Telemedicine and Team-Based Care

Improve Patient Care and Team Engagement by Using Team-Based Care in Telemedicine

Kevin Hopkins, MD
Primary Care Medical Director, West Region, Cleveland Clinic Community Care

James Jerzak, MD
Physician Lead, Team-Based Care, Bellin Health

Christine A. Sinsky, MD, MACP
Vice President, Professional Satisfaction, American Medical Association

Acknowledgments: We thank Dr Vimal Mishra and Dr Robert Findling for their critical review of this toolkit.

How Will This Toolkit Help Me?

Learning Objectives:

1. Explain the essentials of a team-based care approach to care delivery
2. Describe telemedicine acceleration, advantages, and opportunities
3. Identify how to implement team-based care into telemedicine
Introduction

In the spring of 2020, the COVID-19 pandemic accelerated the adoption of telemedicine (virtual visits) among patients, health care professionals, and health systems. In this toolkit, we share new team-based care models for telemedicine based on recent institutional successes in the era of COVID-19. While many health systems plan to continue using telemedicine beyond COVID-19, the focus of this toolkit is how to optimize telemedicine in the context of the current public health emergency.

Physician-led team-based care (TBC) is a cornerstone of practice sustainability, and great strides have been made in developing and implementing team-based care models to support traditional in-office medical practices over the past decade. However, our experience with care delivered via telemedicine platforms has been limited until now and has generally not undergone the same team-based care innovations. The “doctor-does-it-all” model is no more sustainable in a telemedicine environment than it is in a traditional in-office practice model. While advantageous, a pre-existing in-office team-based care practice model is not necessary for the successful incorporation of team-based care into telemedicine.

Figure 1. What is Team-Based Care?
A comprehensive approach to health care delivery transformation, including:

Office visit redesign, including delegated and shared care responsibilities, individual caregivers functioning at the level of their qualifications, and an advanced role for empowered medical assistants or licensed practical nurse (LPNs) with additional skills and training, including real-time in-room documentation and data entry support

In-between visit redesign emphasizing a team approach with all team members working at the top of their skillsets

Focus on population health, utilization of system and community resources, to achieve and maintain optimal health and well-being of the empaneled patient population

A team-based care model (Figure 1) is a higher-efficiency practice model, designed to:

• Increase accessibility
• Improve quality of patient care
• Increase patient access to care
• Improve care team efficiency
• Improve satisfaction and engagement for patients and health care professionals alike
Though this model has been shown to decrease clinician burnout and improve professional satisfaction in a financially sustainable way, the ultimate goal is to improve the health of the patient population. Enhanced team engagement with patients, improved quality measures, and the clinician's greater ability to give their full attention to the patient during the interaction are powerful reasons to implement team-based care.

Q&A

What policy changes have been made to facilitate virtual visits during the COVID-19 public health emergency (PHE)?

The Centers for Medicare & Medicaid Services (CMS) has made the following accommodations during the COVID-19 PHE:

- Medicare will pay the same rates for telehealth services as they do for in-person visits for all diagnoses throughout the PHE
- Patients all over the country are eligible for telehealth services during the PHE, not just those in rural areas
- Patients can be in their home, or any other setting, to receive telehealth services
- Patients do not need to have an existing relationship with the physician who is providing telehealth assistance
- Physicians are allowed to waive or reduce costs for telehealth visits
- Physicians may furnish telehealth services outside their state of enrollment; however, they must still adhere to state licensure laws and regulations
- As a temporary waiver, physicians can bill for “audio-only” (telephone) visits as telehealth encounters

During the PHE, some states have temporarily waived licensure requirements, created temporary licenses, or created registration systems for physicians licensed in one state to provide care for patients in a different state. Many of these measures were established through executive order or temporary regulations. As such, requirements vary by state and have different dates of expiration.

