



**IDENTITY  
& SECURITY**  
CONFERENCE

December 1-2 Gaylord National Harbor

# Digital Transformation: How to Take the First Steps Towards Modernizing Your Vital Records System (VRS)

---

Tuesday December 2, 2025 | Netsmart & Florida



## Digital Transformation: How to Take the First Steps Towards Modernizing Your VRS

# Presenters



## **Ken Higginbotham**

*Deputy State Registrar | Administrator for Administrative Services, Florida Department of Health, Bureau of Vital Records & Naphsis Board Treasurer*



## **Shelly Casale, RN, BSN**

*Senior Director & GM, Vital Records, Netsmart*

# Digital Transformation: How to Take the First Steps Towards Modernizing Your VRS

- 01** Urgency of Modernization & Platform Design
- 02** Benefits of Digitization
- 03** Technology Partner
- 04** Future Proofing Infrastructure

# Introduction and Urgency of Modernization



# Why Modernization is Urgent

## **Rising Demand and Aging Systems**

State agencies face increased demand for vital records while legacy infrastructure struggles to keep up.

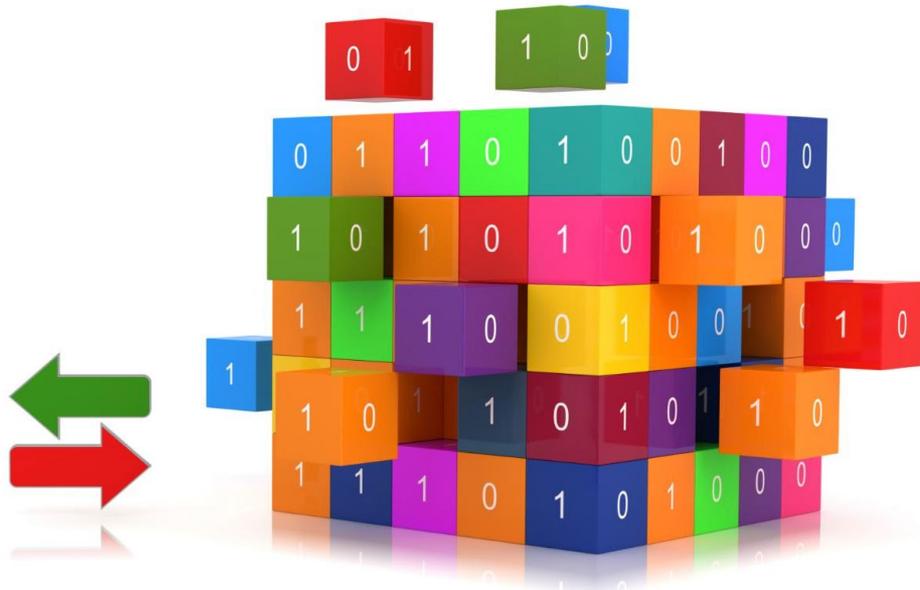
## **Escalating Fraud Risks**

Sophisticated identity theft and fraudulent documents heighten the need for secure record systems.

## **Need for Adaptable Platforms**

Agencies must adopt modern platforms that ensure compliance, trust, and future adaptability.

# Understanding Platform Design



# Purpose-Built vs. Retrofitted Platforms

## Purpose-Built Platform Features

Designed specifically for vital records, these platforms offer secure data handling and configurable workflows tailored to compliance.

## Retrofitted Platform Limitations

General systems adapted for vital records often face limitations in security, functionality, and scalability, risking inefficiency.

## Impact on Compliance and Efficiency

Purpose-built platforms help agencies meet regulatory mandates and improve operational efficiency and user experience.

# Benefits of Digitization

# Enhancing Security, Efficiency, and Access

## Enhanced Security Measures



Encryption, audit trails, and role-based access controls reduce risks of unauthorized access and breaches

## Operational Efficiency



Automation reduces manual data entry and paper handling, speeding processing and lowering errors

## Improved Public Access



Online portals and mobile apps enable easy, multilingual, and ADA-compliant access to vital records.

## Enhanced Security Measures

Encryption, audit trails, and role-based access controls reduce risks of unauthorized access and breaches.

