VINCI Data & Data Services

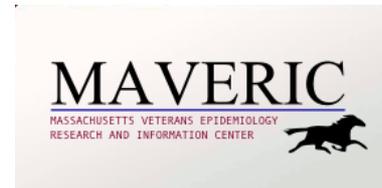HSR&D Cyber Seminar

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- Kevin Malohi, Steve Oostema, Terry Crowe, Elise Gatsby, Lacey Lewis, James Potter, Brian Robison, and Tori Anglin

- Introduction
- **VINCI Data**
- Data Services
- **Data Tools and Resources**
- Q&A Session

What is your role in the VA?

- Research Investigator/PI

- Data Manager, Analyst, or Programmer

- Project Coordinator

- Clinical or Operations Staff

- Other – please describe via the Q&A feature

How many years of experience do you have working with VINCI data?

- Less than 1 year

- 1 year to less than 3 years

- 3 years to less than 5 years

- 5 years to less than 7 years

- 7 years or more

Learning Objectives

- Understanding of available data on VINCI

- Knowledge of Data Services provided and limitations

- Know where to find tools and resources to learn the data

VINCI Data

- **CDW production data** – In/Outpatient, Vitals, ...
- **CDW Raw data** - Oncology
- **SAS based datasets** – MedSAS, Vital Status, ...
- Operations projects

CDW Production Data

- ☐ CDW – Corporate Data Warehouse
- ☐ Vast majority of data come from CPRS
- ☐ Table types:
  - Dimension (Dim)
  - Fact
- ☐ Unique identifiers (SID)
  - SID – Station Identifier (PatientSID, ICD10SID)
  - ICN - PatientICN
- ☐ Updated nightly

Dimensions and NDim Tables

- Dimension data does NOT contain any patient data.
- All dimension tables are accessible to all studies.
- Located in the CDWWork database on all study database servers Contains reference/lookup information, including information about:
  - ICD diagnosis & procedure code numbers/definitions
  - CPT procedure code numbers/definitions
  - Drugs and drug classes
  - Lab tests and specimen types
  - VistA sites / stations, VISNs, and regions
  - All other descriptive information about terms and items used in VA health care.
  - Used to efficiently identify patients for cohorts and to select data.

- NDIM is a schema for any dimension table that is not sourced from a VistA system. Contains data from:
  - Pyramid
  - Active Directory
  - RPCMM

☐ Fact tables, in general, contain patient data.

☐ Fact tables are provisioned to research studies by request.

☐ Most fact table data comes from CPRS.

Allergy

☐ This domain contains allergy and adverse drug reaction information generated by the VA.

☐ The VA GMR allergy package uses additional allergy and adverse drug reaction information provided by the Department of Defense through the Health Data Repository which is not included in this data.

☐ Contains information about causes hypersensitive reactions, including:

- Medications
- Chemicals
- Foods
- Noxious stimuli

☐ Contains information about patient reactions

Allergy cont.

☐ Data tables:

- Allergy.AlergicReaction
- Allergy.AllergicReactionAssessment
- Allergy.Allergy*
- Allergy.AlergyComment
- Allergy.AllergyDrugClass
- Allergy.AllergyDrugIngredient

☐ Dim tables

- Dim.AllergyTerm

Appointment

- ☐ Contains information about appointments, including appointment date, purpose, status, reason cancelled, staff member who cancelled.
- ☐ Data tables:
  - Appt.Appointment
    - Scheduled and historical appointments
    - Station
  - Appt.AppointmentMultiple
    - Sub-appointments for appointments in the Appointment table.
- ☐ Dim tables
  - Dim.AppointmentType
  - Dim.CancellationReason
  - Dim.Eligibility
  - Dim.Location
  - Dim.LocationProvider

Consult

☐ The consult domain contains information about requests for services, including clinical specialty care, procedures, and non- VA care.

☐ Data tables:

- Con.Consult
- Con.ConsultActivity

CPRS Orders

- ☐ Contains Orders and Requisitions made through the Order Entry Option (OR) using any CPRS package.
    - Labs, Radiology (*x-ray, CT, MRI, DEXA scan*), Medications, etc.
- ☐ Data tables:
    - CPRSOrder.CPRSOrder
    - CPRSOrder.OrderAction
    - CPRSOrder.OrderCheckInstance
    - CPRSOrder.OrderCheckMessage
    - CPRSOrder.OrderCheckOverrideReason
    - CPRSOrder.OrderedItem
    - CPRSOrder.OrderIntervention

Dental

☐ Dental Data

- Contains records of dental exams, diagnoses, history, transactions, and procedures, including:
  - Basic hygiene
  - Exams
  - Restorative surgery
  - Orthodontics
  - Periodontics
  - Endodontics
- 29 data/fact tables
- 17 dim tables

Emergency Dept. Int. Software (EDIS)

☐ Data of patients as they were tracked through the Emergency Department.

