

Clinical & Public Health Microbiology Laboratory Relocation

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Most challenging parts of your job that training rarely prepares you for

SURVEY SAYS...

1 LAB MOVE (TIE)

38

1 LIS CONVERSION (TIE)

38

2 PANDEMIC

24

3 SUPPLY CHAIN SHORTAGE

16

Moving Your Lab: Roadmap to Your New Home



1. High level concepts

Mission critical priorities, governance, scope, regulatory compliance

2. High level timeline

Phase-gated master schedule, parallel running, vendor logistics

3. Start to drill in on key dependencies

HVAC, negative pressure, emergency power, LIMS, cold chain

4. Lock in final plan

Hour-by-hour run sheet, Go/No-Go readiness sign-off

5. Execute

Chain of custody, physical move, IQ/OQ/PQ validation runs

6. Stabilize

Turnaround stabilization, CAP/CLIA inspection readiness

Phase 1 of 6: High level concepts



FOCUS AREA: LEVEL 1

High level concepts

Strategic Objective

Define scope, mission-critical continuity priorities, regulatory requirements (CLIA/CAP/ISO), and overall governance structure.

Key Deliverables & Action Items

- Strategic charter & stakeholder alignment
- Core testing menu prioritization
- Chain-of-custody & regulatory scoping

“High level” discussions about basic components of the lab move

Answer these before any detailed planning — they set scope, risk, and sequence.

01

New build or remodel?

Ground-up construction, inter-building move vs. renovating occupied space — drives timeline, phasing, and swing-space needs.

02

What scope is moving?

Micro only, parts of Micro, several labs, or the entire department — defines governance and risk.

03

24x7 or can we close?

Continuous operation vs. a planned downtime window changes the whole move sequence.

04

What pathogens are handled?

Biosafety level, transport risk, cultures and isolates in transit, containment and certification.

05

How far is the move?

Same campus, across town, or a new city — logistics, specimen transport, and staff commute.

06

What else changes at once?

LIS conversion, new instruments, or new workflows layered onto the move multiply the risk.

07

Who decides and approves?

Sponsors, stakeholders, and the go/no-go authority for downtime and validation sign-off.

08

What's fixed: date, budget?

Hard lease or occupancy dates determine where you can absorb delay.

Phase 2 of 6: High level timeline



FOCUS AREA: LEVEL 2

High level timeline

Strategic Objective

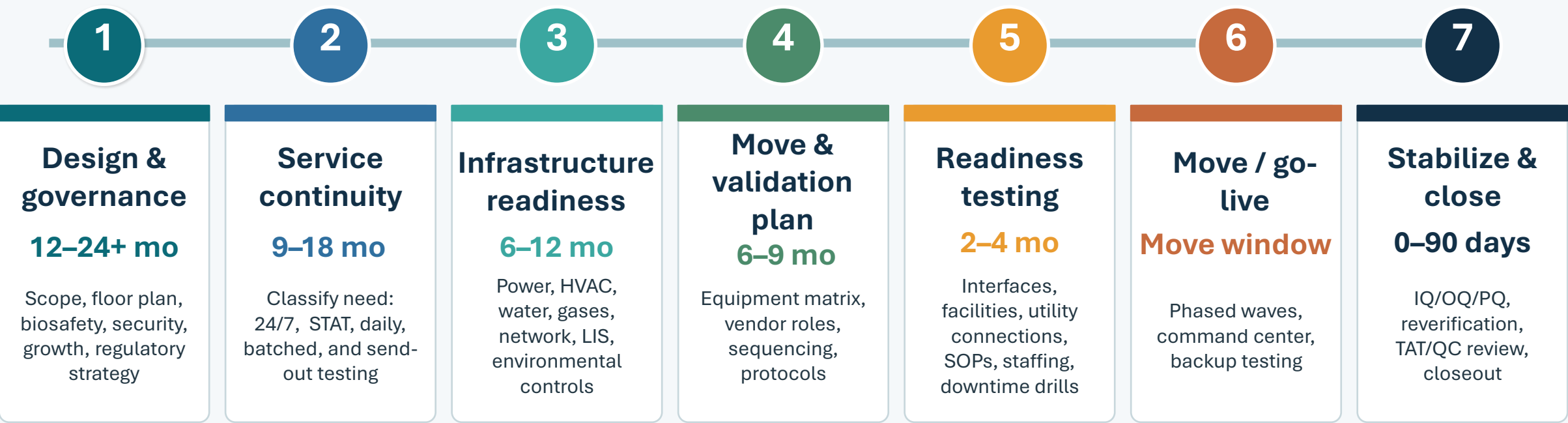
Establish multi-phase milestones, vendor de-installation / re-commissioning schedules, validation windows, and bridge operating plans.

Key Deliverables & Action Items

- Timeline & critical path
- Parallel run duration & downtime buffers
- Courier, vendor, and courier route cutovers

Relocation roadmap

A gated program that protects continuity while the facility, equipment, systems, and staff transition.



Decision gates Design freeze → Infrastructure acceptance → Validation readiness → Go/no-go → Operational acceptance

Phase 3 of 6: Start to drill in on key dependencies



FOCUS AREA: LEVEL 3

Start to drill in on key dependencies

Strategic Objective

Analyze utilities (HVAC, clean power, gases), IT/LIMS connectivity, cold-chain transport, equipment certification, and staff scheduling.

