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FROM CONTROL DESIGN TO OPERATIONAL PRACTICE

A COSO-Based Assessment of Revenue Cycle Internal Controls in a Clinical Laboratory



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Why examine controls in a clinical laboratory?

Control becomes most critical when a recorded transaction is changed.

CASE & SELECTION

Clinical Laboratory XYZ Branch Z, involves front-office, supervisory and cashier activities.

Selected for access to relevant processes and evidence, not because fraud was established.

OPERATIONAL EXPOSURE

Errors in examination entry, payment changes and voids require reliable approvals and supporting evidence.

Reconciliation is an important check, but it does not replace approval when a change occurs.

LITERATUR GAP

Prior studies examine revenue controls in service firms and cash controls in hospitals.

Less is known about change authority, user accountability and cross-functional information in laboratories.

RQ1: How are revenue-cycle internal controls implemented under COSO (2013)?

- **To evaluate the implementation of revenue-cycle internal controls based on the five COSO (2013) components and identify gaps between formal procedures and operational practices.**

RQ 2: What improvements can strengthen these internal controls?

-To develop evidence-based recommendations to strengthen authorization, individual accountability, exception documentation, and monitoring within the revenue cycle.

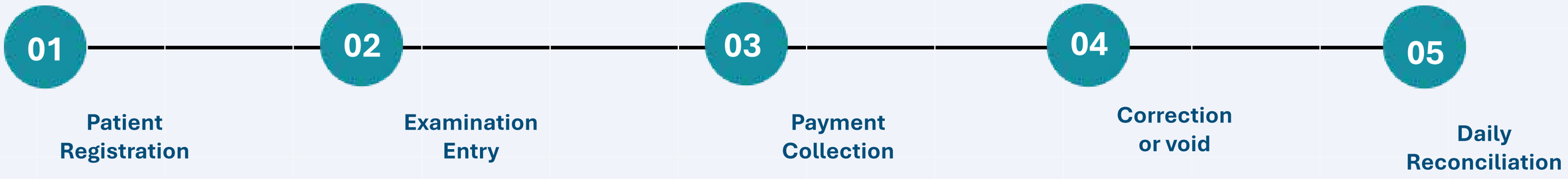
Connecting COSO to the Revenue Cycle

COSO evaluates an integrated control system; accounting information systems research views the revenue cycle as connected transaction and service processes.

COSO 2013 | FIVE COMPONENTS

Control Environment	Risk Assessment	Control Activity	Information & Communication	Monitoring
Roles & individual accountability	Recognising errors and fraud risks	Authorization, access & checks	Reliable records and service status	Follow-up and review

