A detailed comparison between
the “MANNERS” Datasets
and
the “Logical Prioritisation” Datasets

as assessed by
Rupert Fawdry, FRCS (Ed), FRCOG,
Consultant Obstetrician & Gynaecologist
Home: 01525 37 01 37 Fax: 01525 38 24 53 Mobile: 07768 97 44 13
e-mail: eepd@fawdry.demon.co.uk web site: www.fawdry.info

or
Contactable c/o The Perinatal Institute,, Crystal Court,
Aston Cross (off Rocky Lane), Birmingham B6 5RQ
Tel: 0121 687 3400

WEB SITES
MANNERS: www.perinatal.nhs.uk
ELECTRONIC ENCYCLOPAEDIA OF PERINATAL MEDICINE: www.fawdry.info


Any Comments, Criticisms, Corrections
or Suggestions for Improvement very welcome
(or offers to help!)
Introduction

One of the most well known alternatives to the Workload/Cost, Chronological, Flow-patterned based “Logical Prioritisation” perinatal dataset is the large MANNERS 1. Maternal, 2. Neonatal and 3. High Dependency datasets being painstakingly created by Professor Jason Gardosi and his excellent team at the Perinatal Institute in Birmingham.

It seemed therefore worth comparing the current status of these two initiatives as set out in this analysis.

Once this study had been completed it became clear that, although the MANNERS MATERNITY dataset was originally based on a limited selection from the “Logical Prioritisation” (formerly the Fawdry 500 dataset as it existed in 2003) it has since then significantly diverged, mainly as the result of pressure from those whose priority is to audit particular areas of maternity and neonatal care, regardless of the extra workload this will impose on those providing front-line maternity care. As a result of this pressure MANNERS MATERNITY remains so far primarily a data collection system; and has failed to make the crucial conceptual move to becoming an cost-effective, staff-supportive electronic patient record taking full account of RIOs (Realistic Input Output Opportunities). As currently proposed it will increase the workload of already overworked frontline staff by asking them to enter far too much data for others to analyse at a later date. (See EEPDFILES\aHOME\IMAGES\jumbo.pdf)

As can be seen from the side by side comparison document (see below), the MANNERS core datasets, as a viable electronic patient record, are still not as good as they will need to be in the following ways:

1. No flow patterning of data entry (yet)

    Such flow patterning is absolutely vital in any EPR. In contrast in the Logical Prioritisation dataset the analysis of every item always includes the circumstances when each question is asked. Flow-patterning has been promised by MANNERS in the reasonably near future but there is no evidence of such selectivity of data entry appears on the website version currently accessible, and the task involved in programming an adequately flow pattern computer system remains enormous.

2. No attempt to measure the workload involved in the collection of so much data.

    As a result there are far, far too many “Paralysis by Analysis” data items e.g. “HIV Screen Test Date?”, “Screening Leaflet Given?”, “Time of Discharge Examination”, “Time of Highest Bilirubin”, or “Skin to Skin Contact?”

    Such items do not need to be collected for every pregnant woman in the whole West Midlands. A “1 in 10” or even “1 in 100” sample will provide audit data of equal quality with 10% or even 1% of the extra workload.

3. Too many vital gaps to be adequate to generate essential parts of the post-natal record

    Of even greater importance, there remains major and serious areas where the data being required to be entered onto the MANNERS database is not yet sufficient as to allow the computer to contribute adequately to the creation of the paper post natal record. If any data item has to be copied from the main paper record onto another paper record at a time and place when, even in a phase I maternity computer system, a terminal and printer will be available, it must be possible for that piece of data to be entered in an efficient manner into an appropriate place in the electronic system. (See XXX)
4. **Poor identification and separation of the following three essentially separate categories of data**

   A. **Maternity Core Data Index**
   - Data which needs to be entered once for each mother regardless of the number of fetuses/neonates.

   B. **Neonatal Core Data Index**
   - Data which needs to be entered separately for each individual fetus/neonate.

   C. **Paediatric High Dependency Core Data Index**
   - Data which only needs to be entered for those neonates who have been given some form of high dependency care.

Less vital than the above but none-the-less confusing in the design of electronic records, the present Neonatal and High Dependency Indexes both contain a somewhat random selection of data items which should be on the computer for every pregnancy, or for every neonate. In particular the High Dependency Core Index contains many items (e.g. GP Code, etc, not just those under Special Care.) The High Dependency Data Index should either include all such generally available data items; or none.

In contrast, the Electronic Encyclopaedia of Perinatal Data (EEPD) includes in Volume III. (The Resource Document) everything of value which appears anywhere in any of the MANNERS data Indexes:

While in the EEPD, Volume IV ("Logical Prioritisation") contains a logical selection of those data items in the Resource Document (including everything relevant from the MANNERS Data Indexes) which are essential for the care of individual mothers and babies in any Phase 1 (scan room, delivery suite, maternity wards and SCBU) maternity and neonatal networked computer system.

Rupert Fawdry, Jan 2005 (Updated Nov 2005)
### Logical Prioritisation

---

**S. Start of a New Pregnancy on an EPR**

---

**S1. Mother’s Demographic Data**

*Updated if necessary during Pregnancy.
Mainly used at the time of Birth*

#### S1-A. NAMES AND ADDRESS - MOTHER

**Family Name**
- **WHEN?** All (100%)
- **[35 character field]**
- **Workload/Cost:** All Phases of Maternity EPR: A1: Downloaded from PAS.

**First Forename**
- **WHEN?** All (100%)
- **[35 character field]**
- **Workload/Cost:** All Phases of Maternity EPR: A1: Downloaded from PAS.

**Address Line 1**
- **WHEN?** All (100%)
- **[Line 1: 35 character field. Number or Name of House]**
- **Workload/Cost:** All Phases of Maternity EPR: A1: Downloaded from PAS.

**Address Line 2**
- **WHEN?** All (100%)
- **[Line 2: 35 character field. Name of Street]**
- **Workload/Cost:** All Phases of Maternity EPR: A1: Downloaded from PAS.

**Address Line 3**
- **WHEN?** All
- **[Line 3: 35 character field. Name of Village / Town or District]**
- **Workload/Cost:** All Phases of Maternity EPR: A1: Downloaded from PAS.

**Address Line 4**
- **WHEN?** All (100%)
- **[Line 4: 35 character field. Name of City or County]**
- **Workload/Cost:** All Phases of Maternity EPR: A1: Downloaded from PAS.

**Address Line 5**
- **WHEN?** Optional
- **[Line 5: 35 character field. Free Text]**
- **Workload/Cost:** All Phases of Maternity EPR: A1: Downloaded from PAS.

**Post Code**
- **WHEN?** All (100%)
- **[8 character field]**
- **Workload/Cost:** All Phases of Maternity EPR: A1: Downloaded from PAS.

#### Postcode of mother at time of delivery

- **Basis:** Identification of residence at time of birth
- **EXPLANATION:** To derive geographical distribution of babies
- **INPUT OPTIONS:** Link to district code to compare with Office of National Statistics data
- **DATA ORIGIN:** To derive deprivation score
- **Post Code must be stripped of its second half but not its first half before open release.**

---

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 4 of 171
Logical Prioritisation

S1-B. OTHER DEMOGRAPHIC

Date of Birth - Patient/Client/(Expectant) Mother? †
WHEN? All (100%)
[Date]
Unknown
Workload/Cost: All Phases of Maternity EPR: A1: Downloaded from PAS.

Sex - Patient/Client/(Expectant) Mother? †
WHEN? All (100%)
Female

Marital (Civil) Status?
WHEN? All (100%)
Married (and living together)
Parted (Married but Separated)
Single
Widow
Divorced
Unknown
Workload/Cost: All Phases of Maternity EPR: A1: Downloaded from PAS.

What if “Civil Status” is “Married” or “Widowed” or “Divorced” but is now “Living with a Steady Partner”?
When will it be accepted that “Civil Status” is an entirely different entity from “Support/One-Two Parent Family” (see below) (- which could these days include a lesbian partner)

S1-C. IDENTIFICATION NUMBERS

NHS Number - Patient/Client/(Expectant) Mother?
WHEN? All (100%)
[10 character field?] (Allows “Unknown”)
Workload/Cost: All Phases of Maternity EPR: A1: Downloaded from PAS.

Hospital or District or Unit Number - Patient/Client/(Expectant) Mother †
WHEN? All (100%)
[10 character field?] (Must allow “Unknown”)
Workload/Cost: All Phases of Maternity EPR: A1: Downloaded from PAS.

DATA ITEM | Date of Birth
BASIS | To ascertain age for screening tests and age at delivery
EXPLANATION | Requirement for NN4B
INPUT OPTIONS | DD/MM/YYYY
DATA ORIGIN | BNDS, West Midlands Congenital Anomalies Register, Commissioning Data Set, Confidential Enquiry into Maternal Deaths, CESDI, Hospital Episode Statistics, West Midlands Advisory Board - Maternity, SureStart

DATA ITEM | Partnership at booking
BASIS | Social factor relevant to pregnancy
EXPLANATION | To assist in assessing support mechanisms at time of booking
INPUT OPTIONS | Mutually exclusive: Single / Partner / Married / Separated / Divorced / Widowed
DATA ORIGIN | Confidential Enquiry into Maternal Deaths, West Midlands Advisory Board - Maternity

DATA ITEM | NHS Number
BASIS | Unique person identifier
EXPLANATION | Unique identifier for use at all levels and for record linkage with maternal data
INPUT OPTIONS | 3-3-4 numerical format
DATA ORIGIN | British Association of Perinatal Medicine, BNDS, West Midlands Congenital Anomalies Register, Confidential Enquiry into Maternal Deaths, CESDI, CNST, Hospital Episode Statistics, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

DATA ITEM | Hospital number
BASIS | Hospital record identifier
EXPLANATION | Facilitates tracking of patient notes/records within the hospital departments
INPUT OPTIONS | Numerical format
DATA ORIGIN | Commissioning Data Set, Confidential Enquiry into Maternal Deaths, CESDI, Hospital Episode Statistics, West Midlands Advisory Board - Maternity

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  “ Logical Prioritisation” compared with MANNERS Maternity  Page 5 of 171
Logical Prioritisation

S1-D. TELEPHONE NUMBERS

Telephone No - Home
- (Patient/Client/(Expectant) Mother) †
  WHEN? All (100%)
  [15 character field] (Must also allow “None”)
  Workload/Cost: All Phases of Maternity EPR: A1: Downloaded from PAS.

Telephone No - Work
- (Patient/Client/(Expectant) Mother)? †
  WHEN? All (100%)
  [15 character field] (Allows “None”)
  Workload/Cost: All Phases of Maternity EPR: A1: Downloaded from PAS.

Telephone No
- Mobile - (Patient/Client/(Expectant) Mother)? †
  WHEN? All (100%)
  [15 character field] (Allows “None”)
  Workload/Cost: All Phases of Maternity EPR: A1: Downloaded from PAS.

S1-E. CONTACT PHONE NUMBER, IF NO PHONE

Telephone No of Contact? †
  WHEN? When “Telephone Number - Home - (Patient/Client/(Expectant) Mother) = “None”
  [15 character field] (Allows “None”)
  Workload/Cost: All Phases of Maternity EPR: A1: Downloaded from PAS.

Name of Contact with Telephone? †
  WHEN? When “Telephone Number - Home - (Patient/Client/(Expectant) Mother) = “None”
  [15 character field] (Allows “None”)
  Workload/Cost: All Phases of Maternity EPR: A1: Downloaded from PAS.

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 6 of 171
Logical Prioritisation

S2. Professional Support Staff Data (at Birth)

S2-A. GENERAL PRACTITIONER (MOTHER’S OWN GP)

General Practitioner Name (Own GP)?
WHEN? All (100%)
[35 character field?]
[Unknown]
[Not Registered with a GP]
Workload/Cost: All Phases of Maternity EPR: A1: Downloaded from PAS.

General Practitioner Governance Code (Own GP)?
WHEN? Whenever General Practitioner (Own GP) is known
[8 character field?]
Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

Practice Name (Own GP)?
WHEN? Whenever General Practitioner (Own GP) is known
[15 character field]
Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

Practice Address 1-5 (Own GP)?
WHEN? Whenever General Practitioner (Own GP) is known
[Each line a 35 character field]
[Line 1: Number or name of House]
[Line 2: Name of Street]
[Line 3: Name of Village / Town or District]
[Line 4: Name of City or County]
[Line 5: ]
Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

Practice Postcode (Own GP)?
WHEN? Whenever General Practitioner (Own GP) is known
[10 character field]
Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

Practice NHS Code (Own GP)?
WHEN? Whenever General Practitioner (Own GP) is known
[8 character field?]
Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

Practice Phone Number - Public (Own GP)?
WHEN? Whenever General Practitioner (Own GP) is known
[15 character field?]
Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

Practice Telephone No - Restricted (Own GP)?
WHEN? Whenever General Practitioner (Own GP) is known
[15 character field?]
Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

Again it seems best to standardise on 5 separate address lines since many NHS databases require this.

Post Code should be separate?

MANNERS - Maternity

DATA ITEM GP Name
BASIS GP identifier
EXPLANATION Conditional requirement for NN4B
INPUT OPTIONS Linked to National GP database
DATA ORIGIN BNDS, Confidential Enquiry into Maternal Deaths, Hospital Episode Statistics, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

DATA ITEM GP Code
BASIS Unique GP identifier
EXPLANATION Requirement for NN4B
INPUT OPTIONS Linked to National GP database
DATA ORIGIN BNDS, Commissioning Data Set, Confidential Enquiry into Maternal Deaths, Hospital Episode Statistics, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

DATA ITEM Practice name
BASIS Practice location identifier
EXPLANATION Conditional requirement for NN4B
INPUT OPTIONS Linked to National GP database
DATA ORIGIN BNDS, Confidential Enquiry into Maternal Deaths, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

DATA ITEM Practice address
BASIS Location of practice
EXPLANATION Conditional requirement for NN4B
INPUT OPTIONS Linked to National GP database
DATA ORIGIN BNDS, Confidential Enquiry into Maternal Deaths, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

DATA ITEM Practice code
BASIS Practice location identifier
EXPLANATION Requirement for NN4B
INPUT OPTIONS Linked to National GP database
DATA ORIGIN BNDS, Confidential Enquiry into Maternal Deaths, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

† = Must be removed when data is anonymity

EEP.02_DATASETS.L_LARGE.MANNERS.500cM-30 (27th November 2005)
© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 7 of 171
Logical Prioritisation

S2-B. GENERAL PRACTITIONER (MATERNITY CARE PROVIDER)

Own GP providing Maternity Care? (Y/N)
WHEN? All (100%)
Yes
No
Unknown

General Practitioner Name (Maternity Care Provider)?
WHEN? Only if “Own GP providing Maternity Care” = “No” (<5%)

[35 character field?]
[Unknown]

General Practitioner Governance Code (Maternity Care Provider)?
WHEN? Only if “Own GP providing Maternity Care” = “No”

[8 character field?]

Practice Name (Maternity Care Provider)?
WHEN? Whenever “Own GP providing Maternity Care” = “No”

[15 character field]

Practice Address 1-5 (Maternity Care Provider)?
WHEN? Whenever “Own GP providing Maternity Care” = “No”

[Each line a 35 character field]
[Line 1: Number or name of House]
[Line 2: Name of Street]
[Line 3: Name of Village / Town or District]
[Line 4: Name of City or County]
[Line 5: ]

Practice Postcode (Maternity Care Provider)?
WHEN? Whenever General Practitioner (Own GP) is known

[10 character field]

Practice NHS Code (Maternity Care Provider)?
WHEN? Whenever “Own GP providing Maternity Care” = “No”

[8 character field?]

Practice Telephone No - Public (Maternity Care Provider)?
WHEN? Whenever “Own GP providing Maternity Care” = “No”

[15 character field?]

Practice Telephone No - Restricted (Maternity Care Provider)?
WHEN? Whenever “Own GP providing Maternity Care” = “No”

[15 character field?]
**Logical Prioritisation**

**S2-C. NAMED MIDWIFE**

**Expectant Mother’s Named Midwife?**

*WHEN? All (100%)*

Pick List?

Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality - Pick List

**Named Midwife’s Governance Code?**

*WHEN? Whenever Expectant Mother’s Named Midwife is known*

[8 character field?]

Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

**Named Midwife’s Seniority?**

*WHEN? Whenever Expectant Mother’s Named Midwife is known*

Student Midwife
Staff Grade Midwife
Midwifery Sister

[8 character field?]

Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

**Code for Employer of Community Midwife?**

*WHEN? Whenever Expectant Mother’s Named Midwife is known*

[8 character field?]

Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

**Work Address 1-5 (Named Midwife)?**

*WHEN? Whenever available*

[Each line a 35 character field]

[Line 1: Number or name of House]

[Line 2: Name of Street]

[Line 3: Name of Village / Town or District]

[Line 4: Name of City or County]

[Line 5: ]

Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

**Telephone No (Named Midwife)?**

*WHEN? Whenever Named Midwife is known*

[15 character field?]

Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

**S2-D. CONSULTANT OBSTETRICIAN**

*(Back up) Consultant Obstetrician Name?*

*WHEN? Whenever under consultant care or consultant led team (80%) ?*

[From Hospital Personel Database Pick List?]

Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality - Pick List

*(Back up) Consultant Obstetrician Governance Code?*

*WHEN? Whenever (Back up) Consultant Obstetrician’s Name is known*

[8 character field?]

Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

**Code for Employer of (Back up) Consultant Obstetrician?**

*WHEN? Whenever (Back up) Consultant Obstetrician’s Name is known*

[8 character field?]

Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

---

† = Must be removed when data is anonymity

EEP02_DATASETS.L_LARGE.MANNERS,500cm-30 (27th November 2005)

© Rupert Fawdry 2005

“Logical Prioritisation” compared with MANNERS Maternity Page 9 of 171
Logical Prioritisation

S2-E. HEALTH VISITOR

Health Visitor Name?
WHEN? Whenever name is known
[10 character field?]
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality - Pick List

Governance Code for Health Visitor?
WHEN? Whenever Expectant Mother’s Health Visitor’s name is known
[8 character field?]

Health Visitor’s Address 1-5 (Surgery/Health Centre/Other)?
WHEN? Whenever Health Visitor’s Name Not = [Blank]

[Each line a 35 character field]
[Line 1: Number or name of House]
[Line 2: Name of Street]
[Line 3: Name of Village / Town or District]
[Line 4: Name of City or County]
[Line 5:]

Workload / Cost (All Phases of Maternity EPR) AS: Computer Generated

Health Visitor’s Telephone No?
WHEN? Whenever Health Visitor’s Name is not [Blank]

[15 character field]
Workload / Cost (All Phases of Maternity EPR) AS: Computer Generated

S3. First Contact Items
(Usually Booking Letter)

S3-A. START

Data Item

Date of booking
Basis
Record of first antenatal contact

Explanation
Required on documentation in the clinical area and enables calculation of maternal age at any point in the current pregnancy

Input Options

Date of First Antenatal Contact
DD/MM/YYYY

Data Origin

Commissioning Data Set, Hospital Episode Statistics, West Midlands Advisory Board - Maternity

“Date of First Antenatal Contact” IS DEFINITELY NOT the same as the “Date of Initial Assessment (Booking)”???

In any case is the “Date of First Antenatal Contact” the date when a pregnant woman first sees her GP even if she later decides to have a termination

or is it the “Date of First Antenatal Contact (with the maternity care team)”?

or is it the “Date of First Antenatal Contact” the first time she is seen in a Hospital Antenatal Clinic (which could be late in pregnancy.

Does this definition include prior maternity care at another hospital; or in another country?

The simplest solution might be the date when this particular pregnancy is first recorded on the maternity computer system. This would immediately provide a solution to the problem documented in the BMJ in Dec 2005 of making sure that all relevant pregnancies are included in any congenital defect register, including those pregnancies which are later terminated for severe fetal anomalies.

† = Must be removed when data is anonymity

© Rupert Fawdry 2005 “Logical Prioritisation” compared with MANNERS Maternity Page 10 of 171
**Logical Prioritisation**

**S3-D. DUE DATE (BOOKING LETTER)**

A “Paralysis by Analysis” Item therefore NOT A
EEPD Volume IV. “LOGICAL PRIORITISATION” item

*(but included in the
EEPD.Volume III. The Resource Document)*

---

**MANNERS - Maternity**

**DATA ITEM**

**DATA ITEM**

**Last menstrual period**

**BASIS**

To calculate an estimated delivery date at 40 weeks
gestation

**EXPLANATION**

Used in the absence of a dating scan derived estimated
date of delivery

**INPUT OPTIONS**

DD/ M M/YYYY

**DATA ORIGIN**

West Midlands Advisory Board - Maternity

---

**Why on earth are we still recording this on a computer,**

**especially if a dating scan has been done?**

**If no dating scan has been done then it is definitely**

**worth entering the “Best Available Final Due Date”**

- based on the full menstrual history -

- onto the computer

- but any calculation of this

- should always take account of everything known

- about the recent menstrual pattern.

**Despite many years of attempts and case notes which**

**require the entry of all the information needed to**

**calculate the most likely due date (or range of dates)**

**based on LMP, menstrual frequency etc) it has no**

**proved to be possible to train or persuade those**

**entering data onto paper records to be accurate in**

**their calculations whenever these are not simple.**

**Entering all the required data onto a computer and then**

**the use of an elaborate computer program (available on**

**request from the writer) would allow a more accurate**

**due date calculation but the time taken to enter all the**

**data required would almost certainly not be worth**

**while.**

**As an isolated piece of data**

**the date of the LMP is useless**

**either for “Individual Patient Care”**

**or as a “Paralysis by Analysis Item”**

**Amazingly the LMP is still included**

**in the recent New (2001) Birth Notification dataset!**

---

**Estimated Due Date (First Referal - Booking Letter)?**

**WHEN?**

Only if “Basis for Starting Electronic

Pregnancy Record”

= “First Referal - Booking Letter” (95%)

[Date]

Unknown or Uncertain

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality. Annually, if

100% = Look Up by Midwife (10 secs), Extra Workload: 1,550 hours. Cost: £31,000

---

**Mother’s Age at Expected Due Date**

*(Booking Letter Version)*

**WHEN?**

All (9%)

[Two digit integer number]

Unknown

Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

---

†  = Must be removed when data is anonymity

© Rupert Fawdry 2005  
“Logical Prioritisation” compared with MANNERS Maternity  Page 11 of 171
Logical Prioritisation

I. Initial Assessment

Phase 1 assumes that networked computer terminals and printers are nationally reliably available within a year or so at the time of the dating scan, but are not guaranteed to be available nationally for every pregnancy at any other time antenatally. The main criteria for inclusion in this dataset is therefore a) that the data entered may contribute to the care of the mother and/or her baby at the time of birth or later or b) that the information concerns something which in an original paper system, ought to have been copied from the hospital record to the discharge letter and is therefore “Cost Neutral”

“It is salutary to realise that in the process of the Initial Assessment (Booking) of pregnant women, more data is probably collected on a greater proportion of the human race than during any other data-collecting exercise of any kind!”

II.C. ETHNIC ORIGIN, LANGUAGE & RELIGION

Ethnic Origin (Expectant Mother) - for Screening & G.R.O.W. Chart Purposes?

WHEN? All (100%) Africa
North Africa (e.g. Morocco, Algeria)
Sub-Saharan (eg. Somalia, Kenya, Nigeria)
Other (Option for free Text Details)
Asia
India
Pakistan
Bangladesh
Far East Asia (eg. China, Japan, Korea)
South East Asia (eg. Malasia, Thailand, Phillipines)
Other (Option for free Text Details)
Caribbean (eg. Jamaica, Trinidad)
Europe
British Isles (England, N.Ireland, Eire, Scotland, Wales)
Northern Europe (eg. Denmark, Norway, Sweden)
Western Europe (eg. France, Germany, Netherlands)
Eastern Europe (eg. Balkans, Poland, Russia)
Southern Europe (eg. Greece, Italy, Portugal, Spain, Turkey)
Other
Middle East (eg. Egypt, Israel, Syria)
Other (Option for Free Text Details)

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Geographical Ethnic Origin (GEO)

Classification by origin to support medical data
The current Office of National Statistics/Census groupings do not meet requirements for medical data. In the perinatal field, this includes detailing maternal ethnic origin when assessing fetal growth (as recommended by RCOG guidelines) and identifying those at risk for haemoglobinopathy screening. The GEO classification is now used across the West Midlands.
However, the options do map to Office of National Statistics requirements for NN4B submissions.

INPUT OPTIONS Mutually exclusive Pick list within each group
Africa
North Africa
SubSahara
Other
Asia
India
Pakistan
Bangladesh
China
Far East Asia – Other
South East Asia
Other
Caribbean
Europe
- Britain
- Ireland
- Northern Europe
- Western Europe
- Southern Europe
- Other
Middle East
Other

DATA ORIGIN BNDS, West Midlands Congenital Anomalies Register, Commissioning Data Set, Confidential Enquiry into Maternal Deaths, CESDI, GROW, Hospital Episode Statistics, West Midlands Advisory Board - Maternity, NSC

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  "Logical Prioritisation” compared with MANNERS Maternity  Page 12 of 171
**Logical Prioritisation**

**Language Ability (Expectant Mother)?**

WHEN? All (100%)

- Fluent (or Adequate) English
- Slow understanding of English
- No significant understanding of English

Preferred Language (Expectant Mother)?

WHEN? Only if “Language Ability (Expectant Mother)” = “Slow” or “No significant understanding of English” (10%?)

- Urdu
- Bengali
- Gujarati
- Japanese
- Chinese
- Unknown
- Other (Option for free Text Details)

Interpreter needed?

WHEN? Only if “Slow” or “No” understanding of English

(10%?)

- Yes
- No
- Probably

Pregnancy Notes (New West Midlands)

Preferred language

Interpreter required

---

Three items which are surely important for any useful “Individual Patient Care” computer system

---

**MANNERS - Maternity**

Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality. Annually, if 100% + Look Up by Midwife (10 secs), Extra Workload: 1,550 hours Cost: £31,000

---

Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality. Annually, if 10% + Look Up (10 secs) + Data Entry by Midwife, Extra Workload: 155 hours. Cost: £3,100

---

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity   Page 13 of 171
Logical Prioritisation
I1-D. HUSBAND / PARTNER (PUTATIVE FATHER)

**One or Two Parent Family?**

WHEN? All (100%)

Two parent
One parent
Other (Option for Free Text Details)

Unknown

Workload / Cost (Phase 1 of Maternity EPR) A3: Individual Care Quality.
Annually, if 100% + Quick Up Data Entry by Midwife (4 secs). Extra Workload: 620 hours Cost: £12,400

**First Forename (Husband / Partner of either sex)? †**

WHEN? Only if “One or Two Parent Family?” = “Two Parent” (80%)?

 Same as Expectant Mother
or [35 character text field]

Recommended

Workload / Cost (Phase 1 of Maternity EPR) A3: Individual Care Quality.
Annually, if 80% + Time Consuming Data Entry by Midwife (10 secs). Extra Workload: 1,240 hours Cost: £24,800

**Ethnic Origin (Partner/Putative Father) - for Screening Test Purposes?**

WHEN? Only if “One or Two Parent Family?” = “Two Parent” (80%)?

Africa
North Africa (e.g. Morocco, Algeria)
Sub-Saharan (eg, Somalia, Kenya, Nigeria)
Other (Option for free Text Details)
Asia
India
Pakistan
Bangladesh
Far East Asia (eg, China, Japan, Korea)
South East Asia (eg, Malaysia, Thailand, Phillippines)
Other (Option for free Text Details)
Caribbean (eg, Jamaica, Trinidad)
Europe
British Isles (England, N Ireland, Eire, Scotland, Wales)
Northern Europe (eg. Denmark, Norway, Sweden)
Western Europe (eg, France, Germany, Netherlands)
Eastern Europe (eg, Balkans, Poland, Russia)
Southern Europe (eg, Greece, Italy, Portugal, Spain,

Turkey)

Other
Middle East (eg, Egypt, Israel, Syria)
Other
Afro-Caribbean
Asian, Chinese, Mediterraneann
White
Mixed
Unknown
Other (Option for free Text Details)

DATA ITEM Partnership at booking

BASIS Social factor relevant to pregnancy
EXPLANATION To assist in assessing support mechanisms at time of booking
INPUT OPTIONS Mutually exclusive: Single / Partner / Married / Separated / Divorced / Widowed
DATA ORIGIN Confidential Enquiry into Maternal Deaths, West Midlands Advisory Board - Maternity

See above
What if Married or Widowed or Divorced but Living with a Steady Partner?
Civil Status is a different entity from support which could these days include a lesbian partner

**Family Name (Husband / Partner of either sex)? †**

WHEN? Only if “One or Two Parent Family?” = “Two Parent” (80%)?

[35 character text field] Maternity EPR Rejection

Recommended

Workload / Cost (Phase 1 of Maternity EPR) A3: Individual Care Quality.
Annually, if 80% + Time Consuming Data Entry by Midwife (10 secs). Extra Workload: 1,240 hours Cost: £2,480

**Geographical Ethnic Origin (GEO) of father of baby**

BASIS Classification by origin to support medical data pertaining to haemoglobinopathies
EXPLANATION The current Office of National Statistics/Census groupings do not meet requirements for medical data. In the perinatal field, this includes detailing maternal ethnic origin when assessing fetal growth (as recommended by RCOG guidelines) and identifying those at risk for haemoglobinopathy screening. The GEO classification is now used across the West Midlands. However, the options do map to Office of National Statistics requirements for NN48 submissions.

INPUT OPTIONS Mutually exclusive Pick list within each group

Africa
North Africa
SubSahara
Other
Asia
India
Pakistan
Bangladesh
China
Far East Asia – Other
South East Asia
Other
Caribbean
Europe
- Britain
- Ireland
- Northern Europe
- Western Europe
- Southern Europe
- Other
Middle East
Other

DATA ORIGIN BNDS, West Midlands Congenital Anomalies Register, Commissioning Data Set, Confidential Enquiry into Maternal Deaths, CESDI, GROW, Hospital Episode Statistics, West Midlands Advisory Board - Maternity, NSC

† = Must be removed when data is anonymity

© Rupert Fawdry 2005

EEP0.2_DATASETS.L_LARGE.MANNERS.500CM-30 (27th November 2005)
Logical Prioritisation

I1-I. RELEVANT MEDICAL PROBLEMS

Any Existing Significant Medical Problem(s)?
WHEN? All (100%)
No
Yes
Unknown
Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, if 100% + Quick Look Up (10 secs) + Data Entry by Midwife. Extra Workload 1.550 hours Cost: £31,000

Asthma or Chest Problems?
WHEN? Only if “Any Existing Significant Medical
Problem(s)” = “Yes” (10%?)
No
Yes (Option for Free Text Details)
Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 62 hours
Cost: £1,240

TB Risk, Should BCG be recommended?
WHEN? Only if “Any Existing Significant Medical
Problem(s)” = “Yes” (10%?)
No
Yes
Uncertain
Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 62 hours
Cost: £1,240

Back Problems?
WHEN? Only if “Any Existing Significant Medical
Problem(s)” = “Yes” (10%?)
No
Yes (Option for Free Text Details)
Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 62 hours
Cost: £1,240

Depression requiring Supervised Treatment?
WHEN? Only if “Any Existing Significant Medical
Problem(s)” = “Yes” (10%?)
No
Yes (Option for Free Text Details)
Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 62 hours
Cost: £1,240

Other Mental Problems requiring Supervised Treatment?
WHEN? Only if “Any Existing Significant Medical
Problem(s)” = “Yes” (10%?)
No
Yes (Option for Free Text Details)
Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 62 hours
Cost: £1,240

Genital Infections (inc Herpes)?
WHEN? Only if “Any Existing Significant Medical
Problem(s)” = “Yes” (10%?)
No
Yes (Option for Free Text Details)
Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 62 hours
Cost: £1,240

MANNERS - Maternity

B1. HISTORY & BOOKING – Past history

Far too many important items still missing from MANNERS MATERNITY. Essential in any proper maternity computer system

Even if a paper record is sufficient for antenatal and birth care, such information should probably be copied onto the discharge letter at a time and place where a terminal and printer is available.

It should therefore be re-classified as “Cost Neutral”

Depression requiring supervised treatment is now recognised to be so important in maternity care that it is my view that it should be asked for as a distinct separate question.

