



CataTrack

Reports Catalogue

Version 1

CataTrack Reports Catalogue

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The reports catalogue provides a summary of the various reports available with CataTrack. Though the reports are standard and used across country programs, each program will have the ability to make reporting decisions based on data access preferences.

During the introductory consultancy, the Development Team will discuss with country programs regarding their preferred reporting method(s). It is a program's decision how they access their data dependent on their needs; it is simply encouraged that the data be USED regularly so that CataTrack can support program assessments, planning, and improvement.

Metabase

Use if... you need de-identified, summary data and analysis.

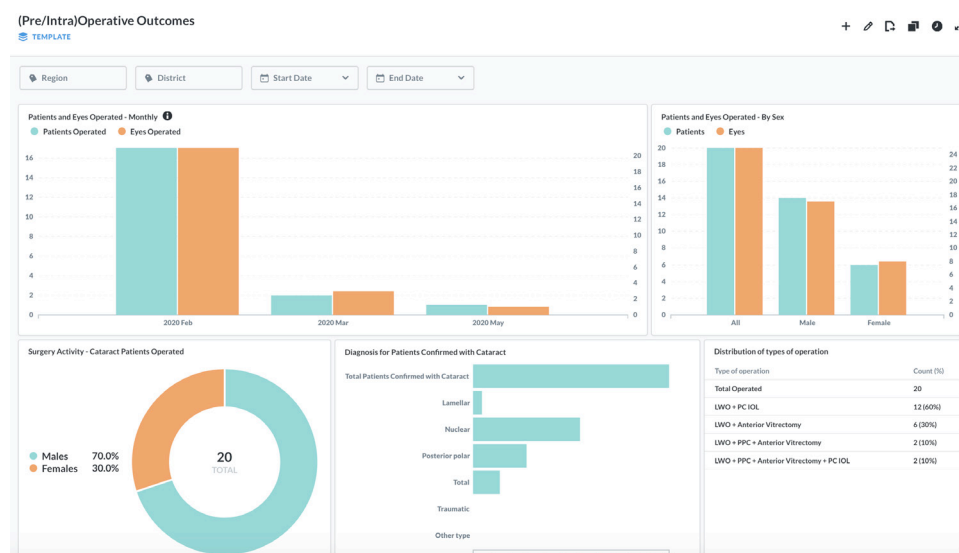
Metabase is a password-protected data visualization tool that can be utilized by programs/facilities for easy data analysis and graphics development. The tool was included in CataTrack due to its ease of reporting summary information. Metabase also provides email or "pulse" capabilities, transforming saved queries to attached Excel documents that can be sent to designated individuals.

Metabase uses de-identified summary data exported from the main CataTrack system to provide programs and facilities with a daily-updated snapshot of the activities conducted in program areas. Once a user accesses the country project in Metabase, he/she can view the dashboard to see a collation of queries that have been saved to a project. Queries are customizable analyses conducted on the collected data; a set of queries will be created by the Development Team and saved to the country project.

