



iCare and Tracking COVID-19 Patients

April 15, 2020



Objectives

- How to use iCare to help track COVID-19 patients



Lab Tests



Lab Test Panel Definitions

- Timeframe versus Date Range
- Sort by Result
- Separate positive results

Timeframe Versus Date Range (1)

- A Timeframe is a relative date range and has a specific definition.
- For iCare, the date range is today – 1 through today – 30 (last month), today – 365 (Last Year), etc.
 - This means that it misses today.
- A calendar timeframe is specific to its definition. Last Calendar Month would be the first and last day of the previous month from today (April 15, 2020 would be March 1 – March 31, 2020).
- A Timeframe can be set to auto-repopulate each night.
- See the **Lab Tests** dialog on the next slide.

Timeframe Versus Date Range (2)

Lab Tests

Range

By Date (none) to (none) By Timeframe

Patient(s) did NOT have the following lab test(s) during the selected range?

By Taxonomy Selected Taxonom

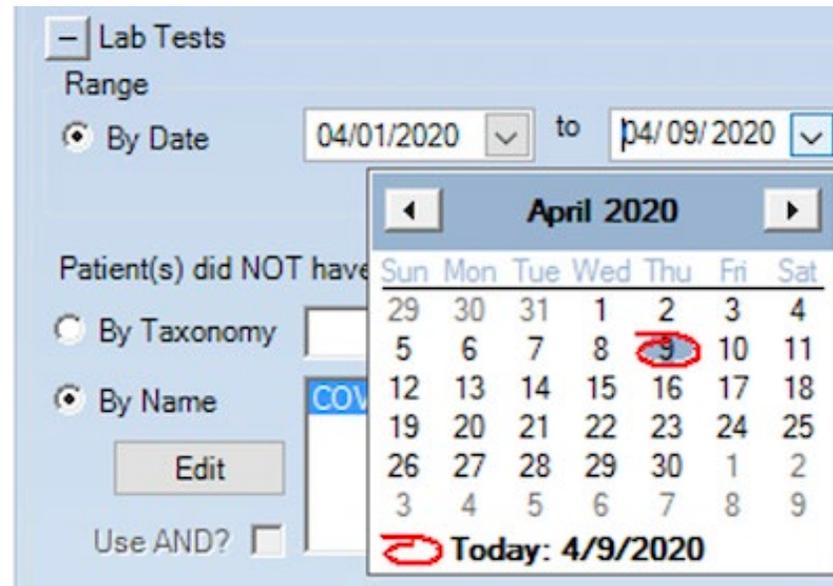
By Name COVID-19 (NM) (S)

Use AND?

Dropdown menu options:
Last Calendar Week
Last 2 Weeks
Last Month
Last Calendar Month
Last 6 Months
Last Year
Last Calendar Year
Last 18 Months

Timeframe Versus Date Range (3)

- A Date Range could include today's date but would need to be changed and re-populated manually each day.
- Determine which fits your needs: Timeframe or Date Range.



[-] Lab Tests

Range

By Date 04/01/2020 to 04/09/2020

Patient(s) did NOT have

By Taxonomy

By Name

Edit

Use AND?

Sun	Mon	Tue	Wed	Thu	Fri	Sat
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	1	2
3	4	5	6	7	8	9

Today: 4/9/2020



Lab Test Example

```
LABTEST IEN: 2326                NAME: COVID-19 QL RT-PCR (I-907078)
TYPE: BOTH
SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.
UNIQUE ACCESSION #: YES          EXTRA LABELS: 2
HIGHEST URGENCY ALLOWED: ROUTINE REQUIRED TEST: YES
REQUIRED COMMENT: ORDER COMMENT PRINT NAME: CoronaVrs
NUMBER: 1                        LAB TEST: _SARS CoV 2 RNA, RT PCR
NUMBER: 2                        LAB TEST: _Patient Symptomatic?
NUMBER: 3                        LAB TEST: _COVID-19 Source:
```

