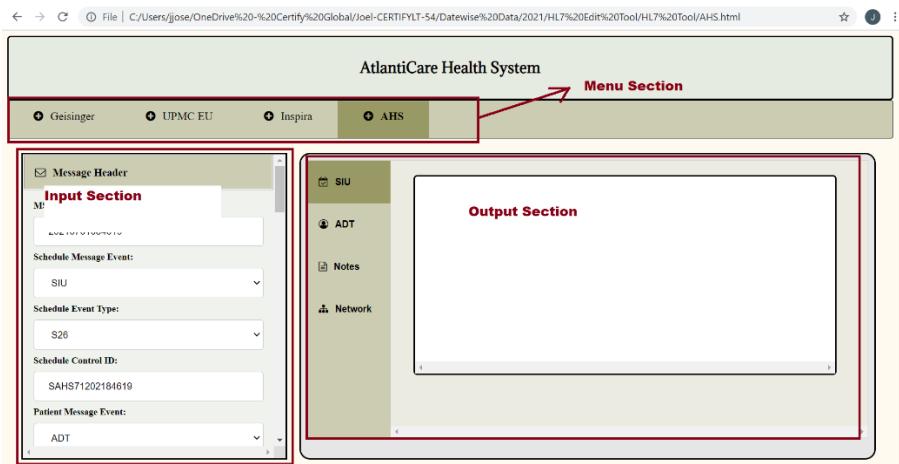


Purpose of the tool

The tool is created to simplify HL7 message creation for testing.



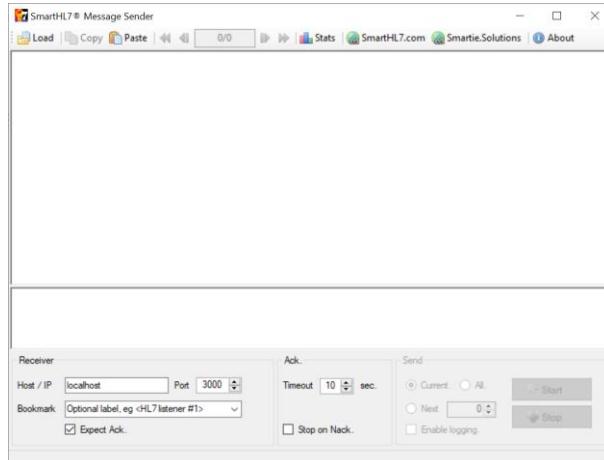
The tool is divided into three sections:

- 1) **Menu Section** : To navigation various client.
- 2) **Input Section**: To fill in dynamic values for the fields that would be displayed in the HL7.
- 3) **Output Section**: Has multiple tabs with the various HL7 message types used for each client and notes and network section.

The **Notes tab in the Output section stores the key values like the message control number, Patient ID, Patient Name, Location details etc. This is useful in providing information about the message created and in troubleshooting.

The **Network tab in the Output section has the IP and Port details where a particular message type needs to be sent to replicate a message sent by clients.

We will be using the **SmartHL7.Message.Sender** tool to send the messages to TCP IP configured.



Example flow: Inspira IMG Covid Result Testing.

Inspira IMG covid result testing will require three types of HL7 messages: SIU, ADT and ORU (MDM).

The image displays two screenshots of the Inspira IMG Covid Result Testing application interface, showing the creation of HL7 messages (SIU, ADT, and ORU) for a patient.

Screenshot 1: SIU Message Creation

This screenshot shows the creation of an SIU message. The message header fields are filled as follows:

- MSH Date/Time: 20210701091227
- Schedule Message Event: SIU
- Schedule Event Type: S12
- Schedule Control ID: IMGS71202191227
- Patient Message Event: ADT

The sidebar on the right lists the message types: SIU, ADT, ORU, Notes, and Network. The SIU message is currently selected.

Screenshot 2: ORU Message Creation

This screenshot shows the creation of an ORU message. The message header fields are filled as follows:

- Patient Event Type: A04
- Patient Control ID: IMGA71202191227
- Result Message Event: ORU
- Result Event Type: R01
- Result Control ID: IMGO71202191227
- Admit Date/Time: (empty)

The sidebar on the right lists the message types: SIU, ADT, ORU, Notes, and Network. The ORU message is currently selected.

IMG Covid Result.html

File | C:/Users/jjose/OneDrive%20-%20Certify%20Global/Joel-CERTIFLYLT-54/Datewise%20Data/2021/HL7%20Edit%20Tool/HL7%20Tool/IMG%20Covid%20Result.htm

July 2021 ▾

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	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	31
1	2	3	4	5	6	7

09 18 AM
10 19 PM
11 20
12 21
01 22
02 23
03 24

Discharge Date/Time:
mm/dd/yyyy --:-- --

Visit Status:
Scheduled

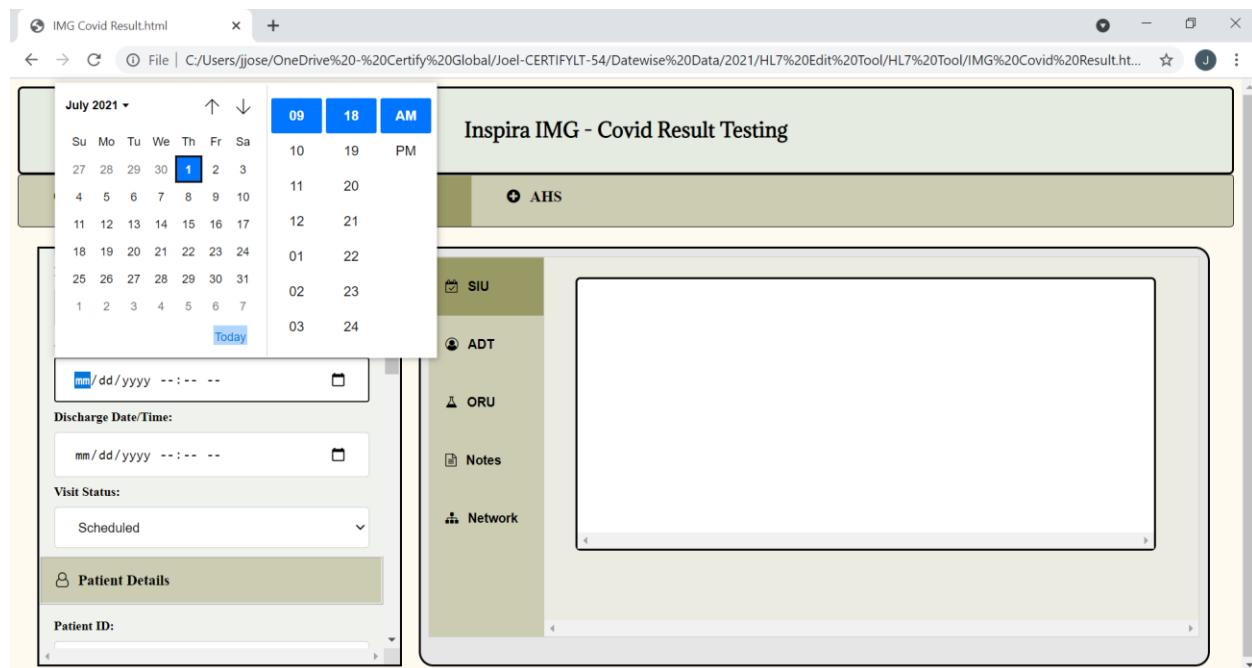
Patient Details

Patient ID:

Inspira IMG - Covid Result Testing

AHS

SIU
ADT
ORU
Notes
Network



IMG Covid Result.html

File | C:/Users/jjose/OneDrive%20-%20Certify%20Global/Joel-CERTIFLYLT-54/Datewise%20Data/2021/HL7%20Edit%20Tool/HL7%20Tool/IMG%20Covid%20Result.htm

+ Geisinger + UPMC EU + Inspira + AHS

Result Control ID:
IMGO71202191227

Admit Date/Time:
07/01/2021 09:18 AM

Discharge Date/Time:
07/01/2021 10:18 AM

Visit Status:
Scheduled

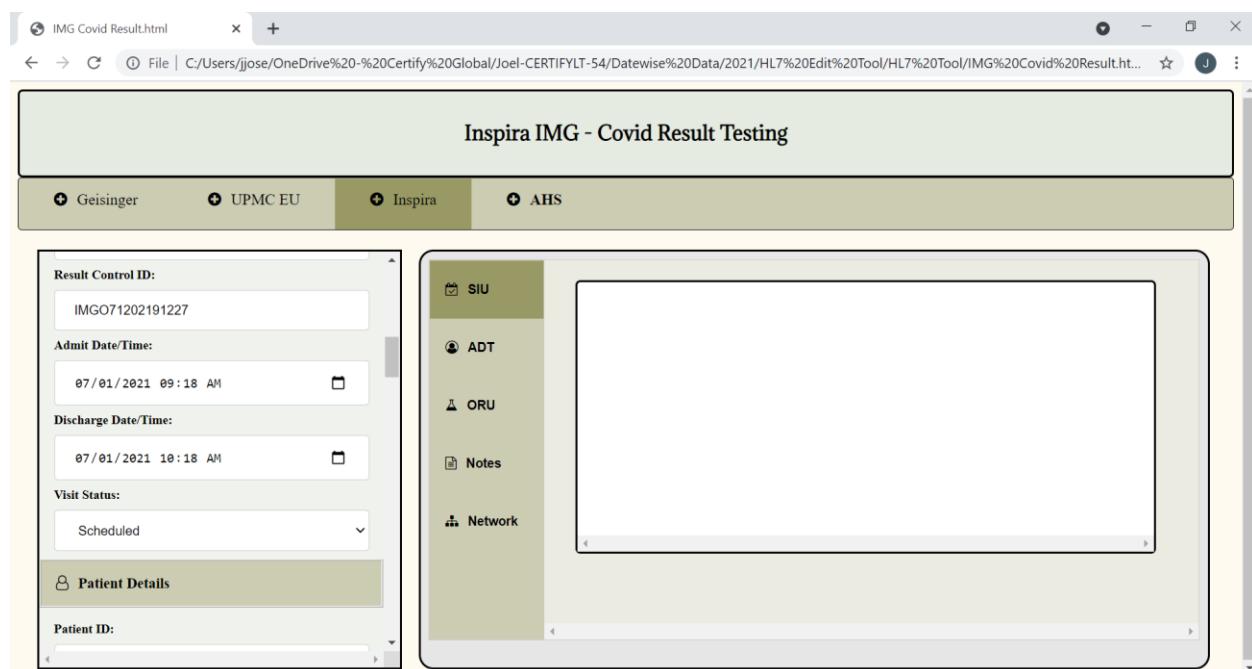
Patient Details

Patient ID:

Inspira IMG - Covid Result Testing

Geisinger UPMC EU Inspira AHS

SIU
ADT
ORU
Notes
Network



IMG Covid Result.html

Inspira IMG - Covid Result Testing

Geisinger UPMC EU Inspira AHS

Patient Details

Patient ID: IC7191227

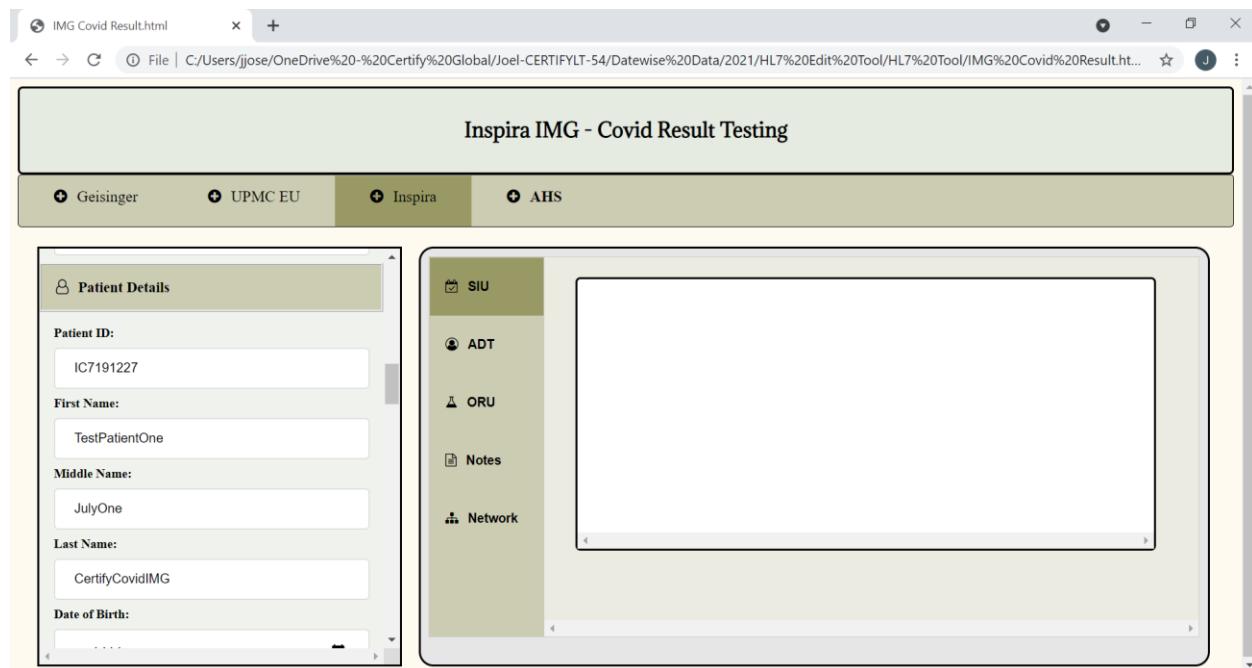
First Name: TestPatientOne

Middle Name: JulyOne

Last Name: CertifyCovidIMG

Date of Birth: 02/16/1994

SIU ADT ORU Notes Network



IMG Covid Result.html

Inspira IMG - Covid Result Testing

Geisinger UPMC EU Inspira AHS

Last Name: CertifyCovidIMG

Date of Birth: 02/16/1994

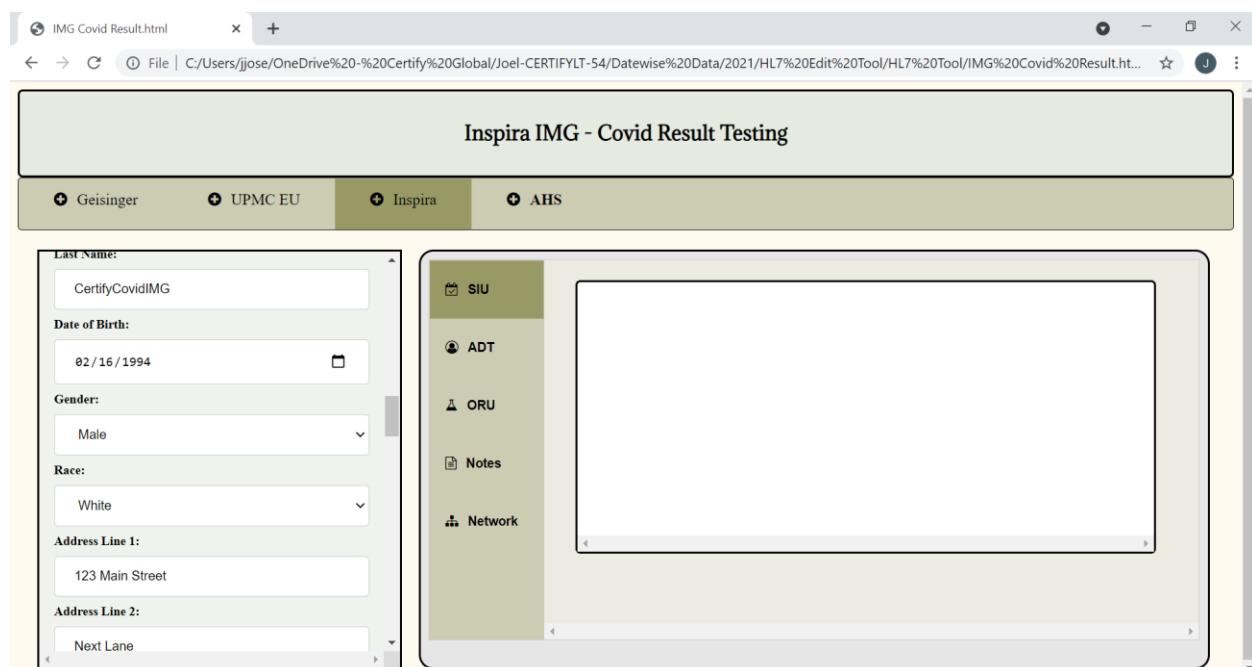
Gender: Male

Race: White

Address Line 1: 123 Main Street

Address Line 2: Next Lane

SIU ADT ORU Notes Network



IMG Covid Result.html

Inspira IMG - Covid Result Testing

Geisinger UPMC EU Inspira AHS

Next Lane

City: New York

State: NY

Zip: XYZ123

Home Phone: 8560000000

Mobile Phone: 8560000000

Email:

SIU ADT ORU Notes Network

This screenshot shows the Inspira IMG - Covid Result Testing application. At the top, there are four tabs: Geisinger, UPMC EU, Inspira (which is selected), and AHS. Below the tabs, a sidebar on the left contains fields for Next Lane, City (New York), State (NY), Zip (XYZ123), Home Phone (8560000000), Mobile Phone (8560000000), and Email. To the right of the sidebar is a large empty rectangular area.

IMG Covid Result.html

Inspira IMG - Covid Result Testing

Geisinger UPMC EU Inspira AHS

testpat@gmail.com

Work Phone: 8560000000

Work Phone Extension: 456

Marital Status: Married

Account Number: AIC7191227

Next of Kin Details

SIU ADT ORU Notes Network

This screenshot shows the same Inspira IMG - Covid Result Testing application as the first one, but with updated patient contact information. The email field now contains "testpat@gmail.com". The sidebar on the left remains the same, displaying the same contact details and the "Notes" section from the previous screenshot.

IMG Covid Result.html

Inspira IMG - Covid Result Testing

Geisinger UPMC EU Inspira AHS

AIC7191227

Next of Kin Details

Copy Patient Values.

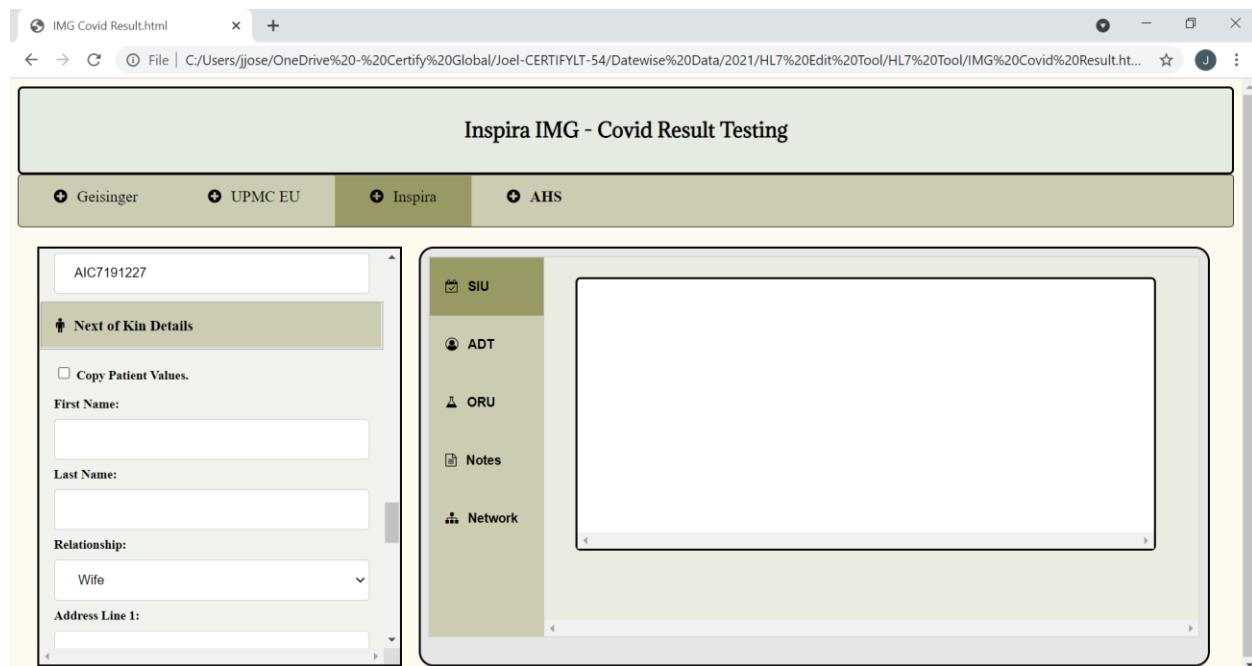
First Name:

Last Name:

Relationship: Wife

Address Line 1:

SIU
ADT
ORU
Notes
Network



IMG Covid Result.html

Inspira IMG - Covid Result Testing

Geisinger UPMC EU Inspira AHS

AIC7191227

Next of Kin Details

Copy Patient Values.

