For now, telepharmacy in the retail setting has not happened in a big way in the United States. Where used, it has been limited to rural states with pharmacist shortages. One typical model of telepharmacy in the retail setting can be described as a “complete pharmacy without the pharmacist on site.” A licensed pharmacist at a central site communicates through video conferencing in real time with the pharmacy technician at a remote site that stores prescription inventory. The second model may resemble a central-fill pharmacy system, where the prescription is filled at a location with the pharmacist present, then delivered to a remote site for patient pickup and counseling.

As previously mentioned, the U.S. Navy began implementing telepharmacy to combat its widespread shortage of pharmacists. Telepharmacy in the Navy is similar to the retail setting model — that is, prescriptions are filled by a technician at a remote site (e.g., ships at sea) connected through telecommunications with a central-site pharmacist.
Regulating Telepharmacy
The limiting factor in the proliferation of telepharmacy is regulation of its use. The practice of pharmacy is regulated by the state boards of pharmacy. In 2006, the NABP Model Act was updated to recognize telepharmacy, including “the practice of telepharmacy within and across state lines.” The act allows telepharmacy services when appropriate, a statement not as easily defined as written. The American Society of Health-System Pharmacists (ASHP) adopted the position that boards of pharmacy should “adopt regulations that enable the use of United States-based telepharmacy services for all practice settings.”

Since the first regulations were passed in North Dakota, approximately nine other states have enacted regulations allowing telepharmacy in a retail setting. Three others allow telepharmacy use strictly in an institutional setting. Some other states are now considering regulations to provide service in underserved areas.

Adoption Issues
Regulating telepharmacy comes with its own issues for consideration. Telepharmacy prescription processing needs to follow ordered steps, as every prescription requires a process of remote order entry, prospective order review, double-checking of the prescription, actual dispensing, and patient counseling.

Potential issues include licensure of pharmacists and pharmacies, especially with services crossing state lines and involving multiple state regulations. Arrangements for workload relief during peak periods must be considered. Finally, disaster recovery procedures need to be addressed. If an audio or video link is down, the pharmacy is unable to dispense prescriptions.

Keys to Success
The single greatest key to telepharmacy success is the pharmacy technician. This means that technicians need to be properly trained to be in charge of a remote pharmacy site, possibly to a higher level of pharmacy technician certification. Pharmacists will be preparing the medications and running the site. Pharmacists need to be detail oriented, as always, and comfortable with remote dispensing and counseling.

Other key elements of telepharmacy success are appropriate technology solutions. Examples include state law flexibility for new technology solutions, functional video and audio linkages, audit trails for quality control, and proper safety checks and balances, which may include the use of barcodes.

The Future of Telepharmacy
As new technology solutions arise, acceptable telepharmacy uses may also expand. Pharmacists can be used for clinical services within the capacity of telepharmacy capabilities. Pharmacists can be taken into assisted-living facilities, group homes, or physician offices via telecommunications. To ensure adequate care, more research will be needed to prove that patient safety is not compromised. Moreover, telepharmacy should not be viewed as eliminating pharmacist jobs, but as providing pharmacy services in underserved locations.

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