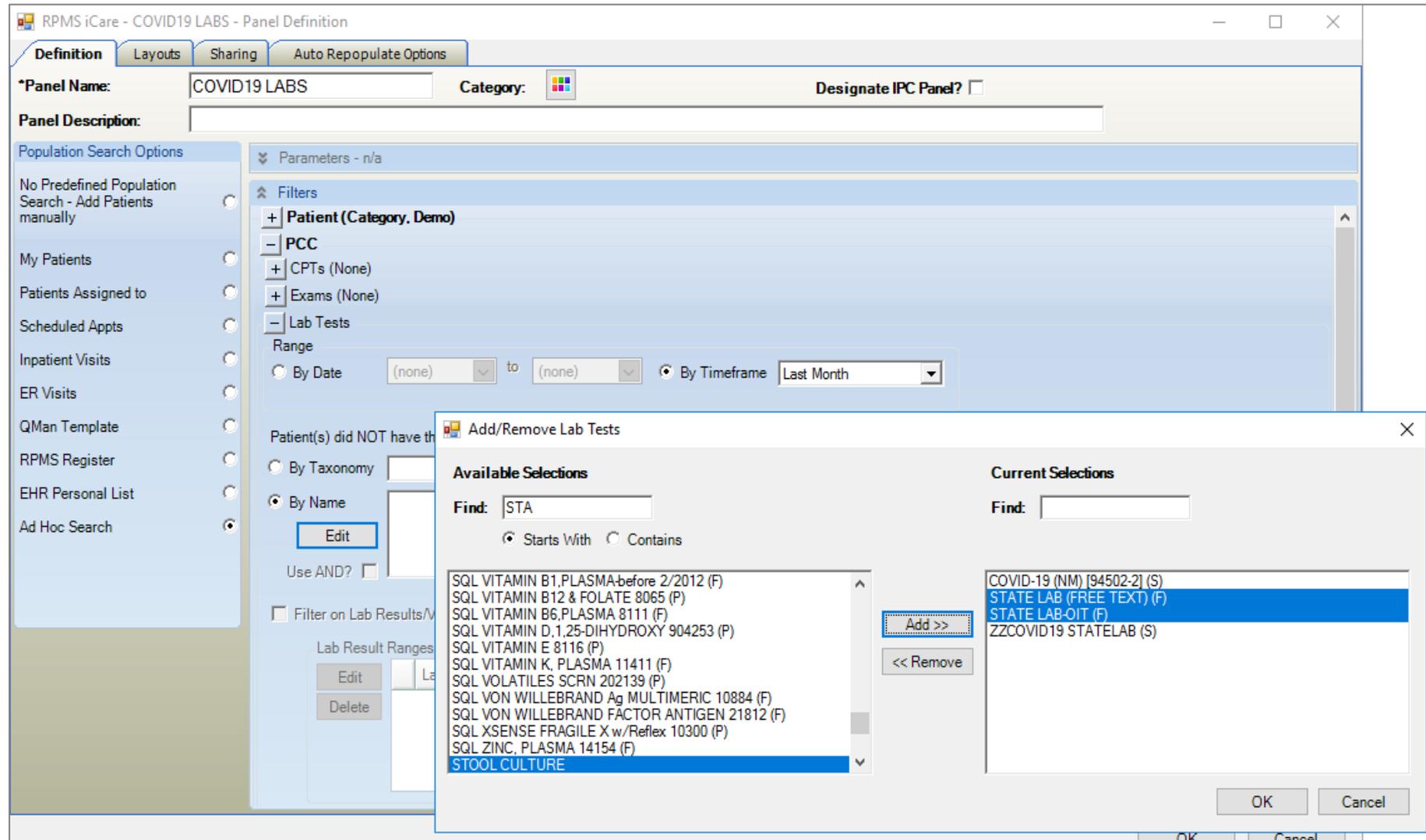


Lab Test Definitions

- Check with your Lab Technicians on how the lab test(s) were defined.
- It may be defined as a panel so it will be important to know which LAB TEST contains the result.

```
LABTEST IEN: 2326                                NAME: COVID-19 QL RT-PCR (I-907078)
TYPE: BOTH
SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.
UNIQUE ACCESSION #: YES                          EXTRA LABELS: 2
HIGHEST URGENCY ALLOWED: ROUTINE                 REQUIRED TEST: YES
REQUIRED COMMENT: ORDER COMMENT                 PRINT NAME: CoronaVrs
NUMBER: 1                                         LAB TEST: _SARS CoV 2 RNA, RT PCR
NUMBER: 2                                         LAB TEST: _Patient Symptomatic?
NUMBER: 3                                         LAB TEST: _COVID-19 Source:
```

Find COVID Created Lab Tests



The screenshot shows the 'RPMS iCare - COVID19 LABS - Panel Definition' window. The 'Definition' tab is active, showing the panel name 'COVID19 LABS' and a category icon. The 'Parameters - n/a' section is expanded to show filters. The 'Patient (Category, Demo)' filter is selected, and the 'Lab Tests' filter is expanded to show a range of 'By Timeframe' set to 'Last Month'. An 'Add/Remove Lab Tests' dialog box is open in the foreground, displaying a list of available lab tests and current selections.

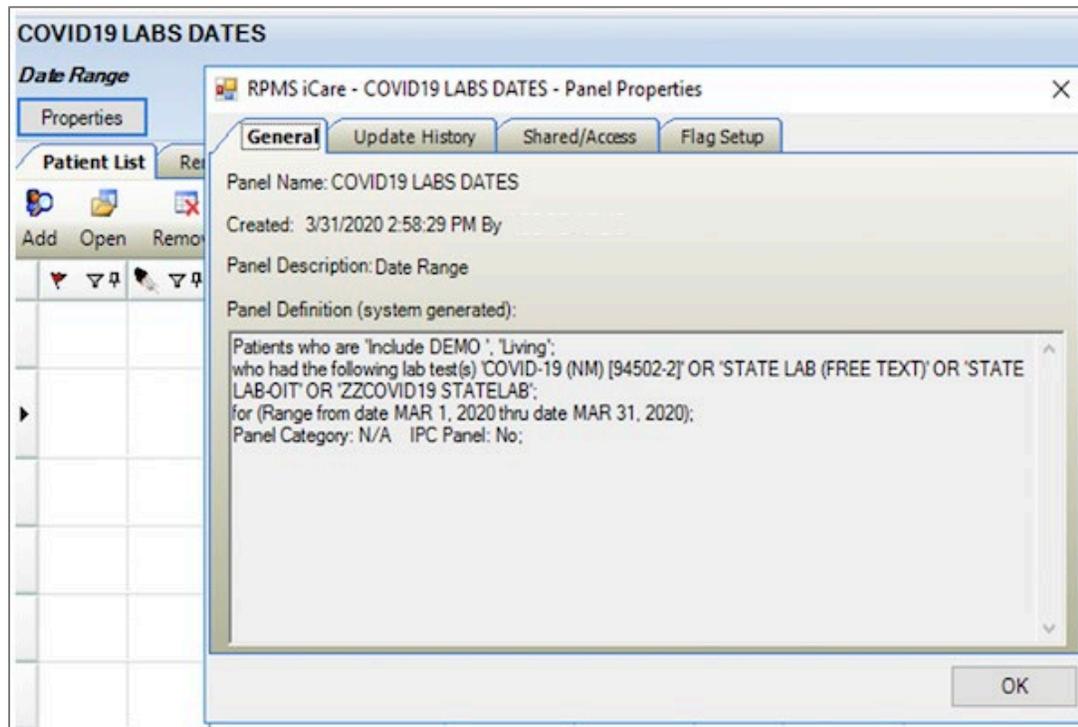
Available Selections

- Find: STA
- Starts With (selected) / Contains
- SQL VITAMIN B1, PLASMA-before 2/2012 (F)
- SQL VITAMIN B12 & FOLATE 8065 (P)
- SQL VITAMIN B6, PLASMA 8111 (F)
- SQL VITAMIN D, 1,25-DIHYDROXY 904253 (P)
- SQL VITAMIN E 8116 (P)
- SQL VITAMIN K, PLASMA 11411 (F)
- SQL VOLATILES SCRIN 202139 (P)
- SQL VON WILLEBRAND Ag MULTIMERIC 10884 (F)
- SQL VON WILLEBRAND FACTOR ANTIGEN 21812 (F)
- SQL XSENSE FRAGILE X w/Reflex 10300 (P)
- SQL ZINC, PLASMA 14154 (F)
- STOOL CULTURE

Current Selections

- Find:
- COVID-19 (NM) [94502-2] (S)
- STATE LAB (FREE TEXT) (F)
- STATE LAB-OIT (F)
- ZZCOVID19 STATELAB (S)

