Office-Based Physicians

Adoption of Telehealth

April 2018

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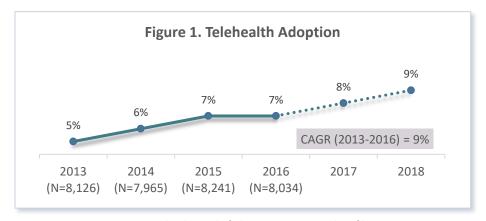
Overview

The health care industry continues to move towards delivery models that reward quality over quantity of services provided. Health care transformation and reimbursement policies at the State and national level influence telehealth adoption. The Medicare Access and CHIP Reauthorization Act (MACRA) of 2015[6] encourages the use of telehealth.[8] In general, the decision to implement telehealth within a practice is informed by its impact on practice revenue, patient engagement, and improving patient access to care, among other things. Financing the technology, practice structure, and reimbursement policies present challenges for implementing and sustaining telehealth for office-based physicians (physicians).[9] According to the American Telemedicine Association, Maryland has more favorable telehealth policies pertaining to physician practice standards and licensure than coverage and reimbursement.[10, 11] This information brief provides a snapshot of telehealth diffusion among office-based physicians and identifies leading barriers to widespread adoption.

Approach and Limitations

In September 2017, the Maryland Health Care Commission (MHCC) conducted an environmental scan of 64 office-based physicians.[12, 13] Responses were not audited by MHCC for accuracy and may have been influenced by respondents' interpretation of the questions. Analysis of information obtained from the environmental scan was augmented with licensure data from the Maryland Board of Physicians.[14]

Findings

Telehealth adoption among physicians is increasing.

Figure 1. Telehealth Adoption

CAGR (2013-2016) = 9%

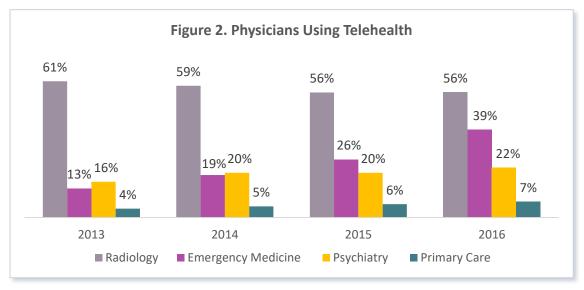| 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| (N=8,126) | (N=7,965) | (N=8,241) | (N=8,034) | | |

5% 6% 7% 7% 8% 9%

Data source: 2013-2016 Maryland Board of Physician Licensure data files
Note: Data for 2017 and 2018 were not yet available at the time of this report; estimated adoption determined by linear approximation.

Physicians report planning to implement telehealth (20 percent) and current trends suggest additional future growth (Figure 1). In a national survey, 51 percent of physicians described telehealth as a high priority in their practice.[15] Widespread adoption requires greater physicians awareness of the potential efficiencies and cost savings.[16] The majority of non-adopters (69 percent) reported needing additional information on telehealth opportunities and potential benefits to patients and practices. Nationally, improving patient satisfaction and patient retention were ranked as the two leading contributors to perceived return on investment for telehealth.[17]
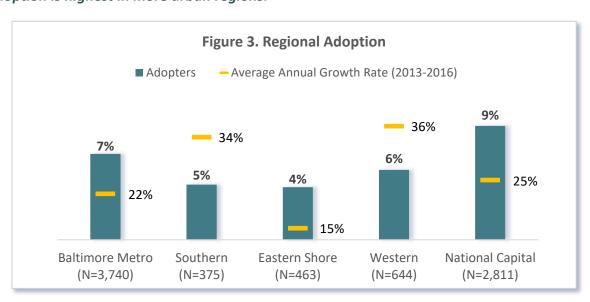
Specialists are more likely to use telehealth than primary care physicians.