Key Deliverables & Action Items

- Environmental & BSL negative pressure verification
- LIMS / instrument interface re-validation
- Specimen bio-repository cold chain integrity

Key dependencies for a safe move

Assign a workstream owner, acceptance criteria, and contingency plan for each domain.



Facility & biosafety

Workflow separation, BSC placement/certification, HVAC, temperature, humidity, water, waste, cold storage, BSL-3?



Power & utilities

Emergency circuits, UPS, generator coverage, gases, outlet/load verification, alarms



IT / LIS

Network ports, instrument interfaces, middleware, label printers, location builds, downtime reporting



Equipment & vendors

Move ownership, decommissioning, rigging, calibration, service engineer availability, spares



Quality & regulatory

Change control, risk assessment, IQ/OQ/PQ, reverification or revalidation, document updates



People & execution

Staffing, training, specimen routing, communications, command center, escalation and fallback



Coordinate vendor, facilities, IT, quality, safety, and laboratory operations through one integrated move plan.

Protect continuous clinical service

Build the move sequence around the urgency, frequency, and allowable downtime of each test.

1 24/7 STAT / continuous No planned interruption

- Blood culture incubation and positive workup
- CSF Gram stain and culture setup
- Critical rapid molecular testing
- Urgent transplant / high-risk patient assays

2 Daily testing Short, controlled transition

- Routine cultures and workups
- MALDI identification and AST
- C. difficile and daily molecular assays
- Daily QC and result review

3 Batched / deferrable Scheduled around move waves

- Specialized or lower-volume assays
- Surveillance and epidemiology work
- Selected send-out activities
- Nonurgent projects and archived work

For every assay: allowable downtime • backup site • duplicate capacity • specimen routing • validation requirement

What to advocate for

Relief usually costs more; stress is what you buy when you cut the budget.

Relieves stress

\$\$\$
More expensive

Creates stress

\$
Cheaper

Redundant equipment

vs

Single piece of equipment

No time pressures to move

vs

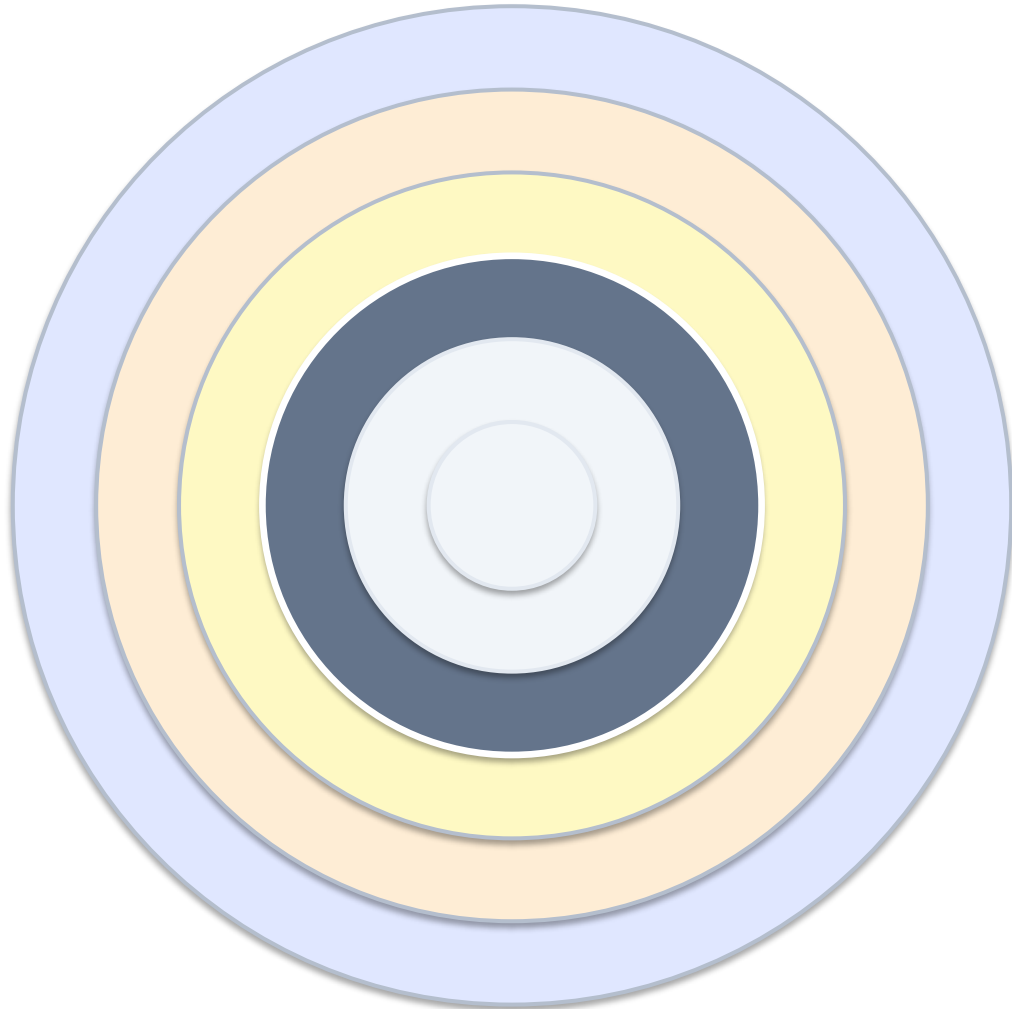
Tight deadlines to occupy and vacate spaces

Excess or support staffing

vs

Minimal staffing

Phase 4 of 6: Lock in final plan



FOCUS AREA: LEVEL 4

Lock in final plan

Strategic Objective

Finalize go/no-go criteria, staffing contingency coverage, logistics dispatch sequences, and run-sheet communications protocols.

