Magentus

Cris Analytics

An Overview

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1 Introduction

1.1 Purpose

Cris Analytics is a Business Intelligence (BI) tool to provide dashboard information on radiology activity. Cris Analytics has the ability to provide real-time updates to senior management, with integrated database functionality to show activity from staff internally and an in-depth patient journey. The tools are simple to use, and designing new charts allows management to visualise and interact with their radiology data in real time, on any device.

The intention of this documentation is for customer information regarding the charts delivered by Cris Analytics Free View and Cris Analytics Pro and what other services are provided as part of both offerings, prior to project commencement.

1.2 Audience

The document is aimed at Project Leads, System Managers and Departmental Managers.

Document Control

Title	Cris Analytics Overview		
Owner	Magentus Operations-Projects	Date Created	30/05/2018
File Reference	MAG_Cris_Analytics_Overview_D3.0		
Product Version	All		

Change History			
Issue	Date	Author	Details of Change
V1.0	15/08/2018	Andrea Hardy	Final issue
V1.1	16/08/2018	Andrea Hardy	Amendment to chart number mistake
V1.2	20/08/2018	Emma Savage-Mady	Amended chart numbering to 23 Standard (20 + 3 linked views) + 3 Audit = 26 Total Charts which now includes the previously omitted Last Quarter charts. Also added hidden mark-up for Chart Name, Data Source and Category for internal reference materials and other suggested amendments.
V1.3	21/08/2018	Sam Wood	Addition of Upgrades to the Free View version
V1.4	28/08/2018	Andrea Hardy	Amended number of charts to 23 in section 2.3 and 3 also
V2.0	11/10/2018	Emma Savage-Mady	Added field descriptions.
V2.1	30/05/2019	Nicola Houlding	Formatting changes and minor alterations.
V3.0	18/07/2024	Christine Anthony	Rebranded to Magentus.

Reviewed by	Emma Savage-Mady	Date	19/07/2024
Authorised by	Emma Savage-Mady	Date	19/07/2024
Review Date	19/07/2026		

2 Cris Analytics

2.1 Free View Version

The Free View version is available as read-only, with 23 pre-defined, universally requested charts that have validated data against your local Cris database. In addition, there are 3 pre-defined audit charts.

Cris Analytics Free View is supplied and implemented by Magentus, and as such, Magentus will provide any initial configuration required. Magentus will provide software upgrades to the Free View version when newer, improved versions are available.

It should be noted that Cris Analytics Free View does not include formal training or bespoke changes to the charts specified.

2.2 Pro Version

- Inclusive of the same charts as the Free View version, with 2 additional charts and access to the ad hoc chart creation tool.
- Cascade Training for up to 6 key users regarding product use and chart creation.
- User administrator ability to create an infinite number of charts.
- Application Specialist support during deployment. This will primarily be to provide advice on chart building if issues are encountered by users and support user testing.
- 2 days Application Specialist consultancy to be used as required post go live for advice and support in system use.
- Helpdesk Support from the Magentus Support Team.
- Upgrades to the product as Magentus receives newer, improved versions.
- The ability to request changes within the product via the product portal.

2.3 Free View vs Pro Version Feature Overview

Features	Cris Analytics Free View	Cris Analytics Pro
23 standard charts plus 3 audits	✓	✓
Read-Only	✓	
Fixed number of charts available	✓	
Dashboard Filters	✓	✓
2 additional charts (see below)		✓
New chart creation tool		✓
Infinite number of charts		✓
Training		✓
Application Specialist support during deployment		✓
Helpdesk Support		✓
Upgrades	✓	✓
Request changes to product		✓

3 Standard Charts: Free View & Pro Versions

A dashboard and 23 charts are supplied as standard with both Analytics Free View and Analytics Pro, as listed below.

