

California Maternal Data Center (MDC) Steps for First-Time Participants

Thank you for participating in the CMQCC California Maternal Data Center (MDC). This guide provides detailed steps for first-time participants. You may also wish to consult the *User Guide for Active Track Hospitals* as you begin to use the MDC. The MDC “Support” section also includes many topic-specific User Guides.

Questions or Comments

Please contact Anne Castles at 626-639-3044 or datacenter@cmqcc.org.

Before you Start: A Note on MDC Security Protocols

The MDC is a secure online tool that supports hospital quality improvement activities. A key feature is the ability to view patient level data. To protect these data, the MDC employs a system called two-factor authentication.

- When logging into the MDC at <https://datacenter.cmqcc.org>, all users are asked to submit a personal login name and password that they create during the registration process. (Please note that if hospital user passwords are lost, ONLY hospital “administrators” can re-set passwords for their hospital users; CMQCC staff are unable to do so given the MDC’s security barriers.)
- Users that attempt to access a screen with individual-level data will be asked to undergo a second security gate. Specifically, you will be prompted to receive a second temporary pin number through phone numbers that you entered during the registration process. Once the pin is entered, users are transported to the screen of interest.

1. Creating the Administrative Data File (adapted PDD file)

Summary Guidelines and Timelines

- Participating hospitals will submit a patient discharge data file to the MDC on a monthly, bi-monthly or quarterly basis (per the hospital’s preference).
- Submissions should be based on discharge date and are to be made on a calendar month basis, representing all discharges from the first day of the month through the last day of the month for the given reporting period.
- You may submit multiple months in a single file, but please ensure the files represent the entire month for each month you are submitting (no partial-month data).
- Please target your submissions for 50-60 days after the close of the reporting period, it is best to wait until coding is complete for your hospital; otherwise cases may be inadvertently excluded.
- Hospital systems can choose between submitting a single discharge data file for all hospitals in their system (or a sub-set of their system), or submitting individual discharge files for each facility.
- All files are uploaded to the secure Maternal Data Center system (maintained on servers at Stanford University School of Medicine). At this time, there is no FTP site for automated file transmissions.
- Each hospital can choose how much retrospective data to submit to the MDC. In general, CMQCC recommends retrospective data going back six-nine months (e.g. if initiating participation in February 2015, submit data starting from July 2014).

File Format

There are two file format options for the Administrative Data File:

Option 1: OSHPD PDD submission format: i.e., column delineated in which each field has a set number of characters and there are no commas. Per the MDC Data Specification-Attachment B1, you may use the file format delineated on OSHPD's MIRCAl site with the noted MDC modifications.

Option 2: CSV file format, with each case in a single row. If a column value is empty, leave no space between the commas: (,,). ICD-9 codes will need to include periods after the appropriate digits. The CSV file format is specified for each data element in the MDC Data Specifications- Attachment B2.

File Specifications

See the detailed File Specifications *Data Specs_CMQCC_Current* for a complete list of required data elements. In general, the Data File uses the same coding as the OSHPD PDD data submission. If you have any questions about the mapping of specific fields, the personnel in charge of your facility's OSHPD PDD submission is likely the best resource. **CMQCC recommends that hospitals assign the MDC file creation to the same department that generates the OSHPD PDD file.**

CMQCC requests the following modifications to OSHPD's PDD File Specifications:

- Replace Patient Social Security Number (SSN) with the numeric "123456789" (which will help to ensure the correct character spacing in a fixed-width file format), or with zeros. (Hospitals nulling out the SSN from their standard OSHPD PDD files may wish to use a text editor. UltraEdit is used by many MDC-participating hospitals; CMQCC can provide instructions for its use upon request)
- Hospitals may choose between submitting all patient discharge records *or* limiting the submission to delivery-related discharges. If you do choose to limit your submission to delivery-related discharges, please use the list of codes in Attachment A of the Data Specifications to filter your data. If you submit all discharge records, CMQCC will apply the filters for you.
- Some fields are optional for CMQCC; optional fields are highlighted in yellow. If you choose not to submit data for these fields, please take care to format the blank values as specified for each file format option.
- The addition of one optional data element— *Campus ID (see below)*. Campus ID can be used to distinguish between different campuses of facilities that share the same OSHPD Facility ID.