Check Properties



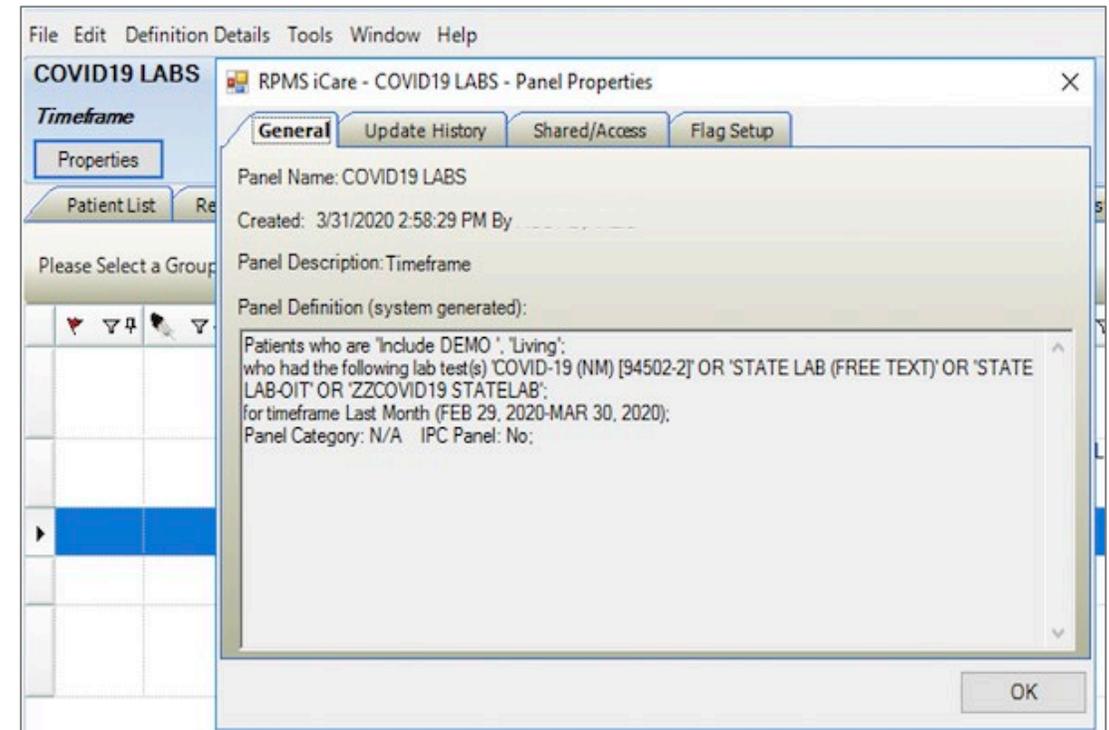
COVID19 LABS DATES

RPMS iCare - COVID19 LABS DATES - Panel Properties

General | Update History | Shared/Access | Flag Setup

Panel Name: COVID19 LABS DATES
Created: 3/31/2020 2:58:29 PM By
Panel Description: Date Range
Panel Definition (system generated):
Patients who are 'Include DEMO', 'Living';
who had the following lab test(s) 'COVID-19 (NM) [94502-2]' OR 'STATE LAB (FREE TEXT)' OR 'STATE
LAB-OIT' OR 'ZZCOVID19 STATELAB';
for (Range from date MAR 1, 2020 thru date MAR 31, 2020);
Panel Category: N/A IPC Panel: No;

OK



File Edit Definition Details Tools Window Help

COVID19 LABS

RPMS iCare - COVID19 LABS - Panel Properties

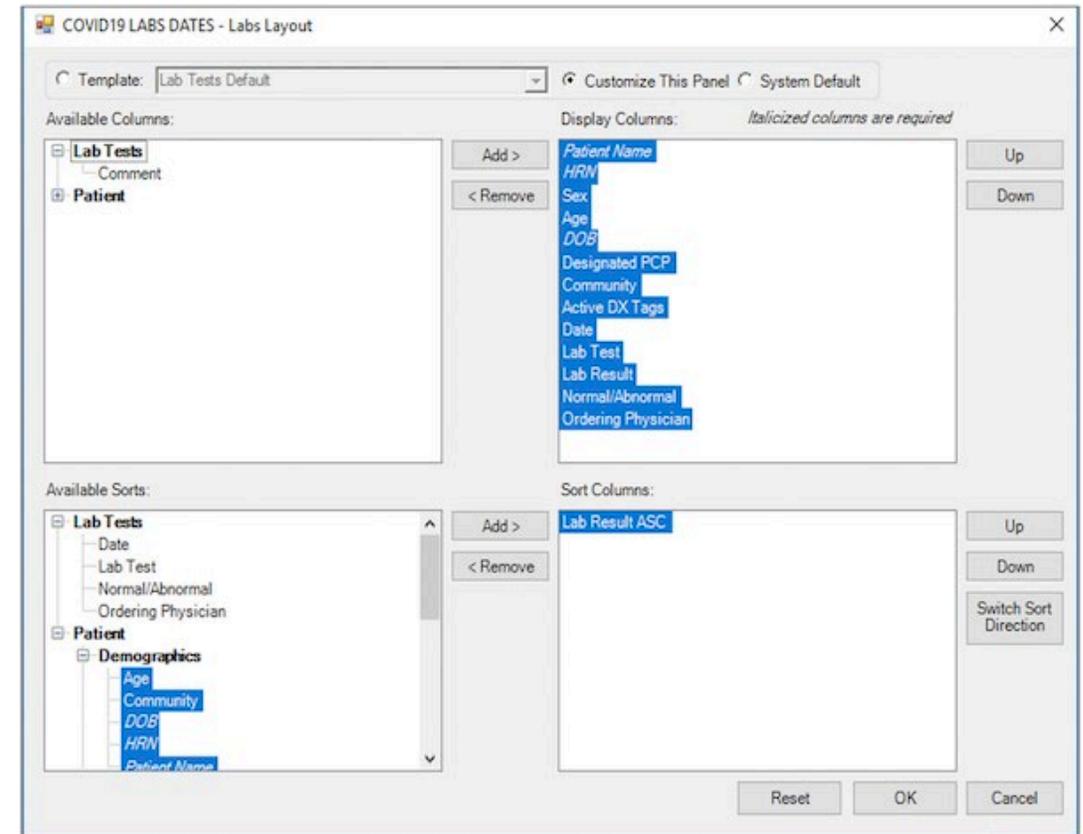
General | Update History | Shared/Access | Flag Setup