☐ Data tables:

- EDIS.EDISLog
- EDIS.EDISLogDischargeDiagnosis
- EDIS.EDISLogHistory
- EDIS.EDISOrder

☐ Dim tables

- Dim.EDISRole
- Dim.EDISRoomBed
- Dim.EDISStaff
- Dim.EDISTrackingArea
- Dim.EDISTrackingCode

Health Factors

- ☐ Contains information about over 3,000 different types of factors which affecting the health of specific patients. Common health factors include:
  - • Tobacco use
  - • Alcohol use
  - • Drug use
- ☐ Usage of health factors varies substantially by station.
- ☐ Health factors are often used with clinical reminders.
- ☐ The data goes back to the beginning of FY 2000 (10/1/1999)
- ☐ Data table:
  - • HF.HealthFactor
- ☐ Dim tables
  - • Dim.HealthFactorType

Immunizations

- ☐ Contains records of individual patient immunizations /vaccinations.
- ☐ There are over 52 million immunization records, occupying over 64 GB of data.
- ☐ One data/fact table
- ☐ Records can contain links to outpatient visit records via the VisitSID
- ☐ Data table:
  - • Immun.Immunization
- ☐ Dim tables
  - • None

Inpatient

☐ Generated from Inpatient VistA File: PTF, 45 which contains all PTF information generated from admissions, treating specialty transfers, and PTF screen edits.

☐ Contains records of inpatient admissions/discharges:

- Admissions
- Discharges
- Surgical Procedures
- ICD/CPT Procedures
- Primary, secondary...etc. diagnoses for stay
- Ward location

☐ Primary domain tables

- Inpat.Inpatient
- Inpat.InpatientDiagnosis
- Inpat.InpatientCPTProcedure
- Inpat.InpatientICDProcedure

LAB CHEMISTRY

- Use of the PatientLabChem table is CDW's recommended path to access the LabChem data for most patient analysis projects. This restricts the laboratory results to only those records that refer to human patients and filters out the administrative test, referral test, and research test records.

- Primary domain tables
  - Chem_PatientLabChem
  - Chem_LabPanel
  - Chem_OrderedLabPanel

MCA (FORMERLY DSS)

- MCA data (managerial cost accounting) is found in CDWWork in the DSS schema.

- Helps with analysis of total cost of care and budget impacts

- Inpat, outpat, pharmacy data

MENTAL HEALTH ASSESSMENT

- Contains the data collected during the administration of a specified instrument from the MH TESTS AND SURVEYS file (#601.71) given to a patient at a specific date and time.

- Primary domain tables
  - MH_SurveyAdministration
  - MH_SurveyAnswer
  - MH_SurveyAnswerT

MICROBIOLOGY

- Antibiotic Sensitivity
- Bacteriology
- Extensive documentation available on CDW site

NON-VA MEDS

- This domain contains one fact table, which contains a list of all medications a patient receives from sources other than their local VA. In order to identify the patient and the circumstances associated with the medication, this table should be used in conjunction with Patient.PharmacyPatient in the Patient Pharmacy Domain and Dim.PharmacyOrderableItem found in both the Pharmacy BCMA and Pharmacy Outpatient domains.

OMOP

International Common Data Model

- Standard Vocabularies
- Standardized Data allowing data interchange
  - Condition
  - Procedure
  - Device Exposure
  - Drug – Exposure, Dose, Era
  - Measurement
  - Observation
- OMOP CDM defines table structures for each of the data domains in a Person and Provider-centric model

OUTPATIENT

The Outpatient Visits domain replaced the CDW Encounter domain. Unlike the Enc tables no records are filtered out of Outpat (aside from the normal excluding records before 10/1/1999).

- Contains data from the VistA ENCOUNTER (409.68), VISIT (9000010) and related files.

- Primary domain tables
  – Outpat_Visit
  – Outpat_VDiagnosis
  – Outpat_VProcedure
  – Outpat_ProblemList

PATIENT ASSOCIATED

The Patient Associated domain contains information on self-reported and verified exposure to nasopharyngeal radium treatments during military service. Related details on the associated screenings for nose/throat radium exposure and associated documentation regarding cancer diagnosis of the head and/or neck are available. This domain informs users of the type of training or job where the Veteran could have been exposed to radium and notes whether or not the training or job took place prior to 1965 for submarines or 1955 for pilots.

