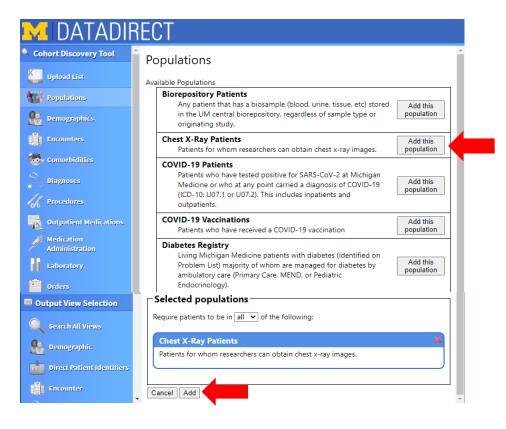




## Chest x-ray data available through DataDirect

Using <u>DataDirect</u>, researchers can get information about the timing and sequence of a patient's chest xrays (CXR). <u>DataDirect</u> is a self-serve software tool enabling researchers to access and explore clinical data. It includes information from the electronic health records (EHR) of more than 4 million unique patients, the <u>Michigan Genomics Initiative</u> cohort and the Michigan Medical School <u>Central</u> <u>Biorepository</u>.

1. Login into DataDirect and select **Create a New Query**. From the **Populations** cohort discovery tool, add the **Chest X-Ray Patients** population. This will limit your query to patients with chest x-rays available in the repository.







2. Under Output View Selection, select **Procedure**. Expand the **ChestXRay\_Crosswalk** and **Orders** output menus.

M DATADI	RECT	
Vrocedures	Procedure Views Request data related to procedures associated with each patient encounter. The "Anesthe: and "Periop" views contain anesthetic record data including data from the anesthesia histo physical and data from the intraoperative anesthesia record. The "Procedures" views contained to the intraoperative anesthesia record.	ory and
Medication Administration	and/or CPT codes extracted from hospital/facility billing data and/or professional billing d	
Laboratory	ChestXRay_Crosswalk Accession numbers and orders for selected set of research images.	~
Orders	Orders	$\sim$
Waveform	Non Medication Orders	
Biorepository	ProceduresComprehensive     Combined ICD9 and CPT Procedures	~
Output View Selection	DracedurerEscility	$\sim$





3. In ChestXRay\_Crosswalk, under **Column Description**, click on the variable name to display the green plus + sign. The green plus sign indicate that variable will be included in the query results. *Note: DeID\_PatientID, DeIDEncounterID, DeIDProcedure\_ID and AccessionNumberPH must be exported to properly join the EHR data to the radiology images.* 

Che	estXRay_Crosswalk
	selected encounters ]
Acce	ession numbers and orders for selected set of research image
Colu	umn Description
(	+ DeID_PatientID: undefined
	+ DeID_EncounterID: undefined
	+ DeID_ProcedureID: undefined
U	+ AccessionNumberPH: undefined
	+ StudyInstanceUID: undefined
	+ StudyDescription: undefined
	+ SeriesInstanceUID: undefined
	+ SeriesDescription: undefined
	+ BodyPartExamined: undefined
	+ Modality: undefined
	+ ProtocolName: undefined
	+ SeriesNumber: undefined
	+ Laterality: undefined
	+ PatientPosition: undefined
	+ SOPInstanceUID: undefined
	+ KVP: undefined
	+ DistanceSourceToDetector: undefined
	+ DistanceSourceToPatient: undefined
	+ DetectorType: undefined
	+ ImageType: undefined
	+ ViewPosition: undefined
	+ PatientOrientation: undefined
	+ ImageLaterality: undefined
	+ InstanceNumber: undefined
	+ AcquisitionDeviceProcessingDescription: undefined
	+ Manufacturer: undefined
	+ ManufacturerModelName: undefined
	+ PhotometricInterpretation: undefined
	+ Rows_dcm: undefined
	+ Columns_dcm: undefined
	+ WindowCenter: undefined
	+ WindowWidth: undefined
	+ LossyImageCompression: undefined
	+ SOPClassUID: undefined
	+ BitsAllocated: undefined
	+ BitsStored: undefined
	+ HighBit: undefined
	+ FileSizeBytes: undefined
	+ FileLocationWinVM: undefined
	+ FileLocationLinuxVM: undefined





4. In the Orders view under Column Description, select ProcedureOrderID in addition to the preselected DeID\_PatientID and DeID\_Encoutner ID.