## Operational Efficiency

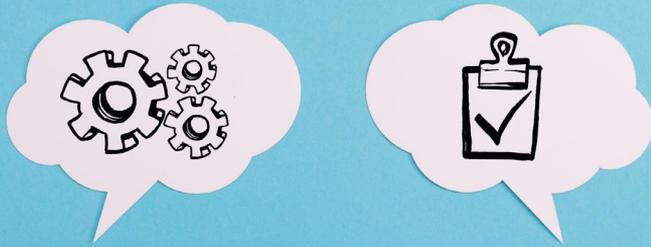
Automation reduces manual data entry and paper handling, speeding processing and lowering errors.

## Improved Public Access

Online portals and mobile apps enable easy, multilingual, and ADA-compliant access to vital records.

# Selecting a Technology Partner

# Key Attributes of a Tech Partner



## **Configurable Solutions**

Configurable platforms enable tailored workflows and integration to meet specific state requirements effectively.

## **Compliance and Security**

Ensuring adherence to federal and state mandates like data privacy and identity verification is critical for vital records systems.

## **Continuous Innovation**

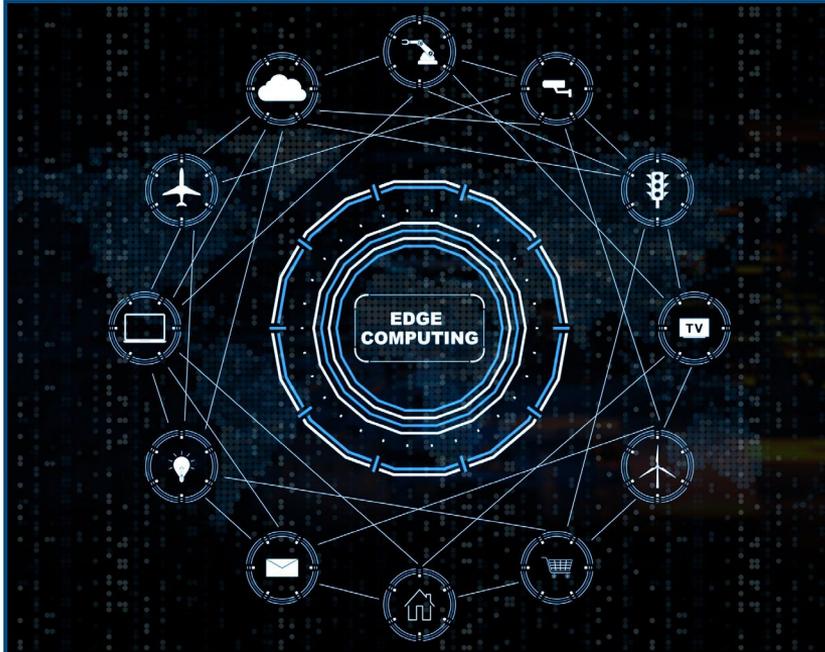
Partners committed to innovation provide regular updates and integrate AI, machine learning, and cloud-native solutions.

## **Strategic Vendor Evaluation**

A comprehensive checklist helps evaluate data security, support models, and long-term sustainability of tech partners.

# Future-Proofing Infrastructure

# Practical Steps for Agencies



## Digital Maturity Assessment

Assess agencies' current capabilities, gaps, and readiness by evaluating interoperability, auditability, and governance.

## Modernization Roadmap

Develop a clear roadmap defining goals, timelines, and resource allocation for future modernization efforts.

## Securing Funding

Obtain funding through grants, partnerships, or legislation to support modernization initiatives effectively.

## Pilot Programs and Training

Implement pilot projects for testing systems and provide staff training to ensure smooth adoption and change management.

# Modernization in Action



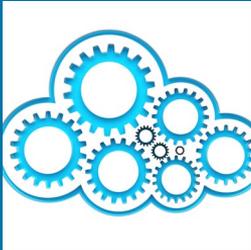
## Cloud-Based Solutions

Cloud platforms enable remote certificate requests and automated verification, reducing manual workloads by 40%.



## Data Integration Benefits

Integration with health databases improves data accuracy and reporting for vital records management.



## Key Modernization Insights

Interoperability, auditability, and user-centric design are critical for successful system transformation.

