based VISITS II application to control the flow of sensitive information through the proper channels to VDH staff from hospitals in the Commonwealth who are mandated by law to conduct screening and provide information related to these programs to VDH.

Given a time line not to exceed June 2008, the project team, under the direction of and in partnership with the sponsor(s) plans to achieve the following objectives

- Business rules design
- Purchase of software and maintenance agreements
- Installation
- Technical configuration
- Acceptance
- Training for administrators and trainers

Project Scope Exclusions

The VDH project will not be used for daily decision making regarding individuals until such time as its use is feasible, responsible, and subject to applicable legal restrictions.

The VDH project will include a feasibility study on the integration with other child health care data systems but will not include the actual coding of interfaces or downloads of data files other than Vital Records.

Authorized users will maintain their information in the database.

Ownership

VISITS I was developed originally by VDH through a contractual agreement with Welligent, LLC (formerly Health Informatics of Eastern Virginia Medical School and the Children's Hospital of The King's Daughters). A multi-discipline, multi-agency task force guided the initial development. Subsequent work groups were formed as needed to identify and address various issues, including the VISITS Issues Work Group and VISITS Quality Improvement Committee.

In 2006, DCAH, under the directive of VDH upper management, transferred VISITS I maintenance and support functions from Welligent LLC to VDH OIM.

Application assistance is currently requested through the OIM Help Desk. This process will continue with VISITS II.

Project Assumptions

None

System Requirements

Quality Improvement

Quality improvement computer technology will be used to enhance VISITS II operations, as outlined below.

A. *Quality Assurance.* Incorporate the following software elements into VISITS II to prevent problems and enhance standardization:
   1. *Build in range checks* to prevent inaccurate abstracting and data entry. These checks will be created for any data variable with a defined parameter of acceptable or measurable values. Example: date range checks can be used for age, date of birth, date of fetal demise, date of death. These become the dates that other dates (e.g., date of case report) are compared to for rationale. Other examples of range checks include but are not limited to Apgar scores, gestational age, and birth weight.
   2. *Develop automated calculations and conversions* for specific data fields. An example of this would be calculating and properly classifying birth weight.
   3. *Use of coded data when appropriate.* Develop codes for text information. This method can be applied to any data variable definition that has multiple acceptable responses. Examples of this include but are not limited to disease, geographic, race, and ethnicity codes.
   4. *Use drop-down windows for data fields.* This approach is useful with long text entries and for text that has been converted to a code.
   5. *Use standard data collection variables (and data definitions)* to accommodate record linkage and electronic transfers. Example: birth and death certificate transfers, VNSS diagnosed case uploads.

B. *Quality Control*. Incorporate the following procedures into VISITS II to detect, measure, and enhance effectiveness.
   1. *Perform logic edits*. Review existing program documentation and syntax to ensure that the computer application is performing as intended. One example would be when VISITS II applications are used to convert or calculate data field values the software is designed to make sure the results using the formula(s) are accurate.
   2. *Create date-posting fields* to monitor timeliness.
   3. *Develop transaction logs*. This is a method that tracks and dates additions, deletions, and other changes to the database.
   4. *Create queries and reports, as specified by users,* to track desired outcome measurements for both standard and ad hoc reporting needs.
   5. *Develop methods, using key data variables, to find duplicate cases* in the database.
   6. *Develop queries to identify problem situations*. One example may be certain International Classification of Disease (ICD) codes may present challenges in conducting birth defects surveillance as defined by the Code of Virginia.
   7. *Develop VISITS II application* to improve the efficiency of program operations, including case ascertainment.
   8. *Develop methods to improve timeliness* of case reporting. This includes using Internet reporting and other electronic methods.

Security

VISITS II security meets HIPAA and VDH Internal Audit Department (IAD) Information Systems Security Requirements, as outlined below.

A. *Technology Security.* Develop and implement a plan for providing evidence that VISITS II meets Commonwealth of Virginia, Virginia Information Technologies Agency (VITA) technology security controls that include, but are not limited to, the requirements of all standards and best practices contained in all relevant VITA documents including (COV ITRM Standard SEC501-01) entitled "Commonwealth of Virginia: Information Technology Resource Management Information Technology Security Standard" or its replacement document.

B. *Non-Technology Security.* Develop and implement a plan for providing evidence that VISITS II meets all Commonwealth of Virginia VITA non-technology security controls.

Integration/Linkages

Electronically integrate and link together VISITS II with other child health information surveillance systems, including (1) Vital Records Electronic Birth Certificate (EBC) (2) Care Connection for Children System Users Network (CCC-SUN) and (3) LeadTrax.

A. VISITS II is designed to integrate with the Vital Records Electronic Birth Certificate (EBC). VISITS II will be a separate module within EBC.
B. VISITS II is designed to allow for eventual linkage or integration with CCC-SUN. This will include a mechanism for automatic referral to CCC-SUN.
C. VISITS II is designed to allow for eventual linkage or integration with LeadTrax.

Registration

Patient Search

VISITS-II will now be integrated with Vital Records Electronic Birth Certificate system (EBC). In EBC, the process of registering a child starts with a search on the mother's record.

Newborn Hearing Screening - VIXNHS

The purpose of this page is to query all the infants that are born between ranges of dates so that the users can mark the infants that have a Pass/Pass result in the initial hearing. This screen gives a chance to back track the records that are in the application and have no hearing screenings associated.

User will query a range of DOB's to find all the infants that are born between those dates at the user logged in facility OR infants that are born between those dates and are transferred to the user's logged in facility. User may additionally use the option 'Include Previous Screenings' to see the child's records that have previous hearing screenings done. However, such records will not be editable.

Query results page will contain identifying information such as child name, mother name, DOB, Medical Record No., Child name will be a hyperlink clicking on which displays child information in a non-editable form.

User will enter a date for a record if the initial hearing screening is done. This will create a record for the infant with hearing results as PASSED/PASSED. However, user may edit this record if need arises.

Req. Trace #	Description
	Child Name (Last, First, Middle) Child's full name Hyperlink Click on the link to display Infant Summary Screen
	Mother Name (Last, First, Middle) Mother's full name
	Medical Record Number Child's medical record number
	DOB Child's Date of Birth
	Test Done Indicate if the initial hearing screening was done Check Box
	Date Date screening was performed
	Type Type of screening Hyperlink Always HEA, to indicate a Hearing screening Click on this to see the result of Initial Hearing Screening.

Child Registration VIXCHI

This page is used to register a new child or update an existing registration record of a child. User will query to see if the child already exists in the database (via EBC data entry). If the child is found, user will use the child record and continue. If child record not found, use will have key in the required information.

Req. Trace #	Description
	Birth Hospital (*) Name of the hospital where the birth took place Refer Appendix for complete list LOV Pre-populated if existing in EBC. Not editable if pre-populated.
	Other Place of Birth (*) Place of birth if not born at a hospital Refer Appendix for complete list LOV Ex: Virginia Home Birth, Virginia Other Birth, Out of State etc., EBC and VISITS have different labels for these values even though they are almost same. Ex: EBC's HOME = VISITS's Virginia Home Birth Pre-populated if existing in EBC. Not editable if Birth Hospital is pre-populated from EBC
	Date of Birth (*) Infant's Date of Birth Pre-populated if existing in EBC. Not editable if pre-populated.
	Plurality (**) Plurality of the birth. Ex: Single Birth, Twins, Triplets, Quadruplet, Quintuplet, More than 5. LOV Pre-populated if possible from EBC VISITS user may leave it blank. This info may not be available for EBC in cases of Delayed Births Pre-populated if existing in EBC. Not editable if pre-populated.
	Birth Order (**) Birth Order in case of multiple births. Ex: 'Baby A' through 'Baby G' Required if plurality is greater than a single birth Pre-populated if existing in EBC. Not editable if pre-populated.
	Date of Death Infant's Date of Death Enter the date in MM/DD/YYYY format OR Select a date from Calendar Pre-populated if existing in EBC
	Cause of Death Cause of infant's death Free Text
	First Name (*) Infant's first name Pre-populated if existing in EBC
	Middle Name Infant's middle name Pre-populated if existing in EBC
	Last Name (*) Infant's last name Pre-populated if existing in EBC
	Admitted to NICU? (*) Indicate if the infant was admitted to NICU. Ex: YES or NO Pre-populated if existing in EBC. Not editable if pre-populated. If the logged in user is a Hospital User, the ADMITTED TO NICU field will be mandatory. If the logged in user is a VDH user, the ADMITTED TO NICU field will be optional

	Gender (*) Infant's Gender/Sex EX: Male, Female, Unknown, Other LOV Pre-populated if existing in EBC
	Suffix Infant's (name) suffix Ex: Jr., I, II, III, IV etc., Pre-populated if existing in EBC
	Race (*) Infant's race Refer Appendix for complete list Use OMB standards. LOV Pre-populated if existing in EBC
	Ethnicity (*) Infant's ethnicity Refer Appendix for complete list Use OMB standards. LOV Pre-populated if existing in EBC

Mother Information

Mother information is populated from EBC if existing. Otherwise, it is entered in this section

	Mother's First Name (*) Mother's first name Pre-populated if existing in EBC
	Mother's Middle Name (*) Mother's middle name Pre-populated if existing in EBC
	Mother's Last Name (*) Mother's last name Pre-populated if existing in EBC
	Mother's Maiden Name Mother's maiden name Pre-populated if existing in EBC
	Mother's Date of Birth Mother's Date of Birth Pre-populated if existing in EBC
	PIN Type (**) Mother's PIN Type Ex: SSN, License No. etc., Pre-populated if existing in EBC
	PIN (*) Mother's PIN Required if PIN Type is not 'NONE' Pre-populated if existing in EBC
	Primary Race (**) Mother's Primary Race EX: White, Black, Asian etc.,
	Hispanic Origin (**) Mother's Hispanic origin Indicate if the contact has any Hispanic origin EX: Cuban, Mexican, non-Hispanic etc.,
	Other Hispanic Origin (**) Mother's Other Hispanic origin Indicate if the contact has any other Hispanic origin that's not listed EX: Cuban, Mexican, non-Hispanic etc.,

	Birth State (**) Mother's State of Birth
	Birth Country (**) Mother's Country of Birth (only if the contact is not born in USA)

Father Information

Father information is populated from EBC if existing. Otherwise, it is entered in this section

	Father's First Name (*) Father's first name Pre-populated if existing in EBC
	Father's Middle Name (*) Father's middle name Pre-populated if existing in EBC
	Father's Last Name (*) Father's last name Pre-populated if existing in EBC
	Father's Suffix Father's Suffix List Box Refer Appendix for complete list Pre-populated if existing in EBC
	Father's Date of Birth Father's Date of Birth Pre-populated if existing in EBC
	PIN Type (**) Father's PIN Type Ex: SSN, License No. etc., Pre-populated if existing in EBC
	PIN (*) Father's PIN Required if PIN Type is not 'NONE' Pre-populated if existing in EBC
	Primary Race (**) Father's Primary Race List Box EX: White, Black, Asian etc.,
	Hispanic Origin (**) Father's Hispanic origin Indicate if the contact has any Hispanic origin EX: Cuban, Mexican, non-Hispanic etc.,
	Other Hispanic Origin (**) Father's Other Hispanic origin Indicate if the contact has any other Hispanic origin that's not listed EX: Cuban, Mexican, non-Hispanic etc.,
	Birth State (**) Father's State of Birth
	Birth Country (**) Father's Country of Birth (only if the contact is not born in USA)

Contact Information - VIXCON

If the child has information of mother and/or father already entered in the application OR populated through EBC, Contact screen will allow user to select mother or father as contact. At least one contact has to be primary contact. If there is more than one contact, Letters will be sent to primary contact. Primary contact need to have at least one telephone number associated. Other contacts may also be entered. Such contacts are either queried in application or entered new. Organizations/Agencies may also be entered as contacts.

User will be presented with radio buttons of available contacts (ex: Mother, Father, Other, Organization). User will make an appropriate selection and continue.

Req. Trace #	Description
	Last Name (*) Contact's last name
	First Name (*) Contact's first name
	Middle Name Contact's middle name
	Relation to Client (**) Ex: Biological Mother, Father, Sister etc., See appendix for complete list of values Required if contact is NOT an Organization. In case of Organizations, this is defaulted to Legal Rep
	Primary Contact? (*) Indicate if this contact is primary contact. Check Box If this is checked, at least one telephone number should be entered
	Primary Language Spoken (*) Contact's primary language spoken Ex: English, Spanish, French etc. List Box See Appendix for complete list Most frequently used languages are shown at the top of the list
	ADDRESS INFORMATION
	Address is mandatory for Child's Contact. The address is used to send letters to children. If the selected contact has an address(es) associated already, it is displayed here. User is also allowed to create a new address for the contact. If the contact is an Organization – address details are defaulted and are un-editable
	House Number Contact's House Number
	Pre Dir Pre-Direction for contact's address Ex: East, West etc., Refer Appendix for complete list LOV
	Address (1) (*) Contact's address line 1
	Address (2) Primary contact's address line 2
	Street Suffix (*) Street Suffix List Box Ex: ST, STR, CIR, RD See Appendix for complete list
	Street Desc Street Suffix Description LOV Ex: Street, Circle, Road See Appendix for complete list
	Post Dir Post-Direction for contact's address Ex: East, West etc., Refer Appendix for complete list LOV
	Apt # Contact's Apartment Number
	Zip Code (*) Contact's (address) Zip Code

	Refer Appendix for complete list LOV If the user enters the 5-digit zip code, which auto-populates city and state
	City (*) Primary contact's (address) city
	State (*) Primary contact's (address) state Ex: Virginia, Maryland. Refer Appendix for complete list LOV
	Phone Type (*) Phone number type List Item. Ex: Home, Work, Cell
	Phone Number (*) Phone number Enter the phone number in 999-999-9999 format (May be split into area code and number) At least one phone number should be entered for a Primary Contact
	Extension Contact's Phone Extension
	The address entered should create a back-end field for FIPS code that can be used in reports.

