

Improving the Patient Experience through Virtual Urgent Care

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VIRTUAL URGENT CARE

Over the years, technology has come a long way and has allowed many, the ability to use video to communicate for a variety of purposes. Telemedicine is defined by the Centers for Medicare and Medicaid Services (CMS) as “a service that seeks to improve a patient’s health, permitting two-way, real-time interactive communication between the patient and the physician at a distant site” (Kichloo, et al., 2020). Telemedicine has been a known, but not widely implemented tool to deliver virtual healthcare.

With the COVID pandemic, healthcare organizations like Dartmouth-Hitchcock Health have had to speed up the process of delivering telemedicine. With the need to practice social distancing, limiting the number of patients in the waiting room and the overall pandemic, it is imperative that we can continue delivering care to prevent potential further harm of patients going untreated. With the decreased volume of patients walking in to be seen, we have the flexibility to incorporate these visits with the existing platform in our electronic health records (EHR).

Aim of the Project

The aim of the project is to improve accessibility for patients with acute needs that may prefer to be seen virtually (especially during the pandemic) or may be medically fragile and probably should not come into a healthcare facility if possible. There is a need to expand the urgent care service at Dartmouth-Hitchcock Health through telemedicine for a multitude of economic, organizational, and financial reasons.

VIRTUAL URGENT CARE

By optimizing telehealth, Dartmouth-Hitchcock can expand its outreach of providing services; to start, by caring for our local community, and in the future, not unrealistically, providing care to patients across the country. An expansion of existing telehealth services into the Urgent Care sector is also anticipated to be a patient and staff satisfier by improving accessibility and convenience for both parties involved.

Background

On March 11th, 2020, COVID-19 is declared a pandemic by the World Health Organization (WHO) (Marin, 2020). With instructions to practice social distancing, quarantine (or refrain from public places and gatherings), and mask wearing as the norm, healthcare organizations saw a dramatic decrease in the number of emergency room visits, and face-to-face outpatient visits being mid-March 2020 (Marin, 2020). The need to expedite the use of telemedicine technology came to the forefront as the healthcare system was forced to use alternate ways to provide care. Telemedicine is a service that is rapidly evolving to provide increased access to high-quality healthcare that is efficient and cost-effective, especially during the current COVID-19 pandemic (Kichloo et al., 2020).

Framework

For the sake of this project, I will utilize the Plan-Do-Study-Act (PDSA) framework for project management. In the 'Planning' phase, it is important to draft an aim statement defining what we are trying to accomplish, how we will know if that a change is an improvement, and if not, what change *can* be made that will be an improvement. In the 'Do' phase, we will

VIRTUAL URGENT CARE

implement an action plan and collect data along the way (Science of improvement: How to improve: Ihi, n.d.).

The 'Study' phase will look at both the 'Plan' and 'Do' phases and will help us determine whether there were improvements made by the project, if the actions were worth the effort, and will hopefully uncover any unintended side effects, whether positive or negative (Science of improvement: How to improve: Ihi, n.d.).

Lastly, in the 'Act' phase, I will reflect on the plan and outcomes and work with internal stakeholders on improving the process as needed. If deemed successful, it is important to create a standardized process but set a timeframe to reassess should further improvements need to be made or there is a change that affects the process (Science of improvement: How to improve: Ihi, n.d.).

Significance

The significance of this project is prevalent in our current health environment with the current COVID-19 pandemic. From an organizational perspective, there are advantages to providing virtual healthcare services. For example, having less patients in the building at the same time enables everyone to practice social distancing as advised by the Center for Disease Control (CDC) (Social Distancing, n.d.).

Telemedicine can potentially aid with staff shortages by eliminating the need to have a medical assistant or other support staff present in the clinic to bring patients into an exam room, perform vitals, and prepare them to be seen by a provider. And according to the Society of Critical Care Medicine, there will be an estimated physician shortage of nearly 125,000 by 2025.

VIRTUAL URGENT CARE

Telemedicine, whether it's used in primary care or a specialty service, can help close this gap and advance the opportunities for physicians to be in contact with patients (Gorman, 2011).

From an economic standpoint, remote healthcare delivery can help slow the spread of COVID-19 as mentioned earlier, by reducing traffic within the clinic. In rural areas, it can improve accessibility to healthcare for those that do not have the means to travel, however, on the flip side could be a deterrent for those without internet access or computers and could be a hindrance. It is imperative that there remains a hybrid approach that continues with non-emergent healthcare services, meaning that options remain to offer in-person visits, home visits, or virtual visits.