# Scanning and OCR

# Streamlining Vital Records Requests with Scanning & OCR

## Digitizing Paper Forms

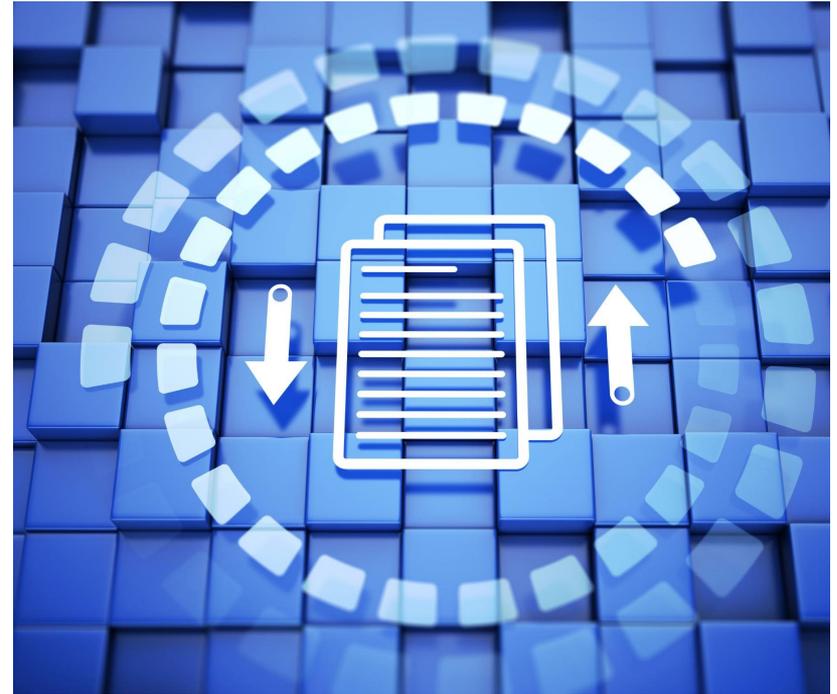
Scanning technology converts paper applications into digital formats for easier processing and storage.

## Automated Data Extraction

OCR technology automatically extracts data from scanned documents to reduce manual entry errors.

## Improved Efficiency and Accuracy

Integrating scanning and OCR streamlines workflows, accelerates processing, and improves data accuracy.



# Challenges in Current Processes

# Current Challenges



## Manual Data Entry Issues

Manual entry from handwritten forms causes errors and slows down data processing in vital records offices.



## Labor-Intensive Verification

Verification processes require significant time and resources, adding to delays and inefficiencies.



## Impact on Service Delivery

These challenges obstruct timely service and complicate compliance with regulatory standards.

# Technology Solution

# Proposed Solution



## **Digitizing Paper Applications**

Scanning paper applications converts physical documents into digital images, enabling automated processing.

## **Optical Character Recognition**

OCR technology extracts key data fields automatically, reducing manual data entry and errors.

## **Data Integration and Validation**

Extracted data is structured, validated, and integrated into the Vital Records Management System for accessibility.

## **Improved Efficiency and Integrity**

The solution accelerates processing, enhances data integrity, and improves authorized user accessibility.

# How OCR Works

## Document Scanning

The first step involves scanning physical documents to create digital images for processing.

## Text Extraction

OCR software analyzes images to identify and convert printed text into machine-readable data.

## Data Validation

Extracted data is validated to ensure accuracy and consistency before storage.

## Automated Data Storage

Validated data is automatically stored, reducing manual input and improving data quality.



# Benefits of OCR Integration

# Benefits

## **Faster Processing Times**

OCR automates data extraction, significantly reducing the time required to process applications and documents.

## **Reduced Manual Errors**

Automation minimizes human entry errors, enhancing the accuracy and reliability of vital records data.

## **Improved Compliance**

Consistent and traceable data handling ensures better compliance with audit and regulatory requirements.

## **Seamless System Integration**

The OCR system integrates smoothly with existing vital records management platforms, boosting operational efficiency.

