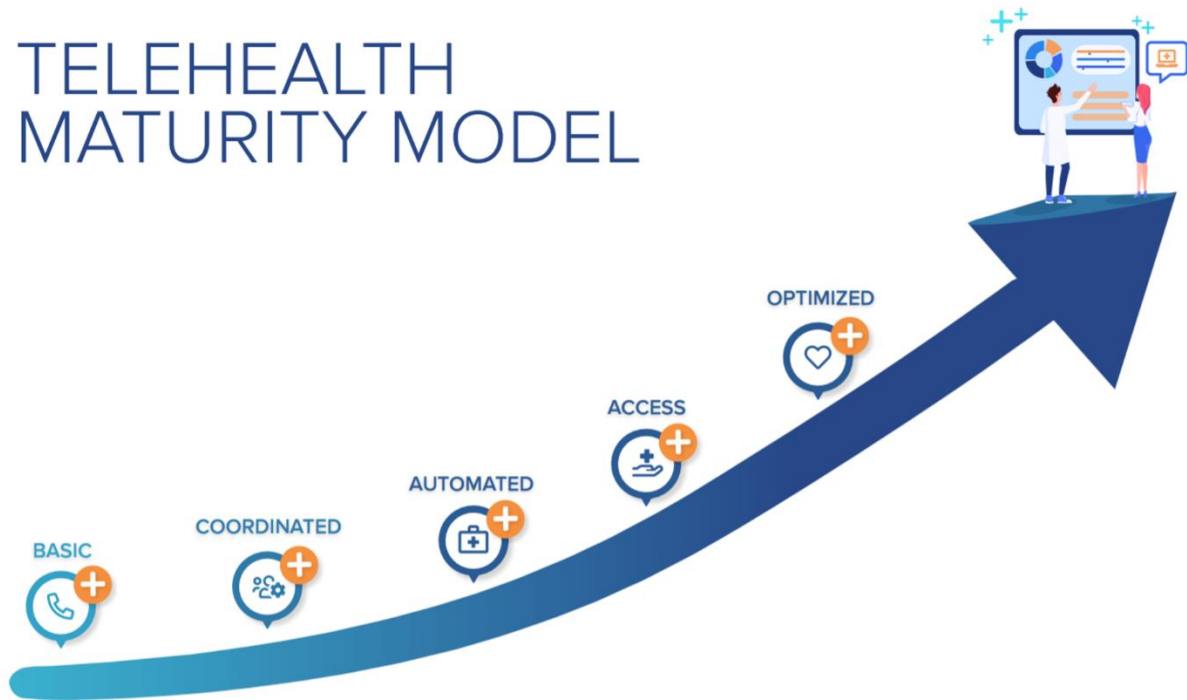# TELEHEALTH MATURITY MODEL: ROADMAP TO THE FUTURE

"Telehealth is here to stay."
– Learn how to optimize its use for better outcomes

Most providers have been building their telehealth vehicle while driving down the COVID highway; they haven't had a blueprint and their telehealth practice is still not up to speed. Keona's Telehealth Maturity Model will help you accelerate from zero to 100 without any delays.

It identifies the capabilities your organization needs for telehealth to reach its promise of

becoming a strategic driver with improved outcomes and more revenue

HOLISTIC TELEHEALTH

When most people think of telehealth, they think of a provider visit over video chat. As you will see, telehealth is far, far more than this one service over one channel. **Telehealth is defined** by the US Dept of Health and Human Services as using any remote technology to support long-distance clinical health care. Telehealth is provided over real-time video,

telephone, web chat, as well as over asynchronous SMS texting or secure messaging. These include sending pictures along with online applications such as patient portals. What is more, its definition of telehealth includes not only the remote delivery of healthcare, but also preparation and administration of remote healthcare.

To see how broad and deep telehealth can be, follow this diagram. This diagram shows the services that are typically rendered around a single telemedicine visit. A smooth telemedicine visit relies on sophisticated coordination across many services including administration and health education.

For more information on the scope of telehealth, see the **The Ultimate Guide**.

PROMISE OF TELEHEALTH

When you contact Amazon, your airlines, or even Roto Rooter, they recognize who you are by the number you are dialing from. The person taking your call has at their fingertips your entire purchase history, your preferences, and instructions on how to handle nearly every request or complaint you make. If, for some reason, they are unable to handle your call and have to forward you to someone else, you can be sure that your notes are available for that next person. The new person may verify key pieces of information, but you can be confident you won't have to repeat every single word that you said.

When you call your healthcare provider, you face a very different experience.

It doesn't have to be this way. Mature telehealth providers have the same advantages as those organizations who have heavily invested in remote service.

Patient Benefits

Patients experience:

- Increased choice
- Faster access
- Reduced total cost of visit
- Easier care - specially for elderly and children
- Better outcomes

Organizational Benefits

Telehealth as a core competency offers many benefits:

- Increased revenue
- Flexibility with schedules
- Improved continuity of care
- Adapting to the unexpected
- Remaining competitive

This is just the beginning. What is far more important to most organizations is that those who have reached a maturity in telehealth are less susceptible to the shocks of unexpected events. This is because the core competencies of telehealth make them nimble and adaptable. They are aware of the syndromic trends in their population without looking at the news stand. They can quickly create new health assessments and resulting workflows and make them available to their staff and online. They can create new visit types and customize them for each provider. They can direct patient demand to the most optimal channels for the moment.

