



# **PREDDIX: Transforming Healthcare Workforce Management**

## **A Case Study on Staff Retention and Compliance Excellence**

Presented to healthcare executives and HR professionals seeking innovative workforce solutions

# The Challenge: **Critical Workforce Issues** in Canadian Healthcare

## **High Clinical Turnover**

15% voluntary turnover rate among nurses with limited visibility into root causes

## **Complex Scheduling**

24/7 operations with manual tracking of paid/unpaid leave creating administrative burden

## **Compliance Gaps**

No real-time monitoring of certification renewals leading to potential regulatory violations

A premier Canadian healthcare provider with **15,000+ employees** faced recurring workforce management challenges that created operational inefficiencies and financial risks. Their reactive approach to workforce management affected staff morale and patient care quality while increasing administrative workload.

# The Hidden Costs of Reactive Workforce Management

Before implementing PREDDIX, the organization struggled with:

## Time-Consuming Reporting

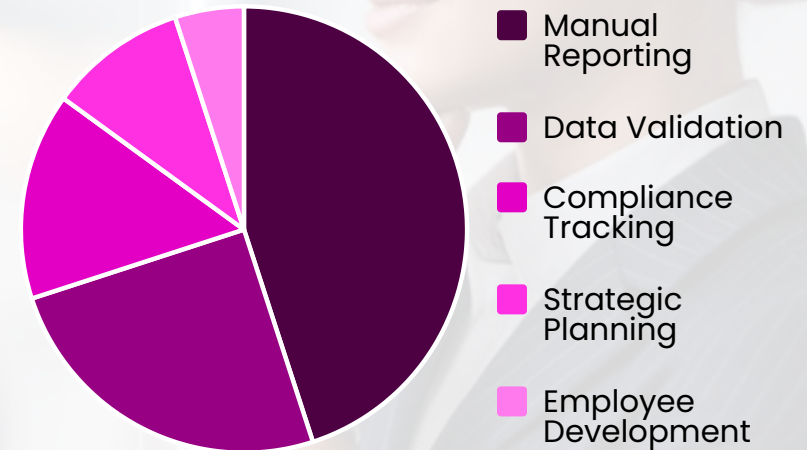
Leadership reports on headcount, turnover, and pay distribution took days to generate, delaying strategic workforce planning and decision-making.

## Significant Manual Effort

A team of HR administrators spent countless hours manually creating and validating reports every pay period, consuming valuable time that could have been directed toward strategic initiatives.

## Lack of Proactive Insight

HR operated reactively, unable to anticipate which departments or employee segments were at higher risk of leaving, or what factors contributed to employee burnout.



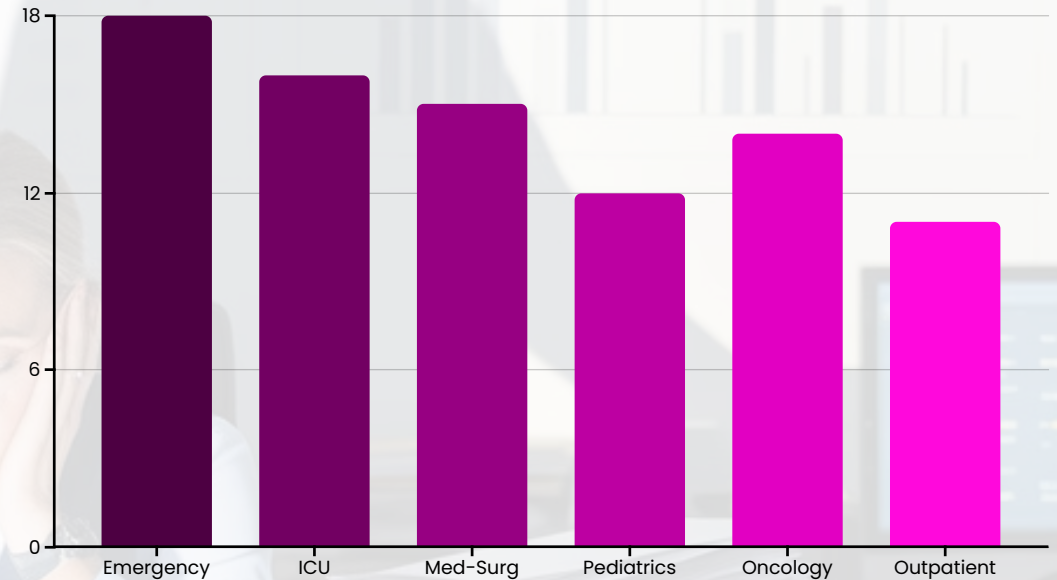
**HR Time Allocation Before PREDDIX Implementation**