“Requiring supervised Treatment” is probably also better than “Requiring Prescribed Medication” although this needs further debate

DATA ITEM
BASIS
EXPLANATION
INPUT OPTIONS
DATA ORIGIN
Mental health problems
Clinical factor relevant to pregnancy care and outcome
Mutually exclusive: Psychiatric referral / Psychiatric admission / Medications (+ free text to document details) / None
Commissioning Data Set, Confidential Enquiry into Maternal Deaths, Health Outcome Indicators - Normal Pregnancy and Childbirth

† = Must be removed when data is anonymity

© Rupert Fawdry 2005 “ Logical Prioritisation” compared with MANNERS Maternity Page 15 of 171
Logical Prioritisation

Heart Problems?
WHEN? Only if “Any Existing Significant Medical Problem(s)” = “Yes” (10%?)

No
Yes (Option for Free Text Details)
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs). Extra Workload: 62 hours
Cost: £1,240

Needing Regular Cardiac Specialist Review?
WHEN? Only if “History of Cardiac Disease?” = “Yes” (1%?)

No
Yes (Option for Free Text)
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality. - Letter to GP etc.
Annually, if 1% + Quick Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 15 hours
Cost: £300

Type of Heart Problem?
WHEN? Only if “History of Cardiac Disease?” = “Yes” (1%?)

Mitrval Stenosis
Pulmonary Hypertension
Other (Option for Free Text - Please Specify)
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality. - Letter to GP etc.
Annually, if 1% + Quick Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 15 hours
Cost: £300

Renal Disease or Surgery?
WHEN? Only if “Any Existing Significant Medical Problem(s)” = “Yes” (10%?)

No
Yes (Option for Free Text Details)
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality. - Letter to GP etc.
Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs). Extra Workload: 62 hours
Cost: £1,240

Needing Regular Renal Specialist Review?
WHEN? Only if “History of Renal Disease or Surgery?” = “Yes” (1%?)

No
Yes
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality. - Letter to GP etc.
Annually, if 1% + Quick Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 15 hours
Cost: £300

Kidney Transplant?
WHEN? Only if “History of Renal Disease or Surgery?” = “Yes” (1%?)

No
Yes (Option for Free Text)
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality. - Letter to GP etc.
Annually, if 1% + Quick Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 15 hours
Cost: £300

Ureteric Reimplantation?
WHEN? Only if “History of Renal Disease or Surgery?” = “Yes” (1%?)

No
Yes (Option for Free Text)
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality. - Letter to GP etc.
Annually, if 1% + Quick Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 15 hours
Cost: £300

Serious Renal Disease at or around presumed time of conception?
WHEN? Only if “History of Renal Disease or Surgery?” = “Yes” (1%?)

No
Yes (Option for Free Text)
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality. - Letter to GP etc.
Annually, if 1% + Quick Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 15 hours
Cost: £300

Far too many important items still missing from MANNERS MATERNITY. Essential in any proper maternity computer system
Logical Prioritisation

**Liver Disease or Hepatitis?**
- WHEN? Only if “Any Existing Significant Medical Problem(s)” = “Yes” (10%?)
- Yes (Option for Free Text)
  - Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality. Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 62 hours Cost: £1,240
- No

**Migraine?**
- WHEN? Only if “Any Existing Significant Medical Problem(s)” = “Yes” (10%?)
- Yes (Option for Free Text Details)
  - Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality. Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 62 hours Cost: £1,240
- No

**Thrombosis Problem (DVT or PE)?**
- WHEN? Only if “Any Existing Significant Medical Problem(s)” = “Yes” (10%?)
- Yes (Option for Free Text Details)
  - Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality. Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 62 hours Cost: £1,240
- No

**Confirmed Deep Vein Thrombosis?**
- WHEN? Only if “Thrombosis Problem?” = “Yes” (2%?)
- Yes (Option for Free Text)
  - Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality. - Letter to GP etc Annually, if 1% + Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 15 hours Cost: £300
- No

**Confirmed Pulmonary Embolism?**
- WHEN? Only if “History of Thrombosis?” = “Yes” (2%?)
- Yes (Option for Free Text)
  - Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality. - Letter to GP etc Annually, if 1% + Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 15 hours Cost: £300
- No

**Thyroid Problems?**
- WHEN? Only if “Any Existing Significant Medical Problem(s)” = “Yes” (10%?)
- Yes (Option for Free Text Details)
  - Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality. Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 62 hours Cost: £1,240
- No

**Uterine Anomaly / Injury?**
- WHEN? Only if “Any Existing Significant Medical Problem(s)” = “Yes” (10%?)
- Uterine Anomaly (Option for Free Text Details)
  - Uterine Injury (Option for Free Text Details)
  - Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality. Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 62 hours Cost: £1,240
- No

**Invasive Neoplastic Condition?**
- WHEN? Only if “Any Existing Significant Medical Problem(s)” = “Yes” (10%?)
- Yes (Option for Free Text Details)
  - Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality. Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 62 hours Cost: £1,240
- No

**Any other Condition needing Regular Specialist Review?**
- WHEN? Only if “Any Existing Significant Medical Problem(s)” = “Yes” (10%?)
- Yes (Option for Free Text Details)
  - Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality. Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 62 hours Cost: £1,240
- No

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 17 of 171

Far too many important items still missing from MANNERS MATERNITY. Essential in any proper maternity computer system.
### Logical Prioritisation

“Paralysis by Analysis” Items therefore included in EEPD.Volume III. The Resource Document but not in Volume IV. The “Logical Prioritisation” dataset

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Pre-pregnancy diabetes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>To identify glucose intolerance existing outside of pregnancy that requires medication</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Clinical factor relevant to pregnancy care and outcome</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Mutually exclusive: Requires oral hypoglycaemics / Requires insulin / None</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>Confidential Enquiry into Maternal Deaths, CESDI, West Midlands Advisory Board - Maternity</td>
</tr>
</tbody>
</table>

**Probably best identified under these heading “Drugs currently taken” (see below) rather than making duplicate work for the person entering data by both asking for history of diabetes AND history of regular medications**

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Epilepsy history</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>To identify seizures of any kind, petit mal or grand mal, and requiring neurological investigation</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Clinical factor relevant to pregnancy care and outcome</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Mutually exclusive: Requires medication/Does not require medication / None</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>Confidential Enquiry into Maternal Deaths, West Midlands Advisory Board - Maternity</td>
</tr>
</tbody>
</table>

**See above**

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Hypertension history</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>To identify raised blood pressure outside of pregnancy that requires the use of anti-hypertensive medication</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Clinical factor relevant to pregnancy care and outcome</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Mutually exclusive: Requires medication / Does not require medication / None</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>Confidential Enquiry into Maternal Deaths, Health Outcome Indicators - Normal Pregnancy and Childbirth, West Midlands Advisory Board - Maternity</td>
</tr>
</tbody>
</table>

**See above**

† = Must be removed when data is anonymity
Logical Prioritisation

Any Other Potentially Serious Medical or Surgical Problem?

WHEN? Only if “Any Existing Significant Medical Problem(s)” = “Yes” (10%)?

No

Yes (Option for Free Text Details)

Workload / Cost (All Phases of Maternity EPR) All Individual Care Quality.

Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 62 hours

Cost: £1,240

Maternal Congenital Anomalies

See elsewhere

(Genetic (Family) History Section)

Cervical Suture already in place

See elsewhere (Past Investigations or Treatment Section)

Other Relevant Surgery

See elsewhere (Past Investigations or Treatment Section)

Chronic Disease requiring Corticosteroid Therapy

See elsewhere

(Medication Section)

Problems with Anaesthetics

See elsewhere (A1-I. Previous Anaesthetics Problems)

Blood Transfusion(s)

See elsewhere (I1-J. Past Investigations or Treatment)

Allergies

See elsewhere

Medications in the last 6 months

See elsewhere (P3-C. Medication during Pregnancy)

Allergies

See elsewhere

Folic Acid

Not relevant to EPR

Vaginal Bleeding - Threatened Miscarriage

See elsewhere (P3-B. Medical, Surgical or Gyn Problems this Pregnancy)

Cervical Smears

See elsewhere (I1-J. Past Investigations or Treatment)

Pesonary Notes (New West Midlands)

N.M.R.P. 2001

Medical History

Your health

Do you have / Have you had? Have you ever had any of the following?

Asthma or chest problems

See elsewhere

Exposure to TB - Back problems

See elsewhere

Depression (Psychological difficulties)

See elsewhere

Other mental health problems (Mental health problems)

See elsewhere

Diabetes

See elsewhere

Disabilities - physical or learning - Epilepsy

See elsewhere

Fertility problems

See elsewhere

Genital Infections (inc Herpes) (Vaginal infections)

See elsewhere

Heart problems

See elsewhere

High blood pressure

See elsewhere

Kidney or urinary problems

See elsewhere

Liver disease or hepatitis

See elsewhere

Migraine - Thrombosis (blood clots)

See elsewhere

Thyroid problems - Other

See elsewhere

Logical Prioritisation

Essential catch-all item in any proper maternity computer system
Logical Prioritisation

I1-J. PAST INVESTIGATIONS, SURGERY OR OTHER TREATMENT

Fertility Problem ever (inc Recurrent Miscarriage)?

WHEN? All (100%)
No
Yes
Unknown

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, # 100% + Quick Look Up (4 secs) + Data Entry by Midwife. Extra Workload: 620 hours Cost: £12,400

Fertility Investigations ever?

WHEN? Only if “Fertility problem ever (inc Recurrent Miscarriage)?” = “Yes” (5%?)
No
Yes (Option for Free Text Details)
Unknown

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, # 5% + Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 77 hours Cost: £1,550

Fertility Treatment ever?

WHEN? Only if “Fertility Investigations ever?” = “Yes” (1%)?
No
Yes
Unknown

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, # 1% + Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 16 hours Cost: £310

Previous Tubal Surgery?

WHEN? Only if “Fertility Treatment?“ = “Yes” (<1%?)
No
Yes
Unknown

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, # 1% + Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 16 hours Cost: £310

Other Fertility Treatment ever?

WHEN? Only if “Fertility Treatment?“ = “Yes” (<1%?)
No
Yes
Unknown

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, # 1% + Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 16 hours Cost: £310

This Pregnancy a result of ‘Other’ Treatment?

WHEN? Only if “Fertility Treatment?“ = “Yes” (<1%?)
No
Yes
Unknown

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, # 1% + Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 16 hours Cost: £310

Method of Fertility Treatment
for this pregnancy?

WHEN? Only if “This pregnancy from ‘Other’ Treatment?” = “Yes” (<1%)?
Clomiphene
Tamoxifen
Pergynol
HCG
Insemination
IVF
GIFT
Other (Free Text Details)

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, # 1% + Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 16 hours Cost: £310

Cervical Suture already in place?

WHEN? Only if “Fertility problem ever (inc Recurrent Miscarriage)?” = “Yes” (5%?)
No
Yes (Option for Free Text)

Workload / Cost (Phase 1 of Maternity EPR) A3 : Individual Care Quality.
Annually, # 100% + Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 1,550 hours Cost: £31,000

† = Must be removed when data is anonymity
© Rupert Fawdry 2005
EEP.D.02_DATASETS.L_LARGE.MANNERS.500ceM-30 (27th November 2005)
“ Logical Prioritisation” compared with MANNERS Maternity Page 20 of 171
Logical Prioritisation

Any (other) Surgery which might be relevant to this pregnancy?
WHEN? All (100%)
No
Yes (Option for Free Text Details)

Workload / Cost (Phase 1 of Maternity EPR) A3: Individual Care Quality:
Annually, if 100% + Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 1,550 hours Cost: £31,000

Previous Blood Transfusion?
WHEN? All (100%)
No
Yes (Option for Free Text Details)

Workload / Cost (Phase 1 of Maternity EPR) A3: Individual Care Quality:
Annually, if 100% + Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 1,550 hours Cost: £31,000

Most Recent Cervical Smear?
WHEN? All (100%)
[Date] or (Approximate) Year
Within Past Three Years (Probably)
More than Three Years (Probably)
Never (Probably)
Unknown

Workload / Cost (Phase 1 of Maternity EPR) A3: Individual Care Quality:
Annually, if 100% + Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 1,550 hours Cost: £31,000
Phase 3, Electronically from Cytology Computer. A4: Downloaded from another computer.
Extra Workload/Cost Free

Most Recent Cervical Smear Result?
WHEN? Only if “Most Recent Cervical Smear Date”
does not = “Never” or “Unknown” (90%)
Negative
No known smear result
Inadequate sample
Borderline changes
Mild dyskaryosis
Moderate dyskaryosis
Severe dyskaryosis
Severe dyskaryosis/invasive carcinoma
Glandular neoplasia

Workload / Cost (Phase 1 of Maternity EPR) A3: Individual Care Quality:
Annually, if 100% + Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 1,550 hours Cost: £31,000
Phase 3, Electronically from Cytology Computer A4: Downloaded from another computer.
Extra Workload/Cost Free

+++++++) Essential catch-all item in any proper maternity computer system

MANNERS - Maternity

Medical History
Your health
Do you have / Have you had? Have you ever had any of the following?
Fertility Problems -

Operations
Blood transfusions

-------------

Last Cervical Smear -
Result

+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

Logical Prioritisation compared with MANNERS Maternity

EEP.D.02_DATASETS.L_LARGE.MANNERS.500cfrM-30 (27th November 2005)
© Rupert Fawdry 2005

† = Must be removed when data is anonymised
I1-L. HABITS AND RECREATIONS
SMOKING

DATA ITEM  Smoker in the 12 months prior to pregnancy
BASIS  Risk factor for current pregnancy
EXPLANATION  Requirement for DSCN 50/2002
INPUT OPTIONS  Mutually exclusive: Yes / No
DATA ORIGIN  DSC Notice 50/2002, Health Outcome Indicators - Normal Pregnancy and Childbirth, West Midlands Advisory Board - Maternity, SureStart

Another “Paralysis by Analysis” (“Below the line”) Item
No value as an “Individual Patient Encounter Assurance” (“Above the line”) item.

A 1 in nn sample would probably give almost the same audit and managerial information with significantly less electronic data entry work by overburdened front line health care workers.

DATA ITEM  Smoker at time of booking
BASIS  Risk factor for current pregnancy
EXPLANATION  Requirement for DSCN 50/2002
INPUT OPTIONS  Mutually exclusive Yes / No
DATA ORIGIN  DSC Notice 50/2002, Health Outcome Indicators - Normal Pregnancy and Childbirth, West Midlands Advisory Board - Maternity, SureStart

Another “Paralysis by Analysis” (“Below the line”) Item
No value as an “Individual Patient Encounter Assurance” (“Above the line”) item.

A 1 in nn sample would probably give almost the same audit and managerial information with significantly less electronic data entry work by overburdened front line health care workers.
**Logical Prioritisation**

**ALCOHOL**

“Paralysis by Analysis” Items therefore included in EEPD, Volume III. The Resource Document but not in Volume IV. The “Logical Prioritisation” dataset

**DATA ITEM** Alcohol consumption

**BASIS**

To ascertain possible alcohol abuse prior to and during pregnancy

**EXPLANATION** Clinical factor relevant to pregnancy care and outcome

**INPUT OPTIONS**

Mutually exclusive: None / Less than 3 units per week /
Less than 7 units per week / Less than 14 units per week / Less than 21 units per week 22 or more units per week

**DATA ORIGIN**

Department of Health, Health Outcome Indicators - Normal Pregnancy and Childbirth, West Midlands Advisory Board - Maternity

Another “Paralysis by Analysis” (“Below the line”) Item
No value as an “Individual Patient Encounter Assistance” (“Above the line”) item.

A 1 in nn sample would probably give almost the same audit and managerial information with significantly less electronic data entry work by overburdened front line health care workers.

---

**NON-MEDICINAL DRUGS**

“Paralysis by Analysis” Items therefore included in EEPD, Volume III. The Resource Document but not in Volume IV. The “Logical Prioritisation” dataset

**DATA ITEM** Non-medical drug use

**BASIS**

To ascertain any substance abuse prior to and during pregnancy

**EXPLANATION** Clinical factor relevant to pregnancy care and outcome

**INPUT OPTIONS**

Mutually exclusive: Yes (+ free text to document details) / No

**DATA ORIGIN**

Health Outcome Indicators - Normal Pregnancy and Childbirth, West Midlands Advisory Board - Maternity

Another “Paralysis by Analysis” (“Below the line”) Item
No value as an “Individual Patient Encounter Assistance” (“Above the line”) item.

A 1 in nn sample would probably give almost the same audit and managerial information with significantly less electronic data entry work by overburdened front line health care workers.

† = Must be removed when data is anonymity
I1- M. GENETIC HISTORY
(Previously called “Family History”)

Any Significant Genetic (Family) History?

WHEN All (100%)

No

Yes (10%)?

Annually, if 100% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 620 hours Cost: £12,400

Diabetes Genetic (Family) History?

WHEN Only if “Any Significant Genetic (Family) History?” = “Yes” (10%)?

No

Yes

Workload / Cost (All Phases of Maternity EPR). A3: Individual Care Quality. Workload / Cost (Phase 1 of Maternity EPR)
Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs) Extra Workload: 62 hours Cost: £1,240

Kind of Diabetes (Genetic (Family) History)?

WHEN Only if “Genetic (Family) History of Diabetes?” = “Yes” (5%)?

Non-Insulin Dependant
Insulin dependent

Unknown which type of Diabetes

Workload / Cost (All Phases of Maternity EPR). A3: Individual Care Quality. Workload / Cost (Phase 1 of Maternity EPR)
Annually, if 5% + Quick Look Up Data Entry by Midwife (4 secs) Extra Workload: 31 hours Cost: £620

Relationship and other comments (Diabetes)?

WHEN Only if “Genetic (Family) History of Diabetes?” = “Yes” (5%)?

One First Degree (Sister/Brother/Father/Mother/Child)
Two First Degree (Sister/Brother/Father/Mother/Child)
Relatives (Add any Comments)
Second Degree Relative(s) only (Add any Comments)
Other (Add any Comments)
Uncertain (Add any Comments)

Workload / Cost (All Phases of Maternity EPR). A3: Individual Care Quality. Workload / Cost (Phase 1 of Maternity EPR)
Annually, if 5% + Quick Look Up Data Entry by Midwife (4 secs) Extra Workload: 31 hours Cost: £620

Thrombosis Genetic (Family) History?

WHEN Only if “Any Significant Genetic (Family) History?” = “Yes” (10%)?

No

Yes (5%)?

Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs) Extra Workload: 62 hours Cost: £1,240

Relationship and other comments
(Thrombosis)?

WHEN Only if “Genetic (Family) History of Thrombosis?” = “Yes” (5%)?

One First Degree (Sister/Brother/Father/Mother/Child)
Two First Degree (Sister/Brother/Father/Mother/Child)
Relatives (Add any Comments)
Second Degree Relative(s) only (Add any Comments)
Other (Add any Comments)
Uncertain (Add any Comments)

Annually, if 1% + Look Up (10 secs) + Data Entry by Midwife, Extra Workload: 16 hours Cost: £310

Whole Section still missing from MANNERS MATERNITY. Essential in any proper maternity computer system?
Logical Prioritisation

High Blood Pressure Genetic (Family) History?
WHEN Only if "Any Significant Genetic (Family) History?" = "Yes" (10%?)
- No
- Yes (Free Text Details) (5%?)
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 62 hours
Cost: £1,240

Relationship and other comments
(High Blood Pressure)?
WHEN Only if "Genetic (Family) History of High Blood Pressure?" = "Yes" (5%?)
- One First Degree (Sister/Brother/Father/Mother/Child)
- Two First Degree (Sister/Brother/Father/Mother/Child)
- Second Degree Relative(s) only (Add any Comments)
- Other (Add any Comments)
- Uncertain (Add any Comments)
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 1% + Look Up (10 secs) + Data Entry by Midwife, Extra Workload: 16 hours
Cost: £310

Pregnancy Induced Hypertension Genetic (Personal or Family) History?
WHEN Only if "Any Significant Genetic (Family) History?" = "Yes" (10%?)
- No
- Yes (5%?)
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 62 hours
Cost: £1,240

Relationship and other comments
(Pregnancy Induced Hypertension)?
WHEN Only if "Pregnancy Induced Hypertension Genetic (Family) History?" = "Yes" (5%?)
- One First Degree (Sister/Brother/Father/Mother/Child)
- Two First Degree (Sister/Brother/Father/Mother/Child)
- Second Degree Relative(s) only (Add any Comments)
- Other (Add any Comments)
- Uncertain (Add any Comments)
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 1% + Look Up (10 secs) + Data Entry by Midwife, Extra Workload: 16 hours
Cost: £310

Genetic (Family) History of Congenital Hip Problems?
WHEN Only if "Any Significant Genetic (Family) History?" = "Yes" (10%?)
- No
- Yes (5%?)
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 62 hours
Cost: £1,240

Relationship and other comments (Congenital Hip)?
WHEN Only if "Genetic (Family) History of Congenital Hip Problems from Birth?" = "Yes" (5%?)
- One First Degree (Sister/Brother/Father/Mother/Child)
- Two First Degree (Sister/Brother/Father/Mother/Child)
- Second Degree Relative(s) only (Add any Comments)
- Other (Add any Comments)
- Uncertain (Add any Comments)
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 1% + Look Up (10 secs) + Data Entry by Midwife, Extra Workload: 16 hours
Cost: £310
Logical Prioritisation

Mental Illness Genetic (Family) History?
WHEN Only if “Any Significant Genetic (Family)
History?” = “Yes” (10%?)
No
Yes (1%?)
Workload / Cost (All Phases of Maternity EPR): A3: Individual Care Quality.
Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs).Extra Workload: 62 hours
Cost: £1,240

Relationship and other comments (Mental Illness)?
WHEN Only if “Mental Illness Genetic (Family) History?” = “Yes” (1%?)
One First Degree (Sister/Brother/Father/Mother/Child)
Relative (Add any Comments)
Two First Degree (Sister/Brother/Father/Mother/Child)
Relatives (Add any Comments)
Second Degree Relative(s) only (Add any Comments)
Other (Add any Comments)
Uncertain (Add any Comments)
Workload / Cost (All Phases of Maternity EPR): A3: Individual Care Quality.
Annually, if 1% + Look Up (10 secs) + Data Entry by Midwife, Extra Workload: 16 hours
Cost: £310

Stillbirths or Multiple Miscarriages
Genetic (Family) History?
WHEN Only if “Any Significant Genetic (Family)
History?” = “Yes”(10%?)
No
Yes
Workload / Cost (All Phases of Maternity EPR): A3: Individual Care Quality.
Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 62 hours
Cost: £1,240

Relationship and other comments (Stillbirths or Multiple Miscarriages)?
WHEN Only if “Genetic (Family) History of High Blood Pressure?” = “Yes” (5%?)
One First Degree (Sister/Brother/Father/Mother/Child)
Relative (Add any Comments)
Two First Degree (Sister/Brother/Father/Mother/Child)
Relatives (Add any Comments)
Second Degree Relative(s) only (Add any Comments)
Other (Add any Comments)
Uncertain (Add any Comments)
Workload / Cost (All Phases of Maternity EPR): A3: Individual Care Quality.
Annually, if 1% + Look Up (10 secs) + Data Entry by Midwife, Extra Workload: 16 hours
Cost: £310

Mental Retardation/Learning Difficulties
Genetic (Family) History?
WHEN Only if “Any Significant Genetic (Family)
History?” = “Yes” (10%?)
No
Yes
Workload / Cost (All Phases of Maternity EPR): A3: Individual Care Quality.
Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 62 hours
Cost: £1,240

Sex of Relative with Mental Retardation/
Learning Difficulties?
WHEN Only if “Mental Retardation/Learning Difficulties
Genetic (Family) History” = “Yes” (1%?)
Male(s)
Female(s)
Both Male(s) and Female(s)
Unknown
Workload / Cost (All Phases of Maternity EPR): A3: Individual Care Quality.
Annually, if 1% + Look Up (10 secs) + Data Entry by Midwife, Extra Workload: 16 hours
Cost: £310

† = Must be removed when data is anonymity
EEP.D.02_DATASETS.L_LARGE.MANNERS.500cm-30 (27th November 2005)
© Rupert Fawdry 2005  " Logical Prioritisation” compared with MANNERS Maternity  Page 26 of 171
Logical Prioritisation

Relationship and other comments (Mental Retardation)?

WHEN Only if “Mental Retardation/Learning Difficulties

Genetic (Family) History?” = “Yes” (5%?)

One First Degree (Sister/Brother/Father/Mother/Child)
Relative (Add any Comments)

Two First Degree (Sister/Brother/Father/Mother/Child)
Relatives (Add any Comments)

Second Degree Relative(s) only (Add any Comments)
Other (Add any Comments)
Uncertain (Add any Comments)

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, if 1% + Look Up (10 secs) + Data Entry by Midwife, Extra Workload: 16 hours
Cost: £310

Congenital Deafness Genetic (Family) History?

WHEN Only if “Any Significant Genetic (Family)

History?” = “Yes” (10%?)

No
Yes

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, if 1% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 62 hours
Cost: £1,240

Relationship and other comments (Congenital Deafness)?

WHEN Only if “Genetic (Family) History of High Blood

Pressure?” = “Yes” (5%?)

One First Degree (Sister/Brother/Father/Mother/Child)
Relative (Add any Comments)

Two First Degree (Sister/Brother/Father/Mother/Child)
Relatives (Add any Comments)

Second Degree Relative(s) only (Add any Comments)
Other (Add any Comments)
Uncertain (Add any Comments)

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 62 hours
Cost: £1,240

Other Possibly Genetic (Family) History of Congenital or Inherited Disease Problem?

WHEN Only if “Any Significant Genetic (Family)

History?” = “Yes” (10%?)

No
Yes (Specify)

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, if 10% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 62 hours
Cost: £1,240

Downs Syndrome?

WHEN Only if “Any Significant Genetic (Family)

History?” = “Yes” (10%?)

No
Yes

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, if 100% + Look Up by Midwife (10 secs), Extra Workload: 1,550 hours Cost: £31,000

Relationship and other comments (Downs Syndrome)?

WHEN Only if “Genetic (Family) History of High Blood

Pressure?” = “Yes” (5%?)

One First Degree (Sister/Brother/Father/Mother/Child)
Relative (Add any Comments)

Two First Degree (Sister/Brother/Father/Mother/Child)
Relatives (Add any Comments)

Second Degree Relative(s) only (Add any Comments)
Other (Add any Comments)
Uncertain (Add any Comments)

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, if 5% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 77 hours
Cost: £1,550
Neural_Tube_Defect?

WHEN Only if “Any Significant Genetic (Family) History?” = “Yes” (10%?)
No
Yes

Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 100% + Look Up by Midwife (10 seccs), Extra Workload: 1,550 hours Cost: £31,000

Relationship and other comments (Neural_Tube_Defect)?

WHEN Only if “Genetic (Family) History of High Blood Pressure?” = “Yes” (5%?)
One First Degree (Sister/Brother/Father/Mother/Child)
Relative (Add any Comments)
Two First Degree (Sister/Brother/Father/Mother/Child)
Relatives (Add any Comments)
Second Degree Relative(s) only (Add any Comments)
Other (Add any Comments)
Uncertain (Add any Comments)

Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 5% + Quick Look Up Data Entry by Midwife (4 seccs), Extra Workload: 77 hours Cost: £1,550

Sickle Cell Genetic (Family) History?

WHEN Only if “Any Significant Genetic (Family) History?” = “Yes” (10%?)
No
Yes

Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 100% + Look Up by Midwife (10 seccs), Extra Workload: 1,550 hours Cost: £31,000

Relationship and other comments (Sickle Cell)?

WHEN Only if “Genetic (Family) History of High Blood Pressure?” = “Yes” (5%?)
One First Degree (Sister/Brother/Father/Mother/Child)
Relative (Add any Comments)
Two First Degree (Sister/Brother/Father/Mother/Child)
Relatives (Add any Comments)
Second Degree Relative(s) only (Add any Comments)
Other (Add any Comments)
Uncertain (Add any Comments)

Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 5% + Quick Look Up Data Entry by Midwife (4 seccs), Extra Workload: 77 hours Cost: £1,550

Thalassaemia Genetic (Family) History?

WHEN Only if “Any Significant Genetic (Family) History?” = “Yes” (10%?)
No
Yes

Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 100% + Look Up by Midwife (10 seccs), Extra Workload: 1,550 hours Cost: £31,000

Relationship and other comments (Thalassaemia)?

WHEN Only if “Genetic (Family) History of High Blood Pressure?” = “Yes” (5%?)
One First Degree (Sister/Brother/Father/Mother/Child)
Relative (Add any Comments)
Two First Degree (Sister/Brother/Father/Mother/Child)
Relatives (Add any Comments)
Second Degree Relative(s) only (Add any Comments)
Other (Add any Comments)
Uncertain (Add any Comments)

Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 5% + Quick Look Up Data Entry by Midwife (4 seccs), Extra Workload: 77 hours Cost: £1,550
Muscular_Dystrophy?

WHEN Only if “Any Significant Genetic (Family) History?” = “Yes” (10%?)

No

Yes

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality,
Annually, if 100% + Look Up by Midwife (10 secs), Extra Workload: 1,550 hours Cost: £31,000

Relationship and other comments
(Muscular_Dystrophy)?

WHEN Only if “Genetic (Family) History of High Blood Pressure?” = “Yes” (5%?)

One First Degree (Sister/Brother/Father/Mother/Child)

Relative (Add any Comments)

Two First Degree (Sister/Brother/Father/Mother/Child)

Relatives (Add any Comments)

Second Degree Relative(s) only (Add any Comments)

Other (Add any Comments)

Uncertain (Add any Comments)

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality,
Annually, if 5% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 77 hours Cost: £1,550

Cystic_Fibrosis?

WHEN Only if “Any Significant Genetic (Family) History” = “Yes” (10%?)

No

Yes

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality,
Annually, if 100% + Look Up by Midwife (10 secs), Extra Workload: 1,550 hours Cost: £31,000

Relationship and other comments
(Cystic_Fibrosis)?

WHEN Only if “Genetic (Family) History of High Blood Pressure?” = “Yes” (5%?)

One First Degree (Sister/Brother/Father/Mother/Child)

Relative (Add any Comments)

Two First Degree (Sister/Brother/Father/Mother/Child)

Relatives (Add any Comments)

Second Degree Relative(s) only (Add any Comments)

Other (Add any Comments)

Uncertain (Add any Comments)

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality,
Annually, if 5% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 77 hours Cost: £1,550

Genetic (Family) History of any other disease that runs in families?

WHEN Only if “Any Significant Genetic (Family) History?” = “Yes” (10%?)

No

Yes

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality,
Annually, if 100% + Look Up by Midwife (10 secs), Extra Workload: 1,550 hours Cost: £31,000

Relationship and other comments
(Other Genetic)?

WHEN Only if “Genetic (Family) History of High Blood Pressure?” = “Yes” (5%?)

One First Degree (Sister/Brother/Father/Mother/Child)

Relative (Add any Comments)

Two First Degree (Sister/Brother/Father/Mother/Child)

Relatives (Add any Comments)

Second Degree Relative(s) only (Add any Comments)

Other (Add any Comments)

Uncertain (Add any Comments)

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality,
Annually, if 5% + Quick Look Up Data Entry by Midwife (4 secs), Extra Workload: 77 hours Cost: £1,550
**Logical Prioritisation**

---

**Preg Notes (New West Midlands) N.M.R.P 2001**

**Family History**

**Your Family**

Has anyone in your family had:

- diabetes
- thrombosis (blood clots)
- stillbirths / multiple miscarriages
- high blood pressure / pre-eclampsia
- hip problems from birth
- mental illness
- cell anaemia
- Thalassaemia
- Muscular dystrophy
- Fibrosis
- conditions

Do you have:

- a disease that runs in families
- need for genetic counselling
- learning disabilities
- (Learning disabilities)
- hearing loss from childhood
- abnormalities present from birth
- (Abnormalities present from birth)
- Baby's Father. Blood relation? N / Y

Are you and your baby's father blood relatives?

