

# **Modernizing the health network:** The strategic role of content management for better continuity of care

A joint approach by TELUS Health and Cercle Group



# Transforming Quebec's health network through enterprise content management

The deployment of an integrated electronic health record (EHR) in Quebec represents a historic opportunity to improve the quality of care and interprofessional collaboration. However, this major transformation raises a significant challenge: how do we ensure seamless interoperability with the decades of patient data locked in outdated information systems that do not interface with modern EHR platforms?

The scope of this challenge is staggering. According to Gartner, up to 80% of an organization's data exists in unstructured document formats, creating a real accessibility challenge.<sup>1</sup> This fragmentation represents a tangible cost to healthcare delivery: 19.8% of management time is spent searching for information.<sup>2</sup>



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As Quebec healthcare leaders chart the path forward for provincial EHR deployment, a key strategic question emerges: how can we accelerate time-to-value while preserving the continuity and quality of care that Quebec patients deserve?

The answer lies in leveraging proven, enterprise-grade content management platforms that have already solved the complex interoperability challenges facing modern healthcare networks. By building on established technology foundations, Quebec healthcare organizations can focus their valuable resources and expertise on delivering exceptional outcomes—rather than rebuilding enterprise infrastructure from the ground up.

## Proven success in Quebec

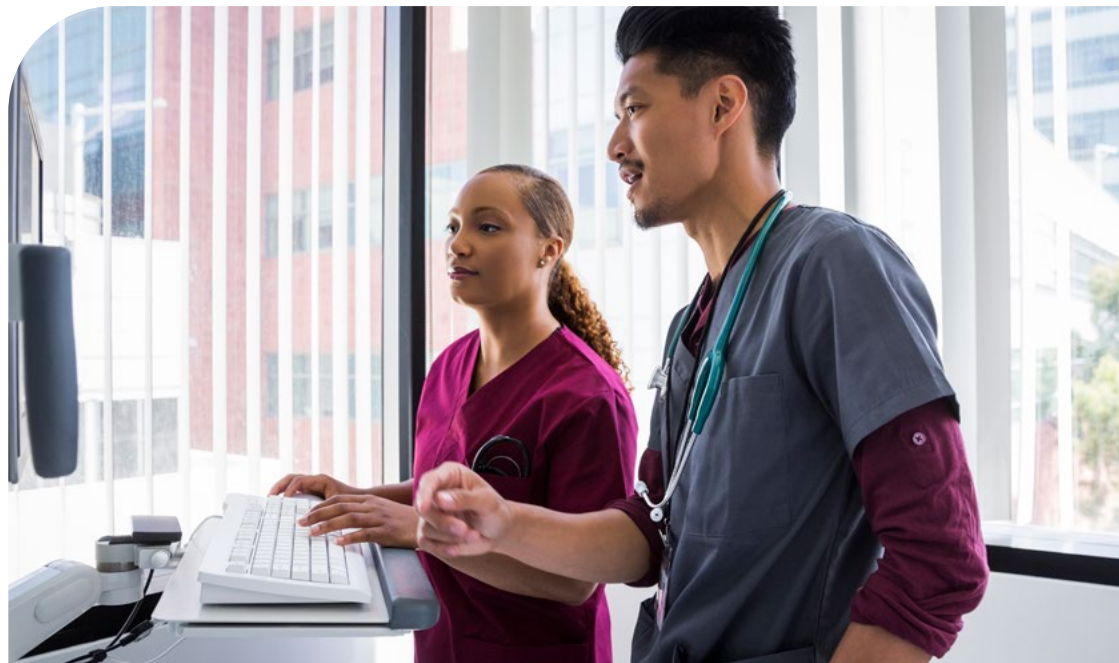
The modernization of Quebec's health network is not a theoretical goal; it is a reality already being realized by healthcare organizations across the province. Successful deployments and positive references from institutions such as the Jewish General Hospital and CHU Sainte-Justine demonstrate that Quanam<sup>®</sup> Enterprise Content Solutions (ECS) is the battle-tested, reliable choice for the Quebec healthcare landscape.