Note on the Abstract Record Number:

CMQCC is requesting provision of the Abstract Record Number (ARN)—a unique patient identifier assigned by the hospital. The ARN will be encrypted immediately upon receipt at the CMQCC server; the true-value ARN will remain viewable by hospital personnel for ease in identifying patient records for record review. **Hospitals should submit an ARN (e.g., medical record number, hospital visit number, account number, case number) that enables look ups by authorized hospital personnel.**

2. OPTIONAL Supplemental Data File

Your hospital has the option of submitting additional supplemental CSV data files derived from internal systems (e.g. EMR, core measure vendor system). The supplemental files might be used to:

- Correct data already in the MDC system from Birth Certificate data or your discharge data submission (e.g. Gestational Age).
- Pre-populate the "chart-review" data elements (e.g. labor, SROM or Prior Uterine Surgery) in the MDC system using data from a core measure vendor system.
- Include a flag that denotes a record as part of the hospital's Joint Commission sample (from the core measure vendor system).

The specifications for the optional supplemental data file can be found in the separate document *MDC Supplemental File Specifications*. Please contact Anne Castles to learn more.

3. Registering with MDC Prior to the First Data Submission

Identification of a Primary Administrator

- Appoint a single individual at the hospital to serve as the “Primary Administrator”. This person will:
 - Authorize other hospital users to access the Maternal Data Center (MDC) system
 - Print out the encryption key for safekeeping
 - Re-set passwords in the event other hospital users lose their passwords
- When the hospital is ready to submit their first data file, notify CMQCC regarding:
 - the day you plan to submit the file, and
 - the name, e-mail address, phone number and title for the designated “Primary Administrator” and the “Primary IT Contact” (the individual programming the file) for your hospital.
 - CMQCC staff can be reached at datacenter@cmqcc.org or 626-639-3044.

Registration

- Once you have identified a Primary Administrator to CMQCC, you will receive an e-mail to register in the MDC system. If you will have access to multiple hospitals’ accounts, you’ll receive an e-mail invitation for each hospital participating in the MDC.
- The e-mails will come from “datacenter@cmqcc.org”.
- Click on the “Register” or “Accept Invitation” box in the e-mail
- Your login name will automatically fill in as the first part of your e-mail address, but you can also change it here.

If you are serving as the contact for multiple hospitals, you will register separately for each account; please choose a unique login name for each facility (e.g. Name+CV for Cherry Valley Hospital; Name+SP for Saint Peter’s).

- Create a password for yourself.

Please take special care to document and store your personal password. The security features of the online tool make password re-sets difficult. If you are registering for multiple hospitals, you can use the same password across all hospital accounts (but you will need unique login names for each)

- Input your phone number(s).

The phone numbers are part of the MDC security protocols: each time you attempt to access individual-level data, MDC will transmit a computer-generated pin number through a call or text to your registered phone number. An additional option for receiving the pin number is to download the smartphone app Google Authenticator; the app does not require a cell connection.

- Click “save and log in”

The screenshot shows the 'MATERNAL DATA CENTER REGISTRATION' form. It includes fields for Email (john.doe@example.org), Login (john.doe), First Name (John), Last Name (Doe), Password (masked with dots), and Password Confirmation (masked with dots). A note states: 'must be at least 8 characters long and contain a lowercase letter, an uppercase letter, and a number'. Below the password fields is a section for 'Phone numbers*' with a note: 'Each time you log in, you will select one of your listed phone numbers; the Data Center will call (or text) the selected number to transmit a temporary PIN that is also required for accessing the system.' There is one phone number listed: Label (Home), Type (Landline), and Number ((415) 888-1235). There are links for 'Remove this phone number' and 'Add another phone number'. At the bottom is a 'Save and Log In' button.

If you are the Primary Administrator (the first to register for your hospital), you will also:

- Print out the encryption key and **place in a secure location.**

The encryption key is the master password for encrypting your hospital’s patient-level information.

