



BORN Information System (BIS): Quick Guide to Data Quality Management for Hospitals



Table of Contents

Quick Guide to Data Quality Management (DQM):	3
How to Access All Reports:.....	3
Data Quality Review Process:.....	4
Step 1: Review the following reports:.....	4
Summary of Records with Incomplete Maternal Encounters Tab.....	6
Summary of Maternal Outcome Discrepancies Tab.....	6
Maternal Encounters with “Number of Fetus” Discrepancies.....	6
Step 2: Review ‘Maternal Infant Cross Encounter Discrepancy’ Report.....	6
Step 3: Review ‘Reconciliation – Maternal Newborn’ Report	7
Step 4: Acknowledge Data	9
Appendix: Data Quality Management Faq.....	11



Quick Guide to Data Quality Management (DQM): For Monthly Data Completion, Correction & Reconciliation

BORN is committed to high quality data to meet its mandate of being the authoritative source for maternal and child information. Clinicians, decision makers, policy makers, and researchers rely on valid and reliable data to support program management, benchmarking, evaluation, and quality improvement.

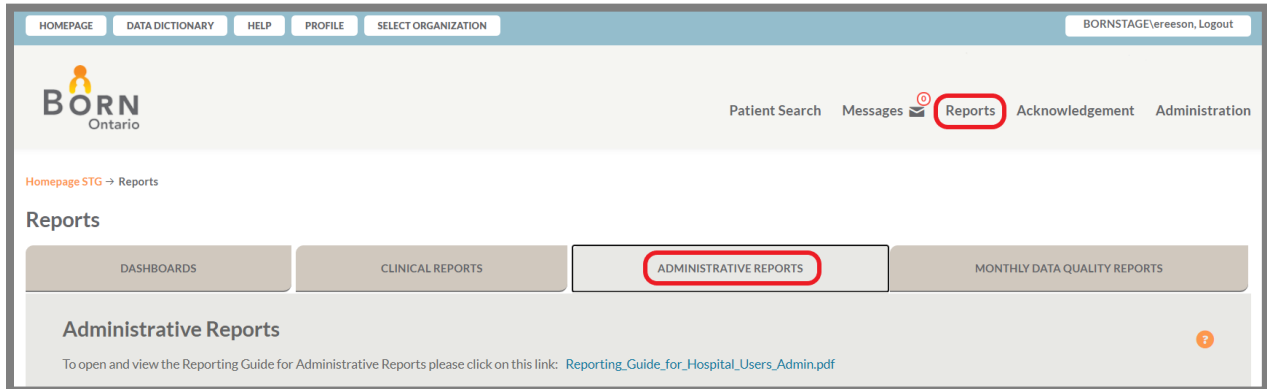
Ensuring data completeness and acknowledgement needs to be done monthly in order for the Maternal Newborn Dashboard and NICU Dashboard to display data for hospitals.

How to Access All Reports:

1. Go to **'Reports'** which is located on the top menu bar of the BORN Information System (BIS) landing page.
2. Click on the **'Monthly Data Quality Reports'** tab.
3. Make your selection from the list of Data Quality Reports.

A screenshot of the BORN Information System (BIS) Reports page. The page has a blue header with navigation links: HOMEPAGE, DATA DICTIONARY, HELP, PROFILE, and SELECT ORGANIZATION. On the right side of the header, it says "BORNSTAGE | ereeson, Logout". Below the header is the BORN Ontario logo and a navigation bar with links for Patient Search, Messages, Reports (highlighted with a red circle), Acknowledgement, and Administration. The main content area shows a breadcrumb trail "Homepage STG -> Reports" and a "Reports" section with four tabs: DASHBOARDS, CLINICAL REPORTS, ADMINISTRATIVE REPORTS, and MONTHLY DATA QUALITY REPORTS (highlighted with a red circle). Under the "Monthly Data Quality Reports" section, there is a heading "Monthly Data Quality Reports" and a paragraph explaining that reports are available to assist in the review of data submitted to BORN and complete data quality activities prior to monthly acknowledgement. Below this, there is a section for "Perinatal Quality Reports" with a list of reports: Reconciliation - Maternal Newborn, Reconciliation - NICU, Incomplete Maternal Record, Incomplete Infant Record, Incomplete NICU Records, Maternal-Infant Cross Encounter Discrepancy, Missing Data Elements - Labour & Birth and Postpartum Mother, Missing Data Elements - Birth and Postpartum Child, and Missing Data Elements - NICU. This list is enclosed in a red rounded rectangle.