Capture Special Circumstances Information - VIXSPC

This screen captures patient's special circumstances information. If these fields are completed, place the words, "Special circumstances" in YELLOW color in Header Bar

Req. Trace #	Description
	Special Circumstance Date Date on which special circumstance recorded
	Comments Comments. Free text 250 characters

Capture Current Provider Information - VIXCPR

This screen captures patient's current provider information. If the provider is not found in the list, this screen allows creation of new provider record which is explained in the section 'Create New Provider'

Req. Trace #	Description
	Provider Name Name of the Provider LOV Selecting a value from the list automatically populates the Facility Name and Address. If a provider belongs to more than one facility, users will notice that the LOV will have more than one entry for that provider along with the facility name and complete address.
	Facility Name of the Facility LOV. List of all facilities where the Facility Type = Local Health District OR Pediatric Practices
	Address Provider Address Populated automatic when Provider is selected from LOV
	Provider Details Provider details. Comments. May be used to enter any relevant information

	about the provider/practice that is not found in LOV

Create New Provider - VIXPRO

User may press the 'Add New Provider' from 'Capture Current Provider Information' page to create a totally new provider record.

This page is also displayed under VISITS Maintenance module where users with appropriate roles can edit the provider information

Req. Trace #	Description
	First Name First Name of the Provider
	Middle Name Middle Name of the Provider
	Last Name Last Name of the Provider
	Suffix Provider Suffix List Box See Appendix for complete list.
	Gender Provider Gender List Box See Appendix for complete list
	Title Provider Title (Provider Type) List Box Valid values: MD – Medical Director RN – Registered Nurse NP – Nurse Practitioner DO – Doctor's Office PA – Physician Assistant OTH – Other/Unknown VISITS-II users may notice few additional choices (used by EBC users) See Appendix for complete list
	Not. Exp Date: Notary Expiry Date
	Provider? Indicate if this person is a Provider List Box Defaulted to YES. Disabled for VISITS user Choice NO will be used by EBC users to create medical attendants.
	Provider Number Provider Number
	Start Date Provider Starting Date
	End Date Provider Ending/Inactive Date
	Hospitals/Facilities Name of the Facility/Hospital provider associated with LOV Provider MUST be associated with AT LEAST one facility. If the provider belongs to multiple facilities – additional records can be created here.

Capture Initial Hearing Screening Information - VIXIHS

Capture patient's initial hearing screening information. This information cannot be entered unless provider information is entered.

Req. Trace #	Description
	Medical Record Number (*) Client's Medical record number Pre-populate from EBC if possible
	Screening Test (**) Hearing screening test done by hospital Ex: OAE, ABR., 2-stage OAE & ABR Refer Appendix for complete list LOV If NICU = YES, FLASH warning: "Infant should be screened with ABR." User can still choose OAE Required if *Discharged Before Screening = NO*
	Discharged Before Screening (*) Indicate if the patient was discharged before screening Valid Values: Yes, No, N/A (not applicable) N/A option should ONLY be available to VDH users. This field should NOT be required for VDH users with a default value to NULL If NULL, Screening Test, Screening Date, Reported By, Person Administering Screening, Right Ear Result and Left Ear Results are required If Hospital Users choose YES in this field, then none of the values starting with 'VDH' in Reason Not Screened should be allowed to choose from.
	Reason Not Screened (**) Indicate the reason why the patient was not screened. Valid Values: Missed Child Before Screening, Parents Refused (Other Reason), Parent Refused (Religious Exemption), Transferred to Out of State Hospital Required if 'Discharged before screening' is YES.
	Screening Date (**) Actual date on which Screening was performed Required if *Discharged Before Screening = NO*
	Discharge to Home Date (*) Date of discharge from reporting hospital. To be entered by the hospital that discharges the infant If field "Reason Not Screened" is "Transferred to out of state hospital" or "Transferred to hospital in state", then "Discharge to Home Date" field should not be available to the person entering these data.. Once the initial entry has been made, then the "Discharge to Home Date" field is available for entry
	Hospital Transferred To (**) Name of the (in state and out of state) hospital the patient transferred to Required if *Reason not Screened = Transferred to Out of State Hospital and Transferred to In state Hospital* If this value is already entered in Child Update page, then populate into this page. However, if the user wants to change this for any reason, display a pop-up asking the user to confirm the action (ex: Are You Sure..?? with YES/NO/CANCEL) In VISITS II, **ALL** transfers will be reported by hospitals, both in state and out-of-state. If the user chooses "Transferred to In State Hospital" for Reason Not Screened, the LOV would only include hospitals located in Virginia. If the user selects "Transferred to Out of State Hospital" for Reason Not Screened, only non-Virginia hospitals would be included in the LOV. VISITS-II User Group will also ask hospitals that receive the infants to go back into the record and enter a discharge date, once they discharge the infant to home.
	Transferred Date (*) Date of transfer from reporting hospital

	The transferring hospital will enter the "Transferred Date" (which will be grayed out unless "Transferred to In State Hospital" or "Transferred to Out of State Hospital" is chosen by the user. If "Reason Not Screened" is "Transferred to out of state hospital" or "Transferred to hospital in state", the transfer date is required
	Screening Setting (**) Indicate screening setting Valid values: Inpatient/Outpatient LOV
	Reported By (*) Name of the hospital where data is reported from Pre-populate the hospital of login. Hospital User cannot change; For VDH users populate the list with all the hospitals and Audiological facilities. VDH user can edit this field. List should contain Hospitals and Pediatric Offices.
	Person Administering Screening (*) Name of the person administering the screening Required if *Discharged Before Screening = NO* Free-text item
	The following items should NOT be made available for hospital user if Discharged Before Screening = YES
	Right Ear Results (**) Results of Right Ear Valid values: Fail, Pass, Pass with Risk, Inconclusive, Ear Not Tested LOV. See appendix for complete list Required if Discharged before Screening = NO "Ear Not Tested" not available to hospital users. Look for more validations after Left Ear Result
	Left Ear Results (**) Results of Left Ear Valid values: Fail, Pass, Pass with Risk, Inconclusive, Ear Not Tested LOV. See appendix for complete list Required if Discharged before Screening = NO "Ear Not Tested" not available to hospital users Look below for more validations
	Some validations based on Right/Left ear results Cannot enter PASS for both ears. VDH users can enter PASS for both ears. If both ear results are not PASS, then risk indicators must be entered (discussed later in the document). Unless risk indicators are entered, no further navigation should be possible. Only VDH users can see the values Inconclusive and Ear Not Tested. Even though these options are available for Hospital Users, they will not be able to save a record when these choices are selected. Application should display appropriate error message Right and Left Results should be reordered - place right ear first, and place left under right, not beside. Note: If either of the ear result = Pass with Risk, then risk indicators must be entered (*Capture Hearing Indicators Information*). Unless risk indicators are entered, no further navigation should be possible. Please see the section 'Capture Hearing risk Indicators' while working on this requirement. When both a "right ear result" and "left ear result" are entered as "pass" the

	system should automatically populate the field "Reason Closed" with the value "pass/pass/HWNL". The system should not be programmed at this point to automatically close a record in any other situation than the one above condition.
	List the items Reason Closed, Date Recorded, Closure Comments under a header 'STATUS DETAILS'. These items are only available to VDH users
	Reason Closed Reason case is being closed. Ex: Expired, Moved, No Insurance etc., Refer Appendix for complete list. LOV
	Date Recorded If reason closed = Yes, pre-populate Required if Reason Closed is entered
	Closure Comments Comments Free text 250 characters
	Audited? Indicate if the case has been audited Provide options for both YES and NO. Check box, YES and NO (or Radio button?) If Audit = Yes-changes made to record get recorded in back end report. Only record changes made on that day. **This field needs to be separate from main screen**, add LOV for each program and make only VDH user able to select so that all programs can record audits using same module then audit fields specific to program will pop up based on first program LOV selected
	Audit Findings Free text up to 250 characters (all programs)
	Audit Date Audit Date (all programs)
	Audit Comments Audit comments Free text 250 characters (all programs)

Hearing Risk Indicators Information VIXRSK

While capturing Initial Hearing Screening Information and Hearing Re-Screening Information, if user enters any results for left and right ear results other than 'Pass/Pass in Both ears', then the following information should be displayed. This screen will have hearing indicators listed along with related information. The idea is to prevent the users from exiting this screen without entering the risk indicators. If the user is not sure about the hearing risk indicators, he/she may choose to dismiss the screen, but the value for the Ear results (that invoked this screen) should be reset to blank prompting for re-entry (this is a mandatory item). Most of the risk indicators come with pre-defined set of comments/related information. Selecting from this pre-defined list will help the user to eliminate a manual quality checks that are performed while generating letters. Hospital users CANNOT choose "parental concern" or "recurrent or persistent otitis media"

If the user chooses to delete all the risk indicator information due to a data entry or similar events, application should display a warning that all the risk indicator information will be deleted and cannot be recovered.

Req. Trace #	Description
	Risk Indicator (**) Description of the risk indicator LOV
	Comments (*) Most of the risk Indicators has pre-defined set of values associated. User can select ONLY from that list. However, there are few risk indicators that have no values associated. For such risk indicators, a free text comments should be

	provided. The below mentioned risk indicators should be available only for internal users. ** Parental or caregiver concern regarding hearing, speech, language, and or developmental delay.* ** Recurrent or persistent otitis media with effusion for at least 3 months.* If user selects JUST 'Others-Specify if chosen' as risk indicator (under Risk Indicator Categories 2 & 8), then this infant record should be displayed in a pop-up before the application generates letters. User will then have to go to this infant's record to see if the entered risk indicator is something that VDH<?> tracks. If it's not, then the user has to un-check the infant's record from the list of automatic letter generation. When the infant's record is unchecked on this account, the corresponding screening should be deleted. However, if the infant has one or more risk indicators AND 'Others – Specify if chosen', then the child should be sent a letter automatically and the child's record will not be shown in the pre-letter generation pop-up

Hearing Re-Screening Information VIXHRS

This may be accessed only when initial screening previously entered. VDH users can access. If the user enters 'Pass' and initial screening result was 'Pass with Risk', the application should display a pop-up with message 'Is the Risk Indicator still VALID?'. User cannot enter 'Pass' if the initial result was 'Pass with Risk'.

If risk indicators are entered in Initial Hearing Screen, then populate those risk indicators into Re-screening page

Req. Trace #	Description
	Screening Date (*) Actual date on which Screening was performed
	Reported By (*) Name of the hospital where data is reported from Pre-populate the hospital of login. Hospital User cannot change; For VDH users, populate the list with all the hospitals and Audiological facilities. VDH user can edit this field. List should contain Hospitals and Pediatric Offices.
	Screening Setting (*) Place where the screening took place List Item The available values in the list should change depending upon the type of user. For Hospital user, only values In-Patient and Out-Patient should be displayed. For VDH users, additional values like this field changes depending If hospital user, auto populate Indicate screening setting Valid values: Audiologist, Hospital (Outpatient), Other
	Person Administering Screening (*) Name of the person administering the screening Free-text item
	Date Received (*) Date received by VDH Should be disabled for hospital user Should be > DOB; > Date of Visit; <= Created Date Mandatory for VDH users
	Screening Test (*) Hearing screening test done by hospital LOV Ex: Auditory Brainstem Response – ABR. Refer Appendix for complete list Hospital users sees only 3: OAE, ABR, and 2 stage OAE & ABR. VDH users see complete list of 10 (see Audiological evaluation)
	Right Ear Results (*)

	Results of Right Ear Valid values: Fail, Pass, Pass with Risk, Inconclusive, Ear Not Tested LOV. See appendix for complete list User cannot enter value of Pass if initial screening result was Pass with Risk. Pop up question: Is risk still valid? Force Yes or No response. If Yes, **cannot** enter Pass. If NO, **can** enter Pass. Also would need to force user to delete the risk indicator if response is NO?
	Left Ear Results (*) Results of Right Ear Valid values: Fail, Pass, Pass with Risk, Inconclusive, Ear Not Tested User cannot enter value of Pass if initial screening result was Pass with Risk. Pop up question: Is risk still valid? Force Yes or No response. If Yes, **cannot** enter Pass. If NO, **can** enter Pass. Also would need to force user to delete the risk indicator if response is NO?
	VDH users and Hospital Users can enter PASS/PASS for both ears. *Note: The validations that are based on Right/Left ear results are mentioned under section 'Capturing Initial Hearing Screening'. Please follow the same guidelines.*
	List the items Reason Closed, Date Recorded, Closure Comments under a header 'STATUS DETAILS'. These items are only available to VDH users
	Reason Closed Reason case is being closed. Ex: Expired, Moved, No Insurance etc.,
	Date Recorded If closed, auto populate Required if Reason Closed is entered
	Closure Comments Comments Free text, 250 characters When both a "right ear result" and "left ear result" are entered as "pass" the system should automatically populate the field "Reason Closed" with the value "pass/pass/HWNL".

Audiological Evaluation Information VIXAUD

Capture patient's Audiological Evaluation Information. VDH personnel receive reports (by fax and mail) from various Audiological Facilities. This screen helps entering the information from that report into the application.

This information is available for VDH personnel only. Hospital users can view only, if they have access to the record. Only VDH users can view, add, edit, and delete data.

