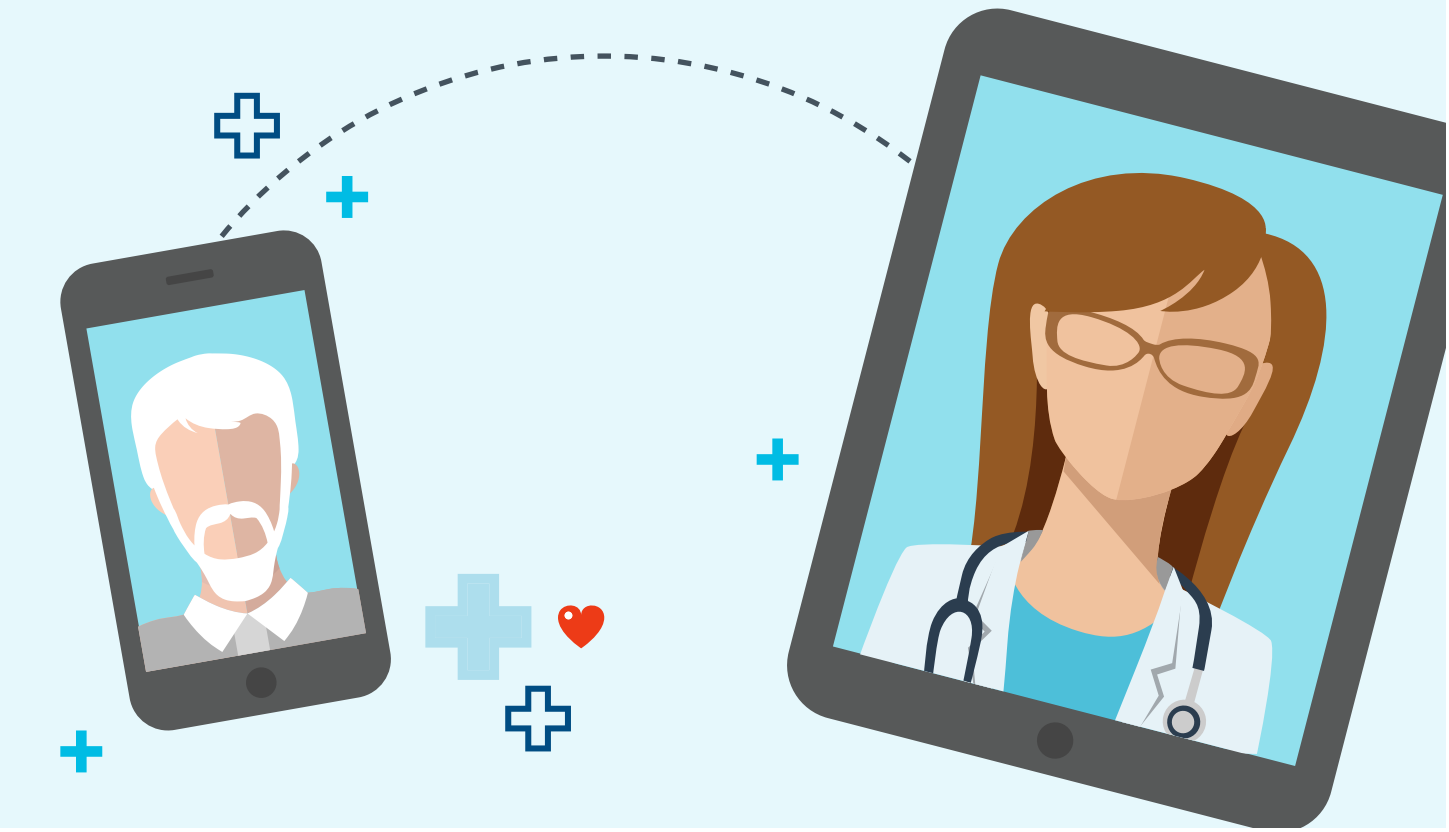
An Introduction to Valuing Telemedicine Services



This white paper is an adaptation of a chapter from the *BVR/AHLA Guide to Valuing Physician Compensation and Healthcare Service Arrangements*. The information provided herein is of a general nature and cannot be substituted for an actual telemedicine valuation, in which specialized knowledge is applied to a particular circumstance. Therefore, nothing in this paper should be construed to offer or render a valuation of telemedicine, and neither the authors nor PYA can take any responsibility for an attempt to use or adopt the information or disinformation presented in this paper.

