



Reimbursement Pathways for Remote Patient Monitoring and Telehealth during COVID-19

April - 2020

Introduction

The COVID-19 pandemic has shifted the center of focus of healthcare towards digital health solutions such as telehealth and remote patient monitoring. This shift has been triggered by a number of new private, public and grant based reimbursement schemes that has been announced particularly for these services. This document will help the reader understand four different reimbursement pathways that are available for deployment of remote patient monitoring and telehealth services during the COVID-19 pandemic.

The first section details the CPT codes. The second section provides example of revenue per patient available to providers based on these CPT codes. The third section details how different key players in the digital health marketplace such as technology vendors, technology integrators, telehealth enterprises and providers can subsequently generate revenue during the COVID-19 pandemic. As an example of RPM technology vendor, we will use Think Biosolution and its “At-Home COVID-19 Monitoring Platform”.

CMS CPT codes for Remote Patient Monitoring and Telehealth

Over the past few years, multiple CPT codes have been introduced to reimburse telehealth products and services. Additionally, remote patient monitoring (RPM) reimbursements were expanded significantly in 2019, with the introduction of new CPT codes 99453 ,99454 and 99457. This was accompanied by the explicit unbundling of RPM from telehealth services, thus addressing the need and pervasiveness of remote patient monitoring solutions as an integral part of several care pathways. The reimbursability of most of these codes have been expanded during the COVID-19 pandemic to address expanded use cases. Detailed below are the relevant CPT codes for remote patient monitoring and telehealth.

Remote Patient Monitoring

CPT code	Purpose	Reimbursement amount
99453	Device Education and Training	\$18.77 - one off (Facility and Non-Facility Rate)
99454	Device/transmission Reimbursement	\$64.44/month (Facility and Non-Facility Rate)
99457	Patient care management	\$51.61/month (Non-Facility Rate) \$32.84/month (Facility Rate)
99458	Additional review, interpretation and follow-up	\$42.22/month (Non-Facility Rate) \$32.84/month (Facility Rate)
99490	Care plan review for multi-morbidity by clinical staff	\$42.23/month (Non-Facility Rate)

Telehealth

CPT code	Purpose	Reimbursement amount
G2012	Brief communication technology-based service, e.g., virtual check-in by HCP	\$13.35-14.80 /session
99422	Online digital evaluation and management service, for an established patient, 11-20 minutes	~\$31/week
99423	Online digital evaluation and management service, for an established patient, 21+ minutes	~\$50/week

Reimbursement Pathways for Providers

Private Insurance

Several private insurance reimbursement models are based on Medicare guidelines. Notably, UnitedHealthcare advises healthcare providers on covered services and reimbursement amounts using CMS CPT codes. (1)

A typical care schedule for at-home COVID-19 monitoring can secure a reimbursement of \$867.98 over 3 months from private insurance as detailed in the table below. The model is based on implementation guidelines for simultaneous deployment of RPM and telehealth solutions from UnitedHealthcare.

CPT code	Frequency/Duration	Cost
99453	Once per episode of care	\$18.77
99454	\$64.44/month for 3 months	\$193.32
99457	\$51.61/month, for 3 months for first 20 minutes of monitoring time every month	\$154.83
99458	\$42.22/month, for 3 months for additional 20 minutes of monitoring time every month	\$126.66
G2012	\$14.80 per virtual check-in, once a month	\$44.40
99422	\$31 per visit, twice a month, 11-20 minutes	\$186
99423	\$50 per visit, once a month, 21 or more minutes	\$150
	TOTAL	\$867.98

CMS Medicare and Medicaid

A typical care schedule for at-home COVID-19 monitoring can secure a reimbursement between \$493.58 (for patients with no co-morbidities) and \$620.27 (for co-morbid patients) over 3 months from CMS as detailed in the table below. The model is based on implementation guidelines for deployment of RPM devices and services. Further information on CPT codes is available above in Section. Remote Patient Monitoring.

