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MEDLAW

PART 1

Avoiding Liability in Telemedicine: Licensure & Coverage

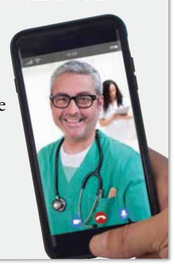
Telemedicine has exploded in scope with the COVID-19 pandemic and will leave a lasting imprint on how medicine is practiced, so it is essential for physicians to understand its basic principles and the specific rules that govern it during the pandemic.

Normally, a patient's residence does not matter, because you see them in the state where you are licensed. However, when you as, for example, a doctor in Manhattan have a video visit with your patient at home just across the river in New Jersey, you are reaching into another state to practice and so your licensure status becomes of interest to that state. As a result of the COVID-19 crisis, states have extended licensure waivers. If you will be practicing telehealth with patients from states where you do not have a license, search fsmb.org for "states waiving licensure requirements" to make sure that is permissible.

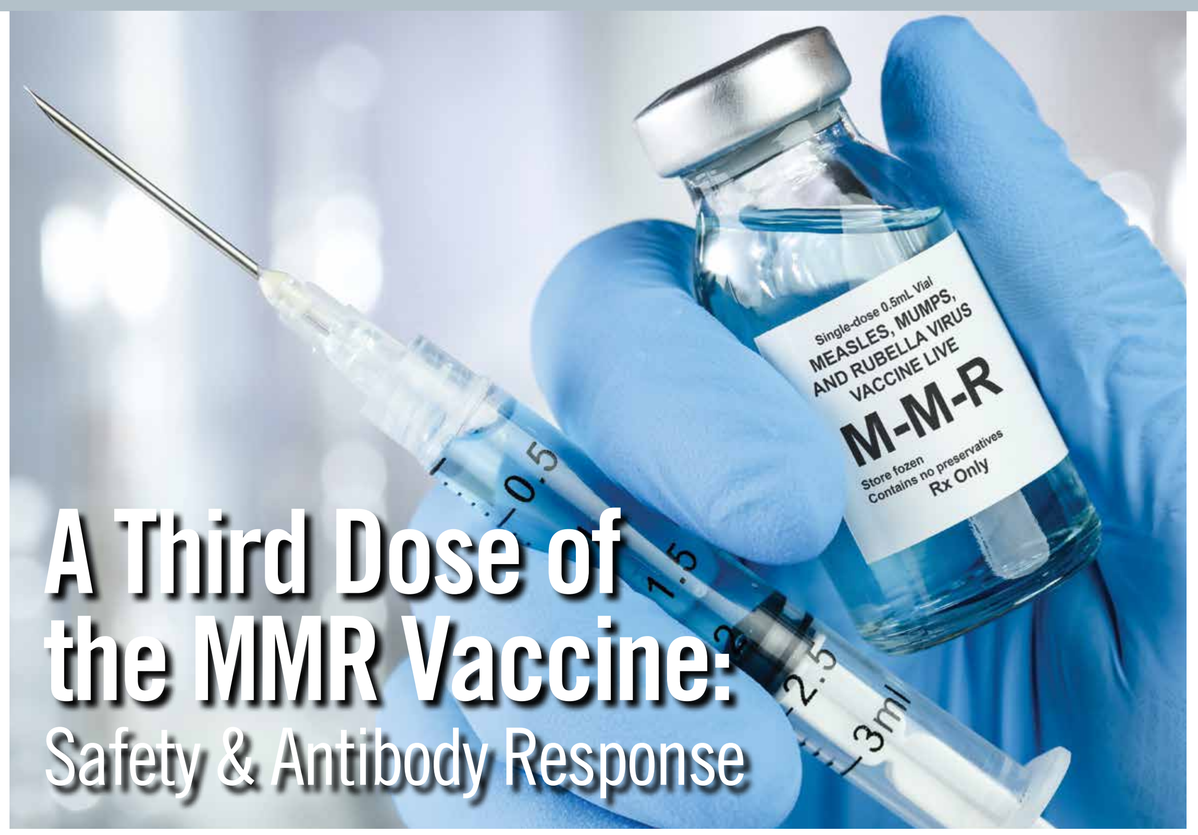
Bear in mind that these modifications are related to the current pandemic. Do not assume that a waiver will continue past the end of the crisis, and make sure you meet all requirements that may re-establish if you want to continue to offer remote visits to your out-of-state patients, or you could face charges of practicing without a license.

The advent of the pandemic originally provoked a retreat by insurers, many of whom wanted to exclude COVID-related issues, but that was essentially a brief reaction, and virtual care coverage is now an expanding and competitive market. However, again, beware that while these changes are significantly the result of carriers seeing an expanding opportunity even after the pandemic ends, they are currently backed up by laws that offer considerable immunity from suits for those involved in COVID-19 care. That rates may rise later when such immunization is lifted should be assumed.