# The Financial Impact of Clinical Staff Turnover

The **15% turnover rate** wasn't just a workforce stability issue—it represented a significant financial drain on the organization:

- Average cost to replace a single nurse: \$40,000–\$60,000
- Annual turnover costs exceeding \$9 million
- Increased overtime expenses to cover staffing gaps
- Negative impact on care quality and patient satisfaction
- Reduced morale among remaining staff, creating a cycle of further turnover



**Nurse Turnover Rates by Department Before PREDDIX**

Without visibility into the specific causes of turnover or the ability to predict which staff members were at risk, leadership was unable to implement targeted retention strategies. This reactive approach meant constantly playing catch-up rather than proactively addressing workforce challenges.

# Introducing PREDDIX: An Intelligent HR Analytics Platform



## Dynamic Dashboards

Real-time, pay-period-level variance analysis with automated detection of discrepancies in workforce data. HR leaders can now see live turnover rates broken down by department, tenure, and role.



## Pre-Built Reports

Instant access to over 250 pre-built reports for tracking mandatory compliance training completion and staff certifications without needing to submit requests to HR.



## Intelligent Recommendations

Advanced analytics engine that analyzes data from performance reviews, absenteeism, and compensation to predict which employee segments are at high risk of attrition, providing actionable recommendations.



## Natural Language Query

Simple question interface allowing managers to ask questions like "Show me absence trends for the last quarter in Cardiology" and get immediate, data-backed answers.

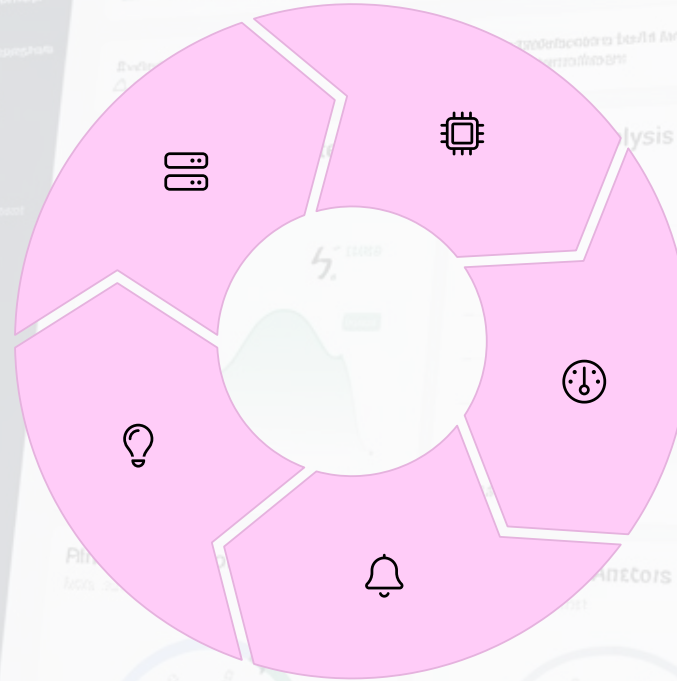
# How PREDDIX Works: The Technical Architecture

## Data Integration

Securely connects to existing HR, scheduling, payroll, and training systems to create a unified data ecosystem without disrupting current workflows.

## Recommendation Engine

Suggests specific interventions based on historical success patterns and industry best practices to address identified issues.



## Predictive Insight Engine

Proprietary algorithms analyze patterns in workforce data to identify trends, anomalies, and predictive indicators of potential issues.

## Visualization Layer

Transforms complex data into intuitive dashboards and reports that provide actionable insights for all levels of management.

## Alert System

Proactively notifies stakeholders of potential compliance issues, scheduling conflicts, or staff at risk of leaving before problems escalate.