Note that waivers and exceptions made by state and federal agencies, through gubernatorial executive order, and by private payers relating to the national PHE are limited in duration unless further action is taken by those policymakers and payers to make them permanent. It is important to seek the advice of qualified advisors, including legal counsel, to help you understand these important issues before making decisions that will extend beyond the term of the current PHE.

What if the patient does not have access to video technology?

Technology limitations can be a significant issue for patients who may not have broadband access, do not own a device with video capability, or are uncomfortable with video technology. In these cases, telephone visits can be quite useful in allowing access to medical care for this segment of the patient population. Extending the current temporary CMS waiver that allows for “audio-only” visits to be paid as telehealth encounters is being actively discussed, but there is no assurance that it will extend beyond the current PHE.
Five STEPS to Implement Team-Based Care Into Telemedicine

1. Define and Engage the Team
2. Choose a Model
3. Develop Team-Based Care Workflows
4. Implement Workflows
5. Iterate and Optimize the Model

Define and Engage the Team

Identify the people who are key to team success. Start with those team members you work most closely with every day. What do they do now to contribute to patient care? Who do you think you need on the team and why? Engage them in dialogue about the need for change. Have individual conversations to share your vision until your vision becomes shared. Bring people together to discuss the opportunity to build a better way to care for patients. Value the perspective and experience of each person. Empower individuals in order to empower the team.

In addition to the physician, consider including:
- Nurse practitioners and/or physicians assistants
- IT partners
- Nursing team members
- Medical assistants (MAs)
- Administrative/clerical team members
Choose a Model

There are 2 general models for team-based care for telemedicine: **synchronous support** and **asynchronous support** (Figure 2).

**Figure 2. Two Telemedicine Team-Based Care Models: Synchronous Support and Asynchronous Support**

**Synchronous Support**
Synchronous support occurs when a clinical team member (usually a medical assistant) is present—physically or virtually—with the physician and patient during the entire virtual visit. This allows the physician to focus fully on the patient while the medical assistant helps with real-time documentation of important data in the electronic health record (EHR).

**Asynchronous Support**
Asynchronous support occurs when a clinical team member does not remain present (physically or virtually) with the physician and patient during the visit, but helps with pre-visit planning and virtual rooming before the visit. Asynchronous support may be necessary due to staffing limitations or to maintain safe physical distancing. With this type of support, the team member can still perform many of the clerical EHR tasks during the virtual “rooming” process. This work includes pending refills and other orders, addressing health maintenance, closing care gaps, scheduling follow-ups, and starting the documentation for the encounter.

For both synchronous and asynchronous models, physical co-location of the physician and medical assistant (eg, together in the office as opposed to working from home) has definite advantages, but may not always be practical. While asynchronous telemedicine visits can be streamlined with either physical co-location or separate locations (work from home), synchronous telemedicine visits are challenging without co-location with the current state of technology. Some virtual visit platforms include an option to invite an additional virtual participant other than the clinician and the patient, and the use of these technologies is evolving rapidly.

Each model has pros and cons, and it is important to discuss both options as a team. Which makes the most sense for your team? Consider which model your current staffing may best be able to support. Discuss how you might adapt one of the models to your specific practice situation. Commit together to give it a try, and learn from your collective experience, recognizing that you/your team can always make changes. It will also be important to confirm that the model will be recognized and accepted by all of your practice’s payers.

Telemedicine team-based care models vary from practice to practice and are dependent on the practice’s staffing model as well as individual state laws and regulations. Table 1 shares example synchronous and asynchronous models that you may find work for your practice.
Table 1. Team-Based Care Models for Telemedicine

