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6 Steps to Improve Patient Engagement and Adherence with Healthcare Technology

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Table of Contents

Introduction

Ten years ago, if you talked about meeting your significant other online, ordering a meal through an app, or asking your car for the fastest way home, you were definitely outside the norm. Today, just as technology is prevalent throughout our social and workplace activities, the healthcare landscape is increasingly turning to technology to address the many challenges it has faced in the past decade, including increased costs, decreased reimbursement, and regulatory changes.

While many healthcare organizations have been utilizing technological innovations to increase access to care and improve engagement for years, the COVID-19 pandemic fueled a dramatic leap towards accessibility through virtual engagement tools, with the industry shifting from 0.3 percent of all provider care occurring via telehealth in 2019 to a staggering 23.6 percent in 2020.[1] While some utilization has dropped post-pandemic, the benefits to patient engagement, adherence, and efficiency presented by virtual healthcare technology means that organizations that embrace it as part of their toolkit will have a distinct advantage, and those that fail to keep up risk being left behind.

For example, medical groups such as Kaiser Permanente, AdventHealth, and Spectrum Health have been able to remain leaders in the industry and effectively deploy virtual tools within their care pathways.[2]

When used effectively, virtual care tools can be used to improve every aspect of the patient experience, but most notably, their power lies in their ability to improve communication and access to care, enhance patient self-efficacy, and increase patient activation and adherence.

> Digital care has helped us drive convenient access, remove barriers to care, close care gaps, and improve operational efficiency and effectiveness overall.
>
> —Dr. Emmanuel Fajardo of Kaiser Permanente

> We wanted to lower the cost of care, maintain viable operations, and achieve superior quality outcomes as a way to respond to the threats that we're all facing, including higher payer scrutiny around therapy utilization, lower reimbursement rates, and changing payment models. It was evident that we'd have to redesign our clinical practice model in order to effectively drive value.
>
> —Marcie Hurlbutt of Spectrum Health

> We want to create a safe environment to make rehab more accessible, meet customer expectations for convenient care and a high level of service, extend our reach to help more of those who need our services, and stay viable. We're finding that we're able to do all that with digital tools.
>
> —Jennifer "Leigh" Harris of Advent Health Sports Med & Rehab

Introducing new technology and innovative care solutions will vary based on your team, but are best achieved by following six simple steps:

- Step 1: Determine Your Organizational and Patient Needs
- Step 2: Select the Right Patient Engagement Tools
- Step 3: Train Clinical Staff with Change Management
- Step 4: Patient Education
- Step 5: Integrate Within Your Clinical Pathways
- Step 6: Track Your Results

Teams who are able to leverage these six steps will be able to more effectively engage their patients and improve outcomes.

Step 1: Determine Your Organizational and Patient Needs

In order to engage patients and improve outcomes, you'll need to identify the needs of both your organization and your patients. Common initiatives at the organizational level include:

- Reducing in-person visits
- Improving patient satisfaction and engagement
- Increasing visits per referral
- Capturing patients that might otherwise cancel or no-show
- Opening new revenue lines

To succeed, you'll need to clearly set these goals so that you can next identify the best engagement tools to improve them. If your organization's goal is for patients to improve their overall self-efficacy, then your next step would be to select a comprehensive patient engagement tool that provides an educational component. Patients who have greater knowledge of their rehabilitation and condition are more prone to engage in rehabilitative behaviors, such as performing home exercises.[3]

For patients, their goals typically include:

- Improving access to care
- Decreasing the cost of their visit
- Improving the overall quality of care
- Improving their results from care

You'll want to determine which of these (if not all) are most relevant so that you can match patient needs with the proper engagement tools. For example, if a patient's goal is to decrease their pain by having improved home exercise compliance and accountability, then your next step will be to select an engagement tool that provides real-time home exercise feedback and patient monitoring capabilities. A higher perception of self-efficacy after discharge from physiotherapy is associated with better perceived clinical improvement, lower pain intensity, and a lower number of physical therapy sessions.[4]

Not every patient engagement tool is appropriate for your organization, and not all engagement tools are right for every patient. It's all about finding the right fit.

Step 2: Select the Right Patient Engagement Tools

Once you've determined the needs of both your organization and your patients, you'll need to select the right engagement tools. Engagement tools can improve communication and access to care, enhance patient self-efficacy, and increase patient activation and adherence. Based on the needs of your patients and organization, you can select the category and the tools within each to drive your goals, either choosing a single category to focus on or selecting tools from each.