PREDDIX was implemented as a proactive, intelligent control layer that sits above existing systems, catching issues before they could escalate while providing deeper insights into workforce dynamics. The platform's machine learning capabilities mean it continuously improves its predictive accuracy over time as it processes more organizational data.



# Real-Time Compliance Monitoring: Eliminating Regulatory Risk

One of the most critical challenges for healthcare organizations is maintaining regulatory compliance across thousands of employees with various certification and training requirements. PREDDIX transformed this process through:

## Automated Tracking

Continuous monitoring of certification expiration dates for all clinical staff, with automated reminders sent at 90, 60, and 30 days before renewal deadlines.

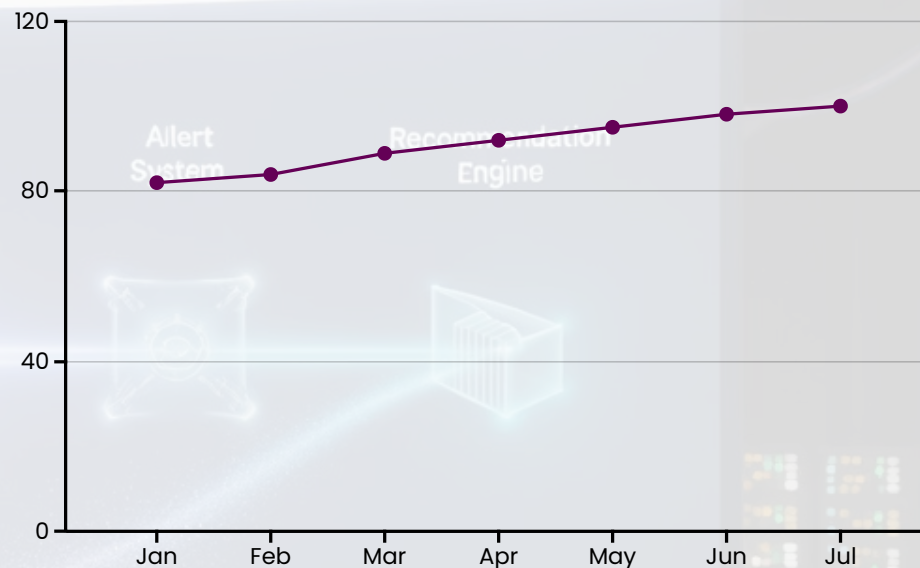
## Department-Level Dashboards

Unit managers receive personalized views showing compliance status for their teams, with the ability to drill down to individual employee records.

## Escalation Protocols

Automatic alerts to department leadership when compliance rates fall below defined thresholds, ensuring immediate remediation.

With PREDDIX, the organization achieved 100% compliance with mandatory certifications within 7 months of implementation, eliminating a significant source of regulatory risk and potential liability.



**Mandatory Certification Compliance Rate After PREDDIX Implementation**

# Predictive Analytics: Identifying At-Risk Staff Before They Leave

PREDDIX's Intelligence engine transformed the organization's approach to retention by analyzing multiple data points to identify patterns that indicate increased flight risk:



## Attendance Patterns

Subtle changes in attendance or shift preference that may indicate job dissatisfaction or burnout



## Performance Trends

Declining engagement metrics or patient satisfaction scores that suggest disengagement



## Feedback Analysis

Natural language processing of performance reviews and surveys to detect sentiment changes



## Personalized Interventions

Tailored retention strategies based on individual risk factors and historical success patterns

The platform generates a "Risk Score" for each employee, allowing HR to prioritize interventions for those most likely to leave. This proactive approach enabled the organization to reduce nurse turnover by 20% within the first year of implementation, saving millions in replacement costs.