- Add other authorized users for your hospital. Upon being added into the system, each of the hospital “users” will receive their own e-mail link to register themselves. Do not forward your e-mail to them.
- Please designate at least one other person to have “Administrator” status for each hospital. *This is important, as only “admins” can re-set lost passwords; CMQCC cannot re-set passwords due to security barriers built into the system.*

- If you are an “administrator” for your hospital system and are adding other users that will have access to multiple hospital accounts, please alert those users that they will need to create unique login names for each hospital account.
- After registration, you will access the MDC at <https://datacenter.cmqcc.org>

The screenshot shows the 'MATERNAL ENCRYPTION KEY FOR SPRINGFIELD GENERAL'. It features a yellow warning box: 'IMPORTANT: Please print and save this for your records.' Below this is a paragraph explaining that the key cannot be used to gain access to the CMQCC Maternal Data Center, but it is used to encrypt direct patient identifiers. A note states: 'CMQCC does not retain this key, making it impossible for CMQCC to access the direct identifiers. In general, your regular CMQCC account password will be enough to be able to decrypt data, but if all the users at Springfield General forget their passwords at the same time, this key will be the only way to access the encrypted direct PHI.' The encryption key is displayed as a 2x5 grid of hexadecimal characters: 4f923c e7e81f 125f18 b6f46f 767f72, b5f1f3 8771fd 0579d9 8ecd8a 52ff23. At the bottom, it says: 'After printing this page and filing it away securely, go on to [manage users](#) for your hospital.'

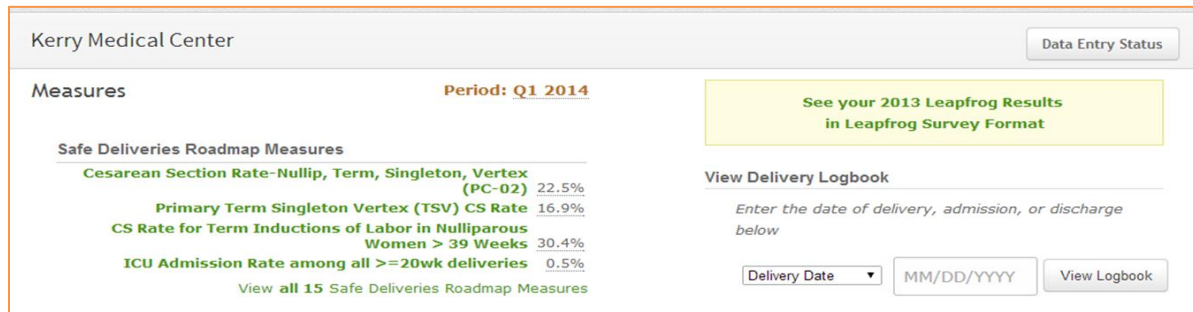
4. Uploading Data Files

After registering, the staff responsible for the file submission will upload the file directly into the secure Maternal Data Center (MDC) system. If this is your first file submission to the MDC, you may wish to start with a test file including at least three months of data.

If you submit the file immediately after registration, you will already be in the MDC system and can proceed to submitting your data. If you access the system after your initial registration, go to:

<https://datacenter.cmqcc.org>

- Enter your login name and personal password.
- Click on “Data Entry Status”, “Upload Data”, then “Discharge Data File”.



Kerry Medical Center Data Entry Status

Measures Period: Q1 2014

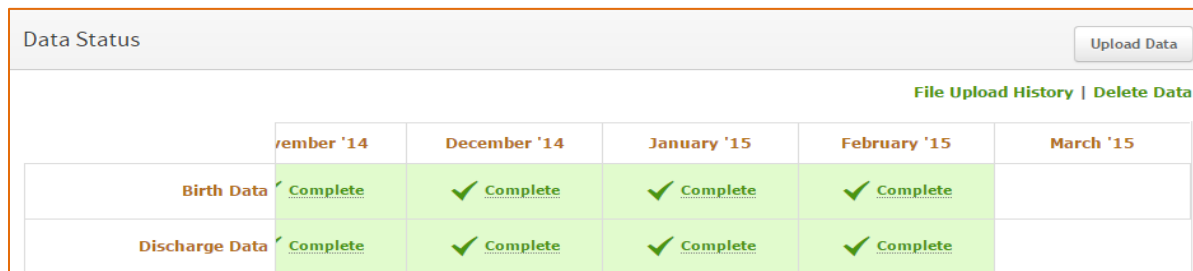
See your 2013 Leapfrog Results in Leapfrog Survey Format

