

CLINICAL MICROBIOLOGY – SETUP & WORKUP

CURRENT-STATE SERVICE BLUEPRINT

WORKFLOW ANALYSIS

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Understanding how user actions, system behavior, and supporting processes interact throughout the existing Clinical Microbiology workflow.

01 PURPOSE

Document the current-state Clinical Microbiology workflow by mapping the relationship between laboratory activities, user interactions, front-stage system behavior, and supporting back-stage processes. The blueprint established a shared understanding of how work progressed through the existing system, revealed where workflow continuity broke down, and created a common reference for future workflow redesign.

02 CONTEXT

Research from the Client Advisory Group and workflow interviews established that Clinical Microbiology work extended beyond individual screens and isolated user interactions. Laboratory staff progressed through a multi-day workflow that required continual coordination between specimen observations, organism workup, incubation cycles, and follow-up activities.

Although the existing product supported many individual tasks, it was difficult to understand how those tasks connected into a complete workflow. User actions, system responses, validation, navigation, and supporting processes were distributed across multiple screens and occurred at different points throughout the specimen lifecycle.

Before redesigning the experience, the team needed a comprehensive understanding of how work was currently performed and how the system supported—or failed to support—that work. The current-state Service Blueprint translated the existing experience into a structured workflow model that connected user goals, laboratory activities, visible system interactions, and supporting system behavior.

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METHOD

The current-state Service Blueprint was developed by synthesizing findings from the Client Advisory Group, workflow interviews, product analysis, and direct examination of the existing Clinical Microbiology workflow.

Rather than documenting screens individually, the blueprint analyzed the workflow as a connected service, mapping each journey phase across multiple layers of interaction.

The blueprint documented:

- Journey phases
- Customer goals
- Customer actions
- Front-stage interactions
- Back-stage system behavior
- Workflow dependencies
- Navigation
- Validation
- System processing

Analyzing the workflow across these layers exposed dependencies that were not visible when examining individual screens or isolated user tasks.

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SOURCES

The Service Blueprint synthesized information collected throughout the discovery phase, including:

- Client Advisory Group sessions
- Current-state workflow interviews
- Existing workflow documentation
- Product analysis
- Existing application behavior
- Subject matter expertise from Product and laboratory stakeholders

These sources were consolidated into a single representation of the current-state workflow.

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WORKFLOW STRUCTURE

The blueprint documented the workflow from specimen access through organism workup by examining each stage across five complementary layers.

Journey Phases: The workflow was divided into sequential phases representing major stages of laboratory work, allowing the team to understand how work progressed over time rather than as isolated tasks.

Customer Goals: Each phase documented the laboratory objective users were trying to accomplish before beginning a set of activities.

Customer Actions: The blueprint captured every action performed by laboratory staff while progressing through the workflow.

Front-Stage Actions: Front-stage actions documented the visible system behavior supporting each user activity, including interface components, navigation, validation, and data entry.

Back-Stage Actions: Back-stage actions documented the system processes invisible to users but necessary to support workflow progression, including validation, context loading, record updates, and system processing.

Examining these layers together created a complete picture of how laboratory work and system behavior interacted throughout the existing workflow.

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KEY FINDINGS

THEME 1

THE EXISTING WORKFLOW OPERATES ACROSS MULTIPLE INTERACTION LAYERS

The Service Blueprint demonstrated that completing a laboratory task involved far more than a single user interaction. Every customer action depended on supporting interface behavior, system validation, navigation, and background processing working together. Viewing these activities as a single workflow exposed dependencies that were difficult to recognize when examining individual screens.

THEME 2

WORKFLOW SUPPORT FOCUSES ON TRANSACTIONS RATHER THAN WORKFLOW PROGRESSION

Although the existing application supported individual laboratory transactions, it provided limited support for the broader workflow connecting those activities. Users remained responsible for maintaining continuity between observations, workups, and follow-up activities while the system primarily responded to discrete user inputs.

THEME 3

SUPPORTING SYSTEM BEHAVIOR IS LARGELY INVISIBLE

Many of the activities required to support laboratory work occurred behind the scenes. Validation, context loading, record updates, and workflow processing were essential to the experience but remained largely invisible to users. Mapping these processes revealed opportunities to better align system behavior with user expectations and workflow needs.

THEME 4

CUSTOMER GOALS AND SYSTEM BEHAVIOR ARE NOT ALWAYS ALIGNED

Each workflow phase began with a clear laboratory objective; however, achieving those objectives frequently required additional navigation, repeated data entry, and movement between multiple interface elements. The blueprint revealed opportunities to simplify these interactions by designing around workflow goals rather than individual transactions.

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HOW THE ANALYSIS INFLUENCED THE PROJECT

The current-state Service Blueprint established a shared understanding of how Clinical Microbiology work was performed across both visible user interactions and supporting system behavior.

The analysis:

- documented the existing workflow architecture;
- identified dependencies between workflow activities;
- exposed gaps between laboratory goals and system support;
- revealed opportunities to improve workflow continuity;
- identified where navigation interrupted specimen progression;
- established a baseline for evaluating future-state concepts; and
- provided a common reference for Product, Design, and Engineering throughout the redesign effort.

Rather than focusing on individual screens, discussions shifted toward redesigning the workflow as an interconnected system.

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HOW THIS INFORMED THE NEXT PHASE

The current-state Service Blueprint established the analytical foundation for future-state workflow design.

By documenting how user activities, interface behavior, and supporting system processes interacted throughout the existing experience, the blueprint identified where workflow continuity could be improved and where the architecture needed to better support specimen progression.

These findings directly informed the future-state workflow model, information architecture, design principles, and wireframe exploration, ensuring that subsequent design decisions addressed the workflow as a whole rather than optimizing individual screens.