VINCI Data & Data Services

HSR&D Cyber Seminar

July 13, 2017

VA Informatics and Computing Infrastructure

VINCI

- Data
- Services
- Computing environment

VINCI

- Data
- Services
  - Data services
  - Other services
- Computing environment

Agenda

- VINCI Data

- VINCI Data Services

- Questions

VINCI Data

- **CDW production data** – Inpatient, Outpatient, Vitals, Pharmacy, Lab, …

- **CDW Raw data** – Echo, Radiology, Oncology, …

- **SAS based datasets** – MedSAS, Vital Status, …

- **Operations projects data** – OMOP, MVP, …

CDW Production Data

- Data warehouse modeled data
- Fact and dimension tables
- Extracted through CDW's journaling process from shadow servers
- Unique CDW identifiers (SID)
- Indexed and partitioned for fast queries
- Updated nightly
- Documentation at:
  - https://vaww.cdw.va.gov/metadata/default.aspx#
  - http://vaww.virec.research.va.gov/CDW/Documentation.htm

VINCI

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
  - Foods
  - Chemicals
  - Noxious stimuli

- Contains information about patient reactions.

Appointment

- Contains information about appointments, including appointment date, purpose, status, reason cancelled, staff member who cancelled.

- Data tables:
  - Appointment
    Scheduled and historical appointments
  - AppointmentMultiple
    Sub-appointments for appointments in the Appointment table.

- Dim tables
  - Dim.AppointmentType
  - Dim.CancellationReason
  - Dim.Eligibility
  - Dim.Location

Consult

- The consult domain contains information about requests for services, including clinical specialty care, procedures, and non-VA care. It stores records of each request for consultation along with its progress and any services, stop codes, or specialties associated with the request.

CPRS Orders

- Contains Orders and Requisitions made through the Order Entry Option (OR) using any CPRS package.

- Tables
  - One data/fact table: CPRSOrder
  - Eight or more dim tables.

Dental

- **Dental**
  - Contains records of dental exams, diagnoses, history, transactions, and procedures, including:
    - Basic hygiene
    - Restorative surgery
    - Orthodontics
    - Periodontics
    - Endodontics
  - 24 data/fact tables
  - Four dim tables

- **Dental Analytics**
  - Contains records of treatments and treatment plans.
  - Five data/fact tables
  - 12 dim tables

Dimensions and NDim

- 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 codes and CPT procedure codes
    - 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.
- Enables quick and efficient identification of the items to use to select patients for cohorts and to select data with.
- NDIM is a schema for any dimension table that is not sourced from a VistA system. Contains data from:
    - Pyramid
    - Active Directory
    - RPCMM

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 from site to site.
- Health factors are often used with clinical reminders.
- There are over 485 million health factor records, occupying over 64 GB of data.
- The data goes back to the beginning of FY 2000 (10/1/1999)
- One data/fact table and one dim table

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

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.

- 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

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_SurveyAnswerText
  - MH_SurveyResult

Microbiology

- AntibioticSensitivity
- 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.

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.

PCMM

- Contains the relationship between a single patient and one or two providers for a date duration.

- Primary domain tables
  - PCMM_PatientProviders
  - PCMM_PatientTeamAssignment
  - PCMM_ProviderFTEE
  - PCMM_ProviderPreceptorRelationship

RPCMM

- This domain incorporates the relationships defined in the third-party system, PCMM Web (PCMMW or PCCMR), that replaces the VistA PCMM domain. As stations become activated in RPCMM, the transition will be noted in RPCMM.RPCMMVistATransition and the VistA PCMM will be retired.

- Note: Only the 4 IOC Sites (585, 614, 648, and 691) will have any data. All other regions/VDWs will have table/view structures but no data content.

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

Pharmacy BCMA

- This domain describes the medication administration process in VA's combined inpatient settings.

- BCMAMedicationLog and its children: BCMADispensedDrug, BCMAAdditive, and BCMASolution describe medications that were scanned and attempted to be administered to inpatients.