For the purpose of this project, the only political significance to the project may be the effect of a new presidential leader and administration, and any new regulations or laws changed surrounding healthcare and reimbursement from Medicare and Medicaid. Dartmouth-Hitchcock has a large demographic of patients with these insurers in our practice. Reviewing data over the last 30 days, the Manchester and Bedford clinics alone saw 15,349 visits of patients with Medicaid or Medicare plans out of a total of 36,155 visits, approximately 42% (Dartmouth-Hitchcock, 2020).

Potential legal issues are relatively significant in that it is imperative that the space where telemedicine will be provided is set up to be private and follow regulations imposed by the Health Insurance Portability and Accountability Act (HIPAA). Concerns over cybersecurity and secure telehealth platforms are to be taken into consideration. Currently, Dartmouth-Hitchcock Health has a zoom platform integrated with its EHR, Epic. It is simple to use, however, there is the ability to send a one-time link to a cellular device or personal email, which in turn, increases the risk of a breach of HIPAA and could jeopardize patient privacy.

VIRTUAL URGENT CARE

There are a couple of ethical issues to consider relevant to the project. By not having face-to-face contact with a patient, the provider must rely on the patient's self-reported symptoms and use advanced critical thinking skills to create a plan for the patient. If the patient is not engaged, quality and safety could be affected (Alsaffar, Almamari, & Futaisi, 2020).

The financial implications of this project are minimal with regards to equipment needed to implement a telehealth setting since the organization already has purchased webcams and additional monitors, as needed. It is also financially advantageous to the organization as there is the potential to reduce costs to the healthcare system in many ways; virtual healthcare could give patients the care they need without unnecessary and costly trips to the emergency room; it can reduce overhead costs for instance, during inclement weather, where providers can continue to provide care from home, without the organization jeopardizing the safety of staff and patients to come into the clinic in person.

Evidence Review

The need for a telemedicine option for patients in an urgent care setting is evident from an organizational, and experiential view. On various interactions with patients via phone or electronic messaging, I have seen firsthand that patients are afraid to come into the healthcare facility, including Dartmouth-Hitchcock. They are nervous about possibly being exposed to a new, unknown, and potentially fatal virus, particularly those who are immuno-compromised or live with someone who is.

Evidence showed that the United States saw a 42% reduction in emergency department visits at the onset of the COVID-19 pandemic (Marin, 2020). Even the Mayo Clinic, who

VIRTUAL URGENT CARE

reportedly sees 1.2 million patients annually, saw a 78% drop of in-person visits from mid-March to mid-June 2020 (Marin, 2020).

Stakeholders both internal to the organization and external, such as patients, have expressed positive feedback through Press Ganey Patient Satisfaction surveys about their telehealth experiences thus far, in other departments within Dartmouth-Hitchcock. Press Ganey is an external organization that Dartmouth-Hitchcock works with to send surveys soliciting patient feedback from ease of access to contact the office, through the entirety of their visit, and aftercare (Patient Experience, n.d.).

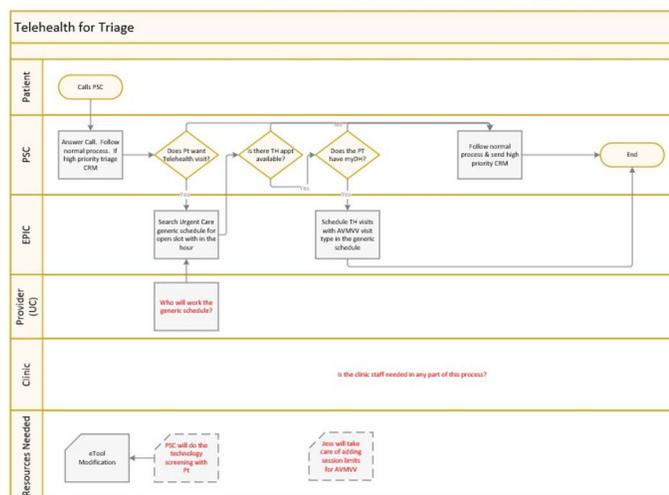
From the patient feedback and organization needs, Dartmouth-Hitchcock Health sees Telehealth expansion in Urgent Care as a necessary step in our expansion of services and is fully supportive of such initiatives across the community group practices (CGPs).