These local success stories provide a strategic roadmap for other healthcare organizations, confirming that the technology is uniquely calibrated to meet provincial clinical workflows, linguistic needs and stringent regulatory requirements today. By leveraging these proven benchmarks, Quebec can move forward with the confidence that the solution is already delivering seamless digital transformation within the local network.

As Quebec moves toward a provincial EHR deployment, this proven track record of EHR interoperability becomes even more critical. Quanam ECS functions as a strategic content layer—a stable foundation that ensures historical data remains accessible regardless of platform evolution. Whether organizations are managing legacy systems, transitioning to newer platforms, or operating in a hybrid environment during the EHR provincial rollout, the content layer remains constant and accessible. This architecture protects Quebec's legacy data investments and ensures continuity of care is never compromised, regardless of which EHR platform operates above it.



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## The strategic choice: Standardized platform vs. legacy IP integration

While it may be appealing to consider leveraging internally owned legacy software or a “homegrown” solution to maintain intellectual property control, organizations must weigh that perceived ownership against the substantial risks of integrating an outdated system that may no longer respond to modern user needs. Utilizing a global enterprise-grade platform like Quanam ECS offers a proven technology response that eliminates the uncertainties, technical debt and long development cycles associated with retrofitting obsolete systems. By providing experienced integration with 30 digital health record platforms currently in use in Quebec, another 30 integrations with clinical systems that provide view capabilities within Epic through Quanam, as well as existing integration with Epic modules and Epic integrations (12), this established approach significantly accelerates deployment and reduces implementation time compared to building or updating legacy integrations from scratch. Furthermore, while outdated internal solutions often lack the flexibility required for current clinical workflows, an enterprise-grade platform ensures long-term sustainability and immediate innovation, AI-readiness and advanced conceptual search capabilities, offering proven conformance to interoperability standards through integrations already tested and validated in other jurisdictions.

Enterprise content management (ECM) solutions, particularly Quanam ECS, offer a proven technology response. St. Joseph’s Healthcare Hamilton’s experience – with 28.9 million integrated documents and 1,900 hours of work recovered – proves that it is possible to preserve historical data while embracing digitization.<sup>3</sup>

TELUS Health, a Canadian leader in digital health innovation with over 15 years of proven expertise through OACIS, has partnered with Cercle Group—the Canadian system integrator for Quanam Enterprise Content Solutions, to support Quebec healthcare organizations in their digital transformation journey. Through this strategic alliance, TELUS Health brings its deep understanding of Canadian clinical workflows, regulatory requirements and patient-centered care, while Cercle Group provides specialized enterprise content management capabilities—delivering proven solutions for Quebec’s evolving healthcare landscape.



# Quantified benefits to the health care system

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## Decommissioning of legacy systems

TELUS Health's partnership with Quest Diagnostics for expert Quantum ECS implementation enables healthcare organizations to securely decommission their legacy systems while preserving access to critical historical data.

This strategic approach offers several key benefits:

- **Consolidated patient data:** Package information from many dated systems into a single historical content management solution, eliminating case fragmentation
- **Seamless onboarding with EHR:** Ensure seamless connectivity to new platforms and readily available historical information to clinicians
- **Reduced operating costs:** Significantly reduce costs associated with managing and administering multiple dated systems, including licensing, maintenance, and technical support



## Quick ROI

Intelligent data capture delivers measurable benefits:

- **Reduce turn-around time by up to 80%:** Helps healthcare organizations meet stringent service level agreements<sup>4</sup>
- **Reduced labour and costs:** Automation decreases the bandwidth required to process large volumes of incoming data
- **Improved accuracy:** Elimination of manual input errors and time-consuming processes
- **Readiness for AI projects:** Architecture compatible with the integration of large language models (LLMs) for future automated analysis and synthesis capabilities



## Direct benefits for patients

Beyond operational efficiency, this strategy has direct and positive repercussions on the quality of care:

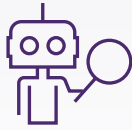
- **Faster diagnoses:** Immediate access to a patient's complete medical history allows clinicians to make faster and more accurate diagnoses
- **Better coordination of care:** The digital chart tracks the patient, ensuring seamless continuity of care between different institutions
- **Increased safety:** Reduced risk of errors due to lack of data, ensuring greater patient safety



### Improved search capabilities

Optical character recognition (OCR) scans-to-text conversion and automated indexing enable:

- Fast and accurate search across all organizational assets
- Breakdown of data silos
- Accelerated discovery of critical information

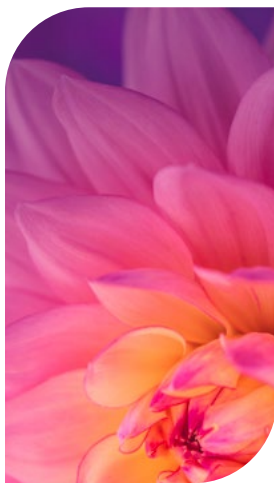


### Deep search: intelligent and contextual search

The Deep Search feature revolutionizes access to discrete information through:

- **Intuitive modern search:** Familiar interface that allows clinicians to search all assets with natural language queries
- **Discrete information discovery:** The ability to identify and extract specific insights buried in large volumes of documents
- **Advanced conceptual search:** Goes beyond simple keyword search to understand context and intent






This approach transforms information search from a laborious process into an intuitive experience, allowing healthcare professionals to spend more time on care and less time on document search.



# The ECM solution

## A comprehensive platform for healthcare content management

Quantum ECS captures, manages and secures all document types—from PDFs and scanned notes to forms and medical images—through a unified platform. Its principal advantage is its ability to act as a bridge between legacy and new systems, centralizing information through a unified interface rather than migrating all data into the EHR.

	Stakeholder	Key benefit	Quantified impact
	<b>Clinical staff</b>	Instant access to complete patient history across all systems.	19.8% time savings on information search. <sup>5</sup>
	<b>IT teams</b>	Secure legacy system decommissioning while preserving data access.	Elimination of multiple license and maintenance costs.
	<b>Administrative staff</b>	Automated document processing and intelligent routing.	Up to 80% reduction in document turnaround time. <sup>6</sup>
	<b>Patients</b>	Faster, more accurate diagnoses with complete medical history.	Immediate clinician access to information across institutions.
	<b>Health information management staff</b>	Workflow automation to prepare and release information with streamlined file completion.	Compliance with provincial regulatory requirements.

# Migration strategy and closure of obsolete systems

## Phased migration approach

Quantum ECS enables a smooth migration strategy that avoids major disruptions:

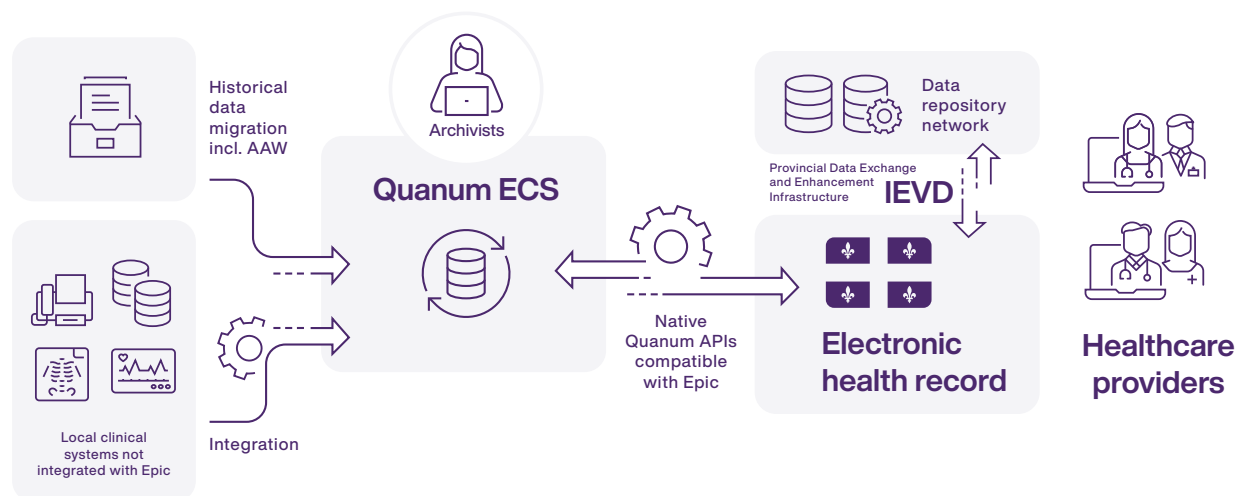
- Migrate in phases based on unit, program or content type
- Temporary coexistence with continuous integrity validation
- Staggered team training

