

10 Ways to Optimize Your Biospecimen Operations

Every clinical trial faces unique challenges, but common obstacles in biospecimen management often stand in the way of data quality, scientific rigor, and operational efficiency. These 10 considerations provide actionable strategies to optimize your biospecimen operations — enabling smoother workflows, higher-quality data, and stronger scientific outcomes.

Manage your inventory more efficiently.

Give sites the tools to be prepared for each patient visit — from precise auto-resupply that minimizes waste to alerts that notify stakeholders when lab kits are running low or expiring.

Don't duplicate your data-entry workflows.

Collect sample metadata from sites through sample management workflows and automatically sync that data to EDC and labs.

3 Standardize sample metadata capture across sites and labs.

Use a single platform across all sites and labs to standardize what information is captured about your samples and in what format.

Eliminate queries and delays due to human error.

Prevent mistakes with software-guided guardrails that ensure all sample metadata is accurately captured and all sample management procedures are followed.

5 Leverage lab-agnostic sample tracking.

Rather than relying on manual Excel tracking and asynchronous sample reports from various labs, monitor sample status across all your central and specialty labs in one place.

Maintain end-to-end visibility to your samples throughout the entire lifecycle.

From collection and processing to shipping and storage, know where every sample is at all times.

7 Make informed decisions with cumulative sample metadata.

Analyze your sample metadata to uncover trends and key metrics that support informed decisions about dose escalation, amendments, interim analysis, and more.

Monitor study compliance across sites and labs.

Quickly and easily identify non-compliant samples and implement corrective actions.

9 Mitigate risk and confusion around amendment changes.

Efficiently roll out study modifications that impact sample collections and sample metadata fields on a site-by-site basis.

Make your sample management workflows work for you.

Leverage a comprehensive solution that's configurable to your study's specific biospecimen-related needs.



Slope is a global provider of biospecimen lifecycle software, data, and services for complex clinical trials. Learn more about Slope's platform, Biospecimen360™, and how it can empower you to make the most of your clinical trial.