PATIENT ENROLLMENT

- The data in the Patient Enrollment domain originates in the Veterans Health Information Systems and Technology Architecture (VistA) version of the VA Enrollment data. When a Veteran goes to a VA Medical Center (VAMC) to enroll in VA care, information pertaining to his or her enrollment is stored in the local VistA system and is then sent to the Health Eligibility Center (HEC) for verification. HEC's enrollment data are considered the authoritative source. Therefore, this VistA enrollment data are synchronized with HEC data once a determination is made. A CDW field referred to SourceOfEnrollment indicates whether or not a particular record has been synchronized.

- Contains information such as: enrollment status, dates of enrollment periods, severity of disability, service-connected disability, military discharge status, type and amount of benefits being paid, priority group, etc.

Primary Care Management Module (PCMM)

- Describes the team of providers and their relationship to an assigned patient
  - Provider title, role, FTEE, facility, service section, team purpose, date of assignment and non-assignment

- Primary domain tables
  - PatientProviders
  - PatientTeamAssignment
  - ProviderFTEE
  - ProviderPreceptorRelationship

- PCMM contains data up until the time the station was converted to RPCMM

Reengineered PCMM (RPCMM)

- Incorporates the relationships defined in the third-party system, PCMM Web (PCMMW or PCCMR), that replaces the VistA PCMM domain

- RPCMM is the first Production domain that does not come from VistA. Therefore, no IENs.

- Transitions will be noted in RPCMMVistATransition and the VistA PCMM will be retired
  - 130 stations have transitioned

PCOR v3.1

- National Patient-Centered Clinical Research Network Common Data Model (PCORnet CDM)

- Primary Domain Tables

  – HARVEST: Datamart implementation, data refreshes

  – PATID_Crosswalk: PatientICN, PatientSID, Sta3n to PATID

  – PCORNET_TRIAL: Patient enrolled in PCORnet clinical trials

  – PRO_CM: Patient-Reported Outcomes

Pharmacy Bar Code Medication Administration (BCMA)

- Medication administration process for the inpatient setting
  - Dates and times medication was ordered, delivered, and administered; Details of the medication; Variances or deviations of the administration process; information on PRN drugs

- Primary domain tables
  - BCMAMedicationLog (Parent table)
  - BCMADispensedDrug
  - BCMAAdditive
  - BCMASolution

Pharmacy Outpatient

- All outpatient pharmacy data: administrative pharmacy services and info on patients receiving prescriptions
  - Fill dates, process dates, number of days' supply, refills, renewals
  - Specific information re: anti-psychotic drug Clozapine

- Primary domain tables
  - RxOutpat
  - RxOutpatFill
  - RxOutpatMedInstructions
  - RxOutpatSig

Purchased Care Authorized (Fee)

- Reimbursement of non-VA medical care from an external entity
  - Vendor, reason for visit, dates of service, status of the reimbursement; Amount billed, amount paid, type of payment
  - Patient information such as initial diagnosis, insurance, admission/discharge dates and dispositions

- Primary Domain Tables
  - FeeAuthorization
  - FeeServiceProvided
  - FeeInpatInvoiceICDDiagnosis & FeeInpatInvoiceICDProcedure

Radiology

- Released in production July 2017
- Administrative and Clinical information for radiology exams, orders, reports
  - Rad: fact tables
  - SPatientText: report text, notes, written clinical histories
- Primary domain tables
  - RadiologyExam
  - SPatientText.RadiologyClinicalHistory
  - SPatientText.RadiologyReportText
- File structure will allow storage of imaging data

SPatient & Patient

- All patients followed by medical centers and/or outpatient clinics
  - Demographics such as age, race, ethnicity
  - Sensitive patient data such as names, addresses, Real SSN
  - Military service information such as service-connected disabilities, period of service

- Primary domain tables
  - Patient and SPatient
  - SPatientAddress and SPatientPhone
  - MilitaryServiceEpisode

SStaff & Staff

- Information on staff affiliated with the VA
  - SStaff: Secured Staff PII data including staff SSN
  - Staff: Basic non-PII staff information
- Primary domain tables
  - Staff and Sstaff
  - StaffSub.ProviderTypeAssignment
  - StaffSub.VistaPermission