If you are getting coverage to do telemedicine, remember that it is not just about malpractice. You will need adequate coverage for technical issues and for privacy breaches. If you have free coverage of some $50,000 for cyber issues on your current policy, make sure to increase it to at least $1 million, because any breach can be costly and telemedicine is inherently more risky being entirely in the vulnerable electronic realm.



This article was written by Dr. Medlaw, a physician and medical malpractice attorney.



A Third Dose of the MMR Vaccine: Safety & Antibody Response

Written by
Patricia Kaaijk, PhD
Center for Infectious Disease Control
National Institute for Public Health and the Environment
Bilthoven, the Netherlands

Data indicate that the levels of antibody against the mumps virus decrease after childhood. "Waning of immunity is a major cause in the re-emergence of mumps among vaccinated young adults," explains Patricia Kaaijk, PhD, "A third dose of the measles-mumps-rubella (MMR) vaccine that increases antibody levels may protect young adults who are at risk for mumps." Dr. Kaaijk and colleagues conducted a study, published in T*he Journal of Infectious Disease,* to determine the safety and antibody responses to a third dose of the MMR vaccine (MMR-3) in young adults aged 18 to 25.

It should be noted that NNSs are 180 to 20,000 times sweeter than sugar and that most are approved for use as food additives within an accepted daily intake level that is difficult to quantify, given that manufacturers are not required to report the amount of NNS contained in products on food labels. Furthermore, while many assume that NNS use is associated with weight loss, studies suggest that NNS use alone (in the absence of other lifestyle adjustments) is unlikely to lead to substantial weight loss. In rare cases (eg, phenylketonuria), there are absolute contraindications to NNS use.

Safe & Effective

Participants were asked to track their temperature and record pain, redness, or swelling at the injection site, as well as rash, neck gland swelling, and arthralgia or myalgia for the first 2 weeks after vaccination. No serious adverse reactions were reported during the study. However, 17% of participants reported one or more mild adverse events at the injection site (12% local pain, 7% redness, and 5% swelling). Although 33% of participants experienced one or more systemic adverse events (16% swelling neck glands, 18% arthralgia or myalgia, 4% fever, and 3% rash), all adverse events were mild and resolved by 4 weeks follow-up.

Blood samples indicated that before receiving MMR-3, participants had an average immunoglobulin G (IgG) geometric mean concentration (GMC) of 186 RU/mL, a neutralizing antibody dilution of serum that resulted in 50% plaque reduction (ND50) titer against the vaccine strain of 88.8, and a ND50 titer against previous outbreak strain of 65.3. Blood samples 4 weeks after injection indicated that antibody levels were increased by 1.65-, 1.34-, and 1.35-fold, to an IgG concentration of 306 RU/, vaccine strain ND50 titer of 119, and the outbreak strain ND50 titer of 88.4, respectively. Data suggest that more than 86% or greater of participants were protected against mumps, which was confirmed with all three serological assays. The same level of protection persisted at 1-year follow-up (Table). "The third MMR vaccination increased antibody levels protecting recipients for longer than had previously been hypothesized," says Dr. Kaaijk. "While the antibody levels declined 1 year after vaccination, the antibody levels were still significantly higher than before vaccination. The data support that a third MMR dose could help safely control a mumps outbreak."

Increasing Antibody Protection

Looking to future implementation, Dr. Kaaijk is encouraged. "Physicians are recommended to follow the childhood vaccination program for two MMR vaccinations as advised by national health authorities," explains Dr. Kaaijk. "Our data strengthen the recent recommendation of the Advisory Committee on Immunization Practices (ACIP) to offer a third dose of a mumps virus-containing vaccine to persons who are identified to be at risk of mumps during an outbreak to prevent mumps virus infection and related complications. In addition, we now provide evidence that MMR-3 vaccination boost the waning immunity and thereby prevent mumps virus infection and related complications for at least 1 year."

Dr. Kaaijk notes that continued research is still needed in this area. "Moving forward, our team will investigate whether the elevated antibody levels still persist 3 years after the third MMR dose, through collection of follow-up blood samples," she says. "In addition to antibodies, other immune factors can play a role in the defense against mumps. We intend to investigate the effects of a third dose of the MMR vaccine on these other immune factors (eg, cellular immunity) as well."

Table Protection Against Mumps

The table below shows subjects with evidence of protection against mumps virus infection immediately before and at 4 weeks and 1 year after receipt of MMR-3.

Assay, Cutoff	Subjects With Level Above Cutoff, %			Pa	
	Baseline	4 Weeks	1 Year	Baseline vs. 4 Weeks	Baseline vs. 1 Year
Fluorescent bead–based MIA					
IgG level >102 RU/mL	80.9	93.9	91.3	.001	.026
FRNT[a]					
ND50 titer >34 against vaccine strain	77.6	85.7	85.8	<.0001	.001
ND50 titer >26 against outbreak strain	78.2	88.4	88.8	.001	<.0001

[a] By the McNemar test.

