

Intermediate/Advanced Reporting Using State Bridge (VPHIB)

Intermediate/Advanced Reporting Using State Bridge (VPHIB)

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Objectives

- Provide a brief overview of the descriptive statistics used to summarize large amounts of data
- Describe the strengths and limitations of data from the Virginia Pre Hospital Information Bridge (VPHIB)
- Demonstrate how to use the Report Writer 2.0 tool in VPHIB to
 - Create and edit transactional reports
 - Share reports
 - Schedule reports for future delivery

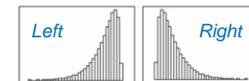


Numbers are Numbers - NOT!

- Groups of numbers (*distributions* or *probability distributions*) don't always look the same
- "Bell shaped curve" or *Normal distribution*
 - Very common (mean +/- standard deviation)
 - Not the only way numbers like to congregate!
- MANY other distributions exist, but you don't need to know about them *BUT* . . .
 - You should be aware of two other common distributions, *left skewed* and *right skewed*



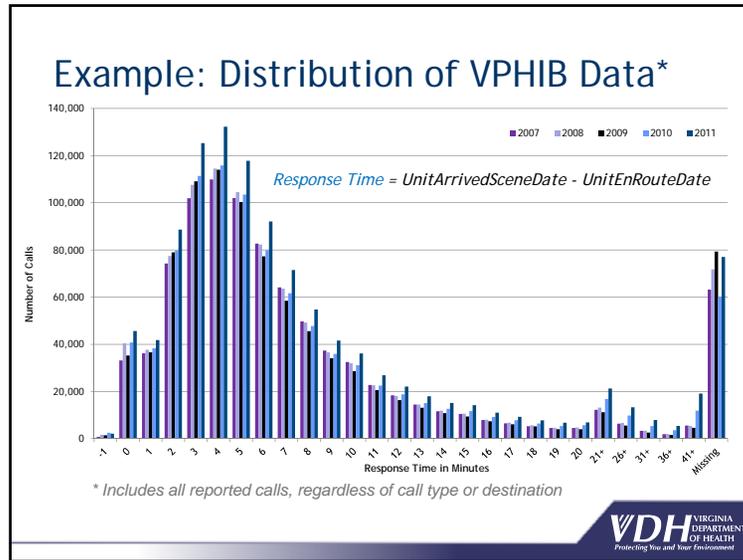
Skewed Distributions



- *Skewness* is a measure of asymmetry
 - Named for the location of the *tail* of the distribution
- Right skewed data are very common in health care
 - Characterized by *asymmetry*
 - Measure of *central tendency* (middle) = *median*
 - Measure of *spread* (variability) = *inter-quartile range (IQR)* represents middle 50% of the data
 - 75th percentile value - 25th percentile value
- Let's apply our new found knowledge to some actual Virginia EMS data . . .



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Example: Statistics for VPHIB Data*

Response Time in Minutes (UnitArrivedSceneDate - UnitEnRouteDate)					
	2007	2008	2009	2010	2011
N Calls	860,368	885,636	842,018	910,883	1,054,323
N Missing Values	63,197	71,742	79,339	60,132	76,995
Minimum	-1,439.0	-1,439.0	-525,585.0	-4,733,277.1	-527,032.0
01st Percentile	0.0	0.0	0.0	0.0	0.0
05th Percentile	1.0	1.0	1.0	0.9	1.0
10th Percentile	2.0	2.0	2.0	2.0	2.0
25th Percentile	3.0	3.0	3.0	3.0	3.0
Median	5.0	5.0	5.0	5.0	5.0
75th Percentile	8.0	8.0	8.0	8.7	9.0
90th Percentile	13.0	13.0	13.0	15.0	16.0
95th Percentile	18.0	18.0	17.0	21.0	24.0
99th Percentile	34.0	33.0	31.0	46.3	55.0
Maximum	1,439.0	1,439.0	1,471.0	3,682,086.2	4,207,687.5
Average	7.5	5.8	4.9	16.3	18.8
Standard Deviation	63.7	77.5	577.3	6,696.8	5,327.8

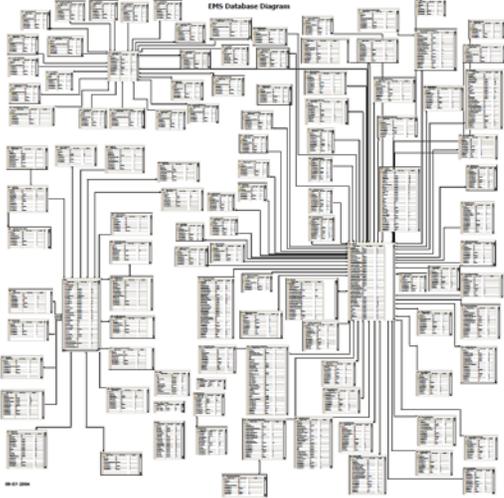
* Includes all reported calls, regardless of call type or destination

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- ### Virginia Pre Hospital Information Bridge
- EMS data submission is mandated by the Code of Virginia § 32.1-116.1 and EMS regulations
 - Current minimum dataset (VPHIB) was officially adopted on February 6, 2010 by the State Board of Health
 - All EMS responses are required to be submitted to OEMS *WITHIN 30 DAYS* in the format prescribed by OEMS
 - Agencies may submit above and beyond this minimum dataset if desired to collect further information on an agency, locality, or regional level
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- ### VPHIB Characteristics
- Strengths
 - Potentially rich source of information
 - Includes all aspects of patient care by all levels of EMS personnel
 - Limitations
 - Older data (pre mid-2010) not as complete
 - Not all agencies submit data in a timely manner
 - Difficult to follow a patient across time
 - Known flaws in several data fields
 - Probable unknown flaws in other data fields
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VPHIB Database Diagram

Note: Many of the tables are truncated!