Surgery PRE, INTRA and POST

- Data extracted from the Surgery package
- Split vertically into three conceptual groupings:
  - Surgery_PRE- surgical case scheduling and preparation
  - Surgery_INTRA – data during a surgical case progression
  - Surgery_POST – post-case data, provider notes, indications for operations, surgically implanted prosthetics
- Each view has surgery case identifier, patient identifier, date & time of the surgery, location, etc.
- Primary domain tables
  - SurgeryPRE, SurgeryINTRA, SurgeryPOST
  - Tables for associated Diagnosis, Procedure, CPT codes

WOMEN'S HEALTH

- The Women's Health domain is a new domain that provides information from the Women's Health VistA files in the 790 range. The information in the domain contains administrative and clinical information pertaining to care for female veterans. Domain Tables:
  - WH.WHLabTest
  - WH.WHNotification
  - WH.WHPapRegimenLog
  - WH.PregnancyLog
  - WH.WHRefusal
  - Patient.WHPatient

VITAL SIGNS

☐ Contains Vital sign data from all sites. Extracted from VistA file:

- GMRV Vital Measurement 120.5

☐ There is no unit of measure with each type of vital. However, it is assumed that Height is measured in inches, weight in pounds, respiration in breaths per minute, pain from 1 to 10 (10 being maximum), pulse in beats per minute, temperature in degrees Fahrenheit, etc. or vital qualifiers which record things like the arm from which the blood pressure was taken.

☐ Domain Table:

- Vital.VitalSign

TIU

☐ Text Integration Utility; TIU contains free text documents such as progress notes and consult reports. TIU notes on VINCI are full text indexed.

☐ This data is extracted from the VistA file: TIU Document (8925).

☐ Domain Table(s) CDW_TIU:

- TIUDocument_8925_02
- TIUStandardTitle_v007

☐ Domain Table CDWWork:

- TIUDocument
- TIUDocument_8925
- TIUIncompleteRecord

TRAVEL

- ☐ Travel domain contains completed travel claim entries for patients showing departure/destination data, as well as specific claim data.
- ☐ This domain contains following

392	beneficiary travel claim	392.3	beneficiary travel account
392.1	beneficiary travel distance	392.31	local vendor
392.1001	division mileage	392.4	beneficiary travel mode of transportation
392.2	beneficiary travel certification	8	eligibility_code

CDW RAW DATA

- Extracted directly from VistA Caché into SQL Server

- Snapshot data

- Same structure (tables names, fields) as source, not modeled

- Data types and column names standardized by VINCI – indexes added

- Updated weekly, monthly, as needed

- Can be joined with production and other data using Sta3n+IEN, PatientSID or ScrSSN

- May move to production over time

BILLS CLAIMS (IB)

☐ [BillClaims] is a CDW-Raw domain and is also known as "IB" (Integrated Billing/Accounts Receivable) after the VistA module of the same name used by CBO (Chief Business Office).

☐ The IB VistA module provides functionality to create first party (patient) and third party (insurance carriers/Medicare) bills.

☐ The Bill Claims domains is a limited* extract of the VistA IB module including the following files (among many others):

```
350    INTEGRATED BILLING ACTION        362.4  IB BILL/CLAIMS PRESCRIPTION
356    CLAIMS TRACKING                  362.5  REFILL IB BILL/CLAIMS PROSTHETICS
361.1  EXPLANATION OF BENEFITS          430    ACCOUNTS RECEIVABLE
399    BILL/CLAIMS                      433    AR TRANSACTION
```

– not necessarily every file in the module is extracted to a corresponding table.

ECHOCARDIOGRAM

☐ Echo domain contains echocardiogram procedures done on a patient.

☐ This does not have Echo Reports. However, some Echocardiogram results are located in the TIU notes

☐ The [Echo] domain is a limited* extract of the following VistA files (among others):

```
691      ECHO              691.09  RISK FACTOR
691.01   MED(CARDIOLOGY    691.15  DIAGNOSIS
691.02   PRE-DX            691.19  ICD DIAGNOSIS
691.04   REGIONAL          691.5   ELECTROCARDIOGRAM (EKG)
691.05   DOPPLER           691.6   HOLTER
691.06   FINDINGS          692.02  EKG
691.08   SYMPTOM           693     MEDICAL DESCRIPTION
```

LEFT VENTRICULAR EJECTION FRACTION (LVEF)

- ☐ This raw domain set contains information on the left ventricular ejection fraction measurement. The total amount of blood in the left ventricle that is pumped out with each heartbeat.

- ☐ The measurement is given in a range value. The LVEF data set separates the lower and upper values of each range that a patient received.

- ☐ The ReportDate is the date of the LVEF measurement.

- ☐ Snippets from the note text is available.

- ☐ The domain tables are found under the VINCI_NLP domain.

