

The Society for Clinical Trials 34th Annual Meeting

Minimizing Reconciliation between Safety and Clinical Databases

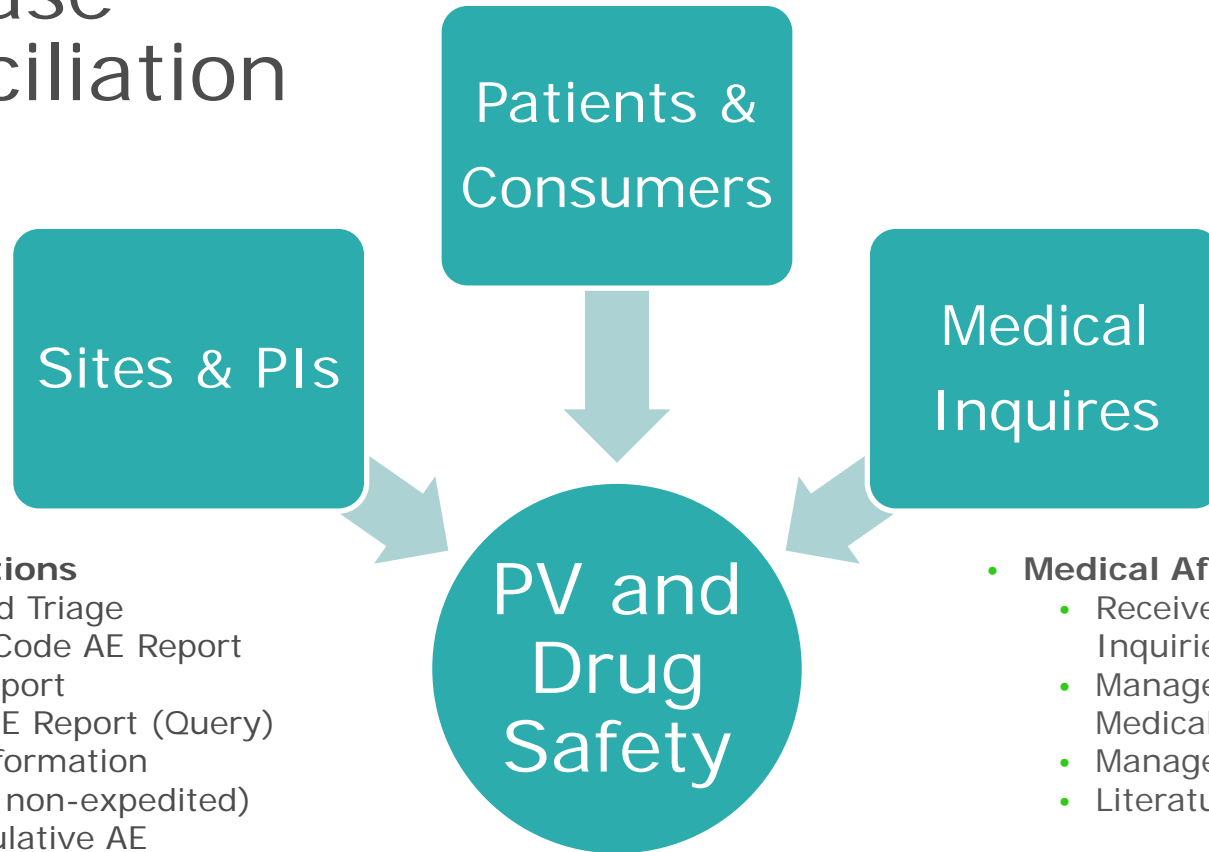
Sean Neal
Client Services Principal, Medidata

20-MAY-2013

Agenda

- What is Database Reconciliation?
- Challenges
- Best Practices
- Benefits

Database Reconciliation



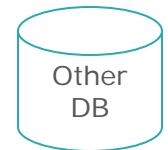
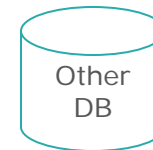
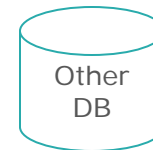
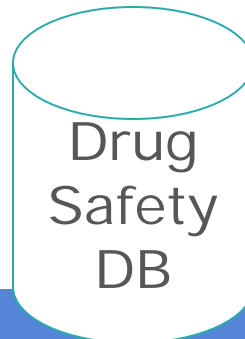
▪ Clinical Operations

- AE Intake and Triage
- Process and Code AE Report
- Assess AE Report
- Investigate AE Report (Query)
- Report AE Information (expedited & non-expedited)
- Submit Cumulative AE Information
- Proactive Trending