Key Deliverables & Action Items

- Approved run sheet & hour-by-hour move plan
- Formal Go/No-Go readiness gate checklist
- Emergency testing diversion agreements

Lock in the final plan

Facility & infrastructure

Equipment lists & utility hookups

- Final equipment list per bench, with make, model, and destination room
- Confirm every utility hookup: power, water, drain, vacuum, gas, network
- Plug types and amperage verified against each new outlet
- Evaluate need for decontamination/disinfection (per vendor)

Gas, exhaust & connections

- Gas connectors and adaptors confirmed per instrument
- Tank storage, delivery, and removal plan (who swaps, how often, where)
- Exhaust ducts, snorkels, and canopy hoods located and certified

Space, hardware & fixtures

- Phone layouts and extension assignments
- Office and desk assignments published before move day
- Hardware confirmations — including door handles and hardware direction
- Confirm acceptable functioning of safety equipment (e.g. eyewash, showers)

Walk the workflow

- Review PPE don/doff procedures in the space
- Physically walk each workflow in the new space before move day
- Bench heights verified against the work performed
- Stools and stool heights, e.g. do they fit under the BSC?



Power and Gas: verify in person

Lock in the final plan

Security, alarms & commissioning

Security equipment

- Badge reader programming by role, shift, and room
- Access levels for BSL-3, cold rooms, and specimen storage
- Cameras placed, aimed, recording, and retained per policy

Security alarms

- Who do the alarms call — and at what hour?
- Transfer the monitoring account to the new address
- Test every zone before occupancy; document responses

If applicable: BSL-3 commissioning

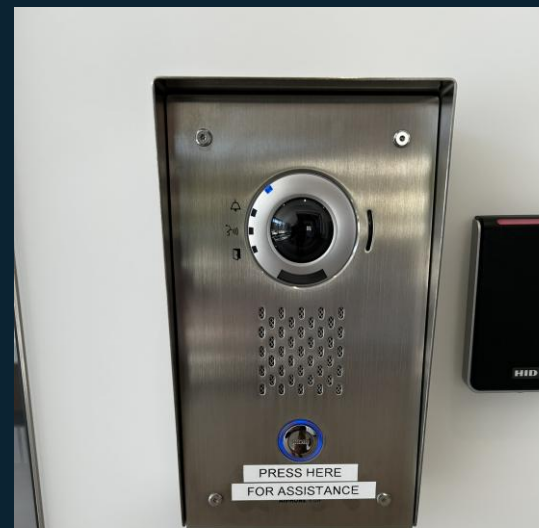
- Commissioning agent engaged early with a written acceptance protocol
- Coordination between commissioning agent and the BMS integration vendor
- Pressure, airflow, and alarm verification before any agent is moved

Lock in the final plan

Security, alarms & commissioning

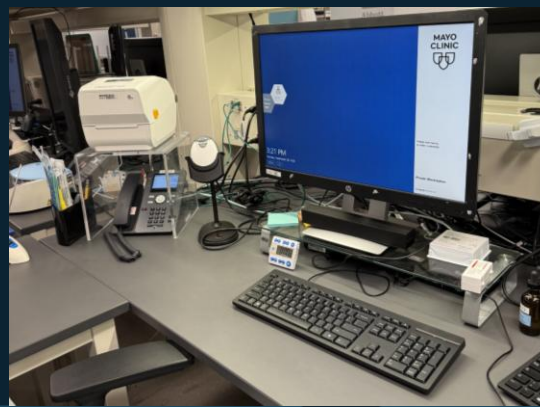
Name that alarm

- Inventory every audible and visual alarm in the new space
- Staff training on what each alarm means and the expected response
- Escalation tree posted at the bench, not just in a binder



Lock in the final plan

IT, training & move-in



IT programming & setup

- IP addresses assigned and documented per instrument and workstation
- Instrument interfaces built, tested, and validated end to end
- Printer mapping, label printers, servers, and middleware confirmed

Training on new systems

- Train before go-live on new instruments and workflows
- Competency documented for anyone working the first shifts
- Downtime procedures rehearsed in the new space

Move-in expectations

- Is construction still ongoing, and what is left on the punch list?
- Set expectations for what will and will not be finished at occupancy
- Daily punch-list review with facilities leading up the transition

Construction / staff coordination

- Coordinate priority and safety between construction crews and lab staff
- Define shared corridors, elevators, and work hours
- Stop-work triggers when construction risks contamination or safety
- Harmonize with facilities for elevator freezes, door removal, etc., for large equipment moves

Lock in the final plan

Movers & scope

Coordinators vs. movers

- Move coordinators are the choreographers; movers are the dancers
- Coordinators own sequence, labeling, and sign-off at both ends
- One command center with a single point of escalation

