

## Outlook Increasing For Future of Telemedicine

In early 2012, Cox Health Systems, owner of five hospitals in Southwest Missouri, faced a tall order to reduce hospital readmissions before the *Patient Protection and Affordable Care Act* (ACA) program to reduce hospital readmissions began.<sup>1</sup> To confront this issue, the health system partnered with a telemedicine company to place follow-up phone calls to patients discharged with cardiac-related issues; these calls provided support on reading discharge instructions, reminded patients to fill medications, and helped patients find proper transportation to scheduled doctor appointments.<sup>2</sup> Four months into the partnership, the telehealth call system reduced readmissions of cardiac patients from 16.4% in 2011 to 14.5% in 2012, convincing Cox Health leadership to adopt the practice across the entire system.<sup>3</sup>

Examples of the impact of telemedicine, such as the Cox Health Systems follow-up phone calls described above, occurred with increasing frequency across the U.S. in 2014, and investors are starting to take notice. After years of slow growth, 2014 levels of telemedicine funding increased by 315% from 2013 to “nearly \$300 million in aggregate funding.”<sup>4</sup> Growing investment in telehealth companies and the development of new telemedicine technologies may signify the start of the potentially revolutionary shift in healthcare delivery toward an increasing reliance on telemedicine. This Health Capital Topics article will discuss both the investment trend in telemedicine technologies, and the removal of traditional barriers to telemedicine, which are creating favorable prospects for continued telemedicine expansion.

After years of slow growth, investments into companies providing telemedicine services or technology development rose significantly in 2014 and are anticipated to continue in 2015. As a whole, venture funding growth for digital health significantly outpaced growth in other areas, such as medical devices and biotech companies.<sup>5</sup> Within digital health, Rock Health, a seed fund that provides capital to digital healthcare companies, categorized telemedicine as one of the “five digital health categories poised for significant growth in 2015.”<sup>6</sup> CB Insights, a company that monitors venture capital firms and the companies receiving venture capital funding, also noted significant growth in digital health funding. Specifically, CB reported that venture capital funding of digital health companies in Quarter 1

of 2014 grew 181% from Quarter 1 of 2013.<sup>7</sup> Within digital health, investments in telehealth companies from January to August 2014 increased 130% from the total for the entire 2013 calendar year, including a \$21 million investment from a venture capital group that includes Richard Branson to Doctor on Demand,<sup>8</sup> a web application allowing video chatting between patients and physicians and psychologists.<sup>9</sup>

This increase in investment is due in part to the refinement of critical technologies related to the provision of telemedicine services, which encourages providers to utilize telemedicine to deliver care. Many telemedicine platforms rely on virtual consultations that allow physicians and patients to have interactions that both promote positive health outcomes as well as foster the physician-patient relationship.<sup>10</sup> In recent years, the technologies allowing virtual consultations, e.g., reliable wireless Internet, Bluetooth-enabled and other mobile devices, and increased software capabilities, have improved significantly.<sup>11</sup> Employers have taken notice of these technological developments and are modifying their health benefit plans accordingly. Thirty-seven percent of companies with at least 1,000 employees expect to offer telemedicine consultations as part of their general benefits package in 2015, an increase of 68% from the 2014 level of 22%.<sup>12</sup>

The gradual breakdown of regulatory barriers has also supported recent telemedicine expansion and stimulated investment in telemedicine providers. Licensure issues, a significant barrier to previous expansions of telemedicine, are becoming less prevalent and restrictive across the U.S. As discussed in a June 2014 Health Capital Topics article, titled, “*Telemedicine Guidelines Adopted by State Medical Boards*,” the *Federation of State Medical Boards* (FSMB) adopted an advisory policy meant to remove regulatory barriers to adoption of telemedicine technology.<sup>13</sup> The FSMB policy sought to encourage telemedicine utilization without sacrificing: quality standards; strong physician-patient relationships; medical record privacy and security; or, patient informed consent.<sup>14</sup> Currently, 47 states require physicians be licensed in the state where the patient is located;<sup>15</sup> often, this prevents highly-qualified physicians from consulting with a patient over a virtual platform solely due to physical location constraints. However, states are beginning to alter this requirement in the context of telemedicine delivery

models. According to a report by the *American Telemedicine Association* (ATA), only 5 states, i.e., Alabama, Arkansas, Missouri, Nebraska, Texas, received failing scores on physician-patient encounter requirements related to licensure, including prohibitions against establishing a physician-patient relationship via telemedicine encounters and requirements for in-person follow-up visits after a telemedicine encounter.<sup>16</sup>

In addition to the erosion of various licensure requirements, regulatory barriers affecting reimbursement for telemedicine services are also decreasing. Starting in January 2015, CMS began to provide reimbursement for seven new CPT codes involving psychotherapy, annual wellness, and other services.<sup>17</sup> To qualify for Medicare reimbursement under these seven CPT codes and the 72 other CPT/HCPCS codes allowing for telemedicine services,<sup>18</sup> a provider must meet four requirements:

- (1) *“The service must be furnished via an interactive telecommunications system;”*
- (2) *“The practitioner furnishing the service must meet the telehealth requirements, as well as the usual Medicare requirements;”*
- (3) *“The service must be furnished to an eligible telehealth individual;”* and,
- (4) *“The individual receiving the services must be in an eligible originating site.”*<sup>19</sup>

On the state level, an ATA report noted that site-of-service regulations are beginning to erode slightly, noting that: *“states are slowly moving away from the traditional hub-and-spoke model [of reimbursement] and allowing a variety of technology applications.”*<sup>20</sup>

While investments in telemedicine are increasing, numerous challenges remain, which may impact the overall outlook of telemedicine as the catalyst in revolutionizing healthcare delivery. While 23 states received an “A” rating from the ATA regarding medical board attitudes toward telemedicine practice, state laws vary regarding licensure and its impact on telemedicine utilization, preventing uniform growth across the U.S.<sup>21</sup> Similarly, commercial and federal reimbursement for telemedicine services remains limited, although recent CMS and state expansions of reimbursable services performed via telecommunication platforms indicate increasing reimbursements for telehealth services in the future. Investors, as well as telemedicine providers and technology developers, may be forced to navigate these challenges in their quests to incorporate telemedicine into healthcare delivery models for the benefit of providers and their patients.

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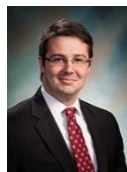
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