As patient demand increases, and the availability of healthcare providers shrinks, hospitals are seeking alternative solutions to traditional healthcare models to meet the needs of the communities they serve. As a result, hospitals are entering into various types of agreements with physicians to help ensure coverage. Telemedicine is a unique solution that allows hospitals to not only provide required health services to a larger population, but do so at a lower cost.

Introduction/overview of telemedicine.

What is telemedicine?

One of the most commonly used definitions of telemedicine comes from the American Telemedicine Association, which defines the term as "the use of medical information exchanged from one site to another via electronic communication to improve a patient's clinical health status."[1] Thus, in simple terms, telemedicine is the provision of healthcare through some form of communications technology. Specifically, it is the use of communications technologies to link healthcare providers with their patients to increase access to care. Telemedicine can be as simple as a phone conversation with a primary care provider or as complex as an interactive two-way video conference via a mobile device. It is not a separate medical specialty, but a channel for remotely providing multiple disciplines of healthcare to patients. Services are generally classified under three categories: **(1)** "store-and-forward" telemedicine; **(2)** real-time interactive telemedicine; and **(3)** remote patient monitoring telemedicine.

Store-and-forward. Store-and-forward telemedicine is the process of one party collecting and storing patient health information such as X-rays, blood tests, vital signs, and other test results and forwarding the information to an appropriate third party or specialist to aid in making the appropriate diagnosis. As this type of arrangement requires no appointment with the other provider, the patient does not have to travel to the specialist's location, and one specialist can provide services to numerous patients at once. Medical providers partner with outside specialist groups to review and analyze forwarded patient information and provide expedited consultative services. This practice is common in the fields of pathology, radiology, ophthalmology, and dermatology, among others.

1 http://thesource.americantelemed.org/resources/telemedicine-glossary.

Real-time interactive. Real-time interactive telemedicine is the provision of healthcare in real time through a variety of communications technology and equipment. For example, a healthcare provider in a remote location could consult with patients via video conferencing. In the past, this technology has been best used to assist burn and stroke patients; however, more recently, this type of telemedicine has been used to provide general health, behavioral health, and pharmacologic consultations.

Remote patient monitoring. Remote patient monitoring telemedicine is the delivery of healthcare services by capturing and transmitting health information directly from a patient in one location to a healthcare provider in a separate location. This allows patients to self-test and monitor themselves while virtually sharing that information with a medical provider. Physicians often utilize this type of telemedicine to more carefully monitor patients with chronic conditions, such as diabetes and asthma.

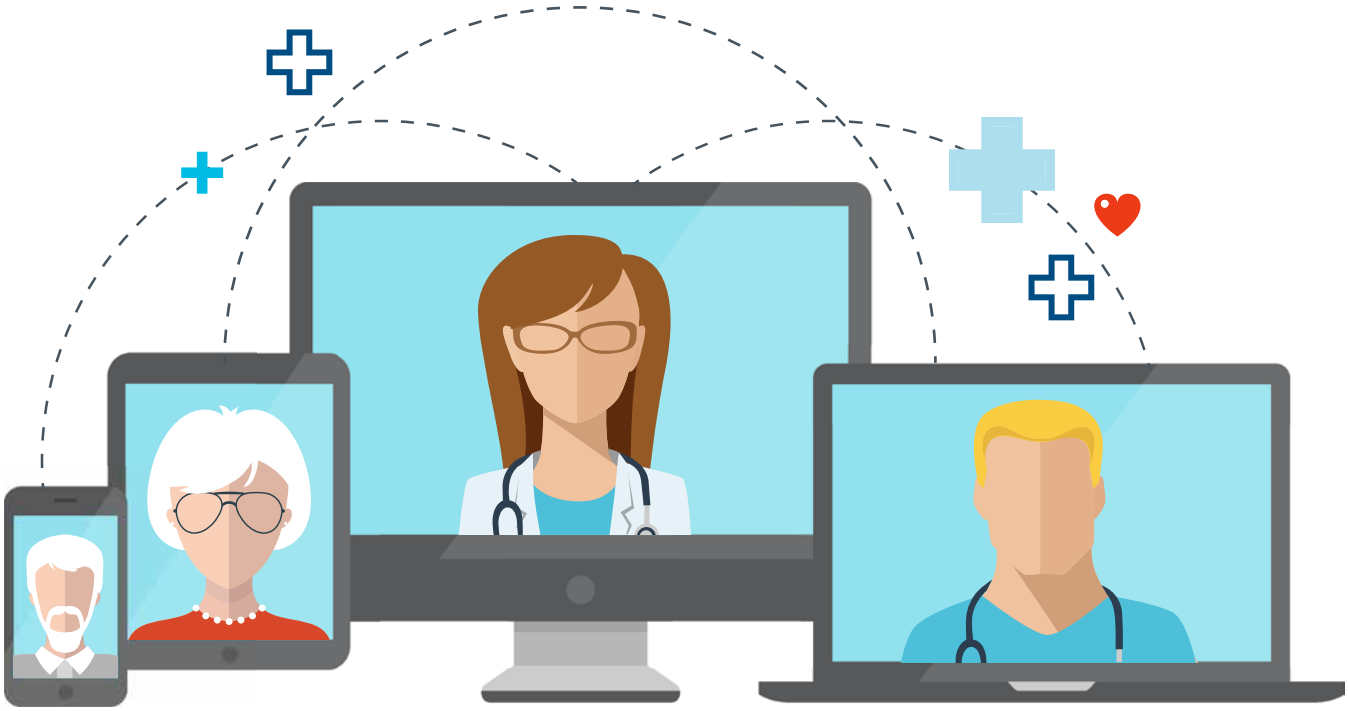
Factors driving the need for telemedicine services.