Reports offered in Metabase

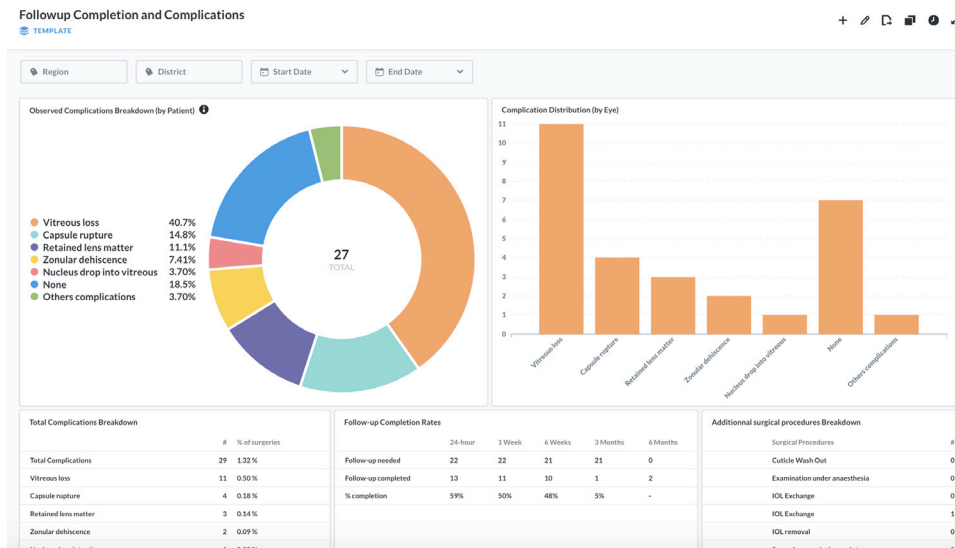
(Pre/Intra)Operative Outcomes

- Patients and eyes operated - Monthly and by sex
- Diagnosis for patients confirmed with cataract
- Type of operation distribution
- Facility activity report (surgery, refusal)



Follow-up completion and complications

- Observed complication breakdown - by patient and by eye
- Total complication breakdown with percentage of surgeries represented
- Complication frequency during each follow-up timepoint
- Follow-up completion rates
- Additional surgical procedures breakdown
- # of patients returned for follow-up because of SMS reminder received



DQA - Data Quality Assessment

- Patients diagnosed without surgery
- Consent given, surgery date filled but no surgery done on either/both eyes
- Dates out of order
- Patients - Manual ID not found
- Patients operated by "Other surgeon"
- List of patients registered in Temporary Facility
- Patients with follow-up but no surgery form filled
- Patients operated by not followed-up

DQA

Region: District: Start Date: End Date:

2020-06-22 05:06 UTC
Last CommCare Sync

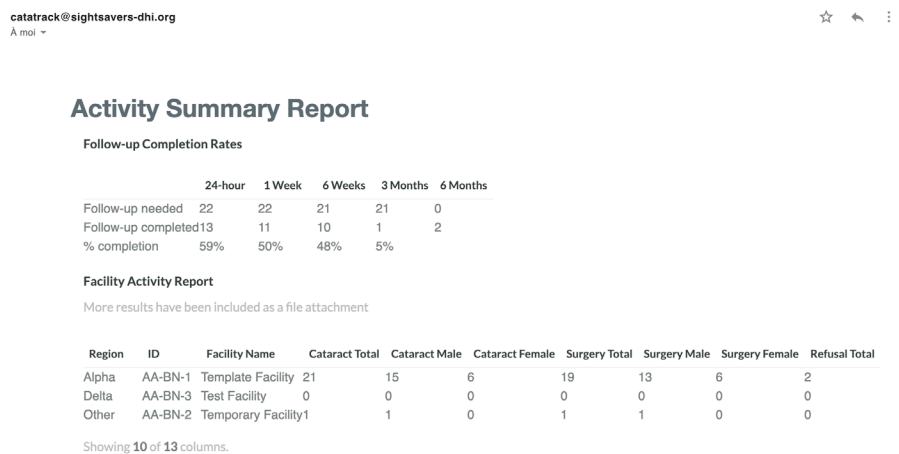
1. Diagnosed without surgery									
caseid	Facility	Evaluation date	RE Susp. Cataract	LE Susp. Cataract	RE Diag.	LE Diag.	RE Consent	LE Consent	
29737361-536b-4c05-a4c3-7d65dc0e65ff	Template Facility	2020-02-17	1	0	nuclear		given		

2. Consent given, surgery date filled but no surgery on either/both eyes.											
caseid	Facility	Evaluation date	RE Susp. Cataract	LE Susp. Cataract	RE Diag.	LE Diag.	RE Consent	LE Consent	Surgery Date	RE Operated	LE Operated
4d401959-5360-4c98-a69c-0b0d8ba3b422	Template Facility	2020-02-19	1	0	total		given		2020-02-19	0	1

Rows 1-1 of 3

Automated activity summaries

All saved queries housed in Metabase can be sent via email to designated individuals, if desired. It is possible to send email reports or “pulses” to selected emails addresses on a unique occasion or schedule the pulse to be a regular occurrence. Both individuals with and without Metabase usernames and passwords are eligible to receive the emailed report, which will be determined by the administrator. Key activity summary queries will be selected to be sent on a pre-determined schedule, according to the needs of the program, so that programs will receive regular program updates without having to access the online portal. The activity summary queries will be attached in Excel for users to download and use as needed.