<https://vphib.vdh.virginia.gov/>



Introduction to VPHIB Resources - 1



Alerts and Notices

Next VPHIB Version 2 Open Forum Meeting 10/9/12 @ 2:00 EST.

In preparation for the move of VPHIB to the new version 2 (VA02) format, VPHIB program staff are having a monthly webinar meeting, on the second Wednesday of each month at 3:00 PM, to provide education, information, dispel myths, answer questions, and allow EMS agencies in attendance to communicate with each other to be a source of peer support.

Agenda - October Meeting

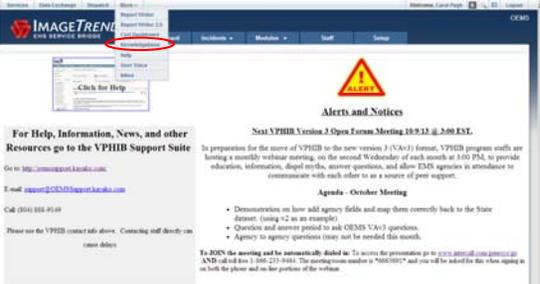
- Demonstration on how add agency fields and map them correctly back to the State dataset. (using '2' as an example)
- Question and answer period to ask OEMS VA02 questions.
- Agency to agency questions (may not be needed this month).

VA02 will be implemented between 7/1/14 and 12/31/13. What do agencies need to do to prepare for VA02?

- If your agency uses Field Bridge (State license) or paper run forms you do not need to do anything at this time. OEMS will provide more information when we are closer to changing Field Bridge or the paper run forms.
- If you submit to VPHIB using 3rd party EMS software, via a billing company, or have your own ImageTrend Service Bridge.
 - Plan your agency's migration to VA02 through your vendor or billing company.
 - Ensure they know you have to submit in the current format until 7/1/14.
 - Ensure they know you cannot submit run information in the current VPHIB format after 12/31/13.
 - Ensure you will have consistent submissions during your agency's transition. Formal notice of the change to VA02 begins on 2/1/2012.
- Remember to ensure your agreements are for a "Virginia" compliant product. Each state will have requirements that exceed NEMIS compliance.



Introduction to VPHIB Resources - 2



Alerts and Notices

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Agenda - October Meeting

- Demonstration on how add agency fields and map them correctly back to the State dataset. (using '2' as an example)
- Question and answer period to ask OEMS VA02 questions.
- Agency to agency questions (may not be needed this month).

VA02 will be implemented between 7/1/14 and 12/31/13. What do agencies need to do to prepare for VA02?

- If your agency uses Field Bridge (State license) or paper run forms you do not need to do anything at this time. OEMS will provide more information when we are closer to changing Field Bridge or the paper run forms.
- If you submit to VPHIB using 3rd party EMS software, via a billing company, or have your own ImageTrend Service Bridge.
 - Plan your agency's migration to VA02 through your vendor or billing company.
 - Ensure they know you have to submit in the current format until 7/1/14.
 - Ensure they know you cannot submit run information in the current VPHIB format after 12/31/13.
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Introduction to VPHIB Resources - 3a

Virginia Department of Health KnowledgeBase

In an effort to better support the VPHIB program the Office of EMS is implementing a Support Suite program that will help us better manage requests for assistance. Effective immediately the following contact information should be used to seek assistance for the VPHIB program:

- <http://emsupport.knowledgebase.vdh.virginia.gov>. This website allows users to create and submit a request for assistance, monitor the progress of the request and provides access to the VPHIB Knowledge Base and VPHIB News.
- support@emsupport.knowledgebase.vdh.virginia.gov. Sending a request for assistance via this e-mail address will place your request in the VPHIB Support Suite and provide you with a confirmation if has been received. Users can access the above website to check on the status of a request.
- (804)894-6149 - This is an OEMS telephone number setup solely to support the VPHIB program. By creating this new number OEMS will be able to provide more consistent access when staff are out of the office or otherwise unavailable.
- Help! Click on help in State Bridge to access ImageTrend University.

Below is a broad list providing guidance to users with understanding who to contact for specific types of requests. No items are the responsibility of the Agency VPHIB Administrator, Office of EMS, Or ImageTrend Inc.

Individual Agency VPHIB Administrators Provide Support for:

- Forgotten User Name or Password
- Submit Provider Account Registration to OEMS
- Add Remote Providers to Agency Routes
- Add User Defined Questions
- Maintain Agency Demographic Data (Agency info, vehicles, & Providers)
- Change agency level controlled State Bridge and Field Bridge Features

The Office of EMS Provides Support for:

- General Virginia State Bridge & Field Bridge Information
- Assistance with Features & Features
- "Assistant" Providers User Accounts When They Belong to More Than One Agency
- Mandatory Reporting Requirement Questions
- Compliance Status
- Report Inactive Users (must be an agency admin. to request re-activation)
- Report System Status Outage
- Add Medications or Procedures to Systems
- Add New Agency or Hospital to the Systems
- Add Hospital Users to Systems
- Request Additional Report Writer Reports
- Submit Suggested Change-Enhancements for Consideration



Introduction to VPHIB Resources - 3b

ImageTrend Inc. Provides Support for:

- Data Exchange Setup or Problems from 3rd Party Vendor Software of Self-Purchased ImageTrend Service Bridge
- Field Bridge Posting Errors
- Field Bridge Trouble Shooting
- "Application Exception" Errors
- Billing Interface Temp or Problem
- Web Browser Issues
- Obtain Purchase Other ImageTrend Products

Contact Info for ImageTrend Support are:
 Help: Click on help in State Bridge to access ImageTrend University
 ImageTrend Support Site: <http://support.imagetrend.com>
 Telephone at (888)400-7789



Introduction to VPHIB Resources - 4

This Page Contains:

- The Report Writer 2 User Manual.
- Other tools used by OEMS with RW2.
- Other resources as deemed appropriate.