The first category of engagement tools are those that **improve communication and access to care**. Improved communication can include improving email and direct message communications between patients and clinicians. Improved access can include offering remote visits through a telehealth platform as a standalone or supplement to in-person care.

When choosing a virtual care platform, you'll want to look for:

- Ease of Use for Both Patients and Providers

  - You want a platform that is intuitively designed, accessible on a variety of mobile and desktop devices, and one that offers easy enrollment via text or email that invites the patient to securely download the app.

  - Electronic medical record (EMR) integration offers optimized access to patient records to increase ease of use for the practitioner, saving time on documentation and boosting patient insight.

- HIPAA Compliant with Secure Encryption

  - While CMS has allowed temporary provisions for e-visits and telehealth during the COVID-19 pandemic, you'll want to futureproof your telehealth solution with a HIPAA-compliant platform.

- Platform Quality-of-Life Features

  - You can improve the overall experience by finding a virtual visits platform with high-definition video, waiting room functionality, and the ability to stream HEP and educational resources within the video player to help provide a seamless therapy session.

  - Patient messaging along with pain and difficulty tracking helps improve patient adherence to treatment plans.

The next category of engagement tools are ones that **enhance patient self-efficacy**. This can be achieved by educating patients on their condition and the importance of adhering to their treatment regimen. If a patient is educated on their diagnosis, they can more readily buy in to their plan of care and take a great level of control, which can result in better outcomes. This includes:

- A robust home exercise program library available to be assigned to patients

- Packaged and customizable patient education programs

- Educational resources available in multiple languages to help explain the patient's condition and treatment plan while promoting health literacy

- A variety of options for HEP and education, including digital as well as printable handouts to provide technological flexibility for less tech-savvy patients

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The third category of engagement tools are ones that **increase patient activation and adherence**. The key to these tools is to provide a seamless experience related to home exercise programs. In order for a home exercise program to increase patient activation, it needs to be engaging, accessible, and customized to the patient. Access to an extensive library of customizable video exercises that can be printed or shared online achieves these components. Programs should include:

- A variety of exercises that match the conditions of your patients and their activities
- Customizable exercise names, descriptions, and parameters
- Patient adherence tracking
- Pain and difficulty self-reporting and messaging
- Online patient portal and virtual access across a variety of devices like laptops, smartphones, and tablets
- Voice over and written instructions in multiple languages

Not only can these virtual tools improve communication and access to care, enhance patient self-efficacy, and increase patient activation and adherence, but they can also save time for both patient and clinicians. For example:

- **Telehealth**: Telehealth has been shown to reduce travel time,[5] improve convenience,[6] and increase overall access to care.[7]
- **Patient Education**: Patients can be given customized digital education resources to help them learn more about their condition and treatment plan between visits.
- **Home Exercise Programs**: Program template tools and the ability to document programs in your EMR with one click can save valuable time when creating home exercise programs for patients.

MedBridge Patient Engagement Solution

Boost patient activation, improve adherence, and motivate your patients to become active participants in their care plan with evidence-based patient engagement tools, effective patient education resources, and best-in-class HEP.

Learn More

Step 3: Train Clinical Staff with Change Management Programs

Identifying the right engagement tools is just the start—getting your staff to fully utilize the tools provided is another important piece of the puzzle. In order to effectively implement the selected tools, your staff needs to be trained with high quality education that matches your organizational and patients' needs.

Choosing staff training tools can be a difficult task when there are so many courses to choose from. Focusing on either "certificate programs" or "course series" to train your staff in a particular area of interest is an efficient and comprehensive way to make sure your team is fully onboard with training.

In order to get staff onboard with organizational changes, it's usually best to use a structured change management approach to help lead your team to the desired outcome, and see it through into the future. To succeed, you'll have to take a three phase approach: Prepare the organization to adopt the new technology, manage the change throughout implementation, and monitor the process to ensure you can sustain adoption and outcomes long term.

If possible, it's often best if you can identify a champion or leader within your staff who is both tech savvy and motivated. They can serve as the point person and take on a leadership role when implementing the new engagement tools, and educating their colleagues on usage strategies. Depending on your organization's size, one champion may be appropriate, or you may need to put together a team or several teams. For example, for larger organizations, the American Medical Association suggests a core team, leadership team, advisory team, and implementation team.[8]

To take virtual staff education one step further, you can equip your team with best-practice training by building customized educational programs. The ability to customize your team's education can ease the administrative burden of coordinating clinician education while providing best practices across multiple forms of education that align with your organization goals.