Examples of the adaptability of the mature telehealth organization:

IDEAL EXPERIENCE FOR HEALTHCARE ORGANIZATION

A regional outbreak occurs

01 You're the first to report it.

02 Quickly train staff and providers on what to do

03 Create symptom screening and have it immediately available to front-line staff and to patient self-service

04 Change your visit mix to accommodate new demands

05 Are able to quickly drive demand to appropriate channels for the quickest assessment and divert other patients to the best channels to avoid those in the outbreak.

06 A weather event shuts down transportation but instead of shutting down, visits are moved around so that telehealth fills all schedules during the event, to be replaced by in-person when transportation is viable again.

07 New patient-access technology or capability comes out and you incorporate it into workflows in months, not decades.

IF YOU'RE NOT DOING THESE THINGS – SOMEONE ELSE WILL.

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To see more details about the benefits of telehealth, please refer to **THE ULTIMATE GUIDE**.

4 KEY PRINCIPLES OF TELEHEALTH DELIVERY

There are of course many challenges when it comes to implementing a holistic telehealth experience. For one thing, it is relatively new, and many organizations began their telehealth experience in earnest due to COVID. This meant there was little time to prepare. Additionally, important tools such as medical records and pharmacy data are usually not integrated. There exist silos between different providers as well as care staff, not to mention between sites and specialties.

For all these reasons, delivering a quality experience is easier said than done. But the principles behind great service are rather simple. It requires following 4 key principles of service:

For all these reasons, delivering a quality experience is easier said than done. But the principles behind great service are rather simple. It requires following 4 key principles of service:

1   Every decision point has full patient context

2   Each step in the workflow is aware of steps before and after

3   Provide all the services in one interaction – while the patient on the phone, online, in person

4   Services are connected across every channel

These principles are simple. Implementing them is a bit more complicated. That's why

many healthcare providers are looking for a roadmap.

MATURITY MODEL

A maturity model is a roadmap to excellence. It shows the path that must be taken to adopt any new telehealth need and outlines the core competencies for continuous improvement.

Like any skill an entire organization must develop, exceptional delivery in telehealth is like eating an elephant: it is easy to quickly feel overwhelmed. One of the key purposes of a maturity model is to help break the giant down into "bite-sized" pieces.

Ultimately, however, it is a process improvement tool.

If you're interested in other maturity models in healthcare, **check out these other models**.

Executive Summary

1 **BASIC**

Your organization has determined telehealth is a strategic priority and offers or is planning at least 3 different telehealth services offered across 2 channels.

Why: Telehealth needs to be a strategic goal your organization is committed to from the leadership down through the staff.

2 **COORDINATED**

You are able to take into account the full patient context and service is delivered with continuity. Staff efforts are coordinated and cross-trained in other functions. Service delivery is federated. **See below.**

Why: Breaking down barriers between silos in data, roles, and medical specialty is critical to holistic telehealth. Integrating all the patient data is the foundation for breaking down these barriers. Then sharing and coordinating workflows is the frame on which everything else is built. This structure of coordination is what makes it possible to deliver on the 4 principles of telehealth delivery. This pre-technology step is the most difficult for most provider organizations, but also the most important. Until you have figured out how to coordinate and consolidate workflows, you will be automating the wrong things.

3 **AUTOMATED**

Workflows are automated inside a unified desktop. Tools are consolidated and management is simplified across all channels.

Why: Automation is required to simplify complicated workflows. Automation reduces interaction time, reduces training time, improves quality, improves consistency and reduces costs. Optimal automation takes a couple cycles of implementation, re-analyzing and then changing or adding more automation until simple, quality workflows are ready for patients.

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4 **ACCESS**

The above automation is made available directly to patients. Service delivery is agnostic, so patients and staff move between channels with minimal disruption.

Why: Patient satisfaction goes way up when you give patients the flexibility and control of self-service. Costs drop as patients handle tasks themselves that your staff used to perform. Developing multiple channels are key to increasing patient access and organizational flexibility.

5 **OPTIMIZED**

The organization is ready for continuous service improvement to any patient trend. Staff cross-training is deep, allowing maximum flexibility. The organization can shape demand management and even confidently offer satisfaction guarantees.

Why: Rapid analysis, response and implementation make practices more flexible, more adaptable AND more streamlined. It is the key to confidently facing changing circumstances.

TAKE THE MATURITY ASSESSMENT

The organization is ready for continuous service improvement to any patient trend. Staff cross-training is deep, allowing maximum flexibility. The organization can shape demand management and even confidently offer satisfaction guarantees.