Methods

There are various methods that will be used to implement virtual visits into Dartmouth-Hitchcock's existing Urgent Care setting. Prior to go-live, I will spend two weeks providing at-elbow training to the scheduling staff and providers with regards to the workflow of virtual visits from registering and arriving them for a visit, and navigating the patient visit through the EHR, Epic Hyperspace. This training will include a scheduled mock visit where I will sit with the staff and each provider and walk through a visit together. Lastly for training, I will educate the urgent care staff on how to help patients (and providers) troubleshoot basic technical issues that may arise before and during the visit.

References documents will include a flowchart of the process from start to finish. These will be made available to staff as a reference. See complete workflow below.

VIRTUAL URGENT CARE



Training materials will be provided to the Patient Service Center (PSC) representatives that receive all incoming calls to the clinic. These materials will include symptom-based decision trees that will exist in their current e-Tool. If clinically appropriate, the PSC representative will be brought to sample instructions and scripting below guiding them to schedule a virtual visit.

Please note instructions will updated to reflect correct department of Man Urgent Care prior to go-live.

<p>YES, patient WANTS a MyD-H Video Visit</p>	<p>a. Book the appointment using Scheduling myDH Visits [All] Guidelines, with the following EXCEPTIONS:</p> <ul style="list-style-type: none"> • Visit Type: AVMVV • Provider: Search by Department MAN PEDIATRICS • Appointment Notes: Include symptom(s) • Timeframe: <ul style="list-style-type: none"> ○ Call time of 8:00 a.m. - 12:00 p.m.: Schedule same day as call ○ Call time of 12:01 p.m. - 5:00 p.m.: Schedule up to 12:00 p.m. the next day ◇ EXCEPTION: If no appointments are available within the specified timeframe, send a Triage > Triage <p>b. ADVISE: "I have scheduled an appointment for <<date >> at <<time>>. The provider will call you within an hour from that time. Your appointment is at <<time>> and the provider will call you by <<one hour after the appointment time>>.</p> <p>c. ADVISE: "If your symptoms worsen or you become concerned, please call us back or call 911."</p>
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Additionally, the following job aids will be made available both in paper and electronic forms: MyD-H Video Visit: Connecting a Video Visit- Laptop or Computer with Webcam

VIRTUAL URGENT CARE

(Appendix A); MyD-H Video Visit: How to Send a Zoom™ Link (Appendix B); and MyD-H Video Visit: Scheduler Guide (Appendix C).

Deliverables

Internal project deliverables to Dartmouth-Hitchcock Health will include a binder with all relevant training materials and references. These materials can be shared with other group practices and implemented throughout their local urgent care departments. Productivity data and patient satisfaction results will be shared quarterly with the Medical Director and Associate Medical Director at Operational Huddles. Additionally, the same information will be shared with department leadership and staff via monthly department meetings. Stakeholder feedback will also be solicited during these meetings. There will be a continual review of what is working in the process and what is not, and whether adjustments need to be made to the flow.

External project deliverables will include an expansion of existing urgent care services to Dartmouth-Hitchcock patients. We anticipate by offering this service, we will improve accessibility and convenience, therefore contributing to an overall improved patient experience.

Project Findings

Implementation of this project has been delayed by department leadership due to an unforeseen provider shortage. The goal is to have three providers on each day with one dedicated to virtual visits. At this time, that is not feasible, therefore, the anticipated go-live date is now March 29, 2021. As for next steps, I will spend the following couple of weeks providing the outlined one-on-one staff and provider training from beginning to end, including scheduling to initiating and completing a virtual visit through the Zoom telehealth platform in the EHR.

VIRTUAL URGENT CARE

Additionally, I will provide any reference materials for future state and provide continual support to the department as needed. As these appointments begin, I will solicit feedback from staff and providers, as well as, monitor incoming patient satisfaction scores which have been updated to include questions regarding telehealth and their experience.

Implications

I anticipate that the implications of this project will benefit the department and overall organization financially in that we could see an increase in patient volume/visits while overhead costs for staffing may decrease. Another implication, and what I am hopeful for this project, is that we will see increased patient satisfaction by offering a virtual service for acute needs. This could be for a couple of reasons, whether convenience or preference in our current state with the COVID-19 pandemic.

Challenges and accomplishments

One of the challenges of this project was deciding upon symptoms that could be appropriately offered through telehealth. Additionally, as I mentioned, having to delay the anticipated go-live date by several weeks was a challenge for the completion of my project and affected my ability to gather and deliver preliminary findings.