Req. Trace #	Description
	Date of Visit (*) Date on form as reported by audiologist on Report Form Validations, as in less than the date created
	Audiological Facility (*) Name of the Location where the Audiological evaluation was performed Provide a list of Audiological Facilities
	Date Received (*) Date received by VDH Should be > DOB; ≥Date of Visit; <= Created Date
	List the following items under a header 'EVALUATION INFORMATION'
	Hearing Test 1 (*) Ex: Auditory Brainstem Response AC, Behavioral Observation Audiometry etc.,

<table>
<tr><td></td><td>Refer Appendix for complete list LOV</td></tr>
<tr><td></td><td>Hearing Test 2
Ex: Auditory Brainstem Response AC, Behavioral Observation Audiometry etc.,
Refer Appendix for complete list LOV</td></tr>
<tr><td></td><td>Hearing Test 3
Ex: Auditory Brainstem Response AC, Behavioral Observation Audiometry etc.,
Refer Appendix for complete list LOV</td></tr>
<tr><td></td><td>Hearing Test 4
Ex: Auditory Brainstem Response AC, Behavioral Observation Audiometry etc.,
Refer Appendix for complete list LOV</td></tr>
<tr><td></td><td>Hearing Test 5
Ex: Auditory Brainstem Response AC, Behavioral Observation Audiometry etc.,
Refer Appendix for complete list LOV</td></tr>
<tr><td></td><td>Right Ear Results (*)
Results of Right Ear
Ex: Conductive Hearing Loss, Hearing Within Normal Limits etc.,
LOV. Refer Appendix for complete list.
Note: Validations common to Right and Left Ear Results are documented below Left Ear Result information</td></tr>
<tr><td></td><td>Left Ear Results (*)
Results of Left Ear
Ex: Conductive Hearing Loss, Hearing within Normal Limits etc.
LOV. Refer Appendix for complete list
Note: Validations common to Right and Left Ear Results are documented below Left Ear Result information
Left Ear results should be placed under the Right Ear results item.</td></tr>
<tr><td></td><td>Validation based on Right/Left ear results

When both a “right ear result” and “left ear result” are entered “hearing within normal limits”, the system should automatically populate the field “Reason Closed” with the value “pass/pass/HWNL”.

The system should not be programmed at this point to automatically close a record in any other situation than the one above

A new VaCARES record is created only when a new Audiological Evaluation is created and Right or Left Ear Result is one of the values that generate an automatic ICD-9 code

If an update is made to Audiological evaluation and new values trigger an automatic ICD-9 code, no changes will be made to VaCARES record or no new VaCARES record will be created.

<table>
<tr><th>Right or Left Ear Result</th><th>Enter ICD-(Code into VaCARES</th></tr>
<tr><td>Auditory Neuropathy/Dys-synchrony</td><td>389.12</td></tr>
<tr><td>Conductive Hearing Loss</td><td>389.00</td></tr>
<tr><td>Hearing Within Normal Limits</td><td>Does not generate VaCARES</td></tr>
<tr><td>Hearing Within Normal Limits but At Risk</td><td>Does not generate VaCARES</td></tr>
<tr><td>Inconclusive Results</td><td>Does not generate VaCARES</td></tr>
<tr><td>Mixed Hearing Loss</td><td>389.2</td></tr>
<tr><td>Sensorineural Hearing Loss</td><td>389.10</td></tr>
<tr><td>Undetermined Type of Hearing Loss</td><td>389.9</td></tr>
</table>
Populate VaCARES fields for the above conditions using the following table
<table>
<tr><th>VaCARES Fields</th><th>How to populate</th></tr>
<tr><td>Medical Record Number</td><td>0000000</td></tr>
<tr><td>Registry Hospital</td><td>Audiological Facility</td></tr>
<tr><td>Attending Physician</td><td>Unknown</td></tr>
<tr><td>Was this child transferred?</td><td>No</td></tr>
</table>
</td></tr>
</table>

	Hospital transferred to	Blank
	Is the child deceased?	No
	Cause of death	Blank
	Date of death	Blank
	Date of admission	Date of visit
	Date of discharge/transfer	Date of visit
	Registry entry date	Created date
	Diagnosis code	See above
	Source of report	VEHDIP
	Right Ear Degree (**) Degree of Hearing Loss - Right Ear LOV Valid values: Mild Hearing Loss, Moderate Hearing Loss, Profound Hearing Loss, Severe Hearing Loss. Required if results = for Right Ear Results are equal to conductive, mixed, sensorineural	
	Left Ear Degree (**) Degree of Hearing Loss - Left Ear LOV Valid values: Mild Hearing Loss, Moderate Hearing Loss, Profound Hearing Loss, Severe Hearing Loss. Required if results = for Left Ear Results are equal to conductive, mixed, sensorineural On the screen, Left Ear Degree should be placed under Right Ear Degree item	
	Type of Hearing Loss (**) Type of hearing loss Valid values: Acquired, Congenital, Unknown Required if results = hearing loss	
	Hearing Loss is - (**) ?? Status of hearing loss LOV Valid values: Permanent, Transient, and Unknown Only one value may be selected Required if results = hearing loss	
	Use this date as the original Date of Diagnosis Date as reported by audiologist on Report Form	
	List the items Reason Closed, Date Recorded, Closure Comments under a header 'STATUS DETAILS'. These items are only available to VDH users. Note: This data is pre-populated from previous screen, if entered	
	Reason Closed Reason case is being closed. Ex: Expired, Moved, No Insurance etc., Refer Appendix for complete list. LOV	
	Date Recorded ?? Date closed. If reason closed = positive value, auto populate. Required if Reason Closed is entered	
	Closure Comments Comments (Free text up to 250 characters)	
	Provide options to View/Insert/Update/Delete data *Provide a button/link to pop-up 'Record Details' that consists of VISITS ID, Date Created, Created By, Reported By Hospital*	

NOTE: If Right or Left Ear Result equals a hearing loss diagnosis, a VaCARES record will automatically be generated.

VA Cares/Birth Defects Information VIXVAC

This page is used to capture patient's VaCARES/Birth defects information. If EBC enters any birth defect related information while registering the child, then a small window is displayed at the top-right corner of this page that contains EBC diagnosis codes. This information is VIEW ONLY.

Req. Trace #	Description
	Medical Record Number (*) Client's Medical record number
	Registry Hospital (*)

	Hospital reporting the birth defect Should default to the hospital currently logged in.
	Select Attending Physician (*) Name of the attending physician Query the name of the physician from the pop-up,
	Was this Child Transferred (*) Indicate if the child is transferred to another hospital. Valid values: Yes, No
	Hospital Transferred To (**) Name of the hospital that the child was transferred to Required when *Was this child transferred = Yes* List of hospitals, including out-of-state hospitals. VDH users can add to the list.
	Is this Child Deceased (*) Indicate if the child expired. Valid values: Yes, No
	Cause of Death (**) Cause of infant's death Free Text Required when *Is this child deceased = Yes*
	Date of Death (**) Infant's Date of Death Required when *Is this child deceased = Yes*
	Source Indicate the source of the diagnosis code for the child. Choose a value from the list box. List: Hospital, EHDI, Newborn screening, Genetics Center For Hospital users, default to 'Hospital'. If hearing loss diagnosis is coming from EHDI, default to EHDI.
	Date of admission (*) Date of admission for child's hospitalization
	Date Discharge/Transfer (*) Date of discharge or transfer for child's hospitalization Need check box if this is a newborn discharge
	Person Entering Registry Information (*) Name of the person entering the birth defect information Should default to the person currently logged in. The user does not have the option to change this.
	Registry Entry Date Date this data is being entered into VISITS Default=Current Date Automatic/cannot be changed.
	Provide an option to enter up to 100 entries for Diagnosis code and description
	Diagnosis Code (*) Diagnosis code (VA Cares ICD Codes) LOV Should be validated against set of valid values available in LOV
	Diagnosis Description (*) Automatically populated when code is entered
	Status (*) Status of the diagnosis code. LOV Valid values: Confirmed, Deleted, Provisional, Unknown Default to Confirmed

Capture Part-C Early Intervention Referral Information VIXEIR

Capture patient's Part-C Early Intervention Referral screening information. After keying in the basic information, the user will have to enter the screening details. If the user enters any information under sections Developmental Delay, Atypical Development or Diagnosed Disabling Conditions, application shall generate automatic referrals to the Part C Web-based database, ITOTS. These automatic referrals will be listed in **Activities** section (below). Refer Appendix for complete list.

NOTE: The automatic referral process involves not only the Part C Early Intervention Referral Module, but the Hearing and VaCARES Modules as well. VISITS II will have in place an eligibility filter (based on the Virginia definition of eligibility) that would look at all VISITS modules for Part C eligibility criteria and identify those infants whose information will be communicated to the Part C Central Points of Entry via the ITOTS database. Any child with a diagnosis of hearing loss will have a referral automatically generated. Children with select ICD-9 codes entered into VACARES will have a referral automatically generated.

It has been suggested that we could write a job that generates a batched file so that necessary information can be sent to Part C's database contractor to be entered into ITOTS. Perhaps a table could be set up in VISITS II with a schema that identified outgoing information from VISITS (the referral) and incoming information (the feedback/outcomes) from ITOTS. This would cover both the "automatic referral" and the reports that we wanted back from Part C. Perhaps the frequency of the batching could be nightly for the "referral" and less frequently - weekly or monthly - for the feedback/outcomes. Perhaps it could be done using FTP (file transfer protocols) through a secure server. This will be revisited once DMHMRSAS OIM has finalized ITOTS future system.

ITOTS will be brought in house (DMHMRSAS) by March 2007. DMHMRSAS IT staff will convert to SQL before the transition. As of March 2008, DMHMRSAS staff is considering options for the ITOTS database including purchasing an IT system used by another state. Once that decision is made that VDH OIM and DMHMRSAS OIM will convene to determine linkage.

If Part C changes any of the eligibility criteria, VDH OIM will make changes accordingly to the indicators in this module.

See Appendix-B for Part C Early Intervention Referral Process

Req. Trace #	Description
	Medical Record Number (*) Client's Medical record number
	Screening Date Date on which this screening took place
	Reported By (*) Name of the hospital where data is reported from Pre-populate the hospital of login. User cannot change. Refer Appendix for complete list
	Person Administering Screening (*) Name of the person administering the screening Free-text item
	Screening Setting (*) Indicate where the screening took place (physical location). LOV Valid values: In-patient, Out-patient
	Is Child Medically Fragile? (*) Indicate if the child is medically fragile Please include the definition of Medically Fragile as a part of onscreen help text
	Notes Enter related comments Recommended size at least 2000 characters
	List the following items under a header '*DEVELOPMENTAL DELAY*'

	Any information entered in this section should create an automatic referral in Activity screen All the following items will have a comments field associated with them. Comments are required when the item is entered.
	Cognitive
	Physical: Including fine motor, gross motor, vision, and hearing
	Communication
	Social or Emotional
	Adaptive
	List the following items under a header *'ATYPICAL DEVELOPMENT'* Any information entered in this section should create an automatic referral in Activity screen All the following items will have a comments field associated with them. Comments are required when the item is entered.
	Abnormal/Questionable Sensory-Motor Responses
	Identified Affective Disorders
	Behavioral Disorders that interfere with acquisition of developmental skills.
	ADD: Impairment in social interaction and communication skills along with restricted and repetitive behaviors.
	List the following items under a header *'DIAGNOSED DISABLING CONDITIONS'* Any information entered in this section should create an automatic referral in Activity screen All the following items will have a comments field associated with them. Comments are required when the item is entered.
	ADD: Autism Spectrum Disorder
	Brain/spinal cord trauma (abnormal neurological exam @discharge)
	Chromosomal abnormality
	symptomatic Congenital infection, TORCHS
	Endocrine disorders
	Failure to thrive
	Grade III IVH w/hydrocephalus
	Grade IV IVH Hemoglobinopathies
	Inborn error of metabolism (Auto populate from VaCARES)
	Microcephaly
	Meningomyelocele
	Seizures/significant encephalopathy
	Severe attachment disorder
	Significant CNS anomaly
	Effects of Toxic exposure, including fetal alcohol syndrome, drug withdrawal. , exposure to chronic maternal use of anticonvulsants, antineoplastics, and anticoagulants
	Visual disabilities
	Congenital or acquired hearing loss (Auto populate from Hearing)
	Other (specify)
	List the following items under a header *'AT-RISK'* Any information entered in this section should NOT create an automatic referral in Activity screen. However, these items should be flagged so that they could be used in At-Risk reports. All the following items will have a comments field associated with them. Comments are required when the item is entered.
	APGAR 0-3 at 5 minutes (Auto populate from EBC)
	Birth weight less than 1500 grams (3.3 lbs.) (Auto populate from EBC)
	Founded Child abuse/neglect
	Diagnosed genetic disorder
	Family History of permanent childhood • **Blindness** • **Hearing**