3.1 Cris Home Dashboard

- Outstanding Appointments for Today (ID:506)
- Outstanding Urgent Reports (ID:520)
- Unprocessed DNAs (ID:514)
- Requested Events Missing a Request Card (ID:499)
- Unreported over 2 weeks old (ID:508)

3.2 Today: Charts Showing Live Data from the Current Date

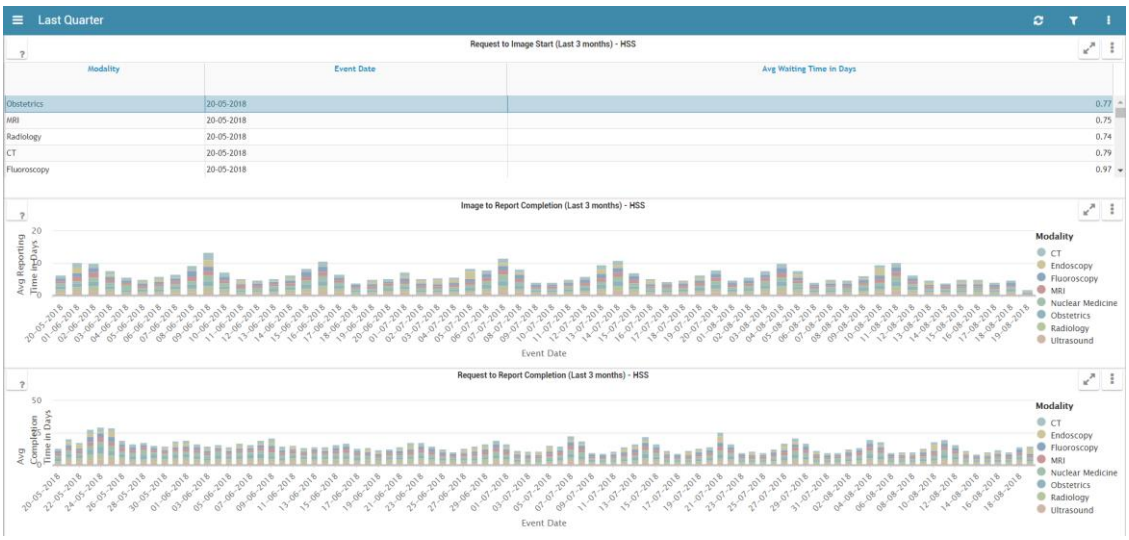
- Average Waiting Time in Minutes (ID:171)
- Maximum Waiting Time in Minutes (ID:170)
- Average Waiting Time for Patients Onsite Last 24 hours (ID:405)
- Outstanding orders and requests last 24 hours (ID:227)
- Request to Image Start Last 24 hours (ID:160)
- Unreported Last 24 hours (ID:464)

3.3 Last Fortnight: Charts Showing Live Data from the Last 14 Days

- Outstanding Reports (Last 14 days – ID:211) plus link to Outstanding Unverified Reports (Last 14 days – ID:224) chart
- Outstanding Orders and Requests (Last 14 days – ID:228) plus link to Outstanding Orders and Requests (Last 14 days by Referral Location- ID:461) chart
- Requests to Imaging Last 14 days (ID:186) plus link to Attend to Imaging (Last 14 days – ID:187) chart
- Request to Report Turnaround Time (ID:188)
- Top 10 Performing Radiologists Reporting Last 14 days (ID:463)
- Top 10 Performing Radiologists Verifying Last 14 days (ID:462)