---

© Rupert Fawdry 2005

EEPD.02_DATASETS.L_LARGE.MANNERS.500cM-30 (27th November 2005)

"Logical Prioritisation" compared with MANNERS Maternity Page 30 of 171

† = Must be removed when data is anonymity
### I5. Once only Clinical Observations at Initial Assessment

<table>
<thead>
<tr>
<th>Data Item</th>
<th><strong>Maternal Height at Booking</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basis</strong></td>
<td>Part of calculation for Body Mass Index</td>
</tr>
<tr>
<td><strong>Explanation</strong></td>
<td>Clinical indicator for risk</td>
</tr>
<tr>
<td><strong>Input Options</strong></td>
<td>Numerical format, expressed in centimetres</td>
</tr>
<tr>
<td><strong>Data Origin</strong></td>
<td>GROW, West Midlands Advisory Board - Maternity, RCOG</td>
</tr>
<tr>
<td><strong>At Booking</strong> is unnecessary?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Item</th>
<th><strong>Maternal Weight at Booking</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basis</strong></td>
<td>Part of calculation for Body Mass Index</td>
</tr>
<tr>
<td><strong>Explanation</strong></td>
<td>Clinical indicator for risk</td>
</tr>
<tr>
<td><strong>Input Options</strong></td>
<td>Numerical format, expressed in kilograms</td>
</tr>
<tr>
<td><strong>Data Origin</strong></td>
<td>GROW, West Midlands Advisory Board - Maternity, RCOG</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Item</th>
<th><strong>Body Mass Index (BMI)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basis</strong></td>
<td>Used as clinical indicator for health risk in current pregnancy</td>
</tr>
<tr>
<td><strong>Explanation</strong></td>
<td>Automatically calculated using a formula that requires input of height and weight</td>
</tr>
<tr>
<td><strong>Input Options</strong></td>
<td>None - calculated field displayed as numerical format</td>
</tr>
<tr>
<td><strong>Data Origin</strong></td>
<td>Confidential Enquiry into Maternal Deaths, West Midlands Advisory Board - Maternity</td>
</tr>
</tbody>
</table>

---

**Note:** Data must be removed when data is anonymity

© Rupert Fawdry 2005 | "Logical Prioritisation" compared with MANNERS Maternity | Page 31 of 171
### Logical Prioritisation

**I6. Once only Dating Ultrasound**

See also Section “U.Generic Ultrasound - Generic”

This section is based on the assumption that one particular scan occasion is used for dating.

As a result of this usage, one particular set of generic scan observation have a unique importance in each pregnancy. When this particular scan is performed some generic observations have a unique significance and are listed here as well as in the generic section e.g. the specific BPD used for dating.

Other observations done at the same ultrasound session e.g. position of the placenta or the viability of the fetus are not connected with dating and therefore only appear in the generic section.

The anomaly scan done at around 20 weeks is a second unique scan occasion. but is part of the screening process rather than the initial assessment process and is therefore documented in the section below entitled “T. (Screening) Tests”

**Dating Scan done?**

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>All (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not yet performed</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Test not considered necessary</td>
</tr>
<tr>
<td></td>
<td>Too far on in pregnancy</td>
</tr>
<tr>
<td></td>
<td>Refused by Expectant Mother</td>
</tr>
<tr>
<td></td>
<td>Not Tested - Reason Unknown (Probable) Tested but Result Unknown or Unreliable</td>
</tr>
</tbody>
</table>

**Date of Dating Scan**

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>All (95%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DD/MM/YYYY</td>
<td></td>
</tr>
</tbody>
</table>

**Crown rump length (CRL) - As used for Dating?**

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>All (99%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerical format, expressed in millimetres</td>
<td></td>
</tr>
</tbody>
</table>

**Biparietal diameter (BPD) - As used for Dating?**

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>All (99%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerical format, expressed in millimetres</td>
<td></td>
</tr>
</tbody>
</table>

**Gestation at time of Dating Scan?**

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>All (99%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculated field displayed as numerical format</td>
<td></td>
</tr>
</tbody>
</table>

---

### MANNERS - Maternity

**C6. ANTE NATAL SCREENING**

- **Booking scan**

**Date of scan**

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Date of scan</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>Record of date when scan performed</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Used in calculation of EDD by scan and to calculate gestation for follow up</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>DD/MM/YYYY</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>NSC, RCOG, RCR, RUG</td>
</tr>
</tbody>
</table>

**Crown rump length (CRL) - Dating**

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Crown rump length (CRL) - Dating</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>Record of CRL measurement at booking scan</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Parameter required for calculation of gestation at scan between 8-13 weeks</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Numerical format, expressed in millimetres</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>NSC, RCOG, RCR, RUG</td>
</tr>
</tbody>
</table>

**Biparietal diameter (BPD) - Dating**

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Biparietal diameter (BPD) - Dating</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>Record of BPD measurement at booking scan</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Parameter required for calculation of gestation at scan between 12-20 weeks</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Numerical format, expressed in millimetres</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>NSC, RCOG, RCR, RUG</td>
</tr>
</tbody>
</table>

**Gestation at time of Dating Scan**

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Gestation at time of Dating Scan</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>Record of gestation at time of booking scan</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Derived from biometry details used to calculate EDD</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Calculated field displayed as numerical format</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>NSC, RCOG, RCR, RUG</td>
</tr>
</tbody>
</table>

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 32 of 171
C1. ANTENATAL SCREENING – Blood tests

T1. BASIC BLOOD TESTS

Haemoglobin - First in this Pregnancy

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Haemoglobin at booking</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>Record of first haemoglobin status</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Clinical indicator for risk of anaemia during pregnancy</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Numerical format, expressed as g/dl</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>Antenatal Screening Advisory Board</td>
</tr>
</tbody>
</table>

ABO Blood Group Test Result (Expectant Mother)?

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Blood group</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>Record of group required for pregnancy care</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Information required on documentation – reference for checking cross matching</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Mutually exclusive: A / B / AB / O</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>Antenatal Screening Advisory Board</td>
</tr>
</tbody>
</table>

Rhesus Group Test Result (Expectant Mother)?

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Rhesus group</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>Record of group required for pregnancy care</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Information required on documentation as an indicator for Anti-D Prophylaxis</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Mutually exclusive: Positive / Negative</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>Antenatal Screening Advisory Board, Health Outcome Indicators - Normal Pregnancy and Childbirth</td>
</tr>
</tbody>
</table>

---

T. (Screening) Test

Data only available soon after the Initial Pregnancy Assessment (or sometimes later)
Logical Prioritisation

MANNERS - Maternity

C2. ANTENATAL SCREENING – Haemoglobinopathy screening

**T2. HAEMAGLOBINOPATHY TESTS**

**T2-A. ELECTROPHORESIS - MOTHER**

### Electrophoresis Test?

- WHEN: All (100%)
  - Test not considered necessary
  - Done, Negative result
  - Done, Significant result
  - Not done under current policy
  - Not tested – Reason unknown
  - Known Thalassaemia &/or Sickle - Not re-tested
  - Expectant mother refused this test
  - Probably tested but result unknown or unreliable
  - Other

<table>
<thead>
<tr>
<th>Workload / Cost (Phase 1 of Maternity EPR)</th>
<th>A3: Individual Care Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,550 hours</td>
<td>Cost: £31,000</td>
</tr>
<tr>
<td>Phase 3</td>
<td>Electronically from Pathology System A4: Downloaded from another computer Extra Workload/Cost Free</td>
</tr>
</tbody>
</table>

### Thalassaemia Test Result (Expectant Mother)?

- WHEN: Only if “Electrophoresis Test” = “Done”, Significant result (5%?)
  - No Thalassaemia problem identified
  - Thalassaemia disease present
  - Other (Details)

<table>
<thead>
<tr>
<th>Workload / Cost (Phase 1 of Maternity EPR)</th>
<th>A3: Individual Care Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1% + Look Up (10 secs) + Data Entry by Midwife</td>
<td>Extra Workload: 16 hours Cost: £310</td>
</tr>
<tr>
<td>Phase 3 Electronically from Pathology System A4: Downloaded from another computer Extra Workload/Cost Free</td>
<td></td>
</tr>
</tbody>
</table>

### Sickle Cell Test Result (Expectant Mother)?

- WHEN: Only if “Electrophoresis Test” = “Done”, Significant result (5%?)
  - No Sickle Cell problem identified
  - Sickle Cell Disease present
  - Sickle Cell Trait present
  - Other (Details)

<table>
<thead>
<tr>
<th>Workload / Cost (Phase 1 of Maternity EPR)</th>
<th>A3: Individual Care Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1% + Look Up (10 secs) + Data Entry by Midwife</td>
<td>Extra Workload: 16 hours Cost: £310</td>
</tr>
<tr>
<td>Phase 3 Electronically from Pathology System A4: Downloaded from another computer Extra Workload/Cost Free</td>
<td></td>
</tr>
</tbody>
</table>

### Haemoglobinopathy screening offered to mother

**DATA ITEM** Haemoglobinopathy screening offered to mother

**BASIS** NHS Plan (DoH 2002) advocates a linked antenatal and neonatal screening programme for haemoglobinopathies and sickle cell disease by 2004

**EXPLANATION** Monitoring and audit of screening provision for local, regional and commissioning purposes

**INPUT OPTIONS** Mutually exclusive: Offer accepted / Offer declined (+ free text to document details) / Not offered

**DATA ORIGIN** Antenatal Screening Advisory Board, NSC

### Haemoglobinopathy screen test result

**DATA ITEM** Haemoglobinopathy screen test result

**BASIS** NHS Plan (DoH 2002) advocates a linked antenatal and neonatal screening programme for haemoglobinopathies and sickle cell disease by 2004

**EXPLANATION** Indicator for risk of sickle cell disease and thalassaemia major in current pregnancy

**INPUT OPTIONS** Mutually exclusive: Normal / Abnormal (pick list of abnormal haemoglobinopathies) / Inconclusive

**DATA ORIGIN** Antenatal Screening Advisory Board, NSC

**Is it Possible to have both Sickle Cell Trait and Thalassaemia?**

**DATA ITEM** Haemoglobinopathy screen test date

**BASIS** NSC proposed standards

**EXPLANATION** Monitoring and audit of screening provision for local, regional and commissioning purposes

**INPUT OPTIONS** DD/MM/YYYY

**DATA ORIGIN** NSC

**Another “Paralysis by Analysis” ("Below the line") Item**

**Not worth entering on Maternity Computer system until electronically transferred from laboratory to maternity computer system**

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 34 of 171
### Logical Prioritisation

**T2-A. ELECTROPHORESIS - PUTATIVE FATHER**

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Haemoglobinopathy screening offered to father of baby</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>NHS Plan (DoH 2002) advocates a linked antenatal and neonatal screening programme for haemoglobinopathies and sickle cell disease by 2004</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Monitoring and audit of screening provision for local, regional and commissioning purposes</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Mutually exclusive: Offer accepted / Offer declined (+ free text to document details) / Not offered – mother declined / Not offered – father unavailable</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>Antenatal Screening Advisory Board, NSC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Haemoglobinopathy screen test result for father of baby</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>NHS Plan (DoH 2002) advocates a linked antenatal and neonatal screening programme for haemoglobinopathies and sickle cell disease by 2004</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Indicator for risk of sickle cell disease and thalassaemia major in offspring</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Mutually exclusive: Normal /Abnormal (pick list of abnormal haemoglobinopathies) / Inconclusive</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>Antenatal Screening Advisory Board, NSC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Haemoglobinopathy screen test date for father of baby</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>NSC proposed standards</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Monitoring and audit of screening provision for local, regional and commissioning purposes</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>DD/MM/YYYY</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>NSC</td>
</tr>
</tbody>
</table>

*Another “Paralysis by Analysis” (“Below the line”) Item
No value as an “Individual Patient Encounter Assistance” (“Above the line”) item.*

*Not worth entering on Maternity Computer system until electronically transferred from laboratory to maternity computer system*
T3-A. RUBELLA SCREENING

Rubella Antibodies Test Result (Expectant Mother)?

WHEN: All (100%)
- Present
- Absent
- Inapplicable
- Previously Antibodies Present - Not re-tested
- Expectant mother refused this test
- Not tested - Reason unknown
- Probably tested but result unknown or unreliable
- Other (Details)

Workload / Cost (Phase 1 of Maternity EPR) A3: Individual Care Quality.
Annually, 100% + Time Consuming Data Entry by Midwife (10 secs), Extra Workload: 1,550 hours Cost: £31,000
Phase 3, Electronically from Pathology System. A4: Downloaded from another computer Extra Workload Cost Free

Rubella screening offered
DATA ITEM
BASIS Record of rubella status in pregnancy
Infectious Disease Standards DoH 2003
EXPLANATION Monitoring and audit of screening provision for local, regional and commissioning purposes
INPUT OPTIONS Mutually exclusive;
Offer accepted
Offer declined (+ free text to document details)
Not offered
DATA ORIGIN Antenatal Screening Advisory Board

Another “Paralysis by Analysis” (“Below the line”) Item
No value as an “Individual Patient Encounter Assistance” (“Above the line”) Item.

A 1 in nn sample would probably give almost the same audit and managerial information with significantly less electronic data entry work by overburdened front line health care workers.

Rubella screen test result
DATA ITEM
BASIS Record of rubella status in pregnancy
Infectious Disease Standards DoH 2003
EXPLANATION Clinical indicator for risk of acquiring an infection which is potentially hazardous to the fetus and the need for postpartum immunisation strategy
INPUT OPTIONS < 10 iu/ml (IgG –ve therefore non-immune)
> 10 iu/ml (IgG +ve therefore immune)
DATA ORIGIN Antenatal Screening Advisory Board

Rubella screen test date
DATA ITEM
BASIS Infectious Disease Standards DoH 2003
EXPLANATION Monitoring and audit of screening provision for local, regional and commissioning purposes Required for calculation of gestation and maternal age when test performed
INPUT OPTIONS DD/MM/YYYY
DATA ORIGIN NSC

Another “Paralysis by Analysis” (“Below the line”) Item
No value as an “Individual Patient Encounter Assistance” (“Above the line”) Item.

Not worth entering on Maternity Computer system until electronically transferred from laboratory to maternity computer system
### Hepatitis B Test Result (Expectant Mother)?

**WHEN:** All (100%)

- **Hepatitis B Antibody Present**
- **Previously Antibodies Present - Not re-tested**
- **Expectant mother refused this test**
- **Not tested - Reason unknown**
- **Probably tested but result unknown or unreliable**
- **Other**

**EXPLANATION**

Monitoring and audit of screening provision for local, regional and commissioning purposes

**INPUT OPTIONS**

- Mutually exclusive:
  - Other accepted
  - Offer declined (+ free text to document details)

**DATA ORIGIN**

Antenatal Screening Advisory Board

---

### Hepatitis C Test Result (Expectant Mother)?

**WHEN:** All (100%)

- **Hepatitis C Antibody Present**
- **Previously Antibodies Present - Not re-tested**
- **Expectant mother refused this test**
- **Not tested - Reason unknown**
- **Probably tested but result unknown or unreliable**
- **Other**

**EXPLANATION**

Monitoring and audit of screening provision for local, regional and commissioning purposes

**INPUT OPTIONS**

- Mutually exclusive:
  - Other

**DATA ORIGIN**

Antenatal Screening Advisory Board

---

### Hepatitis B screen test result

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Hepatitis B screen test result</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>Record of status in pregnancy</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Infectious Disease Standards DoH 2003</td>
</tr>
</tbody>
</table>

**WHY not combine these two into one question?**

---

#### Why not combine these two into one question?

**DATA ITEM**

- Hepatitis B screen test date

**BASIS**

- Infectious Disease Standards DoH 2003

**EXPLANATION**

Monitoring and audit of screening provision for local, regional and commissioning purposes

**INPUT OPTIONS**

- Mutually exclusive:
  - Positive
  - Negative

**DATA ORIGIN**

- NSC

---

### Hepatitis C is becoming more and more routine.

**WHY missing from MANNERS?**
**Syphilis Test Result (Expectant Mother)?**

- **WHEN:** All (100%)
- **Result in Standard Format?**
- **Known Positive Syphilis Test - Not re-tested**
- **Expectant mother refused this test**
- **Not tested - Reason unknown**
- **Probably tested but result unknown or unreliable**
- **Other (Details)**

**DATA ITEM**
- **Basis:** Record of status in pregnancy
- **EXPLANATION:** Monitoring and audit of screening provision for local, regional and commissioning purposes
- **INPUT OPTIONS:** Mutually exclusive: Offer accepted / Offer declined (+ free text to document details) / Not offered
- **DATA ORIGIN:** Antenatal Screening Advisory Board

---

**Syphilis screening offered**

- **DATA ITEM**
- **Basis:** Infectious Disease Standards DoH 2003
- **Explanation:** Monitoring and audit of screening provision for local, regional and commissioning purposes
- **Input Options:** Mutually exclusive: Offer accepted / Offer declined (+ free text to document details) / Not offered
- **Data Origin:** Antenatal Screening Advisory Board

---

**Why not combine these two into one question?**

- **DATA ITEM**
- **Basis:** Infectious Disease Standards DoH 2003
- **Explanation:** Monitoring and audit of screening provision for local, regional and commissioning purposes
- **Input Options:** Mutually exclusive: Positive / Negative
- **Data Origin:** Antenatal Screening Advisory Board

---

**Another “Paralysis by Analysis” (“Below the line”) Item**

**No value as an “Individual Patient Encounter Assistance” (“Above the line”) item.**

**A 1 in nn sample would probably give almost the same audit and managerial information**

**with significantly less electronic data entry work by overburdened front line health care workers.**

---

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 38 of 171
Logical Prioritisation

T3-D. HIV SCREENING

HIV Test Result (Expectant Mother)?

*WHEN:* All (100%)
- Negative
- Known Positive HIV Test - Not re-tested
- Expectant mother refused this test
- Not tested - Reason unknown
- Probably tested but result unknown or unreliable
- Other (Details)

Workload / Cost (Phase 1 of Maternity EPR) A3: Individual Care Quality.
Annually, if 100% + Time Consuming Data Entry by Midwife (10 secs), Extra Workload: 1,550 hours Cost: £31,000
Phase 3: Electronically from Pathology System. A4: Downloaded from another computer Extra Workload / Cost Free

**DATASET**

**DATA ITEM**
- HIV screening offered
  **BASIS** Record of status in pregnancy
  **EXPLANATION** Monitoring and audit of screening provision for local, regional and commissioning purposes
  **INPUT OPTIONS** Mutually exclusive: Offer accepted / Offer declined (+ free text to document details) / Not offered
  **DATA ORIGIN** Antenatal Screening Advisory Board

**DATA ITEM**
- HIV screen test result
  **BASIS** Record of status in pregnancy
  **EXPLANATION** Clinical indicator of risk for maternal treatment and neonatal and family care
  **INPUT OPTIONS** Mutually exclusive: Positive / Negative
  **DATA ORIGIN** Antenatal Screening Advisory Board

**Why not combine these two into one question?**

**DATA ITEM**
- HIV screen test date
  **BASIS** Infectious Disease Standards DoH 2003
  **EXPLANATION** Monitoring and audit of screening provision for local, regional and commissioning purposes
  **INPUT OPTIONS** DD/MM/YYYY
  **DATA ORIGIN** NSC

Another “Paralysis by Analysis” (“Below the line”) Item
No value as an “Individual Patient Encounter Assistance” (“Above the line”) Item.

Not worth entering on a Phase 1 Maternity Computer System

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 39 of 171
**Logical Prioritisation**

---

**T4. NEURAL TUBE DEFECT & DOWNS SCREENING TESTS**

---

**T4-A. NEURAL TUBE DEFECT SCREENING TEST(S)**

---

**C5. ANTENATAL SCREENING – Neural tube defect screening**

---

**Screening leaflet given**

**DATA ITEM**

**BASIS**

NSC Standards January 2003

**EXPLANATION**

Facilitates audit of informed choice

**INPUT OPTIONS**

Mutually exclusive: Yes / No

**DATA ORIGIN**

NSC

Another “Paralysis by Analysis” (“Below the line”) Item

No value as an “Individual Patient Encounter Assistance” (“Above the line”) Item.

A 1 in nn sample would give almost the same
audit and managerial information
with significantly less electronic data entry work
by overburdened front line health care workers.

**Neural tube defect test offer**

**DATA ITEM**

**BASIS**

NSC Standards January 2003

**EXPLANATION**

Monitoring and audit of screening provision for local,
regional and commissioning purposes

**INPUT OPTIONS**

Mutually exclusive: Offer accepted / Offer declined (+
free text to document details) / Not offered – late booker
/ Not offered (+ free text to document details)

**DATA ORIGIN**

NSC

See above

**Neural tube defect test date**

**DATA ITEM**

**BASIS**

NSC Standards January 2003

**EXPLANATION**

Monitoring and audit of screening provision for local,
regional and commissioning purposes

**INPUT OPTIONS**

DD/MM/YYYY

**DATA ORIGIN**

NSC

Another “Paralysis by Analysis” (“Below the line”) Item

No value as an “Individual Patient Encounter Assistance” (“Above the line”) Item.

Not worth entering

on a Phase 1 Maternity Computer System

**Neural tube defect test result**

**DATA ITEM**

**BASIS**

NSC Standards January 2003

**EXPLANATION**

Monitoring and audit of screening provision for local,
regional and commissioning purposes

**INPUT OPTIONS**

Mutually exclusive: Low risk / High risk

**DATA ORIGIN**

NSC

---

**Neural Tube Defect Screening Test?**

**WHEN?** All (100%)

Done

Not locally available

Test not considered necessary

Too far on in pregnancy

Expectant mother refused this test

Not tested - Reason unknown

Probably tested but result unknown or unreliable

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

---

**Result of Neural Tube Defect Serum Screening**

(Odds 1 in . . .)?

**WHEN?** Only if “Spina Bifida Serum Screening Test?” = “Done” (1%?)

[10 character text]

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Phase 3. Electronically from Pathology System. A4: Downloaded from another computer. Extra Workload/Cost Free

---

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 40 of 171
### Logical Prioritisation

#### T4-B. DOWN’S SCREENING TEST(S)

---

### MANNERS - Maternity

---

#### C4. ANTENATAL SCREENING

- **Down’s syndrome screening**

---

**DATA ITEM**

**Screening leaflet given**

**BASIS**

NSC Standards January 2003

**EXPLANATION**

Facilitates audit of informed choice

**INPUT OPTIONS**

Mutually exclusive: Yes / No

**DATA ORIGIN**

NSC

---

Another “Paralysis by Analysis”(“Below the line”) Item

No value as an “Individual Patient Encounter Assistance”(“Above the line”) item.

A 1 in nn sample would give almost the same audit and managerial information with significantly less electronic data entry work by overburdened frontline health care workers.

---

**DATA ITEM**

Down’s screening offered

**BASIS**

NSC Standards January 2003

**EXPLANATION**

Clinical indicator of risk of fetal anomalies

**INPUT OPTIONS**

Mutually exclusive: Offer accepted / Offer declined (+ free text to document details) / Not offered – late booker / Not offered (+ free text to document details)

**DATA ORIGIN**

NSC

---

**DATA ITEM**

Test result risk

**BASIS**

NSC Standards January 2003

**EXPLANATION**

Monitoring and audit of screening provision for local, regional and commissioning purposes

**INPUT OPTIONS**

Numerical format (Moms)

**DATA ORIGIN**

NSC

---

**DATA ITEM**

Type of test

**BASIS**

NSC Standards January 2003

**EXPLANATION**

Monitoring and audit of screening provision for local, regional and commissioning purposes

**INPUT OPTIONS**

Mutually exclusive: 1st trimester serum / Nuchal translucency / 2nd trimester serum

**DATA ORIGIN**

NSC

---

*Does this need to be a separate question? Surely this only needs to be worked out for annual statistics from data on the computer. It does not require separate data entry for each expectant mother*

---

† = Must be removed when data is anonymity

© Rupert Fawdry 2005 

“Logical Prioritisation” compared with MANNERS Maternity 
Page 41 of 171
Logical Prioritisation

Down’s Nuchal Screening Scan?

WHEN? All (100%)
Not locally available
Done
Test not considered necessary
Too far on in pregnancy
Expectant mother refused this test
Not tested - Reason unknown
Probably tested but result unknown or unreliable

Result of Down’s Nuchal Screening Scan (Odds 1 in . . .)?

WHEN? Only if “Down’s Nuchal Screening Scan?” =
“Done” (Assuming Future >80%)
[10 character text]

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral
Extra Workload/Cost Free

MANNERS - Maternity

DATA ITEM  Nuchal translucency (NT)
BASIS  Record of NT measurement at booking scan (in multiple pregnancy)
EXPLANATION  Required to determine risk of Down’s according to gestation
INPUT OPTIONS  Numerical format, expressed in millimetres
DATA ORIGIN  NSC, RCOG, RCR, RUG

DATA ITEM  Date of test
BASIS  NSC Standards January 2003
EXPLANATION  Monitoring and audit of screening provision for local, regional and commissioning purposes
Required for calculation of gestation and maternal age when test performed
INPUT OPTIONS  DD/MM/YYYY
DATA ORIGIN  NSC

Another “Paralysis by Analysis” (“Below the line”) Item
No value as an “Individual Patient Encounter Assistance” (“Above the line”) Item.

Not worth entering
on a Phase 1 Maternity Computer System

† = Must be removed when data is anonymity
T5. FETAL ANOMALY SCREENING TEST

Usually done at around 20 weeks

T5. FETAL ANOMALY SCAN

Anomaly Screening by Ultrasound?

WHEN? All (100%)
Done
Too far on in pregnancy
Expectant mother refused this test
Not tested - Reason unknown
Probably tested but result unknown or unreliable

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

Result (Anomaly Screening by Ultrasound)?

WHEN? Only if “Anomaly Screening by Ultrasound ” = “Done” (90%)?

No significant anomaly noted
Minor Anomaly noted (Free Text Opportunity)
Major Anomaly noted (Free Text Opportunity)
Result Unknown

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

D2. PRENATAL DIAGNOSIS

– Mid trimester scan

DATA ITEM  Date of scan
BASIS  Record of date when scan performed
EXPLANATION  Used to calculate gestation at scan, and EDD
INPUT OPTIONS  DD/MM/YYYY
DATA ORIGIN  West Midlands Congenital Anomalies Register, NSC, RCOG, RCR, RUG

+++++++++++++++++++++++++++++++  
Biparietal diameter (BPD)  
Head circumference (HC)  
Gestation at scan

See below “U. Ultrasound - Generic”

+++++++++++++++++++++++++++++++  

DATA ITEM  Head - skull and brain
BASIS  Detection/screening of fetal anomalies during antenatal period
EXPLANATION  Screen for congenital anomalies e.g. ventriculomegaly and monitor sensitivity of ultrasound views
INPUT OPTIONS  Mutually exclusive: Normal / Abnormal (Pick list for abnormal option – non-mutually exclusive)
- Anencephaly
- Lemon shaped skull associated with spina bifida
- Clover-leaf – craniosynostosis
- Ventriculomegaly (>10mm) /
- Hydrocephalus
- Banana cerebellum
- Encephalocele
- Cerebellar hypoplasia
- Dandy Walker malformation
- Other [free text] Not seen

DATA ORIGIN  West Midlands Congenital Anomalies Register, NSC, RCOG, RCR, RUG

Non-mutually exclusive answers need to be documented separately since they have to be entered separately onto the electronic database if they are to be of any future use.

The documentation above may look fine on paper but do not work on a computer.

How can you enter the data on someone who has more than one of the items on the list?

† = Must be removed when data is anonymity
## Logical Prioritisation

**DATA ITEM** | **EXPLANATION** | **INPUT OPTIONS** | **DATA ORIGIN**
--- | --- | --- | ---
Spine | Detection/screening of fetal anomalies during antenatal period | Mutually exclusive: Normal / Not seen / Abnormal: Pick list for abnormal option – non-mutually exclusive - Spina bifida - Scholiosis - Kyphosis - Other [free text] | West Midlands Congenital Anomalies Register, NSC, RCOG, RCR, RUG

**Non-mutually exclusive answers again**

See comment above

**DATA ITEM** | **EXPLANATION** | **INPUT OPTIONS** | **DATA ORIGIN**
--- | --- | --- | ---
Neck | Detection/screening of fetal anomalies during antenatal period | Mutually exclusive: Normal / Not seen / Abnormal: Pick list for abnormal option – non-mutually exclusive - Increased Nuchal translucency (>2.6mm @ 11-13 weeks) - Nuchal pad (>10mm @ 20wks) | West Midlands Congenital Anomalies Register, NSC, RCOG, RCR, RUG

**Non-mutually exclusive answers again**

See comment above

**DATA ITEM** | **EXPLANATION** | **INPUT OPTIONS** | **DATA ORIGIN**
--- | --- | --- | ---
Face | Detection/screening of fetal anomalies during antenatal period | Mutually exclusive: Normal / Not seen / Abnormal: Pick list for abnormal option – non-mutually exclusive - Cleft lip - Other [free text] | West Midlands Congenital Anomalies Register, NSC, RCOG, RCR, RUG

**Non-mutually exclusive answers again**

See comment above

**DATA ITEM** | **EXPLANATION** | **INPUT OPTIONS** | **DATA ORIGIN**
--- | --- | --- | ---
Chest | Detection/screening of fetal anomalies during antenatal period | Mutually exclusive: Normal / Not seen / Abnormal: Pick list for abnormal option – non-mutually exclusive Cardiac Anomaly - Univentricular heart - ASD / VSD or Fallot’s - Transposition - Complex (mixed including the above) - Other [free text] - Echogenic focus - Other [free text] - Pericardial effusion Lung anomaly - CCAM - Sequestration - Other [free text] - Pleural effusion Other chest anomaly [free text] Shape of chest narrow [Y / N] | West Midlands Congenital Anomalies Register, NSC, RCOG, RCR, RUG

**Non-mutually exclusive answers again**

See comment above

**DATA ITEM** | **DATA ORIGIN**
--- | ---
Abdomen | West Midlands Congenital Anomalies Register, NSC, RCOG, RCR, RUG
**Logical Prioritisation**

<table>
<thead>
<tr>
<th>BASIS</th>
<th>Detection/screening of fetal anomalies during antenatal period</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EXPLANATION</strong></td>
<td>Identification of congenital anomalies, e.g. exomphalos, and monitor sensitivity of ultrasound views</td>
</tr>
<tr>
<td><strong>INPUT OPTIONS</strong></td>
<td>Mutually exclusive: Normal / Not seen / Abnormal: Pick list for abnormal option – non-mutually exclusive</td>
</tr>
</tbody>
</table>

- Anterior wall defects - Gastroscisis - Exomphalos
  - Prune-Belly
  - Other [free text]

**Stomach & bowel**

- Stomach not seen
- Stomach or bowel in the chest
- Double bubble
- Echogenic bowel
- Dilated loops of bowel
- Other [free text]

**Kidneys**

- Dilated renal pelvis
- Multicystic dysplastic
- Echogenic
- Enlarged
- Absent
- Other [free text]

**Bladder**

- Bladder dilated
- Bladder thick-walled
- Other [free text]

**DATA ORIGIN**

West Midlands Congenital Anomalies Register, NSC, RCOG, RCR, RUG

**Non-mutually exclusive answers again**

*See comment above*

**DATA ITEM**

| **Arms** |

<table>
<thead>
<tr>
<th>BASIS</th>
<th>Detection/screening of fetal anomalies during antenatal period</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EXPLANATION</strong></td>
<td>Identification of congenital anomalies, e.g. radial aplasia, and monitor sensitivity of ultrasound views</td>
</tr>
<tr>
<td><strong>INPUT OPTIONS</strong></td>
<td>Mutually exclusive: Normal / Abnormal / Not seen (+ free text to document details)</td>
</tr>
<tr>
<td><strong>DATA ORIGIN</strong></td>
<td>West Midlands Congenital Anomalies Register, NSC, RCOG, RCR, RUG</td>
</tr>
</tbody>
</table>

**Non-mutually exclusive answers again**

*See comment above*

**DATA ITEM**

| **Legs** |

<table>
<thead>
<tr>
<th>BASIS</th>
<th>Detection/screening of fetal anomalies during antenatal period</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EXPLANATION</strong></td>
<td>Identification of congenital anomalies, e.g. talipes, and monitor sensitivity of ultrasound views</td>
</tr>
<tr>
<td><strong>INPUT OPTIONS</strong></td>
<td>Mutually exclusive: Normal / Abnormal / Not seen (+ free text to document details)</td>
</tr>
<tr>
<td><strong>DATA ORIGIN</strong></td>
<td>West Midlands Congenital Anomalies Register, NSC, RCOG, RCR, RUG</td>
</tr>
</tbody>
</table>

**Non-mutually exclusive answers again**

*See comment above*

**DATA ITEM**

| **Global problem** |

<table>
<thead>
<tr>
<th>BASIS</th>
<th>Detection/screening of fetal anomalies during antenatal period</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EXPLANATION</strong></td>
<td>Identification of congenital anomalies, e.g. cyclopia, and monitor sensitivity of ultrasound views</td>
</tr>
<tr>
<td><strong>INPUT OPTIONS</strong></td>
<td>Mutually exclusive: Normal / Not seen / Abnormal: Pick list for abnormal option – non-mutually exclusive</td>
</tr>
</tbody>
</table>

- Hydrops / generalized oedema
- Akinesis
- Other [free text]

| **DATA ORIGIN** | West Midlands Congenital Anomalies Register, NSC, RCOG, RCR, RUG |

**Non-mutually exclusive answers again**

*See comment above*
**Logical Prioritisation**

<table>
<thead>
<tr>
<th><strong>MANNERS - Maternity</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EXPLANATION</strong></td>
</tr>
<tr>
<td><strong>INPUT OPTIONS</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>DATA ORIGIN</strong></td>
</tr>
</tbody>
</table>

**Non-mutually exclusive answers again**

See comment above

**DATA ITEM** | **Neural tube defect** |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BASIS</strong></td>
<td>Detection/screening of fetal anomalies during antenatal period</td>
</tr>
<tr>
<td><strong>EXPLANATION</strong></td>
<td>Presence of fetal anomaly, detectable on booking scan</td>
</tr>
<tr>
<td><strong>INPUT OPTIONS</strong></td>
<td>Mutually exclusive: Anencephaly / Spina bifida / Encephalocele / Not seen</td>
</tr>
<tr>
<td><strong>DATA ORIGIN</strong></td>
<td>NSC, RCOG, RCR, RUG</td>
</tr>
</tbody>
</table>

**DATA ITEM** | **Abdominal wall defect** |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BASIS</strong></td>
<td>Detection/screening of fetal anomalies during antenatal period</td>
</tr>
<tr>
<td><strong>EXPLANATION</strong></td>
<td>Presence of fetal anomaly, detectable on booking scan</td>
</tr>
<tr>
<td><strong>INPUT OPTIONS</strong></td>
<td>Mutually exclusive: Yes / No</td>
</tr>
<tr>
<td><strong>DATA ORIGIN</strong></td>
<td>NSC, RCOG, RCR, RUG</td>
</tr>
</tbody>
</table>

**DATA ITEM** | **Other structural anomaly** |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BASIS</strong></td>
<td>Detection/screening of fetal anomalies during antenatal period</td>
</tr>
<tr>
<td><strong>EXPLANATION</strong></td>
<td>To record any other congenital anomalies detected</td>
</tr>
<tr>
<td><strong>INPUT OPTIONS</strong></td>
<td>Free text to document details</td>
</tr>
<tr>
<td><strong>DATA ORIGIN</strong></td>
<td>NSC, RCOG, RCR, RUG</td>
</tr>
</tbody>
</table>

**GENERIC ITEMS**

*Abdominal circumference (AC), Femur length (FL), Liquor Volume, Placental site may be measured more than once in each pregnancy, therefore see below under “U. Ultrasound - Generic”*

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 46 of 171
R. Retrospective - Mother

R1. End of Pregnancy without a Registrable Birth in this District

The main criteria for inclusion in this dataset is a) that the data entered should help to insure that unsuitable maternets are not inappropriately "booked" for "Community and GP (consultant free) Ante-natal care" or b) may contribute to the care of the mother and/or her baby at the time of birth or later or c) that the information concerns something which in an original paper system, ought to be copied at some time from the hospital paper record to the discharge letter and is therefore “Cost Neutral”

Reason for Closing Record before a Birth in this District?