# Workflow Comparison

## Manual Workflow

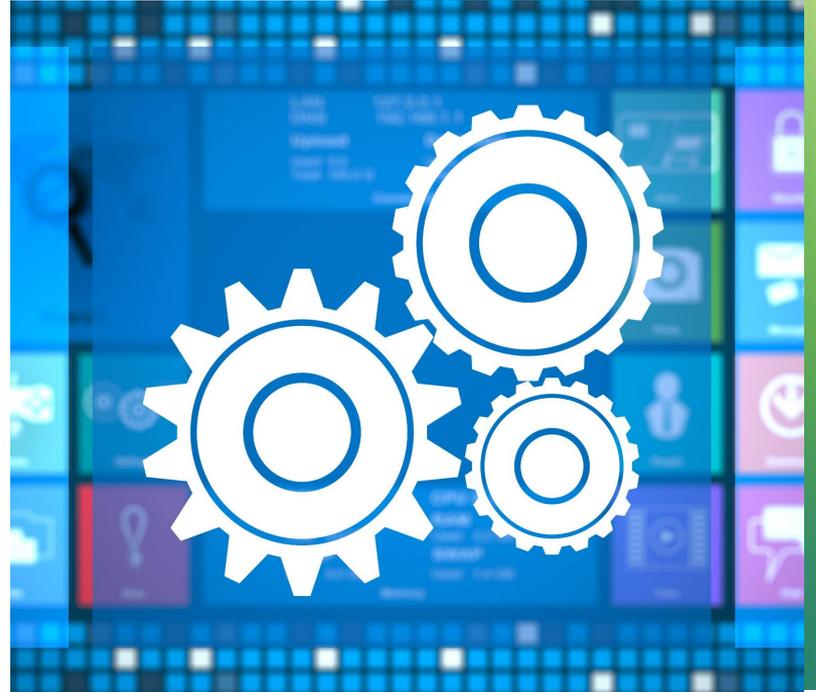
Before OCR, staff manually entered and verified data from paper forms, which was time-consuming and error-prone.

## Automated OCR Workflow

OCR automates data extraction and validation, enabling digital storage and faster processing times.

## Efficiency Improvements

Automation reduces labor costs, lowers processing time, and improves data accuracy compared to traditional methods.



# Implementation Strategy

# Implementation Considerations

## Reliable Hardware and Software

Invest in dependable scanning hardware and OCR software that seamlessly integrates with current systems.

## Data Validation and Security

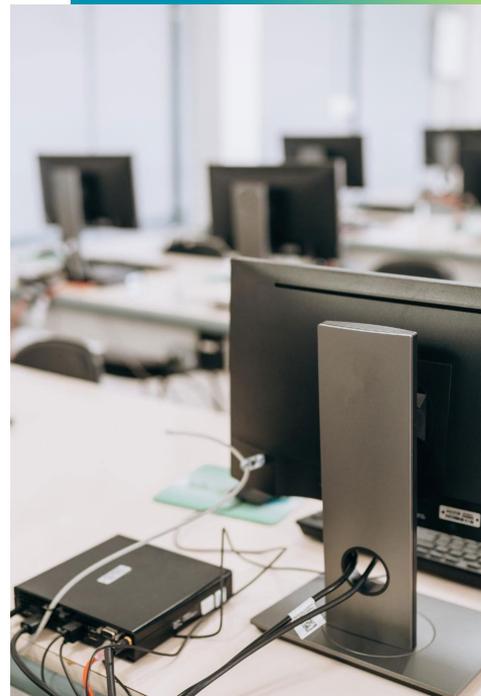
Implement data validation protocols to ensure accuracy and secure sensitive information during processing.

## Staff Training and Workflow

Provide comprehensive staff training to adapt to new scanning and OCR workflows effectively.

## Privacy and Compliance

Ensure privacy policies and compliance measures protect sensitive data and meet regulatory standards.



# Impact on Stakeholders

## Benefits for Internal Staff

OCR reduces workload and speeds processing, enabling staff to focus on more valuable tasks.

## Improved Citizen Experience

Faster vital records processing leads to quicker service and higher citizen satisfaction.

## Enhanced Decision Making

Advanced reporting and analytics improve decision-making and resource management.

## Overall System Efficiency

The OCR system creates a more responsive and efficient vital records service.



# Implementing a Medical Examiner/Medical Examiner/Coroner Case Management System Using MDI FHIR



**Integrating healthcare data standards for efficient case handling**

# Streamlining Processes and Improving Data Accuracy & Timeliness

## Standardized Data Exchange

MDI FHIR specifications enable structured and interoperable data exchange between Medical Examiner/Coroners and healthcare providers.

