Curbside consults join the telemedicine era

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Probably since the dawn of medicine, physicians have been “curbsiding” their colleagues in the hallways of hospitals, i.e., obtaining quick answers to, hopefully, limited questions about a patient’s care. The receiving physician will provide an informal and typically rushed consultation based on limited information, and does so with no compensation for time. More recently, providers have informally consulted their colleagues within the context of their Health Insurance Portability and Accountability Act (HIPAA)–approved electronic health records, or outside these systems in eminently hackable and non-HIPAA-protected email systems.

The marriage of the curbside consult and the use of electronic health records is the eConsult. This can be defined as “asynchronous communication between healthcare providers that occurs within a shared electronic health record or secure Web-based platform.” This was developed over a decade ago,¹ and in this issue of *Neurology® Clinical Practice*, Bradi et al.² describe their group’s development of a platform in Canada that has provided specialty care consults, including in neurology, for over 6 years. The stated purpose of its development was to reduce wait times for specialty care. To accomplish this, the authors developed their own electronic platform, providing encryption and allowing for those who did not already share an electronic health record and patients (e.g., as part of an integrated system such as Kaiser, the Veterans Affairs Medical Centers [VAMC], or something akin to an Accountable Care Organization) to access or respond to specialty care rapid consultations.

That system emphasizes rapid management that may forego the need for formal neurology consultation. Within their system, 3 neurologists (neuromuscular, headache, and multiple sclerosis training) responded to 387 Neurology eConsults (6.9% of all consults) from physicians (92%) and nurse practitioners (8%), with 5 common topics accounting for 57% of all eConsults. Most practitioner questions took the neurologist less than 10 minutes to formulate a response and were answered within a day. The need for face-to-face visits was cut in half. The primary care provider took a new action in a majority of cases.

Bradi and colleagues addressed neurology eConsults where wait lists for regular consultations were weeks long. Other studies have reported helpful electronic, yet face-to-face, advice when the neurologist was too distant, e.g., the military theater.³ Teleneurology with immediate face-to-face patient contact is more common for routine consults.^{4,5} Teleneurology is well-known for stroke evaluations in the emergency department, and is becoming more common in intensive care units. Teleneurology reduces the disparity for timely access in remote rural areas. It also is used for backup in an acute care hospital.⁶

eConsults have advantages and limitations.⁷ As with any face-to-face interaction, patient privacy must be protected for the information sent and received. Transmission needs to be through secure encrypted lines. Licensing becomes an issue for transmission to a different state. Only some US states have regulatory compacts to facilitate telemedicine across state lines. Perhaps the largest related issue is that this may well work within an integrated system with HIPAA protections strongly in place, but what of the many external referrals? Bradi et al. have developed their own electronic platform, which can be accessed in either direction, but there is an additional cost for development and maintenance of such a system.

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Reimbursement is another problem. Bradi et al. describe an externally developed platform in Canada, but do not describe reimbursement within that system, which is distinctly different from that in the United States and other countries. In the United States, the Current Procedural Terminology coding system⁷ has adopted a code family for Internet Consultations, but does not cover non-face-to-face interactions such as eConsults. Within an integrated system such as Kaiser or the VAMC, participation could be designated as a condition of job performance, with appropriate reimbursement. Internal academic practices might designate resource value units for participation, which could then presumably be funded by insurance or other sources. Not seeing a physician for a full consultation may also take on some risk. It is not clear how electronic systems, especially those developed by third parties and not within an integrated health system, will provide detailed records such as actual MRI scans, or EEG and EMG tracings. Malpractice litigation may claim mismanagement attributed to eConsults. Disclaimers will accompany communications. Neurologists should know when to answer an eConsult inquiry directly, or alternatively, when a full consult is needed, rather than always answering with a brief discussion, differential diagnosis, suggested therapy, or recommended test.

Bradi et al. did not describe the practice setting of the practitioners who were providing the eConsult services, but it is likely not all will wish to partake. Given the nature of the questions and responses, it is likely that a general neurologist might be best suited to be a responder, yet some questions might be better answered by a subspecialist, e.g., in movement disorders. Who will get trained and who will train them? How will those seeking guidance gain access to an appropriate list of trained specialty providers? How and when will we integrate the concept and performance of eConsultation into medical education?

As we move away from traditional methods of health care delivery, we worry and check if we are moving in the right direction. Are we comfortable with the decisions made in those electronic circumstances, or have some key features been overlooked when these less formal evaluations are used? Are the consulting neurologists concerned that they are receiving too fragmentary information to make a reasoned decision, or do they feel confident in the information received and advice given? We know outcomes may be faster, but are they as good as for in-person visits? Follow-up studies might compare outcomes of eConsults vs traditional face-to-face consults.

There are several situations in which outpatient eConsults can be most easily integrated into care. For continuity patients, the primary care provider can give an interim report, asking for suggested next steps in a long-term treatment plan of a patient with a chronic neurologic condition known to both physicians. For new patients, more information may be needed. Review of pertinent medical records, laboratory studies, imaging studies,

medication profile, pathology specimens, and so forth may be required and transmitted electronically immediately before the eConsult. In any case, a neurologist should be able to decline to answer a brief eConsult, and ask for a full consult or teleconsult, or recommend an urgent office visit or trip to the emergency department.

Electronic provider-to-provider consultation will grow throughout this century. We need to sort out how to conduct this new health care process rapidly and reliably, without sacrificing quality. We also must remember the human touch in all this. The work product is not just diagnoses, prescriptions, and tests ordered. The patient deserves care from a physician who can listen, evaluate, understand, explain, and express compassion. Can we deliver those qualities electronically?

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