View Delivery Logbook

Enter the date of delivery, admission, or discharge below

Delivery Date

View all 15 Safe Deliveries Roadmap Measures

Data Status Upload Data

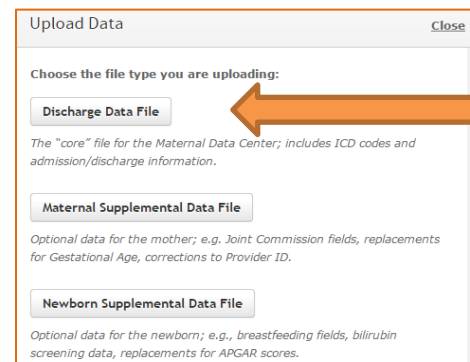
File Upload History | Delete Data

	November '14	December '14	January '15	February '15	March '15
Birth Data	Complete	✓ Complete	✓ Complete	✓ Complete	
Discharge Data	Complete	✓ Complete	✓ Complete	✓ Complete	




Data submissions to the MDC site are controlled by two-factor authentication. In order to submit a data file, you will receive a prompt to receive a second temporary pin. Click “Call” or “Text” to select the phone number at which you wish to receive the computer-generated pin number.

- Input the temporary pin and click “Submit”.
- Select the correct start and end dates of the data file you plan to upload.
- Select “Choose File” to find the file to be uploaded from your system.
- Press Upload. The data may process for several minutes depending on the size of your file. Once the file is accepted, the word “Complete” will display within the Discharge Data bar.



Upload Data Close

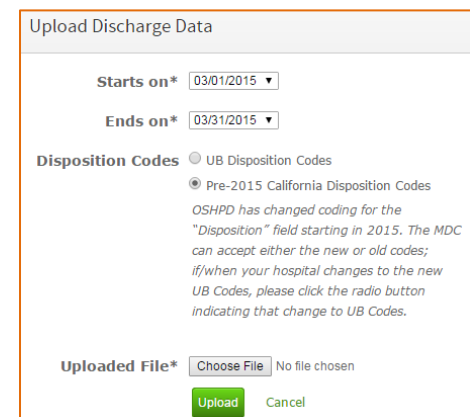
Choose the file type you are uploading:



The “core” file for the Maternal Data Center; includes ICD codes and admission/discharge information.

Optional data for the mother; e.g. Joint Commission fields, replacements for Gestational Age, corrections to Provider ID.

Optional data for the newborn; e.g., breastfeeding fields, bilirubin screening data, replacements for APGAR scores.



Upload Discharge Data

Starts on*

Ends on*

Disposition Codes

UB Disposition Codes

Pre-2015 California Disposition Codes

OSHPD has changed coding for the “Disposition” field starting in 2015. The MDC can accept either the new or old codes; if/when your hospital changes to the new UB Codes, please click the radio button indicating that change to UB Codes.

Uploaded File* No file chosen

Special Notes for Systems

For discharge data files, hospital systems have the option to create a system- or subsystem-level file submission that includes all facilities in the system/sub-system (versus individual facility-level files). This feature is NOT available for supplemental data. Below is a comparison of the steps for each approach.

Task	System- or Subsystem-Level Discharge Data File	Facility-Level Discharge Data File
File Creation	<ul style="list-style-type: none"> Create a file that includes the entire set, or a sub-set, of your system's hospitals 	<ul style="list-style-type: none"> Create individual files for each facility
Registration Process for File Uploaders	<ul style="list-style-type: none"> Notify CMQCC of the individual(s) that will serve as the "system file uploader" CMQCC will send those individuals a "system-level" registration invitation The individual(s) register as "system file uploader" An "administrator" logs into each MDC hospital account and authorizes the designated "system uploader" for their hospital. 	<ul style="list-style-type: none"> An "administrator" logs into each MDC hospital account and adds the individual who will be the "hospital file uploader" for their hospital. The "hospital file uploader" registers within each hospital account
Monthly / Quarterly File Upload Process	<ul style="list-style-type: none"> The "system uploader" logs into the MDC once each month/quarter and uploads the system-level file(s) 	<ul style="list-style-type: none"> Each "hospital file uploader" logs into the MDC hospital account and uploads the file for that hospital. If the same person is uploading for multiple hospitals, they will need to log into <u>each</u> hospital account to upload each file.

