



Neurosurgery and Telemedicine: Assessment of the Opportunities and Risks

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Background

Definition of telemedicine

“The use of electronic information and telecommunications technologies to support long-distance clinical health care.” (HealthIT.gov)

Benefits of telemedicine

- Reduce **costs** through diminished travel times and lost work time for patients and by avoiding unnecessary ED visits, transfers and hospitalizations
- Improve **access** via remote consultation of subspecialty experts, such as neurosurgeons
- Improve **outcomes** for instance via remote consultation to assist with triage and care in time-sensitive scenarios, including acute stroke care and “teletrauma”

Barriers to growth

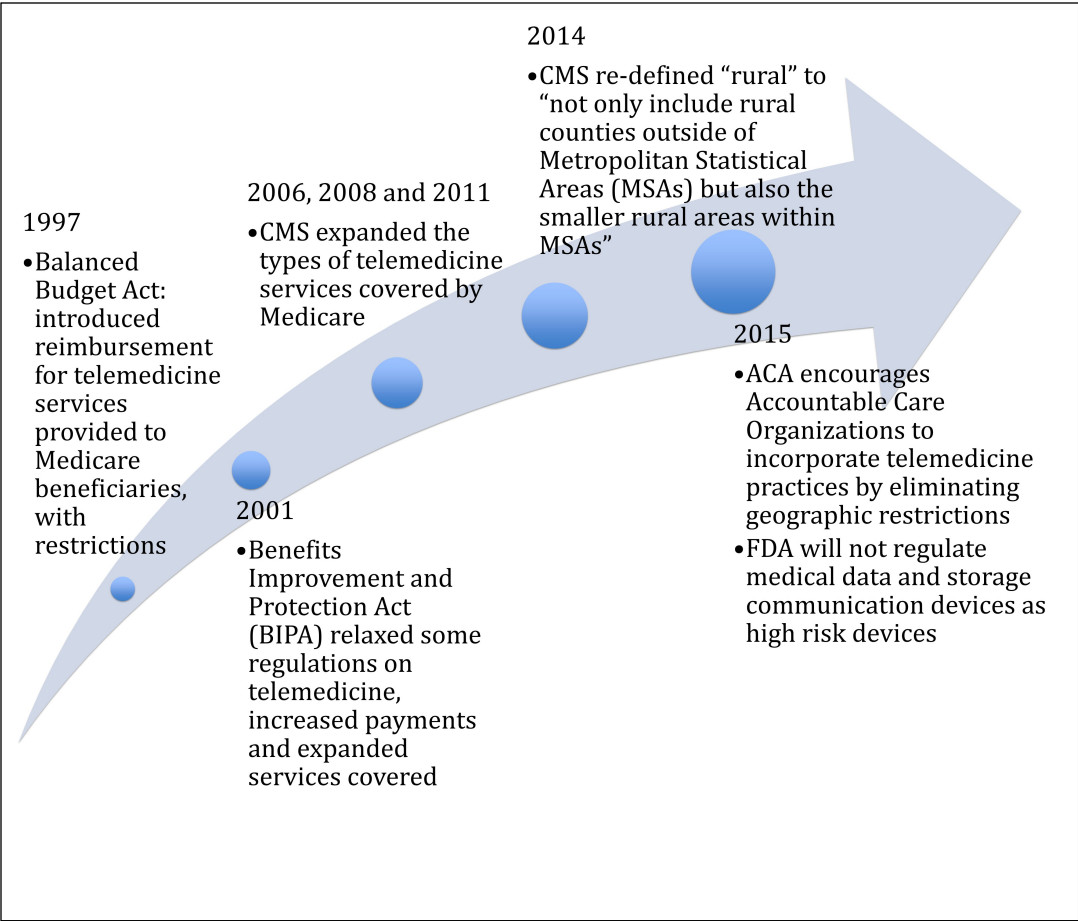
- Lack of widespread reimbursement
- Lack of interstate licensure reciprocity
- Lack of universal access to necessary technology
- Patient confidentiality concerns
- Insufficient outcomes data
- Liability concerns

Current Policy Environment

State-level Policy

- **Widely variable**
- Two key web-based resources:
 - **American Telemedicine Association:**
www.americantelemed.org/policy/state-policy-resource-center#.VUJ2aK1Viko
 - **National Conference of State Legislatures:**
www.ncsl.org/research/health/state-coverage-for-telehealth-services.aspx

Federal Policy Evolution and Current Activity



Future Directions

- **Reducing barriers** through legislation and payment reform
- **Refining scope** through market forces
- **Defining outcomes** through robust research and clinical trials
- **Refining formal guidelines** through state boards and professional organizations, to ensure that implementation of telemedicine is judicious and patient-centered