Introduction to VPHIB Resources - 5

ImageTrend REPORT WRITER

Report Writer
Creating a Report



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Introduction to VPHIB Resources - 6

Field	Display Name	Format	Available	Element	Identifiable	
Incident Apartment Number	Address Apt. No.	Text	Yes	115.29	Yes	
Incident City	Address City	Text	Yes	108.12	No	
Incident County	Address County	Text	Yes	108.13	No	
Incident State	Address State	Text	Yes	108.14	No	
Incident Address	Address Street	Text	Yes	108.11	Yes	
Incident Address Line 2	Address Street	Text	Yes	115.28	Yes	
Incident Postal Code	Address Zip Code	Text	Yes	108.15	No	
Incident Service Name	Agency Name	Text	Yes	200.2	Yes	
Incident Call Number	Call Number	Text	Yes	102.3	Yes	
Incident City FIPS	City FIPS	Text	No	N/A	N/A	
Incident County FIPS	County FIPS	Text	No	N/A	N/A	
Days Reported	Days Reported	Days	1/14/01	Yes	008	No
Incident Date	Event	Incident Date	1/14/01	Yes	006	No
PHID Date	Event 1	PHID Date	1/14/01	Yes	007	2
Dispatch Number Date	Event 2	Dispatch Number	1/14/01 13:00	Yes	005	3
Log Number Date	Event 3	Log Number	1/14/01 13:00	Yes	005	4
Response Date	Event 4	Log Number	1/14/01 13:00	Yes	005	5
Completed Date	Event 5	Log Number	1/14/01 13:00	Yes	005	6
Arrived at Scene Date	Event 6	Scene Arrivd	1/14/01 13:00	Yes	005	6
Arrived at Patient Date	Event 7	Arrived at Patient	1/14/01 13:00	Yes	005	7
Left Scene Date	Event 8	Left Scene	1/14/01 13:00	Yes	005	9
Patient Treatment Date	Event 9	Patient Treatment	1/14/01 13:00	Yes	005	9
Arrived at Destination Date	Event 10	Arrived Destination	1/14/01 13:00	Yes	005	10
Back Home Date	Event 11	Use Back Home	1/14/01 13:00	Yes	005	11
Back in Service Date	Event 12	Use Back in Service	1/14/01 13:00	Yes	005	12
Initial Response Date	Event 13	Initial Response	1/14/01 13:00	No	N/A	N/A
Incident Date of Initial Response	Event 14	Initial Response	1/14/01 13:00	No	N/A	N/A
Incident Facility Code	Incident Facility Code	Hospital Code	Text	Yes	108.9	No
Incident Hospital Method	Incident Hospital Method	Incident ID	Text	Yes	108.10	No
Incident ID	Incident ID	Incident ID	Text	No	N/A	N/A
Incident Number	Incident Number	Incident Number	Text	Yes	102.2	Yes
Traffic Facility	Incident Traffic Facility	Text	No	N/A	N/A	No
Incident Year	Incident Year	Text	No	N/A	N/A	No
Incident Location Type	Location Type	Text	Yes	108.7	No	No
Incident Mass County	Mass County	Text	Yes	108.8	No	No
Incident Mass Region	Mass Region	Text	Yes	111.1	Yes	No

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Introduction to VPHIB Resources - 8

- The current full VPHIB Data Dictionary (required data elements, fields, and quality standards.)
- A short list of the current required list of data elements.
- The short list plus submission schedule.
- List of medications accepted by VPHIB (additional meds can be added upon request.)
- List of hospital codes accepted by VPHIB (all hospitals must be reported using their OEMS assigned codes.)
- List of procedures active accepted by VPHIB (additional procedures can be added upon request.)
- List of inactive procedures that can be utilized when mapping third party software to VPHIB.
- The most current report of VPHIB's validation rules (these are likely to change without notice, typically on the last day of the month).
- The most current report of our validation rules with additional detail. The detailed report has not functioned since January 2012. This function is expected to be fixed with the release of v5.5 in August or September of 2012.

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001_01	Document Instructions	8
001_02	EMS Agency Number	8
001_03	EMS Agency Name	8
001_04	EMS Agency City/County	10
001_05	Organizational Type	11
001_06	Organization Status	13
001_07	Agency Contact - Member	14
001_08	Agency Contact - Local Address	15
001_09	Agency Contact - Phone/Fax	16
001_10	Station Name	20
001_11	Station ZIP	21
001_12	Station Address	22
001_13	Station City/County	24
001_14	Station State	25
001_15	Station Zip	26
001_16	License/Permit Number	27
001_17	Vehicle Make/Year	28
001_18	Vehicle License/Plate Number	29
001_19	Personnel's Level of Certification/License for Agency	31
001_20	EMS Personnel's Last Name	32
001_21	EMS Personnel's First Name	33
001_22	State EMS Certification License Level	34
001_23	Software Creator	35
001_24	Software Name	36
001_25	EMS Agency Number	37
001_26	Software Version	38
001_27	Version Type	39
001_28	Type of Service Requested	40
001_29	Primary Reason for the Call	41
001_30	Type of Dispatch Delay	42
001_31	Type of Response Delay	43
001_32	Type of Status Delay	44
001_33	Type of Transport Delay	45
001_34	Type of Turn-Around Delay	46
001_35	EMS Unit Call Sign (Radio Number)	47
001_36	Personnel Made to Scene	48
001_37	Dispatch Response to Research	49
001_38	Dispatch Response to Research	50
001_39	Dispatch Response to Research	51
001_40	Dispatch Response to Research	52
001_41	Dispatch Response to Research	53
001_42	Dispatch Response to Research	54
001_43	Dispatch Response to Research	55
001_44	Dispatch Response to Research	56
001_45	Dispatch Response to Research	57
001_46	Dispatch Response to Research	58
001_47	Dispatch Response to Research	59
001_48	Dispatch Response to Research	60
001_49	Dispatch Response to Research	61
001_50	Dispatch Response to Research	62



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TYPE OF SERVICE REQUESTED E02_04

Required to be reported in VA – Yes
National Element – Yes

Definition
 The type of service or category of service requested of the EMS service responding for this specific EMS incident.

