Technology Trends and Psychological Practice

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1. Uses of Technology in Psychology

- Practice management
  - Clinical record keeping – free standing and networked electronic medical record (EMR), scheduling, word processing, integrated with billing, networked systems with and without wireless access, accounting, etc.
  - Billing
- Communications and services
  - Colleagues – consultation, collaboration, use of list servs, e-mail, chat-based communications, conference calling rather than face to face meetings
  - Payers – treatment requests, billing, credentialing
  - Clients – e-mail, chat-based Internet communications, videoconferencing, FAX, telephone , opportunities for more "home health" versus office-based services, on-line testing via Internet, monitoring client change via self-report measures at time of service, virtual reality treatments
  - Public - web site presence, marketing
- Professional education and training via the Internet
  - Distance learning such as online CE and university courses, obtaining information via online journals and references regarding specific questions,
  - keeping current about professional literature (use of online subscribed journals, e-alerts about journal articles as they are published, doing literature searches
  - Supervision – e-mail, telephone, televideo, virtual reality simulation
- Research – web-based research

2. Barriers for the adoption and use of technology in psychology

- Technophobia and lack of knowledge and skills
- Unaware of potential benefits
- Perceived ROI is too low – may not be using technology already currently available, initial cost may be too high for potential benefits
- Time investment seen as too high for potential benefits
- Difficulty adjusting to different ways of practicing or adapting to change
- Information overload
- Concerns about confidentiality loss potential (ethical, legal (HIPPA))

3. Some major trends

- Costs of technology is going down
- Easier and quicker sharing of information and communicating with others

- Computer-based services will become a significant part of psychological practices, especially for isolated areas and clients with difficulties in accessing traditional office-based services
- Technology and communications will increasingly becoming more mobile and diverse, decentralized, easily accessible and integrated in everyday lives of more people
- Wireless access to the Internet and local area networks will increase
- Increased "nationalization" of licensure and regulation of psychology since practices will be less geographic bound
- Progressive decrease in privacy of personal information due to increased electronic collection and accessibility
- The amount of information becoming available is exponentially increasing resulting in information overload
- There will be a continued growth of opportunities for distance learning for initial training and continuing education, which will increasingly compete with face to face classes and continuing education presentations and programs
- Professional publications will increasingly be more available in electronic format on the Internet with more psychologists choosing to read journals via the Internet versus subscribing to hard copy journals due to reduced cost and convenience of access
- There will continue to be growing external accountability for psychological services (e.g. more information required about services provided, what format such data is to be in, more, less professional autonomy in what and how services are provided, etc)
- Searching for information on the Internet will become more sophisticated and allow for greater relevance to the user
- General public is becoming more technologically sophisticated and knowledgeable about health services and better informed about service options and more assertive in their expectations

4. Some major issues

- Technology is changing faster than our knowledge about how to use it or to develop agreed upon practices
- Increased standardization of psychological service practices through legal regulations (e.g. HIPAA)
- Local standards of practice will be increasingly superceded by national standards of practice in determining what are acceptable practices
- Increased need for current psychologists and psychologists-in-training to learn new knowledge and skills in order to adapt to the rapid technological changes that will continue
- Decreased reliance on printed forms of knowledge and communications – e.g. increased use of electronic journals accessed from personal computers, use of virtual libraries
- Complexities of compliance with external regulations (e.g. HIPAA, managed care and insurance companies, external regulators, etc)
- Security concerns as information is increasingly digitized and made much easier to share with others and potential for breaching confidentiality is greater.

- Need for advocacy to make legal changes in licensure laws and rules to recognize telehealth and practicing across state lines and easier licensure reciprocity across states.
- Need for the reimbursement of telehealth services – changes in Medicare law and regulations, other insurance plans to recognize services as reimbursed
- Development of guidelines and standards of practice (and ethical expectations) that recognize the use of new practices brought about by new technologies

"Psychologists should be taking the lead in designing technologies that fit particular clinical objectives rather than trying to use technology that has been developed for other purposes."

<div align="right">(Jerome, et al., 2000)</div>

Selected References

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6-3-04
Rev. 11-20-04