Key elements for an EDQUM minimum data set (April 2004)

Information	No.	Description	Notes
Patient	1	Unique identifier	Shaded items 5-7 will be generated from data recorded at each encounter with the patient Additional items - elsewhere prescribed, complementary medicines All items need to be date stamped
	2	Sex	
	3	Date of birth	
	4	Allergies/ ADRs	
	5	Derived "active" problems	
	6	Derived "current" drug chart	
	7	Past medical history ("past problems)	
Encounter	8	Who provided service	Encounter data must be date stamped Need to maintain problem ID throughout longitudinal record as definition (diagnosis) changes over time (see accompanying notes) For minimum data set ignore History and Examination
	9	"Problem" definition • NEW problem • EXISTING problem	
Action taken	10	" Special Advice"	Specific non-pharmacological protocol-driven advice may be appropriate for particular clinical conditions eg trial of dietary and lifestyle advice before lipid lowering therapy is introduced. Actions are taken to deal with "problems". Every action taken must be related to a problem, either a new problem or an existing problem (item 9) Medications should include immunisations, sample packs and OTC recommended products; how data on these medications are managed needs to be resolved. Items 12-16 capture information about the prescription. The exact order in which these fields (and the structure of each field) may vary according to the prescribing package used. Some of these data elements 12-14 inclusive could be covered by a single EAN number (when available) For minimum data set other courses of action have not be included as essential elements for data recording. Desirable additional elements could be: Investigations, Referrals etc
	11	Medication Yes / No	
	12	Medication name • Drug dose form • Drug strength • Pack size	
	13	Quantity of drug prescribed (=dose)	
	14	Dose frequency	
	15	Number of repeats	
	16	Date medication started	
	17	Date medication ceased	
	18	"Other" actions	
Desirable elements	19-23	Height, weight, smoking, alcohol consumption, immunisation status	

Notes accompanying the minimum data set – April 2004

General points

1. This document has been the result of the recognition that currently available data sources have limited capacity to answer the clinical questions of interest that underpin the EDQUM project. Routinely collected data can provide some information, but without patient- and indication-specific information it is not possible to assess the appropriateness of prescribing decisions or measure more subtle changes in prescribing practices over time.

2. In identifying a minimum data set, we have recognized that GPs are time poor and will be unwilling and unable to commit to any data collection that adds substantially to consultation time. This documents attempts to identify the minimum set of information that if routinely collected by the GP would still allow the GP to reflect meaningfully on prescribing practices.

3. The focus of this document is the data fields that should be completed by the GP. This document ***does not*** address issues of computing or data coding nor does it attempt to describe the screen interface which would be used for the data collection. Progress on these aspects will require consultation with software providers. *However, a prerequisite for these consultations is an agreed set of data elements that need to be incorporated into standard data input screens.*

4. The issue of coding of information is a vexed one and has been the subject of discussion and a number of reports by expert committees over a number of years. Resolving this issue is beyond the scope of the EDQUM project, but we would be hopeful that pressures from other organizations and Government will hasten a commitment to a recommended coding system. In the interim, modifications to currently available software used by participants in the EDQUM project to accommodate the minimum data set are likely to use the coding systems relevant to that software. The coding systems can be mapped one to another to facilitate aggregation of data.

5. Apart from patient identifiers (items 1-3 in minimum data set), all items in the data set will need to be 'date stamped' to facilitate generation of current medication lists, current problems and past problems.

Definitions

To avoid confusion and ensure consistency in the use of terms, the following standard international definitions from the World Organisation of Family Doctors should be used and applied to this minimum data set:

Problem*:* any concern in relation to the health of a patient as determined by the health care provider. Problems should be recorded at the highest level of specificity determined at the time of an encounter.[1]

- *New problem*: the first presentation of a problem including the first presentation of a recurrence of a previously resolved problem but excluding the presentation of a problem first assessed by another provider.

- *Continuing problem*: a previously assessed problem that requires ongoing care. Includes follow-up for a problem or an initial presentation of a problem previously assessed by another provider.

Encounter**:** any professional interchange between a patient and one or more members of a health care team.[1]

- *Indirect:* Encounter where there is no face-to-face meeting between the patient and the health professional (but a service is provided e.g. prescription, referral).

- *Direct:* Encounter where there is a face-to-face meeting of the patient and the health professional

Medication: medication that is prescribed, advised for over-the-counter purchase or provided by the GP at the encounter.

The medication may be *new* i.e. prescribed/advised/provided at the encounter for the management of the problem for the first time, it may be a *continuation* or repeat of previous therapy for the problem.

Specific points relating to the items in the minimum data set

Patient information

1. A **unique identifier** is required to facilitate linking of records. This identifier may or may not be the same as the unique number assigned automatically by some computer systems.

2. **Sex** will be a standard data element already collected as part of registration of a patient on the computer system.

3. **Date of birth** will be a standard data element already collected as part of registration of a patient on the computer system.