## Pre-configured integration with EHR

The use of Quantum ECS gives Quebec healthcare organizations a major advantage for the deployment of the EHR, thanks to deep experience with more than 60 integrations of Quantum ECS with digital health record platforms.<sup>7</sup>

These tried-and-tested integrations make it possible to:

- **Accelerate deployment:** Significant reduction in implementation time
- **Minimize risks:** Interfaces tested and validated in other jurisdictions
- **Assure conformance:** Compliance with the interoperability standards required by the EHR
- **Guarantee technical support:** Expertise available for interface optimization



# Return on investment for shutting down dated systems

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## Benefits for the health and social services network

Cost reduction and productivity gains:

- **Technology consolidation:** Elimination of multiple licenses and maintenance costs for obsolete systems
- **Optimization of IT resources:** Freeing up teams for value-added projects
- **Measurable productivity gains:** Intelligent data capture (IDC) reduces total turn-around time by up to 80% and eliminates manual input
- **Improved compliance:** Automated traceability, retention policy management and enhanced security

## Improved user experience and collaboration

- **Unified interface:** Easy access to all patient information from any workstation
- **Enhanced interprofessional collaboration:** Easier information sharing and 24/7 continuity of care
- **Readiness for innovation:** Scalable platform compatible with future technologies (AI, analytics)



## Key modules of Quantum Enterprise Content Solutions

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### Intelligent data capture<sup>8</sup>

IDC feature automates document processing in three distinct phases:

**Input:** Capture physical, electronic and image documents in paper, email, fax and file transfer.

**Analyze:** Intelligently identify content types and metadata through a combination of supervised learning and a rules-based system.

**Transmit:** Automatically send results to the appropriate target systems (e.g., electronic patient records, enterprise management systems, automation platforms, etc.).





## Deep Search<sup>9</sup>

The Deep Search module unlocks structured and unstructured content with advanced capabilities:

### Data enrichment

- Get enriched data with relevant indicators to enhance search results
- Enhance search functionality with multiple data formats
- Obtain native view of files based on search criteria

### Advanced enterprise search

- Perform conceptual search unconstrained by keywords
- Integrate data silos to empower robust searching
- Enjoy personalization and knowledge management

### Knowledge discovery

- Accelerate insight discovery to uncover trends, patterns and relationships
- Eliminate detailed report requests and hand off risks
- Get holistic intelligence and reduce blind spots

## Integration and automation with Quantum ECS<sup>10</sup>

- **Universal connectivity:** Support for HL7 and non-HL7 systems
- **Storage agnostic:** Provider-independent storage enabling interoperability
- **Workflow automation:** Rules-based business intelligence to automate routing and approvals with robust and reliable Epic API integration

# Proven results: The experience of St. Joseph's Healthcare Hamilton

## Organizational context

St. Joseph's Healthcare Hamilton (SJHH) is a leading academic health sciences and research centre, providing high-quality care to patients in Hamilton, Niagara, Haldimand, Brant and beyond. With over 900 inpatient beds, 5,000+ employees, 700+ doctors and HIMSS Step 7 certification, SJHH represents an exemplary use case for digitization.<sup>11</sup>



**900**

inpatient beds



**5000+**

employees



**700+**

doctors



## The initial challenge

SJHH produced an astronomical amount of information on paper, but the insights were often only visible to the staff member who created the document. Clinicians weren't always able to access the details digitally, at least until the patient was discharged. This created major inefficiencies and compromised the quality of care.

## The solution

In 2017, SJHH migrated to Epic® as an electronic health record system.<sup>12</sup> The integration with Quantum ECS transformed the paper document management process into a hybrid approach of electronic content and scanned paper documents, available in Epic via hyperlinks.

The Quest diagnostics team worked with SJHH to create a document interface with a defined format and structure. Since the integration was finalized, SJHH has been able to add document types to the outbound interface setup, which easily routes the document from Quantum ECS to Epic.