Activity Summary Report

Follow-up Completion Rates


	24-hour	1 Week	6 Weeks	3 Months	6 Months
Follow-up needed	22	22	21	21	0
Follow-up completed	13	11	10	1	2
% completion	59%	50%	48%	5%	

Facility Activity Report

More results have been included as a file attachment

Region	ID	Facility Name	Cataract Total	Cataract Male	Cataract Female	Surgery Total	Surgery Male	Surgery Female	Refusal Total
Alpha	AA-BN-1	Template Facility	21	15	6	19	13	6	2
Delta	AA-BN-3	Test Facility	0	0	0	0	0	0	0
Other	AA-BN-2	Temporary Facility	1	1	0	1	1	0	0

Showing 10 of 13 columns.



	24-hour	1 Week	6 Weeks	3 Months	6 Months
Follow-up needed	22	22	21	21	0
Follow-up completed	13	11	10	1	0
% completion	59 %	50 %	48 %	5 %	

Emails will be sent to selected individuals on an automated schedule or on an ad-hoc basis, as desired and established by the Administrator(s). The selected queries for the activity summary will be attached to the email in Excel or CSV files for download.

Data Security

The reporting tool is username and password protected so that no unauthorized users have access to the aggregate information. Access to data housed in Metabase will be granted to individuals who have received an invitation to establish password access. Data included in Metabase are de-identified, reporting most information in the aggregate format; no individual patient information is shared with or by Metabase.

Benefits and challenges of Metabase

Metabase allows users to easily access summary information via computer or smartphone and quickly limit the report to a designated time period and/or location. The queries can be easily exported to Excel, allowing the users to save only the filtered information or download the entire summary. For those familiar with SQL, additional queries can be easily created and stored for later use. By leveraging the “pulse” feature, or emailing system within Metabase, designated individuals

can receive select queries without having to access the website, encouraging programs to regularly review the data and assess program activities.

All information in Metabase is updated daily, so programs will be able to see the most up-to-date information possible for their facility(ies). Once downloaded, it is the responsibility of each individual to protect the program data. It is required that users log into the Metabase site in order to access the full dashboard; it is not possible for all reports to be automatically emailed to designated users. Metabase analytics is limited to de-identified data, limiting program summaries to aggregate data.

Metabase use recommendation

When programs are submitting official reports, it is recommended that the data used be downloaded and saved in Excel. As patient data can be modified (in the event of data error) it is possible that data reports will change, though this is not likely to occur. In the event that it does occur, if a program has saved the export in Excel those collating the data will be able to check back and see the differences in the data from the Export and the current updated data summary. Using the Metabase pulse feature, a summary report can be automated to send to the designated individual who may be tasked with saving the Excel version for future reporting needs.

In order to support programs in assessing data quality, a Data Quality Assessment (DQA) dashboard has been developed for each program. The DQA dashboard will assess the data for key data cleaning issues that may arise (i.e. multiple patient records that must be assigned the same patient ID; a region that must be added to the system as it was listed as “other”; patients followed-up but no surgery form filled; or surgeons that must be added to the surgeon list as they do not appear in CataTrack). It is recommended that the Administrator review this DQA dashboard on a regular basis to ensure data quality and accuracy of data reporting. Along with the Administrator, facility staff should also regularly review Metabase and CommCare Exports to assess for any additional data discrepancies that must be addressed. The DQA dashboard supports the Administrator but the best system available to ensure data quality is data use by the program.

CommCare Export / Report Builder Tool

Use if...you need to export multiple patient records (in line list form).

The internal reporting system of CommCare allows users to access the patient records stored in the system via the Export Tool or Report Builder. If programs must get multiple patient records in a line list, the records must be accessed using the CommCare system. For either tool, the Administrator can create the exports to download in Excel.

Exports: Patient records will be exported in a line-list format within Excel. The development of an export requires selection, formatting, and arrangement of desired indicators to appear in the export. To ease the process, each facility will be provided with a set of pre-determined exports that can be used as the facility exports and/or be copied and used as starting templates for differing, future exports.