- You can also access the Monthly Data Quality Reports and other Administrative Reports in the Administrative Reports tab.



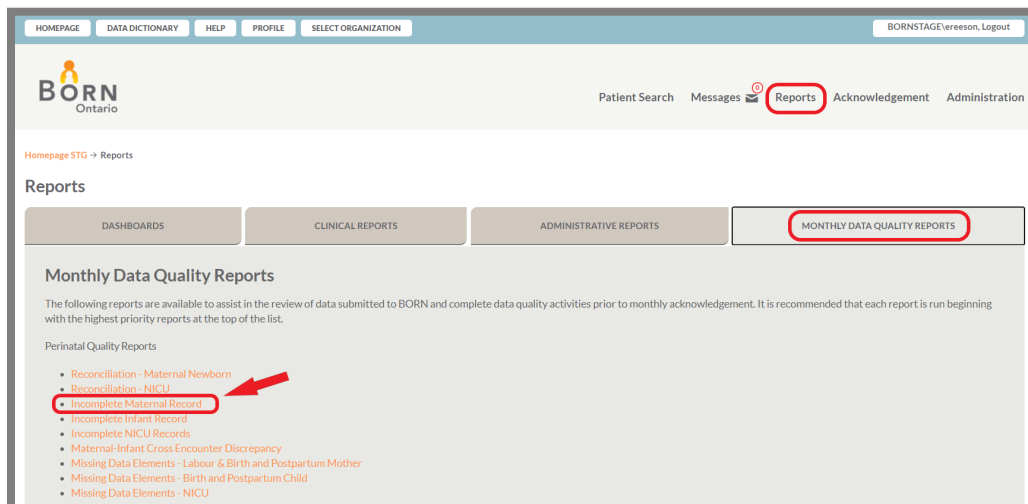
Data Quality Review Process:

Step 1: Review the following reports:

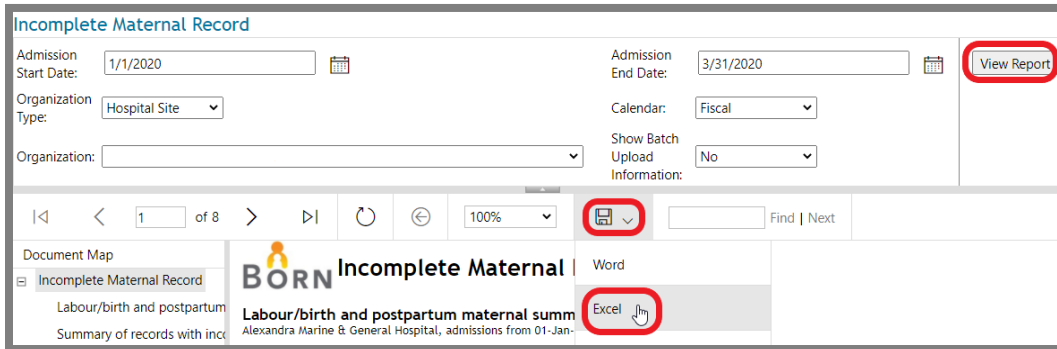
- 'Incomplete Maternal Records'
- 'Incomplete Infant Records'

Note: You will have to run each report separately. The number of live and stillbirths is reported on the Incomplete Infant Record report.

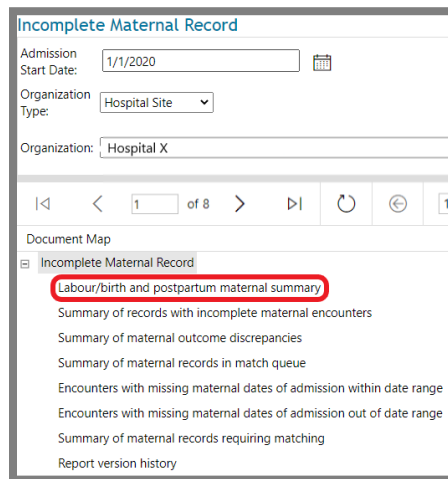
- Go to '**Reports**' which is located on the BIS top menu bar
- Click on the '**Monthly Data Quality Reports**' tab and select **Incomplete Maternal Records**.



