



CLIENT: National Clinic Services Provider

ENGAGEMENT: Archive Remote Office Patient and Financial Health Records

ABSTRACT:

Client offers dialysis services to patients at over 4,000 nationwide locations. Each location held local patient data copied to Corporate servers. Migrating to new, or upgrading current clinical software is constrained by the volume of historical records which could be disposed of and which critical patient and financial data must be retained for compliance.

Client had purchased IBM Optim software to automate archive extraction and retention.

Client approached us for our deep background in HIPAA and large solution design and management. The overall strategy was part of client's overarching cost reduction and services and internal project delivery efficiency improvement.

Our services were advisory as subject matter experts in:

- HIPAA Retention Requirements
- Records Management Retention Schedules
- Data Assessment and Analysis of source databases and file structures
- Clinic Extract Design
- Archive Rules Design
- Archive Software Design & Configuration

APPROACH:

Complexity for this client environment centered on three fundamental principals:

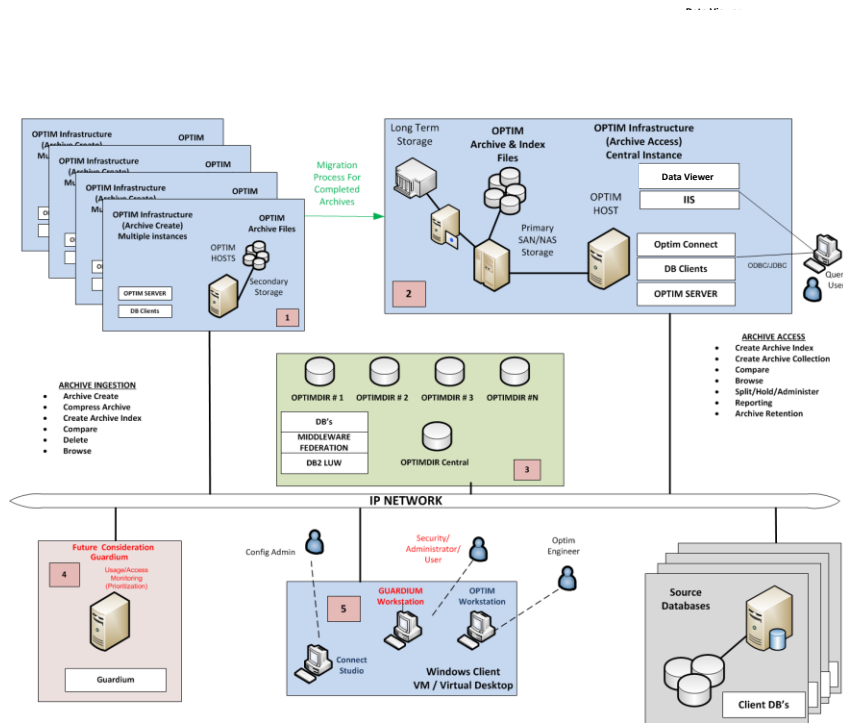
- Data is retained for one year at each local clinic prior to archiving
- The same archive rules were to be applied synchronizing clinics and three corporate databases
- 4,000 plus databases archived simultaneously could cause catastrophic network failure

Our recommended multi-node process architecture design would streamline archiving processes without impacting WAN bottlenecks. We also recommended client consider adopting enhanced security and data governance capabilities improving data stewardship.





Due to the Applications' large number of instances it will require a multi-node implementation methodology to handle the volumes.



1. Archive ingestion nodes – these will handle the scheduled events for all of the enterprise Archive Create and Verification processing functions.
2. Verified Archives will be migrated to the Central Optim Instance. They can be accessed and maintained from this location.
3. This is a Database VM which can consolidate and hold all of the necessary Optim Directories. (One for each Optim Node).
4. Future Security instance. Although any current security implementation may be adequate for many of the systems to be archived those requiring HIPAA might benefit from a product like IBM’s Guardium to watch over the Archives.
5. Virtual desktop instances for client level product portals.

