Enhancing Continuity of Care through an Emergency Medical Card at Intermountain Healthcare: Using the Continuity of Care Record Standard

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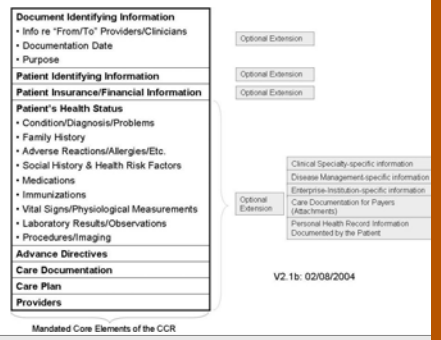
Introduction

Complex and fragmented healthcare systems hamper provision of effective care where it is needed most.[1] In most instances, continuity of care is rarely considered during referral, transfer, or discharge of patients from one caregiver to another. [2,3] The dearth of pertinent current and historical health information at the point of care may lead to medical errors, adverse events, and poor outcomes.[4]

Objectives

- Develop an automated system compliant with continuity of care record standard (E2369-5) to enable patients to modify/add information in a personal database, and create and print a pocket EMC and a full continuity of care report.
- Establish through simulations the impact that the use of the EMC and a full continuity of care report have on continuity of care.
- Evaluate the impact of the EMC and full continuity of care reports on the quality of data entered by providers and by patients.
- Evaluate the impact of the EMC and full continuity of care reports on patient and provider satisfaction.

The CCR standard[5]

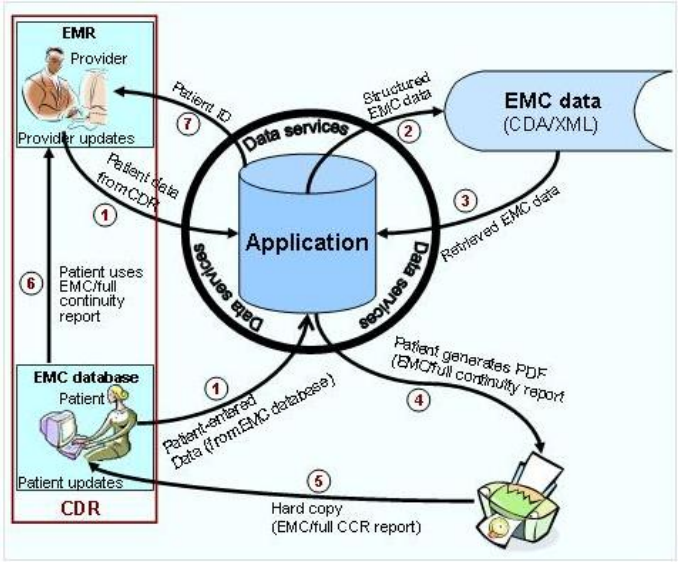


The Problem

Discontinuity of care due to poor communication and exchange of health information among providers is a major efficiency and patient safety concern. Patients often see multiple providers, and, during each visit, the patient's core health information is required by providers for appropriate decision making. Patients with access to their EMR may wish to share their healthcare information, but not all providers may have EMR systems, and browser access may not be available in all circumstances. Providers may therefore provide care without knowing a patient's full health status or what procedures had been performed previously, resulting in wasteful duplication of effort and in clinical decisions that do not take into account the critical data related to the patient's health.

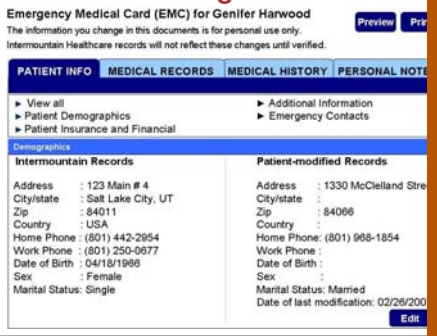
In addition, errors of commission and omission may exist within the patient's EMR. The patient is potentially an excellent source of quality control for the record, but direct access to information is rarely available.

EMC Data Storage and Manipulation Architecture



① Extract datasets from EMR & EMC databases.
② Transform extracted datasets into CCR standard's XML format.
③ Extract CCR dataset.
④ Generate printable *pdf* emergency medical card and full continuity of care documents.
⑤ Patient prints out *pdf* emergency medical card and full continuity of care report.
⑥ Patient keeps/takes printed EMC (for emergencies) and full continuity of care report (for the update of patient's PHR in the EMR) to the next provider he/she visits.
⑦ Provider uses patient-submitted data on full continuity of care report to extract the patient's provider-maintained EMR, verifies & updates.

Main Data Management Menu



References

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Acknowledgements

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