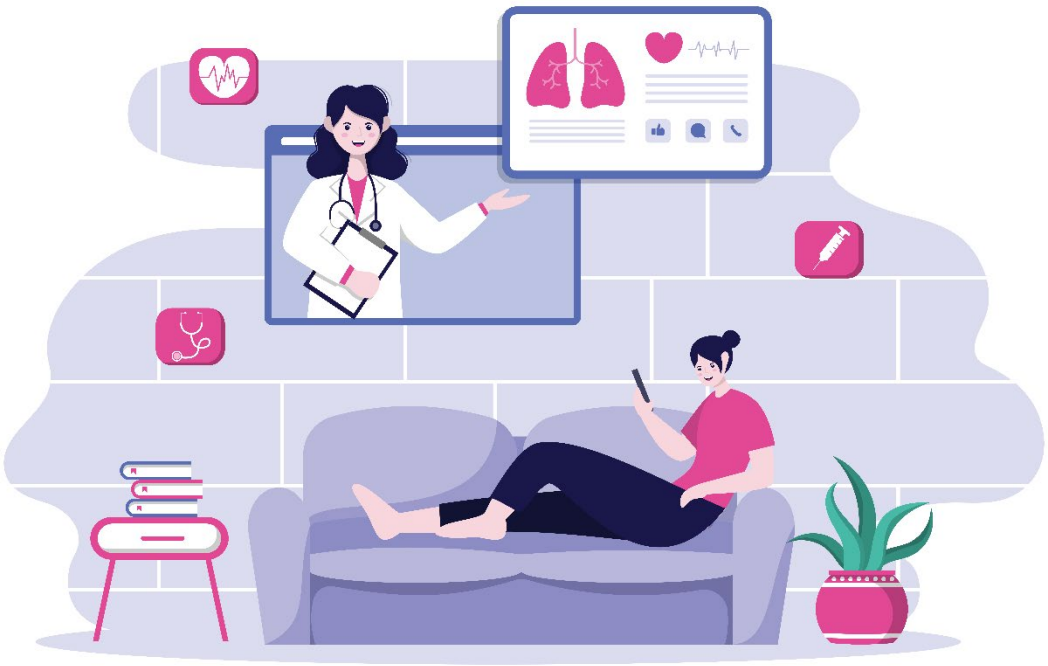
Direct to Consumer Toolkit



There is a growing trend in healthcare to provide care directly to the patient (or consumer) in their homes using a variety of telemedicine technologies. We refer to this type of care delivery as Direct to Consumer (DTC) Telemedicine.
This toolkit provides an overview of what Direct to Consumer Telemedicine is and what key considerations should be reviewed when selecting and implementing a Direct to Consumer solution.

- **Introduction**: This section defines DTC Telemedicine and provides an overview of the topics to be covered in this toolkit.
- **The Consumer and Critical Questions**: What does a DTC customer look like, and what are the critical issues they need to have addressed?
- **Adoption and Accelerating Growth**: A look into the elements that drive and hinder Consumer adoption of DTC technologies and services.
- **Service and Financial Models**: An overview of common service and business models represented in the DTC marketspace.

- **Bibliography and Useful Links**: A bibliography of referenced sources and relevant links.

National Telehealth Technology Assessment Center (TTAC)
telehealthtechnology.org
HRSA Grant # U6743495

- **Resources**: Links to additional related resources

Introduction

Disclaimer: This White paper is intended as a summary of the current issues that should be considered when selecting and implementing a Direct to Consumer solution. It is based on personal experience of the writers and current published literature. For a more in-depth understanding, we suggest the reader see the Helpful Links, included in the Bibliography and conduct a search of current literature.

The purpose of this document is to inform potential Direct to Consumer Telemedicine (DTC) consumers and providers. The objective is to provide a useful background on DTC, the solution options, and a sample listing of current Direct to Consumer Telemedicine companies, including the options available, approaches, and business plans/profiles. We have included critical issues and considerations. Direct to Consumer (DTC) Telemedicine is the provision of healthcare consultations directly to a consumer. The consultation can take place over video, voice or text-based communications. The consultation is generally initiated by the consumer but can be initiated by a provider. The consultation can be scheduled or unscheduled (on-demand). DTC falls into two general categories: #1. A direct video, audio or text conversation with a provider and

A Note on DTC Hardware:

DTC hardware often consists of multi-exam tools designed to capture exam camera, otoscope, stethoscope, pulse/oxygen, and other vital signs. Often these devices are paired with a tablet, or other device to display information, guide the exam, provide a video and audio platform, and transmit the captured vital sign values.