WHEN As soon as a) Relevant Answer becomes Known or 2 months (?) after current best available due date has passed

Spontaneous Miscarriage (including "Hidden Miscarriage")

Miscarriage following an Invasive Procedure (Free Text Opportunity)

Termination of Pregnancy

Transfer to other care provider

Ectopic Pregnancy

Other (Free Text Opportunity)

Unknown Outcome

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Reason for Transfer to another maternity care provider?

WHEN Only if “Reason for Closing Record before a Birth in this District” = “Transfer to other care provider” (1%?)

Mother’s Change of Address

Mother’s Change of Decision

Clinical Reasons (Free Text Opportunity)

Other Reasons (Free Text Opportunity)

Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.

† = Must be removed when data is anonymity
**Logical Prioritisation**

**Indication for Termination of Pregnancy (T.O.P.)?**

**WHEN** Only if “Reason for Closing Record before Birth in this District” (1%?)

= “Termination of Pregnancy”

A. Risk to the Life of the Pregnant Woman
B. Permanent Risk to Physical or Mental Health of the Pregnant Woman
C. Less than 24 weeks. Risk to Physical or Mental Health of the Pregnant Woman
greater than if the pregnancy were terminated
D. Less than 24 weeks. Risk to Physical or Mental Health of any Existing Child(ren)
greater than if the pregnancy were terminated,
E. Substantial Risk of Seriously Handicap (Severe Fetal Anomalies)

Done in another country using a different classification

(Other (Free Text Opportunity)

Other

Unknown

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Description of the Fetal Anomaly which was the indication for Termination?**

**WHEN** Only if “Indication for Termination”

= “E. Substantial Risk of Seriously Handicap - Severe Fetal Anomalies”

[Free Text Opportunity]

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.

**Main Method used for Termination?**

**WHEN** Only if “Reason for Closing Record before Birth in this District” (1%?)

= “Termination of Pregnancy”

Suction Termination alone

Hysterotomy

Other Surgical Method (Free Text Opportunity)

Extra Amniotic Prostaglandins

Intra Amniotic Prostaglandins

Other Medical Method (Free Text Opportunity)

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.

**Followed by (Suction) Evacuation of Uterus?**

**WHEN** Only if “Method used” does not equal “Suction termination only” (1%?)

Yes

No

Unknown

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.

**Date of End of this Pregnancy?**

**WHEN** Only if “Reason for Closing Record before Birth in this District” (1%?)

= Spontaneous Miscarriage (including “Hidden Miscarriage”)

or “Termination of pregnancy”

or “Other (Opportunity to enter Details)”

[Date]

Unknown

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.

**Gestation of End of this Pregnancy?**

**WHEN** Only if “Date of End of Pregnancy” = “Date”

(1%?)

[Weeks] + [Days]

Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

**Woman’s Age at Date of End of Pregnancy?**

**WHEN** Only if “Date of End of Pregnancy” = “Date”

(1%?)

[2 Digit Number]

Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

† = Must be removed when data is anonymity

EEP.D.02_DATASETS.L_LARGE.MANNERS.500cm-30 (27th November 2005)

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 48 of 171
R2. Other later Investigations, Treatments and Decisions

R2-C. INVASIVE FETAL INVESTIGATIONS

Any Invasive Fetal Tests done or attempted (Amniocentesis, CVB etc)?

WHEN? All (100%)
No
Amniocentesis
Chorion Villous Biopsy
Both Amniocentesis and Chorion Villous Biopsy
Other (Free Text Opportunity)
Unknown

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Chorion Villous Biopsy?

WHEN? Only if “Any Invasive Fetal Tests done or attempted?” = “Chorion Villous Biopsy”
or “Both Amniocentesis and Chorion Villous Biopsy” = “Yes” (<1%)

Successful

Unsuccessful - technical failure (specimen collection)
Offered but refused this test
Other (Free Text Opportunity)

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Result (Chorion Villous Biopsy)? [Free Text]

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Amniocentesis?

WHEN? Only if “Any Invasive Fetal Tests done or attempted?” = “Amniocentesis”
or “Both Amniocentesis and Chorion Villous Biopsy” = “Yes” (5%)

Amniocentesis Done
Offered but refused this test
Other (Free Text Opportunity)

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Result (Amniocentesis)? [Free Text]

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Fetal Chromosome Result?

WHEN? Only if “Chorion Villous Biopsy ?” = “Done”

(5%?)
or if “Amniocentesis?” = “Done”
No Chromosome Problem found
Downs syndrome (Trisomy 21)
Pataus syndrome (Trisomy 13)
Edwards syndrome (Trisomy 18)
Turners syndrome (Sex chromosome aneuploidy 45x)
Klinefelters syndrome (Sex chromosome aneuploidy 47xxx)

Other (Free Text Opportunity)

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

R2-C. INVASIVE TREATMENT OF FETAL CONDITIONS

Invasive Fetal Treatment?

WHEN? All (100%)
No
Yes (Free Text Opportunity)

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral
R2-D. OBSTETRIC TREATMENT DURING PREGNANCY

Any Obstetric Intervention or Treatment during Pregnancy?

WHEN? All (100%)
No
Yes
Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Cervical Suture during this Pregnancy?

WHEN? Only if “Any Obstetric Intervention or Treatment during Pregnancy” = “Yes” (1%?)
No
Yes (Free Text Opportunity)
Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

While asymptomatic or symptomatic?

WHEN? Only if “Cervical Suture during this Pregnancy” = “Yes” (1%?)
Symptomatic (Free Text Opportunity)
Asymptomatic
Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Anti-D Gammaglobulin given at any time?

WHEN? Only if “Any Obstetric Intervention or Treatment during Pregnancy” = “Yes” (1%?)
No
Yes (Free Text Opportunity)
Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Other Pre Delivery Intervention?

WHEN? Only if “Any Obstetric Intervention or Treatment during Pregnancy” = “Yes” (1%?)
No
Yes (Free Text Opportunity)
Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

R2-F. STERILISATION REQUEST

Postpartum Sterilisation agreed?

WHEN? All (100%)
No
Yes
Unknown
Other (Free Text Opportunity)
Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

† = Must be removed when data is anonymity
R3. Retrospective Data about the whole of the Present Pregnancy.
(Data which can only be entered accurately at the end of Pregnancy just before Birth Episode)

R3-A. OBSTETRIC PROBLEMS DEVELOPING DURING THIS PREGNANCY

Any Significant Obstetric (Gestational) Problems developing during this Pregnancy?

WHEN? All (100%)
No
Yes (10%?)
Unknown
Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

Prolonged Severe Vomiting of Pregnancy?

WHEN? Only if “Significant Obstetric Problems during Pregnancy” = “Yes” (10%?)
No
Yes (Free Text Opportunity)
Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

Gestational Diabetes?

WHEN? Only if “Significant Obstetric Problems during Pregnancy” = “Yes” (10%?)
No
Yes (Free Text Opportunity)
Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

Requiring Insulin  See Medications during Pregnancy Section

DATA ITEM  Gestational diabetes
BASIS  Glucose intolerance that develops during pregnancy and requires intervention(s) to control blood sugar metabolism
EXPLANATION  Clinical factor relevant to pregnancy care, potential risk factors and outcome
INPUT OPTIONS  Mutually exclusive: Yes / Yes with treatment (+ free text to document details) / No
DATA ORIGIN  Confidential Enquiry into Maternal Deaths, West Midlands Advisory Board - Maternity

DATA ITEM  Threatened miscarriage
BASIS  Any reported vaginal bleeding during the course of pregnancy prior to 24 weeks
EXPLANATION  Clinical factor relevant to pregnancy care and potential risk factors
INPUT OPTIONS  Mutually exclusive: Yes / No
DATA ORIGIN  West Midlands Advisory Board - Maternity

Surely far too common and ill-defined to be worth recording?

DATA ITEM  Antepartum haemorrhage
BASIS  Any reported vaginal bleeding from the 28 weeks until the birth
EXPLANATION  Clinical factor relevant to pregnancy care and potential risk factors
INPUT OPTIONS  Mutually exclusive: Yes / No
DATA ORIGIN  Confidential Enquiry into Maternal Deaths, West Midlands Advisory Board - Maternity

“Any” is far too wide. Needs a much clearer definition.

DATA ITEM  Threatened prematurity
BASIS  Any episode of uterine activity before 37 weeks that requires the use of tocolysis
EXPLANATION  Clinical factor relevant to pregnancy care, potential risk factors and outcome
INPUT OPTIONS  Mutually exclusive: Yes (+ free text to document details) / No
DATA ORIGIN  Confidential Enquiry into Maternal Deaths, West Midlands Advisory Board - Maternity, RCOG

Likely to be more reliably documented in the section on prescribed medication section below

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 51 of 171
**Logical Prioritisation**

**Pregnancy induced hypertension (PIH) ?**
- **WHEN?** Only if “Significant Obstetric Problems during Pregnancy” = “Yes” (10%)?
- **No**
- **Yes** (Free Text Opportunity)
- **Workload / Cost (Phase 1 of Maternity EPR)** A2: Cost Neutral

**Proteinuria (++ or more) during pregnancy ?**
- **WHEN?** Only if “Significant Obstetric Problems during Pregnancy” = “Yes” (10%)?
- **No**
- **Yes** (Free Text Opportunity)
- **Workload / Cost (Phase 1 of Maternity EPR)** A2: Cost Neutral

**Other Obstetric Problem(s) in this Pregnancy?**
- (Possible IUGR - See below)
- **WHEN?** Only if “Significant Obstetric Problems during Pregnancy” = “Yes” (10%)?
- **No**
- **Yes** (Free Text Opportunity)
- **Unknown**

**DATA ITEM**
- Pregnancy induced hypertension (PIH)
- Proteinuria during pregnancy

**BASIS**
- Raised blood pressure during the pregnancy requiring extra surveillance and/or medication
- The presence of two or more “+” of protein on urine testing at any time

**EXPLANATION**
- Clinical factor relevant to pregnancy care, potential risk factors and outcome
- Clinical factor relevant to pregnancy care, potential risk factors and outcome

**INPUT OPTIONS**
- Mutually exclusive: Yes / No
- Mutually exclusive: Yes / No

**DATA ORIGIN**
- Confidential Enquiry into Maternal Deaths, West Midlands Advisory Board - Maternity
- West Midlands Advisory Board - Maternity

---

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 52 of 171

EEP.02_DATASETS.L_LARGE.MANNERS.500cfM-30 (27th November 2005)
Any Significant Medical or Surgical Problems starting during this Pregnancy?

WHEN? All (100%)
No
Yes (5%?)
Unknown

Significant Anaemia (Hb < 10 G/dl at any time)?

WHEN? Only if “Any Significant Medical (Non Obstetric) Problems occurred during this Pregnancy” = “Yes” (5%?)
No
Yes (Free Text Opportunity)

Epileptiform Fit (including Eclampsia)?

WHEN? Only if “Any Significant Medical (Non Obstetric) Problems that the fit was or was not Eclampsia” occurred during this Pregnancy” = “Yes” (5%?)
No
Yes (Opportunity to enter Details, including likelihood)

Thrombo-Embolism Events requiring Anticoagulants
See “Medications” Section

Generalised Priritis - with abnormal test results?

WHEN? Only if “Significant Medical or Obstetric Problems during Pregnancy” = “Yes” (5%?)
No
Yes (Opportunity to enter Details)

Abdominal Surgery during Pregnancy?

WHEN? Only if “Significant Medical or Obstetric Problems during Pregnancy” = “Yes” (5%?)
No
Yes (Opportunity to enter Details)

Invasive Neoplastic condition diagnosed during pregnancy?

WHEN? Only if “Significant Medical or Obstetric Problems during Pregnancy” = “Yes” (5%?)
No
Yes (Opportunity to enter Details)
Mental Disturbance requiring supervised treatment?

WHEN? Only if “Significant Medical or Obstetric Problems during Pregnancy” = “Yes” (5%?)
No
Yes (Opportunity to enter Details)

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

Maternal Trauma?

WHEN? Only if “Significant Medical or Obstetric Problems during Pregnancy” = “Yes” (5%?)
No
Yes (Opportunity to enter Details)

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

DATA ITEM  Maternal trauma
BASIS  Any significant event or injury to the mother that could affect the course of the pregnancy e.g. seatbelt injury, road traffic accident, domestic violence
EXPLANATION  Clinical factor relevant to pregnancy care, potential risk factors and outcome
INPUT OPTIONS  Mutually exclusive: Yes / No
DATA ORIGIN  Confidential Enquiry into Maternal Deaths, Health Outcome Indicators - Normal Pregnancy and Childbirth, West Midlands Advisory Board - Maternity, RCOG

DATA ITEM  Vaginal infection
BASIS  Any microbiologically proven infection during pregnancy
EXPLANATION  Clinical factor relevant to pregnancy care, potential risk factors and outcome
INPUT OPTIONS  Mutually exclusive: Yes / No
DATA ORIGIN  West Midlands Advisory Board - Maternity

DATA ITEM  Urinary tract infection
BASIS  Any microbiologically proven infection during pregnancy
EXPLANATION  Clinical factor relevant to pregnancy care, potential risk factors and outcome
INPUT OPTIONS  Mutually exclusive: Yes / No
DATA ORIGIN  West Midlands Advisory Board - Maternity

Two more “Paralysis by Analysis” Items
No value as an “Individual Patient Encounter Assitance” (“Above the line”) item.

Not worth entering on Maternity Computer system until electronically transferred from laboratory to maternity computer system

DATA ITEM  Suspected intrauterine growth retardation (IUGR)

This belongs under Baby not Mother, since, in a multiple pregnancy, the IUGR may not affect all siblings

Any Rare Disease(s) in Pregnancy?

WHEN? Only if “Significant Medical or Obstetric Problems during Pregnancy” = “Yes” (5%?)
No
Ebstein’s
Myeloproliferative disorders
Other (Free Text Opportunity)
[In time a Set National List of Rare Diseases] ???

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

Other Significant Medical Problem(s) in this Pregnancy?

WHEN? Only if “Significant Medical or Obstetric Problems during Pregnancy” = “Yes”
No
Yes (Opportunity to enter Details)
Unknown

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

Essential catch-all item in any proper maternity computer system
Logical Prioritisation

R3-C. MEDICATION DURING PREGNANCY
or ESPECIALLY AT (or AROUND) TIME OF CONCEPTION

Any Prescribed Medications
(since a month before probable time of conception)
or (at any time during the past 12 months)?

WHEN? All (100%)
No
Yes (50%?)
Unknown

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Antibiotics within the past 12 hours?

WHEN? Only if “Any Prescribed Medicines ...?” =

“Yes” (30%?)
No
Yes (Opportunity to enter Details)
Unknown

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Anti-Coagulants?

WHEN? Only if “Any Prescribed Medicines ...?” = “Yes”

(30%?)
No
Yes (Opportunity to enter Details)
Unknown

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Anti-Hypertensives within the past year?

WHEN? Only if “Any Prescribed Medicines ...?” = “Yes”

(30%?)
No
Yes (Opportunity to enter Details)
Unknown

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Antihypertensives
during first 20 weeks of Pregnancy?

WHEN? Only if “Anti-Hypertensives during pregnancy ... .?” = “Yes” (1%?)
No
Yes (Opportunity to enter Details)
Unknown

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Insulin?

WHEN? Only if “Any Prescribed Medicines ...?” = “Yes”

(30%?)
No
Yes (Opportunity to enter Details) (1%?)
Unknown

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

DATA ITEM Anti-hypertensives
BASIS Any oral or parenteral medication administered during pregnancy
EXPLANATION Clinical factor relevant to pregnancy care, potential risk factors and outcome
INPUT OPTIONS Mutually exclusive: Yes / No
DATA ORIGIN Confidential Enquiry into Maternal Deaths, West Midlands Advisory Board - Maternity, RCOG

† = Must be removed when data is anonymity
Logical Prioritisation

Prolonged use of Steroids during the past year?
(i.e. not including a short course for Prematurity)
WHEN? Only if “Any Prescribed Medicines . . .?” = “Yes”

(50%?)
No
Yes (Opportunity to enter Details)
Unknown

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

DATA ITEM                      Antenatal steroids
BASIS                        Steroids administered to the mother at any time during
                             pregnancy where premature delivery is anticipated
EXPLANATION                Mutually exclusive: Incomplete course / Complete
                             course > 7 days before delivery / Multiple courses / None
INPUT OPTIONS            British Association of Perinatal Medicine, CESDI, Health
                             Outcome Indicators - Normal Pregnancy and Childbirth,
                             West Midlands Advisory Board - Maternity, West
                             Midlands Advisory Board - Paediatrics, RCOG, RCPCH

Another “Paralysis by Analysis”(“Below the line”) Item
No value as an “Individual Patient Encounter
Assistance”(“Above the line”) item.

Also since, at the time when a decision is made in a
threatened pre-term labour, as to whether to give
steroids or not, exactly the same proportion of mothers
will get steroids and go on into labour as those who get
steroids and do not go on into labour. This means that
for audit purposes it is only necessary to ask this
question of those mothers who have a pre-term birth.
Far less data entry work with exactly the same audit
result!
R3-D. CLINICAL OBSERVATIONS & TESTS

Expectant Mother’s Weight in Kilograms (Mid-Pregnancy if possible)?

- WHEN? All (100%)
  - [5 character real number including decimal point (e.g. 70.52Kg)]
  - Unknown

Body Mass Index - BMI (Mid-Pregnancy of possible)?

- WHEN? All (100%)
  - [2 character integer (e.g. 35)]
  - Unknown

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

R3-E. LAST HAEMOGLOBIN PRE-BIRTH EVENT

A “Paralysis by Analysis” Item therefore included in EEPD.Volume III. The Resource Document but not in Volume IV. The “Fawdry 500” dataset

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Haemoglobin pre-delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>Record of current haemoglobin status</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Clinical indicator for risk as a result of haemorrhage intrapartum/post-delivery</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Numerical format, expressed as g/dl</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>Antenatal Screening Advisory Board</td>
</tr>
</tbody>
</table>

It is confusing if, as in the current MANNERS this is included in the section headed C1. ANTENATAL SCREENING – Blood tests

† = Must be removed when data is anonymity
Logical Prioritisation

R3-F. RHESUS ANTIBODY TESTS

Rhesus Antibodies Test - Most Recent Result?
WHEN? Only if Mother’s Rhesus Blood Group = “Negative”(20%)
Rhesus antibodies present
Rhesus antibodies absent
Possibly / Probably done but result unknown
Blood tests refused by mother
Unknown
Other (Opportunity to enter Details)

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

MANNERS - Maternity

C7. ANTENATAL SCREENING
– Anti-D prophylaxis

---

Antibody test at 28 weeks gestation
DATA ITEM
BASIS
EXPLANATION
INPUT OPTIONS
DATA ORIGIN

Clinical indicator for risk of rhesus haemolytic disease of
the newborn (HDN)
Mutually exclusive: Yes /No
Health Outcome Indicators - Normal Pregnancy and
Childbirth, West Midlands Advisory Board - Maternity,
NICE

---

28 week vaccination
DATA ITEM
BASIS
EXPLANATION
INPUT OPTIONS
DATA ORIGIN

Clinical indicator for risk of rhesus haemolytic disease of
the newborn (HDN)
Mutually exclusive: Yes / No
Health Outcome Indicators - Normal Pregnancy and
Childbirth, West Midlands Advisory Board - Maternity,
NICE

---

34 week vaccination
DATA ITEM
BASIS
EXPLANATION
INPUT OPTIONS
DATA ORIGIN

Clinical indicator for risk of rhesus haemolytic disease of
the newborn (HDN)
Mutually exclusive: Yes /No
Health Outcome Indicators - Normal Pregnancy and
Childbirth, West Midlands Advisory Board - Maternity,
NICE

Three more “Paralysis by Analysis” Items
No value as an “Individual Patient Encounter
Assistance” (“Above the line”) item.

A 1 in nn sample would probably give almost the same
audit and managerial information
with significantly less electronic data entry work
by overburdened front line health care workers.

---

R3-E. OTHER ANTIBODY TESTS

Other Blood Group Antibodies (e.g. ABO) Test - Most
Recent Result?
WHEN? All (100%)
Non-Rhesus antibodies absent
Non-Rhesus antibodies present
Possibly / Probably done but result unknown
Blood tests refused by mother
Unknown
Other (Opportunity to enter Details)

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral
**Final Due Date?**

**WHEN?** All (100%)

**[Date]**

Unknown

**Workload / Cost (Phase 1 of Maternity EPR)** A2: Cost Neutral

---

**F. Fetus - Retrospective Summary**

**E1. Labour**

Data regarding Fetus(es) before Birth which may be DIFFERENT if MULTIPLE Births

Prior to the Birth, where multiple fetuses are involved, it is better to designate them as “Fetus A”, “Fetus B” etc, since the one called Fetus A may not always be the one that is born first.

A “Paralysis by Analysis” Item therefore included in EEPD. Volume III. The Resource Document but not in Volume IV. The “Fawdry 500” dataset

Actual IUGR should be calculated by the computer from the Best Estimate of Gestation at Birth and the Birth Weight. See under B.Birth and Baby.

---

**DATA ITEM** Estimated date of delivery (EDD)

**BASIS** Record of expected delivery date at 40 weeks gestation

**EXPLANATION** The most accurate method of dating the pregnancy is by dating scan.

The EDD is calculated according to the crown rump length (CRL) at 8-13 weeks gestation or biparietal diameter at 12-22 weeks gestation.

**INPUT OPTIONS** Calculated value displayed as DD/MM/YYYY

**DATA ORIGIN** West Midlands Congenital Anomalies Register, CESDI, Hospital Episode Statistics, West Midlands Advisory Board - Maternity

**What if a dating scan is unavailable?**

One must assume that what is meant is the “Final” or “Agreed” due date but this needs to be made unambiguous in any proper maternity computer system.

The “Final” or “Agreed” EDD should be calculated by the end of pregnancy and should always be based on the best available data at that time

---

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  "Logical Prioritisation” compared with MANNERS Maternity  Page 59 of 171
E. (Birth) Event

E1. Labour

Birth Event from the Mother’s point of view.
Only ONCE items even if multiple births

| DATA ITEM | Care plan at the start of labour |
| BASIS | To identify lead professional responsible for care at start of labour |
| EXPLANATION | To facilitate audit of standards of care in labour |
| INPUT OPTIONS | Mutually exclusive: Midwife & GP shared care / Midwife, obstetrician & GP shared care / Midwife only / Midwife & obstetrician only / Obstetrician only |
| DATA ORIGIN | Commissioning Data Set, Hospital Episode Statistics, West Midlands Advisory Board - Maternity |

Another “Paralysis by Analysis” (“Below the line”) Item
A 1 in nn sample would probably give the same information with significantly less electronic data entry work by health care workers.

| DATA ITEM | Reason for change of care |
| BASIS | Record of reason for change of intended plan of care at any time during pregnancy and/or labour |
| EXPLANATION | Facilitates tracking of care and audit of best practice |
| INPUT OPTIONS | Mutually exclusive: Clinical reasons during pregnancy / Other reasons during pregnancy / Clinical reasons during labour / Other reasons during labour |
| DATA ORIGIN | Commissioning Data Set, Confidential Enquiry into Maternal Deaths, Hospital Episode Statistics, West Midlands Advisory Board - Maternity |

Yet another “Paralysis by Analysis” Item
A 1 in nn sample would probably give the same information with significantly less electronic data entry work by health care workers.

In any case care may change several times during pregnancy and labour and this is therefore a Generic Maternity Item

E1B. LABOUR SUMMARY

Number of Babies Born during this Birth Event
WHEN? All (100%)
2 character integer number

| DATA ITEM | Number of babies this confinement |
| BASIS | To differentiate types of pregnancy |
| EXPLANATION | Requirement for NN4B |
| INPUT OPTIONS | To facilitate audit of risk factors and outcome in different types of pregnancy |
| DATA ORIGIN | Numerical format |
| | British Association of Perinatal Medicine, BDNS, Commissioning Data Set, Hospital Episode Statistics, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics |

Was there Labour before Birth
WHEN? All (100%)

| DATA ITEM | Essential question still missing |
| BASIS | from MANNERS MATERNITY |
| EXPLANATION | |
| INPUT OPTIONS | |
| DATA ORIGIN | |

† = Must be removed when data is anonymity
© Rupert Fawdry 2005
Logical Prioritisation

E1-C. RIPENINGS OR INDUCTIONS

Type of Onset of Labour (Spontaneous or Induced/ Ripening)

WHEN? Only if “Was there Labour before Birth?” = Yes
(90%?)

Spontaneous Onset of Labour
Induction and / or Ripening
Unknown

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Reason for Induction or Ripening

WHEN? Only if “Type of Onset of Labour?” = Induced and / or Ripening (20%)?

Postdates
Pre-Eclampsia (PET)
Suspected Intra Uterine Growth Retardation (IUGR)
Spontaneous Rupture of the Membranes (SROM)
Past Obstetric History (Free Text Opportunity)
Other Obstetric Problems (Free Text Opportunity)
Maternal Pain (As reason for Induction)
e.g. Back Pain, Symphysis Pain etc) (Free Text)
Maternal Distress / Social Reasons
(Free Text Opportunity)
Other (Free Text Opportunity)

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

See more detailed questions below

MANNERS - Maternity

DATA ITEM Labour onset
BASIS To ascertain if labour was spontaneous
EXPLANATION To record any intervention in process of labour
INPUT OPTIONS Mutually exclusive: None – Caesarean before labour / Spontaneous / Induction-Ripening
DATA ORIGIN Commissioning Data Set, Hospital Episode Statistics, West Midlands Advisory Board - Maternity

DATA ITEM Reason for induction
BASIS To record decision for intervention
EXPLANATION To facilitate audit of standards of care in labour
INPUT OPTIONS Mutually exclusive: Postdates / PET / Suspected IUGR / SROM / Past obstetric history / Maternal pain / distress
DATA ORIGIN West Midlands Advisory Board - Maternity

DATA ITEM Method of induction
BASIS To record any intervention in process of labour
EXPLANATION To facilitate audit of standards of care in labour
INPUT OPTIONS Non-mutually exclusive:
Membrane sweep
Prostaglandin E2
Gemprost
APR
Oxytocin

DATA ORIGIN Hospital Episode Statistics, West Midlands Advisory Board - Maternity

Non-mutually exclusive answers need to be documented separately since they have to be entered separately onto the electronic database if they are to be of any future use.

Such answers look fine on paper but do not work on a computer

How can you enter the data on someone who has more than one of the items on the list?

† = Must be removed when data is anonymity

© Rupert Fawdry 2005

“Logical Prioritisation” compared with MANNERS Maternity Page 61 of 171
**Logical Prioritisation**

**E1-D. ARTIFICIAL RUPTURE OF MEMBRANES FOR INDUCTION**

Was an ARM for Induction done

WHEN? Only if Type of Onset of Labour? = “Induced and / or Ripening” (20%)?
- Yes
- No
- Unknown

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

**Induction by ARM (Date)**

WHEN? Only if “Was ARM for Induction done?” = Yes (10%?)

[Date]
- Unknown

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

**Induction by ARM (Time)**

WHEN? Only if “Was ARM for Induction done?” = Yes (10%?)

[Time : 24 hour clock]
- Unknown

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

---

**MANNERS - Maternity**

**DATA ITEM**  **Membranes ruptured before labour**

**BASIS**  Relevant to possible infection of baby

**EXPLANATION**  Clinical factor relevant to pregnancy care, risk factors and outcome

**INPUT OPTIONS**

**DATA ORIGIN**  West Midlands Advisory Board - Maternity

**DATE ITEM**  **Date of rupture of membranes (ROM)**

**BASIS**  Date of ROM

**EXPLANATION**  Needed to ascertain length of time elapsed between ROM and birth

**INPUT OPTIONS**  DD/MM/YYYY

**DATA ORIGIN**  West Midlands Advisory Board - Maternity

**DATE ITEM**  **Time of rupture of membranes (ROM)**

**BASIS**  Time of ROM

**EXPLANATION**  Needed to ascertain length of time elapsed between ROM and birth

**INPUT OPTIONS**  HH:MM (24 hour clock)

**DATA ORIGIN**  West Midlands Advisory Board - Maternity

† = Must be removed when data is anonymity
E1-F. ONSET OF ESTABLISHED LABOUR

A “Paralysis by Analysis” Item therefore included in EEPD.Volume III. The Resource Document but not in Volume IV. The “Fawdry 500” dataset

Established Labour Onset (Date)
WHEN? Only if “Was there Labour before Birth?” = "Yes"

[Date]
Unknown
Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Established Labour Onset (Time)
WHEN? Only if “Was there Labour before Birth?” = "Yes"

[Time : 24 hour clock]
Unknown
Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

E1-G. AUGMENTATION OF LABOUR

Any Augmentation of Labour
WHEN? Only if “Was there Labour before Birth?” = "Yes" (80%?)

None
Syntocinon and ARM
ARM only
Syntocinon only
Other
Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

DATA ITEM Lead professional
BASIS To identify most senior professional responsible for care during labour
EXPLANATION To facilitate audit of standards of care in labour and change of lead professional
INPUT OPTIONS Mutually exclusive: Consultant obstetrician / Registrar / Midwife / GP
DATA ORIGIN Hospital Episode Statistics, West Midlands Advisory Board - Maternity

The term “Lead Professional” is almost useless, as illustrated by the silly answer options for this question. What if someone is booked for “Consultant Care” but no consultant is involved in any way with the labour, which has been exclusively conducted by several midwives; apart from the registrars seeing her on routine labour ward rounds?”

DATA ITEM Date of onset of established labour
BASIS To record basic chronology of labour
EXPLANATION To facilitate audit of standards of care in labour
INPUT OPTIONS DD/MM/YYYY
DATA ORIGIN Hospital Episode Statistics, West Midlands Advisory Board - Maternity

DATA ITEM Time of onset of established labour
BASIS To record basic chronology of labour
EXPLANATION To facilitate audit of standards of care in labour
INPUT OPTIONS HH:MM (24 hour clock)
DATA ORIGIN Hospital Episode Statistics, West Midlands Advisory Board - Maternity

DATA ITEM Augmentation of labour
BASIS To record any intervention in process of labour
EXPLANATION To facilitate audit of standards of care in labour
INPUT OPTIONS Non-mutually exclusive
DATA ORIGIN Commissioning Data Set, West Midlands Advisory Board - Maternity

Non-mutually exclusive answers need to be documented separately since they have to be entered separately onto the electronic database if they are to be of any future use. Such answers look fine on paper but do not work on a computer
How can you enter the data on someone who has more than one of the items on the list?

