DrChrono Lab API and Webhook

Last modified on 07/02/2026 4:13 pm EDT

Important Notice

Please send an email to api@drchrono.com. Aside from our API scopes and User Permissions, a specialist will need to enable the Lab Vendor permission for your application to be able to POST to our lab APIs. Provide the name of your DrChrono API app and the name of the lab you are connecting to.

The DrChrono Lab API does NOT electronically send orders to a laboratory or receive results from one. The purpose of these endpoints is to allow a third-party lab system to push data into DrChrono.

DrChrono Lab API

Complete API Sequence Summary

	API Endpoint	Action	Purpose
1	/api/sublabs	POST	One-time: Register your lab (save the id)
2	/api/lab_orders	POST	Create order record
3	/api/lab_documents	POST	[Optional] Upload requisition PDF (type=REQ)
4	/api/lab_tests	POST	Submit test panels
5	/api/lab_documents	POST	Upload result PDF (type=RES)
6	/api/lab_results	POST	Submit structured result values
7	/api/lab_orders/{id}	PATCH	Update order status to "R" (Results Received)

Pre-Requisite:

- Email api@drchrono.com to request Lab Vendor permission for your app (provide your DrChrono API app name)

- Required OAuth scopes: labs:read labs:write settings:read settings:write users:read users:write

- Required user permission: "Share Patients" (From Account > Staff Permissions)

Sublab API

This is a one-time setup. The sublab ID is required when creating lab orders. The sublab is an identifier for your laboratory. For instance, I am looking to connect to a Lab called "Custom DRC Labs". I will first need to create a sublab for my lab and store it inside the DrChrono system.

Here is a POST call to accomplish a new sublab creation.

```
POST https://app.drchrono.com/api/sublabs
{
   "facility_code": "00999CL",
   "name": "Custom DRC Labs"
}
```

Response:

```
{
   "id": 1084,
   "name": "Custom DRC Labs",
   "facility_code": "00999CL",
   "vendor_name": "Your Lab Vendor Name"
}
```

NOTE:

- vendor_name is set by the DrChrono API Specialist when granting Lab Vendor permission. If you want a specific name, specify it in your support ticket.

- id is the value you'll use as `sublab` in all subsequent lab_orders calls.

- This endpoint is read-only for standard API consumers; the Lab Vendor permission enables write access.

Lab Order

Create a lab order record in the patient's chart. This represents an order that has been placed with your lab.

JSON example for submitting an order via API.

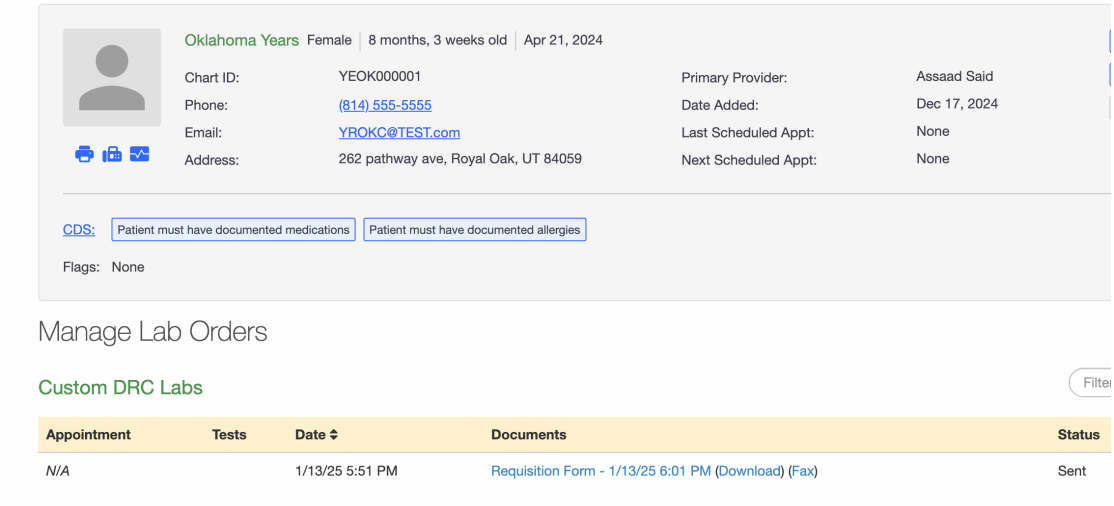
```
POST https://app.drchrono.com/api/lab_orders

{
   "doctor": 319108,
   "patient": 124818685,
   "sublab": 1084,
   "status": "S",
   "notes": "Fasting required. Patient advised no food 12 hours prior.",
   "accession_number": "ACN-2025-0714-001",
   "icd10_codes": [
      {
         "code": "E11.65"
      },
      {
         "code": "E78.5"
      }
   ],
   "priority": "N",
   "requisition_id": "REQ-78432",
   "external_requisition_id": "EXT-LAB-99201"
}
```

