

Minimum Basic Data Set in General Practice: Definitions and Coding

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A minimum basic data set (MBDS) was designed and used in general practice. The most important purpose and need for establishing such a data set is to assist in the provision of patient care. MBDS is designed to meet common needs for many general practitioners. Minimum means that individual programmes or the GP are free to collect as much additional data as they may wish. The MBDS includes two kinds of data: permanent and dynamic/encounter items. Permanent items are: patient data (identification, problem list, chronic treatments, source of payment) and GP data (professional characteristics). Dynamic/encounter items are: date, place, reasons for encounter, problems, process and prior encounter status.

INTRODUCTION

Ambulatory care is an example of data development and collection. The individual is treated in phases and stages of mental, physical and social illness.¹ Each time the GP sees the patient, another piece of information is accumulated. Each fragment is a memory element in planning the next step.

Medical records are made up of items of information or data entries.² Data entries are all the individual pieces of information that are entered into a health record; that is, they are any piece of information that a GP needs to know to treat a patient. All data entries are communicators that release a message about the individual. Individual data entries that are compiled in an organized format comprise an information component. Data entries are of three major types: identification-social, medical and financial.

MINIMUM BASIC DATA SET (MBDS)

The several elements comprising virtually all medical records can be linked only with great difficulty and sometimes not at all.^{1,2} Differences in terms, definitions and other units of measurement or observation preclude relating the major categories of data that merit analysis.³ Comparability among different data

components within a national or international framework is dependent upon the use of terms, definitions, classifications and conventions that are common to the whole system. The MBDS is viewed as a minimum core of common data that was not intended to limit the amount of supplementary information that could be collected or processed. Two definitions are essential to understanding the MBDS:⁴ first, set is defined to include all data elements and their definitions identified for one subject area; secondly, minimum is defined as the least number of essential data items required among multiple users. MBDS is designed to meet common data needs among multiple GPs, not to meet the total data needs of any one GP. Also, minimum means that individual programmes or GP are free to collect as much additional data as they may wish.

The MBDS has items that characterize the patient, the GP and the patient–GP encounter. The most important purpose and need for establishing such a data set is to assist in the provision of patient care.^{5,6} The MBDS demonstrates that an individual patient has need for a service, and that the correct service is provided in the proper manner by the proper provider. The MBDS will allow for the grouping and comparison of data collected across various populations, settings, geographic locations and time.³

The MBDS includes two kinds of data: permanent and dynamic. Permanent data should be recorded once, maintained within the record-keeping system and updated as required to reflect changes; permanent data should be captured at the time of enrolment or registration, or at the time of the patient's first encounter with a GP. Dynamic/encounter data should

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be captured at each encounter between a patient and his GP. Items of each encounter may be maintained in a record separate from those permanent items, with linkage across records achieved by means of the patient and provider identifiers.

We propose a MBDS (Table 1) based on its use in routine ambulatory care (general practice) in our own practices during the last eight years,⁷ 2 years of work in a project on 'MBDS in a health information system in primary care',^{8,9} the information needed to assign an 'ambulatory visit group',¹⁰ and an 'ambulatory care group',¹¹ and the information that could be included in the patient data card.¹²

TABLE 1 *The MBDS to be entered in medical records*

Permanent items	Dynamic/encounter items
Patient data	
1. Number	1. Date
2. Name	2. Place
3. Date of birth	3. Patient's reason for encounter
4. Sex	4. Problems
5. Marital status	5. Process
6. Residence	6. Prior encounter status
7. Socioeconomic class	7. Provider*
8. Problem list	8. Source of payment*
9. Chronic treatments	
10. Source of payment	
GP	
1. Number	
2. Name	
3. Address	

* only if it is different from permanent data

GENERAL DEFINITIONS

Definitions are essential to the collection of primary health care data. Whenever possible, we propose accepted international classifications, according to WONCA.¹³

Encounter

Any professional interchange between a patient and one or more providers. A direct encounter is an encounter in which there is a face-to-face meeting of a patient and a provider. An indirect encounter is an encounter in which there is no face-to-face meeting between the patient and the provider.

GP/family physician

A physician who provides and co-ordinates personal, primary and continuing comprehensive health care to individuals and families. He provides care for both sexes of all ages for physical, behavioural and social problems.

Patient

A person who receives or contracts for professional advice or services from a GP.

