Access Nursing: Legacy Database Modernization & Reporting Automation

A healthcare staffing organization supporting over **300 nurses, caregivers, managers, and executives** relied on a 10-year-old Microsoft Access reporting environment, manually maintained spreadsheets, and multiple disconnected healthcare systems.

The organization depended on information from:

- MatrixCare
- HHA Exchange
- HealthMEDX (now Netsmart)
- Payroll Systems
- Billing Systems

Management reports, patient statistics, payroll reporting, billing reports, and executive scorecards required significant manual effort, spreadsheet manipulation, and report consolidation.

The Challenge

Critical business information was distributed across independent systems with different structures, naming conventions, and reporting methods.

Reporting required:

- Manual report generation
- Spreadsheet consolidation
- Copy-and-paste processes
- FTP downloads
- Manual validation of operational statistics

Many business metrics could not easily be traced back to their source systems, making reporting difficult to validate and maintain.

The Solution



I reverse engineered the reporting environment, identified the source data supporting key business metrics, and designed a centralized SQL Server reporting platform.

The solution included:

- Automated FTP data collection
- SQL Server integration and reporting databases
- SSIS export and import processes
- SQL Agent job automation
- Data mapping and standardization
- Patient, payroll, billing, and operational reporting
- SAP BusinessObjects self-service reporting

A consolidated reporting database was created that unified information from multiple vendor platforms into a single reporting environment.

Results

✅ Supported 300+ healthcare professionals

✅ Automated daily and weekly report generation

✅ Centralized patient, payroll, billing, and operational reporting

✅ Eliminated repetitive manual reporting workflows

✅ Standardized executive scorecards and management reporting

✅ Established a single source of truth across multiple systems

✅ Improved reporting visibility and confidence in business metrics

Key Outcome

The project transformed multiple versions of the truth into a centralized reporting platform that delivered reliable information automatically each morning.

Technologies Used

Microsoft Access • SQL Server • SSIS • SQL Agent • SAP BusinessObjects • FTP Automation • MatrixCare • HHA Exchange • HealthMEDX (Netsmart) • Microsoft Dynamics GP