<table>
<thead>
<tr>
<th>Model of Teamwork</th>
<th>Description</th>
<th>Workflow</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
</table>
| **Synchronous (real-time) “in-room” support** | Video or phone visit with a nurse or MA present from start to finish | **Pre-visit:** The nurse or MA virtually rooms the patient by setting the agenda, reviewing medication and refills, closing care gaps, assessing home vitals, and reviewing any pre-visit lab results. They may also complete pre-charting as appropriate.  
**Visit:** The nurse or MA stays online, drafting visit notes (using documentation templates when able), pending orders, and completing billing in real-time, under physician direction  
**Post-visit:** The nurse or MA reviews the visit notes and next steps with the patient, engages the patient in self-management support as appropriate, and arranges for the patient’s next visit, either in-person or virtual, along with pre-visit lab testing; the physician reviews and completes visit documentation, signs orders, and verifies billing | • Patient and care team member engagement  
• Ability for physician to focus on patient  
• Less physician burnout  
• Increase professional satisfaction  
• Physician–MA partnership  
• More complete documentation support  
• Increased efficiency | • Additional team members likely necessary  
• Additional training necessary  
• Difficult when physician and MA cannot be co-located in the same office |
| **Asynchronous support** | Video or phone visit with a nurse or MA present during portions of the encounter | **Pre-visit:** The nurse or MA virtually rooms the patient by setting the agenda, reviewing medication and refills, closing care gaps, assessing home vitals, and reviewing any pre-visit lab results. They may also complete pre-charting as appropriate. (This may include pulling up a problem-focused note template and drafting the majority of the visit documentation, along with scheduling the next appointment and pending pre-visit labs.)  
**Visit:** The nurse or MA virtually hands the patient off to the physician  
**Post-visit:** The physician edits and completes the visit note documentation and orders, though much of the data entry is anticipated to be accomplished during pre-charting by the nurse or MA | • Use existing team members  
• Time for other work by the MA during visits  
• Can be readily streamlined for either co-located spaces or separate locations (work from home)  
• Still more efficient than “usual care” (no support) model | • Less than optimal EHR support  
• Increased patient handoffs  
• Risk of reverting to usual care model |
What virtual platforms can we use for video visits?

EHR-integrated platforms often require patients to be signed up for the patient portal. There are certainly advantages to this type of system, but it may also be a barrier for some patients. Publicly available video chat apps may also be an option, during and potentially after the PHE, depending on their security features, and these platforms continue to be actively developed. Whatever system you use, make the process as simple as possible for patients while ensuring patient information will remain private and secure.

Where should we perform the virtual visit?

The flexibility of virtual visits during the PHE is an advantage. The visit can be done in an exam room, a clinician office, or a physician's home. The ability for physicians to perform virtual visits from home is useful for quarantine requirements following a COVID exposure or during recovery, for creating virtual “clinic space” when distancing requirements limit use of actual clinic space, or simply for convenience and work–life balance.

Should virtual visits be scheduled anytime during the day, or should they be scheduled during dedicated time slots?

If the volume of virtual visits is relatively low, you can schedule them at whatever appointment times are open. However, as virtual visits become more common, it can be helpful to group these visits into specific time periods. This can improve efficiency, as you and your team can focus on virtual visits without having to do face-to-face visits in between. This increases the likelihood that you can start each video visit on time. The “Practice Pearls” in STEP 5 describe the experiences of other practices who have seen success with virtual visits.

What type of training can help team members perform these enhanced roles?

Education on enhanced team-based roles is not part of the usual medical assistant or LPN curriculum. Most systems need to develop additional training for their team members. Documentation training, population health training, medication reviews, and expanded EHR training (order entry, health maintenance review, appointment scheduling) can be very useful. Standardized documentation templates can make their work in documentation support more streamlined.

Do we need to hire more MAs, LPNs, or other support team members to allow for team-based EHR support?

In traditional team-based care models, increasing staffing support for clinicians allows for robust in-room support, and in turn, increases team engagement and clinician satisfaction, and is financially sustainable. However, many team-based care principles can be utilized even if there are staffing challenges. For example, enhanced virtual rooming, including care gap closure, medication review, refill pending, and setting up and starting documentation templates can all be done the same as face-to-face visits.

For synchronous visits, how do patients react to having another person in the virtual “room” during the visit?