Report Builder: Each country project can save five reports to the country program; programs can adjust these reports depending on the determined need of the project. When developing the system, each country project will be set up with a defined number of reports to assist with the data export process. The report builder allows programs to easily produce exports required for program activities with minimal effort in adjusting formatting.

Reports offered in CommCare Export/Report Builder tool

User can include any variable collected via CataTrack in the export/report builder. An established set of reports are saved to each program when CataTrack is implemented in a program. Users can choose to use, modify, or create new reports as required. The saved reports include:

Export Builder: Patient Line List

List of all patients (within specified time period/location) and summary information for information collected for each patient. This includes demographic and residence information, diagnosis, surgery performed, and subsequent outcome assessments (if completed).

caseid	Reg. Date	Patient ID	Name	Age (years)	Age (months)	Sex	State	LGA	Village/Community/Address	Informant	Phone Owner	Phone #	SMS Lang.	Reg. Enum. Name	Reg. Notes	Preop. Date	Preop. REVA
37f3c7ac-4c3c-473f8376-c2e0836d016e	2020-06-17	AA3A2	Test Patient 2	1		male	Sokoto	Binji	Test Community	1	no_phone	---	---	Bngom		2020-06-17	6/4
94ceb7ca-4c19-4a80-85d1-66940b1124c1	2020-06-03	AA2A1	George Destiny	8		male	Kaduna	Kaduna South	Narayi Kaduna	1	family_member	2349096934060	en	Dr Amina Hassan		2020-06-03	---
ec381a14-c453-4249-9caa-03d5e61bb438	2020-06-17	AA8A2	Ansoumana Faty	12		male	Kaduna	Chikun	Test Village	1	no_phone	---	---	Babacar Ngom		2020-06-17	999
f3c6ea06-b7b3-4a0e-863e-2ea8447c6a90	2020-02-20	AA6A3	Musawa Abdul	18		female	Sokoto	Gada	ungwan boro near water pump	1	village_leader	2348143003843		Enum 1		2020-02-20	6/4
f4592854-b804-4d55-a3ad-da3ffcf2243	2020-02-19	AA2A2	Amina Hassan	10		male	Kaduna	Kajuru	Delta Village	2	health_worker	2348060620050		Enum 2		2020-02-19	3/2
1d1ea375-e47e-4053-b597-d7d6bc73feb4	2020-02-19	AA9A1	Naz Kabir	14		female	Kaduna	Zaria	Adama Village	1	family_member	2349042424143		Enum 3		2020-02-19	1/4
f2b128ff-faac-4c9d-9537-be16d449d6d9	2020-02-19	AA1B1	Muhammad Abubakar	10		male	Zamfara	Bakkuyum	Sankalawa	1	village_leader	2348036090556		Enum5		2020-02-19	5/18
c89083c5-c34f4d7d-92bf-ec2ed3d6fd72	2020-02-19	AABN2	Musawa Abdul	12		male	Sokoto	Kebbe	Bakin Masallaci	1	family_member	2347036170387		Enum 1		2020-02-19	2/3

Export Builder: Facility List

List of facilities where patients were operated and demographic information.

caseid	Facility ID	Facility State	Facility LGA	Facility Name	temporary_facility
580341b2-f98d-4d49-9c9a-2eb6c135ba5e	NG-BN-3	Kaduna	Kaduna North	NEC, Kaduna	0
963521e1-18f4-4c41-9ae5-49db63b92bcb	NG-BN-4	Sokoto	Sokoto South	UDUTH, Sokoto	0
bfde045f-64fb-431d-ab8b-943b12512389	NG-BN-5	Zamfara	Gusau	FMC Gusau, Zamfara	0
f05eadba-585f-47db-b45e-b72cbaf1e5ec	NG-BN-6	Other	Temporary LGA	Temporary Facility	1

Report Builder: Patient Summary

List of all patients (within specified time period/location) and summary of information collected for each patient. This includes demographic and residence information, diagnosis, surgery performed, and subsequent outcome assessments (if completed). The list can be filtered by surgeon and designated time period so users may create a list of patients operated by a designated surgeon.