	Hyperbilirubinemia at a serum level requiring exchange transfusion
	Lead poisoning
	Major congenital anomaly
	Lack of well-child care
	Periventricular leukomalacia
	Persistent pulmonary hypertension of the newborn (PPHN)
	Small for gestational age (10th percentile or less) (Auto populate from EBC)
	Seizure disorder (excluding febrile)
	Severe chronic illness
	Documented Systemic infection documented (congenital or acquired)
	Maternal age 15 or less (Auto populate from EBC)
	Pre-maturity- Gestational Age Divide this into 3 items: • **Less than 28 weeks** • **28-31 weeks** • **32-37 weeks (Auto populate from EBC)**
	Maternal conditions during pregnancy such as phenylketonuria (PKU), accidents, maternal diabetes or sickle cell (Auto populate from EBC)
	Meningitis
	Environmental or social risk factor • **Lack of adequate shelter,** • **Lack of familial support** • **Domestic violence,** • **Other (please list)**
	Severe Parenting Risk factor. • **Mental illness,** • **Mental retardation,** • **Physical disability** • **Substance Abuse**
	Add a section at the bottom of this screen called **Case Status**. In this section there will be fields that will house the data to be imported from the Part C database, ITOTS. • ITOTS ID # • Child evaluated for eligibility, YES NO • If YES, date determined • If YES, Result o Ineligible o Eligible- declined Part C services o Eligible-will receive services o Eligible, chose other services o Eligible-unable to contact • If NO, Reason o Unable to contact o Screened evaluation unnecessary o Deceased o Declined screen/evaluation o Declined Evaluation • IFSP date • Child discharge • Date of closure • Transition Destination NOTE: this is recorded as a number 1. Deceased 2. Left Virginia 3. Parent withdrew 4. Lost contact with family 5. IFSP completion-child less than 3 6. Public school/Part B eligible

	7. Exit with referrals a. Preschool/daycare b. Head start c. Private therapy 8. Another Part C system (in Virginia)? Specify (free text) 9. Exit at age 3 no referrals 10. Part B referral, eligibility not determined 11. Other-specify (free text)

Capture Activities VIXACT

Capture new activity information. VDH-users/follow-up coordinators can enter new activities here ex: calling a parent, sending a letter etc.,

While capturing Part-C Early Intervention Referral Information (above), if the user enters any information under sections Developmental Delay, Atypical Development or Diagnosed Disabling Conditions, application would generate automatic referrals. These automatic referrals will be listed as under Activities section. Refer Appendix for complete list of items that cause automatic referrals in Activities section

Req. Trace #	Description
	Module Type Type of Module. Ex: VaCARES, Hearing, Part-C
	Activity Type Choose a value from the list box. Ex: Phone, Miscellaneous, Letter
	Activity Activity The data in this List Box will change depending upon the value entered in Module Type. Independent activities are defined for different module Types
	Activity Date
	Activity Notes Enter the related notes for the current activity. Free text up to 250 characters
	Status List Box Indicate the status. Ex: Spoke to parent, Left a voicemail etc.,,
	VALIDATIONS: Activity Type: **Phone** Module Type: Hearing and Part C Activity: LOV = Audiologist, E.I. Services, Parent, PCP, Hospital Activity Date: Status: LOV = Spoke with Contact, Not able to Contact, Left Message, Call from, Call to Activity Notes: If Activity Status = Spoke with Contact, Activity Type ***must*** be Phone; If Activity Status = Spoke with Contact, Activity Type ***cannot*** be Miscellaneous Module Type: VaCARES Activity: LOV = Parent, PCP, Hospital Activity Date: Status: LOV = Spoke with Contact, Not able to Contact, Left Message, Call from, Call to Activity Notes: Activity Type: **Miscellaneous** Module Type: Hearing, Part C and VaCARES Activity Date: Activity Notes:

	Activity Type: **Letter** Module Type: Hearing, Part C, and VaCARES Activity: These options should include all letters system-generated and manual sent to parents and PCPs Activity Date: Letter Return Date: Activity Notes Activities page should display which letters the system has generated automatically as well as letters sent ***manually*** for all three modules. VDH users need a place to record the letter and date for manual letters. Automatic letters will be listed with Activity Type = Letter (Automatic). Manual letters will be listed with Activity Type = Letter (Manual). For system generated automatic letters, the activity description will have the name of the letter (Ex: Letter – A: Infants who fail at initial screening). Description for system generated letters cannot be edited by the users.

Documenting Referrals & Child outcomes VIXRAO

This screen would document referrals made for children who have a diagnosed hearing loss and their developmental outcomes. It could be placed to immediately follow the Audiological Evaluation Screen. Information would be entered for children with hearing loss only, not for all infants in the Hearing Module. Only VDH users would have access.

Req. Trace #	Description
	NOTE: All the following items (as checkboxes) should have a date associated with them
	Referral to Part C Check Box If checked, a date must be entered If checked, select a value from adjacent column that list of 'Part C Referred Locations' Populate the LOV with all facilities marked type 'Early Intervention Facility'
	Enrolled in Part C Check Box If checked, a date must be entered
	Enrolled in Part B Check Box If checked, a date must be entered
	Referred to CCC Check Box If checked, a date must be entered If checked, select a value from adjacent column that list of 'Part C Referred Locations' Populate the LOV with all facilities marked type 'Early Intervention Facility'
	Receiving services from CCC Check Box If checked, a date must be entered
	Referred to family-to-family support Check Box If checked, a date must be entered
	Linked to family-to-family support Check Box If checked, a date must be entered
	Fit with hearing aid(s) Check Box If checked, a date must be entered
	Received cochlear implant

	Check Box If checked, a date must be entered
	Referred to otolaryngologist Check Box If checked, a date must be entered
	Received services from otolaryngologist Check Box If checked, a date must be entered
	Referred to ophthalmologist Check Box If checked, a date must be entered
	Received services from ophthalmologist Check Box If checked, a date must be entered
	Referred to Genetics Check Box If checked, a date must be entered
	Received services from Genetics Check Box If checked, a date must be entered
	Referred to other medical specialists Check Box If checked, a date must be entered
	Received services from other medical specialists Check Box If checked, a date must be entered
	Parent declines services Check Box If checked, a date must be entered
	Other interventions Text Item **Enter the comments/specifics into the text item along with date**
	Mode of communication used List Item Enter the mode of communication used. (Method of communicating with the child: Sign language etc.,). Valid values are : o ASL/ESL o Auditory Verbal o Cued Speech o Oral o Total Communication o Other, with a text box to enter the specifics/comments
	VaCARES contact to pediatrician Check Box If checked, a date must be entered
	NOTE: Include outcome information from Part C/Part B that would be communicated to us in the future, via data links/downloads with DMHMRSAS
	Expressive Language level at time of exit from Part C Check Box If checked, a date must be entered
	Receptive Language level at time of exit from Part C Check Box If checked, a date must be entered
	Language Inventory used Check Box If checked, a date must be entered ADD: a Text box If checked info must be entered
	Cognitive Development score at time of exit from Part C

	Check Box If checked, a date must be entered
	Cognitive Development Inventory used Check Box If checked, a date must be entered ADD: a Text box If checked info must be entered
	Social Development score at time of exit from Part C Check Box If checked, a date must be entered
	Social Development Inventory used Check Box If checked, a date must be entered ADD: a Text box If checked info must be entered
	Learning status at entry to kindergarten Check Box If checked, a date must be entered
	Indicator Assessment Assessment date Positive Social Relationship – drop down list 1 through 7 Using Knowledge and Skills - drop down list 1 through 7 Action to meet needs - drop down list 1 through 7 Each of these would be recorded a) at child's entry into service, b) at as many as six interim assessments, and c) at child's exit from the program. This section should also contain a data field "Was progress made?" Responses are Yes or No.

Hearing Letters

VISITS internal users generate hearing letters (to be sent to Parents and PCP's) on a weekly basis and dispatch them by mail. Each letter has its own logic on pulling the data. Once the list of patients fulfilling the letter's logic is generated, the data is mail-merged with templates of the letters (in various languages) stored in Microsoft Word format.

Currently, the assigned VISITS internal user run the letters manually selects the language in which the letter should be printed. This language is associated with the data element 'Primary Language Spoken' which is captured while entering a new patient. Letters are available in English and also in non-English languages like Farsi, Urdu, Korean, Spanish, Chinese, Mandarin, Vietnamese, and Arabic. Any other language selected as Primary Language Spoken will be defaulted to English.

VISITS-II should be designed to schedule the letter generation. For a particular letter type, it is desired that all the letters are generated in all languages in a single attempt.

Mail-merge is the feature that the users are currently working on. As long as the letters are generated with the templates and data merged in one, output format is a not a concern. All Letters should be printed in standard page size. *Along with the letters, a list of Audiological Facilities should be printed. The letter and list are mailed together. Currently, this list is printed on the back of the letters.*

Do not generate more than one letter per ID #, per run, to either a parent or a PCP. See level of priority document**.**

Most of the Parent letters will have a corresponding PCP letter. For any reason, if an infant is eliminated from a parent letter, proper care must be taken to take that infant off of the PCP letters too.

When a file with list of names is generated, the header (first line) needs to be:

For PARENT Letters
date|firstname|middlename|lastname|suffix|street|addr2|city|state|zip|ifirstname|ilastname|dob|infant id|pcp_name

For PCP Letters
drfirstname|drmiddlename|drlastname|practicename|drstreet|city|state|zip|ifirstname|ilastname|contact_name|id|dob|right_ear_result|left_ear_result|medical_record_number|risk1|risk2|risk3|risk4|risk5|risk6|risk7|risk8|risk9|risk10

Priority Level of Parent Letters (If infant meets criteria for higher level letter, no lower level letters will be generated. On any one specific *creation date*, no more than 1 letter per infant will be generated):

Letter D	Infants diagnosed with hearing loss
Letter P	Infants who failed first and second screening
Letter E	Reminder – Infants over 2 months with no subsequent re-screening or evaluation entered beyond initial screening fail or miss (2 months after original letter A or C was sent)
Letter R	Infants who fail at initial screening (non-hospital birth or extended hospital stay)
Letter A	Infants who fail at initial screening
Letter B	Infants who "Pass with Risk" at initial screening
Letter C	Infants discharged before screening (missed)

Priority Level of PCP Letters (If infant meets criteria for higher level letter, no lower level letters will be generated. On any one specific *creation date*, no more than 1 letter per infant will be generated):

Letter Q	Infants diagnosed with hearing loss
Letter N	Infants who failed first and second screening
Letter M	Reminder – Infants over 2 months with no subsequent re-screening or evaluation entered beyond initial screening fail or miss (2 months after original letter F, H, I, or J was sent)
Letter J	Infants who fail at initial screening with hearing risk indicators
Letter F	Infants who fail at initial screening
Letter G	Infants who passed with risk at initial screening
Letter I	Infants discharged before screening with hearing risk indicator(s)
Letter L	Infants not screened-parent refused with hearing risk indicator
Letter K	Infants not screened-parent refused
Letter H	Infants discharged before screening – missed
Letter S	Infants transferred, in or out of state

Parent Letters

Letter "A" Infants who "fail" at Initial screening (hospital) VIXLTA

Letter to each of the primary contacts whose infant failed initial screening ~~in the hospital prior to discharge.~~

Req. Trace #	Description
	LOGIC
	• infant or screen not marked as deleted • initial screening recorded • result left ear or right ear fail • no subsequent screening or evaluation recorded in the system • reason closed null • no previous letter A generated

	• date of death is null
	LETTER OUTPUT
	• Current date • Primary Contact Name, first and last • Primary Contact Street - mailing address lines 1 and 2 • Primary Contact City • Primary Contact State • Primary Contact Zip • Infant's Name, first and last • DOB • VISITS ID • PCP

Letter "R" Infants who "fail" at Initial screening (for infants not born in hospitals or have extended hospital stays) VIXLTR

"Extended Stay" – This would mean a child, born in a hospital, whose date of discharge is 3 months past the date of birth OR any child with "Hospital of Birth" field NULL and "Other place of birth" NOT NULL

Req. Trace #	Description
	LOGIC
	• Infant greater than 3 months of age • infant or screen not marked as deleted • result left ear or right ear fail • no subsequent screening or evaluation recorded in the system • reason closed null • no previous letter R generated • Hospital of Birth is null • Other Place of Birth is not null • Child is less than or equal to 12 months of age • date of death is null
	LETTER OUTPUT
	• Current date • Primary Contact Name, first and last • Primary Contact Street mailing address lines 1 & 2 • Primary Contact City • Primary Contact State • Primary Contact Zip • Infant's Name, first and last • DOB • VISITS ID • PCP

Letter "B" Infants who "Pass with Risk" at initial screening VIXLTB

Letter to each of the primary contacts whose infant has 1 or more hearing risk indicators.

Req. Trace #	Description
	LOGIC
	• infant or screen not marked as deleted • initial screening recorded • result pass with risk in either ear

	• one or more hearing risk indicators entered • reason closed null • neither ear is a fail result • no previous letter B generated • date of death is null
	LETTER OUTPUT
	• Current date • Primary Contact Name, first and last • Primary Contact Street mailing address lines 1 & 2 • Primary Contact City • Primary Contact State • Primary Contact Zip • Infant's Name, first and last • DOB • VISITS ID • PCP

Letter "C" Infants Discharged before screening – missed VIXLTC

Letter to each of the primary contacts whose infant was discharged before screening

Req. Trace #	Description
	LOGIC
	• infant or screen not marked as deleted • discharged before screen YES • reason not screened is "Missed Child Before Discharge" • no screening recorded • no previous letter C generated • reason closed null • date of death is null
	LETTER OUTPUT
	• Current date • Primary Contact Name, first and last • Primary Contact Street mailing address lines 1 & 2 • Primary Contact City • Primary Contact State • Primary Contact Zip • Infant's Name, first and last • DOB • VISITS ID • PCP

Letter "D" Infants diagnosed with hearing loss VIXLTD

Letter to each of the primary contacts whose infants' most recent Audiological evaluation was a hearing loss

Req. Trace #	Description
	LOGIC
	• infant or screen not marked as deleted • right or left ear results are Conductive hearing loss, Mixed hearing loss, Sensorineural hearing loss, Undetermined type hearing loss, or Auditory Neuropathy • hearing loss is not marked as transient

	• reason closed null • no previous letter D generated • date of death is null
	LETTER OUTPUT
	• Current date • Primary Contact Name, first and last • Primary Contact Street, mailing address lines 1 & 2 • Primary Contact City • Primary Contact State • Primary Contact Zip • Infant's Name, first and last • DOB • VISITS ID • PCP

Letter "P" Infants who failed first and second screening VIXLTP

Letter to each of the primary contacts of infants who failed initial and subsequent re-screening.