Panel Name: COVID19 LABS
Created: 3/31/2020 2:58:29 PM By
Panel Description: Timeframe
Panel Definition (system generated):
Patients who are 'Include DEMO', 'Living';
who had the following lab test(s) 'COVID-19 (NM) [94502-2]' OR 'STATE LAB (FREE TEXT)' OR 'STATE
LAB-OIT' OR 'ZZCOVID19 STATELAB';
for timeframe Last Month (FEB 29, 2020-MAR 30, 2020);
Panel Category: N/A IPC Panel: No;

OK

Definition Details Tab

- Data is sorted by Patient Name
- Change to sort by Lab Result and save. This will group the results.

A screenshot of a software configuration window titled "COVID19 LABS DATES - Labs Layout". The window has a close button (X) in the top right corner. It contains several sections for configuring the data display:

- Template:** A dropdown menu set to "Lab Tests Default".
- Customize This Panel:** Radio buttons for "System Default" (selected) and "Customize This Panel".
- Available Columns:** A tree view on the left showing "Lab Tests" (with sub-items "Comment" and "Patient") and "Patient".
- Display Columns:** A list of columns on the right, including "Patient Name", "HRN", "Sex", "Age", "DOB", "Designated PCP", "Community", "Active DX Tags", "Date", "Lab Test", "Lab Result", "Normal/Abnormal", and "Ordering Physician". The "Patient Name" column is highlighted in blue. "Up" and "Down" buttons are on the right side of this list.
- Available Sorts:** A tree view on the left showing "Lab Tests" (with sub-items "Date", "Lab Test", "Normal/Abnormal", "Ordering Physician") and "Patient" (with sub-items "Demographics", "Age", "Community", "DOB", "HRN", "Patient Name").
- Sort Columns:** A list of sorts on the right, with "Lab Result ASC" highlighted in blue. "Up", "Down", and "Switch Sort Direction" buttons are on the right side of this list.
- Buttons:** "Add >" and "< Remove" buttons are located between the "Available Columns" and "Available Sorts" sections. "Reset", "OK", and "Cancel" buttons are at the bottom right.



Example Panel

COVID19 LABS DATES

Date Range

Properties

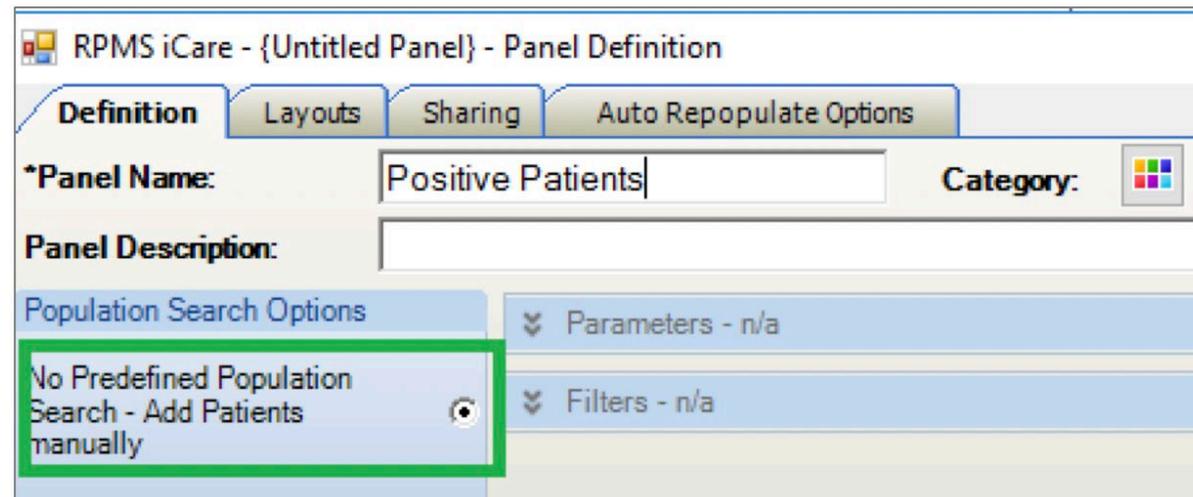
Patient List Reminders Rem Aggregated Natl Measures Natl Aggregated CHET Care Mgmt Diagnostic Tags Flags Definition Details Referrals Consuls

Please Select a Group: Lab Tests Copy Patient(s) Layout

▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼
		Patient Name	HRN	Sex	Age	DOB	Designated PCP	Community	Active DX Tags	Date	Lab Test	Lab Result	Normal/A.	Ordering Physician		
		DEMO.ASHLEY		F	20 YRS			PARKER	Asthma (P); CKD NOS (P); DM (A); Obese (P); Smoker (P)	Mar 31, 2020	STATE LAB (FREE TEXT)	0	A*			
		DEMO.ASHLEY		F	20 YRS			PARKER	Asthma (P); CKD NOS (P); DM (A); Obese (P); Smoker (P)	Mar 31, 2020	COVID-19 (NM) [B4502-2]	DETECT				
		DEMO.VICTOR		M	27 YRS			CHEMEHUEVI VALLEY		Mar 31, 2020	COVID-19 (NM) [B4502-2]	DETECT	A*			
		DEMO.BCMAONE		F	44 YRS			PASSADUMKEA G	Obese (P); PreDM (P)	Mar 31, 2020	COVID-19 (NM) [B4502-2]	DETECT	A*			
		DEMO.ASHLEY		F	20 YRS			PARKER	Asthma (P); CKD NOS (P); DM (A); Obese (P); Smoker (P)	Mar 11, 2020	COVID-19 (NM) [B4502-2]	NOT DETECT				
		DEMO.DEJON		M	71 YRS			SPEARFISH	DM (P)	Mar 11, 2020	COVID-19 (NM) [B4502-2]	NOT DETECT				
▶		DEMO.AMENDMENT ONE		F	65 YRS			PHOENIX	DM (A); HIV (A)	Mar 11, 2020	COVID-19 (NM) [B4502-2]	NOT DETECT				
		DEMO.LOUIS		M	51 YRS			SPEARFISH	DM (P); Obese (P)	Mar 12, 2020	COVID-19 (NM) [B4502-2]	NOT DETECT				
		DEMO.ASHLEY		F	20 YRS			PARKER	Asthma (P); CKD NOS (P); DM (A); Obese (P); Smoker (P)	Mar 12, 2020	ZZCOVID19 STATELAB	NOT DETECTED				