3.4 Last Quarter: Charts Showing Live Data from the Last 3 Months

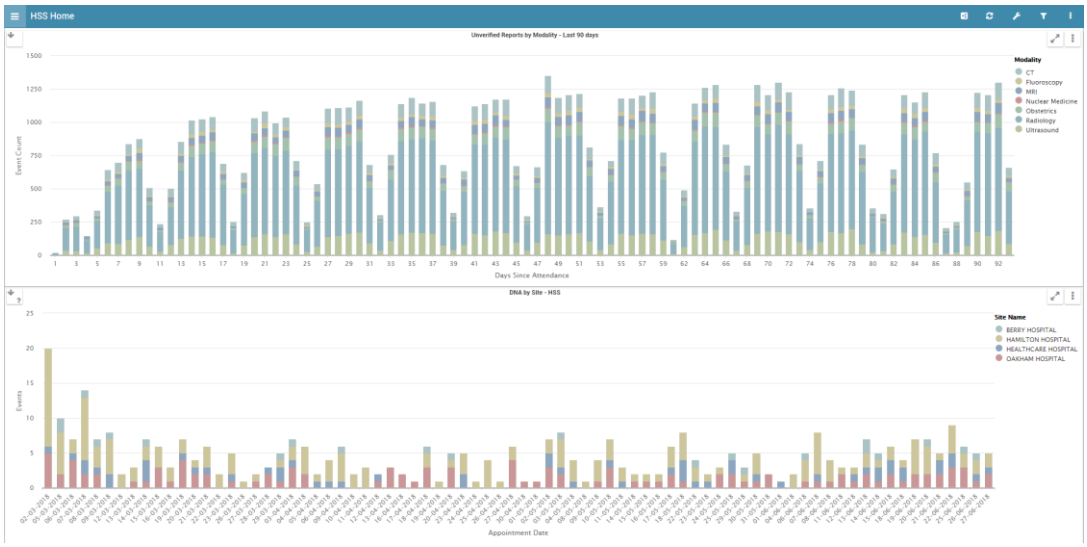
- Request to Image Start (Last 3 months – ID:192)
- Image to Report Completion (Last 3 months – ID:193)
- Request to Report Completion (Last 3 months – ID:194)



3.5 Audit: Charts showing additional audit data

Also supplied as standard to all Free View and Pro Version of Cris Analytics is an audit screen with 3 audit charts as shown below.

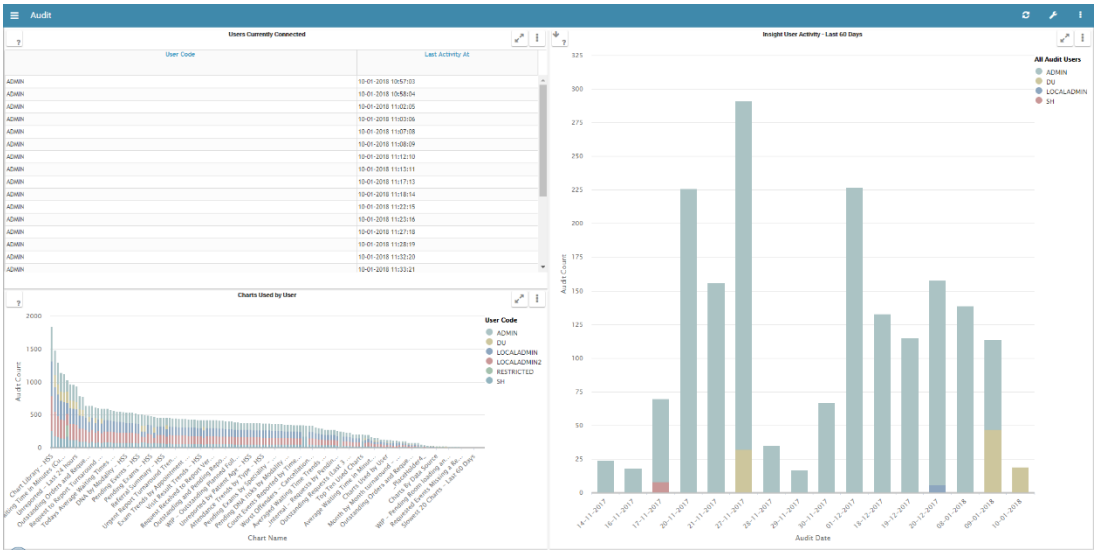
- Users currently connected (ID:169)
- Charts Used by User (ID:221)
- User activity last 60 days (ID:168)



4 Pro Version Additional Charts

In addition to the same 23 standard Free View charts, Cris Analytics Pro provides 2 additional charts as shown below, as well as access to the Ad hoc chart creation tool providing User Administrator ability to create an infinite number of charts.