Req. Trace #	Description
	LOGIC
	• infant or screen not marked as deleted • initial screening recorded • hearing re-screening recorded • result L and/or R fail both times • no previous letter P generated • date of death is null
	LETTER OUTPUT
	• Current date • Primary Contact Name, first and last • Primary Contact Street, mailing address lines 1 & 2 • Primary Contact City • Primary Contact State • Primary Contact Zip • Infant's Name, first and last • DOB • VISITS ID • PCP

Letter "E" Reminder – infants over 2 months with no subsequent re-screening/ evaluation entered beyond initial entry (2 months after the original letter was sent) VIXLTE

Letter to each of the primary contacts who received Letter A or C and have not received a subsequent screening.

Req. Trace #	Description
	LOGIC
	• infant or screen not marked as deleted • reason closed null • was sent previous letter (A or C) • no previous letter E generated • no subsequent entries recorded in the system • infants missed or failed only • Current date minus the date of first letter is equal or greater than

	60 days • date of death is null
	LETTER OUTPUT
	• Current date • Primary Contact Name, first and last • Primary Contact Street, mailing address lines 1 & 2 • Primary Contact City • Primary Contact State • Primary Contact Zip • Infant's Name, first and last • DOB • VISITS ID • PCP

PCP Letters

Patient records where Primary Physician field not equal to "unknown". If any parent letters are put on hold, place auto hold on corresponding PCP letter. This would most likely occur for letter B and corresponding G. Patient records where Primary Physician field not equal to "unknown".

If any parent letters are put on hold, place auto hold on corresponding PCP letter. This would most likely occur for letter B and corresponding G.

If the PCP is changed, system automatically generates letter to new PCP – same as last letter sent.

Letter "F" Infants who "fail" initial screening VIXLTF

Letter to each of the PCPs whose patient failed initial screening.

Req. Trace #	Description
	LOGIC
	• infant or screen not marked as deleted • initial screening recorded • result left ear or right ear fail • no subsequent screening or evaluation recorded in the system • reason closed null • no hearing risk indicators • no previous letter F generated • date of death is null
	LETTER OUTPUT
	• Current date • PCP Name, first & last • PCP practice name • PCP Street • PCP City • PCP State • PCP Zip • Infant's Name, first & last • DOB • VISITS ID • Medical record number • Primary contact name first & last

Letter "G" Infants who "Pass with Risk" at initial screening or rescreening VIXLTG

Letter to the PCP of each infant who has 1 or more hearing risk indicators and a "Pass with Risk" result.

Req. Trace #	Description
	LOGIC
	• infant or screen not marked as deleted • screening recorded • result Pass with Risk in either ear • one or more hearing risk indicators entered • reason closed null • neither ear is a fail result • no previous letter G generated • date of death is null
	LETTER OUTPUT
	• Current date • PCP-Name, first & last • PCP practice name • PCP-Street • PCP City • PCP State • PCP Zip • Infant's Name, first & last • DOB • VISITS ID • Medical record number • Primary Contact name, first and last • Hearing risk indicators Note: For infants with more than one hearing risk indicators, concatenate the risk indicators and print in the space provided for the risk indicators in the letter. Letter should accommodate at least 3 risk indicators

Letter "Q" Infants diagnosed with hearing loss VIXLTQ

Letter to each PCP whose patient has been diagnosed with a hearing loss.

Req. Trace #	Description
	LOGIC
	• infant or screen not marked as deleted • right or left ear results are conductive hearing loss, mixed hearing loss, sensorineural hearing loss, undetermined type hearing loss, or auditory neuropathy • reason closed null • hearing loss not marked as "transient" • no previous letter Q generated • date of death is null
	LETTER OUTPUT

	• Current date • PCP Name, first & last • PCP practice name • PCP Street • PCP City • PCP State • PCP Zip • Infant's Name, first & last • DOB • VISITS ID • Medical record number • Primary Contact name, first and last

Letter "H" Infants discharged before screening – missed VIXLTH

Letter to the PCPs of infants who were discharged before screening.

Req. Trace #	Description
	LOGIC
	• infant or screen not marked as deleted • discharged before screen YES • reason not screened is "Missed Child Before Discharge" • no screening recorded • no hearing risk indicators recorded • reason closed null • no previous letter H generated • date of death is null
	LETTER OUTPUT
	• Current date • PCP-Name, first & last • PCP practice name • PCP Street • PCP City • PCP State • PCP Zip • Infant's Name, first & last • DOB • VISITS ID • Medical record number • Primary Contact name, first and last

Letter "I" Infants discharged before screening with Hearing risk indicator(s) VIXLTI

Letter to PCPs whose patients have 1 or more hearing risk indicators and were discharged before screening.

Req. Trace #	Description
	LOGIC
	• infant or screen not marked as deleted • discharged before screen YES • reason not screened is Missed • no screening recorded • one or more hearing risk indicators selected • reason closed null

	• no previous letter I generated • date of death is null
	LETTER OUTPUT
	• Current date • PCP Name, first & last • PCP practice name • PCP Street • PCP City • PCP State • PCP Zip • Infant's Name, first & last • DOB • VISITS ID • Medical record number • Primary Contact name, first and last • Hearing risk indicator(s) Note: For infants with more than one hearing risk indicators, concatenate the risk indicators and print in the space provided for the risk indicators in the letter. Letter should accommodate at least 3 risk indicators

Letter "J" Infants who fail initial screening with hearing risk indicator(s) VIXLTJ

Letter to PCPs whose patients failed initial screening and also have 1 or more hearing risk indicators.

Req. Trace #	Description
	LOGIC
	• infant or screen not marked as deleted • initial screening recorded • right or left ear screening results fail • one or more hearing risk indicators selected • reason closed null • no previous letter F, G, or J generated • date of death is null
	LETTER OUTPUT
	• Current date • PCP Name, first & last • PCP practice name • PCP Street • PCP City • PCP State • PCP Zip • Infant's Name, first and last • DOB • VISITS ID • Medical record number • Primary Contact name, first & last • Hearing Risk Indicators Note: For infants with more than one hearing risk indicators, concatenate the risk indicators and print in the space provided for the risk indicators in the letter. Letter should accommodate at least 3 risk indicators

Letter "K" Infants not screened-Parent refused VIXLTK

Letter to PCPs whose patients' parent(s) refused screening

Req. Trace #	Description
	LOGIC
	• infant or screen not marked as deleted • discharged before screen YES • reason not screened is Parent Refused • no screening recorded • reason closed null • no previous letter K generated • date of death is null
	LETTER OUTPUT
	• Current date • PCP Name, first & last • PCP practice name • PCP Street • PCP City • PCP State • PCP Zip • Infant's Name, first & last • DOB • VISITS ID • Medical record number • Primary Contact name, first & last

Letter "L" Infants not screened-Parent refused, with Hearing risk indicator VIXLTL

Letter to PCPs whose patients have 1 or more hearing risk indicators and whose parent(s) refused screening.

Req. Trace #	Description
	LOGIC
	• infant or screen not marked as deleted • discharged before screen YES • reason not screened is Parent Refused • no screening recorded • one or more hearing risk indicators selected • reason closed null • no previous letter L generated • date of death is null
	LETTER OUTPUT
	• Current date • PCP Primary Contact Name, first & last • PCP practice name • PCP Street • PCP City • PCP State • PCP Zip • Primary Contact Name • Infant's Name, first & last • DOB • VISITS ID

	• Medical record number • Primary Contact name, first & last • Hearing Risk Indicators Note: For infants with more than one hearing risk indicators, concatenate the risk indicators and print in the space provided for the risk indicators in the letter. Letter should accommodate at least 3 risk indicators

Letter "N" Infants who failed first and second screening VIXLTN

Letter to PCPs whose patient failed initial and re screening.

If an infant has more than one test (screenings or evaluations), the most recent test is neither pass in both ears, pass with risk in both ears, and diagnosis of hearing loss (diagnosis could be sensorineural hearing loss, conductive hearing loss. etc). Results would be Fail in at least one ear

Definition of Test – a Test could either be a screening or an evaluation (named "Hearing Follow-up in VISITS-II)

Req. Trace #	Description
	LOGIC
	• Infant or screen not marked as deleted • Reason closed null • Initial test* recorded • Second hearing test recorded • No previous letter N sent • No subsequent screening or evaluation recorded in the system • Result L and/or R fail both times • date of death is null
	LETTER OUTPUT
	• Current date • PCP Name, F & L • PCP practice name • PCP Street • PCP City • PCP State • PCP Zip • Infant's Name, F & L • DOB • VISITS ID • Medical record number • Primary contact name, F & L

Letter "M" Reminder – infants over 2 months with no subsequent re-screening/evaluation VIXLTM

Letter to PCPs whose parents received Letter E and have not received a subsequent screening.

Req. Trace #	Description
	LOGIC
	• infant or screen not marked as deleted • reason closed null • was sent previous letter F, H, I, J • not sent previous letter M • no subsequent screening or evaluation recorded in the

	system • only those infants who missed or failed in either ear • Current date minus the date of first letter is equal or greater than 60 days • date of death is null
	LETTER OUTPUT
	• Current date • PCP Name, first & last • PCP practice name • PCP Street • PCP City • PCP State • PCP Zip • Infant's Name, first & last • DOB • VISITS ID • Medical record number • Primary Contact name, first & last

Letter "S" < Infants transferred, in or out of state > VIXLTS

Letter to PCPs whose patient was transferred to another hospital, either in or out of state

Req. Trace #	Description
	LOGIC
	• Screen not marked as deleted • Reason Not Screened is either "Transferred to Another Hospital" or Transferred to Out of State Hospital" • "Transferred Date" is not null • Discharged to Home Date" is null • no subsequent screening or evaluation recorded in the system • Reason closed is null • No previous letter sent • Date of death is null
	LETTER OUTPUT
	• Current date • PCP Name • PCP • PCP practice name, Street, Street 2 • PCP city • PCP State • PCP Zip • Infant's name • DOB • VISITS ID (Hyperlink) • Medical record number • PCP

Hospital Hearing Reports

Both hospital and VDH Admin users can generate reports from this section. Report access by various roles will be discussed as a part of Application Security

User should minimally choose 'Date of Birth' OR 'Date of Discharge' AND one other parameter. No date earlier than 01/01/1995 is allowed to be entered. Cannot choose a date range greater than 10 years

Req. Trace #	Description
	Reporting Hospital Name of the hospital where the screening was performed
	Discharge Date (From-To) The date on which the patient was discharged from the hospital
	Date of Birth (From-To) Patient's DOB
	Date Created (From-To) The date on which the patient record was created in VISITS system

1. Monthly Screening Results VHXMSR

Total of all infants screened prior to discharge and results of that screening for a user selected screening date and reporting hospital

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Reporting Hospital
	REPORT OUTPUT
	• Month/Year • Total Screened • Passed • % Passed • Pass with risk factor • % Pass with risk factor • Failed • % Failed • Column-wise totals of above columns

2. Monthly Screening Results (Listing of all hospitals by month) VHXMSH

Report of screening results by individual hospitals. *This is for VDH personnel only*.

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Reporting Hospital
	REPORT OUTPUT
	• Hospital • Month/Year • Total Screened • Passed • % Passed • Pass with risk factor • % Pass with risk factor • Failed • % Failed • Column-wise totals of above columns

3. Monthly Screening Rates VHXMST

Report of screening rate of screenings prior to discharge for a user selected screening date and reporting hospital

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Reporting Hospital
	REPORT OUTPUT
	• Month/Year • Total discharged to home • Total missed • Total refused • Total screened • Screening rate (total discharged to home – (total missed + total refused))/(total discharged to home) • Column-wise totals of above columns

4. Report of Reasons not screened VHXRNS

Total number of infants not screened by hospital

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Reporting Hospital
	REPORT OUTPUT

	• Summary:
	  o Missed Child before discharge
	  o Parents refused (other reason)
	  o Parents refused (religious exemption
	  o Transferred to out of state hospital
	  o Column-wise totals of above columns
	
	Each category should be a "hyperlink" which if clicked, would bring up a list infants within that category and their VISITS ID (hyperlink to open infant's record) numbers and name of infants

5. Report of Infants entered into VISITS System VHXIVI

List of infants entered into VISITS

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Date Created (From – To) • Reporting Hospital
	REPORT OUTPUT
	• VISITS ID (hyperlink to open infant's record) • Name

	• DOB • Screening MRN • Date entered into VISITS

VDH Hearing Reports

These reports are available for VDH users only.

1. Average Time between Discharge Date and Date Created by Hospital VVXTDC

List of all hospitals and the average time it took to enter a child's record into VISITS.

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Race • Sex • Ethnicity • Reason Not Screened • FIPS • State of Residence
	OUTPUT
	• Hospital Name (reporting hospital) • Average Number of Days Between Discharge Date and Record Created (calculated item)

2. Number of Confirmed Diagnosis by Age (months) VVXCDA

Number of children reported with hearing loss or hearing within normal limits, by age.

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Race • Sex • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • Reason Closed • FIPS • State of Residence
	REPORT OUTPUT
	• List of "diagnoses" (includes "hearing within normal limits") • Number of each diagnosis within pre-defined age group (0 – 3 months, 3 – 6 months, 6 – 9 months, 9 – 12 months, over 12 months)

3. Post Discharge Initial Screenings VVXPDI

List of children whose initial screening was completed after discharge from hospital (from hospital or audiologist).