Figure 2. Physicians Using Telehealth

Year	Radiology	Emergency Medicine	Psychiatry	Primary Care
2013	61%	13%	16%	4%
2014	59%	19%	20%	5%
2015	56%	26%	20%	6%
2016	56%	39%	22%	7%

Data source: 2013-2016 Maryland Board of Physician licensure data files

Telehealth in emergency care[18] is increasing at a faster rate than any other specialty group; it is currently about five times more common than in primary care (Figure 2). Telehealth in emergency settings can expedite care and reduce wait times.[19] Behavioral health care has become a leading area for using telehealth nationally. On the whole, behavior health does not require the same hands-on interaction between a physician and a patient as somatic care.[20, 21, 22] Similarly, teleradiology is frequently used by radiologists to obtain consultative support and for afterhours medical imaging assessments.[23, 24]
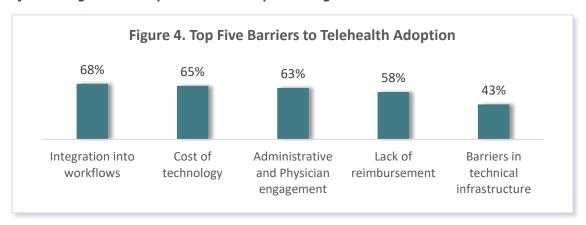
Adoption is highest in more urban regions.

Figure 3. Regional Adoption

Legend: ■ Adopters — Average Annual Growth Rate (2013-2016)

Region	Adopters	Average Annual Growth Rate (2013-2016)
Baltimore Metro (N=3,740)	7%	22%
Southern (N=375)	5%	34%
Eastern Shore (N=463)	4%	15%
Western (N=644)	6%	36%
National Capital (N=2,811)	9%	25%

Data source: 2016 Maryland Board of Physician Licensure data files

Telehealth adoption in the National Capital region[25] of Maryland is highest (Figure 3). Use of telehealth is predominant in more urban counties around Baltimore City and the District of Columbia; however, the rate of growth is faster in the western and southern parts of the State. Nationally, telehealth adoption in rural areas is more common[26] because it is typically used to address some of the challenges to accessing health care, such as provider shortages and long travel distances.[27] Some rural areas of Maryland like the Eastern Shore are less likely to have adequate Internet access to support telehealth.[28]

Workflow integration is reported as the top challenge.

Figure 4. Top Five Barriers to Telehealth Adoption

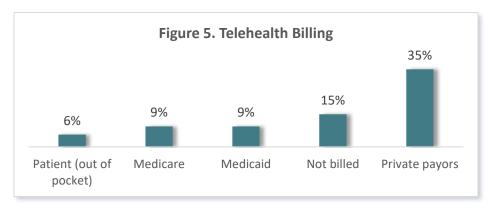|				
68%	65%	63%	58%	43%
Integration into workflows	Cost of technology	Administrative and Physician engagement	Lack of reimbursement	Barriers in technical infrastructure

Five non-adopters did not respond to the question (n=40)

Integrating telehealth into workflows was reported to be the biggest challenge in implementing telehealth (Figure 4). In general, practice workflows are structured to support in-person visits. Reengineering workflows to accommodate remote care delivery can require a sizable investment in time and technology.[29] The majority of non-adopters seek technical support, which includes guidance about how to successfully integrate telehealth technology into workflows.[30]

Nationally, reimbursement is seen as one of the major barriers to telehealth adoption.[31] More than half of non-adopters noted lack of reimbursement as a concern although it ranks fourth among barriers reported, surpassed by cost of technology, and staff engagement. Factors related to technical infrastructure, such as limited Internet access, managing peripheral devices[32], and availability of technical expertise can negatively impact telehealth adoption.[33] Physicians also reported ensuring quality of care, professional liability insurance[34], licensing and credentialing requirements, and sustainability as adoption challenges.

Most telehealth services are paid for by non-government payors.

Figure 5. Telehealth Billing

Category	Percentage
Patient (out of pocket)	6%
Medicare	9%
Medicaid	9%
Not billed	15%
Private payors	35%

No billing information was available for 26 percent of telehealth transactions (n=6)

Private payors are three times more likely to be billed for a telehealth encounter than Medicare or Medicaid (Figure 5). Since 2012, Maryland law requires private payors to reimburse for telehealth consults similar to an in-person office visit.[35] While Medicare reimburses for some telehealth services, it is limited to certain providers and locations.[36, 37] In order to bill Medicaid, physicians are required to register with the State and meet certain technology requirements.[38, 39] These requirements, along with billing challenges contribute to a number of non-reimbursed or billed telehealth services. [40, 41]

Conclusion

Telehealth adoption will continue at a slow pace absent greater State and federal policy intervention aimed at expanding its use. Implementing the technology and changing workflows to support its use are viewed as disruptive by many physicians; concerns often outweigh the benefits of adoption. Alternative payment models encourage physicians to consider innovative ways to deliver care. In general, physicians are beginning to look beyond the policy issues surrounding telehealth and focus on its value in care delivery. Reduced hospitalization, emergency department utilization, and enhanced care coordination are attractive reasons for physicians to consider investing in telehealth.