Field Values

30 911 Response (Scene) (Default)	35 Rendezvous/Intercept
40 Interfacility Transfer (scheduled)	45 Medical Transport
50 Mutual Aid	55 Standby
410000 Interfacility Transfer (unscheduled)	410001 Flagdown/Walk-in Emergent
410002 Flagdown/Walk-in Non-emergent	



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INCIDENT/PATIENT DISPOSITION E20_10

Required to be reported in VA – Yes
National Element – Yes

Definition
 Type of disposition treatment and/or transport of the patient.

Field Values

4815 Cancelled	4820 Dead at Scene
4825 No Patient Found	4830 No Treatment Required
4835 Patient Refused Care	4840 Treated and Released
4845 Treated, Transferred Care	4850 Treated, Transported by EMS
4855 Treated, Referred to Law Enforcement	4860 Treated, Transported by Private Vehicle
804003 Standby Only – No Patient Contacts	



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CAUSE OF INJURY E10_01

Required to be reported in VA – Yes
National Element – Yes

Definition
 The category of the reported/suspected external cause of the injury

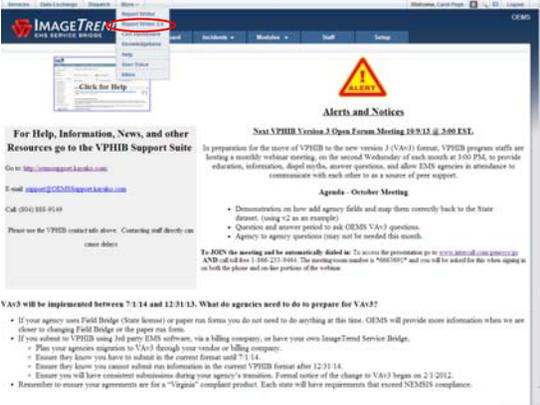
Field Values

-25 Not Applicable	-20 Not Recorded
-15 Not Reporting	-10 Not Known
-5 Not Available	1885 Bites (E606.0)
9500 Aircraft related accident (E84X.0)	9505 Bicycle Accident (E826.0)
9515 Chemical poisoning (E88X.0)	9520 Child battering (E967.0)
9525 Drowning (E610.0)	9530 Drug poisoning (E85X.0)
9535 Electrocution (non-lightning) (E925.0)	9540 Excessive Cold (E901.0)
9545 Excessive Heat (E900.0)	9550 Falls (E88X.0)
9555 Fire and Flames (E69X.0)	9560 Firearm assault (E965.0)
9565 Firearm injury (accidental) (E965.0)	9570 Firearm self-inflicted (E965.0)
9575 Lighting (E907.0)	9580 Machinery accidents (E919.0)
9585 Mechanical Suffocation (E913.0)	9590 Motor Vehicle non-traffic accident (E82X.0)
9590 Motor Vehicle traffic accident (E81X.0)	9600 Motorcycle Accident (E81X.1)
9605 Non-Motorized Vehicle Accident (E846.0)	9610 Pedestrian traffic accident (E814.0)
9615 Radiation exposure (E926.0)	9620 Rape (E960.1)
9625 Smoke Inhalation (E89X.2)	9630 Stabbing/Cutting Accidental (E988.0)
9635 Stabbing/Cutting Assault (E988.0)	9640 Struck by Blunt/Thrown Object (E988.2)
9645 Venomous stings (plants, animals) (E905.0)	9650 Water Transport accident (E83X.0)
580000 Assault	580006 Burn - Hot Substance
580026 Burns-Chemical	580028 Burns - Thermal
580019 Elder Abuse/Neglect	580002 Entrapped (Non-MVC)
580004 Explosion	580005 Foreign Body Entering Eye/Orifice
580001 MVC - ATV	580017 MVC vs. Large Animal
580010 Overexertion	580009 Other injury



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Creating a Transactional Report - 1



Alerts and Notices

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Agenda - October Meeting

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- Questions and answer period to ask OEMS VA3 questions.
- Agency to agency questions (may not be needed this month).

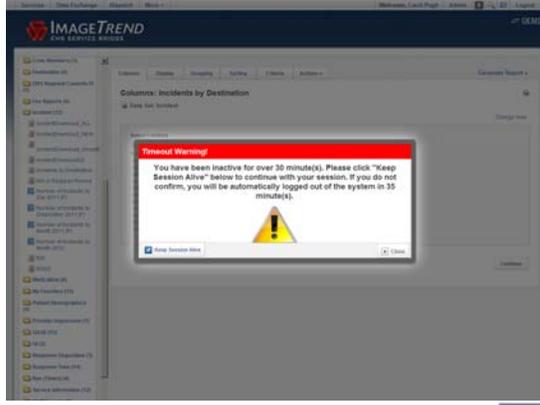
To JOIN the meeting and be automatically added to: To access the presentation go to <http://www.zoom.us/j/3102271045> AND add in the 3:00:00 AM. The meeting room number is 3102271045 and you will be added to the chat area as well as both the phone and on-line portions of the webinar.

VA3 will be implemented between 7:1:14 and 12:31:13. What do agencies need to do to prepare for VA3?

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Creating a Transactional Report - 2



Timeout Warning!

You have been inactive for over 30 minutes. Please click "Keep Session Alive" below to continue with your session. If you do not confirm, you will be automatically logged out of the system in 35 minutes.