For examples of DTC hardware and platforms see the following Innovation Watch articles:

- TytoCare
- MedWand

#2. A visit enhanced with specific hardware designed to allow a consumer to collect needed biomedical data to share with the provider.

DTC offers convenience and a fixed price. Consumer can ask for healthcare consultations and advice when and where they are without having to travel to a care provider, wait in line and potentially expose themselves to infections. Also, because the price of a DTC consult is known up front, the consumer knows the total cost in advance.

DTC telemedicine consults are generally used as an alternative option for Primary Care, Urgent Care, and low acuity Emergency Room visits.

Examples:

DTC service promises online "on-demand" access to a provider.

Typical examples might include:

- An employee with a cough
- A parent with a feverish child
- A college student or traveler away from home.

The primary value is that the consumer is offered the convenience of immediate service. The consumer can stay at home and workers could stay at work. When a person wants a provider consultant, they simply access a web site or an APP on a smart device, log in, create an account with their basic complaint and history and see a provider.

Panels of providers are available to take a call. Every provider is licensed in the state where the patient is. Assignment of a provider is similar to the UBER or Lyft model. A provider posts his/her availability, specialty and other demographics. The consumer can select one of the providers that are available or be assigned a provider based on need. Patients are held in a short cue until the provider gets online. The provider conducts a structured diagnostic interview with the patient face to face. The provider either makes a diagnosis and recommends treatment. If a prescription is needed, the provider writes and transmits a prescription to a pharmacy local to the consumer/patient. If the case is too complicated for the online visit, the provider gives instructions/referral for a higher level of care. The provider documents the encounter in an EMR Electronic Medical Record (EMR).

DTC calls can also be used for follow-up appointments for previous face to face consults or video consults. These are scheduled and can be made with the same provider as the initial visit or another informed provider. Applications typically include follow-up for chronic disease, chronic pain or to check status of the patient on a care plan.

Author disclaimer: The lead author has no financial or management interest in any of the companies listed.

The Consumer and Critical Questions

Who is the Consumer?

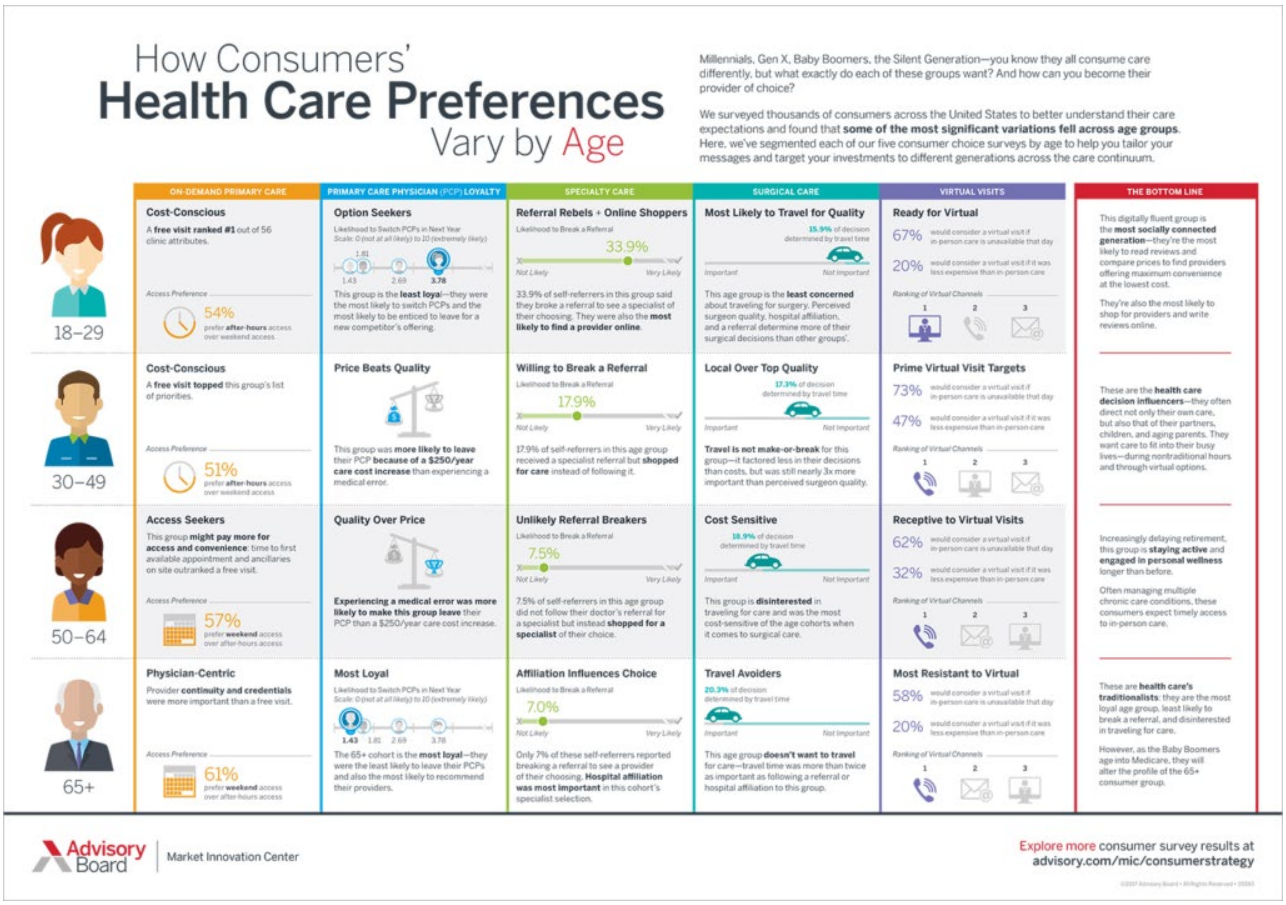
Healthcare is a market where consumers have options. A consumer is any buyer of healthcare whether for themselves or their family or others they care for. Healthcare providers realize that they are often competing for patients and therefore must reach out to the consumers of healthcare in their catchment area and provide services in the form these consumers are interested in. Providers also realize that the expectations of healthcare consumers are changing and may depend on demographics, role or other factors.