Mover scope

- Furniture, lab equipment, general supplies, chemicals, specimens
- Computers, phones, and files — with chain of custody where required
- Special moves: evidence and Federal Select Agent inventory

Who moves what

- Vendor-prep + vendor-move, vendor-prep + mover, or movers only
- Warranty considerations — moving it yourself can void coverage
- Pre-placement: for reagent rental, ask for a new instrument instead of a move

Logistics & risk

- Number of trips and trucks per day, with a realistic load plan
- Equipment weight and cost — confirm insurance coverage
- Hoists, rigging, or other move equipment needed?
- Pre-move requirements, including decontamination

Equipment & Vendors

Approach will vary depending on vendor and mover requirements

	Decon	Equipment Prep	Relocation	Re-install	Validate
Lab Staff	✓				✓
Manufacturer (OEM)		✓		✓	
Movers			✓		
Special Equipment					

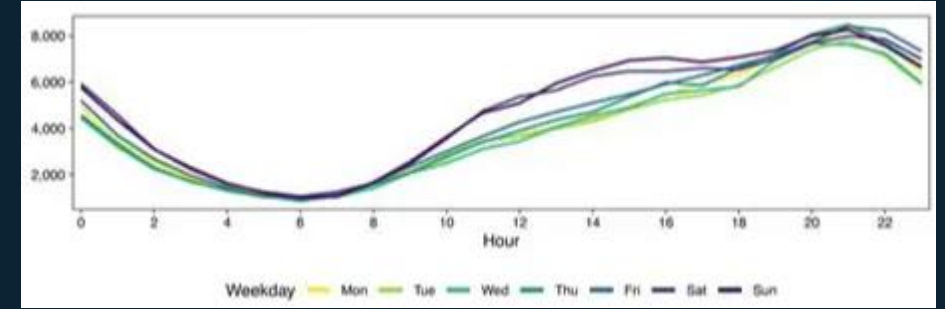


Considerations

- Service Engineer availability should be booked well in advance
- Need to factor OEM costs into the overall move budget
- May be able to include some services under existing maintenance agreements

Lock in the final plan

Continuity of operations



Command Center

- Establish ultimate decision maker (with backup)
- Have resources available on demand (e.g. IT) for expected hiccups
- Regular updates or huddles with senior leaders (can find or advocate for resources as needed)

Sequencing

- Pick least busy day and time to move
- If possible, phase moves so no single service is down at both sites at once
- Backup testing plan for each phased wave
- Tight coordination between post-move calibrators, validators, IT coordinators, etc.
- Go / no-go criteria agreed before the move window opens

Staffing

- Limit PTO- all hands on deck
- Assign roles and responsibilities per team (layers of backup)
- Cross-train as needed
- Pre-approve OT
- Are volunteers or other ancillary staff available for simple tasks

Long-incubation testing

- Long-incubation testing such as AFB & Mycology cultures
- Incubator continuity, monitoring, and documentation during transit



During the move

Move-window execution: run it like an incident, not a project meeting.

Command center

- One room, one phone number, one decision-maker on each shift
- Live status board: what has shipped, arrived, been installed, been verified
- Hourly check-ins with movers, vendors, facilities, and IT

Tracking & custody

- Every item labeled to a destination bench before it leaves
- Scan or sign items out and in — no unlogged boxes on a dock
- Chain of custody maintained for specimens, evidence, and select agents

Safety on the floor

- Clear routes, spotters at corners, and PPE for staff and movers alike
- Spill and breakage response kit staged at both sites
- Stop-work authority for anyone who sees an unsafe lift or leak