As telecommunication technology has advanced, telemedicine has emerged as a care and cost-saving solution for many hospitals and health systems seeking to provide care to the expanding insured patient population, while maintaining reasonable costs with limited providers. More specifically, the proliferation of telemedicine has increased the scope of services that can be provided remotely, allowing physicians to provide healthcare to patients that would not otherwise have access to such care. Now, either a physician or midlevel provider can perform primary care consultations, psychiatric evaluations, emergency care, and other medical services remotely. For physician practices, hospitals, and health systems, this creates a cost-effective alternative to full-time physician employment, while still meeting a community need.

This option is especially attractive to rural health systems that typically have less patient demand, but still require coverage for certain specialties. These health systems otherwise might have to depend upon locum tenens coverage, which is generally much more expensive. Telemedicine increases the quality of provided care, in addition to improving access to, and reducing the costs of, healthcare. Advancements in technology and the passage of the Affordable Care Act, which has resulted in the expansion of patients in the private insurance and Medicaid populations, have increased the need to access additional providers who may not be present in the local market.

Telemedicine reimbursement.

As with all healthcare services, payers must determine how to reimburse providers for telemedicine services. Medicare historically has limited reimbursement for telemedicine services, and private payers have not yet adapted a common standard of reimbursement. As a result, hospitals have found themselves, in many instances, in the position of having to directly compensate the providers.



Medicare.[2] Currently, Medicare will only pay for interactive video telemedicine consultation services wherein both the provider and patient are present. Apart from a few exceptions, Medicare does not reimburse providers for store-and-forward telemedicine or remote patient monitoring. Medicare claims for telemedicine services are billed using Current Procedural Terminology (CPT®) codes,[3] along with the appropriate telemedicine modifier code "GT." Each year, the U.S. Department of Health & Human Services considers new telemedicine services submissions to be approved and added to the list of reimbursable codes. For CY 2018 Medicare Telehealth Services, visit the CMS website.

Medicare reimburses telemedicine services based on the framework of an "originating site" and "distant site practitioners." The originating site is the location of the patient at the time of delivery of telemedicine services. The following types of facilities qualify as originating sites:

- The offices of physicians or practitioners
- Hospitals
- Critical access hospitals (CAHs)
- Rural health clinics
- Federally qualified health centers
- Hospital-based or CAH-based renal dialysis centers (including satellites)[4]
- Skilled nursing facilities
- Community mental health centers

2 https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/TelehealthSrvcsfctsht.pdf, accessed March 8, 2018.

3 CPT® is a registered trademark of the American Medical Association (AMA).

4 Note: Independent renal dialysis facilities are not eligible originating sites.

Medicare only reimburses for telemedicine services when the originating site is in a health professional shortage area, a county outside of a metropolitan statistical area (MSA), a rural census tract, or an approved demonstration site. Starting in 2019, the following sites are also eligible originating sites and are exempt from rural geographic requirements under Medicare in certain circumstances.[5]

- Renal dialysis facilities for visits related to end-stage renal disease
- A patient's home for end-stage renal disease visits
- Mobile stroke units for treatment of acute stroke only