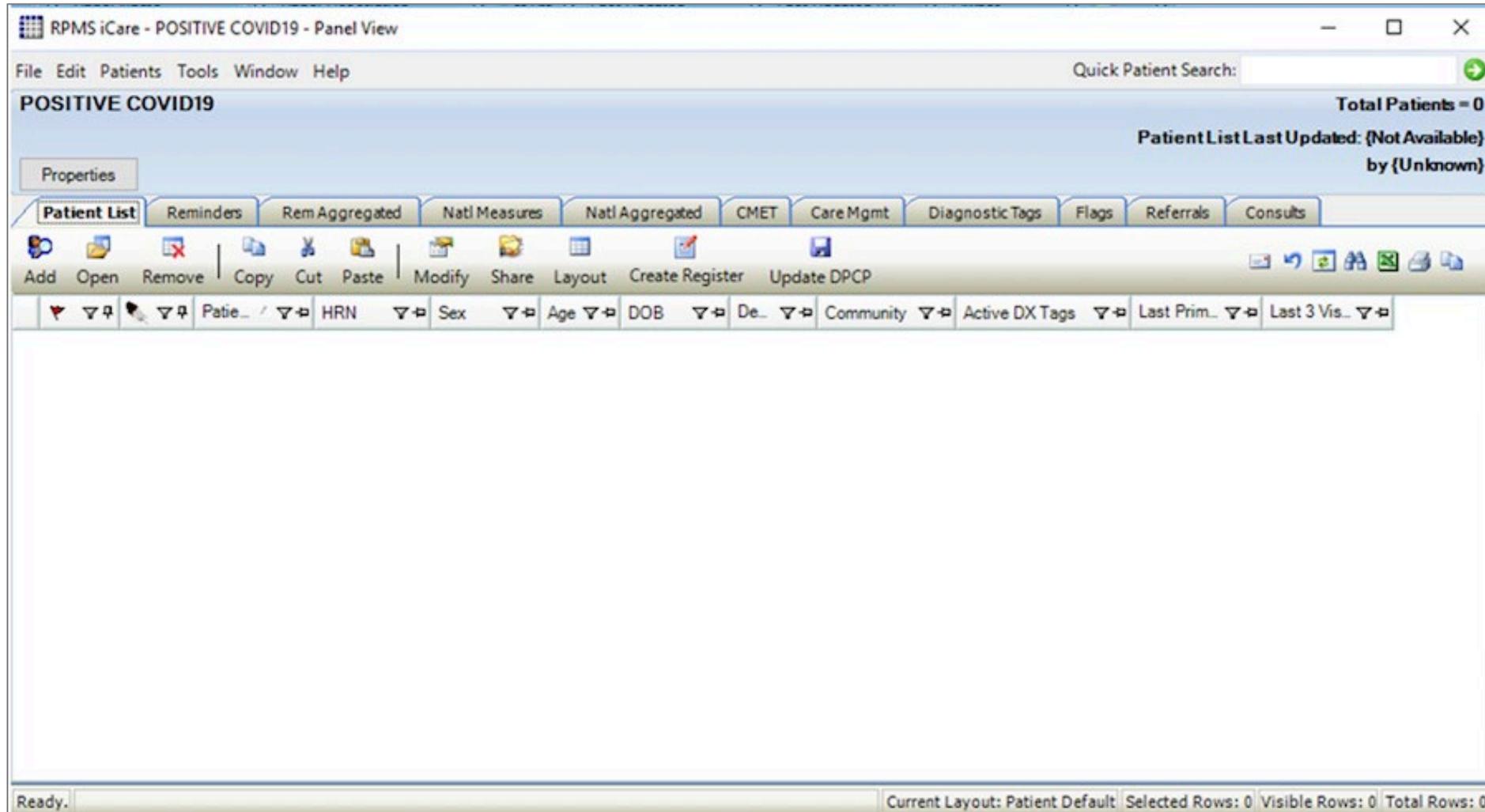
Move Positive Lab Results to Track Separately

- Create a new panel that is a Manual Panel. You will be able to copy the positive patients to the Manual Panel.

A screenshot of the "RPMS iCare - {Untitled Panel} - Panel Definition" window. The window has four tabs: "Definition", "Layouts", "Sharing", and "Auto Repopulate Options". The "Definition" tab is active. It contains a form with the following fields:

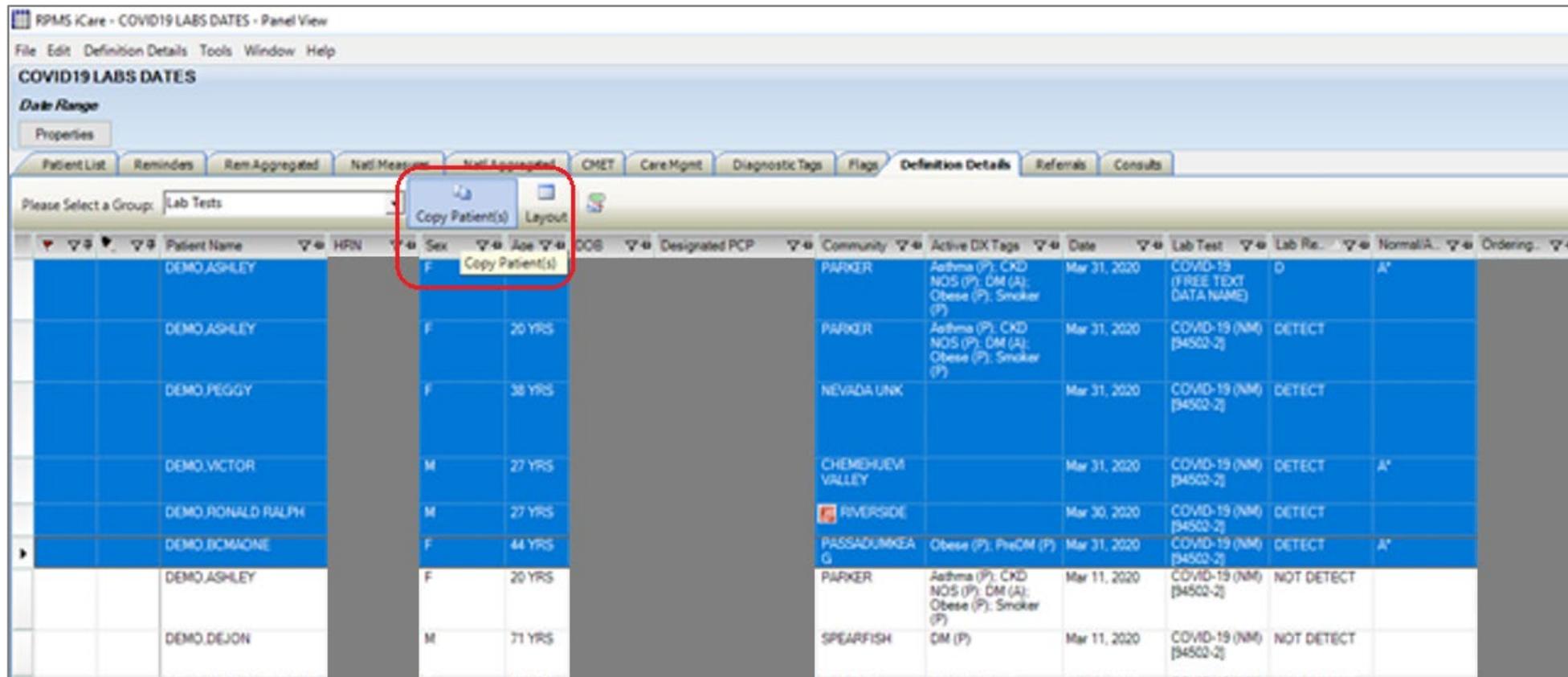
- *Panel Name:** A text box containing "Positive Patients".
- Category:** A dropdown menu with a color-coded icon.
- Panel Description:** An empty text box.
- Population Search Options:** A section with two options:
 - Parameters - n/a
 - No Predefined Population Search - Add Patients manually
- Filters:** A section with one option:
 - Filters - n/a

Open the Manual Panel

The screenshot shows a software window titled "RPMS iCare - POSITIVE COVID19 - Panel View". The window has a menu bar with "File", "Edit", "Patients", "Tools", "Window", and "Help". On the right side of the menu bar is a "Quick Patient Search:" field with a green search button. Below the menu bar, the main area is titled "POSITIVE COVID19" and shows "Total Patients = 0" and "Patient List Last Updated: {Not Available} by {Unknown}". There is a "Properties" button on the left. A horizontal toolbar contains several tabs: "Patient List" (selected), "Reminders", "Rem Aggregated", "Natl Measures", "Natl Aggregated", "CMET", "Care Mgmt", "Diagnostic Tags", "Flags", "Referrals", and "Consults". Below the tabs is a secondary toolbar with icons for "Add", "Open", "Remove", "Copy", "Cut", "Paste", "Modify", "Share", "Layout", "Create Register", and "Update DPCP". Below that is a column header row with fields: "Patie..." (with a dropdown arrow), "HRN" (with a dropdown arrow), "Sex" (with a dropdown arrow), "Age" (with a dropdown arrow), "DOB" (with a dropdown arrow), "De..." (with a dropdown arrow), "Community" (with a dropdown arrow), "Active DX Tags" (with a dropdown arrow), "Last Prim..." (with a dropdown arrow), and "Last 3 Vis..." (with a dropdown arrow). The main content area is currently empty. At the bottom of the window, a status bar shows "Ready." on the left and "Current Layout: Patient Default | Selected Rows: 0 | Visible Rows: 0 | Total Rows: 0" on the right.

Open the Lab Test Panel

Select the patients with positive lab results and click the **Copy Patients** button.