FBCS

☐ Fee Basis Claims System (FBCS) is a nationwide system used to improve claims management and adjudication.

☐ This is a Non-VistA extract; it is part of a commercial off-the shelf software package

☐ There are 42 tables under this domain

INPATIENT MEDICATIONS INTRAVENOUS (IV)

☐ [IV] is a CDW-Raw domain and is a limited* extract of the VistA Inpatient Medications - IV module.

☐ Provides pharmacy staff with IV labels, manufacturing worksheets, ward lists for order updates, and management reports. It permits Pharmacy staff to track the manufacture of IV formulas with greater control than manual procedures allow.

☐ Consists of extracts of the following VistA files (among others):

```
50.3    PRIMARY DRUG              52.6   IV ADDITIVES
50.31   APPLICATION               52.7   IV SOLUTIONS
50.606  DOSAGE FORM               55.02  ADDITIVE
51.2    MEDICATION ROUTES         55.04  ACTIVITY LOG
51.23   STANDARD MEDICATION       55.11  SOLUTION
```

– not necessarily every file in the module is extracted to a corresponding table

ONCOLOGY

- [Oncology] is a CDW-Raw domain and is a limited extract of the VistA Oncology module.

- The Oncology module automates the tumor registry and supports tumor registrars in abstracting cancer cases, following up on cancer patients and producing the Hospital Annual Report. The full set of TNM codes is included from the appropriate edition of the AJCC Manual on VistA Monograph 174 October 2013 Staging of Cancer.

- Consists of extracts of the following VistA files (among others):

```
160 ONCOLOGY PATIENT          165.5 ONCOLOGY PRIMARY
160.075 SUSPENSE              165.51 SUBSEQUENT COURSE OF TREATMENT
160.19 FACILITY               165.52 RADIATION TREATMENT
164.18 CHEMOTHERAPEUTIC DRUGS
```

  – More information at :
    https://vaww.cdw.va.gov/bisl/Database/Shared%20Documents/Extractor/Extraction%20%20Oncology.htm

PULMONARY FUNCTION TEST (PFT)

- Patient ID = PatientSID
- 3 Tables
  - Dimension-like table: PFT.pulmonarx_volume_study_700_017 (defining studies)
  - Patient Fact Table: PFT.pulmonary_function_test_700 (patient fact table)
  - Dimension-like table: PFT.pulmonaryxflows study_700_018

PROSTHETICS

- [Prosthetics] is a CDW-Raw domain and is a limited* extract of the VistA Prosthetics module

- The VistA Prosthetics module automates purchasing and enhances patient care by determining what prosthetic services and devices have been provided to the Veteran in the past, and decreasing the time required for the order, delivery, and/or repair of devices. The Prosthetics package provides control and auditing of expenditures and generates management reports.

- Consists of extracts of the following VistA files (among others):

420.5 UNIT OF ISSUE	661.14 SYNONYM
661.1 PROSTHETIC HCPCS	661.2 PROS STOCK ITEM RECORD
661.11 PROSTHETICS HCPCS ITEM MASTER FILE	661.3 PROS ITEM LOCATION
661.12 ITEM	661.31 HCPCS
665 PROSTHETICS PATIENT	

  - More information at : https://vaww.cdw.va.gov/bisl/Database/Shared%20Documents/Extractor/Extraction%20-%20Prosthetics.htm *not necessarily every file in the module is extracted

VETERANS CHOICE PROGRAM ELIGIBILITY (VACAA)

CHOICE Program

- "Access to Care Legislation" allows Veterans to choose healthcare providers within their community

- If Informed by a local VA medical facility that an appointment cannot be scheduled within 30 days

- Lives 40 miles or more from a VA medical facility that has a full-time primary care physician.

- Travel difficulty from medical condition travels by air, boat, or ferry to seek care facility or geographic challenge, or an environmental factor.

- The veteran resides 20 miles or more from a VA medical facility located in Alaska, Hawaii, New Hampshire, or a U.S. territory, except Puerto Rico.

CARE ASSESSMENT NEED (CAN) SCORE

- The Care Assessment Need (CAN) score reflects the estimated probability of hospital admission or death with in a specified time frame of 90 days or 1 year.
- The score is expressed as a percentile, ranging from 0 (lowest risk) to 99 (highest risk) compared to other VA patients
- Data used to generate the score is obtained from VHA administrative databases
- Very accurate for large groups of patients

CLINICAL ASSESSMENT REPORTING & TRACKING (CART)

- Contains Data about Procedures, Complications, Grafts, Labs, Lesions, LVEF, PCI (heart cath), PCI Indication, Catheter data, Stenosis, Stress tests, etc.