Accomplishments include the overall expansion of a service that will be provided to Dartmouth-Hitchcock patients. This could prove to be beneficial both to the organization but most importantly, the patients. I feel accomplished to have worked beside other members of Dartmouth-Hitchcock leadership and the Urgent Care department to put together the specific details of the process and have it come to fruition. I know that this will be a welcomed service to

VIRTUAL URGENT CARE

patients as it has been successful in our Primary Care and Specialty departments within Dartmouth-Hitchcock.

Recommendations

Recommendations upon go-live include frequent monitoring of patient feedback, addressing any technological issues that may arise, and soliciting feedback from staff and providers in the Urgent Care department. Continual monitoring to any changes in the process should occur on a regular basis and results shared with organizational leadership.

myD-H Video Visit: Connecting a Video Visit – Laptop or Computer with Webcam

You can now complete Telehealth encounters with patients using eD-H for D-H staff, myD-H for patients and Zoom!

Starting the Visit

Within eD-H Hyperspace, open the department or provider schedule to find the scheduled visit. The multiple provider schedule **Video** column will tell you if the patient or proxy has entered the video visit. See the [Technology Setup for myD-H Video Visit tipsheet, #TT0798](#), on how to add this column).

The camera icon will change from an *outline* of a camera  to a *filled in* camera  once the patient or proxy has joined. Hovering over the camera icon will tell you who is signed into the meeting.

1. From your schedule, double click on the patient row to enter the encounter.



Status	Patient Name (preferred)	Time	Appt Type	Video	Age/Gender	Sex	myD-H
Scheduled	Nr-Poc, Kimmy (Kat)	9:00 AM	TELEPHONE OFFICE VISIT		41 y.o. F		4/28
Scheduled	Test-Poc, Jess	10:20 AM	MYD-H VIDEO VISIT NEW		38 y.o. M		proxy (users)
Checked Out	Caves, Reef (Rocky)	12:00 PM	MYD-H VIDEO VISIT NEW		49 y.o. / M	M	Active

2. Within the encounter, the **Rooming** tab is the same as it is today for Telehealth Encounters; use the **TeleHealth Requirement** section to indicate how the visit was completed.
3. There is a new activity tab now in the myD-H video visit encounter: select the  **Connect** tab along the top of the workspace to launch the video visit.
 1. Multiple providers and care team members can join the video visit with the patient. The additional users open the same scheduled encounter from the provider's schedule and use the **Connect** tab the same way the original provider did to join the visit. There is no limit on how many people can join.

VIRTUAL URGENT CARE

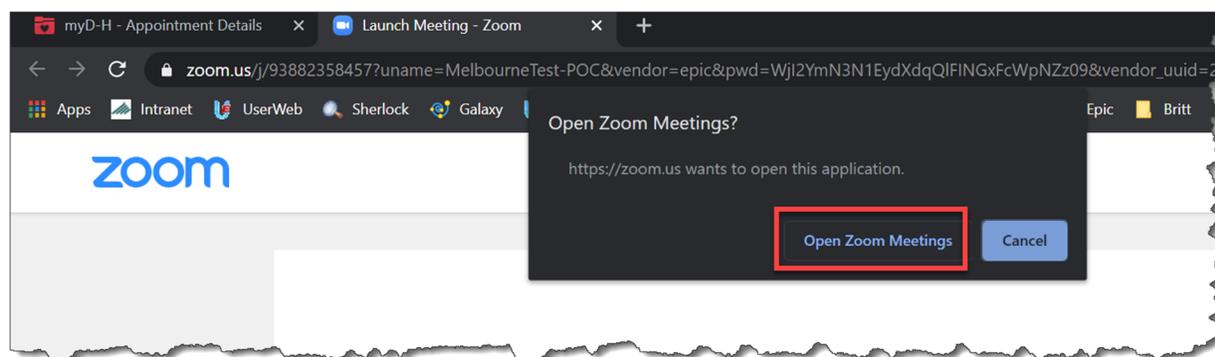
Video Visit To



launch the video connection on your laptop or computer with webcam.