Patient Summary															
Patient ID	Reg. Date	Name	Age (years)	Age (months)	Sex	State	LGA	Address	Phone #	Phone Owner	Eval. Date	RE VA	LE VA	RE IOP	LE IOP
AA1A1		MUSA DAUDA agagu	10		male	Alpha	Alpha 1	1Golf course road	2348033979364	family_member	2020-02-19			20	18
AA1A2		DAUDA MUSA	10		male	Alpha	Alpha 1	mando kaduna	2348033979364	village_leader	2020-02-19			20	21
AA1B1		Christian Nwosu	10		male	Alpha	Alpha 1	1 Golf Course Road	2347036170387	family_member	2020-02-19			20	18
AA1B2		Nwosu ONYEKACHI	6		female	Alpha	Alpha 1	1. Ungwan Dosa Street	2347036170387	family_member					
AA2A1		Musa	10		male	Alpha	Alpha 1	1 golf course road.	2348033071981	family_member	2020-			20	18

Data Security

Access to patient data is limited to those who have a username and password to the CommCare portal and have been granted access by the Administrator to view the patient information. Unless the report is downloaded and shared with others, the information remains secure within CommCare, on the HIPAA compliant server. Once the exports are downloaded, it is the responsibility of the program to maintain the records in a secure location and follow necessary procedures to ensure unauthorized data access is limited.

Benefits and challenges of CommCare Export/Report Builder tool

The CommCare Export and Report Builder Tools allow users to access multiple identifiable patient records in a line list. As the information is housed within CommCare, security of patient information is maintained. Information downloaded using the Export or Report Builder tool will be up-to-date. Both tools allow users to apply filters to the exports. The process to create a new export with the Export Tool without using an existing template is time consuming and less user-friendly than the Report Builder tool. However, with the saved templates already created and prepared for download, the Export tool may be sufficient for a program's needs. The Report Builder may be a more user friendly tool as it allows more efficient building of reports from scratch and permits exporting for a subset of patients, based on unique filters. However, neither the Export nor Report Builder Tool have data analytics and visualization capabilities as are available through Metabase.

PDF Patient Record Exporter

Use if...you need to print a complete patient summary on 1-2 pages.

If there is an issue with a patient's treatment and the patient record is needed, the PDF Patient Record Exporter can be used to print out the entire patient form. It is possible for designated users to access the site and select to download one or multiple patient records as needed. However, it is not advised to use this exporter if a simple line list is needed for record keeping at the health facility (if that is the case, programs should use the CommCare Export/Report Builder above).

Patient Record Printer									
Location: All Locations <input type="button" value="Load patients"/>									
Download selected English Patients 1 to 26 of 26 <input type="checkbox"/> Select All									
District	Session	Outreach Location	Patient ID	Name	Sex	Eval	District	Eval	Print?
Alpha 1	Template Facility		AABN1	Ansoumana Faty	male	2020-02-17		-/-	<input type="checkbox"/>
Alpha 1	Template Facility		AA4A1	Selben Penzin	female			-/-	<input type="checkbox"/>
Alpha 1	Template Facility		AAB2	Nwosu ONYEKACHI	female			-/-	<input type="checkbox"/>
Alpha 1	Template Facility		AA3A1	Amina Hassan	female	2020-02-20	2020-02-20	-/-	<input type="checkbox"/>
Alpha 1	Template Facility		AA3A2	Hassan Amina	male	2020-02-19	2020-02-19	-/-	<input type="checkbox"/>
Alpha 1	Template Facility		AA2A1	Musa Danjuma	male	2020-02-19	2020-02-19	-/-	<input type="checkbox"/>
Alpha 1	Template Facility		AA8A2	Abdul Musawa	female	2020-02-19	2020-02-19	-/-	<input type="checkbox"/>
Alpha 1	Template Facility		AA6A3	Naz Kabir	male	2020-02-20	2020-02-20	-/-	<input type="checkbox"/>
Alpha 1	Template Facility		AA2A2	Danjuma Musa	male	2020-02-19	2020-02-19	-/-	<input type="checkbox"/>
Alpha 1	Template Facility		AA8A1	Muhammad Abubakar	male	2020-02-19	2020-02-19	-/-	<input type="checkbox"/>