References

[1] American Telemedicine Association (ATA), *Telemedicine Benefits*. Available at: http://www.americantelemed.org/main/about/about-telemedicine/telemedicine-benefits.

[2] Bashshur, R.L., et al. (2014). The empirical foundations of telemedicine interventions for chronic disease management. *Telemedicine Journal and E-Health*. Available at: https://www.cdc.gov/dhdsp/pubs/docs/sib_oct2014.pdf.

[3] Burch S., et al. (2017). The power and potential of telehealth what health systems should know: proposed legislation in Congress offers the promise that the nation's healthcare policy will support the expansion of telehealth, allowing hospitals and health systems to fully realize the benefits of this important emerging approach to care. *Healthcare Financial Management*. Available at: http://go.galegroup.com/ps/anonymous?id=GALE%7CA482197844&sid=googleScholar&v=2.1&it=r&linkaccess=fulltext&issn=07350732&p=AONE&sw=w&authCount=1&isAnonymousEntry=true.

[4] Alkon., C. (2016). Using Telehealth to Advance Value-Based Care. *Modern Healthcare*. Available at: http://www.modernhealthcare.com/article/20161116/SPONSORED/161119929.

[5] Edwards, C., Healthcare IT News, *Telemedicine – A Growing Enabler of the Triple Aim and Shift to Value-Based Care*. Available at: http://www.healthcareitnews.com/sponsored-content/telemedicine-growing-enabler-triple-aim-and-shift-value-based-care.

[6] Centers for Medicare and Medicaid Services (CMS), *What's MACRA?* Available at: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/MACRA-MIPS-and-APMs.html.

[7] CMS, *Quality Payment Program, MIPS Overview*. Available at: https://qpp.cms.gov/mips/overview.

[8] Craig, D., *What MACRA Means for Telehealth Reimbursement*, 2016. Available at: https://blog.sprucehealth.com/macra-means-telehealth-reimbursement/.

[9] Office-based physicians provide care in outpatient settings and freestanding offices instead of in hospitals or other large organizations like Health Maintenance Organizations or university health systems.

[10] ATA, *State Telemedicine Gaps Analysis, Physician Practice Standards & Licensure*, 2017.

[11] ATA, *State Telemedicine Gaps Analysis, Coverage & Reimbursement*, 2017.

[12] A total of 72 survey responses were received. Eight responses were excluded from the analysis because they were received from hospital-based physicians and the analysis focuses on office-based physicians. Several responses were incomplete and as a result, the number of responses is reported with each finding.

[13] Telehealth is defined as the use of electronic information and telecommunications technologies such as video-conferencing to support clinical health care, patient and professional health-related education, public health, and health administration. Phone calls, fax, and e-mail are excluded from this definition in line with Maryland law (Health General Code 15-105.2).

[14] Physician licensing data provided by the Maryland Board of Physicians includes information about health information technology use and is collected from all licensed physicians in the State.

[15] REACH Health*, 2017 U.S. Telemedicine Industry Benchmark Survey*.

[16] Zanaboni, P., Wootton, R., (2012). Adoption of telemedicine: from pilot stage to routine delivery. *BMC Medical Informatics and Decision Making*. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3280930/.

[17] May, C., et al. (2003). Understanding the normalization of telemedicine services through qualitative evaluation. *Journal of the American Medical Informatics Association.* Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC264438/.

[18] Examples of telehealth use in Maryland emergency departments include connecting patients with off-site physicians to expedite triage and to consult with behavioral health care specialists.