If you are including a lab requisition form, please use the api/lab_documents endpoint and set "type" to REQ.

```
curl --location 'https://app.drchrono.com/api/lab_documents' \
--header 'Authorization: Bearer 123456' \
--form 'document=@"/Users/your.macbook/Downloads/LAB DOCUMENT A.pdf"' \
--form 'lab_order="11104895"' \
--form 'type="REQ"'
```

The patient's lab order should show in the patient chart > Lab Orders.



Lastly, to update a status make a PATCH call to the lab_orders API.

```
PATCH https://app.drchrono.com/api/lab_orders/11104895
{
  "status": "R"
}
```

Here is a complete list of lab order status.

Value	Note
N	Not Sent
A	ABN Required (Advance Beneficiary Notice)
S	Sent
R	Results Received
E	Error
P	Preliminary Results
Q	Queued
C	Canceled

Field Definitions for api/lab_orders

Field	Type	Required	Description	UI Effect
doctor	integer	Yes	DrChrono doctor ID	Shows as ordering provider on the lab order.
patient	integer	Yes	DrChrono patient ID	Order appears in this patient's chart under Lab Orders
sublab	integer	Yes	The sublab ID	N/A
status	string (1 char)	No (default: "N")	Current status of the order	Displayed in the "Status" column of the lab orders table
notes	text	No	Free-text notes about the order	Visible when viewing order details
accession_number	string (max 70)	No	The lab's unique tracking number for this specimen/order	Displayed in order details. Used to correlate with external lab systems

icd10_codes	array of objects	No	Diagnosis codes associated with the order. Each object must have a `code` field with a valid ICD-10 code	Shows in the "Tests" column as the description text
priority	string (1 char)	No	`"N"` = Normal, `"S"` = STAT (urgent)	Indicates urgency of the order
requisition_id	string (max 100)	No	Your internal requisition identifier	Stored for reference/correlation
external_requisition_id	string (max 100)	No	External system requisition ID	Stored for cross-system tracking

Lab Tests

Submit the individual test panels/components for an order. Each test represents a grouping of results (e.g., "Complete Blood Count", "Comprehensive Metabolic Panel"). You can submit multiple tests per order.

JSON example

```
POST https://app.drchrono.com/api/lab_tests

[
  {
    "lab_order": 11104895,
    "code": "58410-2",
    "name": "Complete Blood Count (CBC)",
    "description": "CBC with Differential",
    "collection_date": "2025-07-14T08:30:00",
    "internal_notes": "Specimen collected at office. Tube type: EDTA lavender top.",
    "report_notes": "Results reviewed and verified by lab director.",
    "status": "F",
    "specimen_source": "Blood",
    "specimen_condition": "Satisfactory",
    "specimen_total_volume": 5.0
  },
  {
    "lab_order": 11104895,
    "code": "24323-8",
    "name": "Comprehensive Metabolic Panel (CMP)",
    "description": "CMP-14",
    "collection_date": "2025-07-14T08:30:00",
    "internal_notes": "Fasting specimen confirmed.",
    "report_notes": "All analytes within reference methodology limits.",
    "status": "F",
    "specimen_source": "Serum",
    "specimen_condition": "Satisfactory",
    "specimen_total_volume": 7.5
  }
]
```