Keep testing running

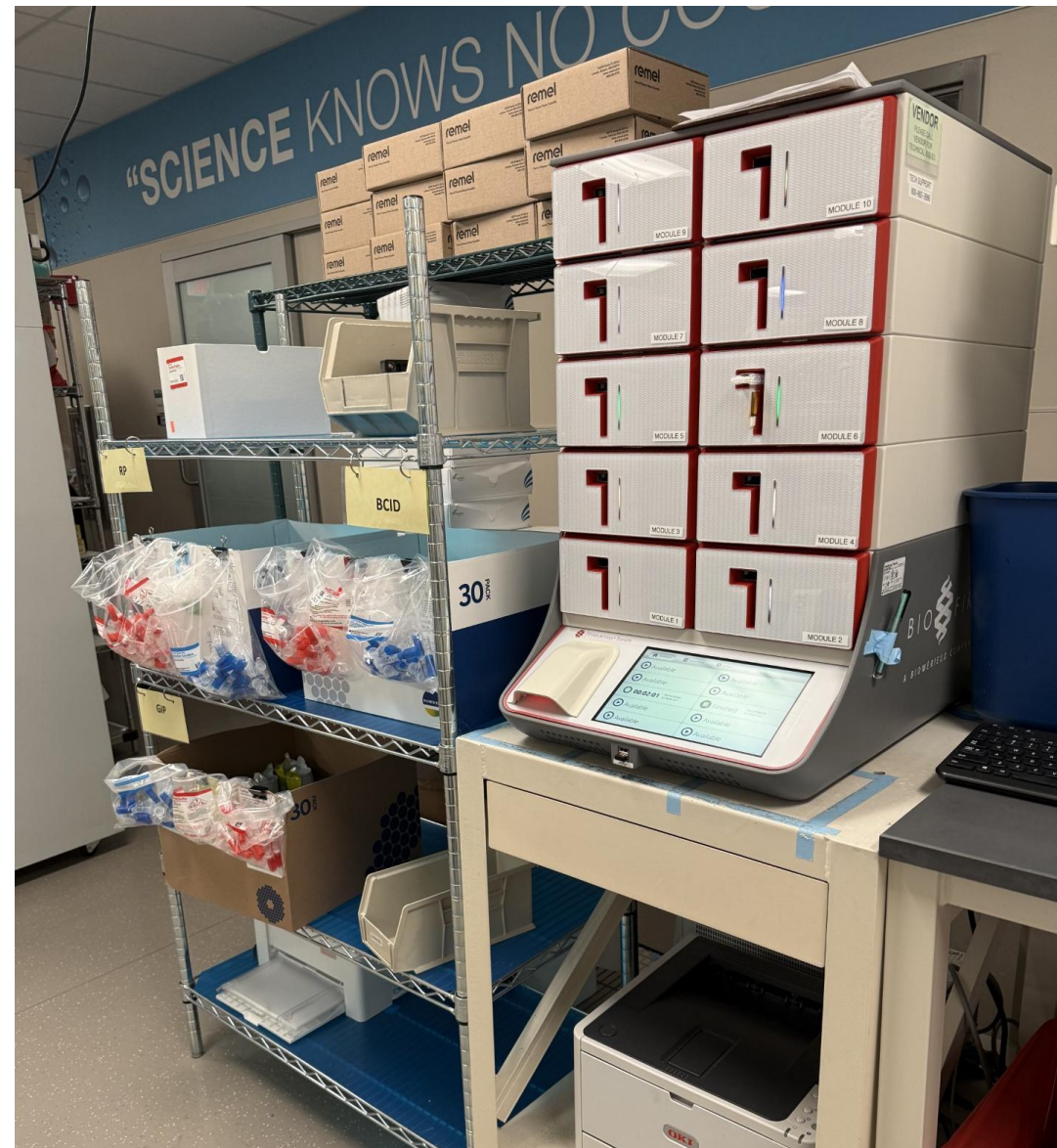
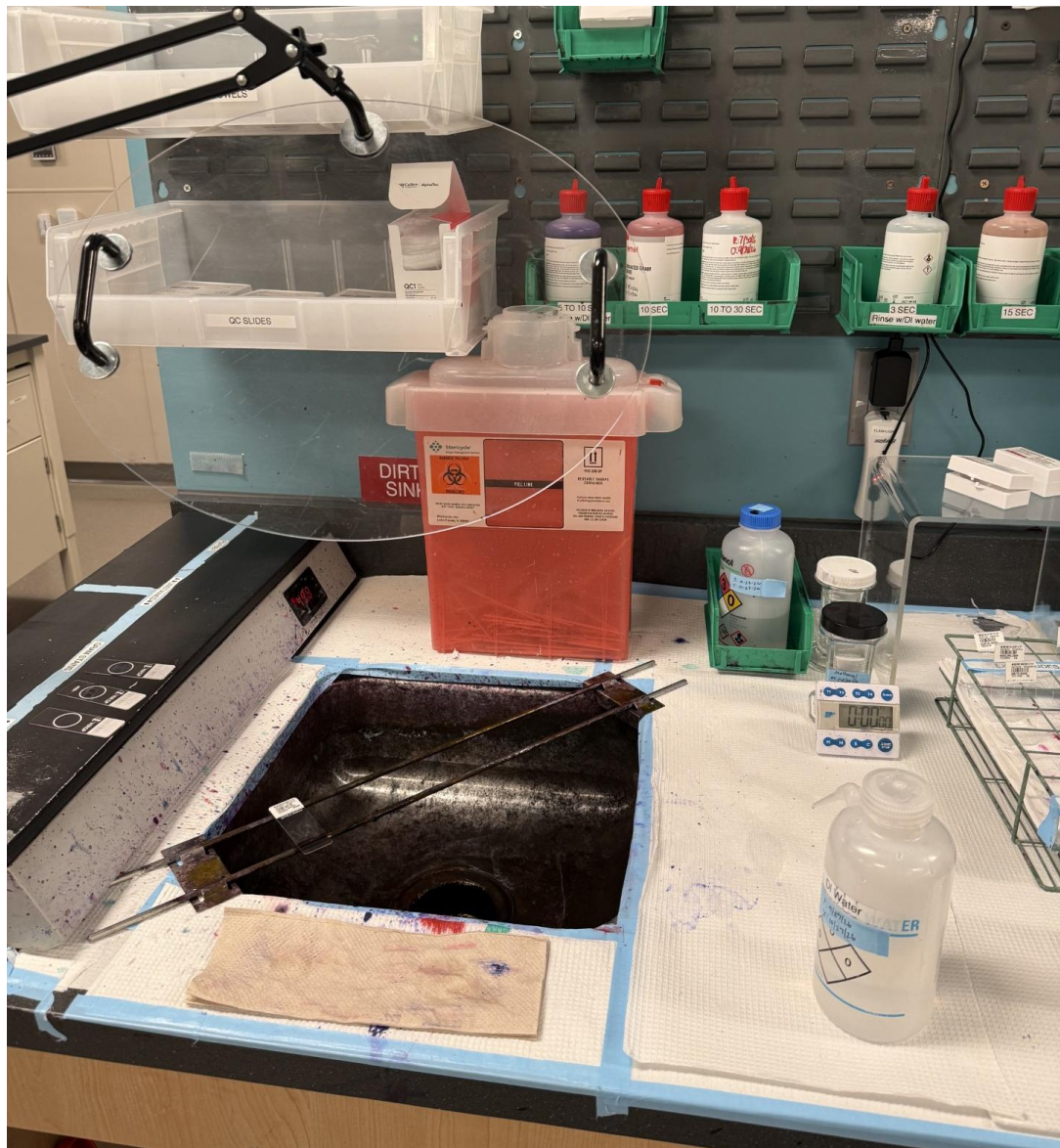
- STAT and time-sensitive testing stays live at one site or the outsourced lab
- Courier and client communications updated as delivery points change
- Temperature-sensitive items monitored continuously in transit