The Telehealth Maturity Model is about your organization's core capabilities and adaptability. If you are responsible for implementing a single service, like telemedicine or scheduling, but don't have the ability to change your organization's mission and strategic direction, please see **Keona 6-Factor Framework (upcoming)**.
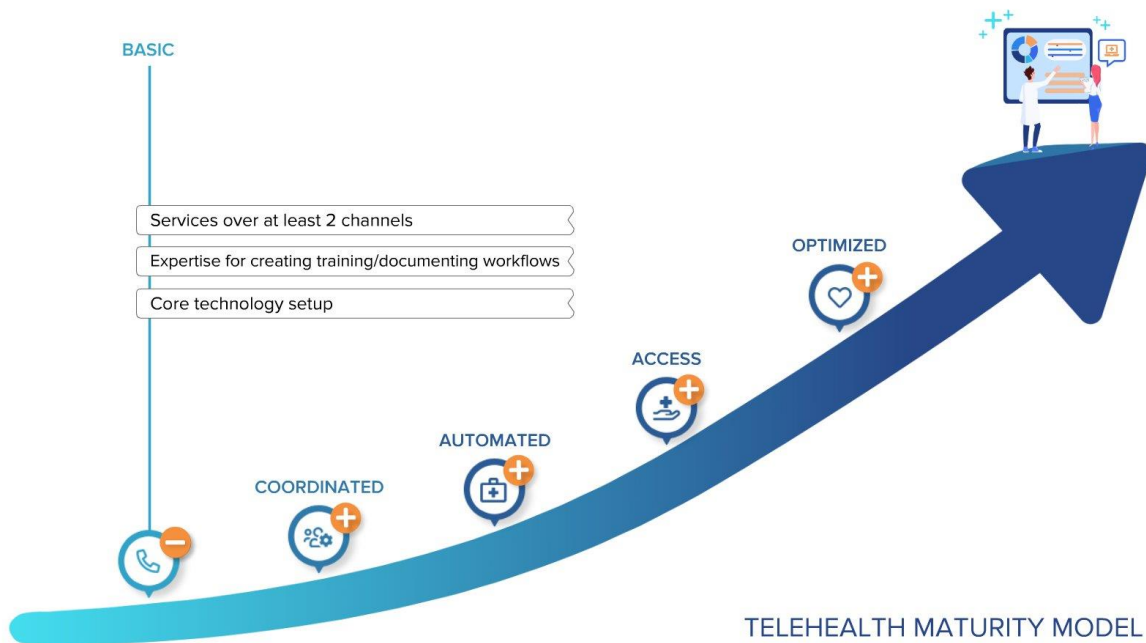
BASIC

Summary

- Basic providers offer 3 or more telehealth services across at least 2 channels
- Have expertise for documenting workflows and creating new training programs
- "Core" technology capabilities: services are secure & able to identify security breaches

In Depth

> (i) Basic providers offer 3 or more telehealth services across at least 2 channels

but they have not yet met the standard of coordinated care.

Sample Telehealth Services	Sample Channels
Scheduling	Telephone
Nurse Triage and health information	Website Self-Service
Telemedicine visits	Website Chat
Remote check-in	Email / Secure Messaging
Patient Self-Service	SMS
Payment estimate and processing	Video
Customer Service	
Remote patient monitoring	

Why this is crucial
• While these services are laudable and useful, they are still siloed and security can be an issue
• In order to step up to the next level, a provider needs analyst expertise to analyze and adjust workflows

Steps you should take
1. Determine the services you wish to offer – Set Mission & Goals
2. Determine the channels that these services will be delivered over
3. Ensure the technology you choose meets HIPAA and security guidelines
4. Map out all the related services that come before and after (basic workflow mapping)

> (i) Captures call reaction metrics

Why this is crucial
• Call reaction metrics, while inferior to more holistic measures, provide a solid base for measuring those critical first impressions
• This sets the stage for demand management, where demand is forecast and patients are directed to different channels or avenues to facilitate the best service.

Steps you should take
Be sure your synchronous channels (telephone, text chat, video chat) report the following metrics:

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1. Time in queue
2. Number in queue
3. Abandonment rate
4. Average speed of answer

