Electronic prescribing report examples

Health & Medicine, Drugs

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Abstract

Electronic prescribing has become a status quo in the medical industry and is considered a significant transformation in the healthcare business. Adoption of this system is encouraged by some state and federal programs that provided technological support for its successful implementation.

This technology offers a wider range of convenience, efficiency and accuracy on the medication workflow process. Physicians and pharmacists have acknowledged the benefits of e-prescribing and the rewards that they may obtain in implementing the system. However, there were apprehensions among medical professionals in adopting the system. . Some medical practitioners lack the willingness to change and embrace opportunities for improvements due to insufficient resources in dealing with the challenges. Aside from the cost, which is their major concern, the lack of technological knowledge and training is a hindrance in considering changes in the workflow. Although the federal government and some government agencies have made efforts in providing technological support to overcome these barriers, there are existing issues on the structure of the Electronic Data

Interchange which is not 100% effective. Successful deployment of electronic prescribing can only be achieved once the issues and risks on the system are addressed. Resolution of all the concerns related to electronic prescribing will lead to its meaningful use and utilization of its full benefits will reap a greater return on investment.

Keywords: Electronic prescribing, Electronic Data Interchange

Electronic Prescribing (E-Prescribing) is a computer-based network that allows access to patient's drug coverage and medical history which electronically transmits the prescription to the pharmacy. Aside from prescribing, transmitting, dispensing, administering and monitoring, the system also supports drug interaction and drug allergy checks. During patient visits to a physician, the EHR application of the physician identifies the patient's information through a master patient index. The patient information request is sent to connected payers and pharmacies which in turn will send the prescription and medical history information to the physician's EHR application. The physician will then validate and review all the medical information, chooses proper medication and pharmacy, and generates the e-prescription. Prescription may be modified or changed depending on any drug allergy alerts and sent electronically to the pharmacy system. The pharmacy can also send electronic message to the physician in cases of refills which the physician can either approve or disapprove the request. Many physicians are using Electronic prescribing due to its cost-effectiveness and safety measures. However, despite of its positive points, it carries negative issues as well.

Pros

For healthcare providers, e-prescribing is a powerful tool in managing their patient's medical needs. It can improve patient safety through accurate and efficient prescription. Due to the system's full support in improving medication adherence, electronic prescribing can eliminate the consequences of harmful drugs and reduce the costs of drugs through the use of generics or other cheaper alternative medications. Providers can instantly evaluate the list of drugs on patient's health insurance formulary and has the option to choose the most effective and cost efficient for the patient. They can also access the patient's medical history and be able to determine if a patient has complied in taking their medications through the fill status notification standard. E-prescription can reduce medication errors through its codified SIG standard where information on dosage calculation, restriction, duration, administration time, and instructions to stop order is determined. Standard names for clinical drugs can be identified through clinical drug terminology as well as its dosage forms, ingredients, brand names and drug mechanism. Clinical support is provided by the system such as warning and alert on patients' drug-drug interactions, drug-allergy interactions, diagnosis, age, body weight and proper appropriation and dosage. Since all information is communicated in a highly advanced process, improvement on quality of service and patient experience is highly visible. Patients are more confident to engage in care and medication or therapy education which can lead to increase in overall productivity. Wireless network offers convenience and freedom of mobility to prescribers through the use of mobile devices such as mobile phones, laptops and tablet

computers in writing prescriptions. E-prescribing also saves time and effort through less phone calls and faxes. Requests for medication refills, eligibility verification and pharmacy call back is quicker. The impact of this new technology lies on the workflow efficiency which replaces the obsolete practice in a medical office that includes the risk of handwriting errors, mixed- up transactions and patient privacy violations. E-prescribing can simplify the workflow process and increase efficiency. Communication and resolution issues on formulary, dosage and generic substitution as well as administrative problems are eliminated thus reducing the workload of health care providers. It is convenient for patients due to a reduced time in picking up the prescription from the pharmacy and renewal requests can be issued promptly. Considering the cost of equipment and software, monthly fees and maintenance or upgrades, the Centers for Medicare and Medicaid Services (CMS) offers incentive programs through e-prescribing initiative to counterbalance the cost of investment. Hospitals and independent physicians can avail of the incentive payment programs initiated by The Health Information Technology for Economic and Clinical Health Act (HITECH) for adopting the meaningful use of electronic health record technologies in which e-prescribing is the main component.

Cons

Although many physicians believed that they will benefit in the implementation of e-prescribing in their facility, some of them are hesitant to welcome it. One of their major concerns is the cost of equipment and installing the system. Most of them are struggling on cost negotiations, proper vendor selection and long term support due to limited accessibility of

Information Technology experts. The transition period of implementing the system is associated with changes in the management that involves effective planning, training and support which is more complicated and time-consuming. Their confusion on how the e-prescription works and the uncertainty of addressing its technical issues are their common problems. They are faced with challenges and limitations that need to be addressed. Some healthcare providers are uncertain if their software programs are compatible with CMS or have an organized Electronic Data Interchange (EDI). To provide a successful universal system, all information on electronic data interchange should be consistently structured for uniform interpretation. Inconsistent information could result to medication errors that could harm the patient. Disfigured software could result to accidental data entry errors and erroneous alerts which could pose liability to physicians or pharmacists. Technical or network issues and loss of electricity can result to system downtime and when e-prescribing is not available, the workflow is greatly affected. Inadequacy of security application may lead to improper disclosure of patient's medical information through the internet. Hospitals, clinics and pharmacies are required to install proper security settings for security and privacy protection. Electronic signature verification should be addressed properly to guarantee medical integrity of the prescriptions.

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