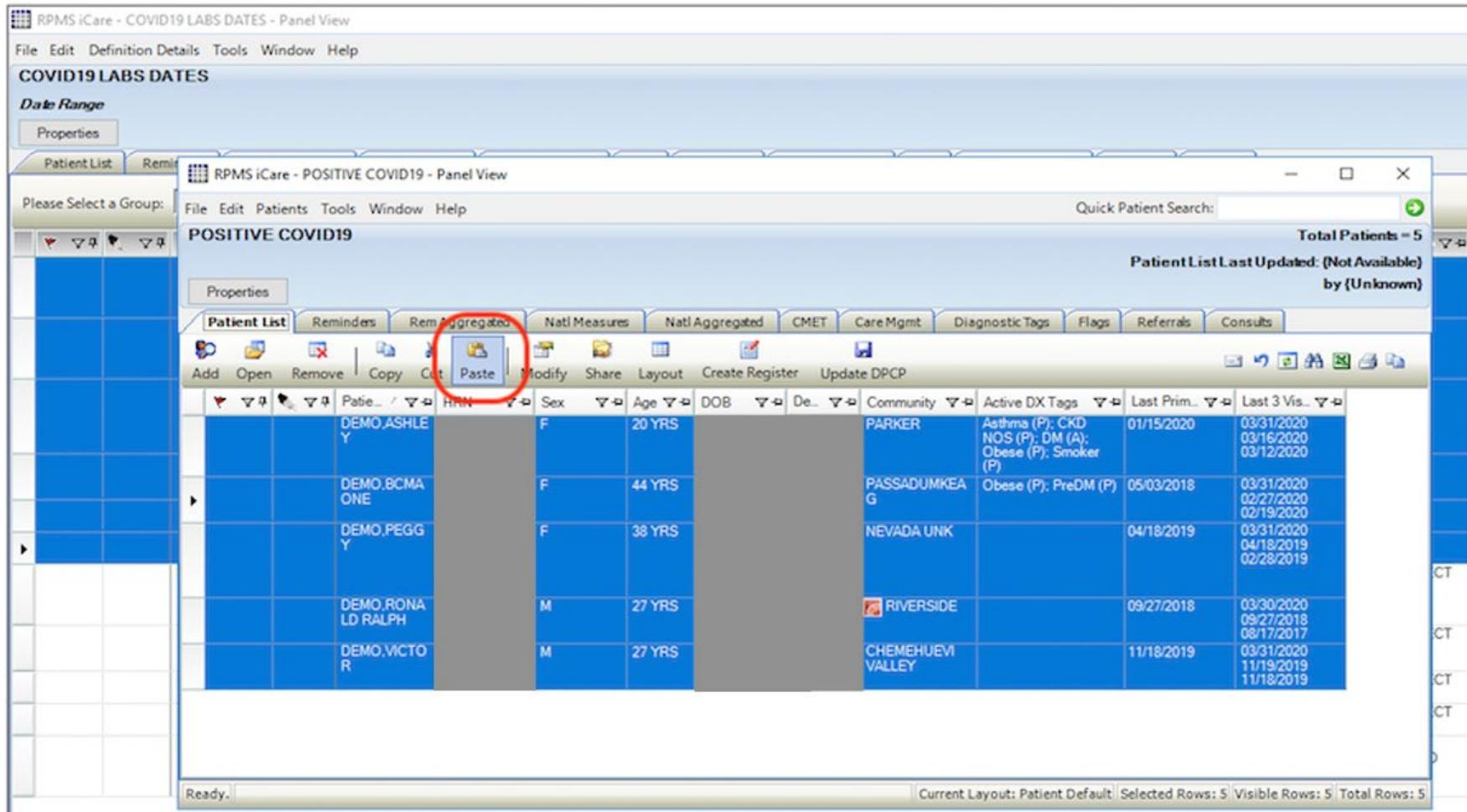


The screenshot shows the 'COVID19 LABS DATES' panel in the RPMS iCare system. The 'Please Select a Group:' dropdown is set to 'Lab Tests'. A red box highlights the 'Copy Patient(s)' button in the toolbar above the table. The table below contains the following data:

Patient Name	HFN	Sex	Age	DOB	Designated PCP	Community	Active DX Tags	Date	Lab Test	Lab Re.	Normal/A.	Ordering
DEMO.ASHLEY		F				PARKER	Asthma (P), CKD NOS (P), DM (A), Obese (P), Smoker (P)	Mar 31, 2020	COVID-19 (FREE TEXT DATA NAME)	0	A*	
DEMO.ASHLEY		F	20 YRS			PARKER	Asthma (P), CKD NOS (P), DM (A), Obese (P), Smoker (P)	Mar 31, 2020	COVID-19 (NM) [B4502-2]	DETECT		
DEMO.PEGGY		F	38 YRS			NEVADA UNK		Mar 31, 2020	COVID-19 (NM) [B4502-2]	DETECT		
DEMO.VICTOR		M	27 YRS			CHEMURVIA VALLEY		Mar 31, 2020	COVID-19 (NM) [B4502-2]	DETECT	A*	
DEMO. RONALD RALPH		M	27 YRS			RIVERSIDE		Mar 30, 2020	COVID-19 (NM) [B4502-2]	DETECT		
DEMO.BCMAONE		F	44 YRS			PASSADUMKEA G	Obese (P), PreDM (P)	Mar 31, 2020	COVID-19 (NM) [B4502-2]	DETECT	A*	
DEMO.ASHLEY		F	20 YRS			PARKER	Asthma (P), CKD NOS (P), DM (A), Obese (P), Smoker (P)	Mar 11, 2020	COVID-19 (NM) [B4502-2]	NOT DETECT		
DEMO.DEJON		M	71 YRS			SPEARFISH	DM (P)	Mar 11, 2020	COVID-19 (NM) [B4502-2]	NOT DETECT		

Bring Forward the Manual Panel

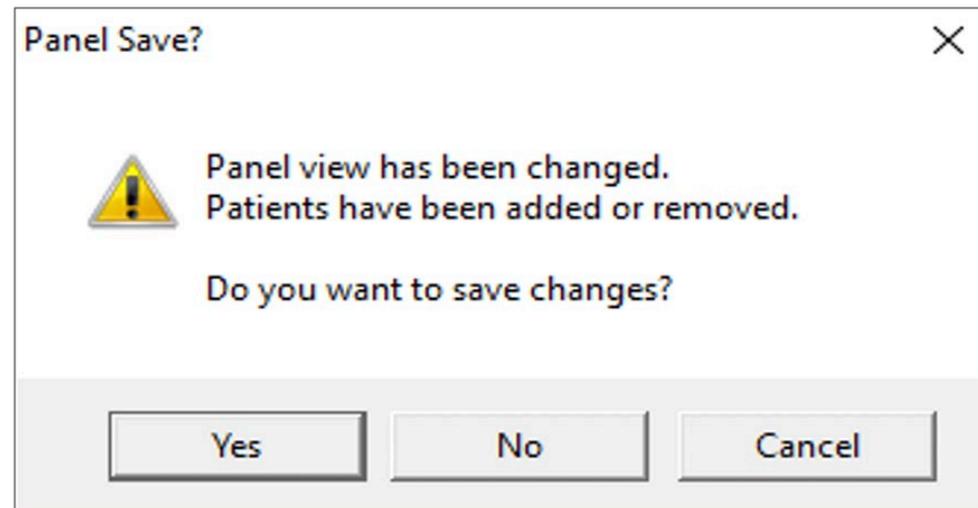
Click the **Paste** button.

The screenshot shows two overlapping windows in the RPMS iCare application. The background window is titled "COVID19 LABS DATES" and the foreground window is titled "POSITIVE COVID19". The foreground window has a menu bar with "File", "Edit", "Patients", "Tools", "Window", and "Help". Below the menu bar is a toolbar with various icons. The "Paste" icon, which shows a document with a plus sign, is circled in red. Below the toolbar is a table with columns for patient information. The status bar at the bottom of the foreground window shows "Current Layout: Patient Default | Selected Rows: 5 | Visible Rows: 5 | Total Rows: 5".