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Race • Sex • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • Reason Closed • FIPS • State of Residence
	REPORT OUTPUT

	• VISITS ID (hyperlink to open infant's record)
	• Name
	• Summary
	  o Total number Discharged before screening
	  o Total number screened initially post discharge
	  o Total number screened before 1 month of age
	  o Total number passed
	  o Total number passed w/ FU
	  o Total number failed

4. Most Recent Result for Pass w/F/U VVXPFU

List of children who have risk indicator(s) (initial screen was Passed with Risk)

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Race • Sex • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • Reason Closed • FIPS • State of Residence
	REPORT OUTPUT

	• VISITS ID (hyperlink to open infant's record)
	• Name
	• Summary:
	  o Total number with initial screen of Pass with Risk
	  o Total number of each diagnosis

5. Age of Failed Infants at First Subsequent Visit VVXAFI

List of infants who failed initial screen and had a subsequent screening/Audiological evaluation

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To)

	• Race • Sex • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • Reason Closed • FIPS • State of Residence
	REPORT OUTPUT
	• VISITS ID (hyperlink to open infant's record) • Name • Age (at time of re-screen/Audiological evaluation) • Summary: o Total number age 0 - .99 months o Total number age 1 – 1.99 months o Total number age 2 – 2.99 months o Total number age 3 – 3.99 months o Total number age 4 – 4.99 months o Total number age 5 – 5.99 months o Total number over 6 months o Median Age o Average Age

6. Infant Status Report VVXISR

Report of the disposition (status) of closed hearing cases.

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Race • Sex • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • Reason Not Screened • Reason Closed • FIPS • State of Residence
	REPORT OUTPUT
	• Total number of each "reason closed"

7. Infants with a Failed Result at Most Recent Re-Screening VVXFRS

Infants with a failed screening result at most recent re-screening (would not include infants who only had initial screening)

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To)

	• Race • Sex • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • Reason Not Screened • Reason Closed • FIPS • State of Residence
	REPORT OUTPUT
	• VISITS ID (hyperlink to open infant's record) • Name • DOB • Date at most recent screening • Screening facility (could be hospital or Audiological facility)

8. Infants with Hearing Loss but no Outcomes VVXHNO

Infants diagnosed with a hearing loss and no outcomes (e.g. hearing aid fitted, cochlear implant, etc.) recorded.

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Race • Sex • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • Reason Not Screened • Reason Closed • FIPS • State of Residence • Diagnosis Date • Data Entry Date • Permanent or Transient • Part C Eligibility
	REPORT OUTPUT
	• VISITS ID (hyperlink to open infant's record) • Name • DOB • Diagnosis Date • Audiological facility • Primary Contact Name • PCP

9. Infants with Hearing Loss but no Referrals Made VVXHNR

Infants diagnosed with a hearing loss and have not had any referrals to services made

Req. Trace #	Description

	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Race • Sex • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • Reason Not Screened • Reason Closed • FIPS • State of Residence • Diagnosis Date • Date Entry Date • Permanent or Transient • Part C Eligibility
	REPORT OUTPUT
	• VISITS ID (hyperlink to open infant's record) • Name • DOB • Diagnosis Date • Audiological facility • Primary Contact Name • PCP

10. Average Time between Date Received and Screening Date by Location VVXTRS

The average number of days between when a child was seen at an Audiological facility and when the report was received at VDH.

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Audiological Facility • Date Received from Audiologist (From – To) • Date Seen by Audiologist (From – To) • State of Residence
	REPORT OUTPUT
	• Audiological Facility • Total number of reports received • Average number of days between screening/evaluation date and date of VDH receipt

11. Average Time between Date Received and Date Created by Location VVXTRC

The average number of days between when a report is received from an Audiological facility and when the report is entered into VISITS by VDH

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To)

	• Name of VDH data entry person • Date Received from Audiologist (From – To) • Date Entered by VDH (From – To) • State of Residence
	REPORT OUTPUT
	• Audiological Facility • Total number of reports received • Average number of days between received by VDH and entered by VDH

12. Age of Pass with Risk Infants at First Subsequent Visit VVXAPF

List of infants who have 1 or more risk indicators (Pass with Risk at initial screening), and had a subsequent re-screening/Audiological evaluation

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Race • Sex • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • Reason Closed • FIPS • State of Residence
	REPORT OUTPUT
	• VISITS ID (hyperlink to open infant's record) • Name • Age (at time of re-screen/Audiological evaluation) • Summary: • Total number who had re-screening • Total number who had re-screening before age 3 years • Median Age • Average Age

13. Infants Diagnosed with Hearing Loss VVXIHL

Total number of infants born in the user selected time period that were diagnosed with hearing loss.

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Race • Sex • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • FIPS

	• State of Residence • Right result • Left result • Diagnosis Date • Permanent or Transient
	REPORT OUTPUT
	• VISITS ID (hyperlink to open infant's record) • Name • DOB • Diagnosis Date • Age at diagnosis • Right result • Left result • Right classification • Left classification • Type of hearing loss • Permanent or Transient? • Mode of communication • PCP • Summary: o Total number diagnosed with hearing loss o Median age o Average age o Minimum age o Maximum age

14. Infants Diagnosed with HL Referrals VVXIHR

Total number of infants born in the user selected timeframe that were diagnosed with hearing loss and had referrals entered.

Req. Trace #	Description
	PARAMETERS
	Discharge Date (From – To) Date of Birth (From – To) Race Sex Ethnicity Reporting Hospital Hospital of Birth Audiological Facility FIPS State of Residence Right result Left result Diagnosis Date Permanent or Transient
	REPORT OUTPUT
	• VISITS ID (hyperlink to open infant's record) • Name • DOB • Diagnosis Date • Right result • Left result • Referrals • Summary:

	o Total number diagnosed with hearing loss o Number referred to Part C o Number referred to CCC o Number referred to otolaryngologist o Number referred to ophthalmologist o Number referred to Genetics o Referred to other medical specialists o Referred to medical specialists before 3 months of age o Referred to early intervention services within 3 months of diagnosis o Number referred to family-to-family support

15. Infants Diagnosed with HL Outcomes VVXIHO

Total number of infants born in the user selected timeframe that were diagnosed with hearing loss and services received

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Race • Sex • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • FIPS • State of Residence • Right result • Left result • Diagnosis Date • Permanent or Transient • Part C Eligibility • Referral and Outcome date
	REPORT OUTPUT
	• VISITS ID (hyperlink to open infant's record) • Name • DOB • Diagnosis Date • Right result • Left result • Services received • Summary: o Total number diagnosed with hearing loss NOTE: each of the following outputs should be broken down into 3 groups – before 6 months of age, after 6 months of age but before 12 months of age, and after 12 months of age. o Number Enrolled in Part C o Number Enrolled in Part B o Number receiving services from CCC o Number linked to family-to-family support o Number received cochlear implant o Number received services from otolaryngologist o Number received services from ophthalmologist o Number received services from genetics

	o Number fit with hearing aid o Mode of communication o Received services from other medical specialists o Number where parent declines services o Enrolled in other intervention

16. Surveillance of Infants Diagnosed with HL VVXSHL

List of infants with hearing loss, mode of communication, hearing aid, cochlear implant

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Race • Sex • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • FIPS • State of Residence • Right result • Left result • Diagnosis Date
	REPORT OUTPUT
	• VISITS ID (hyperlink to open infant's record) • Name • DOB • Diagnosis Date • Mode of communication • Date fit with hearing aid • Date received cochlear implant

17. Infants Transferred Out of State VVXXOS

Infants transferred to in state or out of state hospitals prior to hearing screening

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Race • Sex • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • FIPS • State of Residence • Type of transfer (In State OR Out of State OR Both)
	REPORT OUTPUT
	• VISITS ID (hyperlink to open infant's record) • Name

	• DOB • Birth hospital • Discharge Date • Hospital of transport • Primary contact • PCP

18. Infants Failed with no Subsequent Screenings/Evaluations VVXFNS

List of infants who failed initial screening and did not have a subsequent screening

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Race • Sex • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • FIPS • State of Residence
	REPORT OUTPUT
	• VISITS ID (hyperlink to open infant's record) • Name • DOB • Reporting hospital • Primary contact • PCP • Right result • Left result

19. Infants Failed Lost to Follow Up (no re-screening/evaluation before 6 months of age) VVXFN6

List of infants who failed initial screening (hospital, post discharge, Audiological) and did not have a subsequent screening before 6 months of age

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Race • Sex • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • FIPS • State of Residence
	REPORT OUTPUT
	• VISITS ID (hyperlink to open infant's record)

	• Name • DOB • Reporting hospital • Primary contact • PCP • Right result • Left result

20. Infants Pass w/F/U with No Subsequent Screening/Evaluation VVXPNS

List of infants who have one or more risk indicators (pass with follow at initial screening) and did not have a subsequent screening

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Race • Sex • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • FIPS • State of Residence
	REPORT OUTPUT
	• VISITS ID (hyperlink to open infant's record) • Name • DOB • Reporting hospital • Primary contact • PCP • Risk indicators

21. Infants with Letter Returned VVXILR

List if infants whose letter was returned and a second letter has not been sent

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Race • Sex • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • FIPS • State of Residence • Date letter was created
	REPORT OUTPUT
	• VISITS ID (hyperlink to open infant's record) • Name

	• DOB • Reporting hospital • Primary contact • PCP • Letter (type of letter sent to patient) • Date letter was sent • Date letter was returned

22. Infants not Screened before Discharge VVXNSD

List of infants who were not screened prior to hospital discharge and had no screening/evaluation after discharge

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Race • Sex • Ethnicity • Reporting Hospital • Hospital of Birth • Reason Not Screened • FIPS • State of Residence
	REPORT OUTPUT
	• VISITS ID (hyperlink to open infant's record) • Name • DOB • Birth Hospital • Summary: o Number of infants within each Reason Not Screened

23. Infants Failed Initial Screening (Referral Rate) VVXFIN

Summary report of infants who failed initial screening (hospital or Audiological)

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Race • Sex • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • FIPS • State of Residence
	REPORT OUTPUT

	• Summary:
	  o Number of infants screened
	  o Number of infants screened before 3 months of age
	  o Number of infants failed screen

	o Number of infants failed screen before 3 months of age

24. Infants who have a specific ICD-9 code identified but do not have the corresponding hearing risk indicator chosen (and screening result cannot be Pass) VVXICD

The following table explains the logic for this report

If there is one of the following ICD-9 codes as a birth defect:	The Risk Indicator listed should be chosen in Hearing Module:
744.0, 744.00, 744.01, 744.02, 744.03, 744.04, 744.05, 744.09, 744.1, 744.2, 744.21, 744.222, 744.23, 744.24, 744.27, 744.3, 744.4, 744.41, 744.42, 744.43, 744.46, 744.47, 744.49, 748.0, 758.0	*Stigmata or other findings associated with a syndrome known to include a sensorineural and/or conductive hearing loss, including preauricular tag or pit/sinus and morphological abnormalities of the ear*
090, 090.0, 090.1, 090.2, 090.3, 090.4, 090.40, 090.41, 090.42, 090.49, 090.5, 090.6, 090.7, 090.9, 771.0, 771.1, 771.2	*In utero infections such as cytomegalovirus, herpes, rubella, syphilis, and toxoplasmosis.*
277.4	*Neonatal Indicators (**if** hyperbilirubinemia at a serum level requiring exchange transfusion)*
237.7, 237.70, 237.71, 237.72, 756.52	*Syndromes associated with progressive hearing loss such as neurofibromatosis, osteopetrosis, and Usher's syndrome*
277.5, 334.0, 356.1	*Neurodegenerative disorders, such as Hunter syndrome, or sensory motor neuropathies, such as Friedreich's ataxia and Charcot-Marie-Tooth syndrome*

Req. Trace #	Description
	PARAMETERS
	• Date of Birth (From – To) • Hospital of Birth • Discharge Date (From – To) • Reporting Hospital
	REPORT OUTPUT
	• VISITS ID (hyperlink to open infant's record) • Child's Name • ICD-9 Code/Birth defect • Reporting Hospital

25. Infants with Pass/Pass result VVXIPP

Report of infants who passed the initial hospital screening

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Gender • Race • Ethnicity • Reporting Hospital • Hospital of Birth

	REPORT OUTPUT
	• Summary: o Number of infants screened o Number of infants screened before 3 months of age

26. Report of infants transferred in state or out of state hospitals but not reported as discharged to home VVXXND

List of infants reported as transferred with no subsequent date of discharge entered.