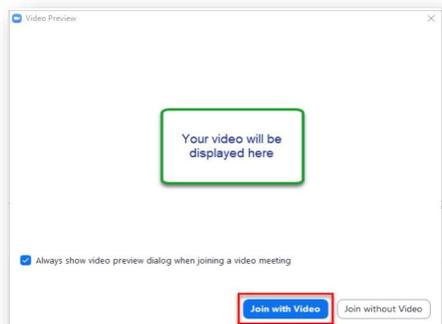
Launching Zoom for Video Connection

1. Your computer will open your default web browser, click **Open Zoom Meetings** on the pop-up window that appears (for instructions on downloading Zoom prior to the visit, please see [Technology Setup for myD-H Video Visit tipsheet, #TT0798](#))



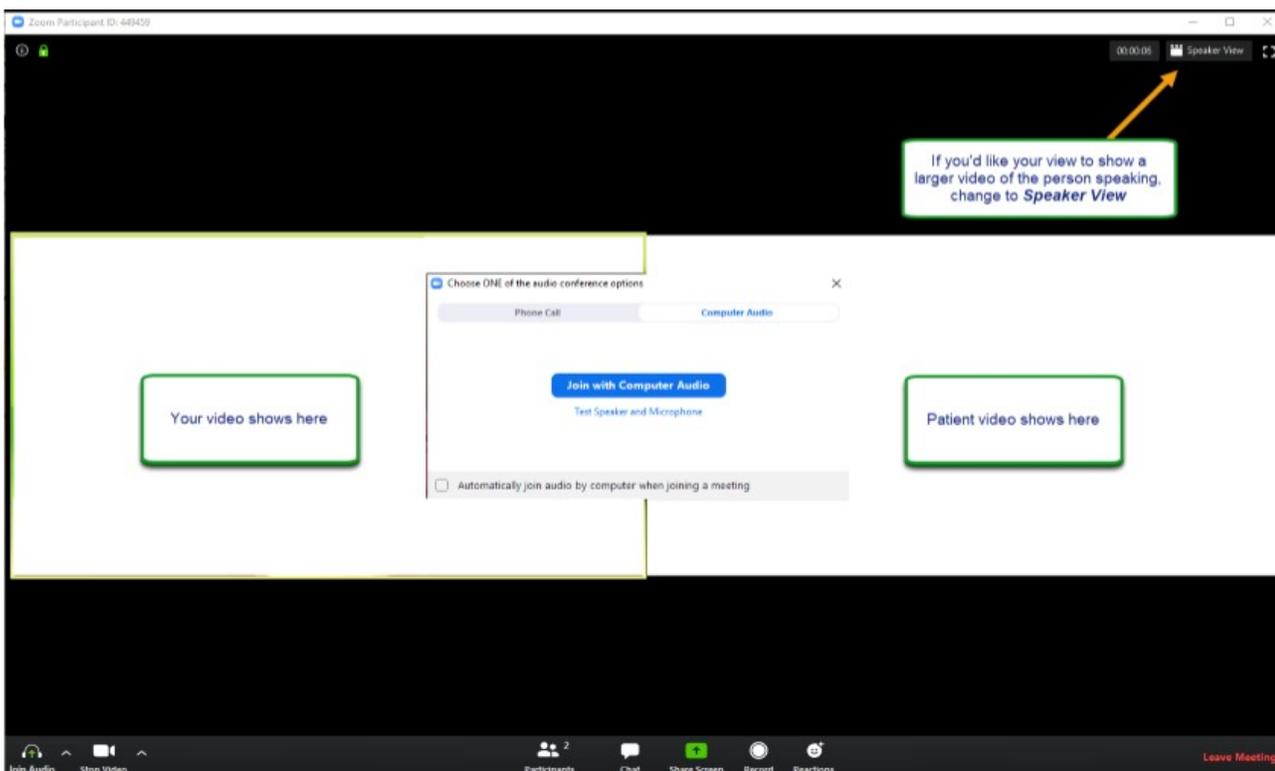
2. Click **Join with Video** to allow your patient to see you in the video visit.

**Note:* if you do not want to see this prompt for every visit, *uncheck* the checkbox that asks if you would always like to show this preview box when joining a video meeting.



VIRTUAL URGENT CARE

3. You will then be asked how you want to connect to the audio portion of the video visit; using your mobile device is recommend:
 1. *Phone Call*– if you choose to use your phone, you will need to call one of the available phone numbers listed and enter your Meeting ID and Participant ID.
 2. *Computer Audio*– you can use your computer for audio; ensure your microphone settings are on if you select this option.