- Domain Table(s) VINCI_Raw:

CART.Assessment	CART.LesionTreatment
CART.CalciumTest	CART.LVEF
CART.CATH	CART.Med
CART.CathIndication	CART.PatientCrosswalk
CART.clProcedureCSA	CART.Patient
CART.clProcedureLHC	CART.PCI
CART.clProcedureLVA	CART.PCIIndication
CART.clProcedureRHC	CART.PlannedProcedure
CART.clProcedureTVT	CART.PostProcedure
CART.clProcedureVS	CART.PostProcedureMeds
CART.Complication	CART.PreCathImpression
CART.CTATest	CART.SiteCrosswalk
CART.DataProvenance_TableRelationship	CART.Stenosis
CART.Graft	CART.StressTest
CART.Lab	
CART.Lesion	

- For research data access to the CART data: Write "CART data" on the **CDW Domain Checklist**.

PATIENT ALIGNED CARE TEAM (PACT)

- Creates an index to assess patient-centered medical home model (PCMI) implementation

- Based upon a 2012 observational study using data on more than 5.6 million veterans

- The main outcomes and measures are patient satisfaction, rates of hospitalization and emergency department use, quality of care and staff burnout

- Requires a Data Use Agreement (DUA)

DaVINCI

- ☐ Department of Defense and VA-VINCI data integration
- ☐ Interagency collaboration and resource sharing
- ☐ Military Health System Data and service-related information

Equipment Inventory

- ☐ Found in VINCI_Inventory
- ☐ AEMS_MERS (Automated Engineering Management System Medical Equipment Reporting System)
- ☐ Work Order System and Inventory System
- ☐ Weekly Extract from 134 Sites

SAS Based Datasets

- ☐ Datasets produced in SAS format
- ☐ Updated monthly, quarterly or annually
- ☐ Loaded into SQL Server
- ☐ Merged
- ☐ Indexed
- ☐ Join fields added

HERC

☐ The VA Health Economics Resource Center (HERC) helps VA data users determine the cost of VA care, assess cost-effectiveness, and evaluate the efficiency of VA programs and providers.

☐ VINCI has the following HERC datasets

- HERC Average Cost Data sets include an estimate of the cost of every VA health service. These estimates reflect the expected cost given the nature of the service provided, and do not reflect local differences in cost or efficiency.

- HERC V21 and Nosos are risk scores calculated for all VA patients. The V21 risk scores primarily use patients' diagnoses (ICD-9/ICD-10) codes, age and gender to determine risk. The Nosos scores build on the V21 scores, adding pharmacy records, as well as VA-specific items such as VA priority status and VA-computed costs.

Medical SAS Datasets (MedSAS)

☐ The VHA Medical SAS (MedSAS) Datasets contain national administrative data on patient care encounters for health care provided by VHA.

☐ Inpatient, Outpatient, and Inpatient Encounters Medical SAS datasets are available. Inpatient data are extracted from the Patient Treatment File. Outpatient and Inpatient Encounters data are extracted from the Nation Patient Care Database(NPCD).

☐ Domain Tables:

Inc_PB	Incexc_XM	Incobd_PMO	Inp_PS	Inpnva_NB	Inpobd_PMO
Inc_PM	Incexc_XP	Incobd_PPO	Inpexc_XB	Inpnva_NM	Inpobd_PPO
Inc_PP	Incexc_XS	Inp_PB	Inpexc_XM	Inpnva_NP	Inppce_IE
Inc_PS	Incnva_NM	Inp_PM	Inpexc_XP	Inpnva_NS	Outp_SE
Incexc_XB	Incobd_PBO	Inp_PP	Inpexc_XS	Inpobd_PBO	Outp_SF

PSSG

☐ The PSSG (Planning Systems Support Group) Geocoded Enrollee files are a group of quarterly datasets comprising detailed and extensive geographic information. These data contain one record per enrollee.

☐ VINCI receives SAS files and the data is loaded into SQL server for research access

☐ Currently we do not have access to ADUSH files

VETSNET

- ☐ The Veterans Services Network Corporate Mini Master File (VETSNET File) is an extract of the Veterans Benefits Administration's (VBA) Corporate Database.