> For example, in the process of improving their virtual care strategies, Kaiser Permanente developed a playbook that used MedBridge Knowledge Tracks, coursework for HEP adherence, digestible exercise programs for maximum compliance, and motivational interviewing.

Step 4: Educate patients

Educating patients can occur at both the organizational level and on a per-patient basis. After you've trained your clinical staff in the areas of care that align with your patient and organizational goals, it's time to get the word out to your patients. Here are just a few examples of how you can achieve this:

- Update your website and utilize email and social media to announce your expanded services.

- Include instructions on how to use virtual care platforms.

- Have your care team or front desk walk patients through the experience:
  - Show them how to log in.
  - Introduce them to their patient portal and explain how to view information.

  - Explain the value of the education and tools they now have access to.

- Promote that your staff is "certified" to your patients.

  - For example, if you have taken the step to certify your entire team with the "Telehealth: Comprehensive Virtual Care Certification," you can then advertise and promote that all of your clinians are certified in providing telehealth services and advertise it as an additional option to improve patient access to care.

Utilizing virtual tools with patients to improve engagement and outcomes comes down to matching the right patient with the right virtual tool. Not every patient will respond to all of the virtual tools that you provide, and you will need to be selective with which tools you select for each patient.

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Step 5: Integrate Within Your Clinical Pathways

There are many opportunities to blend virtual engagement tools within the patient care continuum, from new patient acquisition, evaluations, and follow-up sessions. See below for several use cases showcasing how to integrate these tools into your clinical pathways.

New Patient Acquisition

John is a father of three boys and has elbow pain when playing tennis with his sons. He had thought about seeing a clinician for his lateral elbow pain, but it rarely bothered him during daily activities, and he wasn't sure that it was something that a clinician could help him with. He additionally reports that he is out of shape and would like to begin a walking program for weight loss and general conditioning.

- Improve Communication and Access to Care
  - Telehealth can be used as a method to engage new patients such as John. A remote visit can be used to educate John on the benefits of therapy, determine if he is appropriate for therapy, or encourage him to schedule a follow-up evaluation in-person.

- Enhance Patient Self-Efficacy
  - The clinician can send John a packaged education program to educate him on the diagnosis of lateral epicondylitis (tennis elbow).

- Increase Patient Activation and Adherence
  - The clinician can set John up with a personalized home exercise program tailored to his condition and keep a line of communication open for him to report on any pain and difficulty. To take this a step further, monitoring technology, such as wearable devices, can allow you to track a patient's health metrics. These devices can be used to monitor heart rate, blood pressure, and other vitals as the deconditioned patient returns to normal activity. A device to monitor John's daily step count can be recommended to him to motivate and add a measurable level of adherence to his program. The data collected can be reviewed by a clinician during follow-up in-person or remote sessions, and based on patient responses, the clinician can indicate adjustments needed to therapy to optimize care.

Evaluation

Wilma is an 86-year-old grandmother diagnosed with Parkinson's disease. She is not very experienced with technology, and it takes her a lot of energy to get out of the house. She has to get dressed, put on her make-up, and organize a ride from her grandson. After a small fall, Wilma reports persistent wrist pain. Since it takes so much effort to attend appointments, she doesn't want to see a clinician if she doesn't have to.

- Improve Communication and Access to Care
  - Telehealth can be used for an evaluation of a patient who would prefer to be seen remotely instead of in-person. Whether the patient's reason is accessibility, a time constraint, or a disability, some circumstances make in-person visits more challenging. Wilma can use telehealth for an evaluation to determine if therapy is right for her, and then continue follow-up sessions in person if needed.
  - The clinician can use a pre-built template in the electronic medical record for the evaluation process, which can also be customized for follow-up visits in the in-person setting.

- Enhance Patient Self-Efficacy
  - During future in-person sessions, the clinician can utilize virtual patient education resources and videos to educate Wilma about her Parkinson's diagnosis and provide in-session videos to educate her on posture and movement mechanics.

- Increase Patient Activation and Adherence
  - After Wilma's telehealth evaluation, she could be recommended to attend in-person sessions. During the session, the clinician can print a copy of her exercise program for Wilma to tape onto her refrigerator at home.