5. File Error Checks

Duplicate Records in the File

Sometimes hospital files will include "duplicate" records (i.e. two records that have the same Case ID and both include a delivery-related ICD-9 code). The most common cause of this is when an *antepartum* or *postpartum* admission has *erroneously* been assigned an ICD-9 code that reflects a delivery-related hospitalization.

If there are any duplicates in your file, you will see a list of those cases, and will be asked to identify the correct record prior to your file being accepted. Simply identify the records by choosing the radio button for the correct record, and click "Keep these cases".

Resolve Duplicate Discharge Records MRN

Duplicate Records Found

We found duplicate records with the same MRN in your submission—and both records include ICD-9 codes indicating a delivery-related hospitalization. Often, one of the records is actually a postpartum or antepartum stay (but incorrectly coded with a birth-related ICD-9 code).

You will need to identify the correct birth-related record before the file can be processed:

- Review both records (you can click on each record number to see the full set of information)
- Identify the record that represents the birth admission
- Click the radio button to select that record
- Once done, click "Keep these cases"

Record Number	Date of Birth	Admitted On	Discharged On	Diagnoses	Procedures	Correct Record
123456	10/04/1963	06/01/2013	06/03/2013	V27.0, 666.22	69.52	<input type="radio"/>
123456	10/04/1963	07/01/2013	07/03/2013	V27.0, 666.22	69.52	<input checked="" type="radio"/>

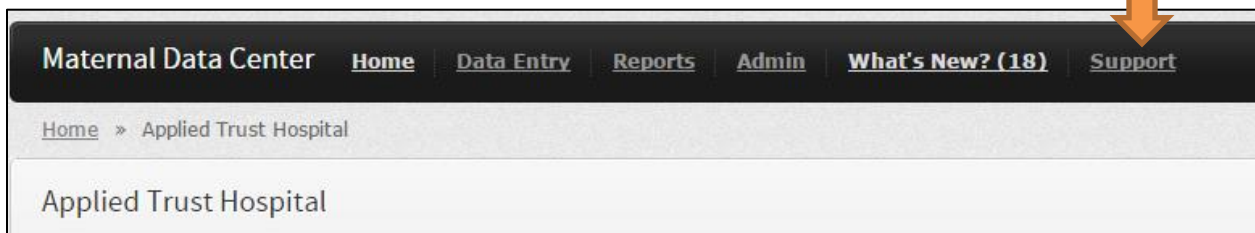
Record Number	Date of Birth	Admitted On	Discharged On	Diagnoses	Procedures	Correct Record
654321	10/04/1954	06/01/2013	06/03/2013	V27.0, 666.22	69.52	<input type="radio"/>
654321	10/04/1954	07/01/2013	07/03/2013	V27.0, 666.22	69.52	<input type="radio"/>

Error Messages

Upon submission, the MDC will conduct some basis data quality checks to evaluate the file for completeness. File will be rejected if they do not meet the following base requirements:

1. All records must include values in the following fields:
 - Facility ID
 - Principal Diagnosis
 - Date of Birth
 - Admission Date
 - Discharge Date
2. The facility ID must match the OSHPD ID that CMQCC has on record.
3. The file includes records that represent discharges in both the first part of the month and the last part of the month.
4. For CSV file formats, column headers denoting specific data elements must match the CMQCC-designated column headers (per the MDC Data Specifications). If the error message suggests very few column headers match, it may be because you accidentally uploaded a “supplemental data file” as a “patient discharge data file” (or vice versa).
5. For CSV file formats, ICD9 codes should contain periods (after the third digit for diagnoses, after the second digit for procedure codes); if ICD9 codes do not contain periods, the MDC will validate that the file as a whole contains leading zeros (to detect if the file has been saved from Excel, which typically causes leading zeros to be lost, which would render ICD9 codes ambiguous).
6. ICD9 codes must be valid (i.e. present in the CMS list of all codes).
7. For fixed width files, all records must include 670 characters.
8. A case cannot meet both the newborn and maternal admission criteria (e.g. the MDC validates that a newborn doesn't have a Cesarean Section procedure code).
9. Race/ethnicity codes must be valid (but blank values are allowed).
10. All fields with dates (admit/discharge/dob/procedure dates) must be recognizable as dates

If you have any issues with interpreting the error message, you may click the Support link in the upper black bar, then click “Contact CMQCC” to e-mail CMQCC staff.