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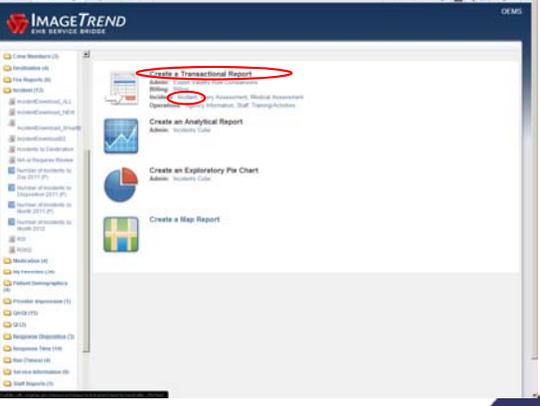
Creating a Transactional Report - 4

<https://vphib.vdh.virginia.gov/reportwriter/>



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Creating a Transactional Report - 5

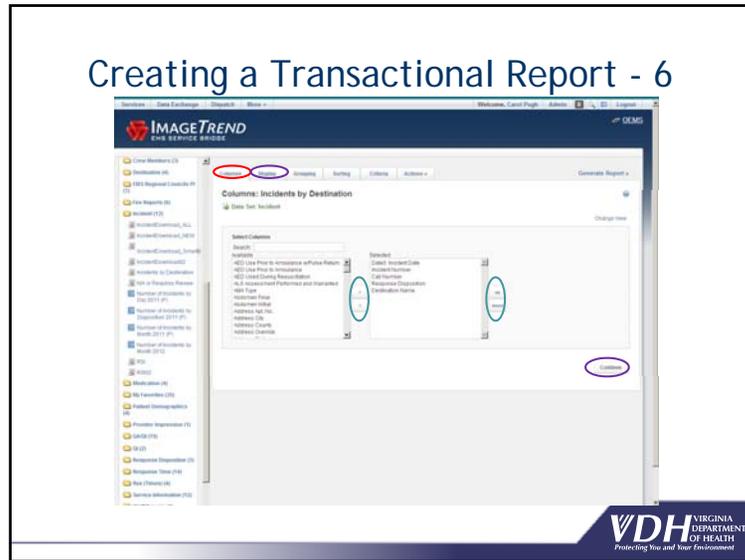


CREATE A TRANSACTIONAL REPORT

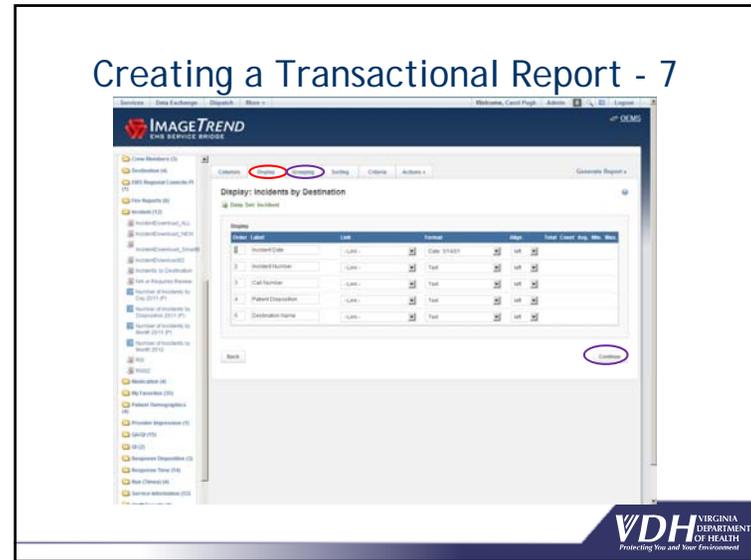
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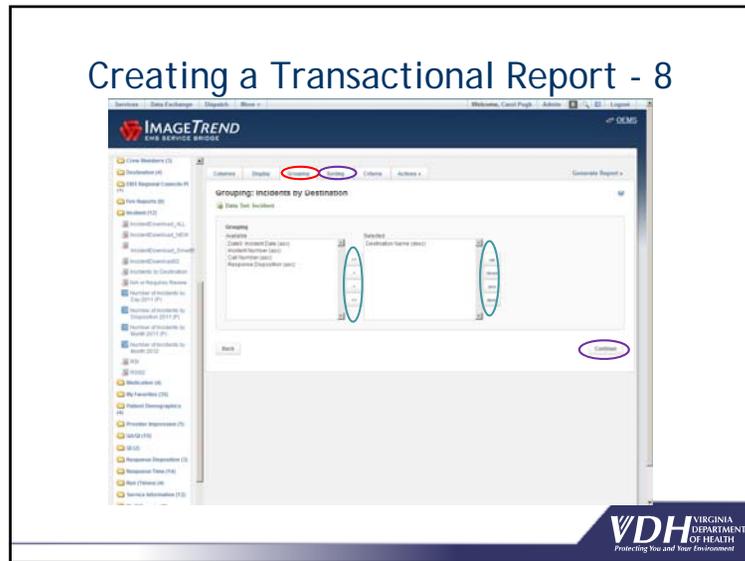
Creating a Transactional Report - 6