We have found that if the physician explains that there will be a medical assistant present whose role is to ensure accurate documentation, order entry, and follow-up so the physician can remain focused on the patient, most patients accept and welcome the additional medical professional helping with their visit. Many patients even see it as an opportunity to have another advocate for their health care and develop close relationships with the assistant over time.

The introductory explanation is especially important for patients who are new to the team care process or are new to telemedicine. It may also be reassuring to let patients know that it is no problem if they want to be alone with their physician. In addition, if the physician or assistant senses that the patient is uncomfortable—such as during certain sensitive parts of the visit—the assistant may leave the virtual room.
Develop Team-Based Care Workflows

After a model is chosen, more detailed workflows can be developed. Look to existing standard work as a starting point. Adapt existing workflows for the telemedicine platform, or co-create new ones. Aim to mirror patient and caregiver experience with that of in-office encounters.

The process of developing a workflow should include:

1. Creating a workflow diagram with specific tasks and responsibilities associated with each step in the patient journey
2. Bringing the team together to discuss which role is most appropriate for each duty
3. Clearly defining and assigning the roles and responsibilities of each team member

Example Workflows: Team-Based Care Virtual Visits

Two practices share their approaches to successful virtual visits. While Bellin Health uses a synchronous approach, Cleveland Clinic uses an asynchronous approach.

As you develop the ideal workflow for your practice, consider incorporating an assessment of the conditions that may be most appropriate for in-person or virtual visits.

In-Person or Virtual Visit?

A guide with considerations to help you and your team determine whether an in-person or virtual visit is warranted.

Q&A

Who should initiate the virtual visit and how can EHR support (documentation, order entry, scheduling) be provided during the visit by team members?

It is preferable that team members initiate the visit, which allows them to perform virtual rooming. If the physician and team are co-located in the same office area, the team member can initiate the visit on a smartphone, tablet, desktop computer, or laptop, then hand off the visit to the clinician. They can then provide real time EHR support on their computer while the co-located clinician connects with the patient on their device. Safety precautions such as physical distancing and mask wearing will be necessary as long as there is concern regarding infectious disease spread.

What is the role of the support team in telephone visits?

It is ideal if the support team members can initiate the visit, then hand off the visit to the clinician. As with video visits, it is helpful if they can stay in the room to provide EHR support during the visit. This allows the clinician to focus on the patient, without distraction, and allows for increased efficiency. The clinician can leave the visit once the plan is set, and the team member can then enter or pend necessary orders, schedule the follow up visit if needed, and reinforce the plan with the patient.
What is ideal to get done during virtual rooming by your support team members?

It is most efficient if your support team rooms patients the same for virtual visits as for face-to-face visits. Virtual rooming includes updating history, medication review and refill pending, agenda setting, care gap closure, and setting up the documentation template. Verifying the history is easier if the patient is logged in through the patient portal and confirms their history and medications and answers the questionnaires. Team members can also ask patients to check their own vitals at home, including blood pressure, heart rate, and weight.

If the support team is unable to provide real-time support during the virtual visit, what can be done to enhance the efficiency of this visit?

In addition to completing the entire rooming process, the team member can set up the documentation template, and start documenting the History of Present Illness. In addition, if they know the clinician's routines, the clinical assistant might anticipate and pend orders for the clinicians. They can also schedule the next routine follow-up appointment for the patient during the rooming process.

4. Implement Workflows

Set a specific and realistic timeline for implementation. It does not have to be all or nothing; you can start simple by making one straightforward, yet impactful change in workflow. Be flexible with the planned schedule, but make progress.

It may be helpful to start with a small pilot of teams that are early adopters. This helps work out challenges with the workflows, and can usually be done with existing support team members, minimizing expense. From there, workflows and processes can be refined and scope expanded.