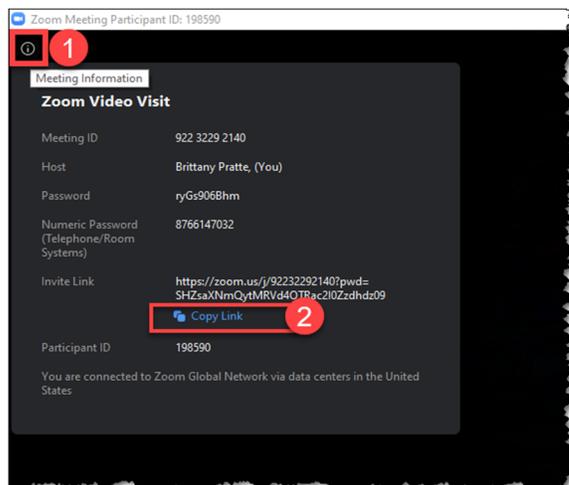


Send the Zoom Meeting Link

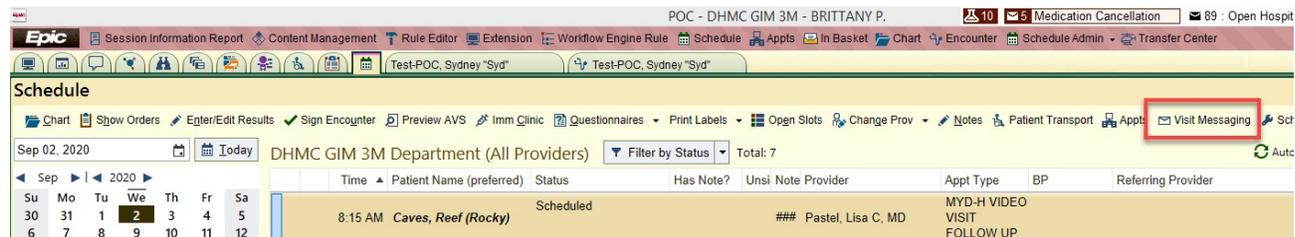
Once someone from D-HH has joined the Zoom meeting, the option is available to send the meeting link to the patient, if they did not have a myD-H account or were unable to log in, or another person outside of the D-HH care team.

1. In the top left corner of the screen, select **Meeting Information**.
2. In the *Invite Link* section, click the **Copy Link** button.

VIRTUAL URGENT CARE



3. If sending the link to a patient, open your eD-H screen and navigate to the schedule.
4. Highlight the patient and click **Visit Messaging**.



5. Paste the link into the body of the message, and click send.

Note: See [TT0785: Send 1-Way Text Messages to Patients and Visit Contacts](#) tip sheet for more information on this feature.

myD-H Video Visit – How to Manually Send a Zoom™ Link

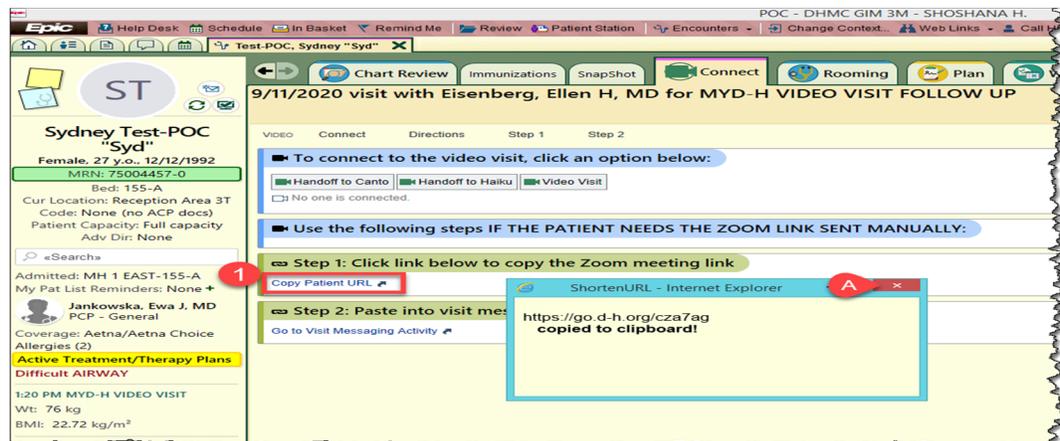
Patients can now connect virtually with their provider through a myD-H Video Visit. This workflow works most seamlessly when patients have an active myD-H account. Because of this, we strongly recommend clinics to encourage patients to enroll in myD-H if they do not yet have an active account. If the patient ultimately declines activating their myD-H account, the below document highlights an alternative workflow that can be used to manually send the patient the Zoom™ meeting link, all from within the Connect tab of the encounter in eD-H.

NEW & IMPROVED WORKFLOW! Previously you may have seen a way to send the Zoom™ meeting link from within Zoom, you can still do that. This is a new and improved way that may save clicks.

