

The Slice

A newsletter for organizations contributing to OCINet diagnostic imaging repositories (DIRs)

Fall 2023

NEODIN integrates with OCINet, cementing the shift from regional to provincial

All three regional DIRs have now consolidated administratively. Technical consolidation has begun.

The Northern and Eastern Ontario Diagnostic Imaging Network (NEODIN) has officially merged with OCINet.

With a DIR that enables the possible exchange of 37M archived exams, the Northern and Eastern Ontario (NEO) network spans 55 hospitals, 8 integrated community health services centres (ICHSCs – formerly independent health facilities), and an area the size of France.

Given the vast geography, NEO is dependent upon the exchange of electronic medical records like those housed in the DIRs to care for patients. NEO hospitals vary significantly in size, ranging from 10~ to 1000+ beds. So, in some parts of the region, both healthcare professionals and patients travel long distances to access and deliver services not available locally. Prior to April 2023, NEODIN operated as a business unit within Health Sciences North (HSN). Leaders from HSN and across the region collaborated to ensure a smooth transition to OCINet. The consolidation would not have been possible without the support of dozens of hospital, ICHSC, and Ontario Health leaders.

OCINet's expanded team, refreshed org structure

Because the goal is to operate as one organization, not three regional offices,

the OCINet organizational structure was refreshed in July 2023, after all NEODIN staff members transferred to OCINet.

OCINet employees are now organized into functional teams with similar skills, regardless of their regional origin. The new, primarily virtual teams had an opportunity to meet, synchronize, and plan in person for the first time at a staff retreat in October.

The vision for provincial image sharing involves breaking down barriers among hospitals and ICHSCs, and the new structure reflects that. Knowledge sharing, cross-coverage, efficiency, and alignment opportunities – within OCINet and across hospitals and ICHSCs – are top priorities.

OCINet's representative Board

The OCINet Board typically includes 12 members but has temporarily expanded to 14 members to ensure geographic representation and a smooth introduction for NEODIN.

In June, the Board elected new leaders, welcomed new directors, and thanked a departing one. Dr. Gary Newton, President & CEO of Sinai Health System, has been re-elected as Board Chair for continuity. Roy Butler, President & CEO of St. Joseph's Health Care London, is now Vice-Chair. Soumya Ghosh, a partner at Amazon Web Services, has assumed the Treasurer role.

The Board welcomed three new directors from NEO. Mike Baker, the President & CEO of Temiskaming Hospital; Jeanette Despatie, the President & CEO of Cornwall Community Hospital; and Cameron Love, the President & CEO of The Ottawa Hospital, now represent the needs of rural and urban, community and academic hospitals from NEO.

In consultation with many stakeholders, the expanded Board will oversee the development of a new strategic plan for OCINet by the end of the fiscal year. With over 100 hospitals and dozens of ICHSCs contributing to the OCINet DIRs, this consolidation has sparked excellent positive momentum and enthusiasm for provincial image sharing.

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Central region DIR and data centre migrations underway

Central region contributors transition to infrastructure used by Ontario Health and other DIR regions.

With the administrative consolidation of OCINet largely complete, OCINet has been able to make progress on two major IT initiatives in the Central region.

Central data centre move

A new data centre contract was executed with ESIT Canada (DXC) to replace a legacy data centre provider (Teranet) in the Central region. The new DXC contract offers stronger service levels, greater flexibility, and reduced costs, while aligning OCINet infrastructure more closely with Ontario Health's. The careful, phased transfer from Teranet to DXC was completed successfully in October, with minimal impact to members or patients.

A GE Healthcare VNA

After exhausting all contract extensions and options, the legacy HDIRS-Agfa Healthcare vendor neutral archive (VNA) agreement expired on September 30. After more than a year of technical and

risk evaluation, committee consultation, legal investigation, and due diligence via a third-party, the OCINet managers have elected to expand the relationship and licence base with GE Healthcare – the platform used in Southwestern (SWO) and Northern and Eastern Ontario (NEO).

The benefits of consolidating on the GE platform for the entire province include

reduced technical complexity, improved supportability, consistency of the end-user experience, standardization of skills across regions and sites, and an easier transition to the cloud in the future.

OCINet will be working with hospitals and ICHSCs in the Central region throughout the remainder of 2023/24 to ensure continued connectivity to the DIRs.



OCINet's Shafique Shamji (left) participated on a "breaking healthcare silos" panel with GE Healthcare and East Midlands Imaging Network (EMRAD) at the 2023 RSNA conference.

Clinic sends imaging reports to Health Report Manager with help from OCINet

OCINet securely transfers reports in the SWO DIR to OntarioMD using the HL7 FHIR standard.