3. A new window will open - select the date range you are looking for and click 'View Report.' To export to Excel, select the floppy disk icon in the center of the top section.



4. The number and type of incomplete records will display on the first tab (summary tab) of the report indicating the number of records requiring investigation and correction. Click the other tabs of the report for more information regarding the type of error (includes draft encounters, missing encounters, disposition discrepancies, missing admission dates, etc.) and personal health information (i.e. OHIP number and chart number)



5. To investigate individual incomplete records:
 - a. Copy and paste the OHIP number or client code into the BIS **Patient Search** field.
 - b. Review the record and make necessary corrections
 - c. Re-submit the record – ensuring the data is complete and accurate



Summary of Records with Incomplete Maternal Encounters Tab

- This tab shows encounters are either not created or not submitted
- Correct the records written in red text.
- Zeros (0) under link to child record means linked baby records for this client are missing.

BORN Incomplete Maternal Record Report													
Summary of records with incomplete maternal encounters													
admissions from 01-Jan-2020 to 31-Mar-2021													
Chart Num	Hospital Visit ID	Health card number	Given name	Family name	Maternal date of birth	Admission date	Admission time	Labour/Birth	Postpartum	Link to child record	Number of live/stillborn fetuses	Number of infant records	Number of infants with birth child encounters

Summary of Maternal Outcome Discrepancies Tab

- The answer to Maternal Outcome is “Discharged Home” in more than one encounter in these records.
- Generally, “Discharged Home” should **only** be selected in the Postpartum Mother encounter.
- In the Labour/Birth Mother encounter, “No Transfer” is most often the appropriate selection.
- **To correct records** Use the information in the tab to enter into Patient Search in the BIS (Healthcare or Chart number).
- Go to the encounter that has duplicate Maternal Outcome = discharged home data (likely the Labour/Birth Mother encounter) and change response to No Transfer – then, **Submit**.

Maternal Encounters with “Number of Fetus” Discrepancies

- This tab shows discrepancies between the Pregnancy tab “Number of Fetuses” data element and the number of created live or stillbirth records.

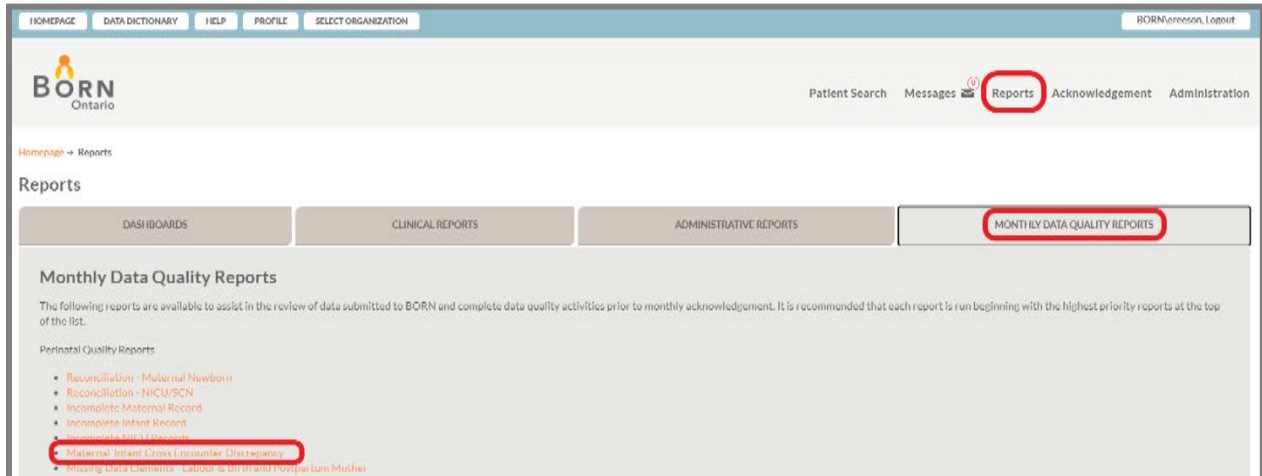
Note: Repeat the above steps for the Incomplete **Infant Records Report** and for hospitals with a NICU, also repeat for the **Incomplete Infant Records – NICU Report**

Step 2: Review ‘Maternal Infant Cross Encounter Discrepancy’ Report

This report flags instances where data in the mother’s record is different from data in the child’s record (i.e., type of birth, birth outcome and birth location).