- Unverified Report by Modality – Last three months
- DNA by Sites



5 Free Version Data Connections / Field Definitions

See below the Event and Exam Keys – Free View.

Column Name	Data Type	Column Description
attended_datetime	timestamp	The date and time that the patient attended for the event. Null if the event is not attended. Taken from events.events_date, events.events_time.
avdata_has_request_card	varchar	Whether or not the event has a scanned request card.
earliest_report_verified_datetime	timestamp	The least recent verify date and time for any report associated with the event (including summary). Taken from reports.date_last_verif, reports.time_last_verif.
event_book_by_name	timestamp	The name of the user who first created the event in Cris. Taken from hdsuse.hdsuse_name.
event_booked_by	varchar(10)	The ID of the user who first created the event in Cris. Taken from events.booked_by.
event_datetime	timestamp	The date and time recorded for the event. Outstanding requests and waiting list do not have an event date and time. Taken from events.events_date, events.events_time.

exam_end_datetime	timestamp	The latest exam / room start time recorded for any exam associated with the event. Taken from exams.exams_date, exams.end_time.
exam_key	integer	Primary identifier for the examination. From exams.exam_key.
exam_start_datetime	timestamp	The earliest exam / room start time recorded for any exam associated with the event. Taken from exams.exams_date, exams.start_time.
examination	varchar(8)	The code of the examination. Taken from exams.examination.
examination_name	varchar	The description of the examination. Taken from examcd.examcd_name.
exams_room	varchar	The code of the room where the examination was, or is scheduled to be, performed. Taken from exams.room.
exams_room_name	varchar	The description of the room where the examination was, or is scheduled to be, performed. Taken from rooms.rooms_name.
intended_radiologist	varchar(10)	The code of the radiologist who is intended to report the event. Taken from events.intended_radiol.
intended_radiologist_name	varchar(40)	The name of the radiologist who is intended to report the event. Taken from radiol.radiol_name.
is_attended	boolean	Whether or not the event is attended. Derived from events.attended being Y.
is_patient_seen	boolean	Whether the patient has been seen or is still in the department (or yet to arrive). Derived from there being one of a dictation, any report, a radiographer recorded for any exam (exams.radiographer_1 not null), any radiopharmaceutical administered (a row in the syringe table associated with the exam) or an exam abandonment recorded.
is_processed	boolean	Whether or not the examination has been post-processed. Derived from there being a radiographer recorded for the exam (exams.radiographer_1 not null) or a radiopharmaceutical administered (a row in the syringe table associated with the exam).
is_reported	boolean	Whether or not a report (not a summary) exists for the exam.
latest_report_verified_datetime	timestamp	The most recent verify date and time for any report associated with the event (including summary). Taken from reports.date_last_verif, reports.time_last_verif.
modality	varchar	The code of the modality associated with the examination. Taken from examcd.modality.

modality_description	varchar(128)	The description of the modality associated with the examination. Taken from hdstbc.description lookup type CRISMODL.
patient_type	varchar(1)	The code of the patient type recorded for the event. Taken from events.patient_type.
patient_type_ description	varchar(128)	The description of the patient type recorded for the event. Taken from hdstbc.description, lookup type CRISPATT.
radiographer	varchar(10)	The code of the radiographer recorded as the operator for the examination. Taken from exams.radiographer_1.
radiographer_name	varchar(40)	The name of the radiographer recorded as the operator for the examination. Taken from radiog.radiog_name.
referrer	varchar(15)	The code of the referring clinician who generated the request. Taken from events.referrer.
referrer_name	varchar(79)	The name of the referring clinician who generated the request. Taken from referer.referer_name.
referring_location	varchar(15)	The code of the location that generated the request. Taken from events.ward.
referring_location_ description	varchar(40)	The description of the location that generated the request. Taken from wards.wards_name.
report_verified_datetime	timestamp	The least recent verify date and time for any report associated with the event (including summary). Taken from reports.date_last_verif, reports.time_last_verif.
request_datetime	timestamp	The date and time that the event record was created. Taken from events.creation_date, events.creation_time.
site	varchar(12)	The code of the site (organisation) that generated the request. Taken from events.site.
site_name	varchar(40)	The description of the site (organisation) that generated the request. Taken from sites.sites_name.
speciality	varchar(8)	The code of the speciality which the referrer generated the request under. Taken from events.speciality.
speciality_description	varchar(45)	The description of the speciality which the referrer generated the request under. Taken from special.special_name.
trust	varchar(12)	The code of the trust that generated the request. This is the parent organiation of the site. Taken from sites.trust.
trust_name	varchar(128)	The code of the trust that generated the request. This is the parent organiation of the site. Taken from sites.trust.