Field Definitions for api/lab_tests

Field	Type	Required	Description	UI Effect
lab_order	integer	Yes	The lab order ID this test belongs to	Links test to the order in the patient chart

code	string (max 16)	No	LOINC code or your lab's internal panel code. Used to group results under this test.	Displayed as the panel identifier. Used for grouping results in the plotter
name	string (max 100)	No	Name of the test panel	Shown as the panel/test name in the results table header
description	string (max 200)	No	Description of what this test covers	Shows in the "Tests" column on the lab orders list
collection_date	datetime	No	When the specimen was collected. Format: `YYYY-MM-DDTHH:MM:SS`	Used as the timestamp for trending/plotting results over time. ***Critical for the plotter X-axis.***
internal_notes	text	No	Internal notes visible to staff	Shown in test detail view
report_notes	text	No	Notes that appear on the report	Displayed with the test results
status	string (1 char)	No	Status of this test	Determines whether results are considered preliminary or final
specimen_source	string (max 100)	No	Source of the specimen (e.g., Blood, Urine, Serum, Saliva)	Displayed in test details
specimen_condition	string (max 100)	No	Condition of the specimen (e.g., Satisfactory, Hemolyzed, Lipemic)	Displayed in test details
specimen_total_volume	float	No	Volume of specimen in mL	Displayed in test details

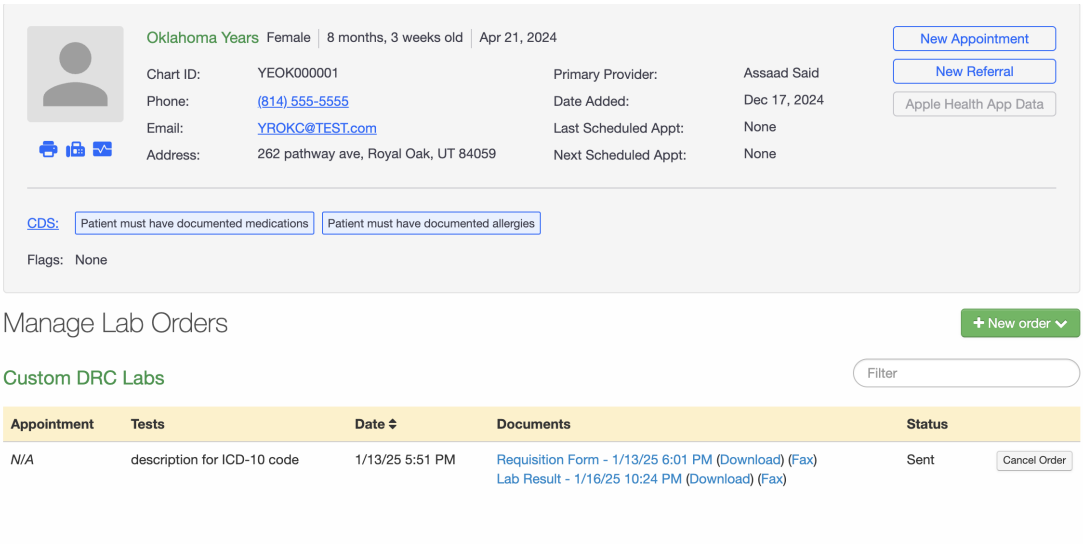
Lab Document

Upload PDF documents (requisition forms or result reports) and attach them to a lab order.

Important: The `id` from the RES document upload is required when submitting structured lab results.

```
curl --location 'https://app.drchrono.com/api/lab_documents' \
--header 'Authorization: Bearer 123456' \
--form 'document=@"/Users/your.macbook/Downloads/LAB DOCUMENT B.pdf"' \
--form 'lab_order="11104895"' \
--form 'type="RES"'
```

The DrChrono patient chart orders page should look like this.



The "type" field will determine the type of document upload. Here is a complete list of the "type" values.

Value	Note
REQ	Requisition Form
RES	Lab Results
R-A	Requisition Form and ABN
ABN	ABN (Advance Beneficiary Notice)

Lab Results

Submit the individual structured result values (observations) for each test. This is what populates the results table AND the graphical plotter in the patient chart.