[19] CIPROMS Medical Billing, *Exploring Telemedicine in the Emergency Department*. Available at: http://www.ciproms.com/2017/04/exploring-telemedicine-in-the-emergency-department/.

[20] Deslich, S., Stec, B., et al. (2013). Telepsychiatry in the 21st Century: Transforming Healthcare with Technology. *Perspectives in Health Information Management*. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3709879/.

[21] Hilty, D., Ferrer, D., et al. (2013). The effectiveness of Telemental Health: A 2013 Review. *Telemedicine Journal and E-Health*. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3662387/.

[22] American Psychiatric Association, *Evidence Base in Telepsychiatry*. Available at: https://www.psychiatry.org/psychiatrists/practice/telepsychiatry/evidence-base.

[23] Teleradiology is the practice of electronically transmitting radiological images to support diagnosis or treatment.

[24] See n. 8, *Supra*.

[25] The National Capitol region includes Montgomery and Prince George's counties.

[26] Beaton, T., (2017). Rural Telehealth Use Rises, But Challenges for PCPs Remain. *Telehealth News*. Available at: https://mhealthintelligence.com/news/rural-telehealth-use-rises-but-challenges-for-pcps-remain.

[27] More information about telehealth in rural America is available from the National Advisory Committee on Rural Health and Human Services at: https://www.hrsa.gov/advisorycommittees/rural/publications/telehealthmarch2015.pdf.

[28] Maryland is working to improve broadband Internet access in rural parts of the State. More information about these activities is available at: http://rural.maryland.gov/wp-content/uploads/sites/4/2018/01/2017_MSAR11269_Task-Force-for-Rural-Broadband-Report.pdf.

[29] May, C., et al. (2003). Understanding the normalization of telemedicine services through qualitative evaluation. *Journal of the American Medical Informatics Association.* Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC264438/.

[30] More than half (59 percent) of non-adopters reported that technical support is needed to facilitate adoption.

[31] LeRouge, C., & Garfield, M. (2013). Crossing the Telemedicine Chasm: Have the U.S. Barriers to Widespread Adoption of Telemedicine Been Significantly Reduced? *International Journal of Environmental Research and Public Health,* 10(12), 6472-6484. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3881125/.

[32] Peripheral devices include electronic stethoscopes, blood pressure cuffs, glucometers, weight scales, and other tools that are used to facilitate telehealth.

[33] Telligen, Great Plains Telehealth Resource and Assistance Center, *Telehealth Start-Up and Resource Guide,* October 2014. Available at: http://www.gptrac.org/wp-content/uploads/2015/01/TelligenTelehealthGuide-Final-2014.pdf.

[34] For more information on physician telehealth licensure, see Appendix B.

[35] Md. Code, Insurance Art., §15–139. Available at: http://mgaleg.maryland.gov/WEBMGA/frmStatutesText.aspx?article=gin&section=15-139&ext=html&session=2017RS&tab=subject5.

[36] Medicare Payment Advisory Committee, *Report to the Congress: Medicare and the Health Care Delivery System, Chapter 8, Telehealth services and the Medicare program*, June 2016. Available at: http://www.medpac.gov/docs/default-source/reports/chapter-8-telehealth-services-and-the-medicare-program-june-2016-report-.pdf?sfvrsn=0

[37] More information about billing telehealth services to Medicare is available at: https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/TelehealthSrvcsfctsht.pdf.

[38] More information about the Maryland Medicaid Telehealth Program is available in the Frequently Asked Questions, available at: https://mmcp.health.maryland.gov/SiteAssets/SitePages/Telehealth/Telehealth%20FAQ%202.22.18.pdf.

[39] Maryland Department of Health, *Remote Patient Monitoring*. Available at: https://mmcp.health.maryland.gov/Pages/RPM.aspx.

[40] Lacktman, N., Telemedicine Magazine, *Telehealth Billing Compliance: Medicare Says Goodbye to the GT Modifier,* February 2018. Available at: http://www.telemedmag.com/article/telehealth-billing-compliance-medicare-says-goodbye-gt-modifier/.

[41] Health Care on Bloomberg Law, *Telemedicine Reimbursement Laws Challenge Insurers and Providers Alike,* October 2017. Available at: https://www.bna.com/telemedicine-reimbursement-laws-n73014471059/.