CPT code	Frequency/Duration	Cost
99453	Once per episode of care	\$18.77
99454	\$64.44/month for 3 months	\$193.32
99457	\$51.61/month, for 3 months for first 20 minutes of monitoring time every month	\$154.83
99458	\$42.22/month, for 3 months for additional 20 minutes of monitoring time every month	\$126.66
99490	\$42.23/month, for 3 months (optional)	\$126.69

	For review of co-morbidities by clinical staff for 20 minutes every month	
		TOTAL \$620.27

A typical care schedule for at-home COVID-19 monitoring can secure additional \$380.40 reimbursement for telehealth services over 3 months from Medicare and Medicaid as detailed in the table below. Further information on CPT codes is available above in Section

Telehealth.

CPT code	Frequency/Duration	Cost
G2012	\$14.80 per virtual check-in, once a month	\$44.40
99422	\$31 per visit, twice a month, 11-20 minutes	\$186
99423	\$50 per visit, once a month, 21 or more minutes	\$150
		TOTAL \$380.40

CARES Act

In response to the COVID-19 pandemic, the CARES Act (2020) has been enacted. The COVID-19 Telehealth Program under the act will provide \$200 million in funding, offering up to \$1 million per healthcare provider to fully-fund telehealth programs through the COVID-19 pandemic. (2)

The CARES act is only intended for public entities and not-for-profit healthcare facilities, such as

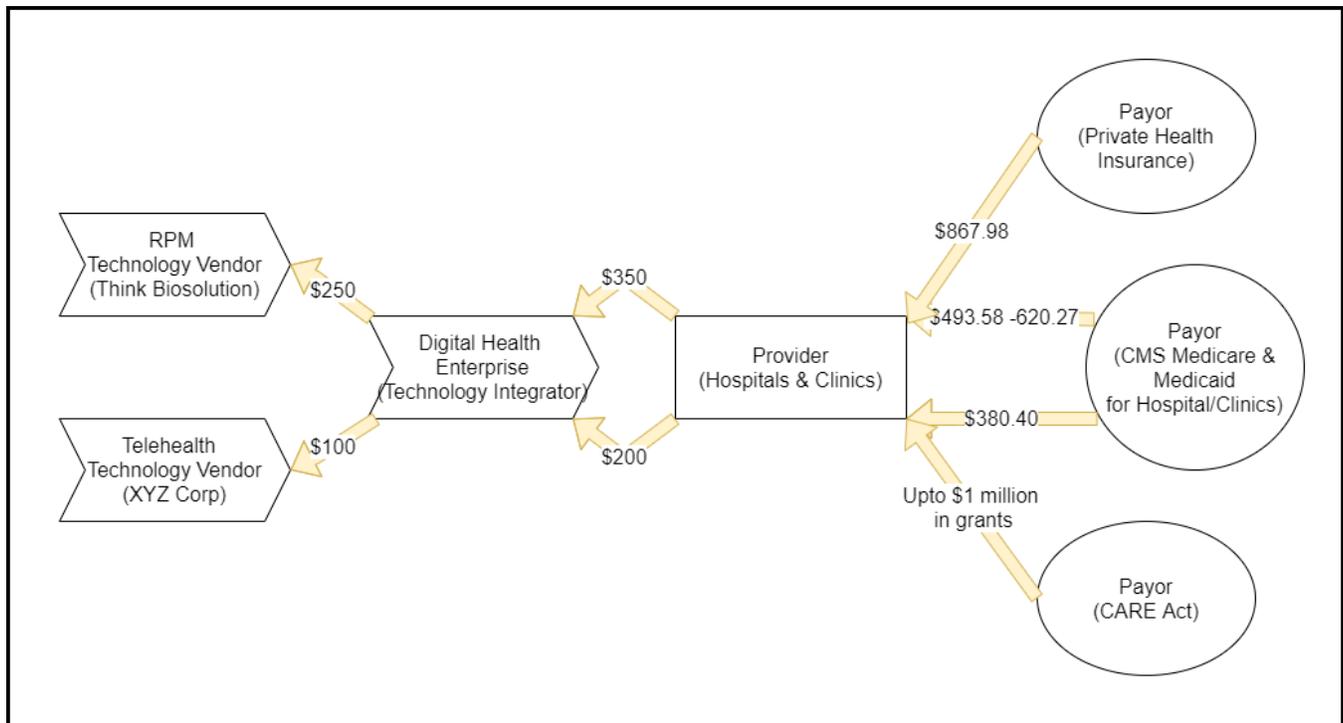
- Teaching hospitals and medical schools
- Not-for-profit hospitals
- Community clinics
- Local health departments and agencies