Critical Questions

Who is your target consumer?

As any good marketing advisor will tell you, target marketing is essential. Consumers in healthcare are not a homogeneous group. Each generation looks at healthcare, and how they want to access healthcare, differently. You should target service definition, promotion, incentives, etc. based on your target populations.

Consumer behavior patterns are changing. A consumer's healthcare used to be centered around a long-term relationship with a primary care provider. Today consumers are using online tools to research, select and buy healthcare services, much like they buy almost everything else. For example: Age groups 18-29 frequently do not have designated primary care providers and buy healthcare services as needed, based on their research and convenience. The loyalty of consumers to a given provider in ages 30-64 is falling. Price and quality considerations are rising as a method of selecting a provider. (7)



Advisory Board – How Consumers' Health Care Preferences Vary by Age – Infographic 2017, https://www.advisory.com/research/market-innovation-center/resources/posters/how-consumers-health-care-preferences-vary-by-age

Deloitte (5), Beckers(6), and the Advisory Board(7) have all published informative studies on Health Consumer profiles to aid in targeting. Links to these articles are included in the **Bibliography**.

Note: Do not underestimate the capability of elders to use technology solutions. Many consumers aged 70 and over have computer skills and have expectations about service technologies. Keep in mind that many of these people have experienced computers and remote services in some form for the past 40-50 years. (2)

- ATMs and video games became popular in the 1970s
- By the early 1980s, office jobs were beginning to center around computers and computer terminals.
- By the end of the 1980s, Microsoft applications were in everyday use in business.

- In the 1990s laptops were in regular use in business and were moving into the home. Amazon arrived in 1994,
- The iPhone arrived in 2007 followed by a deluge of Smart phones. The iPad arrived in 2010 and the over 55% of the early buyers were 55 or older.

Consumer Engagement Don't overestimate initial consumer acceptance. Common first year consumer engagement (prior to Covid 19) is less than 5%

- A major challenge and cost of implementing DTC is engaging consumers and getting consumers to use the services for the first time. As many DTC programs have experienced, it's not enough to tell consumers that your service is available. You have to educate and promote its advantages to the consumer and address their potential resistance.
- The cost of promotion, consumer education, and incentives must be calculated into your budget.
- Change – Don't underestimate the challenge of change. Although Consumers of DTC have reported very high satisfaction levels, this is a new service for them. Acceptance takes time.

Provider Engagement:

For providing Care: Care should be taken when selecting providers to participate in a DTC program. If you are using a provider panel from the DTC service provider, the need to engage your own providers is minimized, but to control cost and to improve provider utilization, it is essential to get your providers engaged and willing to provide consults through the DTC platform. This has been a challenge to date. However, provider attitudes have shifted significantly since the Covid-19 public health emergency.