TELEHEALTH MATURITY MODEL
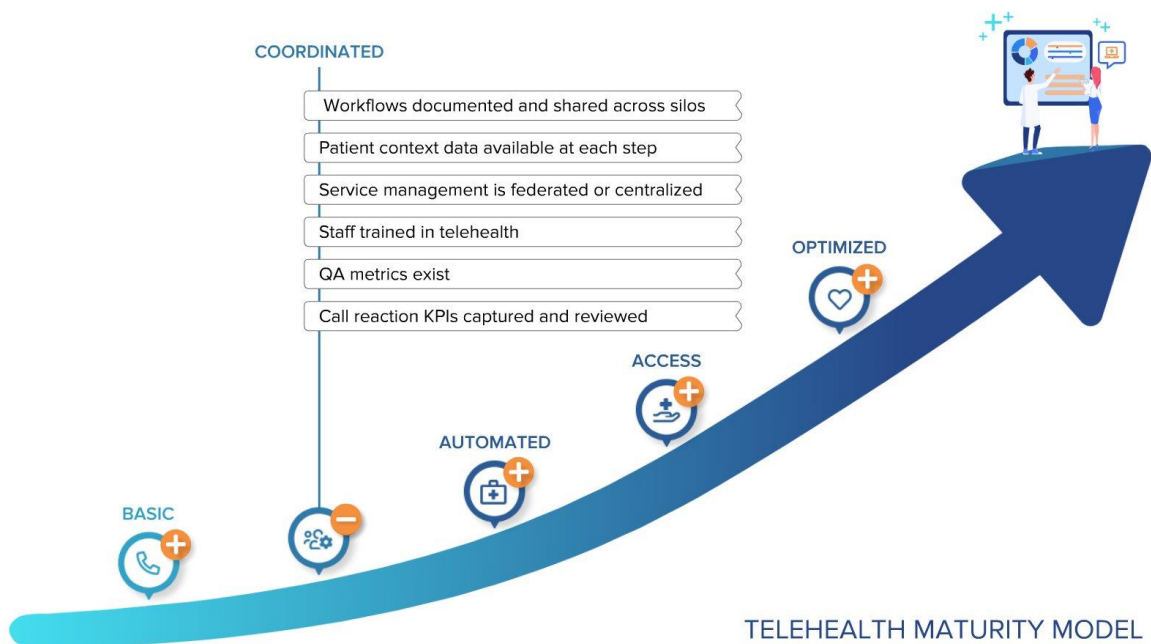
COORDINATED

Summary
• Service management is federated or centralized, not distributed
• Workflows are documented, accessible to everyone across silos, and staff are cross trained
• Full patient and encounter context are available to each step
• All staff are trained in telehealth safety, documentation, and soft skills
• QA metrics exist for all telehealth roles
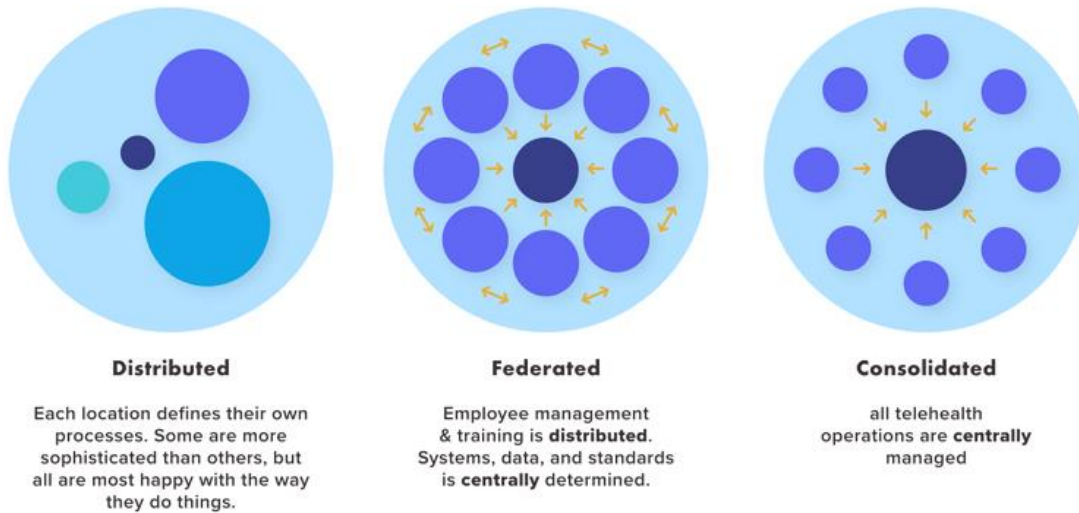• Captures call reaction KPI's

In Depth

> ⓘ Service management is federated or centralized, not distributed

Why this is crucial:
• Your workflows cannot be truly coordinated if they are different for everyone
• You can have variations to meet requirements for each specialty, location, and provider, but you must have a shared core set of data, systems, and standards to implement automation.

ORGANIZATIONAL MODELS

Distributed	Federated	Consolidated
Each location defines their own processes. Some are more sophisticated than others, but all are most happy with the way they do things.	Employee management & training is **distributed**. Systems, data, and standards is **centrally** determined.	all telehealth operations are **centrally** managed

Steps you should take:
1. Setup a taskforce for unifying telehealth systems

2. Identify measurable goals

3. Determine if you will centralize (pro's and con's) or
• Faster to train
• Easier to implement
• Harder to keep providers and patients happy
• The key is for the software to incorporate the differing requirements of each location & provider.

4. If you will federate (pro's and con's)
• Longer to roll-out

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• Longer to train
• Easier to keep each practice and provider happy
• As with centralized, the key is for the software to enforce location and provider requirements in scheduling and workflows.

> (i) Workflows are documented, accessible to everyone across silos and staff are cross trained

Why this is crucial:
• You cannot automate workflows without them
If you automate too early, you lock yourself into bad workflows
• Prepares staff for future agility

Disjointed vs Coordinated workflows
• Today's healthcare workflows are disjointed. Take the scenario of someone who schedules a visit but has symptoms that need to be triaged. During the visit the provider refers the patient to a specialist:

TELEHEALTH TODAY
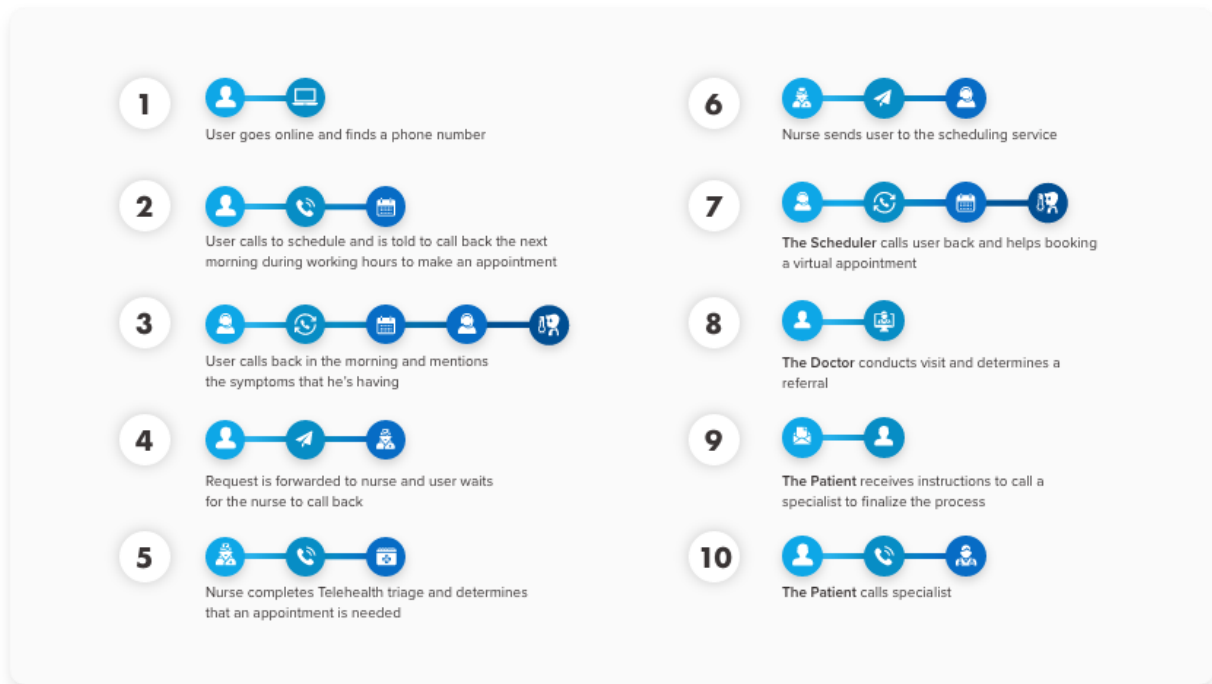
• This example is all too common. It violates all four of the key principles:

1. Every decision point has full patient context: Each person the patient talks to only has partial information

2. Each step in the process is aware of steps before and after: Those handling any one step in this workflow are unaware of next steps

3. Provide all the services in one interaction: Each service is provided in a separate interaction.

4. Services are connected across every channel: changing channels means the patient must repeat information given before. In other words, the data is "lost" when switching channels

• This large number of steps is due to the care not being coordinated. Harvard professor and management thought leader **Clayton Christensen noted in his book "The Innovator's Prescription,"** that healthcare works in batch processing. Services are provided by independent groups that "dump" work to the next group where queues build up behind each one.

Coordinated workflows are designed to take into account the four key principles. The exact same scenario, when following the 4 principles, only takes 4 steps:
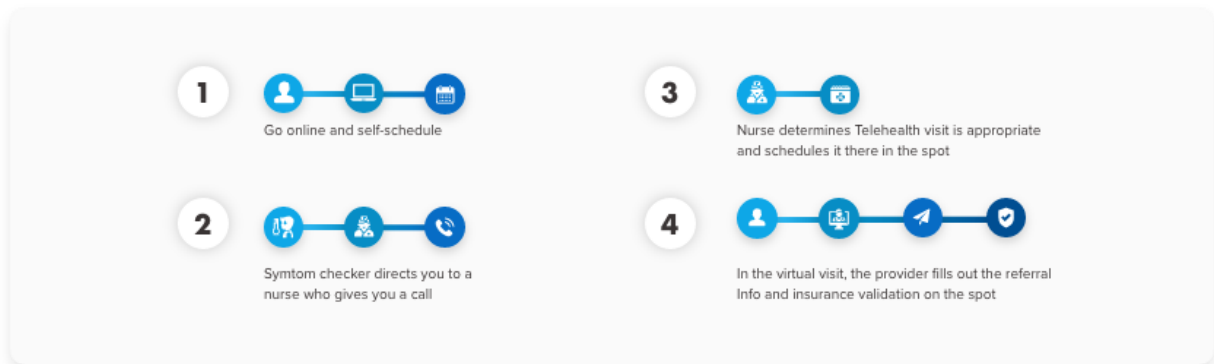
The 4 principles are key to coordinated care. Information is not lost and each person's work is closely coordinated with everyone else's work.

Steps you should take:

1. Map out your workflows
2. Find ways to consolidate stages as much as possible

Real-life Example 1: telephone patient intake immediately following scheduling
With the advent of COVID, providers were having a tough time in the video visits due to the lack of an intake process and pre-visit summary. Some clients have switched to complete the intake process at the time of scheduling. Not only has this change smoothed out their virtual visits, it also has smoothed out office visits as well. There are fewer people in the waiting room and fewer delays throughout the day. This is an example of principle #2 ("each step is aware of steps before and after") and principle #3 ("provide all the services you can in one interaction – while the patient is online / on the phone"), because the person scheduling the visit is told what the intake process needs to look like for each type of visit and they perform as much as they can on the spot.

Real-life Example 2: everyone is trained in scheduling
We work with clients to train all staff who interact directly with remote patients how to schedule. Using automation like **Intelligent Scheduling** makes this possible. Nurses, medical assistants, and even technicians can quickly schedule while talking with a patient. This minimizes patient leakage, saves the patient's time, avoids transferring the patient, all resulting in higher patient satisfaction and a fuller schedule.
This is another example of principle #3 ("provide all the services you can in one interaction").

> (i) Full patient and encounter context are available at each step

"Full patient context" means two related, but different things. First, it means the patient's medical context from the EHR and PM: context such as medical history, medications, problem list, visit history, future visits, etc. (EHR & PM integrations)

Second, it also means the patient's immediate encounter context: reason for call, chief complaint, and any key information the patient has already communicated as well as what will be needed next.

