



Centre for cGMP



PHARMACEUTICALS EXPORT PROMOTION COUNCIL OF INDIA
(Set up by Ministry of Commerce & Industry, Govt. of India)



MANIPAL
ACADEMY of HIGHER EDUCATION
(Institution of Eminence Deemed to be University)



Our Inspiration

Founder : Dr. T M A Pai,
Padmashree awardee

Manipal College of
Pharmaceutical Sciences

In Association with IDMA and Pharmexcil

Centre for cGMP presents to you “cGMP AWARENESS SERIES” (2024/04)

THINK cGMP – cGMP is LIFE

Commitment

Adherence

Creating Quality Culture



Topic : “Data Integrity” within the Pharmaceutical Sector



Know Data Types

- Data**
 Information derived or obtained from raw data.
 Examples: A reported analytical result, a reported specification for a finished product.
- Raw data**
 Refers to original records and documentation, retained in the format they were originally generated.
 Examples: Laboratory worksheet, IPQA sheets etc
- Meta data**
 Forms an integral part of data by providing contextual meaning to it.
 Example: Provide context with details such as source, type, owner, and other data sets.

FDA, EMA, and MHRA – common data integrity guidelines

1. Training all personnel on data storage and processing formats under Good Documentation Practices (GDP).
Includes staff such as process operators, supervisors and QA inspectors.
2. All data must be reviewed by QA department.
Includes computerised records and physical records.
3. All data forms must be backed up safely for inspections.
Includes printed observations from analytical systems, all meta data and raw data.
4. Audit trails must be checked by QA department.
Inspection of data changes such as deletions or backdating.
5. Changes to data should be restricted to personnel identifiable in a traceable manner.
All personnel should have independent logins and batch ID.
6. Control strategies must be based on sound scientific basis.
To be validated by QA personnel.

Know Data Terms

- Data Governance**
 Strategies implemented to establish clear policies, procedures and controls for managing data.
- Data Lifecycle**
 All data should be maintained throughout the record’s retention period.
 Includes retention of all meta data required to reconstruct cGMP activity.
- Audit trail**
 Refers to secure, computer-generated, time-stamped electronic data.

Common examples of data integrity violations

1. Inattentive documentation leading to potentially missing data during note taking.
 2. Data transferred from paper to electronic note book is not acceptable as it is considered to be data manipulation.
-
1. Incomplete and inaccurately submitted documentation.
-
1. Data (raw/processed) unavailable for inspection.
 2. Manual observations recorded on loose paper.
 3. Archived copies are not an accurate representation of original record.
-
1. Backdating results, observations and activities.
 2. Creating acceptable results to fit with the specifications.
-
1. Using shared or common sign in electronic systems.
-
1. Measures in place to maintain and monitor data is non validated.

Key points to remember for compliance of data integrity

Establish robust data management systems

Good Documentation Practices



Visit Manipal cGMP Museum

images from www.freepik.com

Implement quality management systems

Training and Education