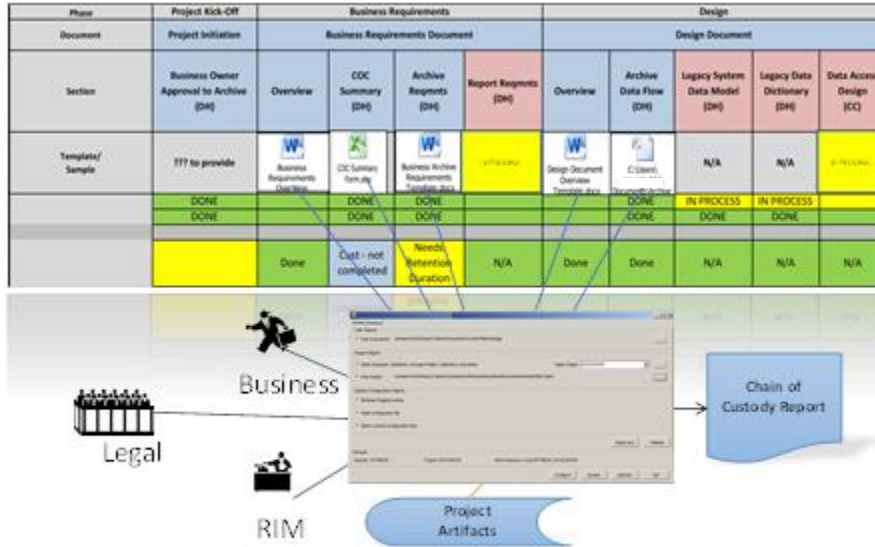
Managing such a large number of installations and administering various types of data retention including “non-standard” legal holds, demanded establishing a program to manage progress and ensure project ROI was met.

Our formal and documented process disciplines emphasize “factory assembly line” type processes to minimize effort investment and emphasizing automation. The process not only meets efficiency KPIs, but also meets demands of HIPAA, PHI and other privacy standards.





In the event of court proceedings, demonstrate archived data is not modified, ability to attest to legitimacy of source data



1. Articulated requirements for extracting and deleting data
2. Chain of custody summary
3. Definition of standards (supports data query and acquisition post-archiving program)
4. Technical designs
5. Data validation and balancing
6. Appropriate sign-offs and approval of correct and complete archival
7. Documentation stored within archive repository

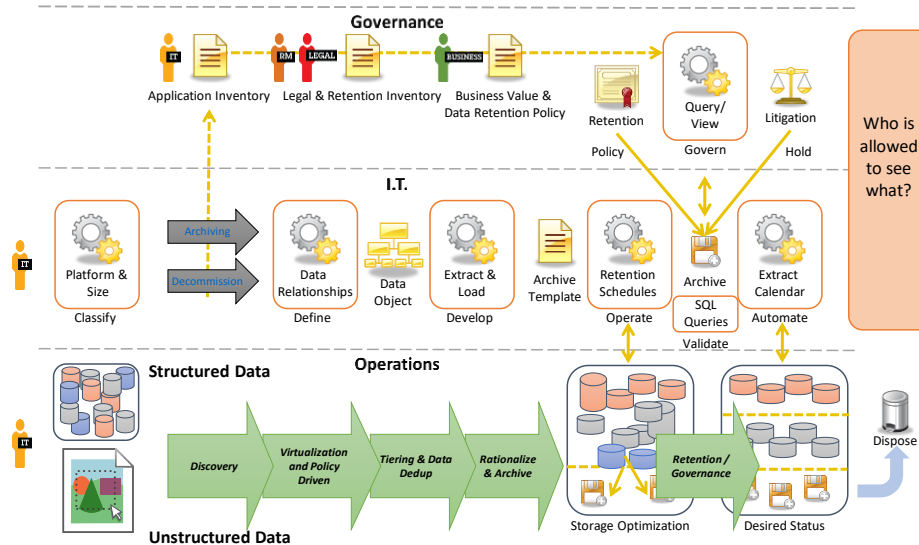




Processes emphasized the importance of engaging appropriate stakeholders with a business stake within the archiving. The suddenly important questions of both clinic and patient access medical records as well as surgeons and hospital staff not affiliated with client.

HIPAA laws mandate availability of personal health records and the protection of Personally Identifiable Information (PII)

1. How long *should* data be retained?
2. How long *must* data be retained?
3. How are legal holds implemented, ensuring Data Retention rules respect mandated holds?
4. "Expired" data continues to have value beyond EHR mandates: research, case management, disease trends.
5. Consolidation of patient data across clinics for reporting and maintaining a 360 degree patient view.
6. Data access requirements: patient, physician, clinic, service dates
7. Automating governance and management
8. Complying with legally defensible position: i.e., Chain of Custody





Other future initiatives enabled by the project and under consideration by the client include using archived for disease management and enabling better patient interaction and freedom.