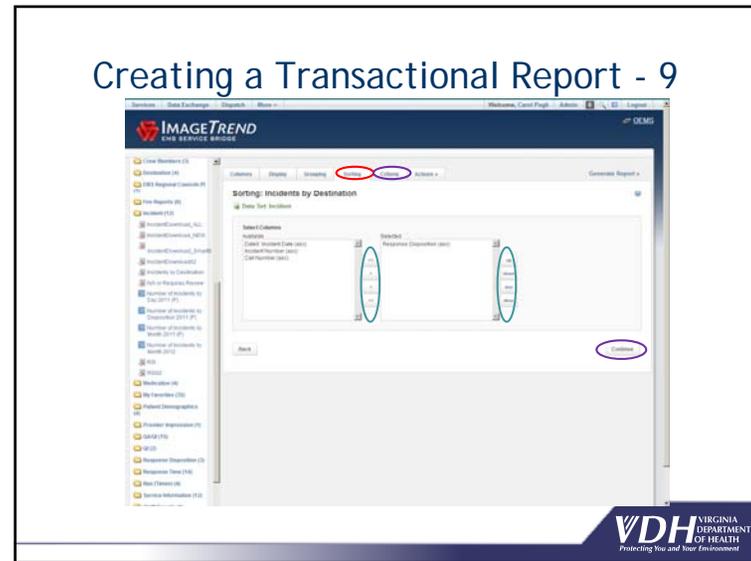
Creating a Transactional Report - 7



Creating a Transactional Report - 8

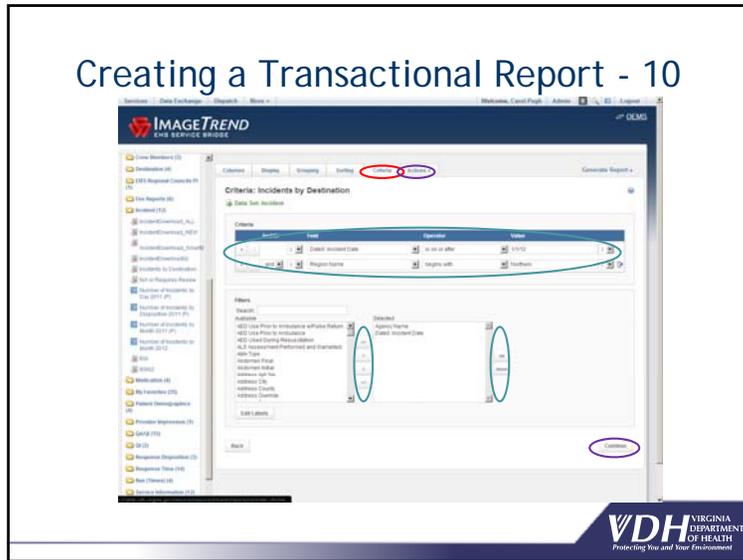


Creating a Transactional Report - 9

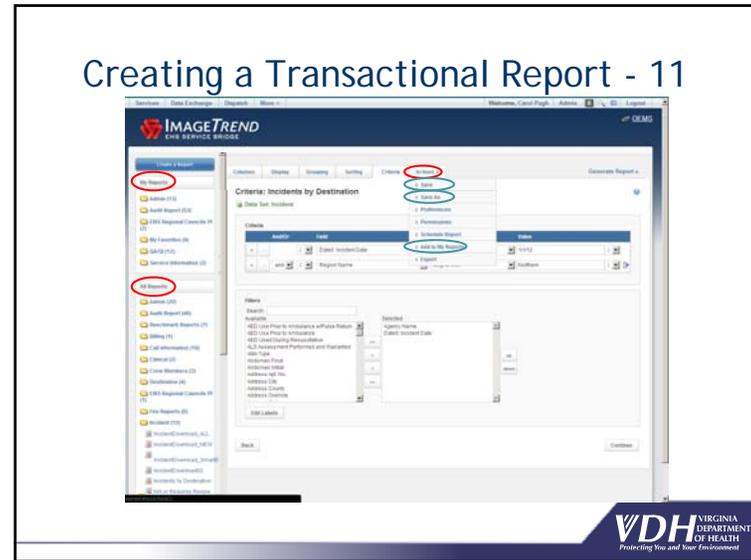


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Creating a Transactional Report - 10