4. **Allergies/adverse drug reactions.** Most computer systems will already have facility for recording this information.

5. **Derived "active problems".** 'Problems' is the generic term applied to symptoms and diagnoses, recognizing that not all presentations to general practice can be assigned a firm diagnosis at first presentation. The diagnosis may be assigned over time as a cluster of symptoms becomes a formed diagnosis. Therefore each 'problem' needs to be tracked over time so that the pathway from symptom to diagnosis is clear. This can be best achieved by assigning a unique identifier to the patient problem/diagnosis at first presentation. The same identifier is retained over time as a changed problem/diagnosis labels are assigned to the problem.[2-4] Active problems are those that are under active management by the GP at that time and are distinct from 'past' or resolved problems that will be listed under item 7, called past medical history. The list of active problems will be generated from encounter data.

6. **Derived current drug chart.** This document will be updated based upon medications recorded as actions taken as part of a consultation

7. **Past medical history ("past problems").** See item 5.

Encounter information

8. **Who provided the service**

9. **"Problem" definition NEW or EXISTING**. See item 5.

New problems will be added to the active problem list for the patient. A new identifier will be assigned as a new problem is entered into the patient record.

Existing problems will be those for which there is already a record of symptoms or diagnosis managed at previous consultations. Existing problems will already have an identifier, assigned at the time of first presentation with the problem.

Action taken

Note: Every action taken must relate to a specific problem which will be either a new problem or an existing problem.

10. **"Special Advice".** This item has been included as not all consultations result in a prescription. For some clinical conditions there will be protocol specific advice that is given to patients and this should be noted here. For example, a GP may recommend a trial of lifestyle changes and dietary modifications before lipid modifying drugs are prescribed or advice may be given on why antibiotic therapy is inappropriate for an upper respiratory tract infection along with a 'prescription' for symptomatic management of the illness.

11. **Medication YES / NO.** From the definition, a medication may be prescribed, advised for over-the-counter purchase or provided by the GP at the encounter.

It is important that GPs recognize that data collection should occur for all consultations and not just those for which a prescription is issued. Specifically in the context of the drug groups which are the focus of EDQUM activities (antibiotics,

lipid-lowering drugs and proton pump inhibitors) it will be important to measure those occasions on which a prescription was not issued.

For example, in assessing prescribing practices for the management of upper respiratory tract infections it is necessary to know how many presentations there were for this condition and in what proportion of those presentations a prescription for an antibiotic was issued. If GPs only record those occasions on which a prescription was provided, this more informed assessment of prescribing practices cannot occur. If only prescribing occasions are recorded, the database will only be able to inform the GP as to which antibiotic was chosen for the prescription.

Similarly for lipid-lowering drugs, it will be important for GPs to be able to assess the extent to which a trial of dietary and lifestyle modification was recommended before therapy with a lipid-lowering agent is introduced.

12. **Medication name**. This is the drug prescribed, advised or provided for a new or existing problem at the encounter.

    Software packages will differ in the nature and extent of recording of elements relevant to the prescription but most are likely to cover the drug dose form, drug strength, dose prescribed, dose frequency, pack size ordered, number of repeats (items 12-16). These items will not represent additional data recording beyond that already undertaken with the use of computerized prescribing packages. The pack size will most often be the standard PBS pack size for the drug being prescribed. In some cases, the GP will want to prescribe other quantities of tablets.

13. **Quantity of drug prescribed = dose.** See item 12

14. **Dose frequency**. See item 12

15. **Number of repeats**. See item 12

16. **Date medication started.** As noted in general points, prescriptions need to be date stamped at the time of issue. The date medication was started will usually be the date of the first prescription for the drug.

17. **Date medication ceased.** While not currently a standard recorded item for prescriptions, a date for ceasing medication helps maintain a current drug chart for the patient.

18. **"Other actions".** Other courses of action beyond advice and prescribing have not been specified in the proposed minimum data set. A consultation may result in a number of other actions including referral to specialists or other health professionals, ordering of pathology, biochemistry or radiological investigations etc. While the recording of these outcomes is desirable, these are consistent with the development of an electronic patient record rather than the more limited scope of this exercise for the EDQUM project.

Desirable elements

19-23 **Height, weight, smoking, alcohol consumption, immunization status**. These items have been nominated as desirable for a patient record, however these are not considered essential elements for a minimum data set.

References

1. Bentzen N, Bridges Webb C. An international glossary for general/family practice. *Fam Pract* 1995;12(3):341-369.
2. Weed LL. New premises and new tools for medical care and medical education. *Meth Inform Med* 1989;28:207-214.
3. Weed LL. Medical records that guide and teach. 1968 [classical article] [see comments]. *MD Comput* 1993;10(2):100-114.
4. Weed LL. *Medical records, medical education and patient care*. Cleveland: The Press of Case Western Reserve University: 1969.