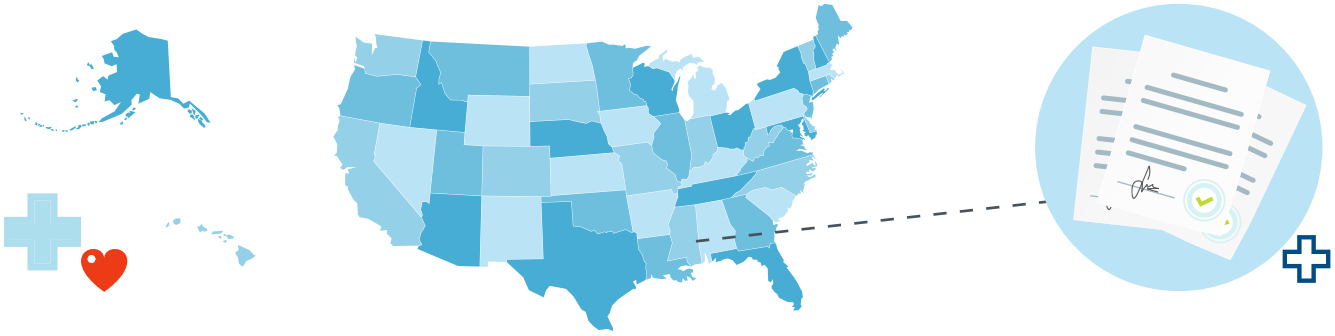
Distant site practitioners include the following:

- Physicians
- Nurse practitioners
- Physician assistants
- Nurse-midwives
- Clinical nurse specialists
- Certified registered nurse anesthetists
- Clinical psychologists (CPs) and clinical social workers (CSWs) (CPs and CSWs cannot bill for psychiatric diagnostic interview examinations with medical services or medical evaluation and management services under Medicare. These practitioners may not bill, or receive payment for, CPT® codes 90792, 90833, 90836, and 90838.)
- Registered dietitians or nutrition professionals

There are no limitations with regard to the site where the health professional delivering the telemedicine services is located. For telemedicine services provided in approved settings, healthcare professionals delivering medical services are reimbursed at 100% of the current non-facility fee schedule for the provided service. Additionally, the originating site is eligible to receive a facility fee. The facility fee is billed under Healthcare Common Procedure Coding System (HCPCS) code Q3014 as a separately billable Part B payment.

Previously, Congress introduced a bill titled the Medicare Telehealth Parity Act of 2015, which proposed a three-phase approach to expansion of telehealth coverage. In Phase 1, the originating sites would be expanded to include federally qualified health centers and rural health clinics, as well as MSAs with populations less than 50,000. Phase 1 also proposed the inclusion of diabetes educators and respiratory, occupational, speech language, and physical therapists as qualified health professionals. Phase 2 would further expand originating sites to include a home telehealth location and MSAs with populations

5 http://www.cchpca.org/sites/default/files/resources/TELEHEALTH%20REIMBURSEMENT%202018%20FINAL%20.pdf.



of 50,000 to 100,000. Finally, Phase 3 would expand originating sites to MSAs with populations greater than 100,000. As of the writing of this paper, Congress has not voted on this bill.[6] However, in the final 2018 Physician Fee Schedule, CMS unbundled CPT® code 99091. This CPT code allows providers to get reimbursed separately for time spent on collection and interpretation of health data generated remotely. Since this code is not defined as a telehealth code, it is not subject to the restrictions of other telemedicine services.[7]

Medicaid and commercial payers. Similar to Medicare, some private payers will also reimburse for telemedicine services, but the policies vary from payer to payer and state to state. Coverage of telemedicine services under Medicaid is determined on a state-by-state basis.[8] The use of telemedicine services will likely not gain significant momentum until governmental payers, such as Medicare, and commercial insurers address the reimbursement issues.

Contractual terms and compensation structures.

Telemedicine contracts are generally structured similarly to physician and other healthcare provider contracts. Depending on the type of healthcare provided and the form of telemedicine utilized, these contracts can include a variety of terms and responsibilities. In general, telemedicine contracts start with an overview of the particular arrangement and parties involved and then outline the restrictions, obligations, compensation terms, and responsibilities of each party (including who is responsible for billing and collecting for services, if that is an option). It is important to note that careful consideration of these contracts is necessary due to federal and state regulations, as discussed later in this paper.

Contracting structures between the originating facility and the distant provider.

Typically, arrangements involve an originating site with a patient needing services contracting with a distant site and an outside provider/specialist who delivers needed services via some form of telemedicine. Depending on the terms of the contract, the originating site will refer the patients to the distant site provider. The compensation terms and responsibilities of each party may vary from the standard healthcare provider contract. For example, a large hospital may employ a neurologist solely for the provision of stroke telemedicine consultations for multiple smaller hospitals. This model is often referred to as a "hub-and-spoke" model. In this example, the employed physician is likely compensated based on a full-time salary, while the larger hospital (the distant site) bills and collects for the telemedicine services provided.