Fix problems fast

- Escalation tree posted — who to call for construction manager, facilities, IT, vendor, and safety
- Daily punch list reviewed with construction and facilities
- Log every deviation for the post-move quality review

Take care of people

- Rotate crews, protect breaks, and feed the team
- Rested staff handle patient testing; fatigued staff do not
- Short end-of-shift huddle to hand off open issues



Lock in the final plan

Special considerations

Chain of custody

- Documented chain of custody for files, evidence, and forensic specimens
- Federal Select Agent inventory reconciled before and after the move
- Named custodians and signature handoffs at each transfer

Moving biologicals & samples

- Specimen inventory, prioritization, and what can be discarded first
- Packaging and transport per shipping and biosafety requirements
- Receiving plan so nothing sits unlogged on a dock

Fridges & freezers

- Move full or empty — decide per unit based on risk and weight
- Continuous temperature monitoring through the move
- Cold trucks, and trucks with electrical outlets for powered units

Chemicals & biohazards

- Segregate, inventory, and transport per hazard class
- Decontaminate before movers touch any equipment
- Waste and expired stock disposed of rather than relocated

Lock in the final plan

Special considerations

Chain of Custody: Examples

- Federal Select Agent Program
 - Moving Registered Inventory
- Law Enforcement Evidence
 - Chain of Custody (digital)
 - Evidence Taped Containers
 - Staff Ride-along
 - Police Escort



FEDERAL SELECT AGENT PROGRAM



Lock in the final plan

Regulatory & communications

CLIA / CAP

- Notify accrediting bodies and update the CLIA certificate address
- Instrument reverification and correlation studies after relocation
- Documentation ready for an inspection shortly after go-live
- IQCP review- new risk assessment for new space

Revalidation

- Vendors will give you guidance but ultimately lab director's call
- Require method re-validation review before allowing compliance testing
- Define acceptance criteria per instrument and assay in advance
- Prepare outlines and samples in advance
- Quality sign-off gates the return of each test to patient reporting

FDA / EPA

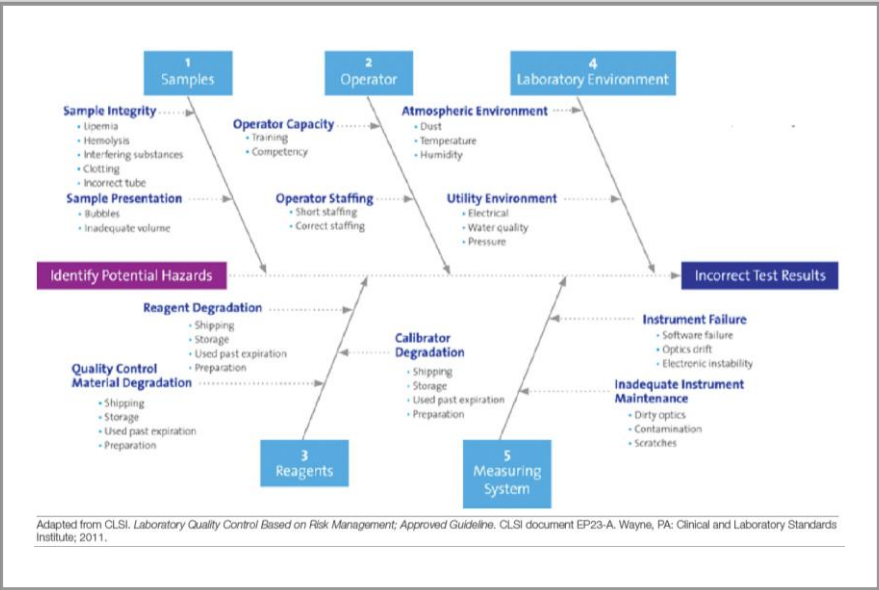
- FDA and EPA requirements for regulated materials and devices
- Permits, registrations, and disposal manifests updated to the new site
- Confirm state and local requirements for the new address

Communications

- Set expectations early and repeat them as the date approaches
- Client and courier communications: what changes and when
- Which location do they deliver to? Plan internal transfers if testing runs at two sites
- Tube stations- new address, shut off plan, burn in period of checking old
- Construction manager fixes and changes