The grants can be used for

- video consultations (both services and platforms will be covered).
- remote patient monitoring (both services and platforms will be covered).
- smartphone/tablets to connect to remote devices and store/transmit data to HCPs, and
- telecommunication services for remote connectivity

Reimbursement Pathways for our Clients

Client - Digital Health Enterprise



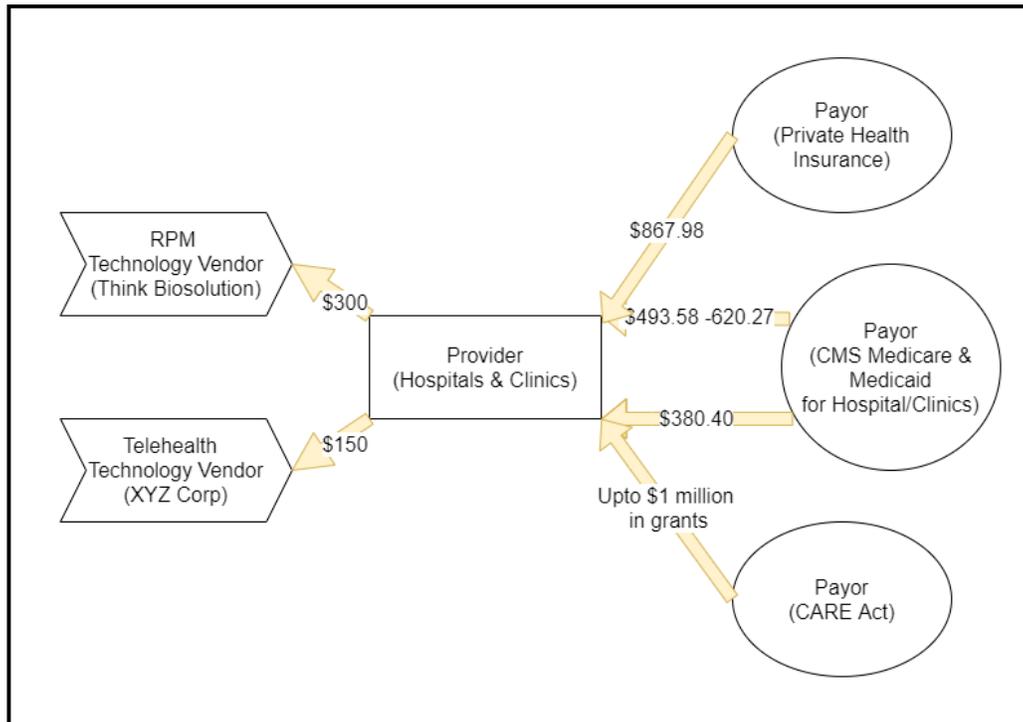
Who they are

A digital health enterprise delivers remote patient monitoring and telehealth services to healthcare providers, such as hospitals, clinics, community care centers. Most of these digital health enterprises are system integrators that procure multiple external services such as RPM and telehealth technologies from technology vendors. Some of these digital health enterprises have in-house digital health platforms and may only opt to work with a single external technology vendor.