Telehealth Adoption Survey

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1. Demographic Information
   a. Name
   b. Title:
   c. Organization:
   d. Email:
   e. NPI [Optional]:

2. Office Setting
   a. Office-Based (e.g., freestanding physician office, etc.)
   b. Other (e.g., hospital, post-acute care facility, etc.) [*end of survey*]

3. County:

4. Type of practice:
   a. Primary Care
   b. Specialty, type(s) of specialty:

5. Ownership type
   a. Independent
   b. Hospital Owned

6. How many physicians are at your practice?

The following questions will assess the practice's adoption of telehealth and telehealth services provided, if any.

Telehealth is the use of electronic information and telecommunications technologies such as video-conferencing to support clinical health care, patient and professional health-related education, public health, and health administration.

For purposes of this survey, telehealth does not include use of phone calls, fax, or e-mail independently.

7. Does your practice provide telehealth services?
   a. Yes
   b. No [*skip to question 14*]

8. How long has your practice provided telehealth services?
   a. Less than 1 year
   b. 1-2 years

c. 3-5 years

d. More than 5 years

9. What types of telehealth services does your practice offer and who is billed? (Select all that apply.)

Services	Provided	Patient (out of pocket)	Medicare	Medicaid	Private Insurance	Not billed
Diagnosis/Treatment	❑	❑	❑	❑	❑	❑
Follow up	❑	❑	❑	❑	❑	❑
Specialist consultation	❑	❑	❑	❑	❑	❑
Pharmacy consultation	❑	❑	❑	❑	❑	❑
Emergency care consultation	❑	❑	❑	❑	❑	❑
Lab consultation	❑	❑	❑	❑	❑	❑
Chronic disease management	❑	❑	❑	❑	❑	❑
Mental/behavioral health	❑	❑	❑	❑	❑	❑
Other, please describe:	❑	❑	❑	❑	❑	❑

10. Does the practice serve as the originating or distant site?

a. Origination site - *where the participant/patient is located*

b. Distant site - *the location of the provider who will perform the services*

11. How was the technology or equipment to provide telehealth services obtained? (Select all that apply.)

a. Purchased with general operating funds
b. Provided by hospital or other health care facility
c. Used existing equipment
d. Leased equipment
e. Purchased with grant funding
f. Donated by charitable organization
g. Other, please specify:
h. Unknown

12. On average, about how many telehealth encounters are provided in a month?

a. less than 10
b. Between 10 and 20

    c.   More than 20

13. What would assist your practice with sustaining or expanding telehealth services other than financial assistance?

    a.   Guidance on licensing/credentialing procedures
    b.   Training assistance
    c.   Technical support
    d.   More information about the potential uses and benefits of telehealth
    e.   Other, please specify:

[*End of survey*]

14. What are the top 5 barriers preventing your practice from implementing telehealth?

	Rank				
	1	2	3	4	5
Lack of reimbursement for telehealth services					
Cost to acquire, implement, and maintain telehealth technology					
Restrictions or exclusions under professional liability insurance policy					
Increase in premium for professional liability insurance					
Credentialing challenges					
Multi-state licensing requirements					
Administrative and physician engagement/buy-in					
Integration into existing clinical workflows					
Barriers in technical infrastructure					
Security/HIPAA-compliance					
Ensuring quality of care					
Sustainability					
No challenges to report					
Other, please specify:					

15. What would assist your practice with adopting telehealth services other than financial assistance?

    a.   Guidance on licensing/credentialing procedures
    b.   Training assistance
    c.   Technical support
    d.   More information about the potential uses and benefits of telehealth
    e.   Other, please specify:

16. Please select the response that most accurately describes your practice's plans to implement telehealth:

    a.   Having discussions regarding telehealth adoption [*Continue to question 17*]
    b.   Adoption of telehealth has been considered and we do not plan to adopt telehealth at this time [*end of survey*]
    c.   Undecided about a telehealth implementation strategy at this time [*end of survey*]

17. What telehealth service(s) does your practice plan to offer? (Select all that apply.)

a. Diagnosis/Treatment
b. Follow up
c. Specialist consultation
d. Pharmacy consultation
e. Emergency care consultation
f. Lab consultation
g. Chronic disease management
h. Mental/behavioral health
i. Other, please describe:

18. How does your practice plan to obtain the technology or equipment to provide telehealth?

a. Purchase with general operating funds
b. Shared/group purchase
c. Provided by hospital or other health care facility
d. Able to use existing equipment
e. Lease equipment
f. Purchase with grant funding
g. Donatation by charitable organization
h. Unknown
i. Other, please specify:

If you would like more information about MHCC's work regarding telehealth use in various care settings, visit
http://mhcc.maryland.gov/mhcc/pages/hit/hit_telemedicine/hit_telemedicine_grants.