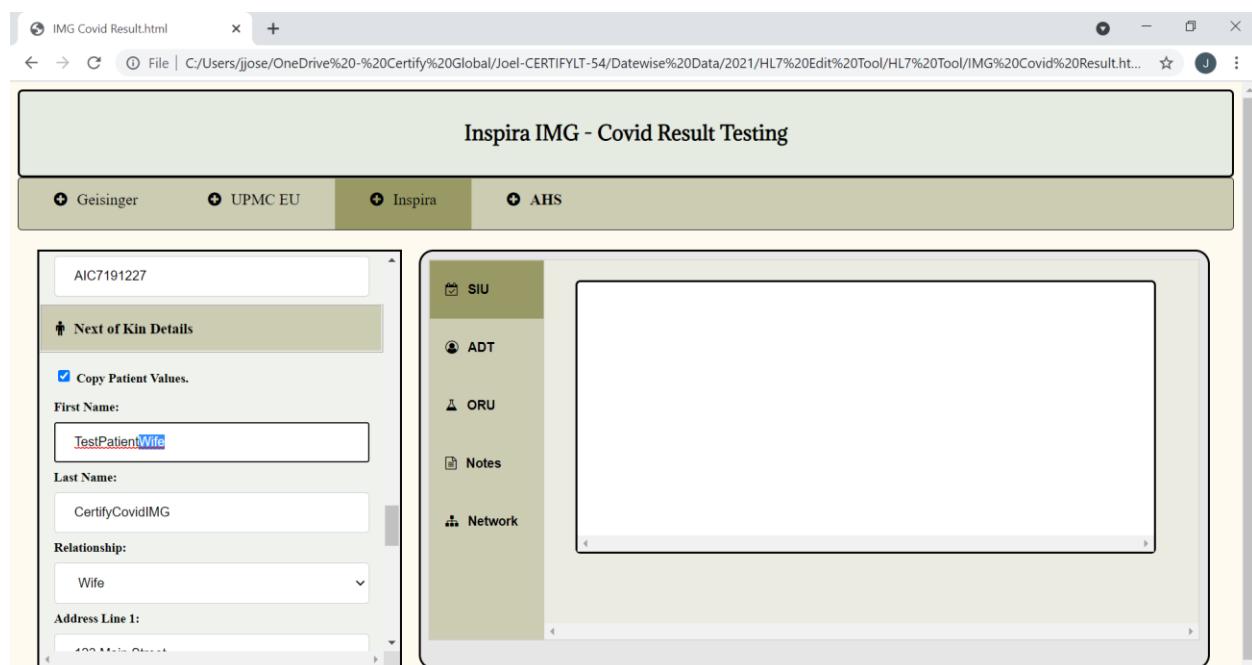
First Name: TestPatientWife

Last Name: CertifyCovidIMG

Relationship: Wife

Address Line 1:

SIU
ADT
ORU
Notes
Network



IMG Covid Result.html

Inspira IMG - Covid Result Testing

Geisinger UPMC EU Inspira AHS

Relationship: Wife

Address Line 1: 123 Main Street

Address Line 2: Next Lane

City: New York

State: NY

Zip: XYZ123

SIU ADT ORU Notes Network

This screenshot shows the Inspira IMG - Covid Result Testing application. At the top, there are four tabs: Geisinger, UPMC EU, Inspira (which is selected), and AHS. Below the tabs, there's a sidebar with a tree view containing SIU, ADT, ORU, Notes, and Network. On the left, there are input fields for a patient's address and zip code. The main area is currently empty.

IMG Covid Result.html

Inspira IMG - Covid Result Testing

Geisinger UPMC EU Inspira AHS

Home Phone: 8560000000

Work Phone: 8560000000

Patient Visit

Location: FM Tom Station

Observation Details

Placer Order Number:

SIU ADT ORU Notes Network

This screenshot shows the same Inspira IMG - Covid Result Testing application. The sidebar menu is identical. In the main area, there are sections for phone numbers, a Patient Visit section with a location dropdown, and an Observation Details section with a Placer Order Number dropdown. The main area is currently empty.

The screenshot shows a web-based application for COVID-19 testing results. At the top, a navigation bar includes tabs for 'Geisinger', 'UPMC EU', 'Inspira' (which is highlighted in green), and 'AHS'. The main title is 'Inspira IMG - Covid Result Testing'. On the left, a 'Patient visit' panel displays a dropdown for 'Location' set to 'FM Glassboro'. Below it is an 'Observation Details' section. Under 'Placer Order Number', the value 'A01072021001' is shown. The 'Observation Date/Time' field contains '07/01/2021 10:30 AM'. A large green 'Submit' button is at the bottom of this panel. To the right, a sidebar lists sections: 'SIU', 'ADT', 'ORU', 'Notes', and 'Network'. The 'Notes' section is expanded, showing detailed MSH and PRNPH segments. The PRNPH segment includes fields like 'MRN', 'SOARF', 'Phone', 'ORNCP', and 'NPIN'. It also lists a 'National Provider Identifier' and a 'Stiebel Gregory' entry.

```
MSH|^~\&|HNA500||20210701091227||SIU^S12|IMG571202191227|2.3
SCH|AT191227|HNAMS|CHEVID||||PCP Established Patient|PCP Established
Patient|[100|MIN||100-20210701091800-20210701101800|||X Kelley Jason||MD||||NYSII|||X Kelley
y Jason||MD||||NYSII|||SCHEDULED
PID|IC7191227|||MRN||MR-SOARF|CertifyCovidIMG|TestPatientOne|JulyOne|||Alternate|||19940216
|M||WHITE||123 Main Street||Next Lane||New
York||NY||XYV123||US||Home|||testpt@gmail.com||-8560000000||PRNPH||Phone||-8560000000||ORNCP|
8560000000||WPNPH|||||456|ENG||M|
PRD||||04407|Stiebel|Gregory|G||D.O.||PRN||NYSII||External
Identifier-1649267881|Stiebel|Gregory|G||D.O.||NP||NYSII||National Provider
Identifier||20210701091800||MIN||100|MIN|||SCHEDULED
PV1|||
RGS|||
AIL|||FM Glassboro|||FM Glassboro|||Radiology|||FM Glassboro|||Appointment|
AIP|||04407|Stiebel|Gregory|G||D.O.||PRN||NYSII||External
Identifier-1649267881|Stiebel|Gregory|G||D.O.||NP||NYSII||National Provider
Identifier||20210701091800||MIN||100|MIN|||SCHEDULED
```

The screenshot shows a web-based application for managing COVID-19 test results. At the top, there are tabs for Geisinger, UPMC EU, Inspira, and AHS. The main title is "Inspira IMG - Covid Result Testing". On the left, a "Patient Visit" panel includes fields for Location (FM Glassboro), Observation Details, Placer Order Number (A01072021001), and Observation Date/Time (07/01/2021 10:30 AM). On the right, a large box displays detailed test results:

SIU

MSH|^~&|HNA500||20210701091227||ADT^A04|IMGA71202191227||2.3
EVN^A04|20210701091227||X^Kelley^Jason||||NYSIIS||
PID||IC7191227^MRN^MRN^SOARF||IC7191227^MRN^MR^SOARF||CertifyCovidIMG^TestPatie
ntOne^JulyOne^Alternate||19940216M|WHITE123 Main Street^Next Lane^New
York^NY^XYZ123^US Home^testpat@gmail.com^8560000000^PRNPH^Phone^8560000000^ORN
CP^8560000000^WPNPB^456ENG|M||AIC7191227^FIN^FIN NBR||
PV1||Outpatient|FM Glassboro^FM Glassboro^Radiology FM
Glassboro||04407^Stielel^Gregory G.^D.O.^PRN^NYSIIS^External
Identifier-1649267881^Stielel^Gregory G.^D.O.^NPI^NYSIIS^National Provider
Identifier-1234567890^CERNER^CERNER||||NPI^NYSIIS^National Provider
Identifier-SYSTEMCERNER^CERNER CERNER ||^PRN^NYSIIS^External
Identifier||||Clinic||AIC7191227^FIN^FIN NBR||Self-Pay|||||FM Glassboro||20210701091800
PV2|||||20210701091800
GT1||IC7191227^MRN^MR^SOARF||CertifyCovidIMG^TestPatientOne^JulyOne^Alternate||123
Main Street^Next Lane^New
York^NY^XYZ123^US Home^testpat@gmail.com^8560000000^PRNPH^Phone^8560000000^ORN
CP^8560000000^WPNPB^45619940216M||Default Guarantor||Self||

The screenshot shows a web-based application for COVID-19 testing results. At the top, there are tabs for 'IMG Covid Result.html' and 'CertifyCare'. The main title is 'Inspira IMG - Covid Result Testing'. Below the title, there are four navigation buttons: 'Geisinger', 'UPMC EU', 'Inspira' (which is highlighted in green), and 'AHS'. On the left, a 'Patient Visit' panel contains fields for 'Location' (FM Glassboro), 'Observation Details', 'Placer Order Number' (A01072021001), and 'Observation Date/Time' (07/01/2021 10:30 AM). A large green 'Submit' button is at the bottom. On the right, a detailed test result summary is displayed in a scrollable box. The summary includes:

MSH|^~\&|IHN_NJ|FM|TomStat|HUB|HUB|20210701091227||ORU|R01|IMG071202191227||2.3
ZAD|FM|TomStat|660 Woodbury-Glassboro Road|Sewell|NJ|08080
PID|IC7191227^~^~MRN^MRN^SOARF|C7191227^~^~MRN^MRN^SOARF|CertifyCovidIMG^TestPatient
atOne^JulyOne^~^~Alternate|1994016|M|WHITE|123 Main Street|Next Lane|New
York-NY-XZ|123 US Home|tempat@gmail.com|8560000000|PRNP|Phone-8560000000|ORN
CP|8560000000-WPNPH^~^~456ENG|M|IC7191227^~^~FIN FIN NBR|
PV1|1|Outpatient|FM|Glassboro^~^~FM|Glassboro^~^~Radiology|FM|Glassboro|||||||||FM
Glassboro|||||20210701091800
OBR|1|A01072021001|HNAME_ORDERID|||QC_OV2FLUAB|||2021071103000|||||1760465603|Herman
n'Gregory^~^~MD^~^~NP1|Personnel|National Provider Identifier|||||20210710103000||C
OBX|1|TX|3545580997|SARS CoV 2-Q|Negative|Not Detected|Not Detected|All|F
NTE|1|Result Comment|This nucleic acid amplification test was developed and its performance
NTE|2|Result Comment|characteristics determined by LabCorp Laboratories. Nucleic acid
NTE|3|Result Comment|amplification tests include RT-PCR and TMA. This test has not been
NTE|4|Result Comment|FDA cleared or approved. This test has been authorized by FDA under
NTE|5|Result Comment|an Emergency Use Authorization (EUA). This test is only authorized
NTE|6|Result Comment|for the duration of time the declaration that circumstances exist

IMG Covid Result.html x CertifyCare x | +

File | C:/Users/jjose/OneDrive%20-%20Certify%20Global/Joel-CERTIFYLT-54/Datewise%20Data/2021/HL7%20Edit%20Tool/HL7%20Tool/IMG%20Covid%20Result.htm J

Inspira IMG - Covid Result Testing

+ Geisinger + UPMC EU + Inspira + AHS

Patient Visit

Location:
FM Glassboro

Observation Details

Placer Order Number:
A01072021001

Observation Date/Time:
07/01/2021 10:30 AM

Submit

SIU

ADT

ORU

Notes

Network

Patient Details:

Name	Value
Message Event:	SIU'S12
Message Control ID:	IMGS71202191227
Patient ID:	IC7191227
Patient Name:	TestPatientOne JulyOne CertifyCovidIMG
Date of Birth (DD/MM/YYYY):	16/02/1994
Location:	FM Glassboro

IMG Covid Result.html CertifyCare

Inspira IMG - Covid Result Testing

Geisinger UPMC EU Inspira AHS

Patient Visit

Location: FM Glassboro

Observation Details

Placer Order Number: A01072021001

Observation Date/Time: 07/01/2021 10:30 AM

Submit

Demo Network Details:

Message Type	IP Address	Port
SIU:	10.8.1.24	9500
ADT:	10.8.1.24	9500
ORU:	10.8.1.24	9510

IMG Covid Result.html CertifyCare

caredemo.certifyglobal.net/dashboarddetails

Inspira medical group FM Glassboro Thursday, 1 July 2021

Total Appointments 1

Appointment 1

Search

VISIT CODE	PATIENT NAME	DOB	PHONE NUM...	PROVIDER	QUEUE	AP...
14971	Imgtestpatinetone	06/28/2021	(790) 450-2377	GREGORY STIEFEL	1	11:25

Arrived 0

Search

VISIT CODE	PATIENT NAME	DOB	PHONE NUM...	PROGRESS	QUEUE	AP...
------------	--------------	-----	--------------	----------	-------	-------

There are no Arrived Patients for Today.

SmartHL7® Message Sender - [Untitled - from Clipboard]

Load | Copy | Paste | Stats | SmartHL7.com | Smartie.Solutions | About

MSH|^~\&|||HNA500|||20210701091227||SIU^S12|IMGS71202191227||2.3
SCH|AIC7191227^HNAMSCHEVID|||||PCP Established Patient|PCP Established Patient|100|MIN|^~^100^
20210701091800^20210701101800
|||||^X Kelley^Jason^^MD^^^^NYSIIS|||||^X Kelley^Jason^^MD^^^^NYSIIS|||||SCHEDULED
PID|||IC7191227^^^MRN^MR^SOARF||CertifyCovidIMG^TestPatientOne^JulyOne^~~~Alternate||19940216|M||WHITE|
123 Main Street^Next Lane^New York^NY^XYZ123^US^Home||^~^testpat@gmail.com~8560000000^PRNPH^Phone~
8560000000^ORNCP|8560000000^WPNPB~~~~~456|ENG|M||
PDI||||04407^Stiefel^Gregory^G.^~^D.O.^~^PRN^NYSIIS^~~~External Identifier~1649267881^Stiefel^Gregory^G.
^~^D.O.^~^NPI^NYSIIS^~~~National Provider Identifier
PVI|1||
RGS|1||
AII|1||FM Glassboro^~~~FM Glassboro^~~~Radiology^FM Glassboro|Appointment|
AIP|1||04407^Stiefel^Gregory^G.^~^D.O.^~^PRN^NYSIIS^~~~External Identifier~1649267881^Stiefel^Gregory^G.
^~^D.O.^~^NPI^NYSIIS^~~~National Provider Identifier|||20210701091800|0|MIN|100|MIN|||SCHEDULED

Loaded

Receiver

Host / IP: 10.8.1.24 Port: 9500

Bookmark: Optional label, eg <HL7 listener #1>

Expect Ack.

Ack.

Timeout: 10 sec.

Stop on Nack.

Send

Current. All.

Next: 1

Enable logging.

Start | Stop

SmartHL7® Message Sender - [Untitled - from Clipboard]

Load | Copy | Paste | Stats | SmartHL7.com | Smartie.Solutions | About

MSH|^~\&|HNA500|||20210701091227||SIU^S12|IMGS71202191227||2.3
SCH|AIC7191227^HNAMSCHEVID|||||PCP Established Patient|PCP Established Patient|100|MIN|^100^
20210701091800^20210701101800
|||||^X Kelley^Jason^^MD^^^^NYSIIS|||||^X Kelley^Jason^^MD^^^^NYSIIS|||||SCHEDULED
PID|||IC7191227^^^MRN^MR^SOARF||CertifyCovidIMG^TestPatientOne^JulyOne^^^Alternate||19940216|M||WHITE|
123 Main Street^Next Lane^New York^NY^XYZ123^US^Home||^^^testpat@gmail.com~8560000000^PRNPH^Phone~
8560000000^ORNCP|8560000000^WPNPH^^^^456|ENG|M||
PDI|||04407^Stiefel^Gregory^G.^D.O.^^^PRN^NYSIIS^^^External Identifier~1649267881^Stiefel^Gregory^G.
^^D.O.^^^NPI^NYSIIS^^^National Provider Identifier
PVI|1|||
RGS|1|||
AIL|1||FM Glassboro^^^FM Glassboro^^Radiology^FM Glassboro|Appointment|
AIP|1||04407^Stiefel^Gregory^G.^D.O.^^^PRN^NYSIIS^^^External Identifier~1649267881^Stiefel^Gregory^G.
^^D.O.^^^NPI^NYSIIS^^^National Provider Identifier|||20210701091800|0|MIN|100|MIN|||SCHEDULED

MSH|^~\&|MIRTH|||HNA500|20210701133006.133||ACK|20210701133006.133|P|2.3
MSA|AA|IMGS71202191227

Ack [0.473 sec]

Receiver

Host / IP: 10.8.1.24 Port: 9500
Bookmark: Optional label, eg <HL7 listener #1>
 Expect Ack.