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6 The bill can be viewed at www.congress.gov/bill/114th-congress/house-bill/2948. The bill was referred to a subcommittee of the House Ways and Means committee. The bill has not moved forward since introduction.

7 https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/downloads/MM10393.pdf.

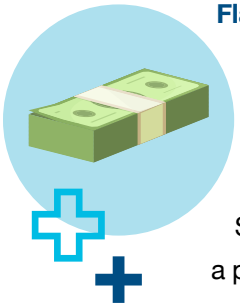
8 www.medicaid.gov/Medicaid/benefits/telemed/index.html, accessed March 12, 2018.

As an alternative to employing a physician to staff the model, the larger hospital could enter into independent contractor arrangements with multiple on-call neurologists to provide telemedicine services when needed. In this second scenario, the on-call neurologist might receive a daily availability stipend or per-consult fee. Thus, the unique responsibilities under each contract will impact the compensation terms. It is critical that the appraiser understands the responsibilities the agreement covers as well as any ability to bill for the services to make a proper determination of the fair market value (FMV) compensation associated with the agreement.

Compensation payment models.

The following are three of the most commonly utilized methodologies for compensating providers for telemedicine services:

1. A flat rate per consultation or work relative value unit (wRVU)
2. An hourly rate for services
3. A coverage stipend for availability (which may be paired with a flat rate or hourly rate, as discussed further below)



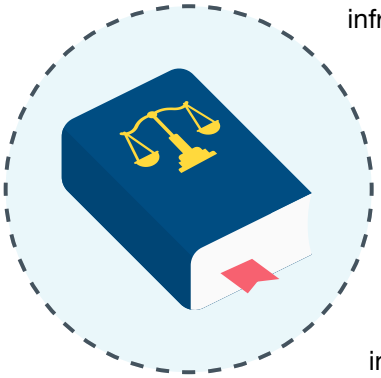
Flat rate per consultation or wRVU. Under this methodology, the healthcare provider is paid a predetermined amount for each consultation or wRVU, regardless of how much time that consultation requires. In this scenario, the healthcare provider is not paid unless consultations are actually provided. These payments are generally tied to the reimbursement of CPT® codes specific to the performed services and associated wRVU values. The Centers for Medicare & Medicaid Services (CMS) developed these CPT® codes to appropriately capture certain metrics associated with a physician providing a service, including time and effort and malpractice expense.

Hourly rate. Unlike a flat-rate-per-consultation payment structure, an hourly rate methodology compensates the healthcare provider for the actual time dedicated to providing telemedicine consultations. Under this methodology, providers can conduct multiple consultations during the hours paid. Similar to independent contractor medical director arrangements, hourly rate compensation payment models typically require the submission of a time sheet to receive payment.

Coverage stipend for availability. Neither of the two models discussed so far compensates healthcare providers for their "availability" to provide services. As a result, when valuing a flat-rate-per-consultation model or an hourly rate model, an appraiser also may be asked to consider the burden associated with being available for a particular period, regardless of whether there are services to be provided. This availability could be desirable to the hospital for purposes of ensuring timely response to patient needs. If the provider is expected to be available to respond in a relatively short time frame, the amount paid to the provider will need to reflect this additional burden. Similar to an emergency department call coverage payment, coverage stipend models consider the healthcare provider's availability and separately compensate for professional services.

Regulatory compliance issues and considerations.

Telemedicine providers, like all healthcare providers with the ability to refer patients to hospitals, must be compensated at FMV to stay in compliance with the Stark Law and Anti-Kickback Statutes, which are intended to deter fraud and abuse in the healthcare system. For tax-exempt facilities, compensation at FMV is also needed for compliance with Internal Revenue Service regulations. It is important that the health system engages experienced legal counsel to ensure compliance with these complex regulations. The U.S. Department of Health & Human Services, Office of the Inspector General (OIG), has issued advisory opinions regarding telemedicine arrangements.[9] Each OIG opinion considers potential physician benefit from referrals, including use of free telemedicine equipment and opportunities to earn additional fees. In each opinion issued to date, the OIG has found that the arrangements in question further congressional intent to promote telemedicine networks in rural areas and that the benefits the community received included improved access to essential healthcare services and decreased costs in rural areas. Nevertheless, the OIG also concluded that the arrangements in question could potentially involve prohibited remuneration under the Anti-Kickback Statute, if the requisite intent to induce referrals was present. Thus, while informational in terms of determining how the OIG evaluates telemedicine agreements, these opinions are not authoritative in nature for another health system's agreement; and, therefore, it is important to ensure that the arrangements are evaluated based on their own merits and determined to be at FMV.