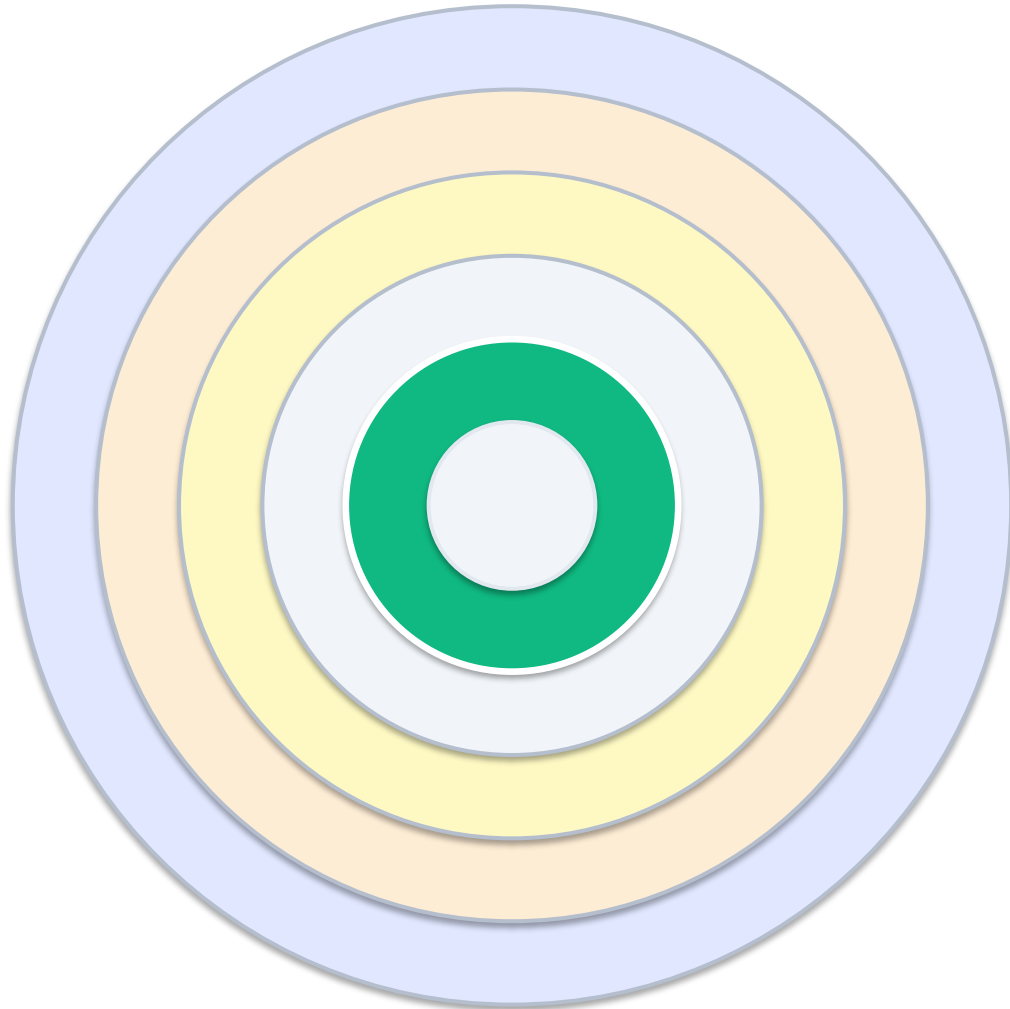


CLINICAL MICROBIOLOGY LABORATORY RELOCATION



HIGH-LEVEL PLANNING FRAMEWORK

Phase 5 of 6: Execute



FOCUS AREA: LEVEL 5

Execute

Strategic Objective

Physical transfer, calibration, parallel specimen verification, live environmental monitoring, and initial low-volume testing.

Key Deliverables & Action Items

- Secure chain-of-custody transfer execution
- Instrument calibration & IQ/OQ/PQ validation
- Quality control & parallel specimen runs

Expect things to go wrong

Something always does — plan the response, not the perfect move.

It will not fit

Doorways, elevators, and corners beat floor plans. Measure the path, not just the room.

Something will fail on arrival

An analyzer that ran fine yesterday won't pass QC today. Book vendor service for go-live week.

The schedule will slip

Punch list, permits, or weather. Hold a contingency day and a fallback testing site.

People will be stretched thin

Fatigue causes errors. Rotate staff, protect breaks, and keep one rested team on patient testing.