Revenue Pathways

For COVID-19 monitoring digital health enterprises typically get reimbursed \$350 for RPM services and \$200 for telehealth services over a typical 3-month period per patient. They in-turn pay technology vendors \$250 for RPM services and \$100 for telehealth services. So digital health enterprises make a profit of \$200/patient. Which in turn means that for every 5000 patients on their platform, digital health enterprises will make a gross profit of \$1 Million.

Client – Providers such as Hospitals/Clinics



Who they are

Healthcare providers, such as hospitals, clinics, community care centers are increasing moving towards building a digital presence and are providing RPM and telehealth technologies to their existing patients. Healthcare providers usually buy telehealth and RPM solutions from technology vendors, acting as a system integrator, and provide the end-to-end platform as a service bundled with access to their clinical staff and infrastructure.

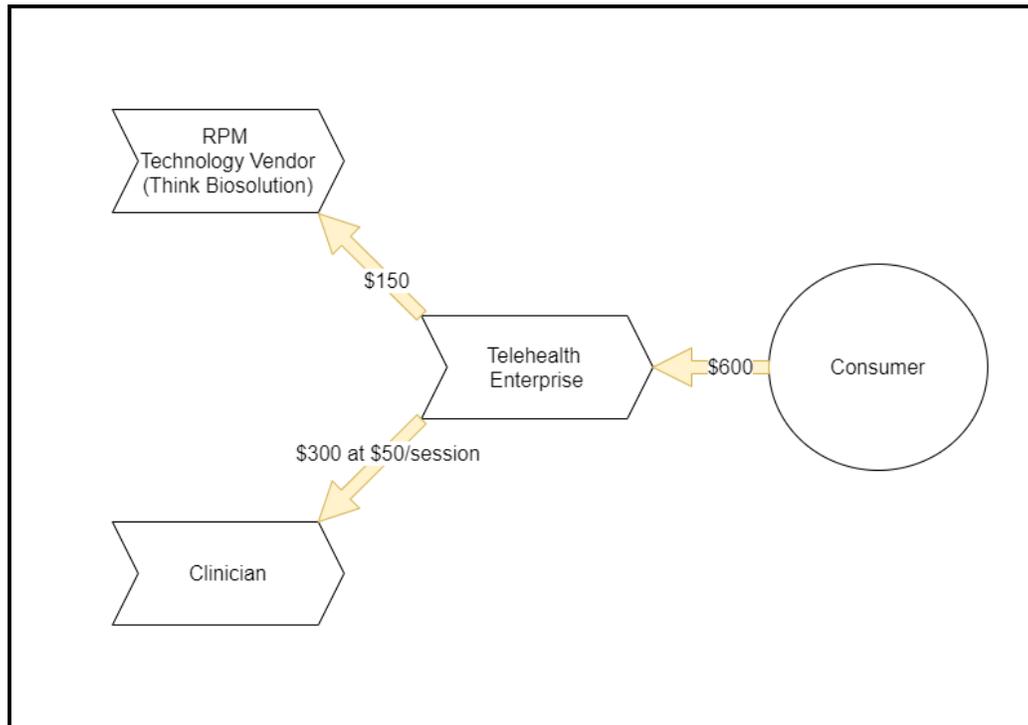
Revenue Pathways

Healthcare Providers largely make their revenue through private health insurance reimbursements, from insurers like UnitedHealthcare and public health programs such as Medicare. More details in Sections - Private Insurance, CMS Medicare and Medicaid.

During the COVID-19 pandemic, hospitals are being provided with grants up to \$1million to acquire medical infrastructure and services intended to help mitigate the sudden stress on the healthcare system. (More details in Section - CARES Act).

For COVID-19 monitoring healthcare providers typically gets reimbursed \$620 for RPM services and \$380 for telehealth services over a typical 3-month period per patient. They in-turn pay technology vendors \$300 for RPM services and \$150 for telehealth services. So, healthcare providers make a profit of \$550/patient. Which in turn means that for every 1818 patients on their roster, healthcare providers will make a gross profit of \$1 Million.