Health Report Manager (HRM), managed by OntarioMD, is a provincial solution that enables primary care physicians and nurse practitioners to receive patient reports electronically from sending facilities, such as hospitals and integrated community health services centres (ICHSCs – formerly independent health facilities).

In 2021, OntarioMD limited future HRM integrations to organizations that can support the Fast Healthcare Interoperability Resources (FHIR) standard.

FHIR builds on HL7 standards and facilitates more secure interoperability between legacy and modern healthcare systems. It is the ideal choice when using a wide variety of devices, mobile apps, and cloud technologies for actively sharing health data.

The FHIR standard integration required for the HRM solution is challenging and costly to implement for many ICHSCs, thereby preventing the distribution and sharing of many valuable reports. While transmitting patient reports to HRM over Ontario Health's Digital Services' secure, managed, private network is preferable, it takes resources that clinicians operating independently often don't often have. OCINet already receives imaging results from certain ICHSCs; has the capability and competency to support the new FHIR standard; and has a focus on helping healthcare facilities to share clinical imaging resources.

Responding to a clinic's request to better serve their referring clinicians, OCINet partnered with one of Southwestern Ontario's ICHSCs to pilot publishing their results to OntarioMD on their behalf.

With a long history of providing diagnostic medical imaging services in the community and hospitals across SWO, the ICHSC that OCINet worked with originally connected to a DIR in 2012/13 and now operates four busy imaging clinics.

Once the concept was cleared by both privacy and security experts, OCINet provided professional services and infrastructure to support the HRM connectivity. As the solution is designed to push reports automatically to HRM, very little maintenance or support work is required going forward.

The ICHSC-HRM integration successfully went live on July 18, 2023. Via OCINet, the ICHSC now sends about 10,000 medical imaging reports through to the HRM monthly, where they are stored in a secure folder for pick-up by physicians and nurse practitioners as needed.

Dozens of Ontario hospitals working to make inter-hospital image sharing improvements

A new, centralized foreign exam management (FEM) solution makes importing exams created by other organizations into local environments possible.

A powerful, new image-sharing tool is now in use at some hospitals in South-western (SWO) and Central Ontario.

The Enhanced Image Sharing Service (EISS) allows clinical imaging records to be shared among hospitals and integrated community health services centres (ICHSCs – formerly independent health

facilities) directly from their picture and archiving communication systems (PACS).

Managed by OCINet, the EISS facilitates foreign exam management (FEM), which is a method of importing

or ingesting imaging exams from another hospital's systems (foreign systems) into the local PACS. The EISS, procured from Peterborough-headquartered Interlinx, enables authorized clinical users to view a patient's longitudinal imaging record within their familiar interface.

EISS has new functionality for Ontario hospitals

Through EISS, many hospitals are gaining access to FEM for the first time. Today, about 80% of hospitals in Ontario have FEM capability, but OCINet plans to close this inequity gap across the province over the next 24 months.

For many of these users, including diagnostic neuroradiologist Dr. Euan Zhang from Hamilton, EISS is a welcomed gift — *“The functionality that FEM provides is invaluable to a radiologist's provision of optimal care. This technology is long overdue. It will allow us to save unnecessary repeat tests, expedite diagnoses, and reduce wait-times. Patient lives will be saved!”*

Hospitals located in the Central region (i.e., legacy HDIRS members) used a variety of independently implemented FEM solutions in the past. This siloed, heterogeneous approach to FEM made PACS ingestion possible, but it was cumbersome to manage.

Regardless of the PACS type or configuration, the EISS configures around the existing PACS and is designed to improve upon existing FEM functionality.

EISS implementations are occurring in 2023/24

OCINet is working with individual hospitals to determine appropriate EISS implementation timing. Larger hospitals and hospitals with readily available resources (and no conflicting projects) remain top priority for the rollout.

A typical EISS implementation involves resources from the hospital, OCINet, and Interlinx. As such, each project may take up to 12 weeks, including 4–6 weeks for discovery and planning and another 6–8 weeks for implementation, testing, and go-live activities. Many implementations take less than three months, however.

EISS sees steady progress and positive impacts

Hospitals in the Central region (including Northumberland Hills Hospital, Mackenzie Health, North York General Hospital, and Trillium Health Partners) and hospitals in the SWO region (including St. Joseph's Healthcare Hamilton, Hamilton Health Sciences Centre, West Haldimand General Hospital, Niagara Health System, Brant Community Healthcare System) have already completed their EISS implementations.