5. Iterate and Optimize the Model

Come together for regular team meetings. Be open and honest; freely discuss what works well and what needs work. Keep each other accountable and willingly submit yourself to feedback, both process-related, and personal. Be patient and show grace to one another as you navigate this change. When things aren't going as well as they might, try something different. Be flexible. Mix it up, and remember to write it down—both what you did and how it went—so you know for next time. Don't forget to use patient feedback at every opportunity. Finally, celebrate your wins together as a team.

Q&A

What strategies can be used to ensure continual improvement in new processes?

It can be helpful to have whiteboards available so any team member can write down questions or ideas for improvement. Ideally, these should be addressed daily. Regular care team meetings are invaluable to reviewing the processes and workflows and getting ideas for refinement and ongoing improvement. Frequent check-ins like this help keep team members engaged. Be willing to adjust your approach to best serve the team, and ultimately, your patients.
As you iterate and optimize your model, here are some telemedicine “Practice Pearls” that we have found useful from our experiences thus far (Figure 3):

Figure 3. Ten Practice Pearls to Optimize Your Telemedicine Team-Based Care Model

1. **Let the patient choose their visit type when possible**

   Allowing patients to choose their visit type is a patient-centered approach. Many patients, when offered a choice, will still prefer an in-office appointment to a virtual visit, simply because virtual visits are new to them. Others will prefer virtual visits for their convenience and decreased risk for COVID-19 exposure. Availability and wait times associated with each visit type will likely affect patient preference (eg, an earlier virtual visit rather than a later in-office appointment). Guidance to help match the clinical condition to the visit platform is available as a downloadable resource (see “Clinical conditions most appropriate for in-person vs virtual visit”).

2. **Track appointment type demand**

   Some physicians and health systems prefer to schedule patients into different scheduling blocks depending on whether the appointment is virtual or in-person. In doing so, it is important to track appointment type demand so that this can be matched to supply. In some practices, fill rates for virtual visits are lower than fill rates for in-person visits (or vice-versa). Some patients prefer to wait longer for the next available appointment rather than scheduling a sooner visit based on the available appointment type. As a result of these observations, appointment type supply may be shifted to more closely align with patient demand and preference.

3. **Schedule realistic time slots for virtual visits**

   It may take more time to accomplish the same care in a virtual visit compared to an in-office visit, due to the associated logistics and limitations of communication via a two-dimensional screen. It is unlikely that everything that may be accomplished in an in-office visit can also be completed in a virtual visit in the same amount of time. This is especially true when physicians are performing most of the tasks related to the encounter. In contrast, by reengaging the care team to provide full support during virtual visits, the time required for physicians and APPs in these visits may more closely approximate the time required for an in-office visit. Teamwork and support team involvement in virtual visits is critical for optimal efficiency.

4. **Support patients in gaining familiarity with the technology and establish expectations**

   It can be helpful to have a team member call the patient ahead of their first virtual visit to walk them through the process. This is also a good time to set mutual expectations, for example, regarding the length of the visit (“We will have 15 minutes with you tomorrow, so I’d like to be sure we understand what your priorities are for that visit”) and its location (“We find it works best, when possible, if you can be in a quiet, private location where you won’t be disturbed.”). A pre-visit contact can help anticipate and troubleshoot connectivity issues and technological challenges including lack of patient comfort and confidence.

5. **Consider simulated “practice visits” for clinical teams**

   Performing a simulated “practice virtual visit” with your care team can allow physicians and support team to experience the virtual platform from both sides. Valuable insight can be gained by navigating the platform and practicing troubleshooting technical problems. It is helpful to understand what a patient sees and hears when they connect with the care team through technology. Some organizations and virtual visit platforms offer patients a “practice virtual visit” to let them test-drive the technology prior to the actual visit.
6 Have a back-up plan for technology failures

If possible, having technical support available in real time and on-site in the office is valuable at go-live. Ensure all care team members have training and detailed instructions in the form of guidance documents, a playbook, and/or quick reference guides (QRG) to help correct any problems which may impede the ability of a patient and physician to connect. Some virtual visit platforms include setting options to default the patient's camera and microphone to "on." It is important to have a back-up plan if the technology fails or user error prevents an adequate connection. Team members supporting pre-visit work should confirm the best way to reach the patient in case an alternative plan for the visit becomes necessary.