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity Page 63 of 171
**E3. Most Significant Route of Birth**

**Most Significant Birth Route for Mother**

WHEN? All (100%)
1. Vaginal Birth(s)
2. Caesarean Section
3. Other (Abdominal)

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Method(s) of Birth - See under “Baby”

**E4. Caesarean Section**

**E4-A. AT START**

**Dilatation of Cervix at the time of the Caesarean**

WHEN? Only if “Most Significant Birth Route” = “Caesarean” (20%) and if “Was there Labour before Birth?” = Yes

[90%?]

[Cms] Unknown

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.

**E4-B. CAESAREAN SURGERY**

**Type of Skin Incision**

WHEN? Only if “Most Significant Birth Route” = “Caesarean” (20%)?

- Modified Pfannenstiel
- Vertical Midline
- Other (Free text opportunity)

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

**If Previous Caesarean, Comment on Adhesions**

WHEN? Only if “Most Significant Birth Route” = “Caesarean” (20%)?

- Average
- Minimal
- Severe (Details)

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

**If Previous Caesarean, State of Scar Tissue**

WHEN? Only if “Most Significant Birth Route” = “Caesarean” (20%)?

- Average
- Minimal Sharp Dissection
- A Lot of Sharp Dissection

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

**Type of Uterine Incision**

WHEN? Only if “Most Significant Birth Route” = “Caesarean” (20%)?

- Lower Segment (Transverse)
- Lower Segment (Vertical)
- Upper Segment
- Other

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

**Thickness of Lower Segment**

WHEN? Only if “Most Significant Birth Route” = “Caesarean” (20%)?

- Average for someone not in Labour
- Thicker than average for someone not in Labour
- Thinner than average for someone not in Labour
- Paper Thin
- Ruptured through
- Other (allowing comment)

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 64 of 171
Logical Prioritisation

Uterine Shape & Cavity
WHEN? Only if “Most Significant Birth Route” = “Caesarean” (20%)?
Normal
Abnormal (Details)
Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Mother Sterilised at Caesarean
WHEN? Only if “Most Significant Birth Route” = “Caesarean” (20%)?
No
Tubal Occlusion at Caesarean (1%)?
Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Method of Sterilisation at Caesarean
WHEN? Only if “Most Significant Birth Route” = “Caesarean”
and if “Mother Sterilised at Caesarean” = “Yes” (1%)?
Pomeroy with Absorbable Suture
Pomeroy with Non-Absorbable Suture
Other (Details)
Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Ovaries
WHEN? Only if “Most Significant Birth Route” = “Caesarean”
Not Seen
Both Seen and Normal
Surgery on Ovaries performed (Details)
Other (Details)
Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Other Intra-Abdominal Organs & Tissues
WHEN? Only if “Most Significant Birth Route” = “Caesarean”
Nil significant noted
Significant Findings noted in other Intra-Abdominal Organs & Tissues (Details)
Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Hysterectomy at Caesarean
WHEN? Only if “Most Significant Birth Route” = “Caesarean”
No
Yes, Hysterectomy performed. (Free Text Opportunity)
Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Other Major Surgery
WHEN? Only if “Most Significant Birth Route” = “Caesarean”
No
Yes (Details)
Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Other Major Complications at Caesarean
WHEN? Only if “Most Significant Birth Route” = “Caesarean”
None
Possible Damage to Urinary Tract (Details)
Yes (Details)
Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Drain(s) inserted at Caesarean
WHEN? Only if “Most Significant Birth Route” = “Caesarean”
None
Superficial Drain only
Deep Pelvic Drain only
Superficial and Pelvic Drain inserted
Other
Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Skin Closure Method/Materials
WHEN? Only if “Most Significant Birth Route” = “Caesarean”
Dexon or Vicryl
Prolene or Nuylon equivalent
Silk
Clips
Other: Absorbable
Other: Non-absorbable

* = Must be removed when data is anonymity
**Logical Prioritisation**

**E4-C. POST CAESAREAN**

**Recommendation for a Future Delivery**

WHEN? Only if “Most Significant Birth Route” =

- “Caesarean”
  - Vaginal Delivery probably reasonable (Free Text)
  - Probable Caesarean needed (Free Text)
  - Definite Caesarean required (Free Text)
  - No Comment

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

**Pelvimetry Recommendation**

WHEN? Only if “Most Significant Birth Route” =

- “Caesarean”
  - No
  - Yes

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

**Prophylactic Antibiotics started**

WHEN? Only if “Most Significant Birth Route” =

- “Caesarean”
  - None
  - Augmentin
  - Cefuroxime
  - Other

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

**Prophylactic Heparin prescribed**

WHEN? Only if “Most Significant Birth Route” =

- “Caesarean”
  - No
  - Yes

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

---

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 66 of 171
### Logical Prioritisation

#### E5. Retrospective of the whole of this Birth Event

Data which needs to be entered after the (last) birth. 
**ONCE ONLY FOR EACH MOTHER even if she has multiple births.**

**E5-A. DATE AND TIME OF (LAST) BIRTH**

<table>
<thead>
<tr>
<th>Date of Birth Event (= Date of Last Birth)</th>
<th>DATA ITEM</th>
<th>Date of onset of third stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHEN? All (100%)</td>
<td>BASIS</td>
<td>To record basic chronology of labour</td>
</tr>
<tr>
<td>[Date]</td>
<td>EXPLANATION</td>
<td>To facilitate audit of standards of care in labour</td>
</tr>
<tr>
<td>Automatically generated by computer based on</td>
<td>INPUT OPTIONS</td>
<td>DD/MM/YYYY</td>
</tr>
<tr>
<td>B. BABY. B1. Birth Number of this Baby = 1 and Birth of</td>
<td>DATA ORIGIN</td>
<td>West Midlands Advisory Board - Maternity</td>
</tr>
<tr>
<td>this Baby (or Fetus) - Date</td>
<td></td>
<td>Same as Date of (Last) Birth</td>
</tr>
<tr>
<td>Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data</td>
<td></td>
<td>which should be entered under B. Baby &amp; Birth below</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time of Birth Event (= Time of Last Birth)</th>
<th>DATA ITEM</th>
<th>Time of onset of third stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHEN? All (100%)</td>
<td>BASIS</td>
<td>To record basic chronology of labour</td>
</tr>
<tr>
<td>[Time : 24 hour clock]</td>
<td>EXPLANATION</td>
<td>To facilitate audit of standards of care in labour</td>
</tr>
<tr>
<td>Unknown</td>
<td>INPUT OPTIONS</td>
<td>HH:MM (24 hour clock)</td>
</tr>
<tr>
<td>Automatically generated by computer based on</td>
<td>DATA ORIGIN</td>
<td>West Midlands Advisory Board - Maternity</td>
</tr>
<tr>
<td>B. BABY. B1. Birth Number of this Baby = 1 and Birth of</td>
<td></td>
<td>Same as Time of (Last) Birth</td>
</tr>
<tr>
<td>this Baby (or Fetus) - Date</td>
<td></td>
<td>which should be entered under B. Baby &amp; Birth below</td>
</tr>
<tr>
<td>Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mother’s Age at time of this Birth Event</th>
<th>DATA ITEM</th>
<th>Important Data Items missing from MANNERS MATERNITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHEN? All (100%)</td>
<td>BASIS</td>
<td></td>
</tr>
<tr>
<td>[Two digit integer number]</td>
<td>EXPLANATION</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td>INPUT OPTIONS</td>
<td></td>
</tr>
<tr>
<td>Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data</td>
<td>DATA ORIGIN</td>
<td>West Midlands Advisory Board - Maternity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gestation (Best Pre-Birth Estimate - Last Birth)</th>
<th>DATA ITEM</th>
<th>Important Data Items missing from MANNERS MATERNITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHEN? All (100%)</td>
<td>BASIS</td>
<td></td>
</tr>
<tr>
<td>[Weeks- Integer (up to 50)]</td>
<td>EXPLANATION</td>
<td></td>
</tr>
<tr>
<td>+ [Days- Integer (Up to 6)]</td>
<td>INPUT OPTIONS</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td>DATA ORIGIN</td>
<td></td>
</tr>
<tr>
<td>Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**E5-B. THIRD STAGE**

<table>
<thead>
<tr>
<th>Management of Third Stage</th>
<th>DATA ITEM</th>
<th>Third stage management</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHEN? All (100%)</td>
<td>BASIS</td>
<td>To record any intervention in process of labour/birth</td>
</tr>
<tr>
<td>Controlled Cord Traction</td>
<td>EXPLANATION</td>
<td>Identifies risk factor and facilitates audit of practice</td>
</tr>
<tr>
<td>Unassisted Maternal effort only</td>
<td>INPUT OPTIONS</td>
<td>Mutually exclusive: Physiological / Active</td>
</tr>
<tr>
<td>Manual Removal of Retained Placenta</td>
<td>DATA ORIGIN</td>
<td>West Midlands Advisory Board - Maternity</td>
</tr>
<tr>
<td>Removed at Caesarian Section</td>
<td></td>
<td>Retained placenta</td>
</tr>
<tr>
<td>Other</td>
<td>BASIS</td>
<td>To record clinical complication</td>
</tr>
<tr>
<td>Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral</td>
<td>EXPLANATION</td>
<td>Relevant to risks of maternal complications</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medications used to assist Third Stage</th>
<th>DATA ITEM</th>
<th>Why two separate questions? Can your really have both a retained placenta and a physiological third stage?</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHEN? All (100%)</td>
<td>BASIS</td>
<td></td>
</tr>
<tr>
<td>Symptometrine (Syntocinon and Ergometrine)</td>
<td>EXPLANATION</td>
<td></td>
</tr>
<tr>
<td>Ergometrine alone</td>
<td>INPUT OPTIONS</td>
<td></td>
</tr>
<tr>
<td>Syntocinon alone</td>
<td>DATA ORIGIN</td>
<td></td>
</tr>
<tr>
<td>Misoprostol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Combination(s) / (Details)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (Details)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
E5-C. DURATION OF LABOUR

DELIVERY OF (LAST) PLACENTA (DATE)?

WHEN? All (100%)

[Date]

Unknown

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral ("Above the Line")

DELIVERY OF (LAST) PLACENTA (TIME)

WHEN? All (100%)

[Time: 24 hour clock]

Unknown

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral ("Above the Line")

TOTAL DURATION OF LABOUR

(PROFESSIONAL DEFINITION, INCLUDES 3RD STAGE)

WHEN?

Only if "Was there Labour before Birth?" = Yes (90%?)

[Hours] & [Minutes]

Unknown

Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

TIME IN LABOUR

(LAY DEFINITION, NOT INCLUDING 3RD STAGE)

WHEN?

Only if "Was there Labour before Birth?" = Yes (90%?)

[Hours] & [Minutes]

Unknown

Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

DURATION OF 3RD STAGE

WHEN? All (100%)

[Hours] & [Minutes]

Unknown

Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

E5-D. MEMBRANES AND PLACENTA

COMPLETENESS OF PLACENTA

WHEN? All (100%)

Apparently complete

Fragmented-Ragged

Incomplete

Not known

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

COMPLETENESS OF MEMBRANES

WHEN? All (100%)

Apparently complete

Fragmented-Ragged

Incomplete

Not known

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

DATE OF END OF THIRD STAGE

BASIS To record basic chronology of labour

EXPLANATION To facilitate audit of standards of care in labour

INPUT OPTIONS DD/MM/YYYY

DATA ORIGIN West Midlands Advisory Board - Maternity

TIME OF END OF THIRD STAGE

BASIS To record basic chronology of labour

EXPLANATION To facilitate audit of standards of care in labour

INPUT OPTIONS HH:MM (24 hour clock)

DATA ORIGIN West Midlands Advisory Board - Maternity

LENGTH OF THIRD STAGE

BASIS To record basic chronology of labour

EXPLANATION To facilitate audit of standards of care in labour

INPUT OPTIONS Calculated field

DATA ORIGIN West Midlands Advisory Board - Maternity

PLACENTA

BASIS To record appearance of placenta

EXPLANATION Relevant to risks of maternal complications

INPUT OPTIONS Mutually exclusive: Apparently complete / Incomplete / Ragged / fragmented / Not known

DATA ORIGIN West Midlands Advisory Board - Maternity

MEMBRANES

BASIS To record appearance of membranes

EXPLANATION Relevant to risks of maternal complications

INPUT OPTIONS Mutually exclusive: Apparently complete / Incomplete / Ragged / fragmented / Not known

DATA ORIGIN West Midlands Advisory Board - Maternity

† = Must be removed when data is anonymity
### Logical Prioritisation

**E5-E. IF SECOND STAGE AND PERINEAL/VAGINAL/LABIAL DAMAGE**

#### Episiotomy performed

<table>
<thead>
<tr>
<th>WHEN</th>
<th>Yes</th>
<th>No</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workload / Cost (Phase 1 of Maternity EPR)</td>
<td>A2: Cost Neutral</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Any (further) Perineal Damage**

<table>
<thead>
<tr>
<th>WHEN</th>
<th>Yes</th>
<th>No</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workload / Cost (Phase 1 of Maternity EPR)</td>
<td>A2: Cost Neutral</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Other or Further Birth Canal or Labial Damage?**

<table>
<thead>
<tr>
<th>WHEN</th>
<th>Yes</th>
<th>No</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workload / Cost (Phase 1 of Maternity EPR)</td>
<td>A2: Cost Neutral</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Vaginal Tear

<table>
<thead>
<tr>
<th>WHEN</th>
<th>Yes</th>
<th>No</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workload / Cost (Phase 1 of Maternity EPR)</td>
<td>A2: Cost Neutral</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Labial Tear

<table>
<thead>
<tr>
<th>WHEN</th>
<th>Yes</th>
<th>No</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workload / Cost (Phase 1 of Maternity EPR)</td>
<td>A2: Cost Neutral</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Cervical Tear

<table>
<thead>
<tr>
<th>WHEN</th>
<th>Yes</th>
<th>No</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workload / Cost (Phase 1 of Maternity EPR)</td>
<td>A2: Cost Neutral</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

### MANNERS - Maternity

**F3. BIRTH EVENT – MOTHER - Perineum**

#### Data Item: Perineum

<table>
<thead>
<tr>
<th>BASIS</th>
<th>To record any intervention in process of labour/birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPLANATION</td>
<td>Identifies risk factor and facilitates audit of practice</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Non-mutually exclusive</td>
</tr>
</tbody>
</table>

**Degree of tear**

<table>
<thead>
<tr>
<th>BASIS</th>
<th>To record presence/severity of tear</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPLANATION</td>
<td>Identifies risk factor and facilitates audit of practice</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Mutually exclusive: None / 1st degree / 2nd degree / 3rd degree / 4th degree</td>
</tr>
</tbody>
</table>

**Perineal repair**

<table>
<thead>
<tr>
<th>BASIS</th>
<th>To record method of repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPLANATION</td>
<td>Facilitates audit of practice</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Mutually exclusive: Simple repair / Complex repair / Not sutured</td>
</tr>
</tbody>
</table>

---

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 69 of 171
Logical Prioritisation

Any Vaginal / Perineal / Cervical / Labial Suturing?

WHEN Only if “Was there a Second Stage” = “Yes”

Yes
No
Unknown

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

What Suture Material used for Perineum

WHEN Only if “Any Vaginal / Perineal / Cervical / Labial
Suturing?” = “Yes”

Polyglycolic Acid or similar (e.g. Dexon)
Vicryl
Catgut
Other or Mixed (Free text opportunity)
Unknown

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

Suture material
DATA ITEM
BASIS
EXPLANATION
INPUT OPTIONS
DATA ORIGIN
Identification of suture material
Facilitates audit of practice
Free text to document details
West Midlands Advisory Board - Maternity

Repaired by (status)
DATA ITEM
BASIS
EXPLANATION
INPUT OPTIONS
DATA ORIGIN
Identification of grade of professional
Facilitates audit of practice
Mutually exclusive: Midwife / Student midwife / Consultant / Registrar
West Midlands Advisory Board - Maternity

Another “Paralysis by Analysis”
(“Below the line”) Item
No value as an “Individual Patient Encounter
Assistance” (“Above the line”) item.

Also far too few Options.
See Section X. Health Care Workers, below

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 70 of 171
Logical Prioritisation

E9. Before leaving Labour Ward - Mother

---

E9-A. HAEOMORRHAGE-RELATED QUESTIONS
WHILE STILL ON LABOUR WARD / EARLY POST PARTUM

Abruptio/Placenta Praevia/APH of Unknown Cause

WHEN? All (100%)
No
Yes

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

 Abruptio

WHEN? Only if “Abruptio/Placenta Praevia/APH of Unknown Cause?” = “Yes”
Reasonably Definite Revealed Abruptio
Reasonably Definite Concealed Abruptio
Probable Revealed Abruptio
Probable Concealed Abruptio
No evidence of Abruptio
Other (Details)

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

Placenta Praevia

WHEN? Only if “Abruptio/Placenta Praevia/APH of Unknown Cause?” = “Yes”
Complete Placenta Praevia (Reasonably Definite)
Partial Placenta Praevia (Reasonably Definite)
Probable Placenta Pravia
No evidence of Placenta Praivia
Other (Details)

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

Significant Early Post-Partum Haemorrhage

WHEN? All (100%)
No
Yes
Unknown

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

Estimate of Blood Loss while still in the Place of Birth

WHEN? All (100%)
[Mls]
Unknown

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

Blood taken for Laboratory Testing
before leaving Delivery Suite

WHEN? All (100%)

Yes (Free Text Opportunity - Specify which tests)

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

Blood Transfusion given (or arranged)
in Delivery Suite

WHEN? All (100%)

No

Yes (Free Text Opportunity - Specify Quantity)

---

MANNERS - Maternity

F4. BIRTH EVENT – MOTHER – Immediate postpartum

---

Intrapartum haemorrhage

DATA ITEM

BASIS

EXPLANATION

INPUT OPTIONS

DATA ORIGIN

To identify risk factor and facilitate audit of best practice
West Midlands Advisory Board - Maternity

What if there has been an Abruptio
but no Haemorrhage?

Significant early postpartum
haemorrhage (PPH)

BASIS

EXPLANATION

INPUT OPTIONS

DATA ORIGIN

Any estimated blood loss >500mls or that which results in hypovolaemic shock within 2 hours of delivery
Mutually exclusive: Yes / No
Confidential Enquiry into Maternal Deaths, Health Outcome Indicators - Normal Pregnancy and Childbirth, West Midlands Advisory Board - Maternity, RCOG

Blood loss in labour, delivery & early PPH

BASIS

EXPLANATION

INPUT OPTIONS

DATA ORIGIN

Records total amount of blood loss
Mutually exclusive: Yes / No
Confidential Enquiry into Maternal Deaths, West Midlands Advisory Board - Maternity

Do they use a ruler in the West Midlands
to measure how high the blood spurts towards the ceiling!

---

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 71 of 171
Logical Prioritisation

“Paralysis by Analysis” Items therefore included in EEPD Volume III. The Resource Document but not in Volume IV. The “Fawdry 500” dataset

MANNERS - Maternity

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Skin to skin contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>Record of opportunity for bonding</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Possible effects on maternal/child relationship and likelihood of breastfeeding</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Mutually exclusive: Yes / No (+ free text to document details)</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>West Midlands Advisory Board - Maternity, SureStart</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Length of contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>Length of time taken when offer accepted</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Possible effects on maternal/child relationship and likelihood of breastfeeding</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Numerical format, expressed in minutes</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>West Midlands Advisory Board - Maternity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Put to breast</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>Record of opportunity to breastfeed as soon as possible following delivery</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Possible effects on maternal/child relationship and likelihood to succeed with breastfeeding</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Mutually exclusive: Yes / No (+ free text to document details)</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>Health Outcome Indicators - Normal Pregnancy and Childbirth, West Midlands Advisory Board - Maternity, SureStart</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Smoker at time of delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>Risk factor for current pregnancy</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Requirement for DSCN 50/2002</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Mutually exclusive: Yes / No</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>Health Outcome Indicators - Normal Pregnancy and Childbirth, West Midlands Advisory Board - Maternity, SureStart</td>
</tr>
</tbody>
</table>

Four more “Paralysis by Analysis”
(“Below the line”) Items
No value as “Individual Patient Encounter Assistance” (“Above the line”) Items.

A 1 in nn sample would probably give almost the same audit and managerial information with significantly less electronic data entry work by overburdened front line health care workers.

† = Must be removed when data is anonymity
Other IntraPartum or Early Postpartum Problems while still in Labour Ward

WHEN? All (100%)

No

Yes

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Severe Maternal Hypertension – Fulminating PET

WHEN? Only if “Other IntraPartum or Early Postpartum Problems while in Labour Ward?” = “Yes”

No

Yes (Free Text Opportunity - Details)

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Uterine Rupture

WHEN? Only if “Other IntraPartum or Early Postpartum Problems while in Labour Ward?” = “Yes”

None particular suspicion

Possible but not confirmed

Confirmed at or after delivery (Free Text Opportunity)

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral S

Other Intrapartum or Early Postpartum Problems

WHEN? Only if “Other IntraPartum or Early Postpartum Problems while in Labour Ward?” = “Yes”

No

Yes (Free Text Opportunity - Details)

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

E9-E. SPECIAL FEATURES

Life Threatening Events - Mother

WHEN? All (100%)

No

Yes (Free Text Opportunity)

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Life Threatening Events - Baby(ies)

WHEN? All (100%)

No

Yes (Free Text Opportunity)

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Important basis for Memos to Consultant and to Risk Assessors

DATA ITEM

Pregnancy induced hypertension (PIH)

BASES

Raised blood pressure during the pregnancy requiring extra surveillance and/or medication

EXPLANATION

Clinical factor relevant to pregnancy care, potential risk factors and outcome

INPUT OPTIONS

Mutually exclusive: Yes / No

DATA ORIGIN

Confidential Enquiry into Maternal Deaths, West Midlands Advisory Board - Maternity

† = Must be removed when data is anonymity © Rupert Fawdry 2005 “Logical Prioritisation” compared with MANNERS Maternity Page 73 of 171
Logical Prioritisation

E9-F. TRANSFER FROM LABOUR WARD

Post Delivery Transfer to

WHEN? All (100%)
Maternity Ward
Home
Intensive Care
High Dependency Unit
Not Transferred - Already at Home or similar
Died
Other (Free Text Opportunity)

Not relevant to a maternity computer system
Should be recorded on PAS.

MANNERS - Maternity

Transfer destination

DATA ITEM
Basis
EXPLANATION
INPUT OPTIONS
DATA ORIGIN

Transfer date

DATA ITEM
Basis
EXPLANATION
INPUT OPTIONS
DATA ORIGIN

Denotes place of care following delivery
Facilitates analysis of good practice guidelines and tracking of care episodes
Mutually exclusive: Postnatal Ward / Transitional care ward / Home / Mother & baby Unit / ITU / HDU Died / Other hospital (+ free text to document details) / Other (+ free text to document details)
Hospital Episode Statistics, Health Outcome Indicators - Normal Pregnancy and Childbirth

Date of transfer/ end of labour care episode
Facilitates tracking and calculation on care episodes
DD/M/YYY
Hospital Episode Statistics, West Midlands Advisory Board - Maternity

© Rupert Fawdry 2005

EEP.D.02_DATASETS.L_LARGE.MANNERS.500cfM-30 (27th November 2005)

† = Must be removed when data is anonymity

“Logical Prioritisation” compared with MANNERS Maternity Page 74 of 171
M. Motherhood - Postnatal

**Post-natal care from the Mother's point of view.**
Only **ONCE** items, even if multiple births

---

### M1. On Arrival in Post-Natal Ward - Mother

#### M1-A. ADMINISTRATIVE

**Mother’s Admission to Post Natal Ward (Date)**

WHEN? All (100%)

[Date]

Workload / Cost (All Phases of Maternity EPR) A1: Downloaded from PAS

---

### M2. Events from Birth to Post-Natal Discharge - Mother

*Probably only entered on Computer at the Time of Mother’s Discharge*

#### M2-A. SERIOUS INTRA PARTUM AND POST PARTUM PROBLEMS

**Any Significant Intra-Partum or Post-Partum Problems**

WHEN? All (100%)

No

Yes

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

**Possibly PET Related Problems**

WHEN? Only if “Any other Post-Partum Problems?” = “Yes”

No

Yes (Free text opportunity - details)

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

**Severe Gestational Proteinuric Hypertension (PET)**

WHEN? Only if “Any other Post-Partum Problems?” = “Yes” and if “Possibly PET Related Problems? = “Yes”

No

Yes

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

**Post Partum Hypertension, after leaving labour ward**

WHEN? Only if “Possibly PET Related Problems? = “Yes”

No

Yes (Give details)

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

---

H. POSTNATAL DATA - MOTHER

**DATA ITEM**

Medical complications

**BASIS**

Records medical complications relevant to outcome

**EXPLANATION**

Facilitates audit of best practice guidelines

**INPUT OPTIONS**

Non-mutually exclusive

- Hypertension
- Fits
- Cloting disorder
- Late PPH

**DATA ORIGIN**

Confidential Enquiry into Maternal Deaths, Health Outcome Indicators - Normal Pregnancy and Childbirth

*Non-mutually exclusive answers need to be documented separately since they have to be entered separately onto the electronic database if they are to be of any future use.*

Such answers look fine on paper but do not work on a computer

*How can you enter the data on someone who has more than one of the items on the list?*

---

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  
“Logical Prioritisation” compared with MANNERS Maternity  
Page 75 of 171
**Logical Prioritisation**

**Epileptiform Fit – including Eclampsia**

WHEN? Only if “Any other Post-Partum Problems?” = “Yes” and if “Possibly PET Related Problems? = “Yes”

*No*

Yes

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

**Coma**

WHEN? Only if “Any other Post-Partum Problems?” = “Yes” and if “Possibly PET Related Problems? = “Yes”

*No*

Yes

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

**Clotting Defect**

WHEN? Only if “Any other Post-Partum Problems?” = “Yes” and if “Possibly PET Related Problems? = “Yes”

*No*

Yes

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Phase 3 Electronically from Laboratory. A4: Downloaded from another computer.

Workload/Cost Free

**Platelets < 50,000 /uL**

WHEN? Only if “Any other Post-Partum Problems?” = “Yes” and if “Possibly PET Related Problems? = “Yes”

*No*

Yes

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Phase 3 Electronically from Laboratory. A4: Downloaded from another computer.

Workload/Cost Free

**Elevated Liver Enzymes**

WHEN? Only if “Any other Post-Partum Problems?” = “Yes” and if “Possibly PET Related Problems? = “Yes”

*No*

Yes

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

Phase 3 Electronically from Laboratory. A4: Downloaded from another computer.

Workload/Cost Free

**Any (other) Haemorrhage Related Problems**

WHEN? Only if “Any other Post-Partum Problems?” = “Yes”

*No*

Yes

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

**Late Post Partum Haemorrhage**

WHEN? Only if “Any (other) Haemorrhage Related Problems?” = “Yes”

*No*

Yes

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

**Post-Natal Blood Transfusion given**

WHEN? Only if “Any other Post-Partum Problems?” = “Yes”

*No*

Yes

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

**ERPC performed**

WHEN? Only if “Any other Post-Partum Problems?” = “Yes”

*No*

Yes

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

---

† = Must be removed when data is anonymity

EEP.D.02_DATASETS.L_LARGE.MANNERS.500cF-30 (27th November 2005)

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity Page 76 of 171

**MANNERS - Maternity**

*Whole Section still only partially implemented in MANNERS MATERNITY.*

**Essential expansion needed for any proper maternity computer system**
### Logical Prioritisation

#### Post-Natal Infection Problems

WHEN? Only if “Any other Post-Partum Problems?” =

<table>
<thead>
<tr>
<th>Yes</th>
<th>No (Free Text Opportunity - Details)</th>
</tr>
</thead>
</table>

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

#### Amniotic Fluid Embolism

WHEN? Only if “Any other Post-Partum Problems?” =

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

#### Major Surgery other than Caesarean

WHEN? Only if “Any other Post-Partum Problems?” =

<table>
<thead>
<tr>
<th>Yes</th>
<th>No (Free Text Opportunity - Details)</th>
</tr>
</thead>
</table>

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

#### Hysterectomy

WHEN? Only if “Any other Post-Partum Problems?” =

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

#### Other Major Surgery (Not Hysterectomy or C/S)

WHEN? Only if “Any other Post-Partum Problems?” =

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

#### Pulmonary Embolic Problem - Post Partum

WHEN? Only if “Any other Post-Partum Problems?” =

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

#### Cardio-Pulmonary Arrest

WHEN? Only if “Any other Post-Partum Problems?” =

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

### Antibiotic administration

<table>
<thead>
<tr>
<th>Data Item</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Records administration of antibiotics following caesarean section</td>
<td></td>
</tr>
</tbody>
</table>

| Explanation |
| Facilities audit of best practice guidelines |

| Input Options |
| Mutually exclusive: Yes / No |

| Data Origin |
| Confidential Enquiry into Maternal Deaths |

### Thromboprophylaxis given

| Data Item |
| Records administration of thrombolytic agents |

| Explanation |
| Facilities audit of best practice guidelines |

| Input Options |
| Mutually exclusive: Increased risk factors (e.g. previous history, high BMI) / Following caesarean section / On-going administration (due to episode during this pregnancy) None |

| Data Origin |
| Confidential Enquiry into Maternal Deaths |

---

† = Must be removed when data is anonymity

EEP.D.02_DATASETS.L_LARGE.MANNERS.500cfM-30 (27th November 2005)
© Rupert Fawdry 2005   “ Logical Prioritisation” compared with MANNERS Maternity  Page 77 of 171
**Logical Prioritisation**

**Severe Post-Partum Mental Health Disorder (Especially Psychosis or Depression)**

WHEN? Only if “Any other Post-Partum Problems?” = “Yes”

No

Yes  

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

---

**MANNERS - Maternity**

**DATA ITEM**  
Severe postnatal depression / Psychotic complicatons

**BASIS**  
Records episodes relevant to mental health and outcome

**EXPLANATION**  
Facilitates audit of best practice guidelines

**INPUT OPTIONS**  
Mutually exclusive: Psychiatric referral / Psychiatric admission / Medications (+ free text to document details) / None

**DATA ORIGIN**  
Confidential Enquiry into Maternal Deaths, Health Outcome Indicators - Normal Pregnancy and Childbirth

---

**DATA ITEM**  
Surgical complications

**BASIS**  
Records surgical complications relevant to outcome

**EXPLANATION**  
Facilitates audit of best practice guidelines

**INPUT OPTIONS**  
Non-mutually exclusive
  - Anaesthetic after delivery
  - ERPC
  - Hysterectomy

**DATA ORIGIN**  
Commissioning Data Set, Confidential Enquiry into Maternal Deaths

---

**Other significant Post-Partum problems**

WHEN? Only if “Any other Post-Partum Problems?” = “Yes”

No

Yes  

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

---

**Essential catch-all item**

in any proper maternity computer system

---

† = Must be removed when data is anonymity

EEP.D.02_DATASETS.L_LARGE.MANNERS.500cM-30 (27th November 2005)  
© Rupert Fawdry 2005  
“Logical Prioritisation” compared with MANNERS Maternity  
Page 78 of 171
Logical Prioritisation

M2-B. CLINICAL OBSERVATIONS / PROBLEMS

**Uterine Involution**
- WHEN? All (100%)
- No Uterine Involution Problems noted
- Slow Uterine Involution (Free Text Opportunity - Details)
- Unknown

**Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral**

**Urinary Incontinence**
- WHEN? All (100%)
- No Urinary Incontinence Problems noted
- Urinary Incontinence Problem - Possible (Free Text Opportunity - Details)
- Urinary Incontinence Problem - Definite (Free Text Opportunity - Details)
- Unknown

**Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral**

**Fecal Incontinence**
- WHEN? All (100%)
- No Fecal Incontinence Problems noted
- Fecal Incontinence Problem - Possible (Free Text Opportunity - Details)
- Fecal Incontinence Problem - Definite (Free Text Opportunity - Details)
- Unknown

**Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral**

M2-C. TESTS

**Most Recent Postpartum Haemoglobin**
- WHEN? All (100%)
- No Post-Partum Haemoglobin result recorded

**Workload / Cost (All Phases of Maternity EPR) until Phase 3 A2: Cost Neutral**

Phase 3 Electronic from Laboratory Computer. A4: Downloaded from another computer. Workload/Cost Free

M2-D. INJECTIONS

**Rubella Vaccination given**
- WHEN? Only if “Risk of Future Rubella Infection” = Yes
- Refused by Mother
- Not given reason Unknown
- Other (Free Text Opportunity - Details)

**Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral**

**Anti-D**
- WHEN? Only if “Risk of Future Rhesus Problems” = Yes
- Refused by Mother
- Not given Reason Unknown
- Other

**Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral**

† = Must be removed when data is anonymity

© Rupert Fawdry 2005   “Logical Prioritisation” compared with MANNERS Maternity   Page 79 of 171
Logical Prioritisation

M2-E, SPECIAL ADMISSIONS DURING BIRTH
EVENT ADMISSION

Admission to ICU during Birth Admission Episode
(Date)
WHEN? Only if known on PAS to have been admitted
to ITU
[Date]
Indication for Admission to Intensive Care Unit
WHEN? Only if known on PAS to have been admitted
to HDU
Haemorrhage
Anaesthetic Difficulties
PET
Other (Free Text Opportunity - Details)

Workload / Cost (All Phases of Maternity EPR) A1: Downloaded from PAS.