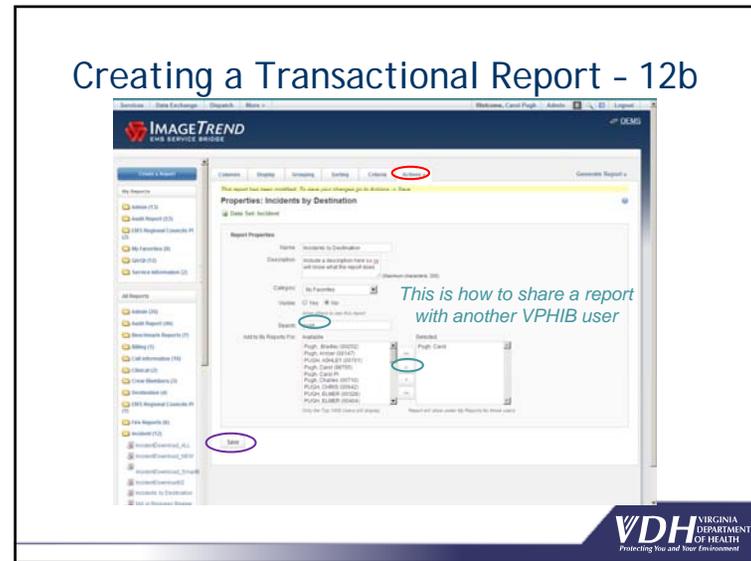
Creating a Transactional Report - 11



Creating a Transactional Report - 12a

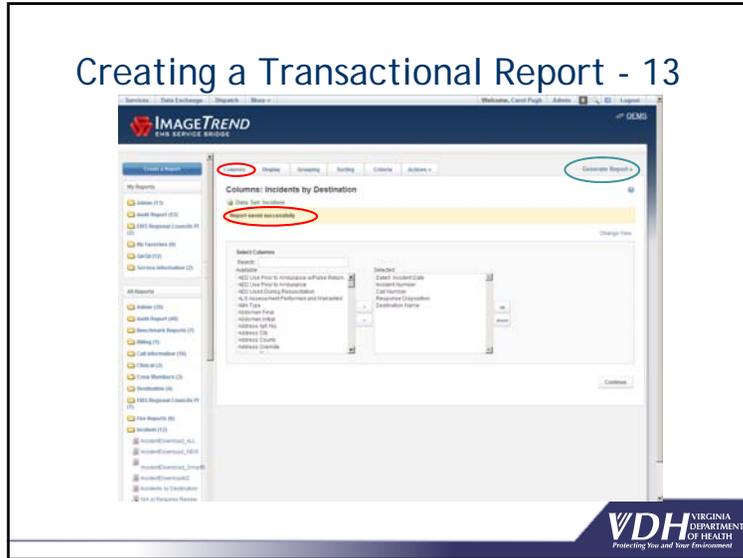


Creating a Transactional Report - 12b

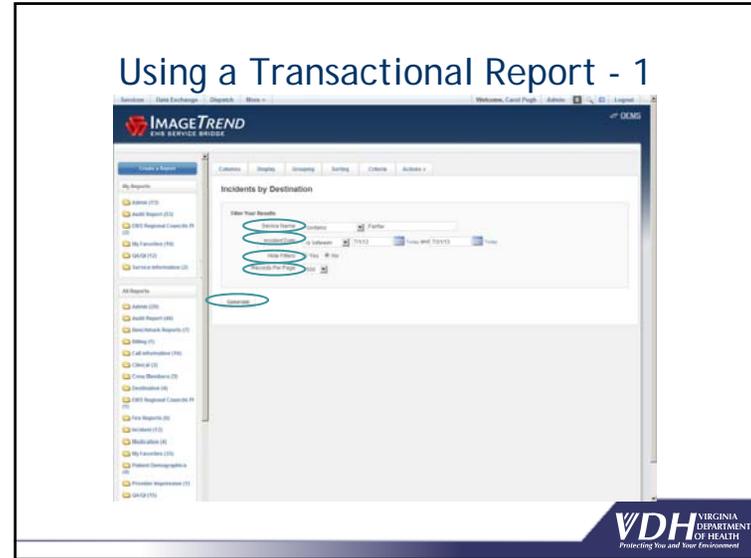


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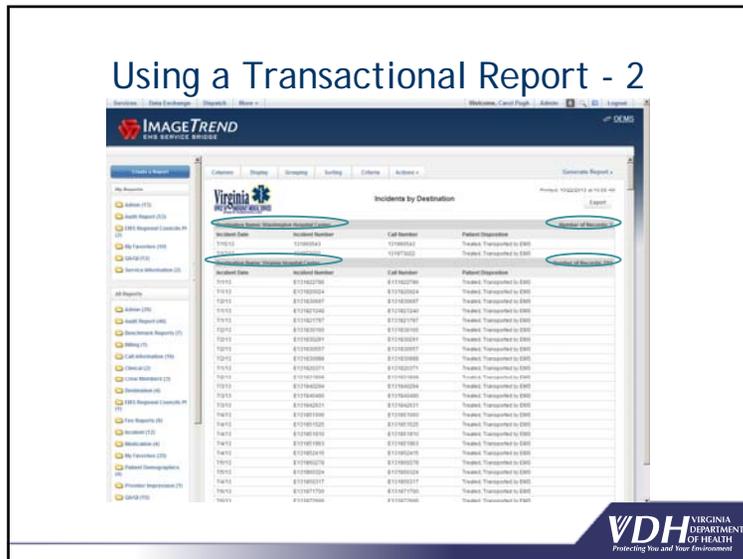
Creating a Transactional Report - 13