When the analyzer meets the doorway



Alarms do not wait for you to unpack



Phase 6 of 6: Stabilize



FOCUS AREA: LEVEL 6

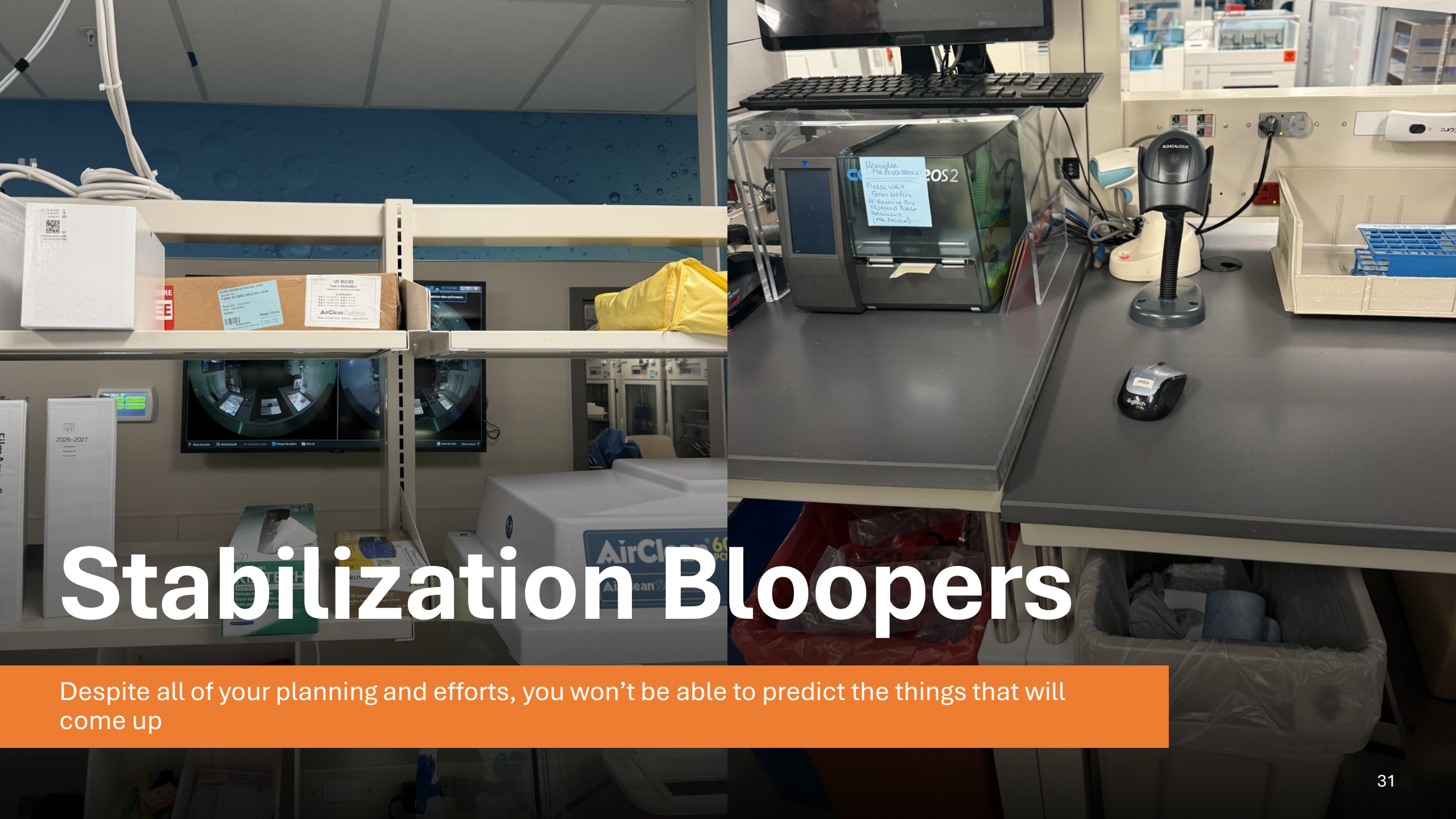
Stabilize

Strategic Objective

Post-relocation optimization, full turnaround time monitoring, final proficiency testing, regulatory sign-off, and staff routine normalization.

Key Deliverables & Action Items

- Full clinical volume operational tempo
- Post-move CAP/CLIA compliance documentation
- Retrospective review & long-term stability



Stabilization Bloopers

Despite all of your planning and efforts, you won't be able to predict the things that will come up

Stabilization Bloopers

Despite all of your planning and efforts, you won't be able to predict the things that will come up

Chair Height



“Non-potable Water”



Missing Hand-Washing Sink



Decommissioning Old Space

Consider requirements and expectations of what needs to be done after a move

What is left behind

Old furniture, old lab equipment, “junk”, chemicals/reagents/supplies

Biosafety

- “Make Safe” for handoff – Risk assessment -> Decontamination (may need external vendors)
- No chemicals or biologicals left behind

Utilities

- Plan for cut & cap of gasses and plumbing if needed
- End services no longer needed (internet, phone, etc)

Clean

Understand expectations around how clean the space needs to be for handover

Address Changes

Change USPS, vendor contact, website, google maps



Relocation Lifecycle: Phases, Owners, & Validation Gates



Phase / Ring	Core Objectives	Critical Operational Deliverables	Exit / Gate Criteria
1. High Level Concepts	Scope, Charter, Stakeholders	Define test menu continuity; assign relocation steering committee	Approved Steering Charter
2. High Level Timeline	Sequence & Milestones	Draft parallel testing buffer periods; vendor de-comm windows	Baseline Master Schedule
3. Key Dependencies	Utilities, IT/LIMS & Facilities	HVAC / BSL air flow testing, emergency power, courier route cutover	Facility & IT Readiness Sign-off
4. Lock in Final Plan	Operational Finalization	Final hour-by-hour move sheet; mutual aid / backup lab MOUs	Formal Go/No-Go Approval
5. Execute	Physical Move & Re-bench	Secure sample transport, instrument re-qualification (IQ/OQ/PQ)	Parallel Validation QC Pass
6. Stabilize	Clinical Normalization	Proficiency testing verification, regulatory notice, routine TAT metrics	Full Regulatory Compliance

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