Send the Zoom Meeting Link

Prior to the visit, a care team member looking at the schedule will see the Appointment Note added by the scheduler indicating this patient needs the link manually sent to them. Since the scheduler populated the Visit Contact at the time of scheduling, the care team member can efficiently send the meeting link to the patient from within eD-H.

1. On the Connect tab, in the *Step 1* section, click the **Copy Patient URL**  link.
 - A) This will copy the Zoom meeting link to your clipboard. Click the X on the pop-up window



2. In the *Step 2* section, click the **Go to Visit Messaging Activity**  link.



- A) Right-click in the text box.
 B) Select  **Paste** (or CTRL + V). This will paste the URL from your clipboard.
 C) Click  **Send**.
 D) View **Message History** to verify that the link has been sent.

Once the patient clicks to open the link that was sent, Zoom will launch on the patient's device. If the patient already has Zoom downloaded, it will bring them right into the video visit; if not it will prompt them to download before joining.

Appendix C

Audience: Schedulers

myD-H Video Visit – Scheduler Guide

Patients can now connect virtually with their provider through a myD-H Video Visit. Prior to scheduling a myD-H Video Visit, you will need to confirm that the patient has an active myD-H account as this is where the link is for the patient to join the visit. If the patient has a smartphone, please encourage the patient to use their device for the visit, accessing the myChart app to launch the visit, and share their video and audio. For pediatric patients, please notify the caller that whoever will be with the child during the video visit has to have access to the myD-H proxy account to be able to join the myD-H Video Visit.

Schedule the Video Visit – myD-H Active Patient

New visit types have been created in eD-H to be used for scheduling the myD-H Video Visits. The two main visit types are: *myD-H Video Visit New (NMVV)* and *myD-H Video Visit Follow Up (FUMVV)*. Departments can submit a DHSM ticket to request access to more specific myD-H video visit types. These visits are scheduled the same way the THHN and THHF visits were previously scheduled and also link to the same visit type blocks. The major difference with the myD-H Video Visit framework is that the workflow works most seamless if the patient has an active myD-H account to join a video visit with their provider.

1. Open the patient's Appt Desk and select **Make Appointment**.
2. In the patient's Storyboard (left side of screen), hover over the **myD-H status icon** to verify the patient has an active myD-H account.
3. If the patient has an active myD-H account, in the **Visit type** field select one of the myD-H Video Visit types.

VIRTUAL URGENT CARE

Make Appointment

Department: DHMC GIM 3M [10610140] Appt notes:

Visit type: PxDx Provider or resource:

Select Visit Type

Specialty List	General List
HOSPITAL CHECK [117019]	BILLING ONLY [117268]
INJECTION [117006]	PLACEHOLDER VIEW ONLY [117112]
MEDICATION ASSISTED TREATMENT [117287]	TELEHEALTH HOME FOLLOW UP [117280]
MEDICATION ASST TREATMENT EXT [117288]	TELEHEALTH HOME NEW [117279]
MYD-H VIDEO VISIT FOLLOW UP [117450]	TELEHEALTH MAINE [1170519]
MYD-H VIDEO VISIT NEW [117449]	TELEHEALTH MASS [1170520]
NEW ACUTE VISIT [117261]	TELEPHONE OFFICE VISIT [117451]
NEW PATIENT [117001]	URGENT VISIT [117258]
NO CHARGE VISIT [117071]	
NURSE VISIT [117008]	MRI ABDOMEN AND PELVIS WO CONTRAST IV SED PAN [2:
NUTRITION NEW [117159]	Procedures
NUTRITION VISIT [117126]	Pools
	MRI IV SEDATION NURSE MRI POOL IV NURSE

Accept Cancel

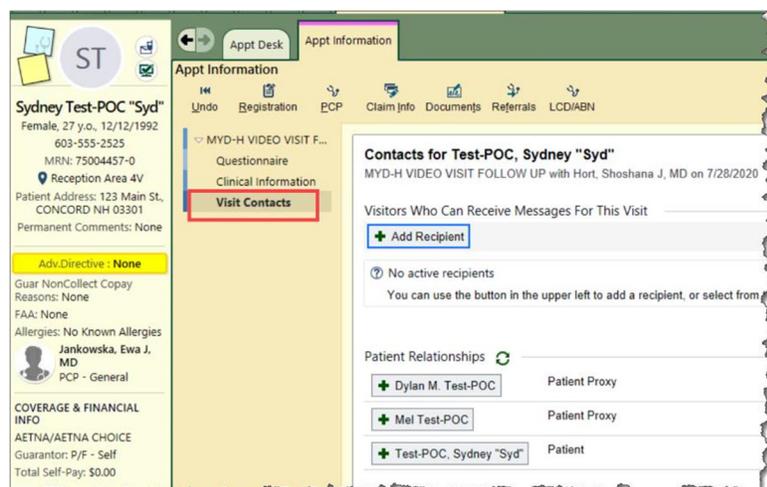
**Note:* Patients will see the myD-H Video Visits on reminder letters, as well as on the AVS under the *Upcoming Appts* section. Patients will also receive a TeleVox reminder call for these appointments.