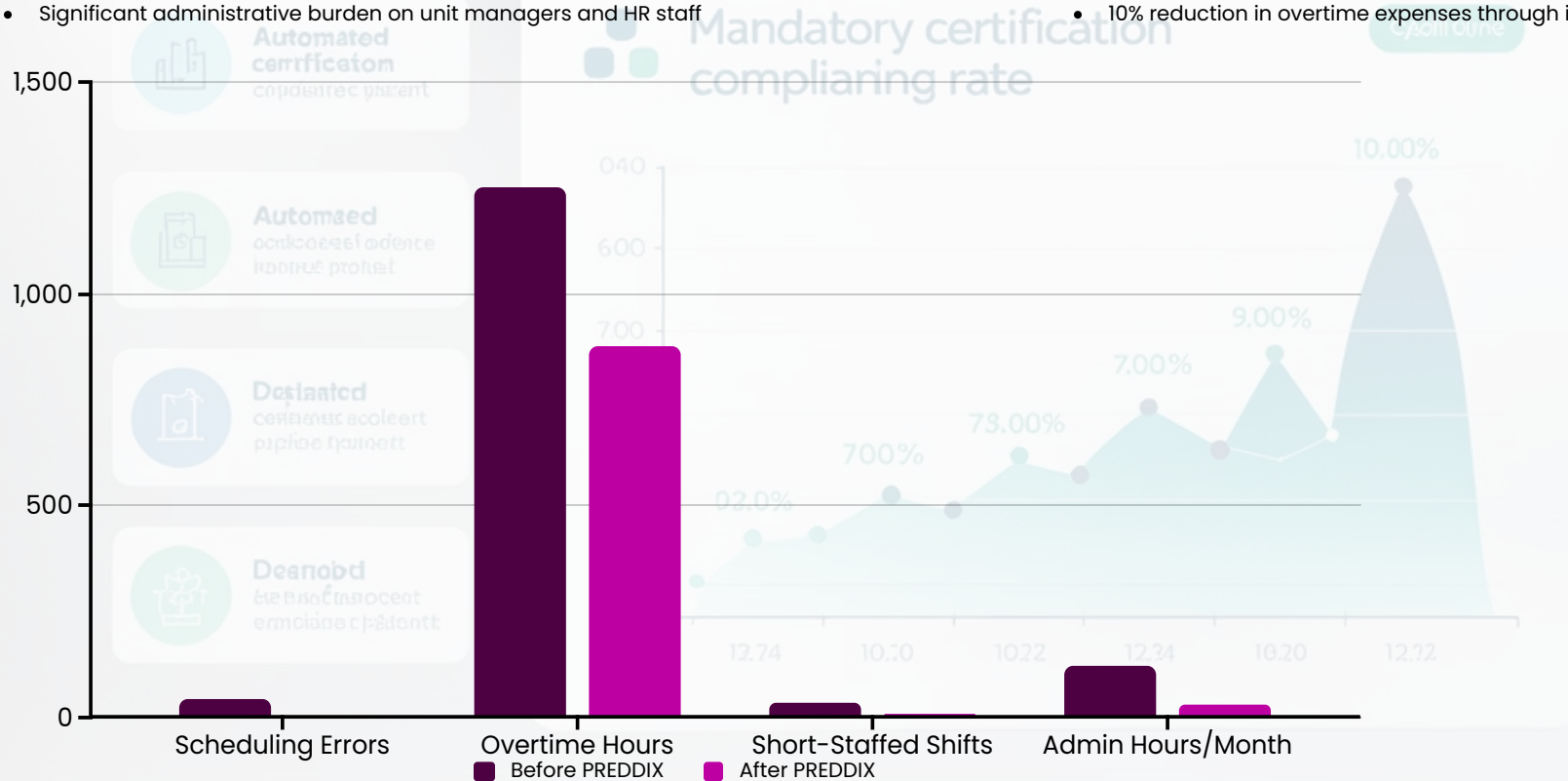
# Transforming Scheduling and Absence Management

## Before PREDDIX:

- Manual tracking of paid and unpaid leave across multiple departments
- Inconsistent application of absence policies
- Frequent scheduling conflicts and last-minute coverage issues
- No visibility into absence patterns or their impact on operations
- Significant administrative burden on unit managers and HR staff

## After PREDDIX:

- Automated detection of potential scheduling gaps weeks in advance
- Intelligence powered recommendations for optimal staff allocation
- Standardized application of absence policies across all departments
- Trend analysis revealing correlations between scheduling practices and turnover
- 10% reduction in overtime expenses through improved forecasting



PREDDIX transformed scheduling from a reactive, manual process to a proactive, data-driven system that optimizes staffing levels while respecting employee preferences and work-life balance needs.