## Quantified outcomes

SJHH's results demonstrate the transformative impact of Quanam ECS integration. In less than a year, the facility has automated the import of more than 7,960 critical documents, including 5,800 vital signs monitoring documents, 1,347 Ocean eReferrals and 814 associated attachments. This automation has resulted in substantial time savings: 500 hours for nurses and 1,347 hours for administrative staff, representing a total of 1,847 hours of work recovered to focus on patient care instead of document management.<sup>13</sup>



**David Walther**

Director of Business Applications and Digital Solutions Integration, SJHH



In addition to saving staff time, the automation ensures the documents are integrated in near real-time so that information is available for use immediately.



The scale of the transformation becomes even more impressive when you consider the overall volume managed by the Quanam ECS platform at SJHH: 1.2 million patients, 28.9 million documents and 16 million records.<sup>13</sup> This critical mass of information, now instantly accessible to clinicians directly in their Epic environment, is a concrete example of how an ECM solution can transform access to information in a modern healthcare facility.

The impact on operational efficiency is particularly noticeable in the speed of access to information. As David Walther, Director of Business Applications and Digital Solutions Integration SJHH explains: "In addition to saving staff time, the automation ensures the documents are integrated in near real-time so that information is available for use immediately and they do not get lost in many interruptions of the day, which had become the office norm."

This transformation was achieved thanks to the Dynamic Document Interface developed by Quest Diagnostics, which David describes as "a Swiss Army knife that allows us to slice and dice information". Utilizing and integrating the scanning and acquisition of documents provides "a complete electronic picture" of the patient chart, eliminating the information silos that characterized the legacy system.

"The integration is rock solid. It is highly effective and efficient, and we're reaping the benefits from it. Our goal is to make things easier for clinicians and improve the patient experience, and we are achieving that goal. This integration optimizes our document management system and ensures high performance by making incredibly valuable information that would otherwise be on paper, available almost instantly electronically."

— David Walther, Director of Business Applications and Digital Solutions Integration, SJHH

# Technical architecture and interoperability

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## Multi-format capture capabilities

Quantum ECS can process content from a variety of sources:

- **Internal and external sources:** Documents related to patient records or clinical-administrative functions
- **Multiple formats:** Paper, email, fax, online file transfer
- **Intelligent classification:** Automatic categorization of clinical and non-clinical documents



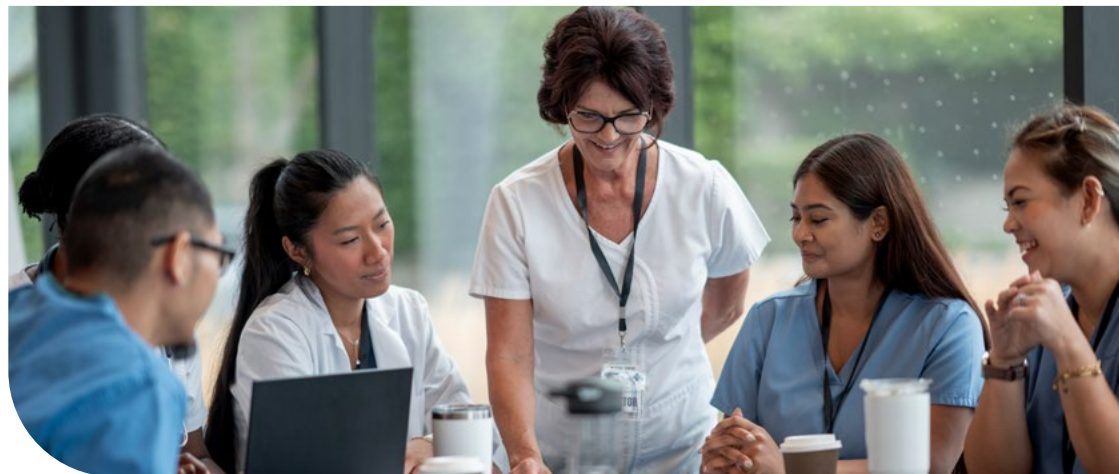
## Integration of Quantum ECS with existing systems

- **HL7 and non-HL7 connectivity:** Interface with all types of hospital information systems
- **Storage agnostic:** Provider-independent storage enabling interoperability
- **Single sign-on:** Unified access to data and documents across the organization