Problem

A provider-determined assessment of anything that concerns a patient, the provider (in relation to the health or the patient) or both. Organic, psychiatric and social problems are included in this definition. A problem has affected, does affect or may affect the patient's functional capacity.¹⁴

Provider

A health professional who, at some time during the care of a patient, exercises independent judgement.⁵ A GP is a provider. There are other health care providers like nurses and qualified graduates of disciplines other than medicine who also render health care.

MBDS: PERMANENT ITEMS

Patient data

1. *Number*: identification number. If the patient has no health identification number, the national identification number or a 'health' special number may be used.

2. *Number*: surname and first name.

3. *Date of birth*: year, month, day.

4. *Sex*: male, female or unknown.

5. *Marital status*: married (includes common law), single, separated, divorced, widowed or unknown.

6. *Residence*: the address should be in sufficient detail and should relate to the usual residence (street name and number, town, zip code and country; also telephone).

7. *Socioeconomic class*: stratum of society usually differentiated by occupation. From I to V, according to the Registrar General, United Kingdom.¹⁵

8. *Problem list*: a list of patient's problems. Problems should be recorded at the highest level of specificity determined at the time of the last encounter. Each problem is dated, numbered and titled. Problems may be relegated to inactive status by dating the resolution. The master problem list should be periodically reviewed and consolidated. Banal problems should not be included in the problem list. The International Classification of Health Problems in Primary Care, ICHPPC-2-D,¹⁶ should be used to classify and code problems.

9. *Chronic treatments*: treatments with a duration of six months or more. The International Classification of Process in Primary Care, IC-Process-PC,¹⁷ should be used to classify and code chronic treatments.

10. *Source of payment*: the source that is expected to be responsible for the largest percentage of the patient's bills. It may be: public (NIH, Social Security, etc), private insurance, self-pay, no-charge or other.⁵

GP data

1. *Number*: identification number. If the provider has no identification number, the national identification number or a 'professional' number may be used.

2. *Name*: surname and first name.

3. *Address*: the office address should be in sufficient detail (street name and number, town, zip code and country; also telephone).

MBDS Dynamic/encounter items

1. *Date*: year, month, day.

2. *Place*: the structure in which the care is provided. The IC-Process-PC¹⁷ should be used to classify and code site of encounter.

3. *Patient's reason for encounter (RFE)*: the statement of the reason why a person enters the health care system with a demand for care. There may be several RFEs during each encounter. The International Classification of Primary Care (ICPC),¹⁸ should be used to classify and code RFEs. The term written down and classified by the provider represents the clarification of the RFE so that the statement is recognizable by the patient as an acceptable description of his demand for care.

4. *Problems*: there may be several problems during each encounter. The first listed problem is the principal problem (the most important problem, as determined by the health care provider). A principal problem must be registered in each encounter. The ICHPPC-2-D¹⁶ should be used to classify and code problems met in each encounter.

5. *Process*: firstly *diagnostic services*. This covers the assessment of any problem by history, physical examination, laboratory, diagnostic imaging and other examinations performed either inside or outside of the office setting. *Therapeutic/preventive services* include preventive, pharmacological, surgical, physical, educational, psychotherapy and other services performed at the time of the encounter or scheduled to be performed before the next encounter. *Disposition* covers the provider's statement of the next step in the care of the patient. The IC-Process-PC¹⁷ should be used to classify and code process. Providers who receive compensation for procedures either from their patients or third-party payers will use the current Procedural Terminology-CPT.¹⁹

6. *Prior encounter status*: the prior encounter status refers to this provider.⁵ The status may be: previously seen for this problem; previously seen for another problem (at least once in the last 5 years); new patient of this provider (never seen or not seen in the last 5 years). The prior encounter status refers to principal problem.

7. *Provider and 8. Source of payment*: only if it is different from permanent data.

DISCUSSION

Criteria for inclusion in a MBDS include finding that data:⁴ can be readily collected with reasonable accuracy and economy; must be needed for each individual patient or provider; do not unnecessarily duplicate data available from other sources; conform to the limits of patient and provider confidentiality, and are periodically considered for both its utility and cost.

The most important purpose and need for establishing such a data set is to assist in the provision of patient care. But there are other uses:^{3,5,20} these include to facilitate self-evaluation by the provider and professional review, to provide a better understanding of the natural history of problems, to assist in the management and planning of ambulatory care, to assist educators, to serve the needs of payers and to provide epidemiologists and other health services investigators with a basis for developing sampling frames for research designed to improve the effectiveness of health services. A MBDS also should help expedite accurate documentation by providers, computerize data, link information across care setting, and retrieve information.²⁰

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