Patient Summary Record				Patient ID: AA3A2		Printed 2020-06-22	
Name: Hassan Amina		Sex: male		District: Alpha 1		Village/Address: zaria	
Age: 17		Informant: 1		Phone #: 2348037862194		Phone owned by: family_member	
Preoperative Summary				Date: 2020-02-19		Session: Template Facility	
Systemic comorbidities				Right	Left		
Visual Acuity	6/18	3/60					
IOP (mmHg)	14	16					
Nystagmus	N	N					
Strabismus	Y	Y					
Corneal opacity/scar	N	N					
Microphthalmos	N	N					
K1		42.5					
K2		42.3					
Axial length (mm)		22.9					
IOL Power (D)		19					
Diagnosis/ Antiology of cataract				posterior_polar			
Intraoperative Summary				Date: 2020-02-19		Surgeon: Chris Chross	
Eye received surgery				Right	Left		
Surgery Type				two_polar	two_anterior-iridectomy		
Intraoperative Complications				none	none		
IOL Power (D)				19	19		
24 Hour Follow-up Summary				Date: 2020-02-20			
Eye assessed for surgery				Right	Left		
Visual Acuity	N	Y					
Anterior Chamber		quiet					
Posterior Segment		normal					
Week 1 Follow-up Summary				Date: 2020-02-20			
Eye assessed for surgery				Right	Left		
Visual Acuity	N	Y					
Anterior Chamber		normal					
Posterior Segment		normal					

CommCare Emailer

Use if...supervisors want to receive automated Due for Follow-up lists and Surgeon Performance Reports and/or surgeons have email addresses and desire to receive individual activity summaries.

The CommCare email reporting system will be used for a select number of reports that cannot be sent or housed by Metabase as the data contain personally identifiable information. These reports must be approved by programs as the data will be sent outside of CommCare system via email to designated individuals.

Reports offered in CommCare Emailer

Patients due for Follow-up

In addition to the patients due for follow-up lists available through the phone, an automated report can be emailed to designated supervisors for the patients due for 1 week, 6 week, 3 month or 6 month follow-up in a given facility. Similarly to the lists found on the phone, the emailed lists will be populated with patients who have not yet received a follow-up for the given postoperative time point, based on the surgery date. The list will be attached in Excel so that users can download and manipulate the file as needed for program activities. If programs do not approve of sending this information via email, it is recommended that the Export tool or Report Builder be used as a basis for developing the follow-up lists.

Surgical Outcomes and Performance Assessments

The surgical outcome assessment will include monthly and year-to-date totals for surgeries completed by each surgeon, as well as the year-to-date totals for follow-ups completed and the outcomes of those follow-ups by surgeon. This will help programs to see progress of surgeons even if surgical audits have not been completed or may determine what surgeon(s) should receive an audit in the coming future. If programs do not approve of sending surgeon names via email, programs can use the de-identified surgeon performance report on Metabase, and use the Surgeon table in CommCare to determine the surgeon name to the associated Surgeon ID.

Individual Surgeon Report

A surgeon report was developed to engage and encourage surgeons supporting the eye health program by providing them with their productivity information, outcomes, and contribution. If the program approve of sending this report, it will be sent to surgeons who conducted at least one surgery in the previous month and who have email addresses.

Data Security

The security for the CommCare emailer is dependent on the security of the email system used by report recipients. If used, programs should also follow best practices in terms of data handling and storage once emails are downloaded and used.

Benefits and challenges of CommCare Emailer

The CommCare Emailer allows programs to receive summary information that includes identifiable patient or surgeon information without having to access the CommCare online portal; the information can be sent on an automated basis to designated users. The emailer does not require users to establish the timeframe for the reporting that is desired—follow-up lists and summaries are sent for the established time periods. This does, however, limit the on-demand reporting abilities that are available using other reporting tools as they have a pre-determined reporting schedule determined by each program.

To discuss your program's reporting package, contact *the CataTrack Development Team*



CataTrack