Why this is crucial:
• Full patient context reduces errors
• It reduces patient restatement and frustration

• Context improves safety, outcomes, and flow
• This data prepares the way for later automation of proactive outreach and safety

Steps you should take:
1. Find a single Healthcare CRM that brings all the patient's data together from all of your systems as much as possible. These should include:
• PM
• EHR
• Telephone (CTI)
• Knowledge Base
• Clinical Decision Support
• Messaging
• Sales/Marketing CRM
• Geo-location Services
• Patient Monitoring

> (i) All staff are trained in Telehealth safety, documentation, and soft skills

Why this is crucial:
• Telehealth communication is significantly different than in-person communication
• Telehealth safety considerations are unique for two reasons: first, clinicians don't have the same feedback they get in person. Second, getting a remote patient to the right location is more difficult than when they are in your office
• Telehealth workers consistently report higher work stress than in-person delivery. Higher levels of support and training are needed

Steps you should take:
1. Look to **American Telemedicine Association** for content for telehealth training
2. **American Academy of Ambulatory Care Nursing** (AAACN) has perhaps the most extensive guidelines and recommendations for telehealth, focused on nursing
3. Keona Health blog and Gina Tabone regularly publish tips and checklists for telehealth

> (i) QA metrics exist for all Telehealth services

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Why this is crucial:
• You need objective measurements of quality as you implement change to guide and correct the changes
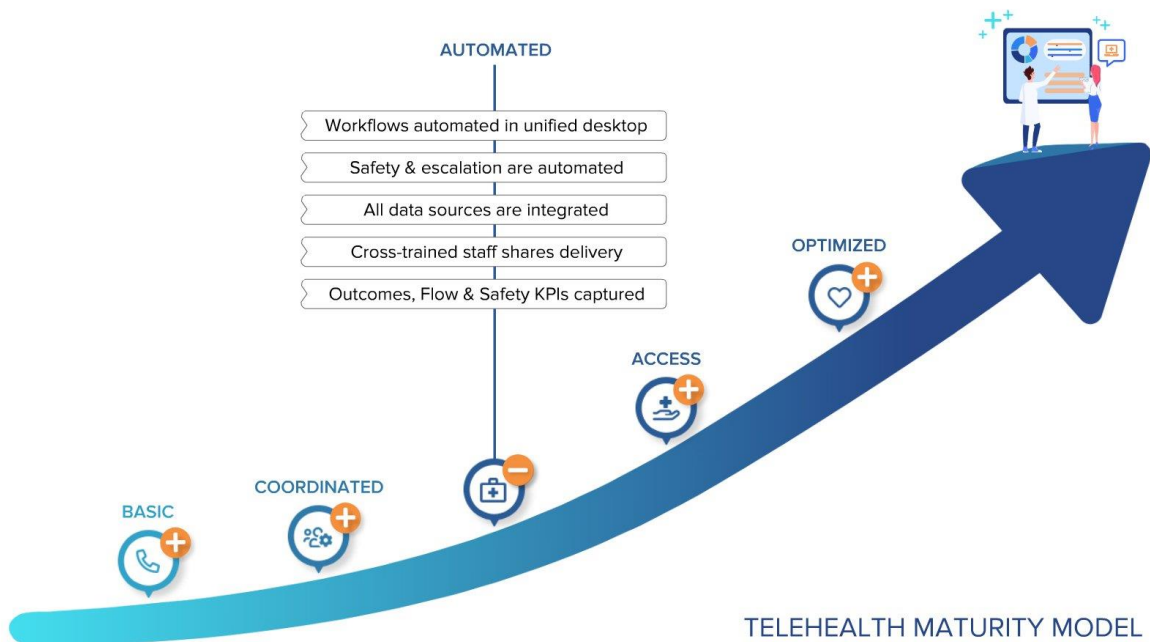• Proper governance is required for optimal outcomes

> (i) Outcomes & Safety Metrics

Why this is crucial:
• You can't optimize what you don't measure
• Safety and outcome metrics are necessary to truly understand your service quality

Steps to take:
• Record and report the outcome of the encounter
• Did the encounter end with a triage disposition? What was it?
• Number of escalations, and reasons why
• QA ratings / reports

AUTOMATED
- Workflows automated in unified desktop
- Safety & escalation are automated
- All data sources are integrated
- Cross-trained staff shares delivery
- Outcomes, Flow & Safety KPIs captured

OPTIMIZED

ACCESS

COORDINATED

BASIC

TELEHEALTH MATURITY MODEL

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AUTOMATED

Summary

A unified Healthcare CRM software guides workflows and...

• Unified desktop automates workflow steps, documentation, safety checks, and escalation procedures
• Patients can access healthcare services over multiple channels
• Proactively intervene and recommend services based on patient context
• Captures Outcomes, Flow & Safety KPIs
• Have results KPIs across each channel

In Depth

> (i) Unified desktop automates workflow steps, documentation, safety check and escalation procedures across roles

Why this step is crucial:
• Automating workflows reduces errors, reduces training time, and reduces costs
• Encapsulating safety checks and escalation procedures improves safety and outcomes
• A single interface and toolset across roles facilitates easy administration and allows different roles to assist each other
• It sets the stage for self-service. Without the simplification of automation, patients could never be trusted to navigate complicated workflows. (For example scheduling, which requires 5 steps.)
• Sets the stage for cross-channel workflows.
• Necessary before self-service access

Steps to take:
1. Subject Matter Experts (SMEs) builds triggers, criteria, and decision points into the software
• Visit type requirements by specialty
• Provider requirements
• Insurance requirements
• Intake criteria by visit type
• Forms request process
• Customer support process
• Any other telehealth workflows needed

2. Encounter routing to staff is built on training and skill sets

3. Incorporate Advanced AI tools and clinical decision tools into the workflow. Key tools:
• Natural Language Symptom algorithms
• Triage Nurse algorithms
• Patient monitoring

4. Establish escalation logic & messaging
• On-call & 2nd level triage logic & integrations
• E911 service integration
• Geolocation & emergency room mapping
• Integrated Fax / EHR messaging to Emergency Departments
• Messaging templates to save precious moments in critical situations

