EHR Database Reporting Series

v11 Order and Result

September 2012

Welcome

- **Reporting Best Practices**

- **v11 Result Data Tables**

- **v11 Order Data Tables**

- **v11 Order and Result Build/Configuration Tables**

- **Q&A – Chat and Live**

Be Careful

- **The Allscripts database is Complex**

- **You can do harm, even by just running queries**

- **You may not have access due to your organization's IT policies**

What To Do

- **Keep it simple**
  - Create complex queries by combining simple queries together

- **Use TEST**
  - Or, your organization's Data Warehouse, if you have one
  - If you run anything in production, make sure:
    - You have the permission of the IT/DBA group
    - You follow your organization's change management process
    - It is run off-hours
    - It runs quickly
      - Even complex queries should be less than a minute
    - Use (NOLOCK) table hints

What To Do

- Avoid performance problems by running queries off hours
    - Queries are one common cause of performance issues reported to Allscripts
- Verify the accuracy of the output
- Get proper approval to access the database

What NOT To Do

- – Delete data. Ever.
- – Share passwords with others, even "defaults" like IDXAdmin
- – Save patient data on your PC or in email
  - • HIPAA concerns
  - • Your company's policies

IT/DBA Recommendations

- **Create separate users in SQL for each person accessing the database**

- **Create a reporting environment**

  – A copy of production, or

  – Use an ETL process, or

  – Use SQL Server Replication

- **Limit access to read-only**

  – http://wiki.galenhealthcare.com/**Reporting_Database_User_Permissions**

Common Result Data Tables

- **Act_Hdr_Result**
  - Header table for Orderable info – Accession Number, Ordering Provider

- **Act_Result**
  - Detail table for Orderable info - Encounter link, Annotations link, Orderable

- **Item_Result**
  - Header table for Resultable info – Resultable (and Orderable)

- **Result**
  - Detail table for Resultable info – most info may be found here – Result Values, Reference Range, Collected/Examined/Clinical Date, Stage, Where Performed, etc

Common Order Data Tables

- **Order_Activity_Header**
  - Common record for Order data – look for ActivityHeaderID in many Order-related tables
- **Order_Activity**
  - Order Number, Status, Ordering/Approving Providers
- **Order_Item_Common**
  - Order Instructions, Req. Perf. Location, To Be Done (Requested) Date, Charge Info
- **Item_Plan**
  - Link to Plan_Item details. Used less in v11.
- **Plan_Item**
  - Patient Instructions, Performing Loc. Comments, Label Info
- **Encounter_ItemChild**
  - Link to Encounter
- **Plan_Item_Order**
  - Link to Requisition and Specimen Label info
- **Order_Result_Mapper**
  - Link to related Result Activity record

Common Order/Result Build Tables

- **QO_Classification_DE**
  - Primary Orderable Dictionary Info

- **QO_DE**
  - Primary Resultable Dictionary Info

- **QO_Class_QO**
  - Orderable-Resultable Link, including Order of Display

- **Order_Defaults**
  - Extended Orderable Dictionary Configuration

- **Order_Item_Identifier**
  - Requested Performing Location Identifiers

- **Req_Perf_Location_DE**
  - Requested Performing Location

Reference Information

- **SQL Views**
  - Created for this session
  - Will help apply what you saw today
  - **vGHSResult -** Common Result Data
  - **vGHSOrder -** Common Order Data
  - **vGHSPatient -** Common Patient Data, from our May webcast

Lookup Tables and Normalization

- **Q: Why do I have to query 10 tables to get the info I need?**

- **A: Database Normalization**

  - Required for the application to run effectively

  - Yes, it makes reporting more difficult

  - http://en.wikipedia.org/wiki/Database_normalization

- **Data Warehouses, e.g. Allscripts ETL**

Summary
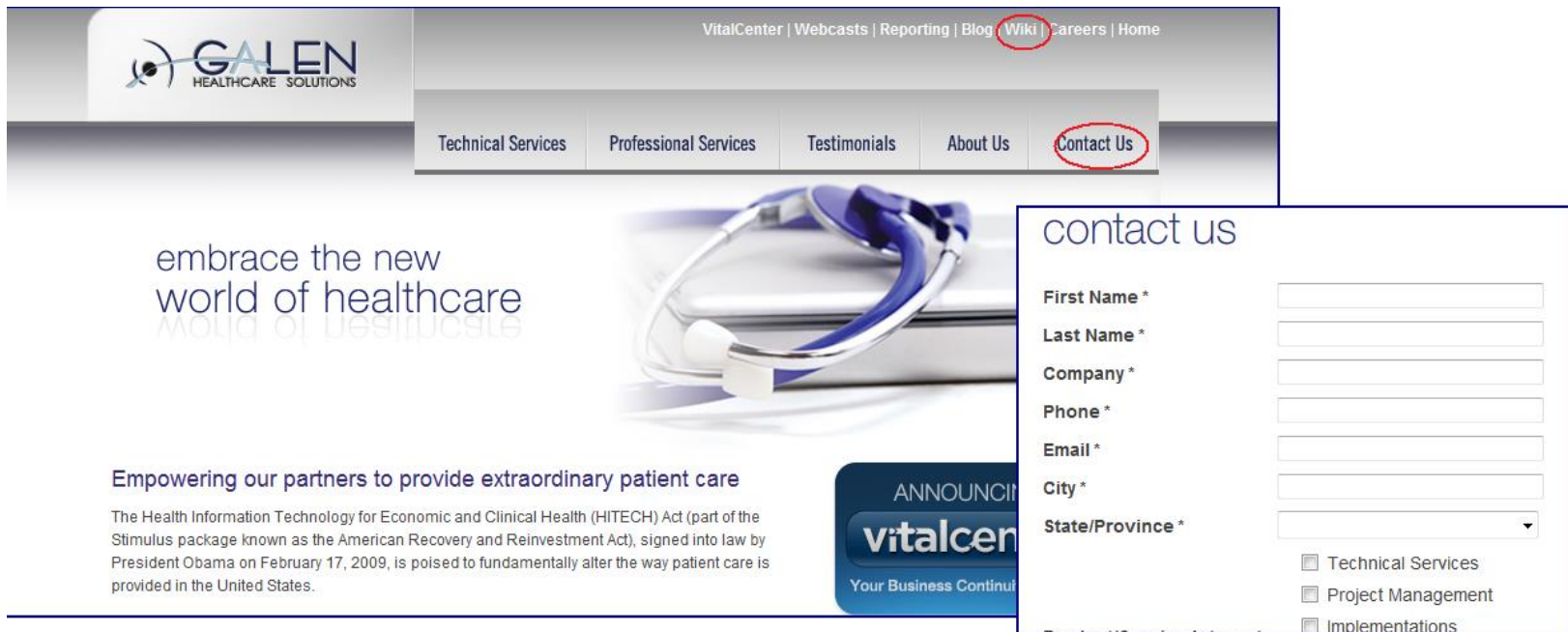
- **Get Permission**

- **Use Non-Production Environment to Validate**

- **Run Production Queries During Off Hours**

- **Result Data**

- **Order Data**

- **Order/Result Build**

Galen Reporting Offerings

- **Custom Reports**
- **Custom Print Forms**
- **ETL and Analytics Reporting**
- **Training**
  - Allscripts DB
  - ETL DB
  - Analytics
  - Advanced Interface/ConnectR

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Thank you for joining us today, for additional assistance….

You can contact us through our website at

www.galenhealthcare.com