Telemedicine Technology in Correctional Facilities

by Donna M. Fletcher, MPA, RRA, HIM practice manager

Telemedicine is the use of any electronic signal to transmit medical information from one site to another. This includes the transmission of medical information by video, e-mail, telephone, and satellite. Benefits of these transmissions include:

- improved access to healthcare (e.g., obtaining second opinions)
- improved continuity of care, patient education and timely treatment (e.g., monitoring the condition of chronically ill patients, reduced travel time of physicians, other healthcare providers and patients, and better reaching underserved areas)
- improved access to medical records and information (e.g., promoting self help by increasing the online availability of medical information, knowledge-based self diagnosis programs, distance learning programs, and medical research data/information)
- improved continuing medical education

Because the benefits are great, the nation's correctional healthcare providers are exploring the use of telemedicine. The National Commission of Correctional Health Care, a not-for-profit organization whose primary purpose is to work toward improving health services in the nation's jails, prisons, and juvenile confinement facilities, recently adopted a position on the use of telemedicine in correctional facilities. [see below] Toward that end, the commission produces and disseminates resource publications; provides technical assistance; offers a quality review program; conducts educational training and conferences; and offers a certification program for correctional health professionals. It also publishes health services standards and operates a voluntary accreditation program for institutions that meet these standards.

Occasionally, new issues arise in telemedicine that have not been addressed by the commission's standards or have changed since the standards latest revision. One such issue is the use of telemedicine technology in correctional facilities. Accordingly, it has adopted a position statement that, along with the published standards, may assist correctional facilities in designing their own procedures on the matter.

Background

The concept of telemedicine refers to the use of electronic communication and information technologies ("telecommunications") to provide or support clinical care at a distance. The Joint Working Group on Telemedicine, an interagency working group of the Department of Health and Human Services, further defined telemedicine as the delivery and provision of healthcare and consultative services to individual patients and the transmission of information related to care, over distance, using telecommunications technologies, and incorporating the following activities:

- direct clinical, preventive, diagnostic, and therapeutic services and treatment, including procedures where a provider may be present with the patient, and clinical training and consultative clinical grand rounds, if used for decision making regarding the clinical care of a specific patient
- consultative and followup services
- remote monitoring, including the remote reading and interpretation of results of patient's procedures
- rehabilitative services
- patient education provided in context of delivering healthcare to individuals

The application of telecommunications technology to facilitate healthcare delivery dates back to the 1920s, when radio was used to link public health physicians at shore stations with ships at sea to assist with medical emergencies. In current application, telemedicine is the real-time or near real-time transfer of medical information between places of lesser and greater medical capability and expertise. In its simplest form, a nurse providing clinical advice over the telephone is considered a

telemedicine practice. Advanced applications include the transmission of still images and interactive compressed video via fax, voice, satellite, digital radio links, microwave technology, and the Internet.

Video conferencing in which physicians are at both ends of the transmission is perhaps the most common application for telemedicine technology. Also common is the electronic transmission of x-rays. Telemedicine technologies are being successfully applied to a wide variety of medical disciplines including radiology, pathology, neurology, cardiology, pediatrics, emergency medicine, and mental health.

It is widely recognized that the greatest benefit of telemedicine is the ability to provide medical expertise to remote areas that might otherwise go without. Other potential benefits include enhanced access to the expertise of specialists, improved quality of care, reduced professional isolation for rural healthcare professionals, and in many cases, a reduction in overall costs.

Telemedicine has the power to facilitate the provision of medical care, including specialty care, to rural areas that may have a lower healthcare professional-to-population ratio. It can also shorten the diagnosis and treatment process by reducing the time required for patients to be seen by a succession of providers. Instead, specialists and general practitioners examine patients and discuss treatment options together. Supporters base their claims of improved quality of care on this collaborative environment. Additionally, telemedicine can reduce duplication of services and overhead costs of providing care and has been found to reduce the isolation of healthcare professionals by facilitating peer contact for both patient consultations and continuing education.

Using these technologies, telemedicine can make a critical difference in rural areas where the distance between a patient and a healthcare specialist may be hundreds of miles. The same technologies also have been employed successfully at correctional facilities, with additional benefits to both the inmate population and surrounding communities. These facilities offer an example of the cost savings of telemedicine by reducing the need for travel. In the correctional arena, this reduction has broad implications. The need to transport an inmate outside the confines of a correctional facility can be a significant barrier to providing medical care. It is possible for one radiologist to service a number of locations using teleradiology. Furthermore, a specialist could provide direction to correctional healthcare staff, eliminating the need to admit an inmate. This is a significant benefit to the correctional industry, where attracting and retaining talented healthcare professionals is a constant challenge.

Despite the benefits of telemedicine technology, there are still barriers to its use. Regulatory issues (including interstate licensure, malpractice, patient confidentiality, and FDA regulations), budget constraints, insufficient administrative support, and fear of the impact on the healthcare system are a few.

The issue foremost in the legal spotlight is the delivery of telemedicine services across state lines. Carefully defining and documenting the roles of practitioners in each consultation is vital. Licensure and telemedicine malpractice cases will most likely look to standards of care in the community where a patient was treated. It is expected that the physician licensed in that state will have the responsibility of framing consultations in the context of the appropriate state laws and applicable clinical guidelines.