5. Integrated Knowledge Base for reference information displays based on call type

> (i) Pricing of services is transparent

Why this step is crucial:
• Process for insurance validation and payment processing need to be worked prior to self-service implementation
• Crucial factors in patient trust as well as maximized revenue

> (i) Captures encounter handling metrics in real time

Why this step is crucial:
• Call handling metrics give you the tools for identifying issues in call flow and addressing them as they occur
• Gives insight into where automation can improve and also where automation is not helping
• These are also key metrics for staff training and for reducing costs
• This sets the stage for demand management, where demand is forecast and patients are directed to different channels or avenues to facilitate the best service

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Steps to take:

1. Be sure all your channels (synchronous and asynchronous) report the following metrics:

• Time for each step in the service flow
• Total Handle Time
• Number of interactions per resolution
• Average speed to resolution
• Number of complaints

TELEHEALTH MATURITY MODEL
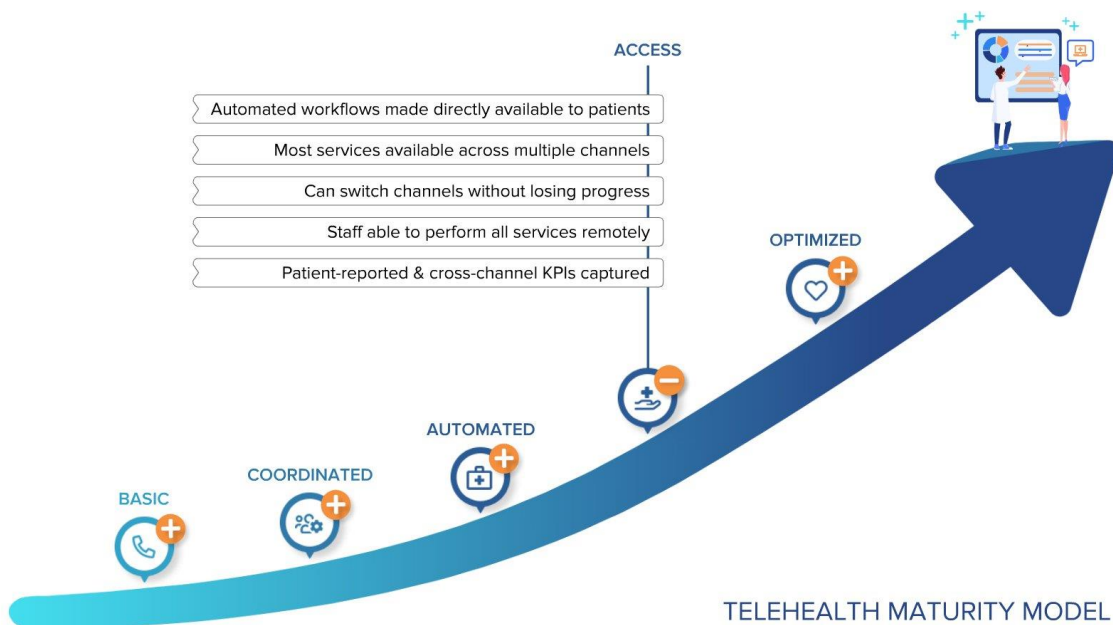
ACCESS

Summary

The Access stage builds on the workflow optimization and automation of the last two phases. It makes services available anywhere over multiple channels with online and AI-optimized cloud technologies.

• Patient self-service is available for most services & workflows, complete with safety checks and escalations
• Patients can switch between channels without losing prior work
• Software facilitates all remote staff workflows
• Pricing of services is transparent
• Capture patient-reported and cross-channel KPI's

In Depth

> (i) Patient self-service is available for most services & workflows, complete with safety checks and escalations

Why this step is crucial:

• During COVID, clients were overwhelmed with COVID calls. It backed up queues, made clients miss appointment calls, and caused delays in care.
• Self-service offloads work from your staff, freeing up personal queues for those patients and requests that require a more personal touch
• Self-service improves patient satisfaction
• Multiple patient facing channels are required to support the Optimized stage, especially demand management

Steps to take:
1. Take existing workflows and automation built for your staff and put them on a patient-facing web page.

Key workflows:

• Symptom Algorithms
• Scheduling
• Health education
• Check-in and intake
• Billing & payments

2. Edit the language to be patient-friendly

3. Add pictures, profiles, maps information and other patient-facing content to add ease and instill confidence

> (i) Patients can switch between channels without losing prior work

Why this step is crucial:
• Losing information increases abandonment rates and reduces repeat use
• When patients reach out via a channel for critical or emergent help, losing information when switching channels causes harmful delays
• The ability to transfer discussion between channels makes your services more

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adaptable when unforeseen situations arise (technology failure, local outbreak, spike in demand, etc.)
• Patients don't like repeating themselves

Steps to take:
1. Be sure the channels you have chosen (text chat, video chat, telephone, SMS, online forms, etc.) are all integrated
2. Each channel should have access to the same or similar AI and clinical decision tools
3. Staff should be trained on going back-and-forth between channels. This is easier if all channels are incorporated into a single interface

(i) Service platform facilitates all remote telehealth workflows

Why this is crucial:
• In localized telehealth, the patient is remote but the service providers are all in a local location. Coordination is far easier when everyone is in the same place.
• In remote telehealth, the patient and the service providers are all remote. When this occurs, processes and collaboration tools must be well honed.• Self-service improves patient satisfaction
• When telehealth staff can work remotely, your organization maximizes access and effectiveness when staff are immobilized, whether during extreme weather, local outbreaks, and more.