Admission to HDU during Birth Admission Episode
(Date)
WHEN? Only if known on PAS to have been admitted
to HDU
[Date]
Indication for Admission to High Dependency Unit
WHEN? Only if known on PAS to have been admitted
to HDU
Haemorrhage
PET
Infection
Other (Free Text Opportunity - Details)

Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral

† = Must be removed when data is anonymity
M3. At the Time of Post-Natal Discharge - Mother

M3-A. ADMINISTRATIVE

Mother’s Discharge from Post Natal Ward (Date)
 WHEN?  All (100%)
 [Date]
 Workload / Cost (All Phases of Maternity EPR) A1: Downloaded from PAS.

Number of Days as a Post Natal In-patient (Mother)
 WHEN?  All (100%)
 [Two character integer]
 Workload / Cost (All Phases of Maternity EPR)  A5: Computer-Generated: based on A1-4 data

Going Home to own Home address (Y/N)
 WHEN  All (100%)
 Yes
 No
 Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

Going Home to - Address 1-5 †
 WHEN  Only if "Going Home to own Home Address?" = "No"
 [Each line a 35 character field]
 [Line 1: Number or name of House]
 [Line 2: Name of Street]
 [Line 3: Name of Village / Town or District]
 [Line 4: Name of City or County]
 [Line 5: ]
 Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

Going Home to - Telephone Number †
 WHEN  Only if "Going Home to own Home Address?" = "No"
 [15 digit number]
 No telephone
 Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

End of Care should probably be on PAS system not on Maternity System?

End of care episode
 Date denoting change of care episode
 Facilitates tracking of care episodes and calculation of duration

INPUT OPTIONS
 DD/ MM/YYYY

DATA ORIGIN
 Commissioning Data Set, Hospital Episode Statistics, West Midlands Advisory Board - Maternity

End of care episode - Mother or End of care episode - Baby or just a generic item?

If Mother
 Date of end of Hospital General Maternal Care
 (Postnatal Discharge from Hospital of Mother)
 or ITU Maternal Care
 or Community Care of Mother?

If Baby
 Date of end of Hospital General Neonatal Care
 (Postnatal Discharge from Hospital of Baby)
 or Special Care Baby Unit
 or Community Care of Baby?

(Probably Hospital Discharge only)
 (since this is for Hospital Episode Statistics?)

† = Must be removed when data is anonymity
Logical Prioritisation

M3-B. PERINEUM, BREASTS AND MIDWIFERY MESSAGES

Perineal Problems

WHEN? All (100%)
No
Yes (Free Text Opportunity - Details)

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

Feeding Method at Discharge

WHEN? All (100%)
Breast
Formula
Stillbirth or Neonatal Death before discharge
Unknown

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

Breast Problems

WHEN? All (100%)
No
Yes (Free Text Opportunity - Details)

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

Clips or Non-Absorbable Sutures Removed

WHEN? Only if “Route of Birth” = “Caesarean Section”
or “Other (Abdominal)”
and “Skin Closure Method/Materials” = “Clips” or “Prolene or Nylon Equivalent” or
“Other: Non-Absorbable”(5%)
Yes (Free Text Opportunity - Details)
Not Yet (Free Text Opportunity - Details)

Workload / Cost (Phase 1 of Maternity EPR)  A2: Cost Neutral

Important Data Items missing from MANNERS MATERNITY

† = Must be removed when data is anonymity
Logical Prioritisation

M3-C. MEDICATION AND FAMILY PLANNING

Take Medications

**WHEN**
- All (100%)

**Yes (Free Text Opportunity - Details)**

**Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral**

**Family Planning discussed**

**WHEN**
- All (100%)
- No

**Yes**

**Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral**

**Contraception: Intended Method after Delivery**

**WHEN**
- Only if “Family Planning discussed?” = “Yes”

**Undecided**

**Unknown**

**Oral contraceptive - combined preparation**

**Oral contraceptive - progestogen only**

**Intra-uterine contraceptive device**

**Cap or diaphragm**

**Injectable contraceptive**

**Other chemicals (including sponge)**

**Sheath/condom - male**

**Sheath/condom - female**

**Rhythm method**

**Female sterilisation**

**Implant**

**Vasectomy**

**Other method**

**No method**

**Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral**

M3-E. OTHER FOLLOW UP

**Place for main Post-Natal check (Mother)**

**WHEN**
- All (100%)

**Health Centre / Surgery**

**Hospital**

**Other**

**Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral**

**Any Specialised Post-Natal Follow-up (Gynae Clinic etc)**

**WHEN**
- All (100%)

**No**

**Yes (Specify Date)**

**Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral**

**Post-Natal Gynaecology Appointment Arranged**

**WHEN**
- Only if “Any Specialised Follow-up?” = “Yes”

**No**

**Yes**

**Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral**

**Post-Natal Medical Appointment Arranged**

**WHEN**
- Only if “Any Specialised Follow-up?” = “Yes”

**No**

**Yes (Specify Date and Name of Consultant and/or**

**Clinic)**

**Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral**

**Any other Post-Natal Appointment (Mother)**

**WHEN**
- Only if “Any Specialised Follow-up?” = “Yes”

**No**

**Yes (Specify Date and Name of Consultant and/or**

**Department)**

**Workload / Cost (Phase 1 of Maternity EPR) A2: Cost Neutral**

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  " Logical Prioritisation" compared with MANNERS Maternity  Page 83 of 171
### B. Birth and Baby

**All Items which may DIFFER at the time of birth FOR EACH BABY IF MULTIPLE BIRTHS**

---

#### B1. Birth

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Birth order</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>The sequence in which the baby was born in a multiple birth</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Requirement for NN4B</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>To analyse pregnancy outcome according to birth order and to identify the individual baby resulting from a multiple birth pregnancy</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>Mutually exclusive: Singleton / First of twins / Second of twins / First of triplets, etc.</td>
</tr>
</tbody>
</table>

**Needs to come first in the baby section; not, as at present, half way through. Otherwise how do you know to which baby the following information refers!**

---

#### B1-A. DATE AND TIME OF BIRTH

**Birth of this Baby (or Fetus) - Date †**

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>All (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>1 Real Number Integer</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral</td>
</tr>
</tbody>
</table>

**Birth of this Baby (or Fetus) - Time †**

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>All (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>[Time : 24 hour clock ] Unknown</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral</td>
</tr>
</tbody>
</table>

---

### MANNERS - Maternity

**G1. BIRTH DETAILS – BABY - Delivery**

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Date of birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>Date of birth of the baby</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Requirement for NN4B</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Required to derive patient age for analysis by age at admission or discharge, for screening, to assist clinical care</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>DD/MM/YYYY British Association of Perinatal Medicine, BNDS, Commissioning Data Set, CESDi, Hospital Episode Statistics, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Time of birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>Time of birth of the baby</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Requirement for NN4B</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Required to derive patient age for analysis by age at admission or discharge, for screening, to assist clinical care</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>HH:MM (24 hour clock) British Association of Perinatal Medicine, BNDS, Commissioning Data Set, CESDi, Hospital Episode Statistics, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics</td>
</tr>
</tbody>
</table>

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  "Logical Prioritisation" compared with MANNERS Maternity  Page 84 of 171
Logical Prioritisation

B1-B. GESTATION

Gestation (Best Pre-Birth Estimate)

WHEN? All (100%)
[Weeks - Integer (up to 50)] + [Days - Integer (Up to 6)]
Unknown

Post-Term Birth

WHEN? All (100%)
No
Yes
Unknown (if gestation unknown)

Pre-Term Birth

WHEN? All (100%)
No
Yes
Unknown (if gestation unknown)

If Pre-Term, Steroids given

WHEN? Only if Pre-Term Birth = “Yes” (10%?)
Yes
No
Unknown (if gestation unknown)

Corrected Age of Baby

WHEN? All (100%)
Weeks - Integer (up to 50) + Days - Integer (Up to 6)
Uncertain (if gestation unknown)

MANNERS - Maternity

DATA ITEM  Gestation at delivery
BASIS  Number of weeks of age of baby at time of delivery calculated by first trimester dating ultrasound scan or menstrual date
EXPLANATION  Requirement for NN4B
A determinant of outcome
INPUT OPTIONS  Calculated field
DATA ORIGIN  British Association of Perinatal Medicine, BNDS, Commissioning Data Set, CESDI, Hospital Episode Statistics, Health Outcome Indicators - Normal Pregnancy and Childbirth, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

Needs to be part of the computer record both as part of the Maternal Section and as part of each neonate

Logical Prioritisation compared with MANNERS Maternity  Page 85 of 171

† = Must be removed when data is anonymity
Logical Prioritisation

B1-C. ACTUAL PLACE OF BIRTH

Place of Birth - NAME OF INSTITUTION or “Home” (Actual Place of Birth)

WHEN? All (100%)
Pick List of Name(s) of Local Institutions or “Home / Domestic Premises”
[Default to this Local Hospital]
Workload / Cost (All Phases of Maternity EPR) A5. Computer Generated - based on A1-4 data

Place of Birth - ADDRESS 1-5 (Actual Place of Birth)

WHEN? All (100%)
5 Lines each of 30 character Fields ????
Workload / Cost (All Phases of Maternity EPR) A5. Computer Generated

Place of Birth - Trust CODE (or a Code denoting a “Domestic Address”) (Actual Place of Birth)

WHEN. All (100%)
5 Character Field
Workload / Cost (All Phases of Maternity EPR) A5. Computer Generated

Place of Birth - Institution CODE (or a Code denoting a “Domestic Address”) (Actual Place of Birth)

WHEN. All (100%)
5 Character Field
Workload / Cost (All Phases of Maternity EPR) A5. Computer Generated

Place of Birth - RESPONSIBILITY for Cover (Actual Place of Birth)

WHEN? All (100%)
1. Obstetrician and Midwives (NHS)
2. Midwives only (NHS)
3. GP and Midwives (NHS)
4. Midwife(s) (Private Practice)
5. Obstetrician (Private Practice) and Midwives (NHS)
6. Obstetrician (Private Practice) and Midwives (Private)
7. Unknown
8. Other (Specify)
Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

B1-D. IF CONSULTANT RESPONSIBLE FOR COVER

Place of Birth - NAME OF (BACKUP) CONSULTANT (Actual Place of Birth)

WHEN? Only if “Place of Birth - RESPONSIBILITY for Cover (Actual Place of Birth)” (80%?)
= “1. Obstetrician and Midwives (NHS)”
or “5. Obstetrician (Private Practice) and Midwives (NHS)”
or “6. Obstetrician (Private Practice) and Midwives (Private)”

[Name from Pick List if possible]
Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

MANNERS - Maternity

Place of delivery

DATA ITEM Place of delivery
BASIS Location of place of delivery of baby
EXPLANATION Requirement for NN4B
INPUT OPTIONS Mutually exclusive: Hospital inside region (pick list) / Hospital outside region (+ free text to document details) / Home / Other (+ free text to document details)
DATA ORIGIN British Association of Perinatal Medicine, BDNS, Commissioning Data Set, CESDI, Hospital Episode Statistics, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

Hospital code

DATA ITEM Hospital code
BASIS Unique identifier denoting the hospital
EXPLANATION Requirement for NN4B
INPUT OPTIONS Linked to National Hospital database
DATA ORIGIN BNDS, Commissioning Data Set, CESDI, Hospital Episode Statistics, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

Trust or Institution code?

No official hospital code exists as far as I know. But if Trust Code then there is no way to look at Solihull separate from Heartlands, or Central Middlesex from Northwick Park; which is stupid.
May there is now a separate hospital code.
Needs clarification.

† = Must be removed when data is anonymity
© Rupert Fawdry 2005 “Logical Prioritisation” compared with MANNERS Maternity Page 86 of 171
Logical Prioritisation

B1-G. PRESENTATION

Lie / Presentation just before Birth

WHEN? All (100%)
1. Cephalic - Vertex
2. Cephalic - Face
3. Cephalic - Brow
4. Cephalic - Other/Unknown
5. Breech - Mento-Anterior
6. Breech - Mento-Posterior
7. Transverse or Oblique
8. Unknown
9. Other

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Presentation at Birth

WHEN? All (100%)
1. Cephalic - Vertex
2. Cephalic - Face
3. Cephalic - Brow
4. Cephalic - Other/Unknown
5. Breech - Mento-Anterior
6. Breech - Mento-Posterior
7. Transverse or Oblique
8. Unknown
9. Other

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

B1-H. OUTCOME

Outcome of Birth (Live or Stillbirth)

WHEN? All (100%)
- Livebirth
- Stillbirth - Death before onset of labour (definite)
- Stillbirth - Death before onset of labour (probable)
- Stillbirth - Death during labour (probable)
- Stillbirth - Time of Death uncertain

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Outcome of pregnancy

WHEN? All (100%)
- Records outcome of pregnancy
- Requirement for NN4B
- Facilitates audit on outcome
- Mutually exclusive: Live / Antepartum stillbirth / Intrapartum stillbirth / Indeterminate stillbirth / Spontaneous miscarriage / Miscarriage after invasive procedure / TOP – medical TOP - surgical Feticide / Alive but died / Other (+ free text to document details)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

DATA ORIGIN
- British Association of Perinatal Medicine, BNDS, Hospital Episode Statistics, West Midlands Advisory Board - Maternity
- British Association of Perinatal Medicine, BNDS, West Midlands Congenital Anomalies Register, Commissioning Data Set, CESDI, Hospital Episode Statistics, Health Outcome Indicators - Normal Pregnancy and Childbirth, West Midlands Advisory Board - Maternity, RCOG, SureStart

Fine for a Retrospective analysis but hopeless for a proper maternity electronic record. See section above on outcomes other than a term birth.

† = Must be removed when data is anonymity

© Rupert Fawdry 2005

EEP.D.02_DATASETS.L_LARGE.MANNERS.500cm-30 (27th November 2005)
Logical Prioritisation

B1-I. REGISTRATION

Sex of Baby for (provisional) Registration
WHEN? All (100%)

<table>
<thead>
<tr>
<th>GENDER</th>
<th>EXPLANATION</th>
<th>INPUT OPTIONS</th>
<th>DATA ORIGIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Phenotypic classification of appearance of sex of baby at delivery</td>
<td>Required for NN4B</td>
<td>British Association of Perinatal Medicine, BNDS, Commissioning Data Set, CESDI, Hospital Episode Statistics, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics</td>
</tr>
<tr>
<td>Male</td>
<td>Facilitates analysis of outcome by sex</td>
<td>Mutually exclusive: Male / Female / Not specified / Not known</td>
<td></td>
</tr>
<tr>
<td>Uncertain, Probably Male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uncertain, Probably Female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No differentiation (yet) possible</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Baby’s Surname
WHEN? All (100%)
35 character field

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Baby’s First Name
WHEN? All (100%)
30 character field?

"Undecided"

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

NHS Number (Baby)
WHEN? All (100%)
15 character field?

"Unknown"

"None Allocated"

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

NHS Baby Number

DATA ITEM | BASIS | EXPLANATION | INPUT OPTIONS | DATA ORIGIN |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Unique identifier for baby</td>
<td>Produced on submission of NN4B data - facilitates record linkage</td>
<td>Numerical – generated from NN4B notification</td>
<td>British Association of Perinatal Medicine, BNDS, Commissioning Data Set, CESDI, Hospital Episode Statistics, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics</td>
</tr>
</tbody>
</table>

Hospital or District or Unit or other Local Number (Baby) †
WHEN? All (100%)
10 character field?

"Unknown"

"None Allocated"

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Post Code - of Mother at time of Birth Event † (Remove second half)
WHEN? All (100%)
8 character field
Unknown

Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

Health District of Residence
WHEN? All (100%)
8 character field?
Unknown

Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

Code for Health Authority of Residence of Mother at Date of giving Birth
WHEN? All (100%)
8 character field
Unknown

Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

Code for Relevant Registrar of Births, Deaths & Marriages
WHEN? All (100%)
8 character field
Unknown

Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

Child Health Organisation Code
WHEN? All (100%)
5 character field
Unknown

Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

DATA ITEM | BASIS | EXPLANATION | INPUT OPTIONS | DATA ORIGIN |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>Link to Child Health system</td>
<td>Requirement for NN4B</td>
<td>Alphanumeric format</td>
<td>BNDS, West Midlands Advisory Board - Maternity</td>
</tr>
</tbody>
</table>

† = Must be removed when data is anonymity

EEP.D.02_DATASETS.L_LARGE.MANNERS.500cfM-30 (27th November 2005)
© Rupert Fawdry 2005  
“Logical Prioritisation” compared with MANNERS Maternity  Page 88 of 171
Logical Prioritisation

Notifying Person: Surname
WHEN? All (100%)
35 alphanumeric spaces
Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

Notifying Person: First Forename
WHEN? All (100%)
35 alphanumeric spaces
Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

Baby's Ethnic Group
WHEN? All (100%)
White
A British
B Irish
C Any other white background
Mixed
D White and Black Caribbean
E White and Black African
F White and Asian
G Any other mixed background
Asian or Asian British
H Indian
J Pakistani
K Bangladeshi
L Any other Asian background
Black or Black British
M Caribbean
N African
P Any other Black background
Other Ethnic Groups
R Chinese
S Any other ethnic group
Z Not stated

Workload / Cost (All Phases of Maternity EPR) B1: Retrospective Analysis only
Annually, if 100% + Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 1,550
hours Cost: £31,000

MANNERS - Maternity

DATA ITEM
Ethnic Origin
BASIS
Classification by origin to support medical data
EXPLANATION
The current Office of National Statistics/Census groupings do not meet requirements for medical data. In
the perinatal field, this includes detailing baby's ethnic origin when assessing birth centile and identifying those
at risk for haemoglobinopathy screening. The GEO classification is now used across the West Midlands.
However, the options do map to Office of National Statistics requirements for NN4B submissions.

INPUT OPTIONS
Mutually exclusive Pick list within each group
Africa
  North Africa
  Sub-Saharan
  Other
Asia
  India Pakistan
  Bangladesh
  China
  Far East Asia – Other
  South East Asia
  Other
Caribbean
  Europe
    - Britain
    - Ireland
    - Northern Europe
    - Western Europe
    - Southern Europe
    - Other
  Middle East
  Other

DATA ORIGIN
BNDS, Commissioning Data Set, Hospital Episode
Statistics, West Midlands Advisory Board - Maternity,
West Midlands Advisory Board - Paediatrics

Another “Paralysis by Analysis” ("Below the line") Item
No value as an “Individual Patient Encounter Assistance” ("Above the line") Item.

A 1 in nn sample would probably give almost the same
audit and managerial information
with significantly less electronic data entry work
by overburdened front line health care workers.

† = Must be removed when data is anonymity

EEP.D.02_DATASETS.L_LARGE.MANNERS.500cM-30 (27th November 2005)
© Rupert Fawdry 2005  “ Logical Prioritisation” compared with MANNERS Maternity  Page 89 of 171
**Logical Prioritisation**

---

**B2. Method of Birth**

---

**B2-A. ROUTE AND METHOD OF BIRTH**

1. Vag Ceph - Spontaneous (No operative assistance)
2. Vag Ceph - Ventouse
3. Vag Ceph - Outlet Forceps
4. Vag Ceph - Rotational Forceps
5. Vag Ceph - Other Forceps
6. Vag Ceph - Method Unknown
7. Vag Ceph - Other
8. Vag Breech - Spontaneous (No assistance),
9. Vag Breech - Assisted Birth,
10. Vag Breech - Breech Extraction,
11. Vag Breech - Forceps to the Aftercoming head,
12. Vag Breech - Unknown or Other,
14. Caesarean - Urgent
15. Caesarean - Scheduled.
16. Caesarean - Planned (Elective)
17. Caesarean - Perimortem
18. Caesarean - Grade of Urgency Unknown
19. Other
20. Unknown

**Route of Birth (Vaginal or Caesarean)**

**WHEN?** All (100%)

- Vaginal for this Baby
- Caesarean for this Baby
- Abdominal
- Other (Specify)

**Workload / Cost (All Phases of Maternity EPR)** A2: Cost Neutral

---

**B2-C. IF VAGINAL BIRTH AND CEPHALIC JUST BEFORE BIRTH**

**Method of Birth**

**WHEN?** Only if “Presentation just before Birth” = "Cephalic” and "Route of Birth” = “Vaginal” (80%)

1. Cephalic Vaginal - Spontaneous (No operative assistance)
2. Cephalic Vaginal - Ventouse
3. Cephalic Vaginal - Outlet Forceps
4. Cephalic Vaginal - Rotational Forceps
5. Cephalic Vaginal - Other Forceps
6. Cephalic Vaginal - Method Unknown
7. Cephalic Vaginal - Other
8. Breech Extraction
9. Other
10. Unknown

**Workload / Cost (All Phases of Maternity EPR)** A2: Cost Neutral

---

**Were there Problems with the delivery of the shoulders**

**WHEN?** Only if “Presentation at Birth (If Vaginal Delivery)” = "Cephalic" (80%)?

- No shoulder problems
- Any Problems with Shoulders (inc true Shoulder Dystocia)
- Moderate: Delay in shoulders less than two minutes, no damage expected
- Severe: Significant delay or assistance required or fetal damage expected/confirmed.

**Workload / Cost (All Phases of Maternity EPR)** A2: Cost Neutral

---

† = Must be removed when data is anonymity
Logical Prioritisation

B2-G. IF VAGINAL BREECH BIRTH

**Method of Birth**

WHEN? Only if “Presentation just before Birth” = “Breech” and “Route of Birth” = “Vaginal”

8. Vaginal Breech - Spontaneous (No assistance),
9. Vaginal Breech - Assisted Birth,
10. Vaginal Breech - Breech Extraction,
11. Vaginal Breech - Forceps to the Aftercoming head,
12. Vaginal Breech - Unknown or Other,
19. Other (Specify)
20. Unknown

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

B2-H. IF CAESAREAN BIRTH

**Urgency of Caesarean**

WHEN? Only if “Route of Birth (Vaginal or Caesarean)” = “Caesarean” (15%?)

14. Caesarean - Urgent
15. Caesarean - Scheduled.
16. Caesarean - Planned (Elective)
17. Caesarean - Perimortem
18. Caesarean - Grade of urgency unknown

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**CAESAREAN SECTION INDICATION(S)**

**Were the Indications and Main Reason for the Caesarean the same for this baby as for Baby 1**

WHEN Only if Multiple birth, and then only for Second and Subsequent births

Yes
No

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Factors in Decision to do a Caesarean**

WHEN? Only if “Route of Birth (Vaginal or Caesarean)” = “Caesarean” (15%?)

And if Multiple Birth and “Were the Indications and, if multiple birth, then the Main Reason for the Caesarean the same for this baby as for Baby 1” = “No”

**FETAL FACTORS**

Breech Presentation Yes / No / ?
Malpresentation Yes / No / ?
Unstable Lie Yes / No / ?
Multiple Pregnancy Yes / No / ?
Concern regarding Suspicious or Pathological CTG Yes / No / ?

Low Fetal Hydrogen ion concentration (previous called pH) Yes / No / ?
Other reason for Fetal Compromise concern Yes / No / ?
Growth Retardation (IUGR) concern Yes / No / ?
Cord Prolapse Yes / No / ?
Chorioamnionitis Yes / No / ?
Other Fetal Indication Yes (Free Text) / No / ?

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

† = Must be removed when data is anonymity
## Logical Prioritisation

### MATERNAL FACTORS

<table>
<thead>
<tr>
<th>Factor</th>
<th>Yes / No / ?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Placenta praevia, actively bleeding</td>
<td>Yes / No / ?</td>
</tr>
<tr>
<td>Placenta praevia, not actively bleeding</td>
<td>Yes / No / ?</td>
</tr>
<tr>
<td>APH / Intrapartum haemorrhage</td>
<td>Yes / No / ?</td>
</tr>
<tr>
<td>Placental Abruption</td>
<td>Yes / No / ?</td>
</tr>
<tr>
<td>Pre-eclampsia / Eclampsia / HELLP</td>
<td>Yes / No / ?</td>
</tr>
<tr>
<td>Maternal medical disease</td>
<td>Yes / No / ?</td>
</tr>
<tr>
<td>Failure to progress (induction / labour)</td>
<td>Yes / No / ?</td>
</tr>
<tr>
<td>Previous Caesarean Section</td>
<td>Yes / No / ?</td>
</tr>
<tr>
<td>Uterine Rupture</td>
<td>Yes / No / ?</td>
</tr>
<tr>
<td>Previous Poor Obstetric Outcome</td>
<td>Yes / No / ?</td>
</tr>
<tr>
<td>Previous traumatisce vaginal delivery (Physical)</td>
<td>Yes / No / ?</td>
</tr>
<tr>
<td>Previous traumatisce vaginal delivery (Emotional)</td>
<td>Yes / No / ?</td>
</tr>
<tr>
<td>Previous Infertility Problem</td>
<td>Yes / No / ?</td>
</tr>
<tr>
<td>Maternal Request</td>
<td>Yes / No / ?</td>
</tr>
<tr>
<td>Other Maternal Indication</td>
<td>Yes (Free Text) / No / ?</td>
</tr>
<tr>
<td>Workload / Cost (All Phases of Maternity EPR)</td>
<td>A2: Cost Neutral</td>
</tr>
</tbody>
</table>

## Caesarean primary reason

**DATA ITEM**

- Records reason for decision

**BASIS**

- Facilitates audit of best practice and trends in

**EXPLANATION**

- Mutually exclusive: Fetal / Maternal

**INPUT OPTIONS**

- Fetal
  - Not cephalic
  - Multiple pregnancy
  - Baby size problem
  - Compromise, presumed
  - Cord prolapse
  - Chorioamnionitis

- Maternal
  - Placenta praevia
  - APH / Intrapartum haemorrhage
  - Placental abruption
  - Preeclampsia / Eclampsia / HELLP
  - Medical disease
  - Failure to progress
  - Previous caesarean section
  - Previous poor outcome
  - Previous emotional/physical traumatic vaginal delivery
  - Previous infertility
  - Uterine rupture
  - Maternal request

**DATA ORIGIN**

- Hospital Episode Statistics, West Midlands Advisory Board - Maternity

---

**Any reasonable computer system must record more than one factor which led to the Caesarean, otherwise an attempted study of all cases involving one particular reason e.g. Previous Caesarean, will miss relevant cases where this was considered not to be the primary reason e.g. Previous Caesarean and Abruptio etc.**
B3. Labour

B3-A. FETAL MONITORING. POSSIBLE COMPROMISE

**Concern over Fetal Distress during Labour (regarding this baby)**

- **WHEN?** Only if “Was there a Labour?” = “Yes” (90%)?
  - **No concern**
  - **Concern but no fetal blood sample**
  - **Concern following Fetal Blood Sample**
  - **Unknown**

Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral

**Prolapse or Presentation of the Cord (this baby)**

- **WHEN?** Only if “Was there a Labour?” = “Yes” (90%)?
  - **No**
  - **Cord Prolapse**
  - **Cord Presentation**
  - **Uncertain**

Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral

---

**Data Items & Explanations**

- **Monitoring during established labour**
  - **Basis:** Minimum standards of care in labour (NICE)
  - **Explanations:** To facilitate audit of best practice
  - **Input Options:** Mutually exclusive: Intermittent / Continuous /
    Intermittent and continuous / None
  - **Data Origin:** West Midlands Advisory Board - Maternity, RCOGternity,
    West Midlands Advisory Board - Paediatrics

**How does one define “Intermittent and Continuous”**

Another “Paralysis by Analysis” (“Below the line”) Item
No value as an “Individual Patient Encounter Assistance” (“Above the line”) Item.

A 1 in nn sample would probably give almost the same audit and managerial information
with significantly less electronic data entry work by overburdened front line health care workers.

**G4. BIRTH DETAILS – BABY – Complications of labour & birth**

- **Suspected fetal compromise (distress)**
  - **Basis:** Records possible clinical complication
  - **Explanations:** Aids in determination of potential risk factors for baby
    and facilitates audit of practice
  - **Input Options:** Mutually exclusive: Yes / No
  - **Data Origin:** West Midlands Advisory Board - Maternity

- **Cord prolapse**
  - **Basis:** Records possible clinical complication
  - **Explanations:** Aids in determination of potential risk factors for baby
    and facilitates audit of practice
  - **Input Options:** Mutually exclusive: Yes / No / Not known
  - **Data Origin:** West Midlands Advisory Board - Maternity

† = Must be removed when data is anonymity
Logical Prioritisation

B3-B. LABOUR TIMINGS

Was there a Second Stage

WHEN? "Was there Labour before Birth" = "Yes" (and if Method of Birth" = "Caesaean then at time of Caesarean,
was “Dilatation of Cervix” = “Fully dilated” (90%)?

Yes (Definitely or Probably)

No

Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral

Best Estimate of the Onset of the Second Stage

(Date)

WHEN? Only if: “Second Stage” = “Yes” (80%)?

[Date]

Unknown

Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral

Best Estimate of the Onset of the Second Stage

(Time)

WHEN? As above

[Time]

Unknown

Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral

Duration of First Stage (for this Baby)

WHEN? Only if: See Above (80%)?