In these telemedicine OIG advisory opinions, a key point of focus is the financing of the involved infrastructure. In many arrangements, the health system will rent the necessary equipment to the rural hospital at which the patient receives treatment (the originating site). For the contracting entities to remain compliant and qualify under the equipment lease safe harbors built into the Stark Law and the Anti-Kickback Statute, the equipment rental rate must be at FMV or at a rate that would be paid in the market if neither party were in a position to refer to one another. A rental rate that is below market rates can indicate that the entity providing services is incentivizing the facility with whom it is contracting to refer patients. Another point of focus involves the referral of patients following the initial telemedicine consultation. If further care is required following the initial consultation, patients should have the opportunity to seek care as they choose and not be required or incentivized to continue treatment with the entity providing telemedicine services.

In summary, the OIG has issued several opinions specific to telemedicine arrangements. Despite the potential physician benefits present in the agreements the OIG reviewed, the OIG has concluded that remuneration, as a result of an arrangement, can be overlooked if the resulting community benefit outweighs the remuneration. The basis for these opinions stems from congressional intent to promote telemedicine networks in rural areas and increase community benefits, including reduced cost of care and improved access to healthcare services.

9 OIG Advisory Opinion Nos. 98-18, 99-14, 04-07, and 11-12.

Valuation methodology.

General considerations.

When determining the value of providing telemedicine services for a particular healthcare provider, there are several factors to be considered, with three key elements that typically impact the ultimate conclusion of value:

1. The length of availability and restriction
2. The burden associated with the provision of services
3. The likelihood of receiving reimbursement for the provision of services

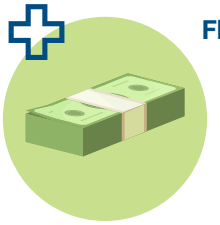
When a healthcare provider agrees to provide telemedicine services, he or she is committing to being available to provide services for a predetermined period. During this predetermined period, the healthcare provider may be restricted to a particular location, such as an office, or the provider may be unrestricted as to location, but have a predetermined period to respond to a request for services. Each telemedicine contract will specify these terms, but the longer a provider's time is restricted, the greater the cost of availability, all other things being equal.

The burden of a particular arrangement also impacts the value. Specifically, telemedicine services requiring back-to-back consultations on complex cases will sometimes necessitate a higher value than telemedicine services with lower complexity and volume.

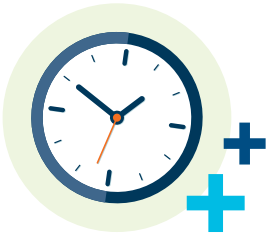
Finally, the likelihood of receiving reimbursement for professional services impacts the value of telemedicine services. As previously mentioned, not all telemedicine services are reimbursable. Thus, in a scenario where it is unlikely that a physician will receive reimbursement for professional services, the amount of the payment to the provider will generally be higher. The valuation should also consider the fact that providers performing the services will generally be independent contractors to the originating facility. Thus, the amounts paid may include an allowance for benefits and professional liability insurance in addition to covering the compensation cost of the providers.

Specific valuation considerations for each payment model.

Specific factors can affect the valuation analysis for each type of payment model. The following sections discuss these factors.



Flat rate per consultation or wRVU. Flat rate per consultation or wRVU payments can reference FMV rates of clinical compensation (which may, at times, be inclusive of a provision for benefits and malpractice expenses) applied to the amount of time required to provide the consult. It also is prudent to evaluate the revenue stream available from the professional consult as another indication of the potential FMV for the service. Even if the service is not reimbursed on a telemedicine basis, reimbursement data that could provide some insight into how the market places a value on the service may still be available.



Hourly rate. Consistent with the flat rate approach, the appraiser would evaluate a fair market rate for hourly clinical services, inclusive of benefits and malpractice expenses. In evaluating the potential revenue stream, the appraiser would need to understand how many consultations could be performed for each hour of purchased professional time.