Specify a Visit Contact for the Video Visit

If the need arises to notify a patient regarding their provider's status (ex. running a few minutes behind schedule), the option is now available in eD-H to send a 1-way text message directly to a patient or their designated visit contact(s). When scheduling the video visit appointment, you can specify the visit contact information so that it is ready to be used on the day of the visit. View the [Send 1-Way Text Messages to Patients and Visit Contacts Tip Sheet \(TT0785\)](#) for full details to on this workflow to see if it would align with your department's workflows.

1. On the Appt Information page, select **Visit Contacts**.
2. Specify the Visit Contact(s) and confirm the phone number or email address (see tip sheet for full details).

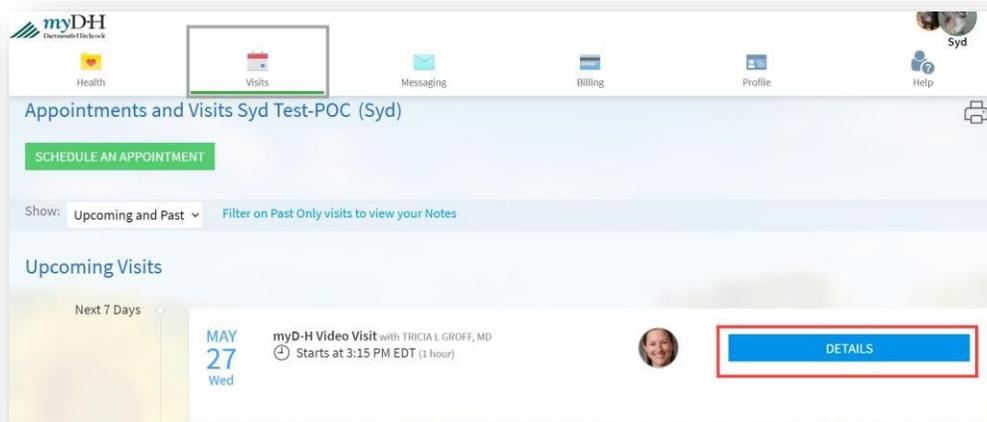
VIRTUAL URGENT CARE



Patient Information for Video Visit

Once the myD-H Video Visit is scheduled, you can review the next steps for the patient on how they can prepare for their video visit and how to connect to the visit on the day of the appointment. It is recommend that patients use their smartphone or tablet to join the visit, because the microphone settings are typically already configured appropriately.

1. Remind the patient that their visit will show in their myD-H portal on the visits tab under 'Upcoming Visits'.
2. Upon clicking **Details** the patient will find visit instructions and additional information regarding their visit.



3. Within the Appointment Details the patient will find the below:
 1. **Visit Instructions** – PDF instructions on how to get setup for the visit and how to join the day of the visit
 2. **Links to Download Zoom** – three link options based on which type of device the patient is using

VIRTUAL URGENT CARE

- 3. **Begin Video Visit** – button used to join the video visit when the appointment date/time arrives

myDH
Dartmouth-Hitchcock

Health Visits Messaging Billing Profile Help

Appointment Details (Syd)

myD-H Video Visit with TRICIA L GROFF, MD

Wednesday May 27, 2020
3:15 PM EDT (1 hour)
[Add to Calendar](#)

This appointment cannot be canceled online.
To cancel, please call 603-653-9663.

It's time to start your video visit!

CONFIRM
Let staff know you don't need a reminder call.

BEGIN VIDEO VISIT
When you are ready to talk to your doctor, click the button.

1 Want an earlier time? [Get on the Wait List](#)

2 Visit Instructions
Please view full home visit instructions [here](#).

3 **Link to Video Visit Patient Instruction Guide**

Links to download Zoom
[For all desktops/laptops](#)
[For Android devices](#)
[For Apple/iOS devices](#)

Patient clicks this button to join visit

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