POST https://app.drchrono.com/api/lab_results


```
[
   {
      "lab_test": 156196635,
      "document": 17836725,
      "status": "F",
      "observation_code": "6690-2",
      "observation_description": "White Blood Cell Count",
      "test_performed": "2025-07-14T14:30:00",
      "value": "7.2",
      "value_is_numeric": true,
      "unit": "10*3/uL",
      "normal_range": "4.5 11.0",
      "abnormal_status": "N",
      "is_abnormal": false,
      "comments": "Within normal limits."
   },
   {
      "lab_test": 156196635,
      "document": 17836725,
      "status": "F",
      "observation_code": "789-8",
      "observation_description": "Red Blood Cell Count",
      "test_performed": "2025-07-14T14:30:00",
      "value": "5.1",
      "value_is_numeric": true,
      "unit": "10*6/uL",
      "normal_range": "4.7 6.1",
      "abnormal_status": "N",
      "is_abnormal": false,
      "comments": ""
   },
   {
      "lab_test": 156196635,
      "document": 17836725,
      "status": "F",
      "observation_code": "718-7",
      "observation_description": "Hemoglobin",
      "test_performed": "2025-07-14T14:30:00",
      "value": "11.8",
      "value_is_numeric": true,
      "unit": "g/dL",
      "normal_range": "12.0 17.5",
      "abnormal_status": "L",
      "is_abnormal": true,
      "comments": "Slightly below reference range. Consider iron studies."
   },
   {
      "lab_test": 156196636,
      "document": 17836725,
      "status": "F",
      "observation_code": "2345-7",
      "observation_description": "Glucose",
      "test_performed": "2025-07-14T14:30:00",
      "value": "105",
      "value_is_numeric": true,
      "unit": "mg/dL",
      "normal_range": "70.0 99.0",
      "abnormal_status": "H",
      "is_abnormal": true,
      "comments": "Elevated. Fasting confirmed. Recommend follow-up A1C."
   }
]
```


Field Definitions for api/lab_results

Field	Type	Required	Description	UI Effect	Plotter Impact
lab_test	integer	Yes	The lab test ID this result belongs to	Groups results under the correct test panel in the results table	Determines panel grouping in chart
document	integer	Yes	The lab document ID (from step 4, type=RES)	Links the result to the PDF report. Clicking the document link opens this PDF	None directly
status	string (1 char)	Yes	Result status. Same values as test status (F, P, C, I, X)	Shown in result detail. "F" indicates verified final result	Only `F` and `C` results are considered definitive
observation_code	string (max 16)	No	LOINC code for this specific observation (e.g., "6690-2" for WBC)	Displayed as identifier	**Critical for trending.** Results with the same `observation_code` across multiple orders are plotted together on the same chart over time
observation_description	string (max 200)	No	Name (e.g., "White Blood Cell Count")	Shown as the row label in the results table and as the chart title	Chart title
test_performed	datetime	Yes	When the test/analysis was performed. Format: `YYYY-MM-DDTHH:MM:SS`	Shown in result details	Used as the X-axis data point on the plotter chart
value	string (max 100)	Yes	The result value (e.g., "7.2", "Positive", "Non-reactive")	Displayed in the "Value" column	The Y-axis data point when numeric
value_is_numeric	boolean	Yes	Whether the value should be treated as a number	Determines display formatting	**Controls whether the plotter renders a chart.** If `false`, no chart is generated for this observation. Only numeric results get plotted

unit	string (max 16)	No	Unit of measurement (e.g., "mg/dL", "10*3/uL", "g/dL")	Shown next to the value	Displayed on the Y-axis label
normal_range	string	No	Reference range. When `value_is_numeric` is `true`, format as `"<lower> <upper>"` (e.g., `"70.0 99.0"`). When not numeric, provide as descriptive text (e.g., `"Negative"`)	Displayed in "Reference Range" column	Defines the shaded normal band on the chart. The plotter draws a gray band from `lower` to `upper`. Values outside the band are visually abnormal
abnormal_status	string	No	Coded abnormal flag. See table below	Displayed with color coding (red for abnormal)	Affects the abnormal indicator on data points
is_abnormal	boolean	No	Whether this result is abnormal	Row is highlighted/flagged when `true`. Panel header shows abnormal indicator	Data point may be colored differently on chart
comments	text	No	Comments/notes about this specific result	Shown in result details and as tooltip on chart hover	Appears in chart tooltip
group_code	string	No	Alternative grouping code (maps to internal `result_code`)	Used for panel-level grouping if present	Can affect which panel a result is displayed under
specimen_received	datetime	No	When the lab received the specimen	Stored for reference	Not directly used in plotter