You don't need all your providers to participate. You only need a sufficient number to staff your anticipated demand (and you can use your service provider's panel to fill in any gaps). You also want to make sure the providers you choose are comfortable, skilled and present well in a video encounter. This will require careful selection, onboarding, training and observation. Look for clinical environments in your system where providers are underutilized (urgent care centers are often a good place to look if you have them)

To promote DTC services – Providers are often the best promoters of new services and functions. Ask your providers to tell patients about the service and encourage them to use it.

Ease of use is a key consideration in any technology selection, but considering how closely providers and patients will interact with these DTC services, special care should be taken to consider the different users, use cases, and usability challenges that may arise.

Consider the perspectives of the:

- Provider – It is critical that the DTC fits within an effective and efficient workflow for the provider. Posting availability, scheduling, initiating the call and taking notes into the EMR are all critical and should be easy to use for the provider. The more you can imbed this process into your current EMR (initiate the call and document the encounter inside the EMR) the better. Make the place to take the call as convenient as possible. Their own office is usually the best (take time to make sure the location looks professional on video)
- Consumer – It is critical that the consumer user experience be easy and satisfying. For the young user, downloading an APP or accessing the service over the Web is generally common and easy. This becomes more complicated with age and demographic. Call connection reliability is also critical. Consumers will quickly become frustrated if the calls do not connect or are disconnected during the call. Test in your environment.
- Infrastructure – Connectivity and Devices – Make sure the solution you choose works within the connectivity limitations of your target consumer (bandwidth, Internet connectivity, cellular connectivity, etc.). It is preferred that no special device be required. The application should operate effectively with the devices commonly available and in-use in your target market.
- Integration with the consumer's medical record/information access – The consumer should be allowed access to current status, results, notes, etc. either directly through a patient portal or through some of the mobile health platforms.

Pricing

The common price to the consumer for a DTC primary care consultation range for about $49-$59 for a primary care/urgent care consult. Prices for behavioral health and other specialty consults appear to range from $59-$99 (at the time of this study). These prices will vary significantly depending on the type and complexity of services offered, as well as the geographic and economic locations services are provided in.

Portability

Consumers want healthcare where and when they need it. They are more mobile than before both physically and in the decisions to buy services. But they also want their medical information to go with them and be shared between providers. Markets like electronic banking, Amazon and most consumer buying sites have conditioned consumers to these expectations. (Consumers are able to make transactions from wherever they are, and their transactions, updated data and even preferences follow them wherever they go.) Additionally, the advent of mobile devices as a primary tool, and destination for health services we should expect to see care that moves both patient data, and patient locations to a variety of locations.

Adoption and Accelerating Growth

Adoption

Why haven't a larger percentage of consumers embraced DTC? Note: This is a rapidly changing environment as these services become more common from health plans and health providers and with the response to and demands of COVID 19.

As of the middle of 2019, nationwide consumer adoption of telehealth services has been stubbornly low, with less than 8% of healthcare consumers having used such services. (3). Although the potential is significant and growth is beginning to accelerate, there are a number of reasons that should be considered and understood**:**

- Resistance to change is a well-established tradition / mode of care – For well over 75 years, the standard method of accessing primary care is that you went to see a doctor. We are creatures of habit and for most consumers this has been a successful and comforting process. Consumer habits change slowly.
- Relationship with their physician – Many consumers have an established and trusted relationship with their physician. All of our examinations and discussions have been face-to-face and personal. A major political mantra in health insurance policy has been the ability for patients to keep the existing physician relationship. With the advent of EMRs and physicians in primary care, consumers are finding this is less and less true, but still effective. People and consumer habits change slowly.

- Perceived limitations in the capabilities of a DTC consult – To consumers, this may be perceived as "less medicine". A common assumption can be that the provider capabilities must be less over a video call than in person. In reality most primary care conditions do not require an in-person visit. DTC has proven to be very effective in identifying issues that require an in-person assessment and advise the consumer/patient accordingly. J. D. Powers found that 84% of cases get resolved entirely on-line. Other reports (including DTC providers) raise this success rate to 95%. The rest of the encounters are referred appropriately.
- Concerned that they might have to pay twice – The concern that the DTC consult will direct them to an ER or other provider anyway resulting in additional changes to the consumer (pay twice). In some cases, this remains true, especially if the DTC providers do not have an existing relationship with the consumer's network or alternative providers. This is being addressed in a variety of ways. Many DTC providers waive the charge if a satisfactory diagnosis cannot be reached, and the patient must be referred to an in-person provider. Health Networks and employer plans have integrated their in-person and DTC services so that the DTC charge is applied to the in-person visit if needed (just as an Urgent Care Center charge is usually either waived or credited if a consumer is referred to an ED).
- Price/Value – One big mistake DTC programs have made is to price the DTC at the same or more than a standard primary care co-pay. Since the consumer perception is for a lower cost and slightly riskier spend, the price should be the same or less which is justified because the cost of a DTC consult is less and may be more valuable to the provider

