

## EHR Database Reporting Series

Enterprise EHR Results Data

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## Welcome

- Reporting Best Practices
- Result Data Tables
- Querying for Results
- Q&A – Chat and Live

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## 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

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## 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

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## 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

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## 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

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## 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

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## Common 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
- **Where\_Performed\_DE**
  - Facility where test performed

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## Result View

- **vGHSResult**
  - Created for this session
  - Common Result data
  - Complexity
    - 25 tables and views linked
    - Knowing what to exclude – IsInactiveFLAG on the Person table

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## Summary

- **Get Permission**
- **Use Non-Production Environment to Validate**
- **Run Production Queries During Off Hours**
- **Result Data**
- **Result Build**

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## 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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## 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](http://en.wikipedia.org/wiki/Database_normalization)
- **Data Warehouses, e.g. Allscripts ETL**

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## 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](http://wiki.galenhealthcare.com/Reporting_Database_User_Permissions)

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

You can contact us through our website at  
[www.galenhealthcare.com](http://www.galenhealthcare.com)

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