# Natural Language Query: Democratizing Data Access

One of PREDDIX's most revolutionary features is its natural language query capability, which allows any authorized user to ask complex workforce questions in plain English and receive instant, accurate answers.

“

"Show me the overtime trends for ICU nurses in the last quarter compared to same quarter last year"

”

“

"Which departments have the highest compliance training completion rates this month?"

”

“

"What's the average time to fill nursing vacancies in Emergency compared to Med-Surg?"

”

This capability transformed how leaders interact with workforce data:

## Before PREDDIX:

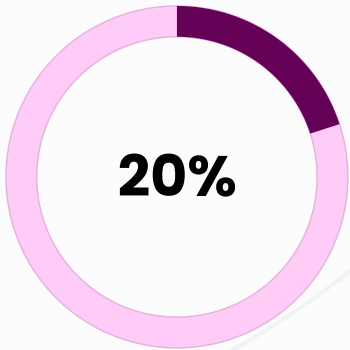
- Request sent to HR analytics team
- 3-5 day wait for custom report creation
- Limited ability to ask follow-up questions
- Data often outdated by delivery time

## With PREDDIX:

- Instant answers to workforce questions
- Ability to refine queries in real-time
- Self-service access for authorized managers
- Always current data reflecting latest changes

By democratizing access to workforce insights, PREDDIX empowered frontline leaders to make data-driven decisions without waiting for centralized reporting, accelerating the organization's ability to respond to emerging workforce challenges.

# Measurable Results: The PREDDIX Impact



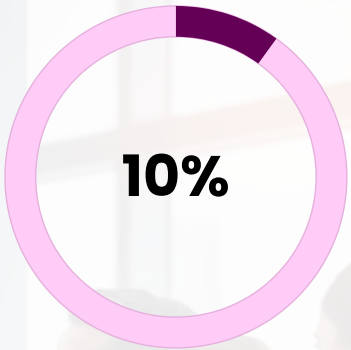
Turnover Reduction

Nurse turnover rate decreased from 15% to 12% within the first year through insights and targeted interventions



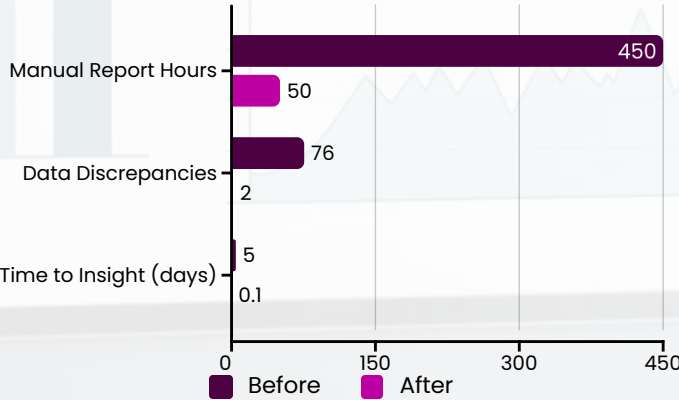
Compliance Rate

Achieved perfect compliance with mandatory certifications, eliminating regulatory risks and potential penalties



Overtime Reduction

Improved forecasting and proactive scheduling reduced costly overtime hours across all departments



The **400+ hours saved annually** in manual reporting allowed the HR team to shift from administrative tasks to strategic initiatives, including developing targeted retention programs, mentorship opportunities, and career advancement pathways that further enhanced workforce stability.



# Is Your Healthcare Organization Ready for Transformation?

## Schedule a Demo

See PREDDIX in action with your own data and discover the hidden insights within your workforce patterns

## ROI Assessment

Our team will conduct a comprehensive analysis to project your organization's specific cost savings and operational improvements

## Implementation Roadmap

Learn about our proven 60-day implementation process with minimal disruption to your existing systems

**"PREDDIX has transformed how we manage our workforce. We've gone from constantly reacting to problems to proactively addressing issues before they impact our operations or patient care. The ROI has been extraordinary."**

– Chief Human Resources Officer, Canadian Healthcare Provider

# Contact Us

Reach our team directly at [info@pclnxai.com](mailto:info@pclnxai.com) for questions about implementing the PREDDIX at your organization.