6 Pro Version Data Connections / Field Definitions

6.1 Event Keys: Pro

Column Name	Data Type	Column Description
event_key	integer	Primary identifier for the event. From events.event_key.
request_time	timestamp	The date and time that the event record was created. Taken from events.creation_date, events.creation_time.
date_on_waiting_list	date	The date the event was first put on the waiting list. Taken from events.date_on_wl.
appointment_time	timestamp	The most recently given appointment date and time for the event. Taken from exams.booked_date, exams.booked_time.
event_time	timestamp	The date and time recorded for the event. Outstanding requests and waiting list do not have an event date and time. Taken from events.events_date, events.events_time.
event_start_time	timestamp	The earliest exam / room start time recorded for any exam associated with the event. Taken from exams.exams_date, exams.start_time.
event_end_time	timestamp	The latest exam / room start time recorded for any exam associated with the event. Taken from exams.exams_date, exams.end_time.
expected_event_ duration	bigint	The sum of the default exam lengths configured in Cris for each exam associated with the event. Taken from examcdh.procedure_time (if not not null), else examcd.real_time.
actual_event_duration	integer	The number of minutes between the event_start_time and event_end_time.
event_duration	bigint	actual_event_duration if not null, otherwise expected_event_duration.
referring_location	varchar(15)	The code of the location that generated the request. Taken from events.ward.
referring_location_ description	varchar(40)	The description of the location that generated the request. Taken from wards.wards_name.
patient_type	varchar(1)	The code of the patient type recorded for the event. Taken from events.patient_type.
patient_type_ description	varchar(128)	The description of the patient type recorded for the event. Taken from hdstbc.description, lookup type CRISPATT.
referrer	varchar(15)	The code of the referring clinician who generated the request. Taken from events.referrer.

referrer_name	varchar(79)	The name of the referring clinician who generated the request. Taken from referer.referer_name.
speciality	varchar(8)	The code of the speciality which the referrer generated the request under. Taken from events.speciality.
speciality_description	varchar(45)	The description of the speciality which the referrer generated the request under. Taken from special.special_name.
intended_radiologist	varchar(10)	The code of the radiologist who is intended to report the event. Taken from events.intended_radiol.
intended_radiologist_name	varchar(40)	The name of the radiologist who is intended to report the event. Taken from radiol.radiol_name.
site	varchar(12)	The code of the site (organisation) that generated the request. Taken from events.site.
site_name	varchar(40)	The description of the site (organisation) that generated the request. Taken from sites.sites_name.
trust	varchar(12)	The code of the trust that generated the request. This is the parent organisation of the site. Taken from sites.trust.
trust_name	varchar(128)	The description of the trust that generated the request. This is the parent organisation of the site. Taken from trusts.trusts_name.
event_booked_by	varchar(10)	The ID of the user who first created the event in Cris. Taken from events.booked_by.
booked_by_name	varchar(40)	The name of the user who first created the event in Cris. Taken from hdsuse.hdsuse_name.
event_urgency	varchar(128)	The description of the urgency recorded for the event. Taken from hdstbc.description lookup type CRISURG.
report_urgency	varchar(128)	The description of the reporting urgency recorded for the event. Taken from hdstbc.description lookup type REPURG.
has_request_card	boolean	Whether or not the event has a scanned request card.
has_summary_report	boolean	Whether or not a summary report exists for the event.
is_planned	boolean	Whether or not the request has any recorded planned waiting time. Derived from there being any WPD status type (other than with a POST status code).
has_dna	boolean	Whether or not the event has a recorded DNA. Derived from there being a APDNA or CPDNA status code, or an unattended past appointment.
has_patient_cancel	boolean	Whether or not the event has ever had an appointment date which was cancelled by the