Follow-Up Sessions

Jennifer was evaluated for low back pain. She has a busy schedule, doesn't drive, and relies on public transportation to commute. She arrived 30 minutes late to her evaluation and first follow-up appointment because she missed the bus. Her low back pain is made worse by prolonged sitting, and taking the bus to see a clinician makes her back hurt more.

- Improve Communication and Access to Care
  - Telehealth can be used in combination with in-person therapy during follow-up sessions to maximize session attendance and punctuality. It can be used with patients who have busy schedules, increased travel time, or who just want to minimize social contact. Jennifer can use telehealth to reduce her time spent commuting.
- Enhance Patient Self-Efficacy
  - Jennifer can access exercises from her smartphone to improve the convenience of care and to motivate her to continue her care program.
- Increase Patient Activation and Adherence
  - Jennifer's clinician can monitor her home exercise compliance and send updates through patient messaging to encourage Jennifer to complete her home program. During sessions, her clinician can use a telehealth solution that pairs with Jennifer's home exercise program so that Jennifer can access exercises and education in real time.

⬚ Step 6: Track Your Results

Selecting the right patient engagement tools that align with your goals, training your team, educating your patients, and integrating within your pathways of care is a great start. However, in order to see if your changes are effective, it is important to track your results and relate them to your goals. Here are a few examples of how this might look in your organization:

Improve Patient Access to Care

One of your organization's goals is to improve patient access to care and you have chosen to offer telehealth as a solution. However, you are concerned that telehealth may affect your patients' satisfaction with the visit. To solve for this, you could send feedback surveys after each telehealth session to track patient satisfaction compared to in-person sessions and run a cost-benefit analysis on the results to see how they compare to patient access numbers. Research has shown patients are highly satisfied with telehealth. In one study, one hundred patients completed a 21-question survey after a video-based telehealth visit with a surgeon. The average score across all questions was 6.01 on a scale from 1 to 7, where 7 indicated the highest level of patient agreement. The highest scores were for questions related to patient satisfaction with telehealth (6.29).[9]

Reduce Cost per Patient

One of your organization's goals is to reduce your cost per patient by reducing visit count through improving compliance with home exercise program performance. One way to improve compliance is by using an integrated home exercise program that monitors program completion, patient feedback on pain, and exercise difficulty. The therapist can then review data with the patient during follow-up visits to improve their activation and engagement in their home exercise program. This data can then be correlated to financial metrics and patient outcome measures. Research has shown that patients with high activation scores can cost up to 21 percent less than patients with high activation levels.[10]

Conclusion

While virtual care was once a source of trepidation among healthcare organizations, the increase in accessibility demonstrated during the COVID-19 pandemic and beyond has shown the power to enhance the patient experience and streamline care in a way that aligns with our modern, digitally-integrated healthcare landscape. As large insurers begin to adopt permanent telehealth policies for therapy, technology has carved out a permanent role in the future of healthcare. By following these six steps, you'll be equipped to improve communication and access to care, enhance patient self-efficacy, increase patient activation and adherence, and build an innovative virtual engagement suite that will help your organization remain agile and able to pivot with whatever challenges the future may bring.

At a Glance: How to Improve Patients Engagement and Adherence with Healthcare Technology

| Organizational Goal	Improve communication and access to care	Enhance patient self-efficacy	Increase patient activation and adherence
Initiatives (Patient/ Provider)	Increase access for patients with limited access to physical locations Improve options for patients on how they can receive care Capture patients that might otherwise cancel or no-show Open new revenue lines	Reduce unnecessary in-person visits Decrease cost of care	Improve patient satisfaction and engagement Capture patients that might otherwise cancel or no-show
Solutions (Products)	Telehealth Virtual Visits Digital Patient Engagement Platform	Patient Education Home Exercise Program Digital Patient Engagement Platform	Home Exercise Program Digital Patient Engagement Platform Telehealth
Select the Right Engagement Tools	• HIPAA-compliant • Virtual waiting room • Exercise and education streaming • Patient messaging • Pain and difficulty tracking • Online patient portal and mobile app	• Online patient portal and mobile app • Extensive HEP and patient education library • Sharable templates • Customizable program builder • Multiple languages available • Video or print formats	• Extensive HEP and patient education library • Customizable program builder • Adherence tracking dashboard • Pain and difficulty self-reporting • Patient-clinician messaging • Online patient portal and mobile app • Gamification, push notification, and scheduled reminders