Thank you for your time.

Appendix B:

Telehealth Liability Flyer

Telehealth Professional Liability Insurance

Overview

As the use of telehealth becomes more common, health care providers are examining their professional liability insurance to determine coverage of services delivered via telehealth. Industry standards for how insurance carriers will provide coverage for telehealth malpractice and liability are not well developed, and many carriers remain silent in their policies regarding coverage for telehealth. Providers may need to consider several factors to determine the extent to which their liability carrier provides coverage when seeking to deliver care via telehealth.

Liability Insurance Coverage

Carrier policies on liability insurance coverage for the practice of telehealth can vary. These variations can include:

- The circumstances in which telehealth will be covered under the policy[1];
- Case by case determinations for providing coverage[2]; and
- Not providing coverage for telehealth.

Lack of specific language in the policy does not necessarily preclude coverage for telehealth. Carriers may assess specific telehealth practices to determine coverage, including the technology to be used, the target population, the type of treatment (i.e. remote patient monitoring, consultation, education and counselling, etc.), practicing across state lines, and the patient-provider treatment relationship, among others. Telehealth providers should contact their carrier and inquire about the following:

- Whether the carrier provides coverage for telehealth services under the provider's policy;

- Any specific telehealth services that are covered under the policy;
- Any specific activities, such as practicing over State lines, that would preclude coverage;
- Any conditions that must be met to maintain coverage, such as establishing a treatment relationship in-person prior to providing telehealth services; and
- If telehealth is not covered, would revising or changing the policy to include coverage result in an increase in premiums.

Providing Telehealth Services across State Lines

Providers who practice telehealth across State lines may experience barriers with liability coverage. Carriers who are licensed to provide liability coverage in a limited number of states are not able to cover telehealth services rendered in a state in which they are not licensed.[3] For example, if a carrier is only licensed in Maryland, DC, and Virginia, and a provider is seeking to deliver care to a patient located in Delaware, the carrier would not be able to cover the provider for malpractice claims. Carriers that provide liability coverage for providers nationally are able to cover providers delivering telehealth to patients located outside of Maryland.[4] National carriers are licensed related to different laws in each state with regard to practicing telehealth, the impact of those laws on liability coverage, and legal experience to assist a provider in the case of any legal proceedings as a result of care delivered via telehealth.[5, 6] Physicians must ensure that they are following laws and regulations pertaining to the delivery of care via telehealth for both the state in which the provider is located and the state where the patient is located.

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[1] For example, as of February 2018, CNA Financial explicitly details coverage for telehealth in their policies. More information on CNA Financial is available at: https://www.cna.com/.

[2] Providers should be prepared to answer questions from carriers on engagement in specific telehealth activities, including, physical location of the provider, location of the intended patients, equipment being used, and types of treatments that will be administered via telehealth.

[3] In Maryland, Medical Mutual, the top liability insurance provider, is only licensed to cover physicians practicing in Maryland, the District of Columbia, or Virginia, and can only cover telehealth if the patient and the provider are located in one of those three locations.

[4] As of February 2018, the following are the top National Liability Insurance Carriers who cover telehealth across State lines for Maryland Providers: 1) Doctor's Company; 2) ProAssurance; and 3) Berkshire Hathaway.

[5] MagMutual. *Guidelines for Telemedicine Policies and Procedures*, January 2017. Available at: www.magmutual.com/learning/article/guidelines-telemedicine-policies-and-procedures-0.

[6] MagMutual. *Telemedicine Guidelines*, December 2014. Available at: www.magmutual.com/learning/article/telemedicine-guidelines.