Regulatory Perspective: Data Integrity Guidance/Policy

PDA Data Integrity Workshop
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Data Integrity

CGMP – minimum requirements

Data integrity underpins CGMP

Lapses obscure other problems

Tip of iceberg
Why write a draft guidance?

FDA has increasingly observed CGMP violations involving data integrity during CGMP inspections.

33 out of 53 Warning Letters Jan 2015-date involved data integrity lapses.

21st Century CGMP: data integrity is an important component of industry’s responsibility to ensure the safety, efficacy, and quality of drugs, and of FDA’s ability to protect the public health.
OMQ Actions
January to August 31, 2016

- Import Alerts: 66-40, 17
- Import Alerts: 99-32, 18
- Regulatory Meetings: 17
- Warning Letters: 29
- Data Integrity: 17

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What the draft guidance is and is not

• It is a list of current problems and how they relate to the CGMP requirements in 21 CFR 210, 211, and 212
• Clarification of several terms in FDA’s regulations
• It isn’t a comprehensive list of data controls or a “how-to” guidance
What is Data Integrity?

Data integrity – requirements for complete, consistent, and accurate data.

Throughout CGMP

<table>
<thead>
<tr>
<th>ALCOA</th>
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<tbody>
<tr>
<td>Attributable</td>
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<tr>
<td>Legible</td>
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<td>Contemporaneous</td>
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<td>Original or true copy</td>
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<td>Accurate</td>
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Other Important Concepts:

- Metadata
- Audit Trail
- Static vs. dynamic records
- Backup
- Systems
Paper requirements = electronic requirements
Data Integrity: Not a New Concept

Principles from the paper-and-ink era still apply:

• § 211.68 requires that backup data are exact and complete, and secure from alteration, inadvertent erasures, or loss
• § 212.110(b) requires that data be stored to prevent deterioration or loss
• §§ 211.100 and 211.160 require that certain activities be documented at the time of performance and that laboratory controls be scientifically sound
• § 211.180 requires true copies or other accurate reproductions of the original records; and
• §§ 211.188, 211.194, and 212.60(g) require complete information, complete data derived from all tests, complete record of all data, and complete records of all tests performed.
Computerized Systems (5.4)

- GMP-related computerized systems should be validated.
- Appropriate installation and operational qualifications should demonstrate the suitability of computer hardware and software to perform assigned tasks.
- Incidents related to computerized systems that could affect the quality of intermediates or APIs or the reliability of records or test results should be recorded and investigated.
Why is FDA concerned with the use of shared login accounts for computer systems?
Why is FDA concerned with the use of shared login accounts for computer systems? (cont.)

• “…you must implement documentation controls that ensure actions are attributable to a specific individual.”
• When login credentials are shared, a unique individual cannot be identified
• On paper you would sign/initial and date your work or the review of other’s work

WL: Forms used a password shared by four or five individuals. December 2015
How should access to CGMP computer systems be restricted?

- FDA recommends that you restrict the ability to alter specifications, process parameters, or manufacturing or testing methods by technical means where possible (for example, by limiting permissions to change settings or data).

- FDA suggests that the system administrator role, including any rights to alter files and settings, be assigned to personnel independent from those responsible for the record content.

*WL: Failure to prevent unauthorized access or changes to data, February 2015*
When does electronic data become a CGMP record?

• When generated to satisfy a CGMP requirement, **all data** become a CGMP record.
• You must document, or save, the data at the time of performance.
• Not acceptable to record data on pieces of paper that will be discarded after the data are transcribed.

**WL**: Substitution of results following failing lab results; failure to record critical values at time activities were performed in cases involving highly potent drugs November 2015.
What is wrong with using samples during “system suitability” or test, prep, or equilibration runs?

• FDA prohibits sampling and testing with the goal of achieving a specific result or to overcome an unacceptable result.

• It is not acceptable to use an actual sample in test, prep, or equilibration runs as a means of disguising testing into compliance.

How often should audit trails be reviewed?

- FDA recommends audit trails that capture changes to *critical data* be reviewed with each record and before final approval of the record.
- Regular review of audit trails should include, at a minimum, changes to:
  - history of finished product test results,
  - sample run sequences,
  - sample identification,
  - critical process parameters

**WL: Lack of audit trails for lab instruments and turning off audit trails—April 2015**
How does FDA recommend data integrity problems identified during inspections be addressed?

• Demonstrate effective remediation by:
  – Hiring third party auditor
  – Determining scope of the problem, risks & effects on products
  – Implementing corrective action plan (globally)

• FDA may re-inspect
Clear accountability for data integrity in the future

• Consider implementing an enhanced ethics program

• Data integrity problems are not always intentional: sometimes they result from poorly controlled systems
Goal of successful remediation

We want you and the regulators to be able to reconstruct the manufacturing process through records.

We want certainty there is no data:

• falsification
• omission
• hiding
• substitution
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