After the Data Submission is Accepted

Once the file is accepted, the Discharge Data bar will display as “Complete” for the reporting periods you submitted and the MDC will automatically link to the birth certificate data for that period, such that “Data Linkage” will also show as “Complete”. (A description of the linkage algorithm is available upon request.)

	July '14	August '14	September '14	October '14
Birth Data	✓ Complete	✓ Complete	✓ Complete	✓ Complete
Discharge Data	✓ Complete	✓ Complete	✓ Complete	✓ Complete
Data Linkage	✓ Complete	✓ Complete	✓ Complete	✓ Complete

If this is your first file submission, please contact CMQCC staff at datacenter@cmqcc.org to notify them that the data upload is complete. CMQCC staff will further evaluate the file for completeness by reviewing the linkage rates between the birth certificate data and the discharge data. (Hospitals can also view these linkage statistics by clicking on “Hospital Data Quality Measures” section from the MDC Home Page: the measures “Unlinked Mothers” and “Unlinked Newborns” will appear on the list). If CMQCC identifies any issues, we will notify the hospital of next steps (either to fix specific issues or to move forward with submitting additional data files).

Correcting Data Errors

There are two types of data errors:

1. Cases are missing from the discharge data submission—either because they were not included in the hospital’s file at all, or because the missing cases did not include one of the delivery-related ICD-9 codes that CMQCC uses to filter the cases. If cases are missing and the hospital can identify the missing cases, please take the following steps to replace the cases:
 - Delete the discharge data file originally submitted for the given reporting period.
 - Create and upload a new Discharge Data file that includes all cases with updated coding
 - See the User Guide: *Deleting Discharge Data* for specific steps
2. Cases are included in the discharge data and birth certificate files, but the data for certain records are erroneous. In this scenario, hospitals can choose to:
 - Manually edit specific cases case (see User Guide: *Making Manual Data Corrections*)
 - Submit a supplemental data file that overwrites the originally-submitted data for specific cases and specific fields. (See User Guide: *Supplemental Data File Specifications*)

6. Chart Review

Once the Birth Certificate and Discharge Data have been linked by the MDC, hospital users will see additional measures listed on the Data Status screen denoted with “Action Needed”. These are OPTIONAL measures that require additional data IF your hospital wants to calculate them in the MDC.

There are two ways to add the additional data for these optional measures.

1. Manual Data Entry: Click on the “Action Needed” cell for the measure of interest. After performing the necessary abstraction, click on the appropriate check boxes for each case (See User Guide: *Chart Review for “Action Needed” Measures*)
2. Supplemental Data Specifications: You can make supplemental data submissions that will pre-populate the chart review boxes for many of the optional measures. See User Guide: *Supplemental Data File Specifications*)

	July '14	August '14	September '14	October '14
Birth Data	✓ Complete	✓ Complete	✓ Complete	✓ Complete
Discharge Data	✓ Complete	✓ Complete	✓ Complete	✓ Complete
Data Linkage	✓ Complete	✓ Complete	✓ Complete	✓ Complete
Elective Delivery	Action Needed	⚠ Action Needed	⚠ Action Needed	⚠ Action Needed
Antenatal Steroids	Action Needed	✓ Complete	✓ Complete	⚠ Action Needed
Bilirubin Screening	Action Needed	⚠ Action Needed	⚠ Action Needed	⚠ Action Needed
DVT Prophylaxis	Action Needed	⚠ Action Needed	⚠ Action Needed	⚠ Action Needed

7. Training Session

Once the hospital makes a full up-to-date file submission, CMQCC will work with the Primary Administrator at each hospital to schedule a 1.5 hour training session of the MDC (held via webinar) to review the hospital data and the tool's features for all hospital and/or system users.

The MDC also includes a Support section which includes numerous User Guides. You can also "Contact CMQCC" directly through the Support section.

Maternal Data Center [Home](#) [Data Entry](#) [Reports](#) [Admin](#) [What's New? \(18\)](#) [Support](#)

Home > Applied Trust Hospital

Applied Trust Hospital

CMDC Support [Contact CMQCC](#)

✓ Signed in successfully.