Accelerating Growth

DTC has shown rapid growth over the past ten years. Much of this growth can be attributed to:

- DTC services are being more widely offered. Most health plans, employer health plans, health systems and payers offer these services to their employees/customers.
- Gradual consumer acceptance – High satisfaction rate. "… among those early adopters who are using telehealth, customer satisfaction with the experience ranks among the highest of any consumer category studied by J.D. Power."(3)
- Impact of the COVID 19 – The infection risk of COVID 19 and resulting stay at home orders have discouraged consumers from going to in-person care

environments to avoid being infected or infecting others. In addition, providers have implemented limitations to in-person visits to reduce risk of infecting themselves or their patients. This has not stopped the consumer's need for care or the need for providers to provide follow-up visits and alternatives to office visits for their patients in order to sustain their practices. The CMS and HIPAA waiver of certain restrictions have encouraged providers to provide visits and follow-up with their patients. Healthcare plans have also implemented video health assessments. This has rapidly exposed both more consumers and more providers with the experience of a video and phone consultation. In December 2019, less than 8% of patients had ever been exposed to telemedicine. By the end of May 2020, that had grown rapidly to approximately 30% and continues to grow rapidly as the pandemic continues. This may have a profound impact on the acceptance of and use of DTC telemedicine services.

Service and Financial Models

Service Models

- Previous vendor surveys have shown a wide variety of service models made available in the DTC market space. Service might include any combination of the following: Video Call – This is where the entire encounter between the consumer and the provider is conducted over video. Can be on demand or scheduled.

- ChatBot – This is where the encounter is at least partially conducted through a text based ChatBot application/structured interview. The ChatBot leads the consumer through a structured question set based on the consumer's complaint and self-reported symptoms. Most ChatBots use AI to generate a differential diagnosis.
- Hybrid – This is where the encounter is at least partially conducted through a text based ChatBot application/structured interview. The ChatBot then communicates the results of the structured interview as well as a differential diagnosis to a provider. The provider then enters the encounter with the consumer (over audio and/or video), makes the final diagnosis and communicates the diagnosis and care plan to the consumer.
- Scheduled vs. On-Demand – Any of the above can be conducted "on demand" or can be scheduled between the consumer and provider if the application you choose enables it.

- Initial appointment vs. follow-up – DTC encounters can be either an initial encounter (frequently "on demand") and/or a follow-up encounter (usually scheduled)
- Visits supported by DTC designed peripherals used to capture and transmit patient information to the DTC provider.

Financial Models

Pricing and billing models vary by company (service provider). When working with a service provider ask for a detailed description of charges. Here are a few examples cost models for comparison purposes. In initial conversations with vendors, you may note that many are hesitant to provide an initial set price and will prefer to do an individualized price quote. Some of this is due to the very fast changing and competitive market, with few vendors having published standard price list. It can also be due to the varied nature of the clients they serve, with the needs and scale of project varying from one client to another. Don't be afraid to negotiate where applicable.

- Licensing – This might include an up-front license to use the technology or application as well as annual license renewals. Some licenses are limited to a number of consumers, number of providers or the number of clinical specialties supported.
- Cost per minute (API services) – A few emerging players may charge a cost per minute
- Cost per call – This is a cost per call using the platform. It does not include the cost of the provider. At least one company charges on a simple – cost per call basis.
- Cost per provider consult – Some companies have a simple cost per consult. This usually includes the "Cost per Call" use of the platform. Cost per consult can vary from about $40-$90 depending on base price and specialty.
- Services – Most companies offer a variety
    - Set-up – Most companies charge an up-from set-up charge. This is sometimes included with the up-front license fee.
    - On-Boarding – Onboarding of providers and staff is essential, and most vendors offer these services directly or in a train-the-trainer approach.
    - Training – Additional training is usually available but at an extra fee
    - Marketing – Marketing is essential, and the larger vendors offer extensive marketing services and will even take on complete marketing

responsibilities. This can result in substantial costs; you should know what you're getting and set written goals/measurements of success for the vendor.

Bibliography and Useful Links:

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Resources

These resources supplement this toolkit:

- Clinician's Guide to Video Platforms: link