## Conformance and security<sup>14</sup>

- **Retention policies:** Configuration and enforcement of organization-specific retention requirements
- **HIMSS certification:** Support for stage 7 requirements with availability of clinical information within 24 hours
- **Data security:** Protection of privileged information according to industry standards

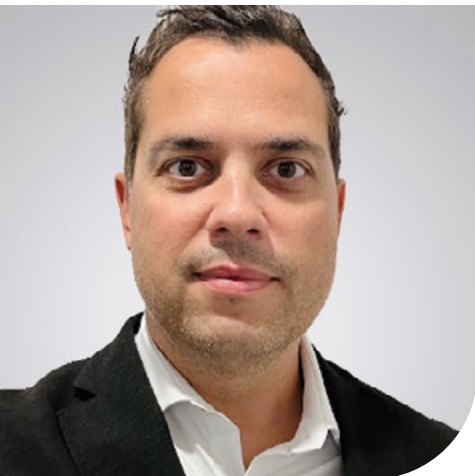


# The strategic role of TELUS Health and Cercle Group

## TELUS Health: Leader in digital health solutions

“Our mission at TELUS Health is to be a true interoperability enabler for the entire Canadian healthcare market and this partnership with Cercle Group directly advances that priority. What makes this particularly powerful is that Quantum Enterprise Content Solutions is purpose-built to integrate across the full healthcare technology landscape—not exclusively with TELUS Health platforms. It means that regardless of which EHR or clinical system an organization has in place, we can deploy Quantum ECS to ensure seamless access to historical data.”

Ratcho Batchvarov, Vice-President, Provider Solutions, TELUS Health



Our mission at TELUS Health is to be  
a true interoperability enabler for the  
entire Canadian healthcare market.

**Ratcho Batchvarov**

Vice-President, Provider Solutions, TELUS Health



TELUS Health is a Canadian leader in digital health solutions, with over 15 years of expertise with its OACIS hospital information system. This in-depth experience in the development, implementation and management of hospital information systems positions TELUS Health as a preferred partner to understand the complex challenges of interoperability and content management in the healthcare sector, enabling transformational change in legacy products.

### This expertise translates concretely into:

- **Understanding of clinical workflows:** Rapid identification of critical anchor points and workflow optimization
- **Technical mastery:** Integration of heterogeneous systems, legacy data management, HL7/FHIR standards
- **Regulatory knowledge:** Compliance with Quebec requirements and adaptation to local specificities
- **Support and coaching:** Technical support and knowledge transfer tailored to ensure smooth and sustainable adoption of solutions

### **Cercle Group: Local expertise and specialized distribution**

As the Canadian system integrator for Quest Diagnostics' Quanam ECS, Cercle Group brings unparalleled local expertise in enterprise content management for the healthcare sector. This geographical and cultural proximity allows:

- **Local technical support:** Understanding the specificities of the Quebec health system since 1999
- **Training and coaching:** Programs adapted to the needs of Quebec healthcare professionals
- **Maintenance and continuous support:** Responsive and personalized after-sales service

## **Strategic partnership for digitization**

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The TELUS Health - Cercle Group alliance offers Quebec healthcare organizations:

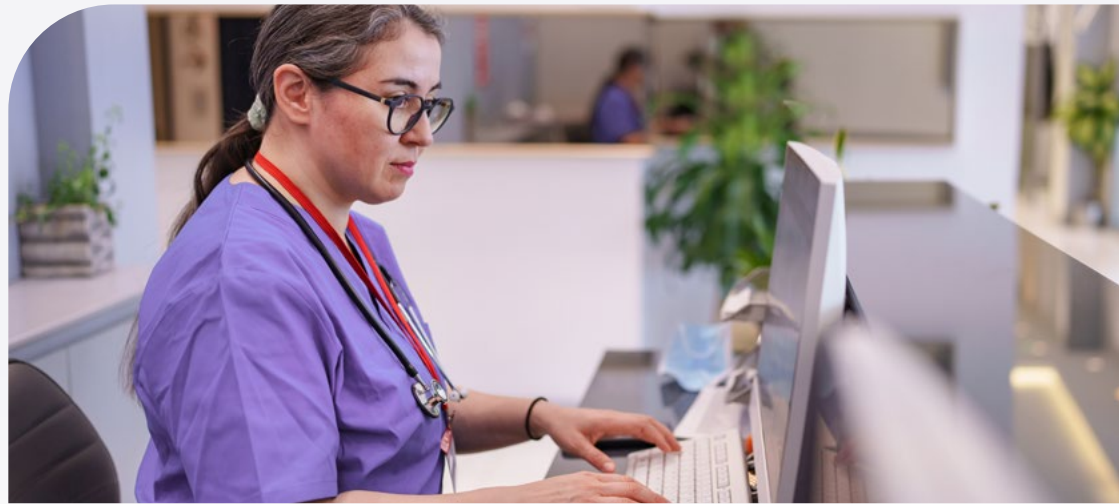
### **Complementary expertise**

TELUS Health:

- Strategic vision of digitization based on more than 15 years of field experience
- Understanding of EHR integration issues through OACIS expertise
- In-depth knowledge of clinical and operational needs
- Recognized expertise in the deployment of clinical information systems, guaranteeing an effective implementation adapted to the realities of healthcare organizations

Cercle Group:

- Specialized technical expertise in Quanam solutions
- Extensive experience in large-scale implementations and content management migrations across Canada
- In-depth knowledge of local content management needs



### Proven integrated approach

- **Needs assessment:** Complete analysis based on OACIS and Quanam ECS experience of hospital information flows
- **Strategic planning:** Deployment roadmap integrating Quanam's expertise in large health systems, OACIS learnings and alignment with the deployment of a provincial EHR
- **Guided implementation:** A proven methodology combining TELUS Health's 15+ years in clinical system implementation and with Cercle Group's specialized delivery of the Quanam ECM solution
- **Ongoing support:** Maintenance and optimization based on OACIS and Quanam operational expertise

### Unique added value for healthcare organizations

- **Risk reduction:** Proven expertise and structured methodology of the TELUS Health and Cercle Group partnership, based on extensive experience in OACIS and Quanam implementations
- **Acceleration of deployment:** Optimized processes and anticipation of challenges thanks to field experience
- **Maximization of ROI:** Optimization of investments based on a detailed understanding of clinical needs
- **Conformance assured:** Compliance with regulatory requirements and security standards validated by OACIS and Quanam experience
- **Continuity of care guaranteed:** Proven transition strategies that preserve access to critical information

This unique synergy between TELUS Health's clinical expertise and Cercle Group's technical specialization ensures Quebec healthcare organizations receive optimal support in their digitization, maximizing the benefits of the EHR while preserving continuity and quality of care.

# The path forward: Transforming interoperability into clinical excellence

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The TELUS Health and Cercle Group partnership is uniquely positioned to transform interoperability into clinical excellence, providing Quebec healthcare organizations with the essential support needed to navigate the fundamental transformation of the EHR. This helps redefine access to and sharing of information in the health network. St. Joseph's Healthcare Hamilton's experience – with 28.9 million integrated documents and 1,900 hours of work recovered – proves that it is possible to preserve historical data while embracing digitization.

Quantum Enterprise Content Solutions provide this essential continuity, enabling healthcare organizations to maximize their EHR investment without losing access to critical data. The partnership between TELUS Health, with more than 15 years of expertise with OACIS, and Cercle Group provides unique support to Quebec healthcare organizations.

By adopting this approach, the Quebec healthcare system is transforming the challenge of interoperability into an opportunity for clinical excellence. Data is no longer trapped in silos, but becomes a unified strategic asset in the service of quality care.

## The future of digital health is being built today

Together, TELUS Health and Cercle Group are ready to support your organization on this critical transition, ensuring a more efficient, secure and fully connected care experience that truly transforms the future of digital health.