- Primary domain tables
  - BCMA_BCMAMedicationLog
  - BCMA_BCMADispensedDrug
  - BCMA_BCMAAdditive
  - BCMA_BCMASolution

Pharmacy Outpatient

- Contains all Outpatient pharmacy data including prescription, refills, dosage, units and instructions to patients on taking medications.

- This data is extracted from the VistA file: PRESCRIPTION (52). It will easily be the largest pharmacy file in time and is pointed to very heavily.

- Domain Table(s)
    - RxOutpat
    - RxOutpatFill
    - RxOutpatMedInstructions
    - RxOutpatSig

Purchased Care (Fee)

- Purchased Care contains data regarding the prices of medical care that the VHA pays some external entity to perform.

- This domain collects data from VistA Files: Purchased Care (Fee) 161 and 162.

- Domain Table(s)

FeeAuthorization	FeeInpatInvoiceICDDiagnosis
FeeAuthorizationRemarks	FeeInpatInvoiceICDProcedure
FeeAuthorizationRequest	FeeNotificationRequest
FeeBatch	FeePharmacyInvoice
FeeCHReportOfContact	FeePrescription
FeeCPTModifier	FeeServiceProvided
FeeInitialTreatment	FeeTravelPayment
FeeInpatInvoice	FeeUnauthorizedClaim

Spatient & Patient

- Contains sensitive patient data such as SSN, names, addresses
- Collects data from VistA File: Patient 2
- Domain Table(s)
  - LabReferralPatient
  - LabResearchSubject
  - SPatient
  - SPatientAddress
  - VISNPatient

Sstaff & Staff

- Contains secured Staff PII data including staff SSN. Data gathered from VistA File: New Person 200
- Basic non PII staff information is under Staff Domain
- Domain Table(s)
  - SFeeCHReportOfContact
  - SFeeServiceProvided
  - SFeeVendor
  - SStaff

Surgery PRE, INTRA and POST

■ The Surgery domain centers around data extracted from the Surgery package and stored in VistA file 130, split vertically into four conceptual groupings. The conceptual groupings are:

- SurgeryPRE- contains data relevant to surgical case scheduling and preparation

- SurgeryINTRA – contains data captured during a surgical case progress

- SurgeryPOST – contains post-case data, provider notes, indications for operations, and information on surgically implanted prosthetics.

- SurgeryQIP (developing) – contains data captured as part of the VA's Surgical Quality Improvement Program

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. There is also a view, Dim.RadiologyDiagnosticCode from VistA file

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:
  - 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)
  - TIUDocument
  - TIUDocument_8925_02
  - TIUIncompleteRecord

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

VINCI

Bill 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 REFILL
356    CLAIMS TRACKING                  362.5  IB BILL/CLAIMS PROSTHETICS
361.1  EXPLANATION OF BENEFITS          430    ACCOUNTS RECEIVABLE
399    BILL/CLAIMS                      433    AR TRANSACTION
```

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

- *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 MEDICATION)         691.15 DIAGNOSIS
691.02 PRE-DX                             691.19 ICD DIAGNOSIS
691.04 REGIONAL WALL MOTION               691.5  ELECTROCARDIOGRAM (EKG)
691.05 DOPPLER                            691.6  HOLTER
691.06 FINDINGS                           692.02 EKG
691.08 SYMPTOM                            693    MEDICAL DESCRIPTION
```

- More information at :

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

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

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

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 ROUTES        55.11  SOLUTION
```

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

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

Inpatient Medications Unit Dose (UD)

- [RxUD] is a CDW-Raw domain and is a limited* extract of the VistA Inpatient Medications – Unit Dose module.

- Provides staff with a standard computerized system for dispensing and managing inpatient medications. Timely, accurate, accessible, and up-to-date patient medication information is available from any terminal within the facility. Computer-generated working forms allow personnel to dedicate more time to patient care.

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