Req. Trace #	Description
	PARAMETERS
	• Screen not marked as deleted • Reason Not Screened is either "Transferred to Another Hospital" or "Transferred to Out of State Hospital" • "Transferred Date" is not null • "Discharged to Home Date" is null • no subsequent screening or evaluation recorded in the system • Reason closed is null • Date of death is null
	REPORT OUTPUT
	• VISITS ID • Infant's first and last name • DOB • Hospital transferred to • Date of transfer

27. Total no. Of Live Births (Occurrent) VVXTLB

Number of infants born within time period within Virginia

Req. Trace #	Description
	PARAMETERS
	• Date of Birth (From – To) • Race • Sex • Ethnicity • Hospital of Birth • FIPS • State of Residence • Level of Education • Insurance Type
	REPORT OUTPUT
	• Summary: o Number of infants born within each hospital o Number of infants of each race o Number of infants of each sex o Number of infants of each ethnicity o Number of infants in each category of level of mother's education o Number of infants in each insurance category

28. Out of Hospital Births VVXOHB

Number of infants born out of hospital that received a hearing screening (hospital, Audiological. Other)

Req. Trace #	Description
	PARAMETERS
	• Date of Birth (From – To) • Race • Sex • Ethnicity • Hospital of Birth • FIPS • State of Residence
	REPORT OUTPUT

	• List of infants born out of hospital
	• DOB
	• Location
	• Date of initial screening
	• Age at initial screening
	• Summary:
	  o Number of infants born out of hospital by location
	  o Number of infants of each race
	  o Number of infants of each sex
	  o Number of infants of each ethnicity
	  o Number of infants screened
	  o Average age
	  o Median age

29. Risk Factors VVXRFA

Number of infants with one or more risk factors

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Race • Sex • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • FIPS • State of Residence
	REPORT OUTPUT

	• List of Infants with corresponding VISITS ID (hyperlink)
	• Risk Factor
	• Summary:
	  o Total number of births
	  o Number of infants with 1 or more risk factor
	  o Number of infants with 1 or more risk factors that receives Audiological testing prior to 3 years of age

30. Acquired Hearing Loss VVXAHL

Number of infants that passed initial newborn screening process, later identified to have hearing loss

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Race • Sex • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • FIPS • State of Residence
	REPORT OUTPUT
	• Summary: o Total number of births o Total number of infants with acquired hearing loss

31. Screenings VVXSCR

Number of infants screened

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Race • Sex • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • FIPS • State of Residence
	REPORT OUTPUT
	• Summary: o Total number of births o Total number of infants screened o Total number of infants screened before 3 months of age o Total number of infants with acquired hearing loss

32. Report of Letters Sent VVXRLS

List of infants who were sent one or more letters

Req. Trace #	Description
	PARAMETERS
	• Letter Date • Letter Name • Created By

	• Language
	REPORT OUTPUT
	• VISITS ID (hyperlink to open infant's record) • Name • Letter Name • Summary: o No. of each of letter sent (break at VISITS ID)

33. Referral Centers Report VVXRCR

Report to generate a list of referral centers in VISITS within a city/town. Hospital Users see a different list from VDH Admin users. Hospital users see only those facilities designated as "approved". This was designed so that the hospitals could print out and provide a list of approved sites to parents before they leave the hospital.

Req. Trace #	Description
	PARAMETERS
	City/Town List Box Choose a value from the List Box Select either one or select 'All' for all cities/towns.
	Facility Type List Box Choose a value from the List Box. Ex: Approved Audiological Facilities, Early Intervention Facilities
	REPORT OUTPUT
	• Follow-up Facility Name • Address • City • State • Zip • Phone

34. Hearing Monthly Totals VVXHMT

Summary Report that lists the total number of infants discharged to home and the number discharged the total infants who passed the hearing screening. Numbers will be summarized on monthly basis for each of the hospitals

.

Req. Trace #	Description
	PARAMETERS
	• Reporting Hospital • Discharge Date (From – To) • Date of Birth (From – To) • Race • Gender • Ethnicity • Hospital of Birth • Audiological Facility • FIPS • State of Residence
	REPORT OUTPUT
	• Summary: o Total number infants discharged to home o Total number of infants who passed screening with no follow-

	up required

At-Risk Extract

Generate a data extract based on certain filter criteria that's used for Part C Early Intervention Referral reports. Users download the data extract into MS Excel. They'd use MS Excel capabilities to generate any ad-hoc information

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Date Created • Race • Gender • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • FIPS • State of Residence
	EXTRACT OUTPUT
	• VISITS ID • First Name • Last Name • DOB • Admitted to NICU • Hospital Of Birth • PCP Name • PCP Address • Race • Ethnicity • Mother's First • Mother's Last • Primary contact first name • Primary contact last name • Contact Phone • Contact Address1 • Contact Address2 • Contact City • Contact State • Contact Zip • Contact FIPS • Primary Language • Reason closed • Closure date • Date created • Created by • Screening setting • Reporting hospital • Developmental delay - Cognitive • Developmental delay - Physical • Developmental delay - Communication • Developmental delay - Social/emotional

	• Developmental delay - Adaptive • Atypical development - Abnormal/Questionable sensory motor responses • Atypical development - Identified affective disorders • Atypical development - Behavioral disorders • Each of the Diagnosed disabling conditions (list of 16) • Each of the Indicators in risk section (list of 29)

Hospital Reports – At-Risk

Both VDH and hospital users can run these reports. All VDH users can run the following reports for one or all hospitals. Hospital Name defaults to hospital running the report. Hospital users cannot run reports from other hospitals

1. Part-C Referrals VAXPCF

List of all names and number of cases entered into this module.

Req. Trace #	Description
	PARAMETERS
	• Name of hospital *Reporting Hospital defaults to hospital running the report; hospital users cannot run report from other hospitals; VDH users can run any hospital or ALL hospitals* • Discharge date (from-to) • Date of Birth (from-to)
	REPORT OUTPUT
	• Hospital name • Name of child • VISITS ID (hyperlink to open infant's record) • Total cases

2. Referred to Part C - Developmental Delay VAXPDD

List of all names and number of cases that were sent as referrals to Part C under Developmental Delay.

Req. Trace #	Description
	PARAMETERS
	• Name of hospital *Reporting Hospital defaults to hospital running the report; hospital users cannot run report from other hospitals; VDH users can run any hospital or ALL hospitals* • Discharge date (from-to) • Date of Birth (from-to) • Developmental Delay category
	REPORT OUTPUT

	• Hospital name
	• Name of child
	• VISITS ID (hyperlink to open infant's record)
	• Developmental delay
	  o Cognitive
	  o Physical

	○ Communication ○ Social/emotional ○ Adaptive • Summary: ○ Total number reported with developmental delay ○ Total number of each category

3. Referred to Part C - Atypical Development VAXPAD

List of all names and number of cases that were sent as referrals to Part C under Atypical Development.

Req. Trace #	Description
	PARAMETERS
	• Name of hospital *Reporting Hospital defaults to hospital running the report; hospital users cannot run report from other hospitals; VDH users can run any hospital or ALL hospitals* • Discharge date (from-to) • Date of Birth (from-to) • Atypical Development Category
	REPORT OUTPUT
	• Hospital name • Name of child • VISITS ID (hyperlink to open infant's record) • Atypical development ○ Abnormal/Questionable sensory motor responses ○ Identified affective disorders ○ Behavioral disorders that interfere with acquisition of skills ○ Impairment in social interaction & communication • Summary: ○ Total number reported with atypical development ○ Total number in each category

4. Referred to Part C - Diagnosed Disabling Conditions VAXDDC

List of all names and number of cases that were sent as referrals to Part C under Diagnosed disabling conditions.

Req. Trace #	Description
	PARAMETERS
	• Name of hospital *Reporting Hospital defaults to hospital running the report; hospital users cannot run report from other hospitals; VDH users can run any hospital or ALL hospitals* • Discharge date (from-to) • Date of Birth (from-to) • Diagnosed Disabling Conditions Category
	REPORT OUTPUT
	• Hospital name • Name of child • VISITS ID (hyperlink to open infant's record) • Diagnosed disabling conditions, one or more

	• Summary: o Total number reported with diagnosed condition (one or more) o Total number in each category

5. Identified At Risk for Part C VAXATR

List of all names and number identified in "at risk" section.

Req. Trace #	Description
	PARAMETERS
	• Name of hospital *Reporting Hospital defaults to hospital running the report; hospital users cannot run report from other hospitals; VDH users can run any hospital or ALL hospitals* • Discharge date (from-to) • Date of Birth (from-to) • Indicator
	REPORT OUTPUT
	• Hospital name • Name of child • VISITS ID (hyperlink to open infant's record) • Indicator, one or more • Summary o Total number reported with one or more indicators o Total number in each category

6. Ineligible for Part C Services VAXIPC

List of names and number of children who have been processed by Part C and found ineligible for services.

NOTE: This information will be "communicated" to VDH/VISITS II from the ITOTS database.

Req. Trace #	Description
	PARAMETERS
	• Name of hospital *Reporting Hospital defaults to hospital running the report; hospital users cannot run report from other hospitals; VDH users can run any hospital or ALL hospitals* • Discharge date (from-to) • Date of Birth (from-to)
	REPORT OUTPUT
	• Hospital name • Name of child • VISITS ID (hyperlink to open infant's record) • Summary o Total number in each reason

7. Refused or Not Receiving Part C Services VAXRPS

List of names and number of children who have been processed by Part C, found eligible for services, but whose parent refused services and/or services not received for other reasons.

NOTE: This information will be "communicated" to VDH/VISITS II from the ITOTS database.

Req. Trace #	Description
	PARAMETERS
	• Name of hospital *Reporting Hospital defaults to hospital running the report; hospital users cannot run report from other hospitals; VDH users can run any hospital or ALL hospitals* • Discharge date (from-to) • Date of Birth (from-to)
	REPORT OUTPUT
	• Hospital name • Name of child • VISITS ID (hyperlink to open infant's record) • Reason for ineligibility or not receiving • Summary o Total number in each reason

8. Already Enrolled in Part C Services VAXEPC

List of names and number with an open or existing or record in ITOTS at time of auto referral.

NOTE: This information will be "communicated" to VDH/VISITS II from the ITOTS database.

Req. Trace #	Description
	PARAMETERS
	• Name of hospital *Reporting Hospital defaults to hospital running the report; hospital users cannot run report from other hospitals; VDH users can run any hospital or ALL hospitals* • Discharge date (from-to) • Date of Birth (from-to)
	REPORT OUTPUT
	• Hospital name • Name of child • VISITS ID (hyperlink to open infant's record) • Total cases

9. Children Reported in More Than One Category VAXMT1

List of all names and number of cases that were sent as referrals to Part C under any of the categories-developmental delay, atypical development, and diagnosed disabling conditions. Include any child whose total is two or more.

Req. Trace #	Description
	PARAMETERS
	• Name of hospital *Reporting Hospital defaults to hospital running the report; hospital users cannot run report from other hospitals; VDH users can run any hospital or ALL hospitals* • Discharge date (from-to) • Date of Birth (from-to)

	• Category
	REPORT OUTPUT
	• Hospital name • Name of child • VISITS ID (hyperlink to open infant's record) • Number of indicators in developmental delay • Number of indicators in atypical development • Number of indicators in diagnosed disabling conditions.

10. Children with More Than One Entry in this Module VAXM1M

List of all names and number of cases whose first entry were at risk and were subsequently reported in a category that made them eligible for automatic referral to Part C.

Req. Trace #	Description
	PARAMETERS
	• Name of hospital *Reporting Hospital defaults to hospital running the report; hospital users cannot run report from other hospitals; VDH users can run any hospital or ALL hospitals* • Discharge date (from-to) • Date of Birth (from-to)
	REPORT OUTPUT
	• Hospital name • Name of child • VISITS ID (hyperlink to open infant's record) • Date of each entry • Indicator(s) reported at initial entry

11. Infants with Special Circumstances VAXISC

This report should be made available for ADMIN users on both VaCARES and Hearing modules

Place this report wherever can be easily accessed by the users

This report should be run before letters are run. Information on report should be reviewed and a 'human' decision should be made whether or not to send the letter to infant

Req. Trace #	Description
	PARAMETERS
	• Reporting Hospital *Reporting Hospital defaults to hospital running the report; hospital users cannot run report from other hospitals; VDH users can run any hospital or ALL hospitals* • Hospital of Birth • Discharge date (from-to) • Date of Birth (from-to) • Reason Closed is Null • Special circumstances marked 'Yes'
	REPORT OUTPUT
	• Name of child • VISITS ID (hyperlink to open infant's record) • Comments

12. Children with Initial Entry of At Risk and Subsequent Entry for Eligibility

List of all names and number identified in "At Risk" section with a subsequent entry in "Developmental Delay", "Atypical Development" or "Diagnosed Disabling Conditions".

Req. Trace #	Description
	PARAMETERS
	• Name of hospital *Reporting Hospital defaults to hospital running the report; hospital users cannot run report from other hospitals; VDH users can run any hospital or ALL hospitals* • Discharge date (from-to) • Date of Birth (from-to) • Indicator
	REPORT OUTPUT
	• Hospital name • Name of child • VISITS ID (hyperlink to open infant's record) • Date of each entry • Summary o Total number reported o Total number in each category (DD, AD, DDC)

Maintenance Module

As VISITS-II and EBC are integrated, there are various master code tables that are shared between both groups. Options that are exclusive to VISITS user will be enabled when the user logs in with appropriate roles

Provider Maintenance

Provider Maintenance screen is shared by EBC and VISITS users. VISITS part of provider maintenance is covered under section 'Child Registration > Create New Provider'

Facility Maintenance EBXHOS

Create new facilities and also to view/modify existing facility information

Req. Trace #	Description
	Facility Type Type of facility LOV Valid values: Audiological Facility Early Intervention Facility Local Health Department Pediatric Or Family Practice Office Hospital
	Facility Code ???
	Facility Name Name of the facility
	Medicare Provider No. ???
	Date Open

	Date on which facility was opened
	Date Closed Date on which facility was closed When a facility is closed (or inactivated), it should not be displayed in any LOV's or other list items.
	Email Address Email address of the facility, if any
	Facility Address Street address of the facility
	City City where facility is located
	State State where facility is located
	Zip Code+4 Zip Code , Zip+4 where the facility is located
	Phone Number phone number of the new facility
	Fax Number Fax number of the new facility
	Comments Comments
	Facility Approved? This is associated with Audiological Facilities only and is linked to how the list of Approved Sites shows to hospital users. Only those Audiological facilities checked as "approved" will be visible to hospital users. Need to see the history of changes.