The OCINet team has been monitoring use of EISS post-implementation and, already since June, a subset of five of these hospitals have prefetched on average

upwards of 166,000 prior imaging exams per month! These prefetched exams have certainly reduced the need for new scans!

Ten more Central hospital sites are in various stages of EISS implementation and testing. Over the next few months, OCINet will be working with Interlinx to finalize an onboarding schedule for another batch of SWO sites.

Possible next steps

The EISS implementations, to date, have focused on putting basic FEM capabilities in place. Advanced FEM features, such as cross-DIR exam sharing, will be implemented once the prioritized hospitals go live with EISS.

Due to the unique, existing sharing network and FEM options in the Northern and Eastern (NEO) part of the province, OCINet is still working with its committees and executive contacts to evaluate need and timing.

OCINet has a new domain Staff email addresses have changed to @ocinet.ca.

OCINet has partnered with The Ottawa Hospital (TOH) for Microsoft 365 services, enabling the creation of a single domain for all regional DIR communications.

All OCINet staff members now use @ocinet.ca email addresses, and OCINet.ca is now the only official website available for Ontario's clinical imaging program. The new website will continue to expand throughout 2023/24.

Regional service desk contact information is under review but remains largely unchanged.



Multi-setting radiologist sings praises of a regional speech recognition reporting system

Dr. Ali Islam confirms that OCINet's Shared SRRS works reliably in a variety of scenarios.

Speech recognition reporting systems (SRRS), which are tightly integrated with picture archiving and communications systems (PACS), enable speech-to-text conversion of medical imaging reports.

The legacy SWODIN region began offering the shared 3M/M*Modal Fluency for Imaging (FFI), implemented and supported through Lanier Healthcare Canada, in 2016. Currently, 12 organizations (22 sites) have signed on for the now-OCINet-provided service, enabling access for 140 staff radiologists and 90 residents. Of those users, 65% report for multiple organizations, and 87% report for multiple sites.

Dr. Ali Islam, a long-time user of the regional SRRS, recently shared his thoughts on Fluency's effectiveness. Dr. Islam provides his expertise in interpretive radiology services for many institutions across Southwestern Ontario, including St. Joseph's Health Care London, Huron Perth Health Alliance, Thames Valley Hospitals, South Bruce Grey Health Centre, and London X-Ray Associates:

"I was initially uncertain about Fluency when it was selected as the regional speech recognition program. In my hybrid practice of providing service in multiple settings (including academic, community, and clinic radiology), I have worked with a variety of vendors and voice recognition products. In my day-to-day work, Fluency has shown itself to be the best of these products.

With Fluency, I can speak and fully concentrate on the images in front of me, without having to check if the voice recognition is capturing my speech. In that sense, Fluency becomes so reliable to the point that it can become invisible — something that really makes it unique. Another strength of the product is in reports with many fields (such as thyroid ultrasound or obstetrical ultrasound), the product remains as nimble as reports without fields. I can move from field to

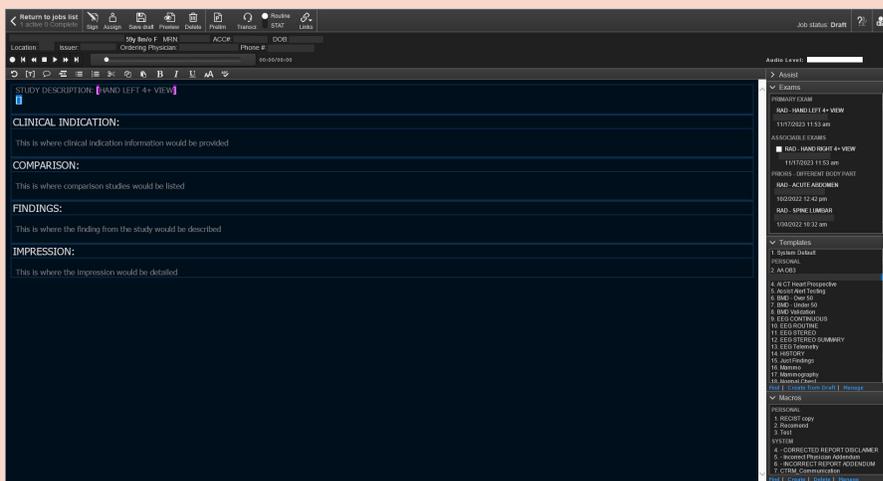
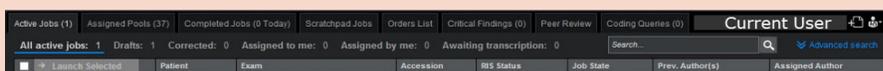
field without a trigger delay or waiting for the software to catch up with my speech.

