Integrating the Niday Perinatal Database into the *electronic patient health record*

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GOAL

To facilitate the data collection for the Niday Perinatal Database indicators through integration with the electronic patient documentation module.

BACKGROUND & PARTNERS

Niday Perinatal Database is regional, internet-based, real-time perinatal surveillance system hosted by CritiCall Ontario. Developed and maintained by the Perinatal Partnership Program of Eastern and Southeastern Ontario, it was adopted by the CHN in 2002 and implemented in all 24 GTA hospitals that provide perinatal care.

Two CHN organizations integrated the Niday Perinatal Database into the Electronic Patient Chart:

- William Osler Health Centre: provides three levels of perinatal care (Levels I, II & II+) to 3 sites for over 7,100 births per year.
- Halton Healthcare Services: provides two levels of perinatal care (Levels I & II) to 2 sites for over 2,800 births per year.

OBJECTIVES

1. To reduce duplicate processes of data collection and information transfer.
2. To increase accuracy in patient documentation.
3. To adopt a standardized perinatal data set.
4. To map data from the patient record to program performance indicators and to the Niday Perinatal Database export data file.

BENEFITS

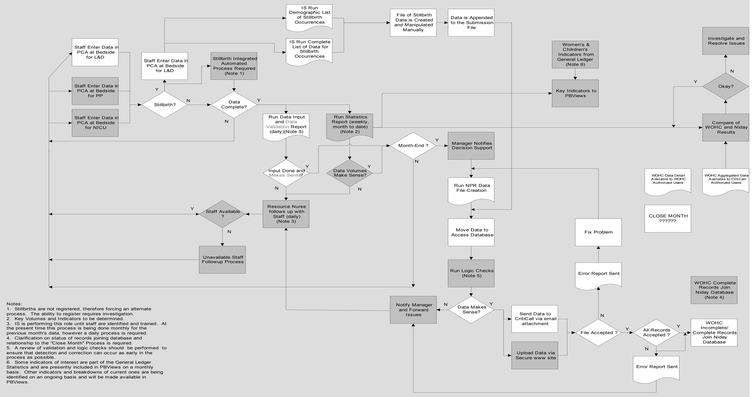
- ✓ Provides "real-time" comprehensive perinatal data for planning, continuous quality improvement, evaluation, program management, tracking trends, and benchmarking.
- ✓ Supports clear, concise and accurate documentation processes.
- ✓ Provides built-in auditing through logic checks and verification functions.
- ✓ Avoids duplication of information and overlapping processes of data collection.
- ✓ Enhances data quality for future application to research and evaluation processes.
- ✓ Allows data mapping to report function for performance measures to be applied to program management.
- ✓ Enhances connectivity with CHN partners and provincial organizations.
- ✓ Aligns with the Ministry of Health and Long-Term Care's information management strategies under the current "Transformation Agenda".

THE PROCESS

Child Health Network for the Greater Toronto Area:

Database Coordinator provided resource liaison and support to hospital integration project.

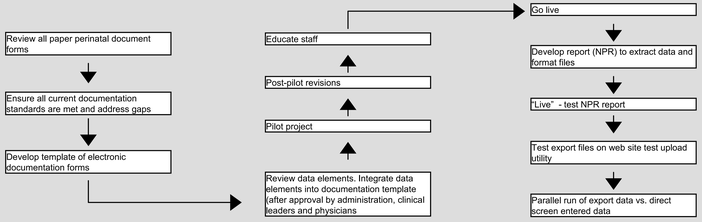
William Osler Health Centre: Integrating Within an Existing Electronic Patient Chart



WILLIAM OSLER HEALTH CENTRE

Halton Healthcare

Halton Healthcare Services: Building a New Patient Chart and Integrating the Data Elements



CHALLENGES

- Dealing with limitations of Meditech system (e.g., building of logic checks).
- Uncovering interface issues of information links in the current system had a ripple effect.
- Sorting out inconsistencies in information management throughout the organization.
- Ensuring sufficient hardware in good repair to support work.
- Attending group education sessions challenged by unit activity.
- Standardizing documentation and flow for differences in care at each site.
- Competing initiatives within the organization taking priority.

CRITICAL SUCCESS FACTORS

- Team approach, including expertise in all aspects of the project (Information Systems, Decision Support, Nursing, Administration, Education & Information Management).
- Involvement of nursing staff in development of increased accountability.
- Illustrating utility of the data, increased awareness, buy-in and ownership.

LESSONS LEARNED

- Generating data quality reports at unit level enhance staff ownership.
- Comparing with other provincial databases helpful in designing reports.
- Ongoing dialogue with staff during implementation enhanced refinements and design effectiveness.
- Building in different layers and types of checks enhances data quality.
- Ensuring less resistance to change by timing of implementation to avoid overlap with other program changes.

FUTURE DIRECTION

- Utilize data in more program initiatives such as MOREob, ACoRN, QM Audits and projects.
- Use data to populate electronic Healthy Babies Healthy Children screening tool and CHN patient transfer forms.
- Use data to general systems improvements through comparisons with similar level of care organizations.
- Share learning with other institutions embarking on a similar project.

OUTCOME

A integrated system of information management that is built on existing resources, can reduce the data collection burden on care providers, increase staff satisfaction, produce better data, and improve care management, contributing to better patient care.

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