Client – Telehealth Enterprise



Who they are

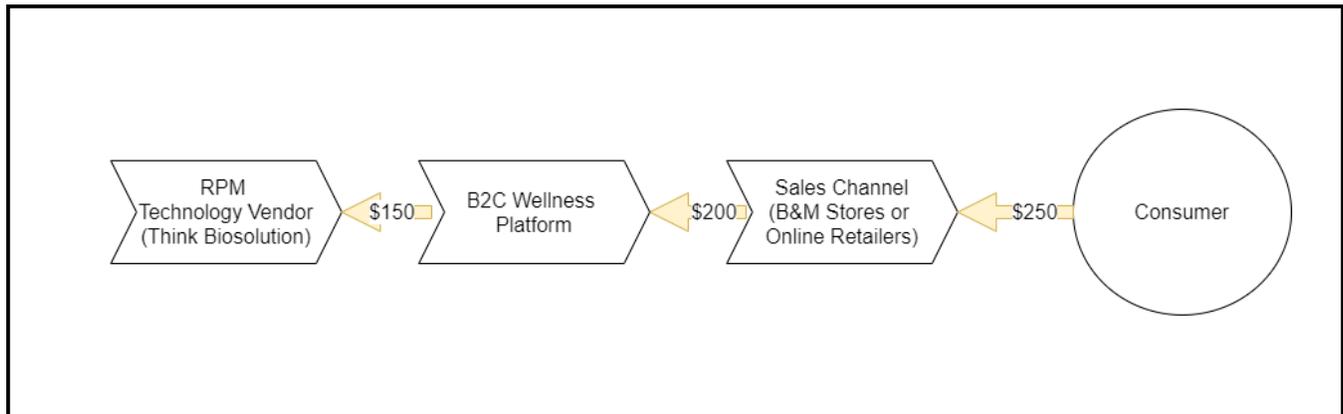
A telehealth enterprise delivers telehealth services directly to consumers. They have both consumers and doctors on their platform. Some of these platforms are now integrating RPM solution as an add-on service. Examples of such companies are Teladoc and American Well

Revenue Pathways

Telehealth enterprise typically charge the consumer directly for their services, and usually paid per session. They then share part of this revenue with the healthcare professionals (doctors) that participate in the sessions. Additionally, they often provide RPM solutions that are integrated with their digital health platform, either on a per device basis, or with a subscription model where the cost of devices is amortized over a prolonged period.

For COVID-19 monitoring telehealth enterprise typically gets reimbursed \$600 for consultation coupled with RPM services over a typical 3-month period per patient. They in-turn pay clinicians \$300 and RPM vendors \$150. So, telehealth enterprise makes a profit of \$150/patient. Which in turn means that for every 6,666 patients on their platform, telehealth enterprise will make a gross profit of \$1 Million.

Client - B2C Wellness Platforms



Who they are

A B2C wellness platform typically uses a non-FDA 510(k) cleared App or Device to help consumers manage their health and wellness. Such platforms do not involve clinicians, providers or insurance-based reimbursements. B2C wellness platform can procure their technology from RPM technology vendors.

Revenue Pathways

Most B2C wellness platforms sell their solutions through online retailers and brick and mortar stores such as pharmacies. Some B2C wellness platforms have direct sales channels such as their website, but typically have a higher cost of customer acquisition. RPM on B2C wellness platforms are usually priced lower than in the regulated “medical device” market, due to the consumers having to pay out of pocket, as well as the solutions being less extensive.

For COVID-19 monitoring B2C wellness platforms typically gets up to \$250 per consumer. They in-turn pay RPM vendors \$150. So, B2C wellness platforms make a profit of \$100/consumer. Which in turn means that for every 10,000 consumers on their platform, B2C wellness platforms will make a gross profit of \$1 Million.

References

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