7 Help the patient assist with the physical exam

Until accessories for smart phones and computers that assist in the virtual physical exam are universally available, enlist the help of the patient. For example, to check the patient's pulse, show them how to feel the radial artery pulse and then ask them to count out loud every time they feel a beat. For dermatologic concerns, ask the patient to send pictures ahead of the appointment—it is difficult to see skin lesions by video camera, and patients often have difficulty aiming the camera and optimizing the lighting. For neurologic exams, the patient can be asked to do tasks associated with daily living, such as put on their shoes, during the visit.

8 Respect boundaries for patients

Some patients may find it intrusive to have their physician and team peer into their home or to have their family members or coworkers overhear confidential conversations. During a pre-visit call, the patient can be instructed on finding a quiet, private location to complete the visit and the use of virtual backgrounds, if desired. Many patients will embrace the chance to have "home-court advantage" for a visit their physician and care team. This can afford opportunity to see the patient's home environment, assess safety and functionality in the home, discuss dietary choices and physical activity, and even meet family members and pets.

9 Respect boundaries for clinicians

Physicians may be concerned about breaches of their own privacy if conducting visits from home, wondering about the risk of patients inadvertently achieving access to personal information. What else might they see or hear that physicians would rather they not? Choose a quiet location with a low likelihood for audible and visual distractions. Check for adequacy of internet and wi-fi signals. Have chargers available for any devices and equipment as well as a back-up power source. Consider using the "Do Not Disturb" feature on your device. Beware of what may be visible through your camera in the background, and that sound and audio connections with the patient may be active before or after you think they are. Use virtual backgrounds and headphones. Understand the potential for unintended consequences of doing virtual visits from a personal device (eg, potential access to your phone number, email address, device IP address, or other personal information).

10 Scheduling tips

Some practices schedule virtual visits and in-person visits within the same time block. This allows patients the flexibility to choose which visit type best suits them and to convert from one visit type to another if needed. It also provides the physician some variety in the course of their day. This approach requires staying precisely on time or developing a system where a team member calls the patient within a pre-specified window of time when they're ready to begin that patient's appointment.

An alternative approach is to cohort all in-person visits and all virtual visits into specific time blocks. This allows the physician and the team to focus on particular visit types within a certain timeframe, which may enhance efficiency. It may even allow the team to manage these visits remotely (ie, from home) if desired.
Conclusion

The adoption of telemedicine was accelerated as an effect of the COVID-19 pandemic, and yet its optimal utility in patient care has yet to be fully established. Early experience suggests that telemedicine implemented without attention to workflow risks minimizing team-based care and introduces new barriers to efficient care. It is important to adapt and build upon our experience with in-office team-based care as we develop new models of team-based care to support telemedicine after the public health emergency (and waivers and exclusions limited to the public health emergency) is over. Telemedicine will likely prove to be a very valuable tool, and gives us another means to stay connected to our patients, with or without a pandemic.

AMA Pearls

• Involve all team members in the creation of a meaningful and efficient workflow for team-based care in telemedicine
• Implementation does not have to perfect from the beginning; give your team members and your patients time to adapt, grow, and learn from the process
• Incorporating team-based care into telemedicine is ultimately a win for patients, caregivers, and the health care system.

Further Reading

Journal Articles and Other Publications

Disclaimer

The information and guidance provided in this document is believed to be current and accurate at the time of posting. This information is not intended to be, and should not be construed to be or relied upon as, legal, financial, or consulting advice. Consider consulting with an attorney and/or other advisor to obtain guidance relating to your specific situation. References and links to third parties do not constitute an endorsement, sponsorship or warranty by the AMA, and the AMA hereby disclaims all express and implied warranties of any kind.

References