Ack.

Timeout: 10 sec.
 Stop on Nack.

Send

Current. All. Start
 Next: 1 Stop
 Enable logging.

SmartHL7® Message Sender - [Untitled - from Clipboard]

Load | Copy | Paste | Stats | SmartHL7.com | Smartie.Solutions | About

```
MSH|^~\&|||HNA500|||20210701091227||ADT^A04|IMGA71202191227||2.3
EVN|A04|20210701091227|||^X Kelley^Jason^^^^^NYSIIS||
PID||IC7191227^^^MRN^MRN^SOARF|IC7191227
    ^^MRN^MR^SOARF||CertifyCovidIMG^TestPatientOne^JulyOne^^^^Alternate||19940216|M|WHITE|123 Main
    Street^Next Lane^New York^NY^XYZ123^US^Home||^^^testpat@gmail.com~8560000000^PRNPH^Phone~8560000000
    ^ORNCP|8560000000^WPNPH^^^^^456|ENG|M|AIC7191227^^^FIN^FIN NBR|
PVL|1|Outpatient|FM Glassboro^^^FM Glassboro^Radiology^FM Glassboro||||04407^Stiefel^Gregory^G.^D.O.
    ^^PRN^NYSIIS^^^External Identifier-1649267881^Stiefel^Gregory^G.^D.O.^NPI^NYSIIS^^^National
    Provider Identifier|1234567890^CERNER^CERNER^^^^^NPI^NYSIIS^^^National Provider
    Identifier~SYSTEMCERNER^CERNER^CERNER^^^^^PRN^NYSIIS^^^External Identifier|||||||||Clinic|AIC7191227
    ^^FIN^FIN NBR|Self-Pay|||||||||FM Glassboro|||||20210701091800|
PV2|||||||20210701091800
GT1|||IC7191227^^^MRN^MR^SOARF|CertifyCovidIMG^TestPatientOne^JulyOne^^^^Alternate||123 Main
    Street^Next Lane^New York^NY^XYZ123^US^Home|^^^testpat@gmail.com~8560000000^PRNPH^Phone~8560000000
    ^ORNCP|8560000000^WPNPH^^^^^456|19940216|M|Default Guarantor|Self|
IN1|1|3008342^CIGNA^^^CIGNA|3244123|CIGNA HealthCare|Po Box 30010^Austin^TX^78755^US||8664942111
    ^WPNPH|||0||2020111000000||||TestPatient^Care^^^^Alternate|Self|20010101|123 NEW STREET^APT 6
    ^FRANKLINVILLE^NJ^08322^US^Mailing~123 NEW STREET^APT 6^FRANKLINVILLE^NJ^08322
    ^ITS^Home^testpat@gmail.com|On File|||||||||Comm|||||||File|||||1234567890
```

Loaded

Receiver

Host / IP: 10.8.1.24 Port: 9500

Bookmark: Optional label, eg <HL7 listener #1>

Expect Ack.

Ack.

Timeout: 10 sec.

Stop on Nack.

Send

Current. All. Start Next 1 Stop Enable logging.

SmartHL7® Message Sender - [Untitled - from Clipboard]

Load | Copy | Paste | Stats | SmartHL7.com | Smartie.Solutions | About

```

MSH|^~\&||HNA500|||20210701091227||ADT^A04|IMGA71202191227||2.3
EVN|A04|20210701091227|||^X Kelley^Jason^^^^^NYSIIS||
PID||IC7191227^^^MRN^MRN^SOARF|IC7191227
    ^^MRN^MR^SOARF||CertifyCovidIMG^TestPatientOne^JulyOne^^^^Alternate||19940216|M|WHITE|123 Main
    Street^Next Lane^New York^NY^XYZ123^US^Home||^^^testpat@gmail.com~8560000000^PRNPH^Phone~8560000000
    ^ORNCP|8560000000^WPNPH^^^^^456|ENG|M||AIC7191227^^^FIN^FIN NBR|
PV1||1|Outpatient|FM Glassboro^^^FM Glassboro^^Radiology^FM Glassboro|||04407^Stiefel^Gregory^G.^D.O.
    ^^PRN^NYSIIS^^External Identifier-1649267881^Stiefel^Gregory^G.^D.O.^NPI^NYSIIS^^National
    Provider Identifier|1234567890^CERNER^CERNER^^^^^NPI^NYSIIS^^National Provider
    Identifier~SYSTEMCERNER^CERNER^CERNER^^^^^PRN^NYSIIS^^External Identifier|||||||||Clinic|AIC7191227
    ^^FIN^FIN NBR|Self-Pay|||||||||FM Glassboro|||||20210701091800|
PV2|||||||20210701091800
GT1||1|IC7191227^^^MRN^MR^SOARF|CertifyCovidIMG^TestPatientOne^JulyOne^^^^Alternate||123 Main
    Street^Next Lane^New York^NY^XYZ123^US^Home||^^^testpat@gmail.com~8560000000^PRNPH^Phone~8560000000
    ^ORNCP|8560000000^WPNPH^^^^^456|19940216|M|Default Guarantor|Self|
IN1||1|3008342^CIGNA^^^CIGNA|3244123|CIGNA HealthCare|Po Box 30010^Austin^TX^78755^US||8664942111
    ^WPNPH|||0||2020111000000|||TestPatient^Care^^^^Alternate|Self|20010101|123 NEW STREET^APT 6
    ^FRANKLINVILLE^NJ^08322^US^Mailing~123 NEW STREET^APT 6^FRANKLINVILLE^NJ^08322
    ^TIS^Home^testnat@gmail.com|On File|||||||||Comm|||||||File|||1234567890
MSH|^~\&|MIRTH|||HNA500|20210701133100.719||ACK|20210701133100.719|P|2.3
MSA|AA|IMGA71202191227

```

Ack [0.393 sec]

Receiver

Host / IP: 10.8.1.24 Port: 9500

Bookmark: Optional label, eg <HL7 listener #1>

Expect Ack.

Ack.

Timeout: 10 sec.

Stop on Nack.

Send

Current. All. Start

Next: 1 Stop

Enable logging.

IMG Covid Result.html x CertifyCare x +

caredemo.certifyglobal.net/dashboarddetails

Inspira medical group FM Glassboro Renjini Lallavathy Thursday, 1 July 2021

Total Appointments 2

VISIT CODE	PATIENT NAME	DOB	PHONE NUM...	PROVIDER	QUEUE	AP...
55079	TestPatientOne JulyOne CertifyCov	02/16/1994	(856) 000-0000	GREGORY STIEFEL	1	09:18 A
14971	Imgtestpatinetone	06/28/2021	(790) 450-2377	GREGORY STIEFEL	2	11:25 A

Arrived 0

Search

VISIT CODE	PATIENT NAME	DOB	PHONE NUM...	PROGRESS	QUEUE	AP...
------------	--------------	-----	--------------	----------	-------	-------

There are no Arrived Patients for Today.

