

Why the E.E.P.D?

(The Electronic Encyclopaedia of Perinatal Data)

Rupert Fawdry, FRCS (Ed), FRCOG.

Consultant Specialist in Maternity Care, Gynaecology and Medical Information Technology
General Editor: Electronic Encyclopaedia of Perinatal Data (EPPD) Web site: www.fawdry.info
31, St.Mary's Way, Leighton Buzzard, LU7 2RX, United Kingdom. 01525 37 01 37
e-mail: rupert@fawdry.demon.co.uk Mobiles: 077 678 23 827 or 077 68 97 44 12

or

c/o The Perinatal Institute, Crystal Court,
Aston Cross (off Rocky Lane), Birmingham B6 5RQ
Tel: 0121 687 3400 www.perinatal.nhs.uk

**Any Comments, Criticisms, Corrections
or Suggestions for Improvement very welcome**

My Original Aim in Computers

27 years ago I realised that computers might help reduce human errors in the maternity care of individual expectant mothers, and thus improve the quality of individual patient care.

Present Reality

Over the years since then, I have, instead, seen maternity computers systems used almost entirely

- A. as clever typewriters (and as desk top publishers to create floods of new proformas)
- B. to collect data for managerial purposes e.g. birth notification, audit, annual statistics or
- C. to print out only a limited amount of communication paperwork such as the booking summary, the basic discharge letter etc.

Foundation concepts essential to progress towards my original aim

Progress towards my original ideal has been painfully slow or non-existent.

Indeed for most of my career there seems to have been a chasm between what I know of medicine, and what I have learnt in IT as illustrated in [EEPDPFILES/00_IMAGES/EEPDTALK/Chasm.jpg](#)

As is more fully explored in my most important paper "[EEPDPFILES/01_ESSAYS/B_EPRS/B03_Hybrids.pdf](#)" (See Hyperlink on [EEPDP Home Page](#))

My long experience[†] has led me to the following essential conclusions:

1. Each patients electronic record is fundamentally a hybrid of two distinct types of electronic storage. It consists either of
 - a) Type A Storage. Photograph-like images of Letters etc. or Videos. Fixed at the time of writing without any easy way to analyse any of the details stored in this way or
 - b) Type B Storage. Data entered into rigidly defined databases with only limited opportunities for free text
2. The later type of electronic data storage is essential if IT is to reach its full potential as a source of expert assistance. Complex advice cannot be based on free text in letters or casenotes etc. The cost of programming is too great.
3. Almost every such dataset so far documented (All the 85 I have so far documented (See the [EEPDP Volume III. Perinatal Datasets](#))
 - a) are concern almost entirely with "secondary" data (i.e. data for later analysis rather than data being used in the care of individual patients) and
 - b) almost all require the documentation - electronically (or on paper) of incompatible questions and answer options.
4. Further progress in using electronic records effectively will depend on
 - a) a focus on "Primary" data i.e. data which is entered electronically mainly for the care of each individual patient) instead of incompatible "Secondary" datasets (datasets for later analysis) and
 - b) a single internationally agreed set of defined questions together with all allowable answer options.

5. When electronic data is for secondary use “ARM + Prostaglandins” or “Other” as part of a list of answer options are quite acceptable.

But for individual care much more precision is mandatory e.g. “ARM Done? Yes / No / Unknown”, “Prostaglandins used? Yes (followed by more detailed further questions) / No / Unknown and ”Other (Free Text Option)“

6. The potential quantity of data which could be recorded in such precise electronic databases is almost infinite.
7. The only reliable way to compare different complex datasets is for each of them to be set out chronologically as seen in the EEPD
8. Flow-patterning can then be used to minimise the workload e.g. Always “Was there a labour?” before “Please enter the Time and Date of the Start of the First Stage”
9. As high a proportion as possible of all potential questions and related answer options need to be precisely defined.
10. Such a task is so massive that, on the basis of the proposed classification of data (EEPDPFILES/00_HOME/IMAGES/RFCClassif.pdf) it seems worth focusing first on those items which are of most use in an electronic record which
 - A. Require reliable and accessible terminals and printers in the following places
(What I call a Phase 1 system)
 - i) Whenever scans are done
 - ii) In all Maternity Wards
 - iii) In all Delivery Suites and
 - iv) In all Special Care Baby Unit and
 - B. Are of use in the care of Individual Patients rather than just for later analysis.
11. In Acute Medical Services in most places in the world, a paperless electronic record for all of maternity care is, and will for a long time (and possibly for ever) remain impractical. Indeed it remains my conviction that “If computers had been invented first and paper and pen later, paper and pen would have been regarded as the greatest IT breakthrough in history”
12. As a result, one of the most important uses of IT is to improve the quality of paper records both as case notes and proformas, and as computer printouts.

Outcome of the conclusions above

A. Chronologically arranged, flow patterned questions and answer definitions.

Volumes II (Nightmare findings), III (Existing Datasets), IV (Resource Documents) and V (Logical Prioritisation) are all concerned with encouraging a web based debate on the creations of the essential solid foundation of an internationally agreed chronologically-arranged, flow-patterned set of question and all allowable answer options.

B. Building on that foundation

If and when an ever increasing number of Questions and Allowable Answer options are slowly agreed, then these will provide a more solid and cost effective foundation for further progress.

Assuming that we finally achieve a solid foundation as suggested above, it will then, at last, be possible to use such a foundation to have a further web based consultation on a whole series of other matters as suggested in the EEPD Volumes VI (RIOs), VII (Prognosis), VIII (Action Suggestions) VIII (Leaf Links)

C. Using the EEPD for other purposes

The remaining Volumes (Volume 1 (Discussion Documents) Vol simply provide an opportunity to circulate much other material which I have created or accumulated over the years and which I hope will be useful to my colleagues.

Footnote.

Why not the RCOG or the BMA?

It might be argued that the Royal College of Obstetricians and Gynaecologist or the British Medical Association are the bodies which should be responsible for the creation of Wikipaedia like the EEPD; but I would argue that the RCOG and BMA have an official roles which would not allow the flexibility open to those involved in the development of the EEPD.

Being editorially free has advantages as well as disadvantages.

But if and when the RCOG or the BMA sees the value of an EEPD Wikipaedia the matter is open for discussion.

† Regarding my experience see EEPDPCFILES/01_ESSAYS/B_EPRS/B01_BerlinW.pdf