Hearing Reports/Extracts

VDH users receive a lot of ad-hoc requests on patient data. VDH users generate an 'extract' using one or more parameters from Hearing reports. This extract consists of various patient related items. This file is opened in Microsoft Access by VDH users and they will perform the queries based on the request they received. However, no inputs are fed back into the application based in these ad-hoc requests.

Hearing Extract VIXHXT

Req. Trace #	Description
	PARAMETERS
	• Discharge Date (From – To) • Date of Birth (From – To) • Date Created • Race • Gender • Ethnicity • Reporting Hospital • Hospital of Birth • Audiological Facility • FIPS • State of Residence
	EXTRACT OUTPUT
	• Child ID • First Name

	• Last Name • DOB • Hospital Of Birth • PCP Name • Gender • Race • Ethnicity • Reporting Hospital • Discharge Before Screening • Reason Not Screened • First Screening Date • Screening Test • Right Ear Result • Left Ear Result • Post Discharge Screen Date • Post Discharge Screening Test • Post Discharge Right Result • Post Discharge Left Result • Post Discharge Screening Location • Risk Factor • First Follow-up Date • Most Recent follow-up Date • Most Recent Screening Test • Most Recent Result - Right • Most Recent Result – Left • Most Recent Follow-up Location • Right Classification • Left Classification

VaCARES Letters

VaCARES Parent Contact Letter VIXLTV

See the current protocol that VaCARES team follows to generate these letters. VaCARES generates about 35 such letters the steps in the protocol need to be automated and the logical items need to be included in letter logic. .

Parent resource brochure will be mailed (physically) along with the application. Same letter is CC'd to the PCP too

The codes mentioned here are good as of the day the requirements are gathered. However, there may be new codes or existing codes may be deleted that generate VaCARES letter. This will be handled as a maintenance function (screen code EBUSTA where each Statistic has a flag "Generate VaCARE Auto Ref" that can be set to YES to generate VaCARES letter

Req. Trace #	Description
	LOGIC

	• Infant entered into VISITS within specified timeframe
	• Infant has one (or more) of the selected ICD-9 codes
	  o Anencephalus: 740.0
	  o Spina Bifida: 741, 741.0, 741.00, 741.01, 741.02, 741.03, 741.9, 741.90, 741.91, 741.92, 741.93
	  o Tetralogy of Fallot: 745.2
	  o Cleft Lip/Cleft Palate: 749, 749.0, 749.00, 749.01,

	749.02, 749.03, 749.04, 749.1, 749.10, 749.11, 749.12, 749.13, 749.14, 749.2, 749.20, 749.21, 749.22, 749.23, 749.24, 749.25 o Gastroschisis/Omphalocele: 756.79 o Diaphragmatic Hernia: 756.6 o Esophageal Atresia/Tracheoesophageal Fistula: 750.3 • Infant is less than 24 months of age • Infant is not deceased • No previous VaCARES Parent Contact Letter sent
	LETTER OUTPUT
	• Current date • Child's name (first and last) • Primary contact's name (first and last) • Street address • City • State • Zip Code • PCP

VaCARES Reports

1. Diagnosis Report VBXDIA

Report to list all children with the designated ICD-9 code(s) within the specified parameters.

Req. Trace #	Description
	REPORT OUTPUT
	• Child's name • VISITS ID (hyperlink to open infant's record) • VaCARES ICD-9 code(s) • State of Residence • State of Birth • Date of birth • Race • Ethnicity • Total

2. Hospital Reporting VBXHOS

Report to list all children with VaCARES eligible ICD-9 codes reported by the specified hospital within the given parameters

Req. Trace #	Description
	REPORT OUTPUT
	• Child's name • VISITS ID (hyperlink to open infant's record) • Reporting hospital • VaCARES ICD-9 code(s) • Date of birth • Medical record number • Registry entry date • Discharge date with breakdown of newborn discharge (yes/no) •

	• Total

3. Hospital Reporting Time VBXHST

Report to provide average number of days between discharge date and registry entry date for the specified hospital within the given parameters. If no hospital is specified, all hospitals will be listed.

Req. Trace #	Description
	REPORT OUTPUT
	• Reporting hospital • Average number of days between discharge date and registry entry date

4. Interstate Exchange VBXIST

Report to list all infants who are residents of the specified state within the given parameters.
Note: If there is one contact associated with the child and yet not flagged as Primary Contact, use the existing contact's information in report's output. If there are multiple contacts for the child but none of them are marked as Primary Contact, use the most recent contact for that child

Req. Trace #	Description
	REPORT OUTPUT
	• VISITS ID (hyperlink to open infant's record) • Birth Certificate # • Date of Birth • Sex • Infant's First Name • Infant's Middle Name • Infant's Last Name • Birth Hospital • Plurality • Race • Mother's First Name • Mother's Middle Name • Mother's Last Name • Mother's Maiden Name • Mother's SSN • Contact's Phone # • Alternate Phone # • Street Address (1) • Street Address (2) • City • State • Zip Code • Reporting Hospital(s) • Medical Record Number(s) • Date of Death • Diagnosis Code(s)

5. Source of Report VBXSOR

Report to list all the children who were reported by hospitals, or through EHDI., Newborn Screening, or Genetic Centers

Req. Trace #	Description
	REPORT OUTPUT

	• Child's name • VISITS ID (hyperlink to open infant's record) • VaCARES ICD-9 code(s) • Date of birth • Registry entry date • Source of report • Total

6. Parents Contact Report VBXPAC

Report to generate all children with VaCARES eligible ICD-9 codes within the specified parameters.

Should include logic to exclude deceased infants.

If there is one contact associated with the child and yet not flagged as Primary Contact, use the existing contact's information in report's output. If there are multiple contacts for the child but none of them are marked as Primary Contact, use the most recent contact for that child

Req. Trace #	Description
	REPORT OUTPUT
	• Child's name • VISITS ID (hyperlink to open infant's record) • VaCARES ICD-9 code(s) • Date of birth • Registry entry date • Contact's name • Contact's relationship to the child • Contact's address • Primary care provider • Primary language spoken • Total

7. Monthly Automatic Report for Hospitals VBXMHR

Report to generate all infants entered by the specified hospital during the previous month and sends the report to the predetermined VISITS user on the first of the month.

Req. Trace #	Description
	REPORT OUTPUT
	• Child's name • VISITS ID (hyperlink to open infant's record) • Reporting hospital • VaCARES ICD-9 code(s) • Date of birth • Medical record number • Registry entry date • Discharge date • Total

8. Deceased Infants Report VBXDEC

Report to list all infants within the specified parameters that are deceased

Req. Trace #	Description
	REPORT OUTPUT
	• Child's name • VISITS ID (hyperlink to open infant's record) • Date of birth • Date of death • VaCARES ICD-9 code(s) • Reporting hospital • Total

9. User Log History VBXULG

Report to list all hospital users that have logged onto VISITS within the specified timeframe (This seems to be a duplicate function that can be produced under user maintenance)

Req. Trace #	Description
	REPORT OUTPUT
	• Reporting hospital • Name of user • Date of Log-on • Time spent logged on

10. No Cases Reported VBXNCR

Report to list the hospitals that have clicked the "No Cases to Report" link.

Req. Trace #	Description
	REPORT OUTPUT
	• Reporting hospital • Month for which there were no cases

11. Health Districts VBXHDT

Report to list all children within the specified criteria and the health district they live in

Req. Trace #	Description
	REPORT OUTPUT
	• Child's name • VISITS ID (hyperlink to open infant's record) • Date of birth • Reporting hospital • Health district • VaCARES ICD-9 code(s)

12. City and County VBXCAC

Report to list all children within the specified criteria and the ~~health district~~ city or county they live in.

Req. Trace #	Description
	REPORT OUTPUT
	• Child's name

	• VISITS ID (hyperlink to open infant's record) • Date of birth • Reporting hospital • City or county • VaCARES ICD-9 code(s)

13. Race and Ethnicity VBXRAE

Req. Trace #	Description
	REPORT OUTPUT
	• Child's name • VISITS ID (hyperlink to open infant's record) • Date of birth • Reporting hospital • Race • Ethnicity • VaCARES ICD-9 code(s)

14. Confirmation of Diagnosis VBXCDG

Req. Trace #	Description
	REPORT OUTPUT
	• Child's name • VISITS ID (hyperlink to open infant's record) • Date of birth • Reporting hospital • VaCARES ICD-9 code(s) • Status of each ICD-9 code (confirmed, provisional, deleted, or unknown)

15. Infants who have a specific risk indicator identified but do not have corresponding birth defect (ICD-9 code) VBXICD

The following table explains the logic for this report

If Risk Indicator Chosen in Hearing Module is:	There should be a birth defect of one (or more) of the following ICD-9 codes:
Stigmata or other findings associated with a syndrome known to include a sensorineural and/or conductive hearing loss, including preauricular tag or pit/sinus and morphological abnormalities of the ear	744.0, 744.00, 744.01, 744.02, 744.03, 744.04, 744.05, 744.09, 744.1, 744.2, 744.21, 744.222, 744.23, 744.24, 744.27, 744.3, 744.4, 744.41, 744.42, 744.43, 744.46, 744.47, 744.49, 748.0, 758.0
In utero infections such as cytomegalovirus, herpes, rubella, syphilis, and toxoplasmosis.	090, 090.0, 090.1, 090.2, 090.3, 090.4, 090.40, 090.41, 090.42, 090.49, 090.5, 090.6, 090.7, 090.9, 771.0, 771.1, 771.2
*Neonatal Indicators (**if** hyperbilirubinemia at a serum level requiring exchange transfusion)*	277.4
Syndromes associated with progressive hearing loss such as neurofibromatosis, osteopetrosis, and	237.7, 237.70, 237.71, 237.72, 756.52

Usher's syndrome	
Neurodegenerative disorders, such as Hunter syndrome, or sensory motor neuropathies, such as Friedreich's ataxia and Charcot-Marie-Tooth syndrome	277.5, 334.0, 356.1

Req. Trace #	Description
	PARAMETERS
	• Date of Birth (From – To) • Hospital of Birth • Discharge Date (From – To) • Reporting Hospital
	REPORT OUTPUT
	• VISITS ID (hyperlink to open infant's record) • Child's Name • Risk Indicator • Reporting Hospital

VaCARES Extracts VIXVXT

VaCARES users have to generate certain ad-hoc reports for internal reporting. This may be accomplished by providing a means of downloading data in unformatted fashion as text files. This file is created with Pipe '|' as delimited. This file may be opened using MS Excel where user can perform desired operations

Req. Trace #	Description
	PARAMETERS
	• Discharge Date • Date of Birth • Date Created • Race • Gender • Ethnicity • Reporting Hospital • Hospital of Birth • FIPS • State of Residence
	EXTRACT OUTPUT
	• Child ID • First Name • Last Name • Date of Birth • Hospital of Birth • Newborn Discharge • PCP Name • Race • Ethnicity • Medical Record Number • Registry Hospital • Attending Physician • Hospital Transferred to • Deceased? • Date of Death

	• Cause of Death • Source • Date of Admission • Date of Discharge • Person entering registry information • Registry Entry Date • ICD Codes

No VaCARES Cases VIXNVC

Hospital users enter this screen if they have no VaCARES cases to report for a given month.

Req. Trace #	Description
	Hospital List Box Pick a hospital for which the reports need to be run Defaulted to the hospital of login. Hospital user should not be able to change this.
	Month List Box Pick a month for which the report needs to be run. Valid values: Three letter abbreviated definitions for months ex: Jan, Feb etc.,
	Year List Box Pick a 4 character year for which the report need to be run

Appendices

Appendix-B: Part C Early Intervention Referral Process

For all infants whose age is ≤ 2 years, 364 days and not recorded as deceased.

System will display a message to the hospital user once Part C EI Referral information is entered. If the referral will be communicated to Part C (all entries except for Risk Indicators section), message should read: Information reentered for this child indicates that a referral will be sent automatically to the Part C Central Point of Entry indicated by the child's city/county of residence. Obtain appropriate signatures and give information to the parent."

Add a pop-up message telling the user that referral was not generated because child was past cut-off age.

- The following data fields should be included in the information batched and sent to the ITOTS database:
- Infant name, first and last
- DOB
- Sex
- Race (ITOTS does not have the same values as VISITS)
- FIPS code
- Insurance type (ITOTS does not have the same values as VISITS)
- Indicators from Developmental Delay, Atypical Development, Diagnosed Disabling Conditions, and Risk Indicators
- All information entered into the notes section

- For auto referrals from Hearing module, the following data fields should be included:
- Infant name, first and last
- DOB
- Sex
- Race (ITOTS does not have the same values as VISITS)
- FIPS code
- Insurance type (ITOTS does not have the same values as VISITS)
- Right and left ear results
- Right and left ear degree
- Type of hearing loss

- For auto referrals from VaCARES module, the following data fields should be included:
- Infant name, first and last
- DOB
- Sex
- Race (ITOTS does not have the same values as VISITS)
- FIPS code
- Insurance type (ITOTS does not have the same values as VISITS)
- Diagnosis code
- Diagnosis description

If there is an existing record on the child at the time of receipt of referral in ITOTS, information will not be "processed" as a referral in ITOTS. However, there will need to be a place or a process for this information to go to be reviewed by the Part C entity. **If there is a closed record on the child, the information will be processed as a new referral?**

There is a situation where a hospital would enter a child with just “at risk” indicators, which would not generate a referral. If the child were seen again at a later date and identified with delays or conditions that would make them eligible, the hospital user would go into VISITS and enter this in a new screen. This new entry would then generate the referral to Part C.