Historically, the federal government, through grants, has provided funding for most telemedicine research. Over the years the availability of federal funds has fluctuated. Many of the telemedicine projects that continue today have received funding from a number of entities including the sponsoring healthcare facility, government agencies, phone companies, vendors, and private philanthropic organizations. Correctional facilities have always experienced difficulties in funding, and the purchase or leasing of even basic equipment may be unrealistic for some facilities. Working with universities and large medical research facilities may provide opportunities for correctional facilities to incorporate telemedicine into their health services.

Position Statement

The use of telemedicine affords correctional facilities many opportunities for reducing operational costs associated with providing healthcare to confined individuals. Policies and procedures must clearly define the purpose and instances in which telemedicine may be used in a correctional facility. Regardless of the type and combination of technology, the basic principals governing the physician-patient relationship must remain intact. This responsibility can be met in large part by ensuring that telemedicine policies and procedures comply with the Commission's Standards for Health Services that have been developed for prisons, jails, and juvenile detention and confinement facilities. Particular attention should be given to the standards for:

- policies and procedures
- comprehensive quality improvement programs
- privacy of care
- continuing education for qualified health services personnel
- orientation training for health service staff
- initial health screening
- access to healthcare
- mental health evaluation
- health record standards
- informed consent
- right to refuse treatment
- medical research

Compliance with the standards will provide the necessary foundation for the appropriate use of telemedicine in correctional facilities. Further attention must be paid to professional licensing regulations and interstate commerce laws which may apply when telemedical consultations cross state boundaries.

NCCHC position on telemedicine

1. **Use of Telemedicine in Correctional Facilities**

   Policies should identify the following:

   - circumstances under which the facility will allow the use of telemedicine
   - which health professionals may assist with a telemedicine consultation
   - which cases are appropriate (and inappropriate) for telemedicine consultations
   - the ultimate responsibility for the patient and action taken as a result of the telemedicine consultation
   - backup arrangements for emergency situations beyond the scope of the telemedicine system--including the abilities of the remote-site personnel
   - arrangements for hands-on evaluations and treatment for situations where the requirements of the physical examination exceeds the capabilities of the remote-site personnel and/or when physical examination (palpation of lymph nodes as an example) is an integral part of determining the proper course of patient care
   - A mechanism through which patients can be seen by appropriately trained medical personnel when necessary
   - equipment standards
   - minimum acceptable technology standards
   - clear documentation of issues such as transmission speed, resolution, and audio quality

2. **Patient Consent, Documentation, and Storage of Information**

   Patients must consent to a telemedicine consultation just as they would any face-to-face encounter with a physician. If the transmitted images will be recorded as part of the diagnostic or therapeutic process, the consent form should include discussion of the capture and use of the images. A facility's policy should address:

   - information ownership and how images or recordings will be maintained
   - how images and recordings are considered part of the patient's medical record and should be kept for the same time period state law requires medical records to be kept
   - the necessity of documentation in the patient's record indicating the availability and location of these recordings
   - the definition of what constitutes "adequate medical records" regarding telemedicine consultations (e.g., whether fax copies of medical records are acceptable for patient charts, etc.)
   - how patient medical records will be maintained and in what form
   - how to maintain hard copy backup of electronic records
   - an emergency plan established in case of electronic system failure ("computer system crashes")

3. **Licensing**

Remote site and consultant personnel must be properly licensed. If the telemedicine consultation involves more than one state, personnel must be licensed in the transmitting and the receiving state(s).

4. **Training and Education**

   Healthcare professionals in correctional facilities will require training in the use of the chosen technologies. This will not only involve initial training on the equipment, but continuing education as well. Involved professionals should stay current on the advances in the applications of telecommunications technology and external issues impacting its use.

Adopted on November 9, 1997, by the National Commission on Correctional Health Care Board of Directors, Chicago, IL.

References

Brecht, R. M. "Correctional Telemedicine: An Overview." In N. Neuberger, ed., *Telemedicine Sourcebook*. New York, NY: Faulkner & Gray, 1997.

Freeman, T. "Telemedicine and CHINS: Interviews with Two Experts." *Journal of AHIMA* 65, no. 8 (1994): 40-43.

Gonzales, W. "Recommended Principles for Accrediting Bodies; Setting of Standards for Access to Care Teleconsultations," 1996.

Gonzales, W. "Use of Telemedicine in Correctional Facilities." In Minutes of the Policy and Standards Committee. Conducted at the annual meeting of the National Commission on Correctional Health Care. Nashville, TN: 1996.

Huston, J. L. M. "Telemedical Records: The Weak Link in Telemedicine." *Journal of AHIMA* 67, no. 6 (1996): 69-71.

Kennedy, M.D. "The Strategic Use of Telecommunications: Lessons Learned and the Path Ahead." *Telecommunications* 30, no. 1 (1996).

Lorton, L., and J.D. Legler. "A Telemedicine Trial." *Journal of AHIMA* 67, no. 4 (1996): 40-42.

O'Connor, K. "Making Distance Smaller: Telemedicine Technology Is Connecting Patients with Appropriate Care." *Health Plan* (July/August, 1996).

Siwicki, B. "Telemedicine Live, Via Satellite." *Health Data Management* 4, no. 9 (1996): 82, 84.

US Department of Commerce, National Telecommunications and Information Administration. "Tele-medicine Report to Congress." January 31, 1997. Available online at http://www.ntia.doc.gov/reports/ telemed/index.htm.

US Food and Drug Administration. "Appended Report on Telemedicine-related Activities of the Center for Devices and Radiological Health." Rockville, MD: FDA, July 11, 1996.

Article Citation:

Fletcher, Donna M. "Telemedicine Technology in Correctional Facilities." *Journal of AHIMA* 69, no.10 (1998): 68-71.