## Enhanced Accuracy and Timeliness

The system facilitates real-time updates, reducing manual errors and improving the timeliness of case information.

## Streamlined Workflow and Compliance

Implementation of MDI FHIR streamlines workflows and supports regulatory compliance in medical death investigations.

# Challenges and Solution

# Current Challenges

## Manual Data Entry Issues

Manual data entry in Medical Examiner/Coroner offices causes inefficiencies and increases the risk of errors.

## Fragmented Systems

Fragmented systems create difficulties in sharing data across agencies and delay reporting.

## Regulatory Compliance Challenges

Outdated processes complicate compliance with state and federal regulations.

## Lack of Real-Time Updates

The absence of real-time updates limits prompt response to public health and legal needs.



# Proposed Solution

## Automated Data Exchange

The system automates data exchange with vital records and healthcare systems using MDI FHIR standards.

## Efficient Data Capture

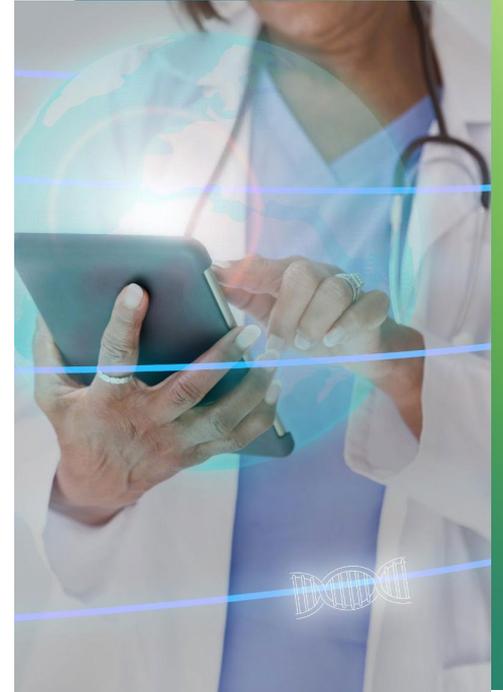
MDI FHIR-compliant templates enable efficient data capture and transmission without manual input.

## Real-Time Updates and Compliance

Supports real-time case updates, enhances data accuracy, and ensures regulatory compliance.

## Unified Collaboration Platform

Improves cross-agency collaboration by providing a unified platform for case management.



# MDI FHIR Overview

# What is MDI FHIR?

## Standardized Data Framework

MDI FHIR provides a standardized framework for sharing Medical Examiner/Coroner and medical examiner case data securely and efficiently.

## Integration with Health Systems

It enables seamless interoperability with Electronic Health Records and Vital Records systems for timely data exchange.

## Capture of Critical Case Details

Supports recording cause of death, investigation details, and related medical information in a structured format.

## Facilitates National Compatibility

Adopting MDI FHIR ensures compatibility with national health data standards for effective communication.



# Workflow and Benefits

# Workflow Overview

## Case Initiation and Data Capture

Workflow starts with case initiation using MDI FHIR-compliant templates to standardize data collection.

## Automatic Data Exchange

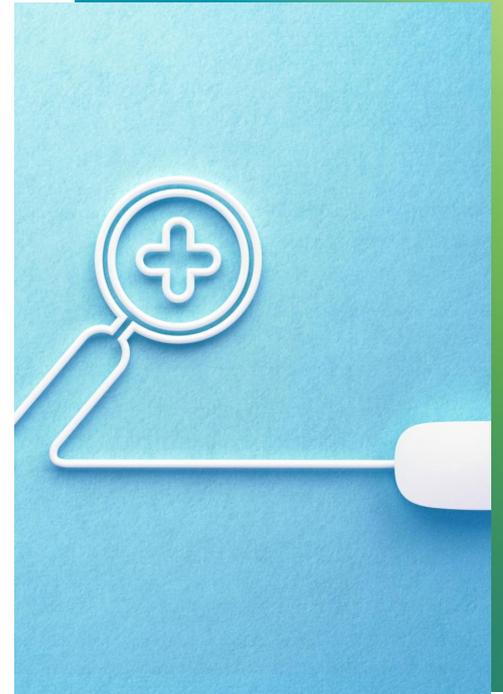
Data is automatically exchanged between Medical Examiner/Coroner Case Management and Vital Records systems to ensure seamless integration.