```
53.3    ACTIVITY LOG REASON        55.07    DISPENSE DRUG
55.06   UNIT DOSE                  55.08    COMMENTS
55.0611 DISPENSE LOG               55.6114  LAST RENEW
55.0612 PROVIDER COMMENTS
```

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

*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

PFT

- Pulmonary Function Test is a CDW-Raw domain and is a limited extract of the PFTs performed on the patient.

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

- 700   PULMONARY FUNCTION TESTS

- 700.017   VOLUME STUDY

- 700.018   FLOWS STUDY

- More information at :
https://vaww.cdw.va.gov/bisl/Database/Shared%20Documents/Extractor/Extraction%20-%20PFT.htm#_Toc368658352

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

Radiology

- VINCI Radiology contains links to report text and impression text but no images are stored.

- Largest Raw domain; 41 tables

- Radiology reports full-text indexed

- Data in this domain includes
  - Patient demographics that are imaging related
  - Registered exam information
  - Imaging order entered, clinical history, report and impression and any procedures that may be associated with an imaging exam

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

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		

- More information at :
https://vaww.cdw.va.gov/bisl/Database/Shared%20Documents/Extractor/Extraction%20-%20Beneficiary%20Travel%20(CBO).htm

VACAA

- VACAA – Veterans Choice Program Eligibility is a NON-VistA data coming from a single source database in Orlando.

- VACAA is part of the "Access to Care legislation" that allows Veterans to receive health care within their community.

- VACAA domain contains Patient eligibility, wait time information, geocoded addresses and distance to the nearest VAMC

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

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 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.

- More information at :
  http://vaww.vhadataportal.med.va.gov/DataSources/HERCCostData.aspx#AverageCostData

Managerial Cost Accounting (Formerly Decision Support System(DSS))

- VA's Managerial Cost Accounting (MCA) System (formerly Decision Support System or DSS) contains fiscal data and clinical information. MCA (formerly DSS) National Data Extracts (NDEs) data originates from various site-level MCA databases and subsystems. NDEs provide clinical and financial information at the patient level.

- MCA NDEs from fiscal year (FY) 2005 through the current year are now in the Corporate Data Warehouse (CDW) in SQL tables

- Partial list of table(s):

ALBCC	ECS	OIPD	SUA
ALBHR	lab	OUT	SUR
ATTEND	Lar	OUT2	TRT
CHAR4	NOSHOW	PHA	TRTIPD
DDC	OBT	RAD	WARD
DISCH	OCRED	RAI	

- More information at: http://vaww.dss.med.va.gov/index.asp

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

- More Info at:
http://vaww.virec.research.va.gov/MedSAS/Overview.htm

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

■ More information at :
http://vaww.vhadataportal.med.va.gov/DataSources/PSSGGeocodedEnrolleeFiles.aspx

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

- More information at :
  http://vaww.vhadataportal.med.va.gov/DataSources/VETSNET.aspx

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

Operations Projects Data

- Derived from CDW and other data sources
- Targeted for specific needs
- Some used by applications

OMOP/PCOR

■ OMOP combines numerous CDW tables and overlays those tables into an internationally accepted data model with commonly used vocabularies like SNOWMED, LOINC, and RxNorm.

■ Contains information such as:
- Condition
- Procedure
- Device Exposure
- Drug – Exposure, Dose, Era
- Measurement
- Specimen
- Observation
- Visit

My HealtheVet (MHV)

- My HealtheVet (MHV) is a web-based application that creates a new, online environment where Veterans, family, and clinicians may come together to optimize Veterans' health care. It combines essential health record information enhanced by online health resources to enable and encourage patient/clinician collaboration.