[Hours and Minutes]

Workload / Cost (All Phases of Maternity EPR)  A5: Computer Generated

Prolonged First Stage (for this Baby)

WHEN? As Above

No

Yes

Workload / Cost (All Phases of Maternity EPR)  A5: Computer Generated

Duration of Second Stage (for this Baby)

WHEN? As Above

[Hours and Minutes]

Workload / Cost (All Phases of Maternity EPR)  A5: Computer Generated

Prolonged Second Stage

WHEN? As Above

No

Yes

Workload / Cost (All Phases of Maternity EPR)  A5: Computer Generated

Essential Item for Flow-patterning

DATA ITEM  Length of first stage

BASIS To record basic chronology of labour

EXPLANATION To facilitate audit of standards of care in labour

INPUT OPTIONS Calculated field

DATA ORIGIN Hospital Episode Statistics, West Midlands Advisory Board - Maternity

DATA ITEM  Length of second stage

BASIS To record basic chronology of labour

EXPLANATION To facilitate audit of standards of care in labour

INPUT OPTIONS Calculated field

DATA ORIGIN Hospital Episode Statistics, West Midlands Advisory Board - Maternity
### B5. Membranes and Liquor

#### B5-A. RUPTURE OF MEMBRANES

**Rupture of Membranes (Date) †**  
[Remove Day, Retain Month & Year]

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>All (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Date]</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
</tr>
</tbody>
</table>

Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral

**Rupture of Membranes (Time) †**

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>All (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Time: 24 hour clock]</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
</tr>
</tbody>
</table>

Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral

**Liquor Loss before Onset of Labour**

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>All (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
</tr>
</tbody>
</table>

Workload / Cost (All Phases of Maternity EPR)  A5: Computer Generated

**Membrane Rupture / Birth Interval**

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>All (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Hours &amp; Minutes]</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
</tr>
</tbody>
</table>

Workload / Cost (All Phases of Maternity EPR)  A5: Computer Generated

**Prolonged Rupture of Membranes**

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>All (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
</tr>
</tbody>
</table>

Workload / Cost (All Phases of Maternity EPR)  A5: Computer Generated

**Prophylactic Antibiotics given during Labour**

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>All (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
</tr>
</tbody>
</table>

Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral

**Gestation at Rupture of Membranes**

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>All (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weeks - Integer (up to 50) + Days - Integer (Up to 6)</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
</tr>
</tbody>
</table>

Workload / Cost (All Phases of Maternity EPR)  A5: Computer Generated

**Pre-Term Rupture of Membranes**

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>All (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
</tr>
</tbody>
</table>

Workload / Cost (All Phases of Maternity EPR)  A5: Computer Generated

---

**DATA ITEM**  Length of time of ROM before delivery  
**BASIS**  Length of time elapsed between ROM and birth  
**EXPLANATION**  Identifies risk factor and Facilitates audit of best practice  
**INPUT OPTIONS**  Calculated field  
**DATA ORIGIN**  West Midlands Advisory Board - Maternity

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 95 of 171

EEP.D.02_DATASETS.L_LARGE.MANNERS.500cfM-30 (27th November 2005)
Logical Prioritisation

B5-B. LIQUOR

Quantity of Liquor
WHEN? All (100%)
Average
Excessive
Reduced
Unknown

Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral

Meconium in Liquor
WHEN? All (100%)
Clear/straw coloured
Blood-stained /Meconium stained
   Grade 1 - minor, green-stained
Meconium stained
   Grade II - moderate, particulate matter seen
Meconium stained
   Grade III - thick, lumpy
Other discolouration
No liquor seen
Unknown

Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral

Condition of Liquor (Possible/Probable Infection)
WHEN? All (100%)
No evidence of Infection
Possible Infection
Purulent
Unknown

Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral

Liquor Volume in Manners Maternity for some reason only appears as part of the Anomaly Scan Data. It should also be here

DATA ITEM  Liquor condition
BASIS  Records clinical observation of liquor
EXPLANATION  Aids in determination of potential risk factors for baby and facilitates audit of practice
INPUT OPTIONS  Mutually exclusive: Clear / Thin meconium / Thick meconium / Blood stained / No liquor seen / Not known
DATA ORIGIN  West Midlands Advisory Board - Maternity, NICE, RCOG

† = Must be removed when data is anonymity

EEP.D.02_DATASETS.L_LARGE.MANNERS.500cM-30 (27th November 2005)
© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 96 of 171
Logical Prioritisation

B7. Professional Staff at Birth

B7-A. WHO ‘DID’ THE DELIVERY

Profession of Person who ‘did’ the Delivery

WHEN? All (100%)
- Midwife (Including Trainees)
- Hospital Doctor (Including Trainees)
- General Practitioner (Including Trainees)
- None - Delivered Herself
- Other (Specify)

Unknown

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, if 100% + Data Entry by Midwife + Known (4 secs), Extra Workload: 620 hours
Cost: £12,400

Person who ‘did’ the Delivery (Name) †

WHEN? All (100%)
- [Name][Appropriate Pick List]
- or
- Locum
- Bank
- New Staff not on the system yet
- Temporary Trainee
- Other (Name)
- Unknown

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, if 80% + Known (4 secs) + Data Entry by Midwife, Extra Workload: 500 hours
Cost: £9,920

Person who ‘did’ the Delivery (Grade)

WHEN? All (100%)
- [Grade/Seniority]

Person who ‘did’ the Delivery (Governance Code)

WHEN? All (100%)
- [Code]

Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

IF LOCUM, BANK, NEW STAFF, TEMPORARY TRAINEE, OTHER ‘DID’ THE DELIVERY

Locum, Bank, New Staff, Temporary Trainee, Other (Name)

WHEN Only if “Name of Health Care Worker” = “Locum”,
- “New Staff”, “Temporary Trainee”, “Other”

[Free Text]

Workload / Cost (All Phases of Maternity EPR) A2 : Individual Care Quality.
Annually, if 5% + Ask and Free Text (20 secs) + Data Entry by Midwife, Extra Workload: 154 hours. Cost: £3,100

Locum, Bank, New Staff, Other (Seniority)

WHEN Only if “Name of Health Care Worker” = “Locum”,
- “New Staff”, “Other”

[Free Text]

Workload / Cost (All Phases of Maternity EPR) A2 : Individual Care Quality.
Annually, if 5% + Ask and Free Text (20 secs) + Data Entry by Midwife, Extra Workload: 154 hours. Cost: £3,100

Locum, Bank, New Staff, Other (Governance Code)

WHEN Only if “Name of Health Care Worker” = “Locum”,
- “New Staff”, “Other”

[Free Text]

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, if 5% + Ask and Free Text (20 secs) + Data Entry by Midwife, Extra Workload: 154 hours. Cost: £3,100

A proper discharge letter should include the name of the person who did the actual delivery

DATA ITEM Grade
BASIS Record of professional responsible for delivery
EXPLANATION Facilitates audit of practice
INPUT OPTIONS Mutually exclusive: Midwife / Student midwife / Consultant / Registrar / GP / Other
DATA ORIGIN Commissioning Data Set, Hospital Episode Statistics, West Midlands Advisory Board - Maternity

† = Must be removed when data is anonymity
Bureaucratic unjustifiable addition to the workload. The name is, as far as I know, NOT required by law, only by custom

If it ever became necessary for this to be known it should be easy to find out from the paper record. What a waste of valuable staff time having to enter it onto a computer.

Does anyone in the universe know of any occasion when this entry onto a computer system has ever been used for any useful purpose whatsoever?
Was the Person “Doing/Attending” the Delivery Supervised?

- **WHEN?** All (100%)
- **No**
- **Yes**
- **Unknown**

**Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality**
- Annually, if 85% + Known (4 secs) + Data Entry by Midwife, Extra Workload: 500 hours
- Cost: £9,920

**Profession of Supervisor**

- **WHEN?** Only if “Was the Person “Doing/Attending” the Delivery Supervised?” = “Yes” (5%?)
  - Midwife
  - Hospital Doctor
  - General Practitioner
  - Other
  - Unknown

**Person supervising the Delivery (Name)**

- **WHEN?** Only if “Was the Person “Doing/Attending” the Delivery Supervised?” = “Yes” (5%?)
  - [Appropriate Pick List]
  - or
  - Locum
  - Bank
  - New Staff not on the system yet
  - Temporary Trainee
  - Other (Name)
  - Unknown

**Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality**
- Annually, if 5% + Known (4 secs) + Data Entry by Midwife, Extra Workload: 31 hours
- Cost: £2,480

**Person supervising the Delivery (Grade/Seniority)**

- **WHEN?** Only if “Was the Person “Doing/Attending” the Delivery Supervised?” = “Yes” (5%?)
  - Set List of Allowable Grades for Midwives
  - Other
  - Unknown

**Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated**
- Locum, Bank, New Staff, Other (Name)
- Locum, Bank, New Staff, Temporary Trainee, Other (Name)

**IF LOCUM, BANK, NEW STAFF, TEMPORARY TRAINEE, OTHER WHO SUPERVISED**

- **Locum, Bank, New Staff, Temporary Trainee, Other (Name)**
  - **WHEN** Only if “Name of Health Care Worker” = “Locum”,
  - “New Staff”, “Temporary Trainee”, “Other”
  - [Free Text]

**Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality**
- Annually, if 5% + Ask and Free Text (20 secs) + Data Entry by Midwife, Extra Workload: 154 hours
- Cost: £3,100

- **Locum, Bank, New Staff, Other (Seniority)**
  - **WHEN** Only if “Name of Health Care Worker” = “Locum”,
  - “New Staff”, “Other”
  - [Free Text]

**Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality**
- Annually, if 5% + Ask and Free Text (20 secs) + Data Entry by Midwife, Extra Workload: 154 hours
- Cost: £3,100

- **Locum, Bank, New Staff, Other (Governance Code)**
  - **WHEN** Only if “Name of Health Care Worker” = “Locum”,
  - “New Staff”, “Other”
  - [Free Text]

**Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality**
- Annually, if 5% + Ask and Free Text (20 secs) + Data Entry by Midwife, Extra Workload: 154 hours
- Cost: £3,100

† = Must be removed when data is anonymity
### B8-A. RESUSCITATION

#### Type of Resuscitation

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>All (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Minimal</td>
<td></td>
</tr>
<tr>
<td>More Complex</td>
<td></td>
</tr>
<tr>
<td>Not known</td>
<td></td>
</tr>
<tr>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>

**Basis**
- Workload / Cost (All Phases of Maternity EPR)
- A2: Cost Neutral

**Explanation**
- Staff trained in neonatal resuscitation favourably influence the management and outcome of an ill or preterm baby requiring resuscitation

**Input Options**
- Non-mutually exclusive: Midwife / Neonatal Nurse / ANNP / SHO / Reg istrar / Consultant

**Data Origin**
- CESDI, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

#### Non-mutually exclusive answers

Need to be documented separately since they have to be entered separately onto the electronic database if they are to be of any future use. Such answers look fine on paper but do not work on a computer

How can you enter the data on someone who has more than one of the items on the list?

One of the most stupid and time consuming questions in all of medical IT. Never answered accurately but wastes massive amounts of overburdened staff time!!

#### Type of Basic Resuscitation

**WHEN?** Only if “Type of Resuscitation” = “Minimal”

**Input Options**
- Airways Maneouvres & Suction ONLY
- Airways Maneouvres, Suction & Facial Oxygen

**Data Origin**
- Commissioning Data Set, Hospital Episode Statistics, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

#### Type of IPPV

**WHEN?** Only if “Type of Resuscitation” = “More Complex” (20%?)

**Input Options**
- Face Mask and IPPV
- Intubation and IPPV

**Data Origin**
- Hospital Episode Statistics, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

### G5. BIRTH DETAILS – BABY – Resuscitation details

#### Professionals present at resuscitation

**Basis**
- A record of personnel present at resuscitation

**Explanation**
- Staff trained in neonatal resuscitation favourably influence the management and outcome of an ill or preterm baby requiring resuscitation

**Input Options**
- Non-mutually exclusive: Midwife / Neonatal Nurse / ANNP / SHO / Reg istrar / Consultant

**Data Origin**
- CESDI, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

#### Intermittent Positive Pressure Ventilation (IPPV)

**Basis**
- Identifies method of delivering respiratory support

**Explanation**
- The need for endotracheal IPPV is an indicator of continuing need for airway support

**Input Options**
- Mutually exclusive: Face mask / Endotracheal tube / Both / None

**Data Origin**
- Hospital Episode Statistics, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

#### Age at intubation

**Basis**
- Records age at which baby was intubated

**Explanation**
- A measure of the time taken to secure baby’s airway during resuscitation and a means of recording compliance with RCPCH RDS guideline and surfactant administration in appropriate cohort

**Input Options**
- MM (to nearest minute)

**Data Origin**
- Hospital Episode Statistics, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

---

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  "Logical Prioritisation" compared with MANNERS Maternity  Page 100 of 171
Logical Prioritisation

Chest Compression
WHEN? Only if “Type of Resuscitation” = “More Complex” (5%?)

Face Mask IPPV

Intubation and IPPV
Workload / Cost (All Phases of Maternity EPR)A3: Individual Care Quality.
Annually, if 20% + Known (4 secs) + Data Entry by Midwife. Extra Workload: 124 hours Cost: £2,480

Drugs given for Resuscitation
WHEN? Only if “Type of Resuscitation” = “More Complex” (20%)

No
Yes
Unknown
Workload / Cost (All Phases of Maternity EPR)A3: Individual Care Quality.
Annually, if 5% + Known (4 secs) + Data Entry by Midwife. Extra Workload: 31 hours Cost: £620

**Adrenaline**
WHEN? Only if “Drugs given for Resuscitation?”= “Yes”
(5%?)

No
Yes
Unknown
Workload / Cost (All Phases of Maternity EPR)A3: Individual Care Quality.
Annually, if 5% + Known (4 secs) + Data Entry by Midwife. Extra Workload: 31 hours Cost: £620

**Sodium Bicarbonate**
WHEN? Only if “Drugs given for Resuscitation?”= “Yes”
(5%?)

No
Yes
Unknown
Workload / Cost (All Phases of Maternity EPR)A3: Individual Care Quality.
Annually, if 5% + Known (4 secs) + Data Entry by Midwife. Extra Workload: 31 hours Cost: £620

**Volume of i/v fluids**
WHEN? Only if “Sodium Bicarbonate”= “Yes” (5%?)

[Miss]
Unknown
Workload / Cost (All Phases of Maternity EPR)A3: Individual Care Quality.
Annually, if 5% + Known (4 secs) + Data Entry by Midwife. Extra Workload: 31 hours Cost: £620

**Glucose**
WHEN? Only if “Drugs given for Resuscitation?”= “Yes”
(5%?)

No
Yes
Unknown
Workload / Cost (All Phases of Maternity EPR)A3: Individual Care Quality.
Annually, if 5% + Known (4 secs) + Data Entry by Midwife. Extra Workload: 31 hours Cost: £620

Other Drugs for Resuscitation (Specify)
WHEN? Only if “Drugs given for Resuscitation?”= “Yes”
(5%?)

None
Yes (Specify)
Unknown
Workload / Cost (All Phases of Maternity EPR)A3: Individual Care Quality.
Annually, if 5% + Known (4 secs) + Data Entry by Midwife. Extra Workload: 31 hours Cost: £620

Surfactant. See S. SCBU dataset

B8-B. RESUSCITATION OF BABY AT BIRTH

Paediatric Consultant (normally the one on duty?)
WHEN? Only if “Livebirth” (>99%)
[Name of Consultant Paediatrician]
Workload / Cost (All Phases of Maternity EPR)A2: Cost Neutral - Pick List

MANNERS - Maternity

**External cardiac massage given**
DATA ITEM
BASIS
EXPLANATION
INPUT OPTIONS
DATA ORIGIN

Record of use of this procedure
Facilitates audit of resuscitation practice and best practice guidelines
Mutually exclusive: Yes / No
West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

**Drugs given**
DATA ITEM
BASIS
EXPLANATION
INPUT OPTIONS
DATA ORIGIN

Record of use of any drugs for resuscitation
Facilitates audit of resuscitation practice and best practice guidelines
Non-mutually exclusive
Adrenaline
Bicarbonate
Glucose
Hospital Episode Statistics, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

Non-mutually exclusive answers need to be documented separately since they have to be entered separately onto the electronic database if they are to be of any future use.

*Such lists of potential answers look fine on paper but do not work on a computer*

How can you enter the data on someone who has more than one of the items on the list?
B8-C. APGARS ETC

Apgar Score at 1 minute
WHEN? Only if “Outcome of Birth?” = “Livebirth” (>99%)
Two Digit Integer Number (0 - 10)
Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Apgar Score at 5 minutes
WHEN? Only if “Outcome of Birth?” = “Livebirth” (>99%)
Two digit Integer Number (0 - 10)
Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Duration from Birth until Heart Rate > 100 bpm
WHEN? Only if “Outcome of Birth?” = “Livebirth” (>99%)
Duration in Minutes
Unknown
Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

B9. Baby Care & Observations

B9-A. VITAMIN K

Vitamin K (Konakion) given / not given
WHEN? Only if “Outcome of Birth?” = “Livebirth” (>99%)
Given
Not given - Clinical Reason
Declined by Parent(s)
Not given for other reasons
Unknown if given or not
Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Route of Vitamin K
WHEN? Only if “Vitamin K” = “Given” (>99%)
Intramuscular
Intravenous
Oral
Unknown
Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Dose of Vitamin K
WHEN? Only if “Vitamin K” = “Given” (>99%)
Allowable Doses ???
Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Data Item: Apgar score at 1 minute of age of baby
Basis: An assessment of the baby’s physical condition at birth
Explanation: Low apgar score indicates need for resuscitation and is related to outcome
Input Options: Numerical format
Data Origin: Hospital Episode Statistics, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

Data Item: Apgar score at 5 minutes of age of baby
Basis: An assessment of the baby’s physical condition at birth
Explanation: Low apgar score indicates need for resuscitation and is related to outcome
Input Options: Numerical format
Data Origin: Hospital Episode Statistics, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

Data Item: Vitamin K
Basis: Prevention of Vitamin K deficient bleeding of the newborn (VKDB)
Explanation: Vitamin K administration prevents VKDB
Input Options: Mutually exclusive: Given IV Given IM / Given orally – no further doses needed / Given orally – further doses needed / Not given
Data Origin: Department of Health PL/CMO/98/3; Department of Health PL/CMO/98/4; Department of Health/HMSO 2000, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

† = Must be removed when data is anonymity

© Rupert Fawdry 2005 “Logical Prioritisation” compared with MANNERS Maternity
### Logical Prioritisation

#### B9-C. INITIAL MEASUREMENTS

**Birth Weight (Gms)**
- **WHEN?** All (100%)
- **Basis** [Weight in Grams]
- **Explanations** Requirement for NN4B
- **Input Options** Numerical format, expressed in grams
- **Data Origin** British Association of Perinatal Medicine, BNDS, Commissioning Data Set, CESDI, Hospital Episode Statistics, Health Outcome Indicators - Normal Pregnancy and Childbirth, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics, SureStart

**Calculated Centile Weight for Gestation**
- **WHEN?** All (100%)
- **Basis** [Centile Weight]
- **Explanations** Determines potential risk factors for baby and facilitates audit of outcome
- **Input Options** Calculated field
- **Data Origin** GROW, West Midlands Advisory Board - Maternity, RCOG

**Below 10th centile weight for gestation**
- **WHEN?** All
- **No**
- **Yes**
- **Explanations**
- **Data Origin**

**Length of Baby at Birth**
- **WHEN?** All (100%)
- **Basis** [Centimetres]
- **Explanations**
- **Input Options**
- **Data Origin**

**Ponderal Index of Baby at Birth?**
- **WHEN?** All (100%)
- **Basis** [Two digit Number]
- **Explanations**
- **Input Options**
- **Data Origin**

**Head Circumference at Birth**
- **WHEN?** All (100%)
- **Basis** [Centimetres]
- **Explanations**
- **Input Options**
- **Data Origin**

---

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  
“Logical Prioritisation” compared with MANNERS Maternity  
Page 103 of 171
Logical Prioritisation

B9-E. CONGENITAL ANOMALIES ON SIMPLE INSPECTION AT DELIVERY

Notifiable Congenital Anomaly(ies) apparent on Inspection at delivery
(possible / probable / definite)
WHEN? All (100%)
Yes
No
Unknown
Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Possible Down’s Syndrome
WHEN? Only if “Notifiable Congenital Anomaly(ies) apparent on Inspection at delivery” (2%) (possible / probable / definite) = “Yes”
Yes
No
Unknown
Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Possible Neural Tube Defect
WHEN? As above
Yes
No
Unknown
Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Absent Digits
WHEN? As above
Yes (Opportunity for free text)
No
Unknown
Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Hare Lip
WHEN? As above
Yes (Opportunity for free text)
No
Unknown
Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Definite or Possible Cleft Palate
WHEN? As above
Yes (Opportunity for free text)
No
Unknown
Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

B9-F. CORD OBSERVATIONS

Number of Cord Vessels
WHEN? All (100%)
Three
Two only
Unknown
Other
Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

MANNERS - Maternity

G3. BIRTH DETAILS – BABY – Congenital anomalies (at birth)

DATA ITEM Congenital anomaly
BASIS Presence of a congenital anomaly excluding those detailed in EUROCAT
EXPLANATION To measure incidence of congenital anomaly in babies born
INPUT OPTIONS Mutually exclusive: Yes / No / Suspected
DATA ORIGIN British Association of Perinatal Medicine, West Midlands Congenital Anomalies Register, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

DATA ITEM Date of notification
BASIS Record of notification
EXPLANATION Facilitates audit of process and dissemination of information to parents
INPUT OPTIONS DD/MM/YYYY
DATA ORIGIN West Midlands Congenital Anomalies Register, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

Another “Paralysis by Analysis” (“Below the line”) Item
No value as an “Individual Patient Encounter Assitance” (“Above the line”) item.

DATA ITEM Details of anomaly
BASIS Clinical factor relevant to clinical care
EXPLANATION Determines potential risk factors and outcome for baby
INPUT OPTIONS Non-mutually exclusive:
- Abnormal karyotype
- Central nervous type
- Cardiac / CVS
- Renal / urogenital
- Skeletal / limb
- Head & neck
- Chest & abdominal Syndrome
- Other (+ free text to document details)
DATA ORIGIN West Midlands Congenital Anomalies Register, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

Non-mutually exclusive answers need to be documented separately since they have to be entered separately onto the electronic database if they are to be of any future use.

Such answers look fine on paper but do not work on a computer

How can you enter the data on someone who has more than one of the items on the list?
Placenta Weight
WHEN? All (100%)
[Grammes]
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 100% + Time Consuming Look Up by Midwife (10 secs). Extra Workload: 1,550 hours. Cost: £31,000

Baby / Placenta Ratio
WHEN? All (100%)
[True Number to one decimal point]
Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated

Placenta Investigation
or Comments about Appearance
WHEN? All (100%)
No
Yes
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 100% + Time Consuming Look Up by Midwife (10 secs). Extra Workload: 1,550 hours. Cost: £31,000

Placental Infarction
WHEN? Only if “Placenta Investigation or Comments about Appearance?” = “Yes” (10%?)
No significant infarction noted
Significant Placental Infarction
Some moderate/mild evidence of Infarction
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 10% + Known (4 secs) + Data Entry by Midwife. Extra Workload: 62 hours
Cost: £1,240

Possible Placental Abruption
WHEN? Only if “Placenta Investigation or Comments about Appearance?” = “Yes” (10%?)
No Evidence of Abruption
Possible/Probable Evidence of Abruption
Definite Evidence of Abruption
Unknown
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 10% + Known (4 secs) + Data Entry by Midwife. Extra Workload: 62 hours
Cost: £1,240

Possible Molar Changes
WHEN? Only if “Placenta Investigation or Comments about Appearance?” = “Yes” (10%?)
No Evidence of Molar Changes
Evidence of Possible/Probable Molar Changes
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 10% + Known (4 secs) + Data Entry by Midwife. Extra Workload: 62 hours
Cost: £1,240

Other Comments on Placenta
WHEN? Only if “Placenta Investigation or Comments about Appearance?” = “Yes” (10%?)
Free Text
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 10% + Known (4 secs) + Data Entry by Midwife. Extra Workload: 62 hours
Cost: £1,240

Placental Bacteriology Requested
WHEN? Only if “Placenta Investigation or Comments about Appearance?” = “Yes” (10%?)
No
Yes
Unknown
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 10% + Known (4 secs) + Data Entry by Midwife. Extra Workload: 62 hours
Cost: £1,240

Placental Histopathology Requested
WHEN? Only if “Placenta Investigation or Comments about Appearance?” = “Yes” (10%?)
No
Yes
Unknown
Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 10% + Known (4 secs) + Data Entry by Midwife. Extra Workload: 62 hours
Cost: £1,240

† = Must be removed when data is anonymity
B10. Before leaving Labour Ward - Baby

---

**Transfer from Place of Birth to**

**WHEN?** Only if “Outcome of Birth?” = “Livebirth” (>99%)

- Post-Natal Ward
- Home
- Already at Home
- Directly to local Special Care Baby Unit or Neonatal Intensive Care Unit
- Died while still on Labour Ward
- Other
- Unknown

---

**DATA ITEM**  
**Transfer date**

**BASIS**  
Date of transfer/END of care episode

**EXPLANATION**
Facilitates tracking and calculation on care episodes

**INPUT OPTIONS**
DD/M M/YYYY

**DATA ORIGIN**
Hospital Episode Statistics, West Midlands Advisory Board - Maternity

*Should be on PAS system, not on maternity/neonatal system*

---

**DATA ITEM**  
**Intended method of feeding**

**BASIS**  
Method of choice at the time of birth

**EXPLANATION**
Possible effects on maternal/child relationship and facilitates calculation of breast feeding rates

**INPUT OPTIONS**
Mutually exclusive: Breast / Artificial / Breast and artificial / Other (+ free text to document details)

**DATA ORIGIN**
West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics, SureStart

*Intention as part of the Hospital Discharge? Surely it should be “Method of Feeding at Discharge”*

If “Intention” is intended then this is yet another “Paralysis by Analysis”(“Below the line”) Item

No value as an “Individual Patient Encounter Assistance”(“Above the line”) item.

A 1 in nn sample would probably give almost the same audit and managerial information with significantly less electronic data entry work by overburdened front line health care workers.

---

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 106 of 171
Logical Prioritisation

N. Newborn Baby
Post-partum care of the baby.
All Items which may DIFFER for each baby IF
MULTIPLE BIRTHS

---------------------------------------------
N1. On Arrival in Post-Natal Ward - Baby

N1-A. ADMINISTRATION

All this section: Only if “Outcome of Birth?” = “Livebirth” (>99%)
(But could have a Home Birth and still be admitted to Post-Natal Ward)

Date of Admission to Post Natal Ward (Baby)
WHEN? Only if “Outcome of Birth?” = “Livebirth” (>99%)
[Date]
Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral or Download from PAS

N1-B. FINAL DECISION ON SEX OF BABY (ONLY IF PREVIOUS DOUBT)

Final Decision on Sex of Baby
WHEN? Only if “Sex of for (provisional) Registration”
does not = “Female” or “Male” (<1%)
Female
Male
Still Uncertain
Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral

---------------------------------------------
N2. Birth to Post-Natal Discharge - Baby

N2-A. INITIAL OBSERVATIONS

All this section: Only if “Outcome of Birth?” = “Livebirth” (>99%)

Urine passed
WHEN? Only if “Outcome of Birth?” = “Livebirth” (>99%)
Yes
No
Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral

Meconium passed
WHEN? Only if “Outcome of Birth?” = “Livebirth” (>99%)
Yes
No
Unknown
Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral

Age Meconium passed in Hours
WHEN? Only if “Meconium Passed” = “Yes” (>99%)
Two Integer Digits
Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral
**Logical Prioritisation**

**N2.B. CONGENITAL ANOMALIES CONFIRMED ON EXAMINATION OR TESTING**

WHEN: All this section: Only if “Outcome of Birth?” = “Livebirth” (>99%)

**Any Possibly Notifiable Congenital Diseases or Anomalies on Examination**

WHEN? Only if: See above

- **No**
- **Yes (Specify or use list below) (2%)**

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Down’s Syndrome**

WHEN? Only if “Any Possibly Notifiable Congenital . . . .”

- **“Yes” (2%)**
- **No**

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Neural Tube Defect**

WHEN? Only if “Any Possibly Notifiable Congenital . . . .”

- **“Yes” (2%)**
- **No**

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Absent Digit(s)**

WHEN? Only if “Any Possibly Notifiable Congenital . . . .”

- **“Yes” (2%)**
- **No**

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Hare Lip**

WHEN? Only if “Any Possibly Notifiable Congenital . . . .”

- **“Yes” (2%)**
- **No**

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Cleft Palate**

WHEN? Only if “Any Possibly Notifiable Congenital . . . .”

- **“Yes” (2%)**
- **No**

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Other (Free Text)**

WHEN? Only if “Any Possibly Notifiable Congenital . . . .”

- **“Yes” (2%)**
- **No**

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Free Text Description**

WHEN? Only if “Any Possibly Notifiable Congenital . . . .”

- **“Yes” (2%)**

Free Text. 30 characters

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral
Any Other Problems noted on Examination (Possible / Probable / Definite)
(In addition to any notifiable congenital anomalies already entered on the computer)

WHEN? Only if “Outcome of Birth?” = “Livebirth” (>99%)

No problems noted on examination
Yes (2%)?
Not examined yet
Other (Details)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Palate Problem (Possible / Probable / Definite)**

WHEN? Only if “Any Other Problems noted on Examination” = “Yes” (2%?)

No Palate Problem
Definite Palate Problem
Possible Palate Problem
Probable Palate Problem

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Heart Problems (Possible / Probable / Definite)**

WHEN? Only if “Any Other Problems noted on Examination” = “Yes” (2%?)

No Heart Problem
Definite Heart Problem
Possible Heart Problem
Probable Heart Problem

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Femoral Pulse Problems (Possible / Probable / Definite)**

WHEN? Only if “Any Other Problems noted on Examination” = “Yes” (2%?)

No Femoral Pulse Problem
Definite Femoral Pulse Problem
Possible Femoral Pulse Problem
Probable Femoral Pulse Problem

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Eye Problems (Possible / Probable / Definite)**

WHEN? Only if “Any Other Problems noted on Examination” = “Yes” (2%?)

No Eye Problems
Definite Eye Problems
Possible Eye Problems
Probable Eye Problems

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Result**

Records outcome of examination

Determine potential risk factors for baby and monitor quality of service provision

Mutually exclusive: Normal / Abnormal (+ free text to document details)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Date of discharge examination**

Record of when examination took place

Enables calculation of age at examination and audit of practice

**Time of discharge examination**

Record of when examination took place

Enables calculation of age at examination and audit of practice

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity Page 109 of 171
**Logical Prioritisation**

**Descent of Testes Problem**

WHEN? Only if “Any Other Problems noted on Examination” = “Yes” (2%?)
and when “Sex of Baby” = “Male”

*No Descent of Testes Problem*

*Probable Descent of Testes Problem*

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Descent of LEFT Testes Problem (Possible / Probable / Definite)**

WHEN? Only if “Examination of the Testes Problem” = “Yes” (<1%?)

*No Descent of LEFT Testes Problem*

*Definite Descent of LEFT Testes Problem*

*Possible Descent of LEFT Testes Problem*

*Probable Descent of LEFT Testes Problem*

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Descent of RIGHT Testes Problem (Possible / Probable / Definite)**

WHEN? Only if “Examination of the Testes Problem” = “Yes” (<1%?)

*No Descent of RIGHT Testes Problem*

*Definite Descent of RIGHT Testes Problem*

*Possible Descent of RIGHT Testes Problem*

*Probable Descent of RIGHT Testes Problem*

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Any (other) Genital Problems (Possible / Probable / Definite)**

WHEN? Only if “Any Other Problems noted on Examination” = “Yes” (2%?)

*No (other) Genital Problems noted*

*Definite (other) Genital Problems noted*

*Possible (other) Genital Problems noted*

*Probable (other) Genital Problems noted*

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Problems on Hip Examination (Possible / Probable / Definite)**

WHEN? Only if “Any Other Problems noted on Examination” = “Yes” (2%?)

*No Hip Problems noted*

*Possible Hip Problems not noted*

*Possible Hip Examination not performed*

*No Hip Examination performed*

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Examination of LEFT Hip**

WHEN? Only if “Problems on Hip Examination” = “Yes” (<1%?)

*No Problems noted on Examination of LEFT Hip*

*Definite Problem on Examination of LEFT Hip*

*Possible Problem on Examination of LEFT Hip*

*Probable Problem on Examination of LEFT Hip*

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Examination of RIGHT Hip**

WHEN? Only if “Problems on Hip Examination” = “Yes” (<1%?)

*No Problems noted on Examination of RIGHT Hip*

*Definite Problem on Examination of RIGHT Hip*

*Possible Problem on Examination of RIGHT Hip*

*Probable Problem on Examination of RIGHT Hip*

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Any other (Possible / Probable / Definite) Problem(s)**

WHEN? Only if “Any Other Problems noted on Examination” = “Yes” (2%?)

*No other problems noted on examination*

*Yes (Details)*

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

---

**MANNERS - Maternity**

**DATA ITEM** Undescended testes

**BASIS** Records that examination has taken place

**EXPLANATION** Determines potential risk factors for baby and audit of service provision for those at risk

**INPUT OPTIONS** Mutually exclusive; Yes / No

**DATA ORIGIN** West Midlands Advisory Board - Maternity, NSC

**Another “Paralysis by Analysis” (“Below the line”) Item**

No value as an “Individual Patient Encounter Assitance” (“Above the line”) item.

**Discharge Letter and Child Health Record etc., would need to know which, or if both, Testes were undescended, NOT whether the test had been carried out**
Logical Prioritisation

N2-D. TESTS/INVESTIGATIONS

All

Heel Stab (Guthrie or Equivalent) Test

Done / Not Done

WHEN? Only if “Outcome of Birth?” = “Livebirth”

(>99%)?

Done
Offered but refused
Not done for other reasons
Unknown if done or not

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Result of Heel Stab Test

WHEN? Only if “Heel Stab (Guthrie or Equivalent)” = “Done” (>99%)?

Normal
Abnormal (Actual nationally standardised normal and abnormal results needed here)
Result Unknown

MANNERS - Maternity

DATA ITEM
Neonatal Bloodspot Test

BASIS
Record that test has been performed

EXPLANATION
Facilitates audit of practice and adherence to guidelines

INPUT OPTIONS
Mutually exclusive: Yes No

DATA ORIGIN
West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics, NSC

DATA ITEM
Date of neonatal bloodspot test

BASIS
Record of when the test was performed

EXPLANATION
Enables calculation of age at test and audit of practice

INPUT OPTIONS
DD/MM/YYYY

DATA ORIGIN
West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics, NSC

Another “Paralysis by Analysis” (“Below the line”) Item
No value as an “Individual Patient Encounter Assistance” (“Above the line”) item.

A 1 in nn sample would probably give almost the same audit and managerial information
with significantly less electronic data entry work by overburdened front line health care workers.