## Real-Time Updates and Transparency

Authorized users receive real-time updates, improving transparency and reducing manual errors.

## Audit Trail and Accountability

Maintains a clear audit trail of case activities enhancing accountability and reporting accuracy.



# Benefits

## Improved Data Accuracy

MDI FHIR integration reduces manual data entry and standardizes formats for greater accuracy.

## Faster Case Processing

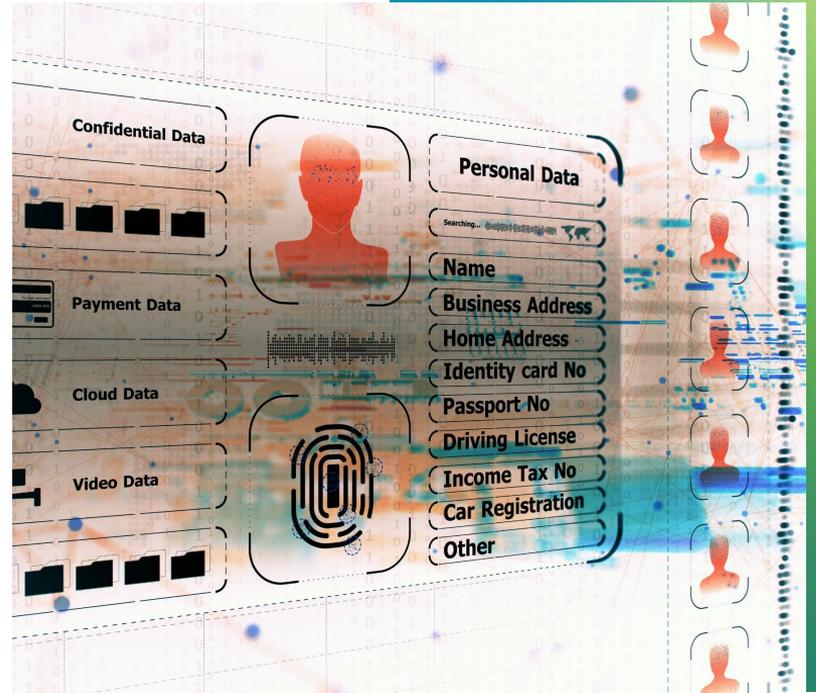
The system accelerates case processing and reporting for timely public health responses.

## Enhanced Compliance

Supports adherence to state and federal standards, reducing legal and regulatory risks.

## Secure Collaboration

Enables secure and interoperable data exchange for improved agency collaboration.



# Implementation and Impact

# Implementation Considerations

## System Integration

Integrate the new system with existing Vital Records and EHR platforms for seamless operation.

## Training and Support

Provide comprehensive training for Medical Examiner/Coroners and staff to ensure proficient system use.

## Data Security and Compliance

Ensure data security and HIPAA compliance to protect sensitive health information.

## Pilot Program and Monitoring

Conduct pilot programs and use continuous feedback to refine and improve the system.



# Impact on Stakeholders

## Medical Examiner/Coroners' Workflow Improvement

Streamlined workflows and reduced paperwork will enhance Medical Examiner/Coroners' efficiency and accuracy in case management.

## Vital Records Efficiency

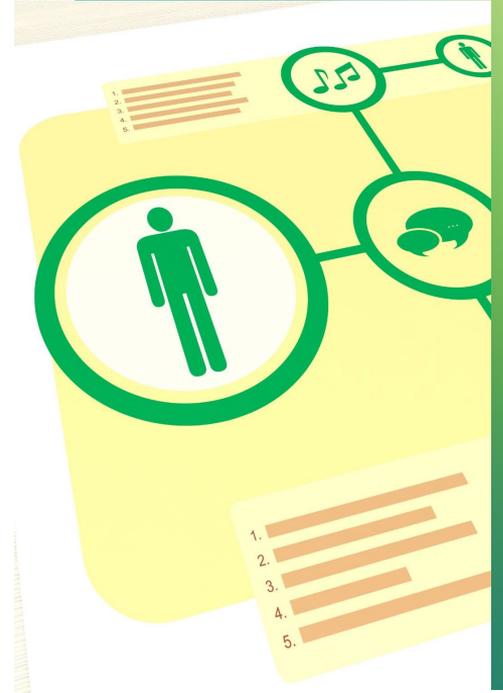
Faster registration processes and improved data quality will benefit Vital Records offices significantly.