		patient. Derived from there being a CP status type (other than with a CPDNA status code).
is_appointment	boolean	Whether or not the event has an appointment time. Will be true for attendances that were attended from an appointment and outstanding appointments, past or future. Derived from events.book_mode being M or S.
is_event_cancelled	boolean	Whether or not the event is currently cancelled. Derived from events.book_mode being H or P.
is_attended	boolean	Whether or not the event is attended. Derived from events.attended being Y.
is_patient_seen	boolean	Whether the patient has been seen or is still in the department (or yet to arrive). Derived from there being one of a dictation, any report, a radiographer recorded for any exam (exams.radiographer_1 not null), any radiopharmaceutical administered (a row in the syringe table associated with the exam) or an exam abandonment recorded.
is_complete	boolean	Whether or not the event is complete. Derived from there being a verified summary report, or by all reports associated with the event being verified, where at least one report exists.
date_of_birth	date	The patient's date of birth. Taken from patient.dob.
date_of_death	date	The patient's date of death (null if not deceased). Taken from patient.date_of_death.
patient_is_deceased	boolean	Whether or not the patient is deceased. Derived from patient.date_of_death.
patient_sex	varchar(128)	Description of the patient's gender. Taken from hdstbc.description lookup type CRISSEX.
attend_time	timestamp	The date and time that the patient attended for the event. Null if the event is not attended. Taken from events.events_date, events.events_time.
referral_source_type	text	The description of the type of organisation that generated the request. Taken from hdstbc.description lookup type CRISRST.
patient_ref	integer	CRIS Number. Unique identifier of the patient. Taken from patient.computer_number.
booked_event_ duration	integer	The sum of the booked diary times, in minutes, for each exam associated with the event.
event_verify_time	timestamp	The most recent verify date and time for any report associated with the event (including summary). Taken from reports.date_last_verif, reports.time_last_verif.
event_addendum_time	timestamp	The most recent date and time that an addendum was added to any report associated with the event (including summary). Taken from reports.last_addendum, reports.last_add_time.

event_report_time	timestamp	The most recent date and time that any report associated with the event was authored (including summary). Taken from reports.last_addendum, reports.last_add_time.
summary_report_ clinician	varchar(10)	The code of the reporting clinician who authored the summary report. Taken from reports.reported_by.
summary_report_ clinician_name	varchar(40)	The name of the reporting clinician who authored the summary report. Taken from radiol.radiol_name.
summary_report_time	timestamp	The date and time that the summary report was authored. Taken from reports.date_reported, reports.time_reported.
summary_verify_ clinician	varchar(10)	The code of the reporting clinician who most recently verified the summary report. Taken from reports.last_verify_by.
summary_verify_ clinician_name	varchar(40)	The code of the reporting clinician who most recently verified the summary report. Taken from radiol.radiol_name.
summary_verify_time	timestamp	The date and time that the summary report was most recently verified. Taken from reports.date_last_verif, reports.time_last_verif.
summary_is_verified	boolean	Whether or not the summary report is verified.
is_event_not_ performed	boolean	
is_dna	boolean	Whether the current status is DNA.
dna_count	integer	Number of DNA in total for this event. Similar to has_dna but represented as a count of DNAs against the Event.
vetting_protocols	text	Protocols key for the vetting protocols selected
vetting_protocol_ names	text	The names of the vetting protocols selected
vetting_code	varchar(6)	The events status code associated with the vetting record
vetting_description	varchar(30)	The status description associated with the vetting record
vetted_time	timestamp	The timestamp of the status associated with the vetting record
vetted_by	varchar(10)	The user id who carried out the vetting
vetted_by_name	varchar(40)	The user's name who carried out the vetting
patient_cancel_count	integer	Number of patient cancellations in total for this event. Similar to has_cancel but represented as a count of cancellations against the Event.
hospital_cancel_count	integer	Number of hospital cancellations in total for this event.
has_hospital_cancel	boolean	Whether or not the event has ever had an appointment date which was cancelled by the

