

Improvement of the efficiency of electronic medical record signature



International
Hospital
Federation

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● Context and Aims

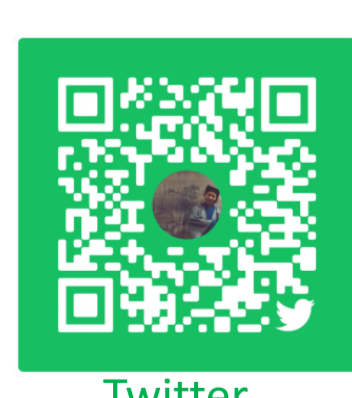
Signatures are important in medical record. Electronic medical record (EMR) needs the Healthcare Certification Authority IC card for electronic signature and timestamp marking to ensure the legal validity and authenticity of electronic documents. Timeliness of EMR signature can prevent patients from accepting wrong medical treatment and protect the rights and medical safety of patients. Therefore, the completion rate within 24 hours of the EMR signature is an important quality indicator.

● Innovative Contribution

The EMR Exchange Center in Taiwan can access the records of each hospital within 6 months on the Internet. EMR exchange across hospitals allowed patients to save time and money, improved medication safety and made physicians more efficient in diagnosis and treatment. The average number of discharged patients in our hospital was 33,611(2015-2017) and increased year by year. Therefore, the number of patients benefited will be more and more. The correctness and completeness of electronic medical records were the basis of patient safety. The Ministry of Health and Welfare actively promoted the electronic medical record policy. These improvements can be used as a reference for electronic medical record management.

● Findings

Since 1998, we have started implementing EMR including medical records, nursing records, inspection reports, etc. In 2014, the completion rate within 24 hours of the EMR signature was 84.5% and could not reach the threshold 90%. After investigation and statistical analysis, we found that the reasons for the low completion rate included: 1. There was no policy on timeliness of electronic signature. 2. The process of signature was very complicated and time-consuming. 3. The signature system purchased could not be customized and was unstable. 4. Insufficient number of signature equipment. 5. Medical staffs were not familiar with the signature method. We implemented the following strategies: 1. Revised the "Electronic Medical Record Management Guidelines". 2. Simplified the process of signature to enhance effectiveness. 3. Developed our own signature system. 4. Provided adequate number of computers and signature equipment. 5. Conducted comprehensive education and training. 6. Set up a reminder on the information system. In 2015 and 2016, the completion rate within 24 hours of the EMR signature was 93.5% and 93.8%. We have implemented another strategy: when staffs login to the computer, the system automatically prompt the number of non-signature and provide quick link to the signature system. In 2017, the completion rate within 24 hours of the EMR signature was 95.9%.



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