(i) Patient-reported and Cross-Channel KPI's are captured

Why this is crucial:
• Immediate & direct patient surveys are the best measure
• Cross channel KPI's are needed for demand management

Steps to take:
1. Be sure all your channels (synchronous and asynchronous) report the following metrics:
2. Satisfaction rating

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3. Custom patient surveys
4. Channel preference by demographic, specialty, etc.
5. Wait time per channel
6. Outcomes & escalations per channel
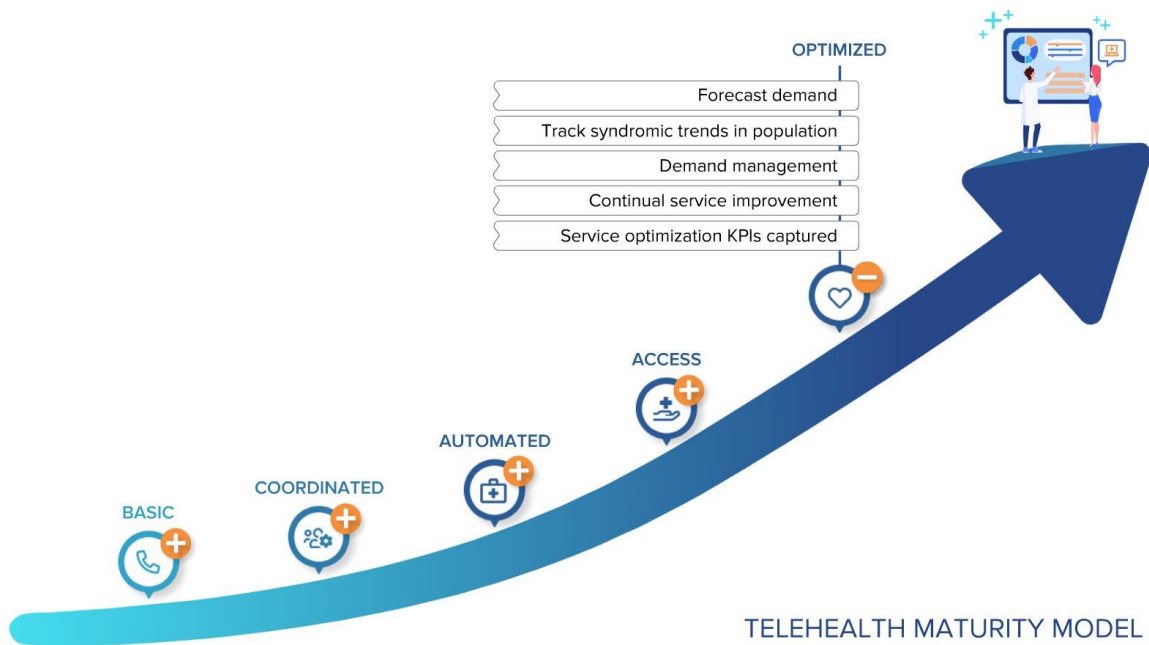
OPTIMIZED

Summary

The Optimized stage builds on every prior stage. Providers can forecast demand, continuously improve service and quickly adjust workflows and processes in real time to changing circumstances. They are aware early of symptomatic trends across the population and have the tools and expertise in hand to direct demand to the channels needed at the moment.

• Track symptomatic and syndromic trends in population
• Capture holistic patient experience KPI's
• Forecast demand
• Continuously measure and improve quality and efficiency of all channels
• Demand management drives traffic to the most effective avenue

IDEAL EXPERIENCE FOR HEALTHCARE ORGANIZATION

IF YOU'RE NOT DOING THESE THINGS – SOMEONE ELSE WILL.

In Depth

ⓘ Track symptomatic and syndromic trends in population

Why this step is crucial:
• Maximize service predictability
• React early to changes in your population
• Report key data to your public health board

Steps to take:
1. Setup reporting and business intelligence to map address and/or zip code to symptomatic data

ⓘ Forecast demand

Why this step is crucial:
• Reduce costs while maintaining quality
• Optimize workforce management

Steps to take:
1. Build a forecast model from underlying cross-platform data
2. Start with seasonality, and add trends, such as channel use, then modify for seasonal variations, such as timing of flu season
3. With the right BI tool, this can be easily access in a dashboard at any time

> (i) Continuously measure and improve quality and efficiency of all channels

Why this step is crucial:

• Capture relative use, effectiveness, strengths, weaknesses, and outcomes of each channel for your local population

> (i) Capture holistic patient experience KPI's

Why this step is crucial:
• A few, simple service metrics yield the best correlation to behavior
• Closely monitoring these will yield optimize service delivery

Steps to take:
1. Be sure all your channels (synchronous and asynchronous) report the following metrics:
2. Net Promoter Score
3. First contact resolution
4. Customer Satisfaction Score
5. Mean Time to Resolve
6. Complaints
7. For more information, see **How to Grow 2x with the Right Scorecard**

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> (i) Offer satisfaction guarantees for your telehealth services

Why this step is crucial:
• With deep knowledge of your service capabilities and adaptability, you can make a strong statement of assurance in your services
• Given your experience with adapting, the next unexpected event can be met with confidence
• Satisfaction guarantees have been closely linked to growth in a number of industries, especially if you have a first-mover advantage

Steps to take:
1. Determine the target market for growth
2. Determine the type of guarantee, the service guaranteed, the length of time, and how to evaluate conditions and process the benefits
3. Advertise!

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