

Software Engineering – Practitioner’s Approach (SQA)

Key Concepts:

- **Process Orientation:**
 - Integrate QA from planning to delivery.
 - Continuous verification and validation.
- **Standards & Compliance:**
 - Follow ISO, IEEE, or domain-specific standards for data handling.
- **Metrics & Reviews:**
 - Use defect density, reliability, and usability metrics.
 - Conduct peer reviews and formal inspections.
- **Risk Management:**
 - Identify potential quality risks early (data quality, algorithm drift, privacy breaches).
- **Continuous Improvement:**
 - Use feedback loops from clients and system monitoring.

ClinicTrends AI Application:

- **Model Validation:** Incorporate verification steps to ensure sentiment and topic models maintain accuracy over time.
- **Dashboard QA:** Test rendering across browsers and devices before client rollout.
- **Security Audits:** Ensure CSV uploads and NPS datasets meet HIPAA-equivalent privacy standards
- **Regression Testing:** Before releasing new features, run automated tests to ensure no degradation in data accuracy.

Combined Impact for ClinicTrends AI

If we integrate the *Presentation Skills* content with *SQA best practices*:

- **Before a pitch or demo:** SQA principles can ensure the product functions flawlessly during live demonstrations.
- **During presentations:** Use modern, audience-tailored visuals to build trust and engagement.
- **After presentations:** Follow up with accurate, secure, and well-documented product updates that match what was promised.