Abnormal Status Values

Value	Meaning	Visual Indicator
`N`	Normal	No flag
`L`	Low	Below range flag
`LL`	Alert Low	Critical low flag
`H`	High	Above range flag
`HH`	Alert High	Critical high flag
`<`	Panic Low	Critical alert
`>`	Panic High	Critical alert
`A`	Abnormal	General abnormal flag
`AA`	Very Abnormal	Critical abnormal flag
`S`	Susceptible	Microbiology
`R`	Resistant	Microbiology
`I`	Intermediate	Microbiology
`NEG`	Negative	Negative finding
`POS`	Positive	Positive finding
(empty)	No Comment	No indicator

How *normal_range* works with the Plotter.

When `value_is_numeric` is `true`:

- Format: `"<lower_bound> <upper_bound>"` (space-separated floats)

- Example: `"70.0 99.0"` means normal range is 70.0 to 99.0

- The plotter draws a **shaded band** between these values representing the normal zone

- The Y-axis auto-scales to show the range plus 5% padding above/below

- Values falling **outside** the shaded band are visually abnormal

When `value_is_numeric` is `false`:

- Provide as descriptive text (e.g., `"Negative"`, `"Non-Reactive"`)

- **No chart is rendered** for non-numeric results

- The range text is displayed as-is in the reference column

How the Plotter Trends Results Over Time.

The plotter groups results by `observation_code`. When the same patient has multiple lab orders over time with results sharing the same `observation_code`:

- All values are plotted on a single spline chart

- X-axis = `collection_date` (from the parent lab_test) or `test_performed`

- Y-axis = `value` (numeric)

- The normal range band persists across all data points

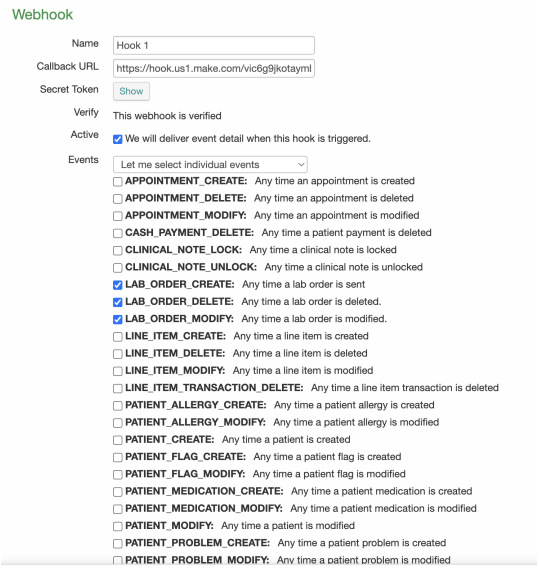
- This allows providers to see trends (e.g., glucose trending upward over 6 months)

Lab Webhook

The lab order API has a webhook for when the order was created, modified, and deleted. You can subscribe to those events from the API page (Account > API).

Webhook Events:

```
| Event | Fires When |
----------------------
| `LAB_ORDER_CREATE` | A lab order is created (via UI or API) |
| `LAB_ORDER_MODIFY` | A lab order is modified (status change, etc.) |
| `LAB_ORDER_DELETE` | A lab order is deleted |
```



Reference

https://app.drchrono.com/api-docs/#tag/Clinical/operation/sublabs_create

https://app.drchrono.com/api-docs/#tag/Clinical/operation/lab_orders_create

https://app.drchrono.com/api-docs/#tag/Clinical/operation/lab_documents_create

https://app.drchrono.com/api-docs/#tag/Clinical/operation/lab_tests_create

https://app.drchrono.com/api-docs/#tag/Clinical/operation/lab_results_create

https://app.drchrono.com/api-docs/#section/Webhooks