The upgrades that have occurred in the seven years that I have used the product have continued to improve the usability of the product, particularly as it pertains to templates and macros. I feel confident in my ability to create new templates, and import the templates of my colleagues, on my own without being dependent on a PACS team member. These upgrades have continued to widen the gap in my user experience of Fluency and my experience with another major product that I regularly use. While I have needed help

from the OCINet team for PACS-related problems, I have not specifically contacted them for a failure with Fluency.

While I was initially uncertain about Fluency, I now consider myself extremely fortunate that this product was chosen as the regional speech recognition program. This product works, it works reliably, and it works smoothly — even melting into the background. I have no reservations recommending this product to any institution looking to upgrade their radiology speech engine."

If your organization would like more information about the shared SRRS solution provided by OCINet, please contact us.



OCINet hires full-time privacy manager

Darcelle Hall will work with stakeholders and hold responsibility for all aspects of OCINet privacy.

One of Ontario's respected healthcare privacy experts, Darcelle Hall, has joined OCINet on a permanent basis. Darcelle has worked with OCINet (via HDIRS) on privacy matters on contract since 2017 but assumed the role of full-time privacy manager on October 2, 2023.

Darcelle joins OCINet from MD+A Health Solutions (MD+A), where she led their Health Privacy Services consulting practice. Darcelle was one of MD+A's longstanding consultants supporting the delivery of health and human services projects, business transformations, and strategic planning initiatives across Canada and the Caribbean. As Director of Privacy Services at MD+A, Darcelle managed client relationships, led the consulting team, and contributed to the delivery of over 150 privacy impact assessments and development of high-quality privacy programs for large hospitals, and regional and provincial programs and systems, primarily in Ontario.

As part of the OCINet senior leadership team, Darcelle will work collaboratively with internal and external stakeholders and hold responsibility for all aspects of privacy as it relates to OCINet. Darcelle

will organize privacy risk management and governance activities, manage privacy operations, and provide privacy guidance for new initiatives.

With several large technology projects underway and mandates to add new clinical imaging types and contributing healthcare organizations in the coming years, Shafique Shamji, OCINet's President and CEO, is excited to take the privacy program to the next level — "Darcelle's tactical and strategic contributions to the regional DIRs have exceeded expectations. Her skillset in relation to privacy in healthcare, in this province is unparalleled. She is well known and trusted within hospitals and integrated community health services centres from Windsor to Ottawa to Kenora. With Darcelle coordinating our Privacy Advisory Committee and leading our privacy efforts, we can confidently grow while supporting our members and their patients. All of our patient records are in good hands."

Protecting PHI is always a team effort and, in her new role, Darcelle will serve as a valuable team member in ensuring Ontario's patients, hospitals, and DI repositories are equipped for success.



"OCINet holds responsibility for one of the largest repositories of patient information in the province. With the regional DIRs, we've established the foundations for an excellent privacy program, but there's so much more depth and value we can add. With the prospect of cloud, automation, AI, and analytics, there is a huge amount of change on the horizon. I want to build out a strong privacy program for OCINet as a provincial organization positioned to deliver on Ontario's health system priorities today and ensure that privacy is considered in all decisions related to the advanced technologies of tomorrow. I look forward to working with the OCINet team as well as all of its partners, vendors, members, and clients!"

Darcelle Hall,
Privacy Manager, OCINet

About the Ontario Clinical Imaging Network

The Ontario Clinical Imaging Network (OCINet) is an independent, not-for-profit corporation and a full delivery partner of Ontario Health. Formed in April 2022, OCINet was created to execute Ontario's medical imaging digital health strategy.

Building on regional efforts of the past decade, OCINet enables the secure storage and retrieval of millions of image records across multiple repositories; supports hundreds of hospitals and integrated community health service centres (ICHSCs – formerly known

as IHFs); and connects thousands of radiologists, referring physicians, and specialists province-wide.

Today, OCINet facilitates the exchange of diagnostic image records (e.g., X-rays, MRIs, CTs); tomorrow, additional clinical imaging types are in scope. The seamless, authorized sharing of all clinical imaging records supports the movement and treatment of patients, reduces repeat scans and harmful radiation exposure, reduces healthcare costs, and decreases wait times and overcrowding.

Beyond the repositories, OCINet is a shared services partner and service innovation hub for Ontario hospitals. OCINet offers regional picture archiving and communication systems (PACS), the Emergency Neuro Imaging Transfer System (ENITS), peer review technology, speech recognition, and is actively working with ICHSCs to include additional imaging in the DIRs. Continually working to add value, contain costs, and enrich care, OCINet is much more than a health information network provider (HINP).