- ☐ Data in the file includes:
  - Disability ratings for service connected and non-service connected disabilities
  - Type, amount, and dates of benefits paid
  - Military service branch and entrance and release from active service dates
  - Non-compensation and pension benefits data (i.e. education and burial)

- ☐ VINCI receives SAS files and the data is loaded into SQL server for research access

Vital Status

- ☐ Includes date of death, Medicare yearly enrollment indicators, date of last activity, and Veteran status flags, etc.
- ☐ Transformed and loaded from SAS to SQL Server tables by VINCI
- ☐ Updated quarterly

VASQIP

- ☐ VA Surgical Quality Improvement Program (VASQIP)
- ☐ Surgical Outcome Data
  - • Morbidity and Mortality
- ☐ Data on the quality of processes and structures of surgical care

VINCI Data Services Overview

- Preliminary Consulting & Data Needs Assessment

- Preparatory to Research Access

- Data Access and Security

- VINCI Data Project Types

- Cohort Selection

- External Data

- Getting to know VINCI Central
  - Helpful Resources

Preliminary Consulting & Data Needs

- Consultation with your study team to prepare you for making a DART request

- Query development and to find estimated cohort size

- Multiple simple to moderately complex aggregations provided

- We can assist with determining whether a sufficient sample size is available based off your study criteria
  - For help please contact: VINCI@va.gov
  - New to VINCI

Preparatory to Research Work

- All the services of the Data needs assessment plus more

- Primarily used to check study feasibility

- More complex and thorough aggregations

- Access to your own database in VINCI

- Access to CDW data (CDWWork.Dim tables)

- Use of the VINCI Workspace and all the tools

- Access to individual data records, as needed

Data Access & Security

- Access group created based on IRB and NDS approved research team

- Only research team members will have access to the data

- Data stored on the secure VINCI servers or downloaded to local VA server (pending approval)

- Regular data backup and archiving

- Project work can be performed in VINCI

- Export final results & publication

VINCI Data Projects & Storage Types

- **VINCI Workspace**
  - All work is done within the secure VINCI workspace
  - Study is able to use VINCI supplied software for their analysis work
  - All data backed up and secured by VINCI
  - Data can be moved in and out of secure workspace with the VINCI Upload/Download Tools
    - Approval required
    - Fully audited
- **Local VA Server Location/ Development Workspace**
  - Data is placed in a SQL Server database on a server OUTSIDE of the VINCI workspace, so that the data may be downloaded to a local server
  - Snap shot/ Read- only database
  - Study must have locally installed tools to download the data and do analysis (SSMS, SAS, etc.)
  - Large datasets take time to download
- **VINCI Download**
  - Combination of VINCI Workspace and local VA Server

Cohort Selection

- Research study team receives project approval from NDS
- Data access group created including research study team participants
- Research study team receives alerts that the correspondence site has been created
- Study team either sends cohort or cohort specifications to VINCI Data Managers
- VINCI data managers can assist in creating one, if the study does not have a cohort, Research Study Team provides specific criteria (Inclusion and exclusion filters)
- Alternatively, the research team can create cohort within VINCI
  - VINCI provides access to data necessary for cohort selection
  - Research Study Team completes additional cohort selection work

Data Extraction Process Overview

- Research study team receives project approval from NDS
- Data access group created including research study team participants
  - Used for granting access to data & workspace
- Research study team receives alerts that the correspondence site has been created
  - All communication should take place on the correspondence site
  - Correspondence site message are automatically sent to participants VA email
- Study team either sends cohort or cohort specifications to VINCI Data Managers
  - Cohort specifications may be uploaded to correspondence site as long as it doesn't contain PI/PHI
  - If cohort contains PI/PHI it must be uploaded through secure upload site created by VINCI Data Manager
- VINCI Data Manager joins the cohort to the relevant domains and extracts data to the study's database
  - Data is presented via Cohort tables and views (fact tables)
- VINCI Data Manager notifies study via correspondence site that the extraction is complete

External Data

- Research Study Team may upload other data for analysis into project database or workspace

- Secure data upload process

- Optional direct database

- VINCI data mangers work on behalf of research team to upload data from other data providers

Getting to know VINCI Central

- **Quick Links**
  - Meta Data Viewer- search matching schemas, tables/views

- **Applications**
  - Dim Data Viewer- allows you to search all of the DIM tables within CDW database

- **User Guides**
  - User guides, software, OMOP, and SAS

- **Data Sources**
  - Lists data sources, link to CDW Domain Page, and VIReC's Documentation

HELPFUL SOURCES

- ## VHA Data Portal
  - "One Stop Shop for Data Users' Needs", links, relevant resources for data needs, information from multiple sources to single location

- ## VIReC
  - VA Information Resource Center is a key source of data knowledge & guidance regarding VA data & information systems

- ## CDW & BISL
  - Provides CDW Support, Metadata, Training, and external links that are helpful when getting started to use CDW data

- ## Listserv
  - Connect to community of VA researchers through VA email. Exchange info, ideas, questions, etc.