IMG Covid Result.html | CertifyCare | Edit patient : testpatientone cert | +

caredemo.certifyglobal.net/patient/patientdetails/577811/1686/109437

Renjini Lailavathy

Edit Patient - TESTPATIENTONE CERTIFYCOVIDIMG

- Personal Information
- Physician Information
- Guarantor Information
- Employment Information
- Emergency Contact Information
- Insurance Information
- Pharmacy Information
- Miscellaneous
- Documents**

Consent Forms

DOCUMENT NAME	DOCUMENT TYPE	RECORDED				
DOCUMENT NAME	ALL	MM DD YYY				
<input type="button" value="Search"/>						
PATIENT NAME	DOB	DOCUMENT NAME	ACCOUNT NUMBER	DOCUMENT TYPE	RECORDED/SIGNED	VIEW DOCS

SmartHL7® Message Sender - [Untitled - from Clipboard]

Load | Copy | Paste | 1/1 | Stats | SmartHL7.com | Smartie.Solutions | About

```

MSH|^~\&|IHN_NJ|FM TomStat|HUB|HUB|20210701091227||ORU^R01|IMGO7120191227||2.3
ZAD|FM TomStat|660 Woodbury-Glassboro Road^Sewell^NJ^08080
PID||IC7191227^^MRN^MRN^SOARF|IC7191227
^^MRN^MR^SOARF||CertifyCovidIMG^TestPatientOne^JulyOne^^^^Alternate||19940216|M||WHITE|123 Main
Street^Next Lane^New York^NY^XYZ123^US^Home||^^^testpat@gmail.com~8560000000^PRNPH^Phone~8560000000
^ORNCP|8560000000^WPNPH^^^^^456|ENG|M||AIC7191227^^FIN^FIN NBR|
PVI||1|Outpatient|FM Glassboro^^^FM Glassboro^^Radiology^FM
Glassboro|||||||||FM Glassboro|||||20210701091800|
QBR|1|A01072021001^HNAME_ORDERID||^QCOV2FLUAB|||20210701103000|||||||1760465603^Herman^Gregory^^M.D.
^^^NPI^Personnel^^^National Provider Identifier|||||20210701103000|||C
OBX|1|TX|3545580997^SARS CoV 2-Q||Negative||Not Detected^Not Detected|A|||F
NTE|1|Result Comment|This nucleic acid amplification test was developed and its performance
NTE|2|Result Comment|characteristics determined by LabCorp Laboratories. Nucleic acid
NTE|3|Result Comment|amplification tests include RT-PCR and TMA. This test has not been
NTE|4|Result Comment|FDA cleared or approved. This test has been authorized by FDA under
NTE|5|Result Comment|an Emergency Use Authorization (EUA). This test is only authorized
NTE|6|Result Comment|for the duration of time the declaration that circumstances exist
NTE|7|Result Comment|justifying the authorization of the emergency use of in vitro

```

Loaded

Receiver	Ack.	Send
Host / IP <input type="text" value="10.8.1.24"/> Port <input type="text" value="9510"/>	Timeout <input type="text" value="10"/> sec.	<input checked="" type="radio"/> Current. <input type="radio"/> All. <input type="radio"/> Next <input type="text" value="1"/>
Bookmark <input type="text" value="Optional label, eg <HL7 listener #1>"/>	<input type="checkbox"/> Stop on Nack.	<input type="button" value="Start"/> <input type="button" value="Stop"/>
<input checked="" type="checkbox"/> Expect Ack.	<input type="checkbox"/> Enable logging.	

SmartHL7® Message Sender - [Untitled - from Clipboard]

Load | Copy | Paste | Stats | SmartHL7.com | Smartie.Solutions | About

```

MSH|^~\&|IHN_NJ|FM TomStat|HUB|HUB|20210701091227||ORU^R01|IMGO71202191227||2.3
ZAD|FM TomStat|660 Woodbury-Glassboro Road^Sewell^NJ^08080
PID||IC7191227^^MRN^MRN^SOARF|IC7191227
    ^^MRN^MR^SOARF||CertifyCovidIMG^TestPatientOne^JulyOne^^^^Alternate||19940216|M||WHITE||123 Main
    Street^Next Lane^New York^NY^XYZ123^US^Home||^^testpat@gmail.com~8560000000^PRNPH^Phone~8560000000
    ^QRNCP|8560000000^WPNPH^^^^456|ENG|M||AIC7191227^^FIN^FIN NBR|
PVI|1|Outpatient|FM Glassboro^^^FM Glassboro^^Radiology^FM
Glassboro|||||||||||||||||FM Glassboro|||||20210701091800|
OBR|1|A01072021001^HNAME_ORDERID||^QCOV2FLUAB|||20210701103000|||||||1760465603^Herman^Gregory^^M.D.
    ^^NPI^Personnel^^National Provider Identifier|||||20210701103000||IC
OBX|1|TX|3545580997^SARS CoV 2-Q||Negative||Not Detected|Not Detected|A|||F
NTE|1|Result Comment|This nucleic acid amplification test was developed and its performance
NTE|2|Result Comment|characteristics determined by LabCorp Laboratories. Nucleic acid
NTE|3|Result Comment|amplification tests include RT-PCR and TMA. This test has not been
NTE|4|Result Comment|FDA cleared or approved. This test has been authorized by FDA under
NTE|5|Result Comment|an Emergency Use Authorization (EUA). This test is only authorized
NTE|6|Result Comment|for the duration of time the declaration that circumstances exist
NTE|7|Result Comment|justifying the authorization of the emergency use of in vitro
MSH|^~\&|HUB|HUB|IHN_NJ|FM TomStat|20210701133242.689||ACK|20210701133242.689|P|2.3
MSA|AA|IMGO71202191227

```

Ack [0.511 sec]

Receiver

Host / IP: 10.8.1.24 Port: 9510

Bookmark: Optional label, eg <HL7 listener #1>

Expect Ack.

Ack.

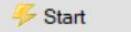
Timeout: 10 sec.

Stop on Nack.

Send

Current. All.

Next: 1 Enable logging.