Patie...	HRN	Sex	Age	DOB	De...	Community	Active DX Tags	Last Prim...	Last 3 Vis...
DEMO.ASHLEY		F	20 YRS			PARKER	Asthma (P); CKD NOS (P); DM (A); Obese (P); Smoker (P)	01/15/2020	03/31/2020 03/16/2020 03/12/2020
DEMO.BCMAONE		F	44 YRS			PASSADUMKEA G	Obese (P); PreDM (P)	05/03/2018	03/31/2020 02/27/2020 02/19/2020
DEMO.PEGGY		F	38 YRS			NEVADA UNK		04/18/2019	03/31/2020 04/18/2019 02/28/2019
DEMO.RONALD RALPH		M	27 YRS			RIVERSIDE		09/27/2018	03/30/2020 09/27/2018 08/17/2017
DEMO.VICTOR		M	27 YRS			CHEMEHUEVI VALLEY		11/18/2019	03/31/2020 11/19/2019 11/18/2019

Save the Manual Panel

Save the Manual Panel when exiting. You can continue to move positive patients into this panel.





Historical Data Entry of Labs

- COVID19 Labs done outside your facility can be entered into RPMS as Historical Events to be picked up by your iCare panels.
- Enter via PCC or iCare.



PCC Entry

```
*****
**          PCC Data Entry Module          **
**          Update Patient-Related Data     **
*****

          IHS PCC Suite Version 2.0
          2016 DEMO HOSPITAL

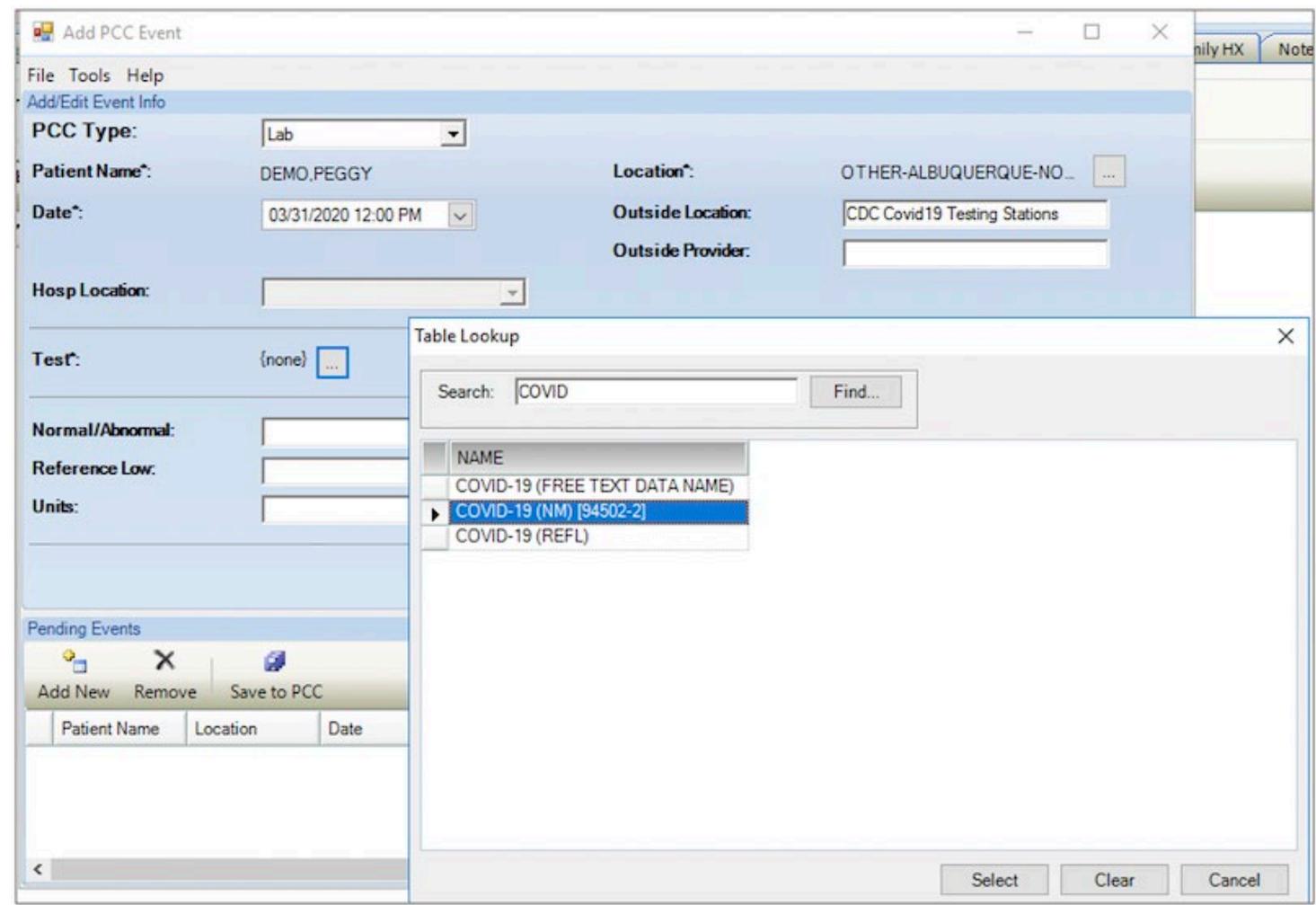
NVD   Enter Non-Visit Data
HDI   Enter Historical or Non Visit Related Patient Data
PATG  Patient Goals Update
PRL   Problem List Update
TP    Update Patient Treatment Plan

You have PENDING ALERTS

      Enter  "VA to jump to VIEW ALERTS option

Select Update Patient Related/Non Visit Data <TEST ACCOUNT> Option: HDI Enter
Historical or Non Visit Related Patient Data
```

iCare PCC Data Entry

A screenshot of the iCare PCC Data Entry software interface. The main window is titled "Add PCC Event" and contains a form for entering patient information. The form includes fields for "PCC Type" (set to "Lab"), "Patient Name" (set to "DEMO, PEGGY"), "Date" (set to "03/31/2020 12:00 PM"), "Location" (set to "OTHER-ALBUQUERQUE-NO..."), "Outside Location" (set to "CDC Covid19 Testing Stations"), "Hosp Location", "Test" (set to "{none}"), "Normal/Abnormal", "Reference Low", and "Units". A "Table Lookup" dialog box is open over the "Test" field, showing a search for "COVID" and a list of results: "COVID-19 (FREE TEXT DATA NAME)", "COVID-19 (NM) [94502-2]" (which is selected), and "COVID-19 (REFL)". The dialog box has "Select", "Clear", and "Cancel" buttons at the bottom. The main window also has a "Pending Events" section with "Add New", "Remove", and "Save to PCC" buttons, and a table with columns for "Patient Name", "Location", and "Date".

Questions and Demonstration