- ## SQL Script for Information search- useful to narrow down tables/views of interest

  USE [CDWWork] -- Or database of interest

  GO

  SELECT * FROM INFORMATION_SCHEMA.TABLES

  Where

  TABLE_SCHEMA like '%Inpat%' --search schema names for mentions of key terms of interest

  --TABLE_NAME LIKE '%Inpat%'   --search table names for mentions of key terms of interest

CONTACT INFORMATION

VINCI Help Desk:
VINCI@va.gov

VINCI Central Web site:
https://vaww.vinci.med.va.gov/VinciCentral/VU/Video

Bill Claims

https://vaww.cdw.va.gov/bisl/Database/Shared%20Documents/Extractor/Extraction%20%20Bill%20Claims%20(CBO).htm

CDW Business Intelligence Service Line

https://vaww.cdw.va.gov/Pages/CDWHome.aspx

CliniComp

https://vaww.cdw.va.gov/bisl/Database/Shared%20Documents/Extractor/Extraction%20-%20CliniComp.htm

DaVINCI

https://vaww.vinci.med.va.gov/VinciCentral//DataSources/Index

Dim Data Viewer

https://vaww.vinci.med.va.gov/webapps/dimdataviewer

Domain Descriptions

http://vaww.virec.research.va.gov/CDW/Domain-Descriptions/CDW-Domain-Descriptions.pdf

Echocardiogram

https://vaww.cdw.va.gov/bisl/Database/Shared%20Documents/Ext ractor/Extraction%20-%20Echocardiogram.htm

Equipment Inventory

https://vaww.cdw.va.gov/bisl/Database/Shared%20Documents/Extractor/Extraction%20-%20Equipment%20Inventory.htm

FBCS

https://vaww.cdw.va.gov/bisl/Database/Shared%20Documents/Extractor/Extraction%20%20FBCS.htm

Inpatient Medications Intravenous (IV)

https://vaww.cdw.va.gov/bisl/Database/Shared%20Documents/Extractor/Extraction%20%20Intravenous%20Meds%20(IV).htm

HERC

http://vaww.vhadataportal.med.va.gov/DataSources/HERCCostData.aspx#AverageCostData

HSR&D ListServ

http://vaww.listserv.va.gov/scripts/wa.exe?A0=HSRDATA-L

MedSAS

http://vaww.virec.research.va.gov/MedSAS/Overview.htm

Metadata Documents

https://vaww.cdw.va.gov/metadata/Metadata%20Documents/Forms/AllItems.aspx

Meta Data Viewer

https://vaww.vinci.med.va.gov/webapps/metadataviewer

Oncology

https://vaww.cdw.va.gov/bisl/Database/Shared%20Documents/Extractor/Extraction%20-%20Oncology.htm

Patient Aligned Care Team (PACT)

http://vaww.vhadataportal.med.va.gov/DataSources/PACTImplementationIndex(Pi2).aspx

PCORnet CDM

http://pcornet.org/pcornet-common-data-model/

Planning Systems Support Group (PSSG)

http://vaww.vhadataportal.med.va.gov/DataSources/PSSGGeocodedEnrolleeFiles.aspx

Prosthetics Extracts

https://vaww.cdw.va.gov/bisl/Database/Shared%20Documents/Extractor/Extraction%20-%20Prosthetics.htm

VASQIP

https://vaww.nso.med.va.gov/apps/VASQIP/SitePages/VasqipDescription.aspx

Veterans Choice Program Eligibility

https://vaww.cdw.va.gov/bisl/Database/Shared%20Documents/Extractor/Extraction%20-%20VACAA%20Veterans%20Choice%20Program%20Eligibility.htm

RESOURCES AND TOOLS (CONT)

VETSNET

http://vaww.vhadataportal.med.va.gov/DataSources/VETSNET.aspx

VHA Data Portal

http://vaww.vhadataportal.med.va.gov/Home.aspx

VIReC

http://vaww.virec.research.va.gov/

Vital Status File

http://vaww.vhadataportal.med.va.gov/DataSources/VitalStatusFile.aspx

http://vaww.virec.research.va.gov/VSF/Overview.htm

VINCI Central Home Page

https://vaww.vinci.med.va.gov/VinciCentral/Home/Index

VINCI Central Quick Links

https://vaww.vinci.med.va.gov/VinciCentral/QuickLinks/Index

 VINCI Data Sources

https://vaww.vinci.med.va.gov/VinciCentral/DataSources/Index