RCEM

Clinical Information Systems

Author
Kirsty Challen

Introduction

The choice of clinical information system (or Electronic Patient Record) can have huge impact on the quality of life at work in an Emergency Department. Multiple login requests, excessive clicks required for a simple action and unnecessary alerts leech time, bandwidth and enthusiasm from all exposed to them. Research by members of the RCEM Informatics Committee has demonstrated the poor useability of the majority of systems in use in 2019[1].

Emergency Department Information Systems (EDIS) rarely operate or are procured in isolation so Emergency Physicians have limited scope to control or influence decisions around them. However, this chapter will provide a brief introduction to the underlying standards and principles.

Standards immediately applicable to Emergency Departments

ECDS Information standards notice: this specifies the information which must be submitted by all Emergency Departments (including from 2024 Same Day Emergency Care). It is regularly updated and the current version can be found at
https://digital.nhs.uk/data-and-information/data-collections-and-data-sets/data-sets/emergency-care-data-set-ecds.

Emergency Care Discharge Standard: this was developed by the Professional Record Standards Body (PRSB) in conjunction with RCEM, RCGP and RCP amongst others. It details the information which should be included in communications with the GP when a patient is discharged from Emergency Care. The current version is at
https://theprsb.org/standards/emergencycaredischarge/.

Recommendations

RCEM

The RCEM informatics committee has prepared advice for clinicians involved in IT system procurement
https://rcem.ac.uk/advice-for-clinicians-involved-in-ed-it-procurement/

A clinical information system has a number of functions relevant to Emergency Care

1. Core functions

- Recording an ED attendance, including for a patient who arrives unconscious;
- Merging records when patient identity becomes known;
- Admitting to a ward;
- Making and attending an ED follow-up appointment;
- Record attendance or non-attendance from a 111 contact;
- Major incident functions including multiple unknown patients.

2. Core functions

- Access to relevant records including hospital, GP, mental health and CPIS;
- Documentation of acuity assessment including triage and streaming;
- Documentation of clinical records;
- Requesting and reporting of investigations including imaging;
- Documentation and communication of referral and transfer to specialty teams and areas (including specialties at a different centre);
- Providing an overview of all emergency care areas (the "whiteboard" function).

3. Core functions

- Retrieval and incorporation of medication history from other sources;
- Allergy checking and documentation;
- Prescribing and administration of drugs, including retrospective documentation of drugs given in an emergency scenario;
- Fluid and blood product prescribing and tracking;
- Integration of Patient Group Directives and Non-Medical Prescribing function.

4. Core functions

- Extraction and reporting of Core Data Sets (ECDS);
- Live identification and alerts for patient deterioration;
- Report building eg to support business cases or for QI/research.

RCEM

References

1. *111 referral standard. Professional Record Standards Body. 2024.*
   https://theprsb.org/standards/111referralstandard/.

2. *Ambulance handover to emergency care. Professional Record Standards Body. 2024*
   https://theprsb.org/standards/ambulancehandover/.

3. *Urgent transfer from care home to hospital. Professional Record Standards Body. 2024.*
   https://theprsb.org/standards/carehometohospital/.

4. *Palliative and End of Life Care Standard. Professional Record Standards Body. 2024.*
   https://theprsb.org/standards/palliativeandendoflifecare/

5. *Bloom BM, Pott J, Thomas S et al. Usability of electronic health record systems in UK EDs.*
   Emerg Med Journal. 2021; 38:410-5.