[Search Support Documents](#)

Not finding the information you need? Please [Contact CMQCC](#) and we'll get back to you.

General User Guides	Data Specifications	Provider-Level Section
<ul style="list-style-type: none">• User Guide for View-Only Hospitals• User Guide for RPPC Users• Making Manual Data Corrections• User Guide for Active Track Hospitals• Detailed Registration and Data Submission Steps	<ul style="list-style-type: none">• Core Specifications: Patient Discharge Data• Cal-HEN Transfusion and Pre-eclampsia Measures: Supplemental Data Specifications to Auto Calculate Cal-HEN Measures• Supplemental Data File Specifications	<ul style="list-style-type: none">• Navigating the Provider-Level Reports• Correcting Provider IDs

8. Staying Up-to-Date on MDC Features and Data Submission Requirements

The MDC's e-mail distribution list is based on all hospital staff that have registered in the Maternal Data Center. All registered users will receive notifications around the following:

- Quarterly user group meetings that are held to inform hospital users of new features and answer hospital questions. Doodle polls are used to ascertain the best dates for scheduling the meetings approximately one month in advance of the target meeting date.
- Any substantive changes in data specifications, data file submission protocols, or data entry protocols.

Hospital personnel denoted as the "Primary IT Contact" for each hospital will receive direct e-mails denoting any substantive changes in the MDC data specifications or data file submission protocols.

CMQCC also provides immediate updates on new features via the "What's New" section in the upper black bar. You'll see an enumeration of all new features since the last time you clicked on the "what's new link".

Checklist of Hospital MDC Decision Items

Hospital Decision Item	Description	Complete?
Data File Decisions		
File Format	Will you submit via Fixed Width Format (per OSHPD) or CSV File Format?	
Identifying Cases for Inclusion	Hospitals have the choice to submit <u>all</u> discharge data records (and CMQCC will filter out the mother and newborn records once the file is submitted) —or— the hospital can filter the files on their side using the ICD-9 codes listed in Attachment A of the Data Specifications.	
Monthly vs. Quarterly Submissions	How often will your hospital submit data? Most hospitals choose to make monthly submissions given the benefits of receiving monthly reports.	
Submission Schedule	CMQCC recommends waiting to pull and submit your discharge data file <u>at least</u> 50 days after the end of each reporting period (CMQCC does not receive Birth Certificate data from Vital Records until 45-50 days after the end of each month). If coding is not complete for delivery discharges within 50 days, it is best to wait until it is complete (otherwise cases may be inadvertently excluded)	
Retrospective Data	While CMQCC receives <i>statewide</i> PDD and Birth Certificate data to calculate many metrics, it is generally at least 9 months old and does not enable drill-down to the patient level. CMQCC suggests submitting retrospective data going back 6-9 months from your initiation date, so there are no gaps in your metrics. You may want to submit additional periods of retrospective data if patient-level drill down for those periods is important for your hospital.	
Supplemental Data Files	Do you wish to submit any OPTIONAL data fields that you can download from EMRs or a core measure vendor system?	
Hospital System Files	Do you wish to submit a single file for all hospitals in your system, or have each hospital submit an individual file?	
Personnel Decisions		
Identify Primary Administrator	Provide CMQCC with the contact information for the Primary Administrator who will register the hospital prior to the first data submission	
Identify Primary IT Contact	Provide CMQCC with the contact information for the Primary IT Contact who is responsible for programming the data file submission.	
Identify File Uploader for the Hospital or System	For your internal planning, which hospital user will upload the data files for your hospital? On what schedule?	
Identify Abstractor for OPTIONAL chart review	If you plan on calculating any of the optional measures within the MDC, who will collect and enter the chart review information?	
Additional Hospital Users	Identify the hospital personnel whom your hospital's Primary Administrator will authorize to access the MDC and decide whether they will have Administrator, Data Entry, or Read-only status.	
Once the First File is Ready		
Registration	Once you are ready to submit your first file, let CMQCC know and we will initiate the hospital registration process with the Primary Administrator.	
First Data Submission	Notify CMQCC when you have completed your first data submission.	
Training Session	After making your first data submission, work with CMQCC to schedule your training session.	