Coverage stipend for availability. At first appearance, use of on-call survey data might appear to be a way to value a coverage stipend for telemedicine availability. For example, as previously mentioned in this paper, coverage stipends are similar to emergency department call coverage per diems. As such, when determining the cost of telemedicine coverage stipends, appraisers can start with on-call coverage per diems reported in benchmark survey resources. It is important for the appraiser to bear in mind, however, that published call coverage data generally represents emergency department call coverage and will likely need to be adjusted if used for a telemedicine stipend calculation. More specifically, emergency department call coverage benchmarks typically consider the burden of responding in person to the emergency department to perform a consultation, surgery, or other procedure. Telemedicine does not require an in-person response to a hospital. Thus, as telemedicine coverage is typically less burdensome in this context, it is sometimes appropriate for an appraiser to apply a discount to reported on-call survey data.

Regardless of the methodology utilized, it is important that the appraiser considers the total compensation of a telemedicine arrangement with multiple components—such as a coverage stipend arrangement—for availability that may be paired with a flat rate or hourly rate. In a coverage stipend for availability paired with a flat rate or hourly rate, each component is dependent on the value of the other. For example, in a coverage stipend scenario where the physician can bill and collect from patients or receives other compensation (*i.e.*, an hourly rate or payment per wRVU) in addition to receiving a stipend for availability, the stipend will likely be a lower amount. Conversely, if the physician is not able to bill and collect from patients (and does not receive any other form of compensation), or it is unlikely that the physician will receive reimbursement for reasons such as a poor payer mix, the coverage stipend will likely be higher. In summary, regardless of the structure of the arrangement, the totality of the compensation should be reasonable.

Market approach.

The market approach is a valuation method in which market data is analyzed to determine what is actually paid in the marketplace for comparable services. In the case of telemedicine services, data is gathered and analyzed, and comparisons are made between the facts of the telemedicine services being valued and the facts of the particular market from which the comparable telemedicine data is obtained. However, access to similar telemedicine services performed by an analogous healthcare provider is not always readily available. Nevertheless, appraisers are sometimes able to make generalizations related to certain benchmark survey data points and the different types of telemedicine payment methodologies. For example, an appraiser may consider an hourly rate benchmark for clinical compensation when determining an hourly rate for telemedicine services. Appraisers are also able to review CPT® reimbursement and wRVU data reported by CMS as a market approach. As mentioned earlier in this paper, CMS developed telemedicine CPT® codes to appropriately capture certain metrics associated with a physician providing a service, including time and effort.

Cost approach.

The cost approach often involves a calculation of the cost to replace or replicate a particular telemedicine asset or service. This approach is frequently used when valuing the different telemedicine compensation methodologies and structures, given the ability to use benchmark survey data (which can be thought of as a form of the market approach) and other information to model the particular arrangement. In performing a cost approach, an appraiser will consider each component of compensation in a particular telemedicine arrangement and estimate the cost to replace or replicate that arrangement. For example, in an hourly rate arrangement with an independent contractor, an appraiser might first value hourly clinical compensation by reviewing benchmark data or market comparable data. Then, understanding that independent contractors are typically responsible for their own benefits and malpractice expenses, the appraiser would add a reasonable premium to that hourly compensation benchmark rate to be inclusive of benefit and malpractice insurance.