		hospital. Derived from there being a CH status type.
ecount	integer	The number 1.

6.2 Exams Keys: Pro

Column Name	Data Type	Column Description
exam_key	integer	Primary identifier for the examination. From exams.exam_key.
event_key	integer	Primary identifier for the event. From events.event_key.
examination	varchar(8)	The code of the examination. Taken from exams.examination.
exam_start_time	timestamp	The exam / room start time recorded for the exam. Taken from exams.exams_date, exams.start_time.
exam_end_time	timestamp	The exam / room end time recorded for the exam. Taken from exams.exams_date, exams.end_time.
examination_description	varchar(40)	The description of the examination. Taken from examcd.examcd_name.
modality	varchar(1)	The code of the modality associated with the examination. Taken from examcd.modality.
modality_description	varchar(128)	The description of the modality associated with the examination. Taken from hdstbc.description lookup type CRISMODL.
radiographer	varchar(10)	The code of the radiographer recorded as the operator for the examination. Taken from exams.radiographer_1.
radiographer_name	varchar(40)	The name of the radiographer recorded as the operator for the examination. Taken from radiog.radiog_name.
room	varchar(6)	The code of the room where the examination was or is scheduled to be performed. Taken from exams.room.
room_description	varchar(40)	The description of the room where the examination was or is scheduled to be performed. Taken from rooms.rooms_name.
report_clinician	varchar(10)	The code of the reporting clinician who authored the report for the exam . Taken from reports.reported_by.
report_clinician_name	varchar(40)	The name of the reporting clinician who authored the report for the exam . Taken from radiol.radiol_name.
report_time	timestamp	The date and time that the report for the exam was authored. Taken from reports.date_reported, reports.time_reported.

verify_clinician	varchar(10)	The code of the reporting clinician who most recently verified the report for the exam. Taken from reports.last_verify_by.
verify_clinician_name	varchar(40)	The code of the reporting clinician who most recently verified the report for the exam. Taken from radiol.radiol_name.
verify_time	timestamp	The date and time that the report for the exam was most recently verified. Taken from reports.date_last_verif, reports.time_last_verif.
is_not_performed	boolean	Whether or not the exam was abandoned (the patient attended but the exam was not performed). Derived from exams.status being populated or the current status for the exam having status_code ATN.
is_processed	boolean	Whether or not the examination has been post-processed. Derived from there being a radiographer recorded for the exam (exams.radiographer_1 not null) or a radiopharmaceutical administered (a row in the syringe table associated with the exam).
is_reported	boolean	Whether or not a report (not a summary) exists for the exam.
is_verified	boolean	Whether or not a verified report (not a summary) exists for the exam.
is_order	boolean	Whether or not the request for the exam was received through an order comms system.
ignore_in_diary	boolean	Whether or not the ignore option was used when booking the exam. This option allows the user to book the exam with another on the same appointment without using an additional time slot in the diary. Derived from exams.ignore_appt.
booked_duration	integer	The appointment diary time, in minutes, booked for the exam. Taken from exams.appt_mins.
body_area	varchar(24)	
body_area_description	varchar(128)	
xcount	integer	The number 1.
report_time	timestamp	The date and time that the report for the exam was authored. Taken from reports.date_reported, reports.time_reported.
verify_clinician	varchar(10)	The code of the reporting clinician who most recently verified the report for the exam. Taken from reports.last_verify_by.