1. [Darin Stewart. Big Content: The Unstructured Side of Big Data. Gartner Blog Network.](#)
- 2, 5. [Workers Spend Too Much Time Searching for Information, Cottrill Research](#)
- 3, 7, 8, 9, 10, 11. [Quest Diagnostics. Case study: St. Joseph's Healthcare Hamilton](#)
- 4, 6. [Quantum. Enterprise Content Solutions Intelligent Data Capture](#)
12. See Appendix A: Quantum ECS Pre-Configured Integrations with Digital Health Record Platforms

# APPENDIX

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## Quantum ECS pre-configured integrations with digital health record platforms

Quantum ECS has experienced integrations with many clinical systems and digital health record platforms. These integrations have been tested and validated in healthcare institutions across Canada and North America. The following is a presentation of Quantum ECS integrations:

### 1. Examples of Quantum integrations to Quebec based clinical systems

The following is a list of integrations with various systems in Quebec through which Quantum “receives” patient documentation:

1. eClinibase ADT
2. Stat Urge ADT
3. Transcription - Centro - Crescendo
4. Lab - SoftLab, SIL-P Ennovacom
5. BulkScan - Salumatics, Trigonix, TACT
6. RAD - RadImage
7. Dynamic Document Interface / Generic (Repere, ICCA, EyeView, Radimage, Growth XP...)
8. ECG/EKG Interface- MUSE
9. Medi Pathology
10. Gespharx - Pharmacy
11. ERED/Urgence - StatUrg, MedUrg
12. Repere - DSIE-Repere
13. Mirth-engin d'integration
14. Nephrology - NephroCare - Ingenio
15. Mosaiq - Oncology
16. eRendezvous - Admissions
17. Dynadoc
18. Medisync DME
19. Perigen OB Interface
20. Cath Lab - cardiac IF
21. Opera - Salle d'operation
22. DAWN-AC Interface - Dawn clinical software
23. Qualtrics Interface - Sondages - Prems and Proms
24. SISSS - gestion risque
25. SOS Oncology
26. ZeDoc - Sondages sur les résultats rapportés par les patients
27. Telstra - interface soins maison
28. Harris CHR/ARC - EHR
29. Oacis - CIS
30. SIL-P
31. Numerous system-to-system integrations, including: Web Services, LDAP, AD, SSO, SAML, APIs, HL7, XML

## 2. Examples of integrations with clinical systems, demonstrating data view capabilities in Epic

The following table provides examples of integrations with clinical systems, demonstrating data view capabilities in Epic:

Source system	Description
CDCN	Result-external
ASCENT	Result - respiratory
CGASTRAIA	Result - diagnostic imaging
BKLD-TELUS	Continuity of care document
QUANUM	Legacy records
CARDIOLAB 6.8	Result-cardiology electrophysiology
CCIMAGING	DI radiology result
CCS	External document
RURAL MUSE	Result-cardiology holter/event monitor
TELEMEDDYNA	Result - cardiology ecg
iECG	Result - cardiology ecg external
RURAL MUSE	Result-cardiology stress test
HISTOTRAC	Lab managed result scan
EPIC SCAN	Result-cardiology transthoracic echo
OBIX	Electronic fetal monitor
PACEART	Result - cardiology pacemaker
ViaSys	Sleep lab
3M	Outbound CAC
ViaSys	Emergency (ED)
3M	Outbound CAC
Picis	Lab
Optum	PeriGen OB
SoftLab	SOS oncology
PeriGen	VHP home health
SOS	Pathology
Telestra	Carefusion
CoPath	Radiology
VMAX	Endoscopy
Misys	Sleep lab
Endosoft	Outbound CAC

Source: Quest Diagnostics, Systems Integrations - Qanum Enterprise Content Solutions.

### 3. Integration points with Epic

Epic Scheduling Interface  
Epic ADT Interface  
Epic Scan Acquisition API  
Web Blob Pass Through  
Outbound HL7 Notification  
Epic Scan Viewing API  
Epic Image Retrieval API  
EpicWeb  
Epic Activity Button  
Epic HyperLinks Backload  
Epic Deficiency Tracking  
Epic HIM Release of Information  
Epic Scan Document Link  
Maintenance Interface  
Epic Order Interface  
User Update Interface  
Ancillary Inbound Interfaces

### 4. Existing integration with Epic modules

ADT/Prelude  
Cadence  
Canto  
Community Connect  
Epic Web  
EpicCare  
EpicCare Link  
Haiku  
HIM  
Home Health  
Media Manager  
MyChart  
PlanLink  
Radiant  
Resolute  
ROI  
Tapestry  
Wisdom