Ord	lers A
[ <u>for</u> s	selected encounters ] [0 filters enabled]
Non	Medication Orders
Colu	Imn Description
ſ	+ DeID_PatientID: undefined
l	+ DeID_EncounterID: undefined
	<b>x isCanceled</b> : Boolean field containing ?1? if the order was canceled, ?0? if the order was not canceled, and null if no order status information is available.
(	+ ProcedureOrderID: This is the unique RDW identifier assigned to the order.
	× OrderTermID: This is the unique term identifier for the order.
	× OrderName: This is the order caption visible within MiChart, it is not the full text of the order.
Y	× OrderType: This is the category of the order, e.g. imaging, nursing, etc.
	× DeID_OrderDate: undefined
	× DeID_OrderStart: undefined
	× DelD_OrderStop: undefined
	× MinDose: This is the minimum dose.
	* MaxDose: This is the maximum dose.

5. Select Run Query on the right lower side of the window. Your query has been submitted and you will receive an email when your data file is available on Turbo.

	Orders	Logged in as shollar
Encounters	Orders     (for selected encounters.) [0 filters enabled]	Current Query (deidentified)
Comorbidities	Non Medication Orders	COVID TEST - copy
	Column Description	No. 1914 Contractor Contractor Marcon
Diagnoses	+ DelD_PatientID: undefined	Cohort Discovery Results
	+ DelD_EncounterID: undefined	
Procedures	Iscanceled: Boolean field containing-?1? if the order was canceled, ?0? if the order was not canceled, and null if no order status information is available.	Starting Population: COVID Crest:
a sana ana ang ang ang ang ang ang ang ang	+ ProcedureOrderID: This is the unique RDW identifier assigned to the order.	Initial Counts 2.171 pat
Outpatient Medications	x OrderTermID: This is the unique term identifier for the order.	2,535 encou
	× OrderName: This is the order caption visible within MiChart, it is not the full text of the order.	
Medileation Administration	V Content of the category of the order, e.g. imaging, nursing, etc.	Procedures U
	× DelD_OrderDate: undefined	099870Z / 099500Z / 099600Z + 12 more
aboratory	× DelD_OrderStart: undefined	codes
	× DelD_OrderStop: undefined	Click the arrow for more mo
Orders	× MinDose: This is the minimum dose:	0
	× MaxDose: This is the maximum dose.	0 enc
laveform	DoseUnits: This is the unit recorded for the order.	Final Counte 0.04
and a second of the second of	RouteTerm: This is the prescribed route for administration.	ac of 5 (6 PM
liorepository	× Strength: This is the strength of the dose	1/12/2021 0 encos
	StrengthUnita: This is unit recorded for the strength of the dose.	Cohort Demographics
out View Selection	Image: speak and the second	Geolocation Overview
and the state of the	Status: This categorical field holds the status of the order, e.g. completed, canceled, etc.	A CARLES AND A CARLES AND A CARLES AND
learch All Views	× DoseUofMOriginal: This is the dose unit of measure for the order.	Selected Output Views
	× Specimen: ? This holds the specimen source of the order, e.g. blood, urine, etc.	C
lemographic	× StopReason: This holds information related to stop conditions for the order.	Output Views
	× Priority: Categorical field containing the priority of the order.	views: 2
incounter	Raw_Frequency: Raw frequency stored in Glarity for the order	names:
(1998) (1999)	× Mapped_Frequency: ? Contains a categorical frequency mapped from the original Clarity frequency for the order.	CXR_COVID_Crosswalk
iagnosis	Frequency_Group: Contains a category designation for the order frequency, determined by the time units used in the order frequency.	Orders Run Query
rocedure	Refills: This is the number of refills for the order.	Run Query
1919/19/19	Quantity: This holds any quantity associated with the order.	
Medication	V × OrderDepartment: Contains the ordering service.	
	× OrderingCaregiverID: The RDW ID of the ordering provider	
Manager and Anna Anna Anna Anna Anna Anna Anna	DeID_IMG_OrderDate: undefined	
aboratory	DelD IMG_ExamTime: undefined	
Flowsheet	x DeID_IMG_ReadTime; undefined	