Neurosurgical Documentation

- Prospective insights into pediatric neurosurgery: transforming care through adverse event analysis
- Iatrogenic cerebral amyloid angiopathy: Two cases linked to childhood cadaveric dural transplantation for different intracranial pathologies, diagnosed using the simplified Edinburgh computed tomography criteria
- Morphometric and Clinical Analysis of the Azygos Anterior Cerebral Artery: Insights From a Cadaveric Case Report Study
- Prion Safety Laboratory Swipe Test
- Primary intracranial malignant melanoma in an adolescent: case report and literature review
- Predicting Postoperative Delirium Using Intraoperative Neuromonitoring in Patients Undergoing Craniotomy for Aneurysm Clipping Surgery
- Corpus callosotomy for intractable epilepsy in the pediatric population: value of intraoperative neurophysiological monitoring
- Evaluating Large Language Models for Automated CPT Code Prediction in Endovascular Neurosurgery

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Clinical documentation has been a cornerstone of medical care for hundreds of years, if not longer [1].

see Medical history.

Administrative database

Administrative database

Purposes

The products of such documentation, serve many purposes: reminding the note author of what they did, communicating to other providers both in the present and the future, justifying a level of service provided and a fee charged, defending decisions in case of malpractice accusations, providing data for research and quality improvement, and even communicating with patients as in OpenNotes [2] [3] [4].

The last major paradigm shift in documentation occurred in 1968 when Dr. Larry Weed proposed the problem-oriented medical record [5].

Weed presaged and welcomed electronic health records (EHRs) [6], writing that “it can readily be seen that … in the future all narrative data may be entered through [a] series of displays.

Clinical documentation is usually stored in an unstructured format in electronic health records (EHR). Processing the information is inconvenient and time-consuming and should be enhanced by computer systems. In this paper, a rule-based method is introduced that identifies adverse events documented in the EHR that occurred during treatment. For this purpose, clinical documents are transformed into

a semantic structure from which adverse events are extracted. The method is evaluated in a user study with neurosurgeons. In comparison to a bag of word classification using support vector machines, our approach achieved comparably good results of 65% recall and 78% precision. In conclusion, the rule-based method generates promising results that can support physicians' decision making. Because of the structured format the data can be reused for other purposes as well [7].

Neurosurgical documentation refers to the process of recording and documenting information related to neurosurgical procedures and patient care. It involves creating accurate and comprehensive medical records that capture the details of the surgical intervention, patient assessment, operative findings, neurosurgical techniques, postoperative care, and follow-up.

Effective neurosurgical documentation helps ensure continuity of care, facilitates communication among healthcare providers, supports research and quality improvement initiatives, and serves as a legal record of the patient's treatment. It should be timely, legible, objective, and comply with relevant documentation guidelines, such as those set forth by regulatory bodies and professional organizations.

Preoperative Neurosurgical Documentation

Preoperative Neurosurgical Documentation.

Intraoperative Documentation

Intraoperative Documentation.

Operative Notes

Operative Notes

Postoperative Documentation

Postoperative Documentation

Progress Notes and Follow-up

Coding and Billing Documentation

Prospective quality registries

Prospective quality registries.

Case reports

see Case report.

Storing

there are several options available depending on the type and amount of data you need to store. Here are some common methods of storing information:

Hard drives: Hard disk drives (HDD) and solid-state drives (SSD) are commonly used for storing data on personal computers and servers. They offer varying capacities and are suitable for storing large amounts of data.

Cloud storage: Cloud storage services allow you to store data on remote servers accessed through the internet. Popular cloud storage providers include Google Drive, Dropbox, and Microsoft OneDrive. Cloud storage offers convenience, scalability, and accessibility from multiple devices.

Network-attached storage (NAS): NAS devices are dedicated file storage devices connected to a network. They provide centralized storage for multiple devices and can be accessed by authorized users over a local network or remotely.

External storage devices: External hard drives, USB flash drives, and SD cards provide portable storage options for backing up or transferring data. These devices are widely available and offer different capacities to suit your needs.

Optical storage: CDs, DVDs, and Blu-ray discs are optical storage media that can store data, music, videos, or software. However, their storage capacity is relatively limited compared to other options.

Tape storage: Magnetic tape storage is primarily used for long-term archival and backup purposes. It offers high storage capacities and is often used in enterprise-level data storage systems.

When choosing a storage method, consider factors such as data security, accessibility, scalability, cost, and backup options. It's often advisable to have multiple copies of important data stored in different locations or using redundant storage systems to minimize the risk of data loss.

1)
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2)
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3)
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4)
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5)

Weed LL. Medical records that guide and teach. N Engl J Med. 1968 Mar 14;278(11):593-600. PubMed PMID: 5637758.
6)

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7)

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