1. Go To **‘Reports’** which is located on the top menu bar

2. Click on the **'Monthly Data Quality Reports'** tab and select **'Maternal-Infant Cross-Encounter Discrepancy Report'**.



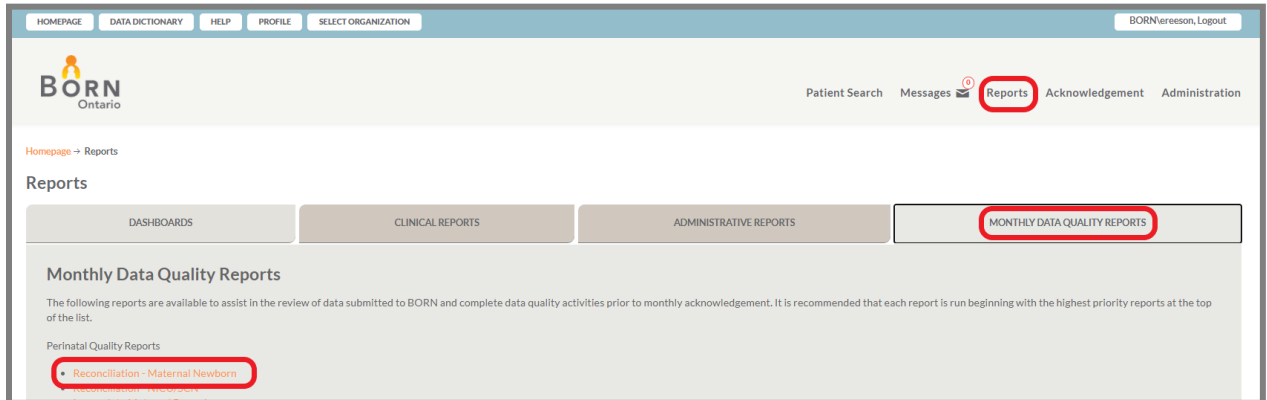
3. Select the date range you are looking at and click **'View Report.'** To export to Excel, select the floppy disk icon in the center of the top section.
4. The number of records with cross-encounter discrepancies will display on the first tab of the report (summary tab) indicating the number of records requiring investigation and correction. The other tabs contain more information on the discrepant records.
5. To investigate individual records with cross encounter discrepancies:
 - a. Copy and paste the OHIP number (or client code) into the **BIS Patient Search** field.
 - b. Review the record and make necessary corrections (i.e. ensuring the pregnancy/birth outcome, type of birth, birth location, etc. is the same between birth child and labour/birth mother encounters). Ensure data is complete and accurate.

Step 3: Review **'Reconciliation – Maternal Newborn' Report**

This report includes all birth child encounters created for your hospital. Reconciliation is key to capturing 100% of your organization's births in the BORN Information System (BIS).

1. Go To **'Reports'** which is located on the top menu bar

2. Click on the **'Monthly Data Quality Reports'** tab and select **'Reconciliation – Maternal Newborn Report'**.



3. Select the date range you are looking at and click View Report. To export to Excel, select the floppy disk icon in the center of the top section.
4. This report provides a list of maternal admissions, discharges, and births. The number of admissions, discharges, and births need to be cross-referenced with an internal data source. Examples of internal data sources include: Admission-Discharge-Transfer (ADT) lists, health records, computerized unit census or log book.
5. Do you have a different number of live and still births between your internal source and the report you just ran?
 - Perhaps a birth occurred at your hospital but was not entered into the BIS - please check and enter the information into the BIS.
 - If a baby was born outside of a birthing hospital and not under the care of a midwife, the Labour Birth Mother and Birth Child encounters should be entered in the BIS under the first birthing hospital that they are admitted to. If your organization's internal source only represents births that occurred at your organization, this may account for the discrepancy in numbers. To check if this is the case:
 - a. Run the Maternal Newborn Reconciliation report for the time period of interest
 - b. Export to Excel
 - c. Click on List of Births (Birth Child) tab