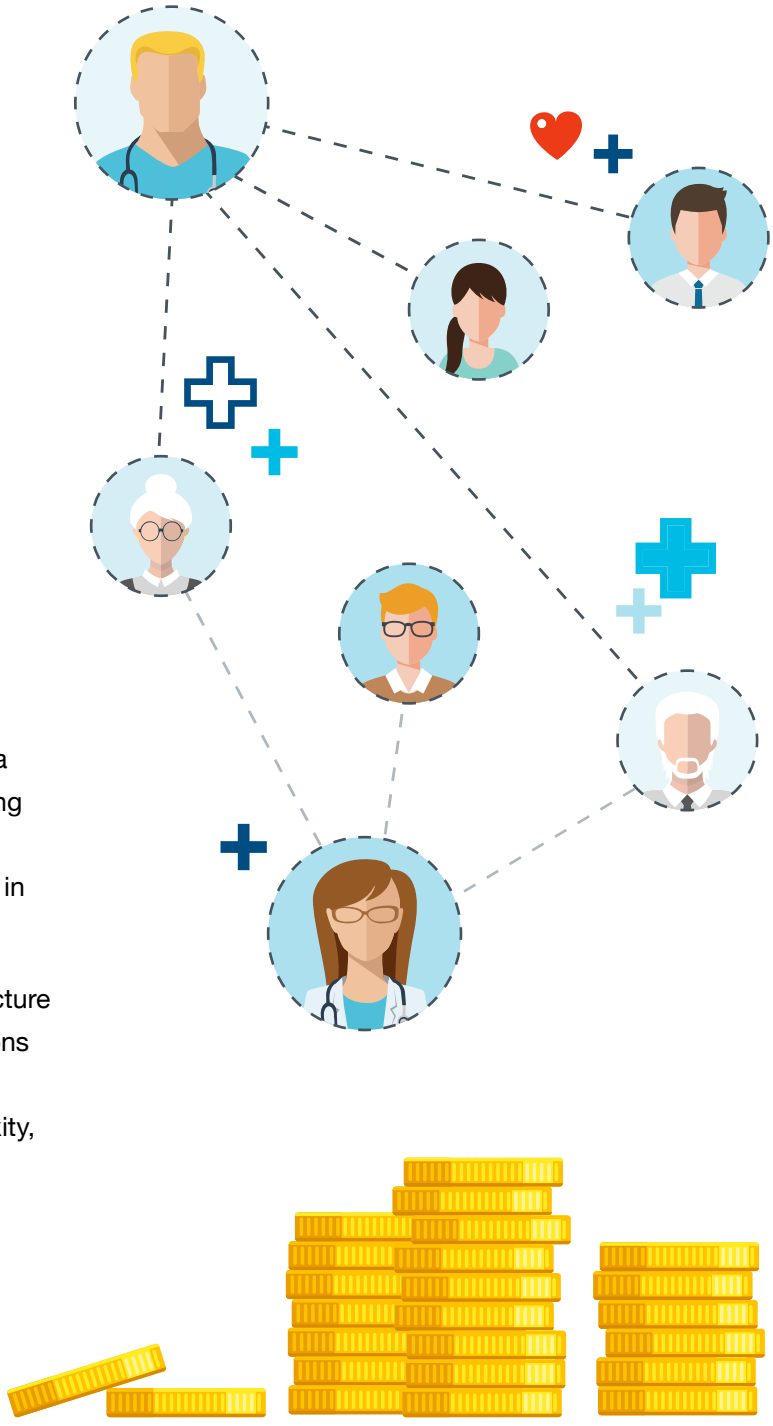
Income approach.

The income approach is a forward-looking premise of value, based on the assumption that the value of an asset or service is equal to the sum of the expected future benefits of providing a service, or owning that interest. This approach requires consideration of the income-generating potential of the service. However, as previously mentioned, not all telemedicine services are reimbursable.

Compensation stacking.

There are several key factors to consider when structuring and valuing telemedicine compensation models; however, one of the most routinely overlooked factors is compensation stacking. As more fully described in this paper, compensation provided to an individual for multiple types of services and duties is often referred to as compensation stacking. When valuing a payment for the provision of telemedicine services, an appraiser must consider all sources of compensation the organization paid in the aggregate. Specifically, when contemplating potential compensation stacking issues, an appraiser must consider whether excess compensation results from all of the services provided when the compensation amounts are related to multiple arrangements, locations, or organizations. One potential issue when evaluating the possibility of an overpayment is double payments. For example, if a health system is compensating a physician for providing telemedicine services to several campuses at once for multiple payment rates, these payments must be FMV in the aggregate.

Although telemedicine is a newer technology, the structure of these arrangements is subject to the same regulations that guide other arrangements that do not utilize this technology. As these agreements increase in complexity, the potential for regulatory scrutiny will also increase.



How PYA Can Help:

Valuing healthcare organizations and arrangements (including telemedicine) is a complex undertaking requiring substantial industry knowledge, solid technical skills, and practical experience. PYA's hands-on valuation team has the experience to deliver valuation opinions and advice to a broad range of healthcare entities.

Specifically, our experience includes business and tangible asset valuation services in connection with:

- Regulatory compliance issues
- Mergers and acquisitions
- Joint ventures and other complex business arrangements
- Transaction planning and modeling
- Financial reporting (purchase price allocations and goodwill impairment testing)
- Tax compliance and planning
- Disputes and litigation matters

For healthcare organizations that include:

- Ambulatory Surgery Centers
- Cancer Centers
- Cath and Diagnostic Labs
- Dental Practices
- Dialysis Centers
- Durable Medical Equipment Providers
- Hospice Providers
- Hospitals and Health Systems
- Home Health Agencies
- Imaging Centers
- Managed Care Organizations
- Pharmaceutical Manufacturers
- Pharmacies
- Physician Therapy/Rehab Facilities
- Physician Practices
- Retirement/Assisted Living Facilities
- Skilled Nursing Facilities

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