Success Measure	• Patient experience:
	  ○ Improved patient satisfaction
	  ○ Increased patient choice in how they receive care
	  ○ Decreased wait time for visits
	• Patient access:
	  ○ Increased volume of patients reached
	  ○ Improved cancellation/ no-show rates
	  ○ Better patient engagement and adherence to program throughout care
		• Increased engagement between visits
		• Increased adherence to treatment plans
		• Increased patient confidence in managing their condition
		• Clinical Impact:
		  ○ Decrease in cost per care
		  ○ Improved patient outcomes
		  ○ Decrease in readmissions
			• Increased adherence to prescribed HEP
			• Patient prepared for next in-person visit
			• Increased communication
			• Increased patient confidence in managing their condition
			• Improved patient progress throughout care plan

MedBridge Education	Telehealth: An Introduction to Virtual Care Telehealth: Conducting a Virtual Subjective Exam Telehealth: Performing a Virtual Objective Exam Telehealth: Delivering Virtual Interventions	Motivating Through Movement for Parkinson's: The Challenges of Exercise Cognitive Rehab Strategies: Home Exercises, Individual & Group Therapy Improving HEP Compliance: Motivating the Patient	Patient Activation: Inducing Intrinsic Motivation Patient Activation: Considering Virtual Collaboration and Telehealth Patient Activation: Chronic Condition Self-Management Patient Activation: Post-Acute Care

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Endnotes

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How MedBridge Helps Engage Your Patients

To achieve the six steps needed to effectively engage patients and improve adherence as outlined in this white paper, you'll need a comprehensive solution that blends patient engagement and education with innovative technology.

MedBridge produces best-in-class virtual engagement solutions and evidence-based education designed to:

- Improve communication and access to care
- Enhance patient self-efficacy
- Increase patient activation and adherence
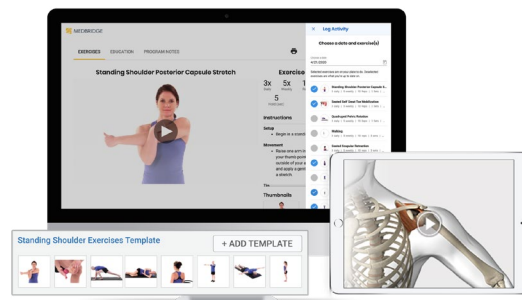
PRODUCTS

Telehealth Virtual Visits

Replace or supplement more costly in-person visits for your low- to medium-risk patients with our effective, user-friendly telehealth tool.

Patient Education

Help patients quickly and comprehensively understand their diagnosis and rehabilitation plan with engaging education.

Home Exercise Program

Increase patient adherence with easy-to-use, customizable, and engaging home exercise programs.

Patient Adherence Tracking

Identify behavioral patterns and barriers to adherence to help boost patient satisfaction and improve clinical outcomes.

MedBridge GO Mobile App

Transform the patient experience by prescribing home exercises in easy-to-follow, achievable daily doses.

Continuing Education

Thousands of accredited courses across multiple disciplines and specialties help improve training, engagement, and outcomes.

Patient Experience Education

Best practice education and microlearning to elevate patient satisfaction, drive engagement, and improve the patient experience.

Learning Management System

Remediate gaps in knowledge by seamlessly creating, assigning, and tracking staff education.

About the Author

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Jared Vagy received his doctorate in physical therapy (DPT) from the University of Southern California (USC) and completed a one-year residency in orthopedics and a one-year fellowship in movement science. Dr. Vagy is a clinical assistant professor of physical therapy in the DPT program at USC and is a mentor in both the orthopedic residency and upper extremity elite athlete fellowship programs. He is an international best-selling author and has published three books and numerous articles on injury prevention. Dr. Vagy delivers lectures and seminars worldwide on the topic of the movement system. He is an orthopedic clinical specialist and a certified strength and conditioning specialist.

Dr. Vagy is an innovator in the area of web-based education and remote learning. He held leadership roles in several courses during the conversion of the in-person USC DPT program into an online hybrid format and continues to teach patient management courses in the USC DPT hybrid pathway.

He has served as a physical therapist in China for the Chinese national track and field team and has worked with USA Track & Field at the Olympic Team Trials. He completed a rotation at the US Olympic Training Center, working primarily with USA men's gymnastics, and has provided medical care at international events, such as the International Weightlifting Federation World Championships. Dr. Vagy has rehabilitated several world champions, gold medalists, and Olympic athletes. His assessments and treatments are rooted deeply in an understanding of the movement system.