IMG Covid Result.html x | CertifyCare x | Edit.patient : testpatientone cert x +

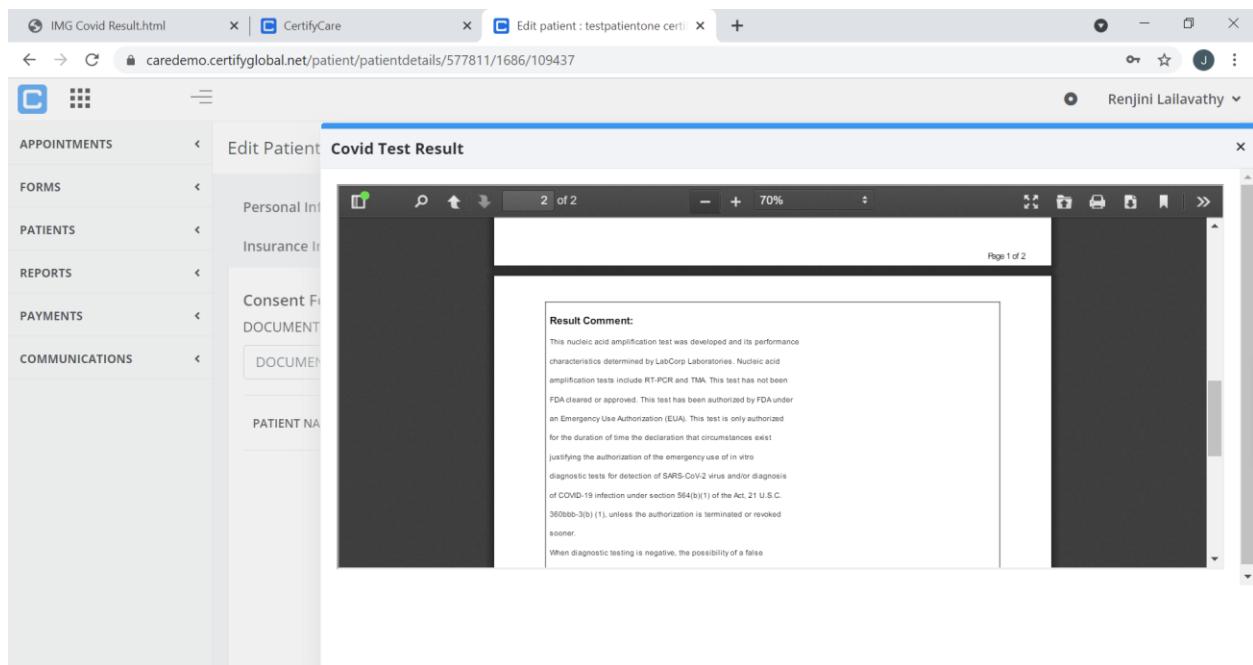
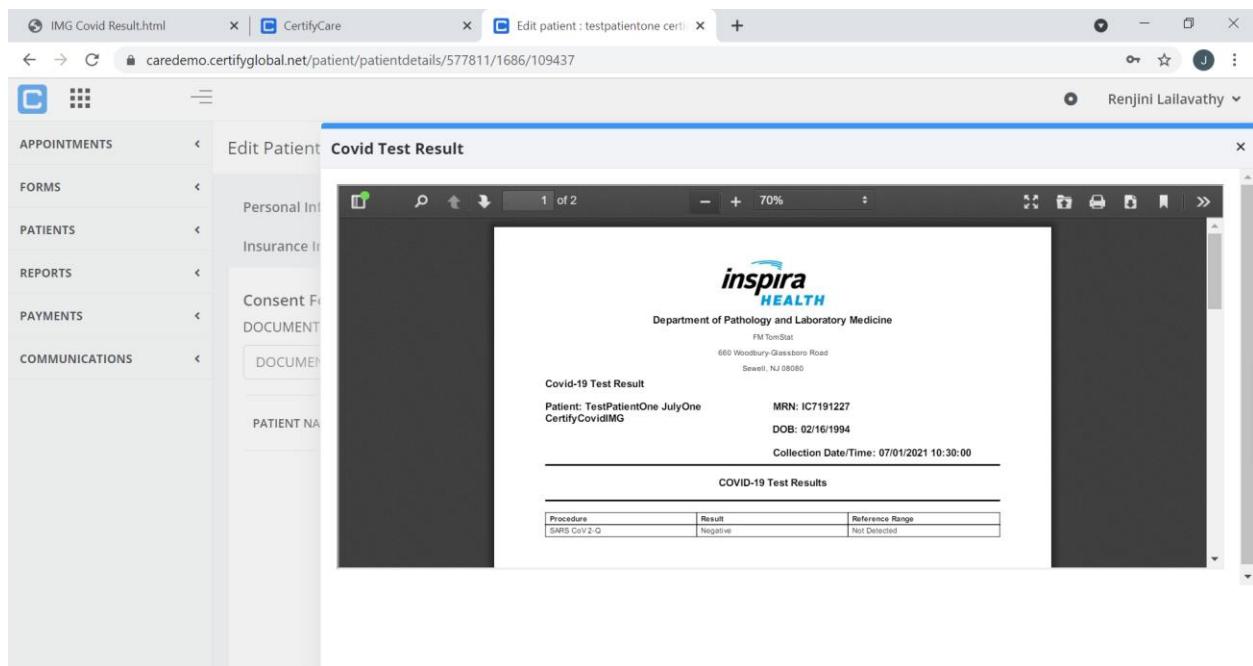
caredemo.certifyglobal.net/patient/patientdetails/577811/1686/109437

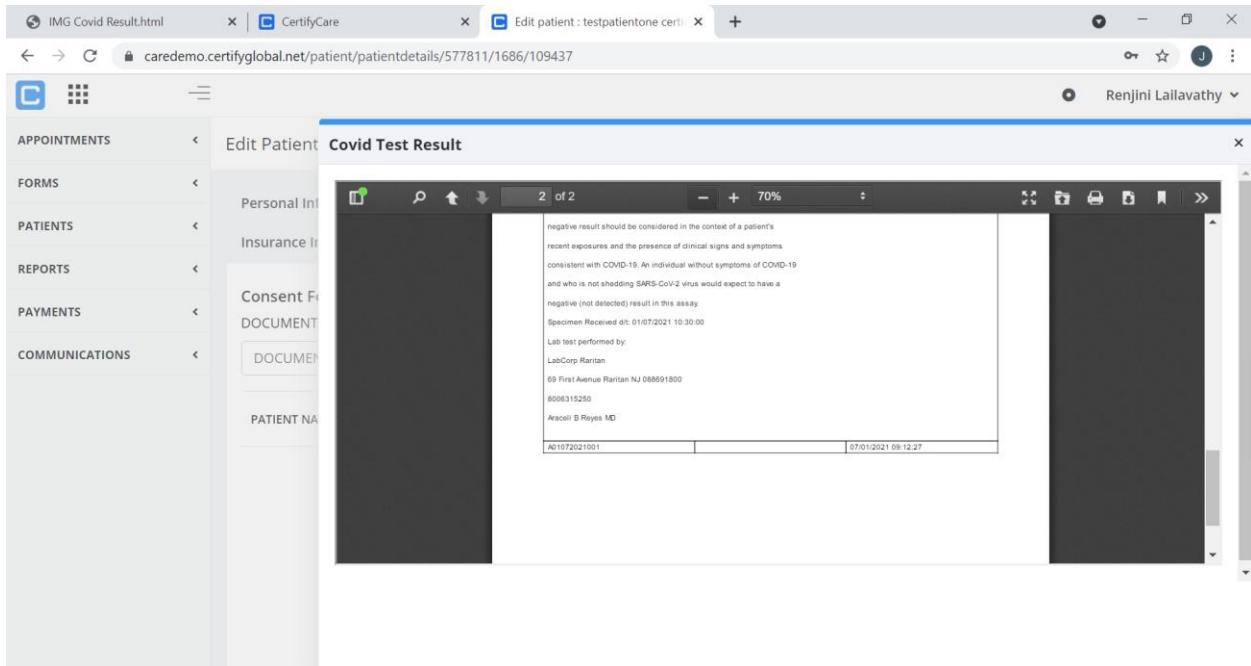
Renjini Lallavathy

Covid Result

PATIENT NAME	ENCOUNTER NO	ACCESSION NO	VIEW	VIEW AUDIT REPORT
TestPatientOne CertifyCovidIMG	AIC7191227	A01072021001		

Save





Drawbacks and further development

- a) Clean the codes and separate CSS, JS and HTML files.
- b) Many segments in HL7 which do not change frequently are hardcoded.
- c) The difference between the admit date/time and discharge date/time JS function is not accurate.
- d) Auto complete the field values.
- e) Create the application as desktop app instead of web app.
- f) Connect to Database to check if value already exist or to validate.
- g) Send the HL7 directly to TCP when submitted without using the SmartHL7 Tool.
- h) Create section in the Output Section to generate JSON values to test in environments without Mirth (Dev and QA).

Existing Modules in the tool.

- 1) AHS
- 2) Inspira IMG
- 3) Inspira UC
- 4) Inspira IMG, UC Covid result testing
- 5) Geisinger
- 6) Geisinger Merge
- 7) UPMC EU Inpatient Multicampus.