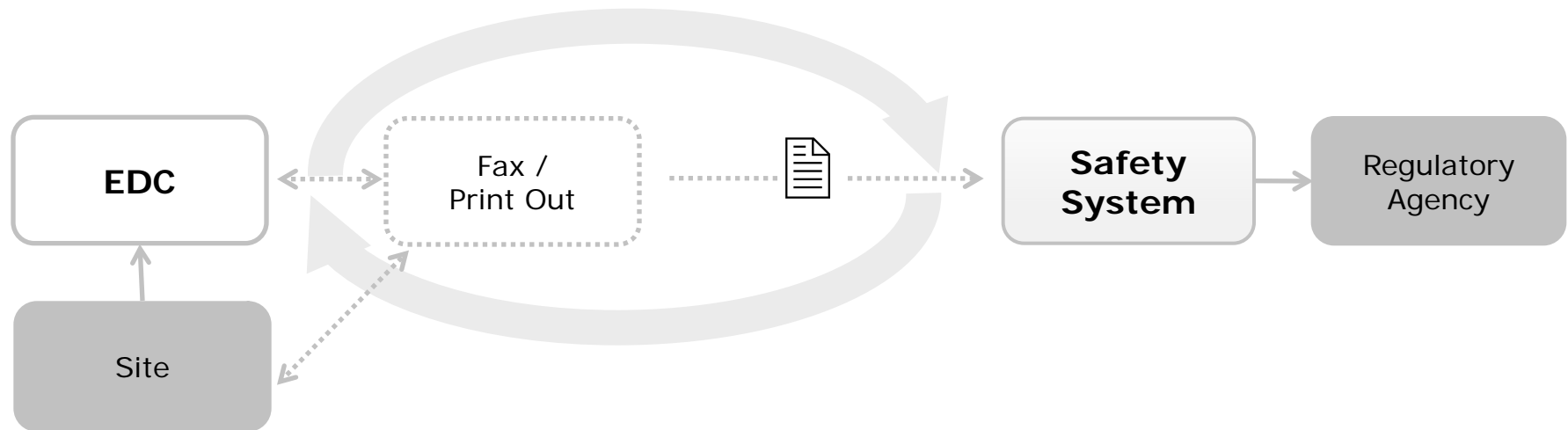
• Medical Affairs

- Receive and Triage Medical Inquiries
- Manage and Respond to Medical Inquiries
- Manage and Reports AEs
- Literature Searches

- Medwatch/CIOMS
- PSURs
- etc.



Current Manual / Paper process



Practice

- Separate data collection and submission processes
- Print out and/or fax to safety team
- Manual transfer of data into safety system

Challenges

- **Manual** entry of safety case data from paper SAE form
- **Duplicate** data entry
- **QC** of data entry
- Creation of paper queries for clinical data and **transcription errors**
- **Tracking** of and updating responses from queries
- **Reconciliation** of SAE database with clinical data

Challenges

- Tufts Center for Study of Drug Development estimates:
 - Study Coordinators spend 10% to 20% of their total work effort on trials just on AE/SAE reporting
 - Some sites have suggested charging ~\$500-750 per SAE
 - This would represent an **additional ~ quarter of a million dollars per study** to the sponsor on a typical Phase III study

"Inside the EU's Next Generation of Pharmacovigilance," Medidata Solutions, S. Araujo, Applied Clinical Trials, 2012; "Burying Sites Under Safety Reporting," K. Getz, Applied Clinical Trial, Jan 2009

Challenges

- It has been estimated at 2.15 FTE days per SAE – just in Sponsor effort
- The majority (59%) of trials experience SAE rates of up to 10%
 - Oncology specific SAE trial rates are 3 times higher
- On a typical 1500 patient Phase III study this represents **322 FTE days!**

“SAE Rates in Clinical Trials,” J. Handen, Applied Clinical Trials, 2012

Challenges

- And while 59% of trials exhibit SAE rates of 10% or less
- 10% of trials have SAE rates between 10% and 20%
- 17% of trials have SAE rates between 20% and 50%
- 6% of trials exhibited SAE rates of greater than 50%

"SAE Rates in Clinical Trials," J. Handen, Applied Clinical Trials, 2012

Best Practices

- Leveraging **technology** and **standards**
 - Over 90% of data required for safety reporting is **already captured** at the site in EDC
 - SAE
 - subject
 - investigation product
 - medical history
 - concomitant medications
 - etc.
 - **Extending** the adverse event clinical report form to include the additional safety information
 - MedDRA **auto-coding** at initial point of data entry in EDC, not batch-processing out of the safety system
 - Packaging the safety case into **E2B** (the ICH standard for AE data structure – used to transfer SAE data to regulatory agencies and between companies)
 - **Transmitting** this structured data to the safety system

Automated Business Objective



To provide clients with an online and secure solution, which is more **efficient and accurate** than current processes for transferring clinical data related to serious adverse events (SAEs) to their safety system

Benefits

- Identifying “single source of truth” for the clinical data.
- Eliminating duplicate data entry by safety personnel into safety systems.
- Minimizing impact on site personnel to report SAEs and ensuring a single streamlined data entry process, thus facilitating compliance.
- Increased data quality on initial transfer.
- Allowing safety personnel to focus on case assessment and monitoring, and not data queries.
- Reducing follow-up communication for data clarifications/errors.

Benefits

- Generating more **complete initial case** submissions due to availability and cleanliness of data
- Optimizing safety case processing **productivity** through more tightly coupling processes between safety, CDM, and development
- Significantly reducing or **eliminating reconciliation** between clinical and safety databases, e.g. for;
 - event seriousness
 - causality to investigational product (IP)
 - MedDRA-coded event term
 - patient death flag

Benefits

- **39% fewer safety queries to the sites in total – less work for the sites!**
- **30% of safety-related queries system auto-generated - less work for the sponsors!**
- **Reduces or Eliminates Reconciliation**

“Transforming SAE Life-cycle Management in Clinical Trials – Enabling a Streamlined Business Process through Electronic Systems, J. for Clinical Studies, M. Markley, 2012

Thank You!
sneal@mdsol.com