## Healthcare Provider Access

Timely access to accurate case data supports better patient care and public health reporting by healthcare providers.

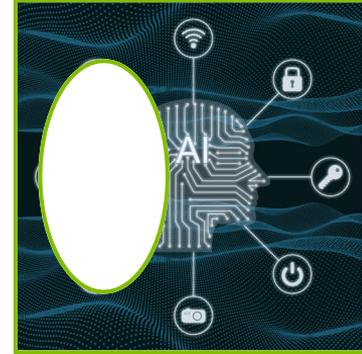
## Public Health Agency Analytics

Enhanced analytics enable public health agencies to respond quickly to emerging health trends and improve community health outcomes.



---

# Integrating AI into Vital Records Systems



**Enhancing data accuracy and efficiency  
with AI technology**

# Understanding the Current Landscape

# Current Challenges in Vital Records Systems

## Manual Data Entry Issues

Manual data entry introduces high risk of human error and causes processing delays in vital records systems.

## Outdated Workflows

Outdated workflows lack automation, limiting scalability and responsiveness of vital records operations.

## Poor User Experience

Legacy interfaces restrict intuitive navigation and do not support real-time updates for users.

## Need for Modernization

Modernizing vital records systems with intelligent technologies can enhance timeliness and reliability.

## Statewide Uniformity



# AI Integration Opportunities



# AI Use Cases in Vital Records

## Smart OCR for Data Extraction

Smart OCR extracts structured data from scanned paper applications, reducing manual transcription efforts.

## NLP for Handwritten Text

Natural Language Processing interprets handwritten and unstructured text into usable data fields.

## Machine Learning for Anomaly Detection

Machine learning analyzes historical records to find patterns and flag anomalies, aiding fraud detection.

## AI Chatbots for User Support

AI chatbots assist users by answering questions, guiding form submissions, and providing status updates.



# Operational Enhancements

# Workflow Improvements with AI

## Automation Enhances Efficiency

AI automation reduces manual tasks, allowing staff to focus on complex and higher-value activities.

## Faster Processing Times

AI accelerates processing of vital records requests, enabling quicker service delivery to users.

## Accurate Data Validation

AI-driven validation ensures data accuracy and completeness, reducing errors and corrections.

## Real-Time Status Updates

Users receive AI-powered real-time updates during the application process, enhancing transparency and satisfaction.



# Benefits of AI Integration

## Improved Data Accuracy

AI integration reduces errors and enhances data integrity, building greater trust in vital record systems.

## Operational Efficiency

Automation and intelligent processing increase operational efficiency and manage higher workloads with fewer resources.

## Regulatory Compliance

AI enforces validation rules and creates audit trails to ensure compliance with legal and regulatory standards.

## Enhanced User Experience

Faster turnaround, intuitive interfaces, and responsive support significantly improve user satisfaction.



# Implementation Strategy

# Implementation Considerations

## Selecting Appropriate AI Tools

Choose AI tools and frameworks that fit operational needs and technical infrastructure for effective implementation.

## Data Privacy and Security

Prioritize compliance with data privacy and security standards, especially for sensitive personal information.

## Staff Training and Adoption

Provide comprehensive staff training to enable effective use of AI-enabled workflows in daily operations.

## Continuous Monitoring and Updates

Maintain system accuracy and relevance through ongoing monitoring and regular AI model updates.



# AI Workflow for Vital Records

STEP	DESCRIPTION
<b>Paper Application</b>	Initial submission of vital records request in paper format
<b>OCR &amp; NLP</b>	Scanning and extracting data using Optical Character Recognition and Natural Language Processing
<b>AI Validation</b>	Automated checks for accuracy, completeness, and compliance
<b>Vital Records Database</b>	Storing validated data for access and reporting

# Questions?



# Recap and Discussion

## **Strategic Digital Transformation**

Digitization is essential for modernizing vital records systems to enhance security and efficiency.

## **Platform Selection Importance**

Understanding differences between purpose-built and retrofitted platforms is crucial for successful modernization.

## **Collaboration and Learning**

Engaging in discussions and sharing experiences supports effective planning and informed decisions.