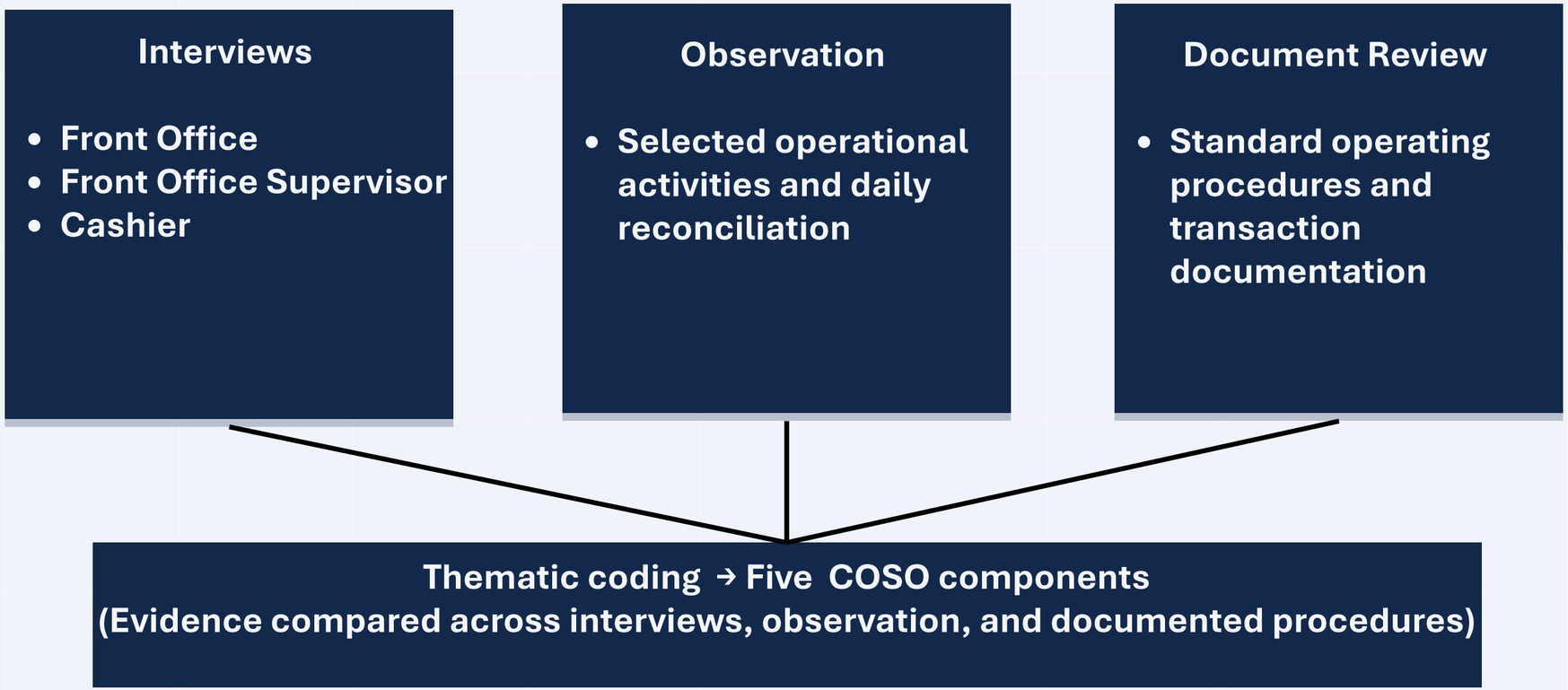
REVENUE CYCLE | WHERE CONTROLS MUST OPERATE



Payment amendments • Service-status checks • Void approvals • Reconciliation follow-up

Method: Qualitative Single-case Study

- Clinical Laboratory XYZ, Branch Z
- Unit of analysis : revenue cycle internal control process



Five COSO Components: Existing Controls and Gaps

Control Environment	Defined responsibilities and periodic procedural refreshers exist. Accounts differ regarding alternate authorization when a supervisor is unavailable; individual account attribution requires clarification.
Risk Assessment	Staff recognize entry errors, payment-method mistakes, network failures and cancellations without supporting documents. A systematic, periodically documented fraud-risk assessment was not established by the qualitative evidence.
Control Activities	Restricted void access, supervisory review and cashier reconciliation are established. Informants describe payment-method change approvals differently, and independent approvals are not always traceable in system records.
Information & Communication	Written procedures and transaction records exist, but exception documentation varies. Cashiers may need to contact other functions to confirm whether examination results were already delivered.
Monitoring	Daily reconciliation, void reports and supervisory checks provide a monitoring foundation. Documentation of follow-up and review of related corrections across periods can be strengthened.

Strengthening Authorization, Evidence and Follow-up

01

Clarify authority

Written approval matrix for transaction amendments and a named alternate approver

02

Preserve accountability

Individual,non-transferable user credentials and traceable independent approvals

03

Document exceptions

Standardized exception log and cross-functional confirmation of service status

04

Review and learn

Periodic documented risk-control review and monitoring follow up

Strengthen existing routines rather than replace them

Effective control requires more than written procedures

Branch Z has defined responsibilities, restricted void access, supervisory checks and daily reconciliation—yet transaction changes still require stronger authorization, documentation and service information.

RESEARCH CONTRIBUTION

CONCEPTUAL

Links COSO components to exception points within the laboratory revenue cycle.

METHODOLOGICAL

Compares interviews, observation and procedures in a single-case process assessment.

PRACTICAL

Maps approval, account ownership, exception records and follow-up to concrete cycle stages.

LIMITATION: One branch, three informants and selected observations; no statistical generalisation or proof of fraud.

THANK YOU