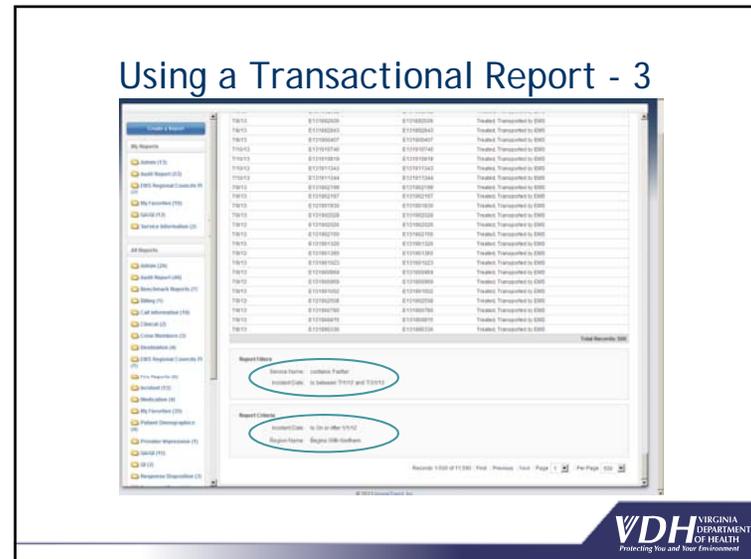
Using a Transactional Report - 1



Using a Transactional Report - 2



Using a Transactional Report - 3

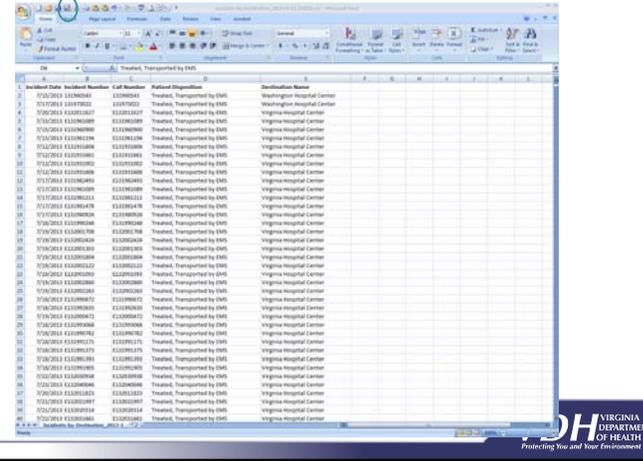


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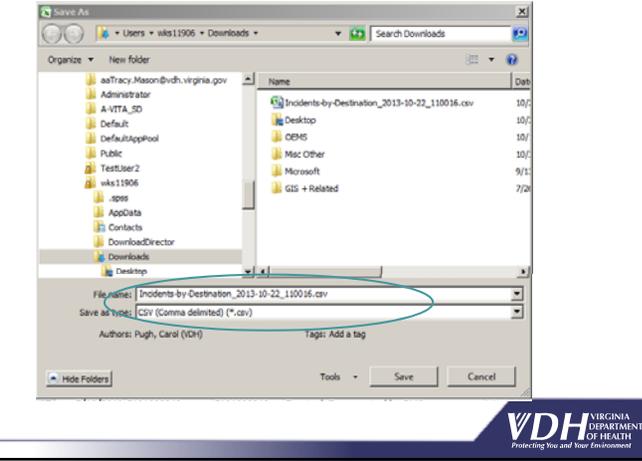
Using a Transactional Report - 4



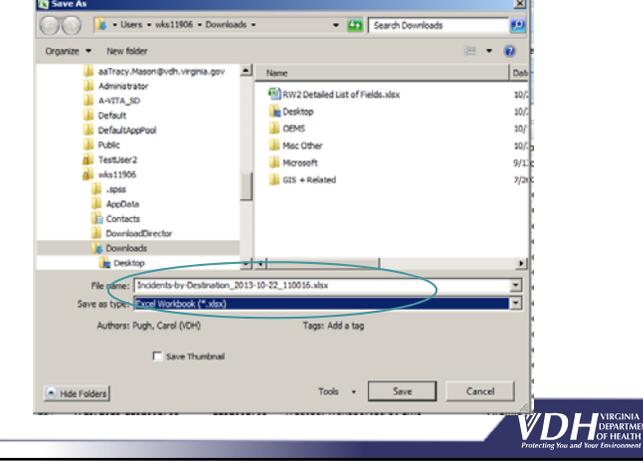
Using a Transactional Report - 5



Using a Transactional Report - 6

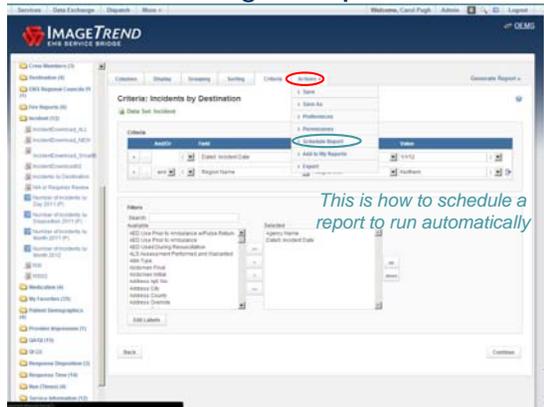


Using a Transactional Report - 7

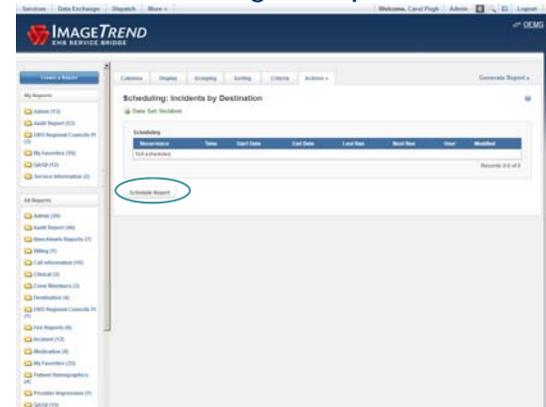


Intermediate/Advanced Reporting Using State Bridge (VPHIB)

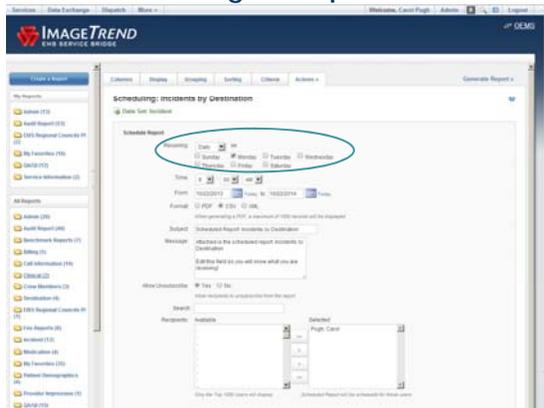
Scheduling a Report - 1



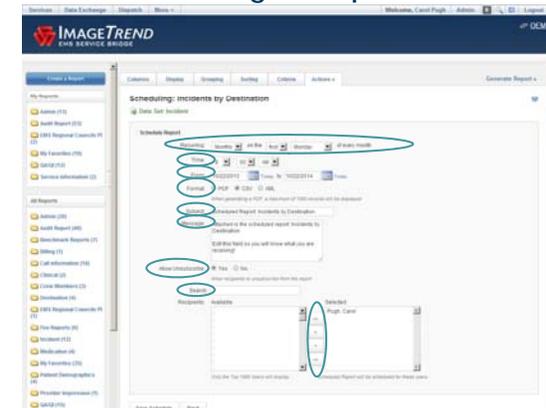
Scheduling a Report - 2



Scheduling a Report - 3



Scheduling a Report - 4



Intermediate/Advanced Reporting Using State Bridge (VPHIB)

Final Thoughts - 1

- Some data items come from *“one to one”* matches with the incident data table
 - Patient demographics
 - Incident characteristics (type of service, patient disposition)
- Other data items come from *“one to many”* matches which can result in unintentional duplicate records
 - Vital signs
 - Procedures (and complications)
 - Medications (and complications)



Final Thoughts - 2

- The interface can be glacial in its speed
 - Best to think of this as a data extraction tool rather than a report writer
 - Use at *“off”* times (evenings, weekends) makes things move more quickly
 - Schedule reports to deliver the data to your Email Inbox



Questions?



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