Abbreviations: FRNT, focus-reduction neutralization test; IgG, immunoglobulin G; MIA, multiplex immunoassay; MMR-3; third dose of MMR vaccine; ND_{50}, virus-neutralizing antibody titer resulting in 50% plaque reduction; RU, RIVM units.

Source: Adapted from: Kaaijk P, et al. *J Infect Dis.* 2020;221(6):902-909.

Addressing Global Infectious Diseases With Dual Infectious Diseases/Critical Care Medicine Fellowships

Written by
Faran Ahmad, MD
Infectious Diseases Fellow
Creighton University Medical Center

With the emergence of the global outbreaks of novel infectious diseases and the related requirement of an educated workforce to manage the burden of care, ID physicians have become the core of attention once again. As the world is dealing with the global spread of COVID-19, we have discovered that elderly patients with underlying comorbidities have the highest case fatality rate, most developing respiratory failure resulting in death. We learned from the Ebola virus disease outbreak that hypovolemic and septic shock followed by multisystem organ dysfunction were the most frequent causes of death. In both cases, critical care has been the cornerstone of effective management to improve clinical outcome, particularly as we wait for effective COVID-19 treatment. Combination of ID fellowship with critical care medicine (CCM) training is a natural merger to groom young physicians for this evolving challenge.

This combined pathway has been appealing for potential fellowship applicants. Every year, many 2-year ID fellowship spots in the United States remain vacant; but, there has been a reasonable increase in the number of applicants looking for the dual fellowship track, and programs offering such pathways are able to completely fill their fellowship spots. In 2016, *Clinical Infectious Diseases* published a national survey of ID-CCM physicians trained in the US, revealing that 83% were extremely or highly satisfied with their career path; 76% highlighted that, if given an option, they would pursue dual training again. Interestingly, these physicians preferred combination of ID with CCM due to clinical synergy (70%), increased procedural activity over isolated ID training (50%), and lack of comparable interest in pulmonology (49%).

However, ID-CCM-trained physicians currently constitute only 1% of those who are CCM board certified in the US. Only a dozen academic centers offer this unique combined training pathway, which evokes the grave question of whether we are ready to confront the emerging challenge of worldwide infectious disease outbreaks with the current workforce? While we strengthen our healthcare facilities with enhanced infection prevention standards to tackle the epidemic spread, efforts are needed to reinforce care teams with dual-trained physicians who have expertise in managing critical illness associated with infectious diseases and resulting complications. In addition to provision of significant funding for cutting-edge research, opportunities should be provided to increasingly more ID fellowship programs to include additional combined CCM training pathways.

A Novel Collaborative Tuberculosis Care Model

Written by
Bernadette Jakeman, PharmD, PhC, BCPS, AAHIVP
Associate Professor
Pharmacy Practice & Administrative Sciences
College of Pharmacy
University of New Mexicoe

Although latent tuberculosis infection (LTBI) is a curable condition, research indicates that treatment completion rates are inconsistent. "Inconsistent rates of treatment completion are oftentimes due to the duration of LTBI treatment and medication-related side effects," explains Bernadette Jakeman, PharmD, PhC, BCPS, AAHIVP. To determine whether a collaborative care model could be effective in the treatment of LTBI, Dr. Jakeman and colleagues conducted a prospective pilot study in collaboration with community pharmacies and the New Mexico Department of Health, and published their results in *Preventing Chronic Disease*.

"Pharmacies provide the convenience of location, access, and extended hours, and pharmacists are trained to provide adherence counseling and to identify and manage potential medication side effects," highlights Dr. Jakeman. Collaborating with local pharmacy locations, the research team administered LTBI treatment using once-weekly isoniazid and rifapentine via directly observed therapy. Patients received initial evaluation and diagnosis at department of health sites and were offered to continue treatment there or at a community pharmacy. Patients who chose the community pharmacy received adherence and medication counseling, as well as assessment for medication-related adverse events, along with treatment.

Among patients who received treatment at a community pharmacy, 75% completed treatment. Patients of Hispanic ethnicity were more likely to complete treatment than were non-Hispanic patients (76.7% vs 40.0%). Most patients (60%) experienced more than one potential adverse drug event, including dark urine (27.5%), excessive fatigue (22.5%), and nausea/vomiting (22.5%). "Pharmacists were able to address adherence barriers, manage mild non-serious medication side effects, and encourage patients to complete therapy," adds Dr. Jakeman. "They also had direct communication with the health department in cases for which additional evaluation of potential medication side effects was warranted."

"Our study showed that pharmacies could serve as additional sites for patients to safely receive LTBI treatment, especially in areas where the department of health is over-burdened," says Dr. Jakeman. "With an estimated 13 million people in the US affected by LTBI, I would like to see more health departments around the country working with their community pharmacies to tackle this public health issue. To that end, pharmacists are in a great position to provide these services."