- The My HealtheVet Secure Messaging (MHV-SM) data mart resides within the Department of Veterans Affairs (VA) Corporate Data Warehouse (CDW) environment, and contains data extracted from MHV as well as related data elements extracted from the CDW (originally extracted from the Veterans Information System and Technology Architecture [VistA]).

- Documentation preparation is in progress

Care Assessment Need (CAN) Scores

- The Care Assessment Need (CAN) score reflects the estimated probability of hospital admission or death with in a specified time frame (90 days (or 1 year).

- Data used to generate the score is obtained from VHA administrative databases including the Corporate Data Warehouse (CDW) for outpatient and the National Patient Care Database (NPCD) for inpatient.

- Domain table(s)
  - weekly_report_V2_0
  - weekly_report_V2_0_history

- More information under "Other Data sources" at : https://vaww.vinci.med.va.gov/VinciCentral/DataSources/Index

Clinical Assessment Reporting and Tracking(CART)

- 30 tables
- Not well documented yet
- More information to come from the CART team soon

Patient Aligned Care Team(PACT)

- 1 table

- Description of the data & users guide:
http://vaww.vhadataportal.med.va.gov/DataSources/PACTImplementationIndex(Pi2).aspx

VINCI Data Services

- Preliminary Consulting & Data Needs Assessment
- Preparatory to Research Access
- VINCI Data Project Types
- Cohort Selection
- Data Access and Security
- External Data

Preliminary Consulting & Data Needs Assessment

- 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 for your study
- Contact: vinci@va.gov

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
- Your own work database in VINCI
- Access to CDW data
- Use of the VINCI Workspace and all the tools
- Access to individual data records, as needed

VINCI

VINCI Data Project 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 the secure workspace with the VINCI Upload and Download tools.
    - Approval required
    - Fully audited

- **Download**
  - 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.
  - The study's database is read-only
  - 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 CDW Extract

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 takes place on the Correspondence Site
  - Correspondence site messages are also sent to study participant's VA email
  - Correspondence Site is easy to use
- Study team either sends cohort or cohort specification to the VINCI Data Managers.
  - Cohort specification may be uploaded to the correspondence site since it contains no PI/PHI
  - Cohort must be uploaded to a secure upload site created by the 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 tables (cohort) and views (fact tables)
- VINCI Data Manager notifies study via correspondence site that the extraction is complete

Cohort Selection

- VINCI data managers can assist in creating one, if the study does not have a cohort, Research Study Team provides specific criteria (inclusion, 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 Access & Security

- Access groups created based on IRB and NDS approved research team
- Only research team members have access to the data
- Data stored on secure VINCI servers
- Regular data backup and archiving
- Project work can be performed in VINCI
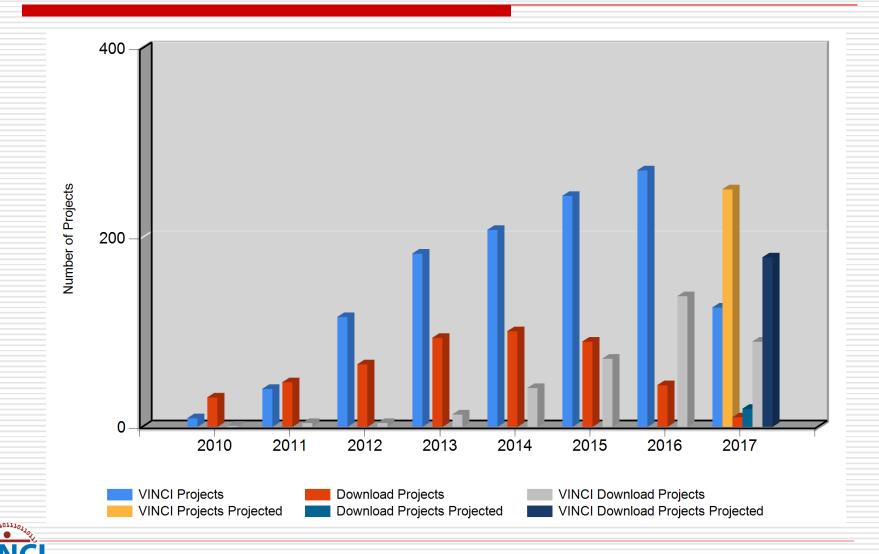- Export final result & publication

External Data

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

- Secure data upload process

- Optional direct database upload

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

VINCI Data Services
Data projects growth over time

Useful Links

- [VINCI Central site](#)

- [VHA Data Portal](#)

- [VIReC](#)

- [BISL - CDW Home](#)
  - [Metadata Report page](#)
  - [Support](#)
  - [Raw](#)

Questions?

Have questions?/Need help? Send email to: vinci@va.gov

VINCI Web site: https://vaww.vinci.med.va.gov/vincicentral/

Contact Information: Hamid Saoudian – hamid.saoudian@va.gov