- d. Filter rows by 'Place of Birth' and/or 'Birth Hospital' to identify any baby(ies) not born at your organization
6. For hospitals with a **NICU**, repeat the above steps for the '**Reconciliation – NICU**' Report to ensure 100% of NICU **discharges** are captured in the BIS

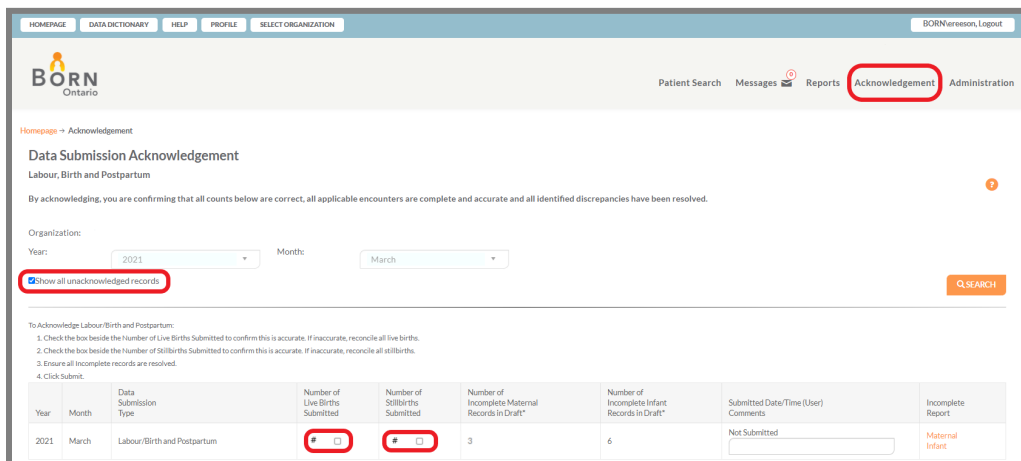
Step 4: Acknowledge Data

- Acknowledgment is the final step of data quality management, after all of your incomplete reports have been viewed and corrected.
- Once acknowledged, clinical reports can be viewed with confidence. Your hospital data can also be included in research/data requests and the comparators in profile reports for other hospitals.

1. Click on 'Acknowledgement' as seen on the top menu bar



2. Select the checkbox titled 'Show all unacknowledged records' to display all months not yet acknowledged, then click 'Search.'



3. If you want to see one month only, select the year and month that you would like to acknowledge and click Search



4. Once the data table is displayed, in order to report data completion, click the box under the number of live births and the number of stillbirths submitted.
5. For hospitals with an NICU – repeat the above process for NICU data and in the data table, click the box under the number of NICU Discharges beside Data Submission Type (provided these numbers match your expected values as confirmed by your internal data source) and click ‘Save’



Appendix: Data Quality Management Faq

Are you having trouble accessing the reports mentioned in this guide?

The BIS local administrator at your MPG can grant you access to 'Data Analysis Administrative Reports' and/or 'Organization Data Acknowledgement'

Are you having trouble acknowledging data?

You will only be able to acknowledge data for your organization if you've been granted permission by your BIS Local Administrator

Did you know you can export your reports in various formats?

Reports can be formatted into Excel, Word, PowerPoint, PDF, etc. by clicking on the export icon in the toolbar above the report and can be printed for use as a working document. Remember that reports contain personal health information and if printed, they must be kept confidential (i.e. locked up, shredded following use, not left open for viewing by others)

Would you like to see which months have been acknowledged to date?

Go to '**Reports**', then click on the '**Administrative Reports**' tab. Click on '**Month End Acknowledgement – All Organizations**', choose your organization and the date parameters and click on 'view report'.

Questions?

Remember to send any questions that require sharing personal health information to your BORN Coordinator via BIS Messages. Your coordinator will be pleased to help!