† = Must be removed when data is anonymity

EEP.D.02_DATASETS.L_LARGE.MANNERS.500cfM-30 (27th November 2005)
© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity Page 111 of 171
**Logical Prioritisation**

**Jaundice (Bilirubin) Blood Test Done / Not done**

WHEN? All (100%)

Never done
Done (10%)?
Offered but refused
Other (Details)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Highest Recorded Result of Bilirubin Blood Test**

WHEN? Only if “Jaundice (Bilirubin) Blood Test” = “Done” (10%)?

Umol/L or Gms/100 mls

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**EXPLANATION**

Assists in identifying potential risk factors for baby

**INPUT OPTIONS**

Mutually exclusive: Yes / No

**DATA ORIGIN**

Hospital Episode Statistics, West Midlands Advisory Board - Maternity

---

**MANNERS - Maternity**

**DATA ITEM**

Jaundiced

**BASIS**

Records presence of jaundice before discharge from place of birth

**EXPLANATION**

Assists in identifying potential risk factors for baby

**INPUT OPTIONS**

Mutually exclusive: Yes / No

**DATA ORIGIN**

Hospital Episode Statistics, West Midlands Advisory Board - Maternity

**DATA ITEM**

Highest plasma bilirubin

**BASIS**

Record of highest plasma bilirubin reading

**EXPLANATION**

Assists in identifying potential risk factors for baby

**INPUT OPTIONS**

Numerical format, expressed in micromol/l

**DATA ORIGIN**

Hospital Episode Statistics, West Midlands Advisory Board - Maternity

**DATA ITEM**

Date of highest plasma bilirubin

**BASIS**

Record of date of the test

**EXPLANATION**

Enables calculation of age at which test was taken and assists in identifying potential risk factors for baby

**INPUT OPTIONS**

DD/MM/YYYY

**DATA ORIGIN**

West Midlands Advisory Board - Maternity

**Another “Paralysis by Analysis” (“Below the line”) Item**

No value as an “Individual Patient Encounter Assistance” (“Above the line”) item.

A 1 in nn sample would probably give almost the same audit and managerial information with significantly less electronic data entry work by overburdened front line health care workers.

**DATA ITEM**

Time of highest plasma bilirubin

**BASIS**

Record of time of the test

**EXPLANATION**

Enables calculation of age at which test was taken and assists in identifying potential risk factors for baby

**INPUT OPTIONS**

HH:MM (24 hour clock)

**DATA ORIGIN**

West Midlands Advisory Board - Maternity

**See comment above; but louder!!**

---

**Audiology Test done / Not done**

WHEN? All or Only if “Hearing Risk” = “Yes” (10%?)

Never done
Done
Offered but refused
Other (Details)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Result of Audiology Test**

WHEN? Only if “Audiology Test” = “Done” (10%? or 100%?)

Normal
Abnormal (Details)
Result Unknown

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

---

**Universal Neonatal Hearing screen**

**BASIS**

Records that test has been performed

**EXPLANATION**

Facilitates audit of practice and adherence to guidelines

**INPUT OPTIONS**

Mutually exclusive: Yes No

**DATA ORIGIN**

British Association of Perinatal Medicine, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics, NSC

---

† = Must be removed when data is anonymity
**Logical Prioritisation**

**IF HIP PROBLEM RISK (or ALL BABIES?)**

**Hip Scan done / Not Done**

- **WHEN:** Only if “Risk Factors for Congenital Hip Dislocation” = “Yes”
- or Problems on Hip Examination (Possible / Probable / Definite) = “Definite” or “Possible” or “Probable” (10%)?
- **Done**
- **Offered but refused**
- **Not done for other reasons**

**Result of Hip Scan**

- **WHEN:** Only if “Hip Scan” = “Done” (10%)
- **Reassuring Scan**
- **Problem confirmed in RIGHT Hip**
- **Problem confirmed in LEFT Hip**
- **Problem confirmed in BOTH Hips**
- **Equivocal result in RIGHT Hip**
- **Equivocal result in LEFT Hip**
- **Equivocal result in BOTH Hips**
- **Result Unknown / Not yet available**

**E. MEDICATIONS / INJECTIONS - BABY**

**ALL**

**Antibiotics given / not given**

- **WHEN:** All (100%)
- **No**
- **Yes**
- **Unknown**

**Which Antibiotics given**

- **WHEN:** Only
- **Yes (Details)**
- **Unknown**
- or [Pick List needed]

**IF HEPATITIS B RISK IDENTIFIED**

**Hepatitis B Vaccine given / not given**

- **WHEN:** Only if “Hepatitis Risk” = “Yes” (or if “Outcome of Birth?” = “Livebirth”) (1%)?
- **Given**
- **Offered but refused**
- **Not given for other reasons**

**IF TB RISK IDENTIFIED**

**BCG injection given / not given**

- **WHEN:** Only if “TB risk” = “Yes” (10%)
- **Given**
- **Offered but refused**
- **Not given for other reasons**
Any Important Post-Natal Problems with Baby
WHEN? Only if “Outcome of Birth?” = “Livebirth” (>99%)

No
Yes (2%?)
Unknown

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Acidaemia
WHEN? Only if “Major Post-Natal Problems with baby?”

None
Mild
Moderate
Severe

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Hypotension
WHEN? Only if “Major Post-Natal Problems with baby?”

None
Mild
Moderate
Severe

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Early Neonatal Encephalopathy
WHEN? Only if “Major Post-Natal Problems with baby?”

Grade

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Hypoglycaemia
WHEN? Only if “Major post-natal problems with baby?”

No
Yes

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Lowest Recorded Blood Sugar
WHEN? Only if “Hypoglycaemia?” = “Yes” (<1%)

[Blood Sugar Level]

Workload / Cost (All Phases of Maternity EPR) until Phase 3 A2: Cost Neutral
Phase 3 Electronically from Laboratory. A4: Downloaded from another computer

Infection Proven and Treated
WHEN? Only if “Major Post-Natal problems with Baby?”

No
Yes

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Prophylactic Antibiotics (No proven infection)?
WHEN? Only if “Major Post-Natal Problems with Baby?”

No
Yes

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Respiratory Distress
WHEN? Only if “Major Post-Natal problems with Baby?”

Mild
Moderate
Severe

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Required Assisted Ventilation after Resuscitation?
WHEN? Only if “Major Post-Natal problems with Baby?”

No
Yes

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral
Logical Prioritisation

Required I/V support (not nutrition)?
WHEN? Only if "Major Post-natal problems with baby?"
= “Yes” (2%?)
No
Yes

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Seizures within the first 48 hours. Coma / Shock
WHEN? Only if "Major Post-natal problems with baby?"
= “Yes” (2%?)
No
Yes

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Required Tube Feeding?
WHEN? Only if "Major Post-Natal Problems with Baby?"
= “Yes” (2%?)
No
Yes

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Required Parenteral Nutrition?
WHEN? Only if "Major Post-Natal Problems with Baby?"
= “Yes” (2%?)
No
Yes

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Birth Trauma?
WHEN? Only if "Major Post-Natal Problems with Baby?"
= “Yes” (2%?)
No
Yes (Details) (1%?)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Fractures
WHEN? Only if "Birth Trauma?" = “Yes” (1%?)
No
Yes (Details)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Cuts from Surgical Procedures
WHEN? Only if “Birth Trauma?” = “Yes” (1%?)
No
Yes (Details)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Serious Bruising
WHEN? Only if "Birth Trauma?" = “Yes” (1%?)
No
Yes (Details)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Heat Effects
WHEN? Only if "Birth Trauma?" = “Yes” (1%?)
No
Yes (Details)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Pressure Effects
WHEN? Only if "Birth Trauma?" = “Yes” (1%?)
No
Yes (Details)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Tissued Intravenous Infusion Effects
WHEN? Only if “Birth Trauma?” = “Yes” (1%?)
No
Yes (Details)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Vascular Accidents
WHEN? Only if “Birth Trauma?” = “Yes” (1%?)
No
Yes (Details)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Superficial Skin Trauma
WHEN? Only if “Birth Trauma?” = “Yes” (1%?)
No
Yes (Details)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  “ Logical Prioritisation” compared with MANNERS Maternity  Page 115 of 171
Logical Prioritisation

Cephalhaematoma

WHEN? Only if "Birth Trauma?" = “Yes” (1%?)
No
Yes (Details)

Workload / Cost [All Phases of Maternity EPR] A2: Cost Neutral

Other Major Post-Natal Problems - Baby?

WHEN? Only if "Major Post-Natal Problems with Baby?" = “Yes”

WORKLOAD / COST (ALL PHASES OF MATERNITY EPR) A2: Cost Neutral

Yes (Details)

W H E N ? O n l y  i f  " B i r t h  T r a u m a ? "  =  " Y e s " ( 1 % ? )
No
WORKLOAD / COST [ALL PHASES OF MATERNITY EPR] A2: Cost Neutral

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

N 3 . A t  t h e  T i m e  o f  t h e  P o s t - N a t a l

Discharge - Baby

N3-A. ADMINISTRATIVE

Admission to SCBU from Post-Natal Ward

WHEN? Only if “Outcome of Birth?” = "Livebirth” (>99%)
No
Yes

WORKLOAD / COST [ALL PHASES OF MATERNITY EPR] A2: Cost Neutral

Indication for Admission
from Postnatal Ward to SCBU

WHEN? Only if "Admission to SCBU not directly from Labour Ward" = “Yes”(1%?)
Nationally Agreed Set of Reasons

WORKLOAD / COST [ALL PHASES OF MATERNITY EPR] A2: Cost Neutral

Date of Post-Natal Discharge from Hospital or Death (Baby)

WHEN? Only if “Outcome of Birth?” = "Livebirth” (>99%)
[Date]

WORKLOAD / COST [ALL PHASES OF MATERNITY EPR] A2: Cost Neutral or Download from PAS

Number of Days as Post-Natal In-Patient (Baby)

WHEN? Only if “Outcome of Birth?” = "Livebirth” (>99%)
Up to 3 Digit Integer Number


DATA ITEM

BASIS
EXPLANATION
INPUT OPTIONS
DATA ORIGIN

Date of discharge

Date denoting end of care episode
Required to derive length of stay
D D/M M/YYYY
British Association of Perinatal Medicine, Commissioning
Data Set, Hospital Episode Statistics, West Midlands
Advisory Board - Maternity, West Midlands Advisory
Board - Paediatrics

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 116 of 171
Logical Prioritisation

This Baby being discharged with Mother

WHEN? Only if: See above
Yes, Going Home with Mother
No, Did not go Home with Mother

Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral

Did not go home with mother because

WHEN? Only if: “Being discharged with Mother” = “No,
Did not go Home with Mother”
- Baby Died (Neonatal Death)
- Going for Fostering
- Baby still needed hospital care when mother went home
- Other (Details)

Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral

Baby being discharged to Mother’s Address

WHEN? Only if: “Being discharged with Mother” = “No,
Did not go Home with Mother”

Yes
No
Unknown

Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral

Baby’s Discharge Address 1-5
(If not Mother’s PAS Address)

WHEN? Only if “Baby being discharged to Mother’s
Address” = “No” (1%?)
- Each line a 35 character field
- Line 1: Number or name of House
- Line 2: Name of Street
- Line 3: Name of Village / Town or District
- Line 4: Name of City or County
- Line 5:

Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral

Baby’s Discharge Post Code (Not Mother’s)

WHEN? Only if “Baby being discharged to Mother’s
Address” = “No” (1%?)

[PostCode]

Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral

Parenting Intention

WHEN? Only if “Outcome of Birth?” = “Livebirth”

- Mother and Father take joint legal responsibility
- Mother takes legal responsibility
- Father takes legal responsibility
- Surrogate mother
- Fostering/adoption planned
- Intentions not known
- Child Protection
- Unknown

Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral
Logical Prioritisation

N3-B. BABY’S FEEDING AND WEIGHT

All this section WHEN? Only if “Outcome of Birth?” = “Livebirth” and “Place of Birth - Type of Place (Actual Place of Birth)” = “DGH or similar Hospital with 24 hr ‘on site’ medical cover”, “Tertiary Centre Hospital with 24 hr ‘on site’ medical cover” “Maternity Unit without 24 hr ‘on site’ medical cover (95%)”

Method of Feeding at Hospital Discharge (Baby)

WHEN? Only if: See above
Breast Feeding and/or Expressing only
Formula (Bottle milk) only
Mixed Breast & Bottle
Other

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

DATA ITEM Feeding method
BASIS Method of choice at time of discharge
EXPLANATION Facilitates calculation of breastfeeding rates and audit of practice
INPUT OPTIONS Mutually exclusive: Breast / Artificial / Breast and artificial /Other (+ free text to document details)
DATA ORIGIN Health Outcome Indicators - Normal Pregnancy and Childbirth, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics, SureStart

DATE ITEM Date of first feed
BASIS Record of first feed
EXPLANATION Enables calculation for timing of bloodspot test
INPUT OPTIONS DD/MM/YYYY
DATA ORIGIN West Midlands Advisory Board - Maternity, SureStart

Another “Paralysis by Analysis” “(“Below the line”) Item No value as an “Individual Patient Encounter Assistance” (“Above the line”) item.

A 1 in nn sample would probably give almost the same audit and managerial information with significantly less electronic data entry work by overburdened front line health care workers.

DATA ITEM Change in Weight since Birth
BASIS Weight (Grams)
EXPLANATION An important outcome measure of neonatal care. Has resource implications.
INPUT OPTIONS Numerical format, expressed in grams
DATA ORIGIN British Association of Perinatal Medicine, EuroNeoNet, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

Hospital Discharge Weight (Gms)

WHEN? Only if: See above
Weight (Grams)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

DATA ITEM Discharge Weight
BASIS Weight of baby at time of discharge
EXPLANATION An important outcome measure of neonatal care. Has resource implications.
INPUT OPTIONS Numerical format, expressed in grams
DATA ORIGIN British Association of Perinatal Medicine, EuroNeoNet, West Midlands Advisory Board - Maternity, West Midlands Advisory Board - Paediatrics

Change in Weight since Birth

WHEN? Only if: See above
Weight (Grams)

Unknown

Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated: based on A1-4 data

 Logical Prioritisation” compared with MANNERS Maternity Page 118 of 171
Logical Prioritisation

N3-C. PROBLEMS WITH BABY AT DISCHARGE FROM INSTITUTION

All this section Only if “Outcome of Birth?” = “Livebirth” and “Place of Birth - Type of Place (Actual Place of Birth)” = “DGH or similar Hospital with 24 hr ‘on site’ medical cover” “Tertiary Centre Hospital with 24 hr ‘on site’ medical cover” “Maternity Unit without 24 hr “on site ‘medical cover” (95%?)

Any Significant Problems with Baby at Discharge

WHEN? Only if: See above
No
Yes (Details) (5%?)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Irritability

WHEN? Only if “Any Problems with Baby at Discharge”

= “Yes”
No
Yes (Details) (1%?)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Confirmed Infection

WHEN? Only if “Any Problems with Baby at Discharge”

= “Yes”
No
Yes (Details) (1%?)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Jaundice

WHEN? Only if “Any Problems with Baby at Discharge”

= “Yes”
No
Yes (Details) (1%?)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Severe Nappy Rash

WHEN? Only if “Any Problems with Baby at Discharge”

= “Yes”
No
Yes (Details) (1%?)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Other Rash

WHEN? Only if “Any Problems with Baby at Discharge”

= “Yes”
No
Yes (Details) (1%?)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Constipation

WHEN? Only if “Any Problems with Baby at Discharge”

= “Yes”
No
Yes (Details) (1%?)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Other Problem(s)

WHEN? Only if “Any Problems with Baby at Discharge”

= “Yes”
No
Yes (Details) (1%?)

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

† = Must be removed when data is anonymity
N3-D. FOLLOW-UP

Main Follow-up Arrangement (Baby)
WHEN? Only if “Outcome of Birth?” = “Livebirth”
- GP care
- Paediatric appointment at this hospital
- Paediatric appointment at another hospital (Free text opportunity)
- Some other arrangement

Workload / Cost [All Phases of Maternity EPR]  A2: Cost Neutral

Other Specialist Medical Referral(s) made
WHEN? Only if “Outcome of Birth?” = “Livebirth”
- Not required
- Yes
- Unknown

Workload / Cost [All Phases of Maternity EPR]  A2: Cost Neutral

Audiolist
WHEN? Only if “Referrals made” = “Yes”
- Not required
- Yes
- Intended, not yet referred

Workload / Cost [All Phases of Maternity EPR]  A2: Cost Neutral

Orthopaedic Surgeon
WHEN? Only if “Referrals made” = “Yes”
- Not required
- Yes
- Intended, not yet referred

Workload / Cost [All Phases of Maternity EPR]  A2: Cost Neutral

Plastic Surgeon
WHEN? Only if “Referrals made” = “Yes”
- Not required
- Yes
- Intended, not yet referred

Workload / Cost [All Phases of Maternity EPR]  A2: Cost Neutral

Other Referral
WHEN? Only if “Referrals made” = “Yes”
- Not required
- Yes
- Intended, not yet referred

Workload / Cost [All Phases of Maternity EPR]  A2: Cost Neutral

† = Must be removed when data is anonymity
C. Neonatal Care

All the items in this dataset are only required for babies admitted for “Neonatal Care” to a SCBU or NICU equivalent.

C1. On Admission to Neonatal Care Facility

C1-A. ADMINISTRATIVE

Case Identifier (Patient ID)
WHEN? All Neonates Admitted or Re-Admitted for Neonatal Care

[8 figure integer]  
Workload/Cost (All Phases of Neonatal EPR)  A5: Computer Generated

Name of this Neonatal Care Facility
WHEN? All Neonates Admitted or Re-Admitted for Neonatal Care

[Name of Unit]  
Workload/Cost (All Phases of Neonatal EPR)  A5: Computer Generated

Code of this Neonatal Care Facility
WHEN? All Neonates Admitted or Re-Admitted for Neonatal Care

[Code of Unit]  
Workload/Cost (All Phases of Neonatal EPR)  A5: Computer Generated

Episode (Admission or Readmission)
WHEN? All Neonates Admitted or Re-Admitted for Neonatal Care

[8 figure integer]  
Workload/Cost (All Phases of Neonatal EPR)  A5: Computer Generated

Admission Date † (Retain Month & Year, Remove Day)
WHEN? All Neonates Admitted or Re-Admitted for Neonatal Care

[Date]  
Workload/Cost (All Phases of Neonatal EPR)  A1: Downloaded from PAS.

Reason for Admission for Neonatal Care
WHEN? All Neonates Admitted or Re-Admitted for Neonatal Care

Pre-Term  
Traumatic Birth  
Other (Free Text Opportunity - Details)  
or BAPM list ?????

Workload/Cost (All Phases of Neonatal EPR)  A2: Cost Neutral

C1-B. MEDICAL ITEMS ON ADMISSION

Antenatal Steroids to Mother
WHEN? All Neonates Admitted or Re-Admitted for Neonatal Care

None  
Complete and Recent Course (2 doses only, 1-7 days before delivery)  
Earlier Complete Course (2 doses only, > 7 days before delivery)  
Repeated Courses  
Incomplete Course

Workload/Cost (All Phases of Neonatal EPR)  A5: Computer Generated - From Maternal EPR

SCBU / NICU admission
REASON BASIS: Records necessity for transfer of care
EXPLANATION: Assists with audit of babies requiring admission to SCBU/NICU

INPUT OPTIONS: Mutually exclusive: Yes / No
DATA ORIGIN: British Association of Perinatal Medicine, Hospital Episode Statistics, Health Outcome Indicators - Normal Pregnancy and Childbirth, West Midlands Advisory Board - Maternity

The fact that this section has any entries automatically must mean that this neonate has been admitted to a SCBU/NICU

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 121 of 171
C2. Neonatal Care Events from Admission to Discharge

C2-A. INFECTIONS

Any Significant Infection
WHEN? All Neonates Admitted or Re-Admitted for Neonatal Care
- No
- Yes
- Unknown
- Not recorded

Workload/Cost (All Phases of Neonatal EPR) A2: Cost Neutral

Nectrotising Enterocolitis
WHEN? Only if “Any Significant Infection” = “Yes”
- None
- Suspect
- Confirmed
- Advanced
- Unknown
- Not recorded
- Other (Free Text Opportunity - Details)

Workload/Cost (All Phases of Neonatal EPR) A2: Cost Neutral

Positive Blood Culture (Y/N/?)
WHEN? Only if “Any Significant Infection” = “Yes”
- No
- Yes
- Test done but result not yet available
- Unknown
- Not recorded
- Other (Free Text Opportunity - Details)

Workload/Cost (All Phases of Neonatal EPR) A2: Cost Neutral

Positive CSF Culture (Y/N/?)
WHEN? Only if “Any Significant Infection” = “Yes”
- No
- Yes
- Test done but result not yet available
- Unknown
- Not recorded
- Other (Free Text Opportunity - Details)

Workload/Cost (All Phases of Neonatal EPR) A2: Cost Neutral

Positive Urine Culture (Y/N/?)
WHEN? Only if “Any Significant Infection” = “Yes”
- No
- Yes
- Test done but result not yet available
- Unknown
- Not recorded
- Other (Free Text Opportunity - Details)

Workload/Cost (All Phases of Neonatal EPR) A2: Cost Neutral

Other Significant Infections
WHEN? Only if “Any Significant Infection” = “Yes”
- No
- Yes (Free Text Opportunity - Details)

Workload/Cost (All Phases of Neonatal EPR) A2: Cost Neutral

† = Must be removed when data is anonymity
C2-B. RETINOPATHY OF PREMATURENESS (R.O.P.)

**R.O.P. Screening Examination**
WHEN? All Neonates Admitted or Re-Admitted for Neonatal Care
- **Screened**
- Not screened
- Discharged before screening
- Unknown
- Not recorded

Workload/Cost (All Phases of Neonatal EPR) A2: Cost Neutral

**R.O.P. Staging (Worst)**
WHEN? Only if “R.O.P. Screening Examination” = “Screened” (??%?)
- 0 = No changes seen
- 1 = stage I, demarcation line
- 2 = stage II, ridge
- 3 = stage III, ridge with extraretinal fibrovascular proliferation
- 4 = stage IV, retinal detachment - subtotal
- 5 = stage V retinal detachment - total
- 6 = not examined, no eye examination performed, or not appropriate

Unknown
- Not recorded

Workload/Cost (All Phases of Neonatal EPR) A2: Cost Neutral

**R.O.P. Therapy**
WHEN? Only if “R.O.P. Screening Examination” = “Screened” (??%?)
- None Required
- Yes, ROP Therapy given
- Unknown
- Not recorded
- Other (Free Text Opportunity - Details)

Workload/Cost (All Phases of Neonatal EPR) A2: Cost Neutral

C2-C. OTHER MEDICAL PROBLEMS.

**Encephalopathy**
WHEN? All Neonates Admitted or Re-Admitted for Neonatal Care
- 0 = normal, no encephalopathy, or grade 1 encephalopathy
- 2 = grade 2 ischaemic encephalopathy
- 3 = grade 3 ischaemic encephalopathy
- Unknown
- Other (Free Text Opportunity - Details)

Workload/Cost (All Phases of Neonatal EPR) A2: Cost Neutral

**Pneumothorax**
WHEN? All Neonates Admitted or Re-Admitted for Neonatal Care
- No
- Yes (Free Text)
- Unknown
- Not recorded

Workload/Cost (All Phases of Neonatal EPR) A2: Cost Neutral

**Air Leak requiring drainage**
WHEN? All Neonates Admitted or Re-Admitted for Neonatal Care
- No
- Yes
- Unknown
- Not recorded

Workload/Cost (All Phases of Neonatal EPR) A2: Cost Neutral

† = Must be removed when data is anonymity

EEP02_DATASETS.L_LARGE.MANNERS.500cfM-30 (27th November 2005)
© Rupert Fawdry 2005  "Logical Prioritisation” compared with MANNERS Maternity  Page 123 of 171
C2-D. ULTRASOUND SCANS

Cranial Ultrasound done
WHEN? All neonates Admitted or Re-Admitted for

Neonatal Care
Yes, Cranial Ultrasound done
Following Local Policy Cranial Ultrasound not done
Despite Local Policy, Cranial Ultrasound not done
Unknown
Not recorded
Other (Free Text Opportunity - Details)

Workload/Cost (All Phases of Neonatal EPR)   A2: Cost Neutral

Cranial Ultrasound Findings (worst)
WHEN? Only if “Cranial Ultrasound Screen done” =
”Yes, Cranial Ultrasound done” (??%?)
Normal
IVH WITHOUT ventricular dilatation (GLH, SEH, Grades 1/2)
IVH WITH ventricular dilatation

Other (Free Text Opportunity - Details)
Workload/Cost (All Phases of Neonatal EPR)   A2: Cost Neutral

Maximum changes of Intra-Ventricular Haemorrhage on Scan (IVH)
WHEN? Only if “Cranial Ultrasound Screen done” =
”Yes, Cranial Ultrasound done” (??%?)
No haemorrhage or localised haemorrhage
Blood clot forming a cast of the lateral ventricle and extending beyond the atrium
Intraparenchymal haemorrhage
Unknown
Other (Free Text Opportunity - Details)
Workload/Cost (All Phases of Neonatal EPR)   A2: Cost Neutral

Ventricular Size
WHEN? Only if “Cranial Ultrasound Screen done” =
”Yes, Cranial Ultrasound done” (??%?)
Normal
Transient ventriculomegaly
Persistent ventriculomegaly on 6 wk scan
Ventriculomegaly shunted
Unknown
Not recorded

Workload/Cost (All Phases of Neonatal EPR)   A2: Cost Neutral

Parenchymal Lesions
WHEN? Only if “Cranial Ultrasound Screen done” =
”Yes, Cranial Ultrasound done” (??%?)
None
Transient IPE < 14 days
Transient IPE > 14 days
Single large cyst (porencephalic)
Multiple cysts (cPL)
Unknown
Other (Free Text Opportunity - Details)
Workload/Cost (All Phases of Neonatal EPR)   A2: Cost Neutral

Cystic Leukomalacia
WHEN? Only if “Cranial Ultrasound Screen done” =
”Yes, Cranial Ultrasound done” (??%?)
Normal
Abnormal
Not examined
Unknown.

Workload/Cost (All Phases of Neonatal EPR)   A2: Cost Neutral
### C2-F. Treatment

#### Mode of Ventilation

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>All Neonates Admitted or Re-Admitted for Neonatal Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
</tr>
<tr>
<td>IPPV only</td>
<td></td>
</tr>
<tr>
<td>IPPV and HFOV</td>
<td></td>
</tr>
<tr>
<td>HFOV only</td>
<td></td>
</tr>
</tbody>
</table>

Workload/Cost (All Phases of Neonatal EPR)  | A2: Cost Neutral

### Nitric Oxide

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>All Neonates Admitted or Re-Admitted for Neonatal Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Not recorded</td>
<td></td>
</tr>
</tbody>
</table>

Workload/Cost (All Phases of Neonatal EPR)  | A2: Cost Neutral

### ECMO

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>All Neonates Admitted or Re-Admitted for Neonatal Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Not recorded</td>
<td></td>
</tr>
</tbody>
</table>

Workload/Cost (All Phases of Neonatal EPR)  | A2: Cost Neutral

### Surfactant given

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>Only if “Mode of Ventilation” does not equal “None” (??%?)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Survanta</td>
<td></td>
</tr>
<tr>
<td>Curosurf</td>
<td></td>
</tr>
<tr>
<td>Other (Free Text Opportunity - Details)</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Not recorded</td>
<td></td>
</tr>
</tbody>
</table>

Workload/Cost (All Phases of Neonatal EPR)  | A2: Cost Neutral

### Chest Drain

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>All Neonates Admitted or Re-Admitted for Neonatal Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Not recorded</td>
<td></td>
</tr>
</tbody>
</table>

Workload/Cost (All Phases of Neonatal EPR)  | A2: Cost Neutral

### Needle Drainage

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>All Neonates Admitted or Re-Admitted for Neonatal Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Not recorded</td>
<td></td>
</tr>
</tbody>
</table>

Workload/Cost (All Phases of Neonatal EPR)  | A2: Cost Neutral

### Steroids for Chronic Lung Disease (C.L.D.)

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>All Neonates Admitted or Re-Admitted for Neonatal Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Steroids given</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Not recorded</td>
<td></td>
</tr>
</tbody>
</table>

Workload/Cost (All Phases of Neonatal EPR)  | A2: Cost Neutral

---

**EEPD.02_DATASETS.L_LARGE.MANNERS.500cM-30 (27th November 2005)**

© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 125 of 171
C3. At time of Death/Discharge from Neonatal Care Facility

C3-A. ADMINISTRATION

**Death, or Discharged/Transfer Destination**
WHEN? All Neonates Admitted or Re-Admitted for Neonatal Care

- Home
- Fostering
- Other Ward in this Hospital
- Another hospital (specify)
- Died
- Other (specify)

Workload/Cost (All Phases of Neonatal EPR) A2: Cost Neutral

**Date of Discharge/Transfer or Death**
WHEN? All Neonates Admitted or Re-Admitted for Neonatal Care

[Date]

Workload/Cost (All Phases of Neonatal EPR) A1: Downloaded from PAS.

**Reason for Discharge / Transfer**
WHEN? Only if “Death or Discharged/Transfer Destination” does not equal “Death” (??%?)

- Ready for Discharge from Neonatal Care
- Medical Reason for Transfer
- Surgical Reason for Transfer
- Unit Full
- Staffing Shortage
- Other (specify)

Workload/Cost (All Phases of Neonatal EPR) A2: Cost Neutral

---

**C3-B. OXYGEN THERAPY**

**On Added Oxygen at Discharge**
WHEN? Only if “On Added Oxygen Therapy on, or from, Day of Admission” = “Yes” (??%?) or “Started on Added Oxygen Therapy after Admission” = “Yes”

- No
- Yes

Workload/Cost (All Phases of Neonatal EPR) A2: Cost Neutral

---

**C3-D. BABY**

**At Discharge, Age in Months and Days since Birth**
WHEN? All Neonates Admitted or Re-Admitted for Neonatal Care

[Weeks] + [Days]

Workload/Cost (All Phases of Neonatal EPR) A5: Computer Generated

---

**Corrected Age at Discharge**
WHEN? All Neonates Admitted or Re-Admitted for Neonatal Care

[Weeks] and [Days]

Workload/Cost (All Phases of Neonatal EPR) A5: Computer Generated

---

**Neonatal Care Facility Follow-up Arrangements**
WHEN? All Neonates Admitted or Re-Admitted for Neonatal Care

**Timing of Neonatal Care Follow-up**
WHEN? All Neonates Admitted or Re-Admitted for Neonatal Care

[Weeks]

Workload/Cost (All Phases of Neonatal EPR) A2: Cost Neutral
Neonatal Care Discharge Letter Free Text Message

WHEN? All Neonates Admitted or Re-Admitted for Neonatal Care

[Free Text]
Workload/Cost (All Phases of Neonatal EPR) A2: Cost Neutral

"Other" Follow-up. See Section N. NEWBORN,
MANNERS Neonatal: Other Follow up, Memo

Heel Prick. See Section N. NEWBORN,
MANNERS Neonatal: Heel Prick Date. EPR entry not justified.

Feeding Method at Hospital Discharge. See Section N. NEWBORN
MANNERS Neonatal: Feeding Method at Discharge, an35, Breast; Bottle; Breast & Bottle; Other

Feeding Method at Neonatal Care Facility Discharge. No need for EPR.
Paper Record is adequate
MANNERS Neonatal: Feeding Method at Discharge, an35, Breast; Bottle; Breast & Bottle; Other

† = Must be removed when data is anonymity
A. Obstetric Anaesthesia

Items which, in time, will probably need to be on the Anaesthetic EPR with automatic electronic downloading to the Maternity EPR

A1. Previous Anesthetic Problems

A1-A. PROBLEMS SPECIFIC TO ANAESTHESIA

Previous Problems Specific to Anaesthesia

WHEN All (100%)

None Known

Yes

Extra Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 100% + Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 1,550 hours Cost: £31,000

Preg Notes (New West Midlands) N.M.R.P 2001
Medical History Your health

Do you have / Have you had? Have
you ever had any of the following?
Problems with Anaesthetics
(Anaesthetic problems)

Accidental Dural Puncture

WHEN Only if “Previous Anaesthetic Problems” = “Yes” (1%?)

No

Yes (Free Text Opportunity - Details)

Extra Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 1% + Look Up (4 secs) + Data Entry by Midwife. Extra Workload: 6 hours Cost: £124.

Awareness or Recall under GA

WHEN Only if “Previous Anaesthetic Problems” = “Yes” (1%?)

No

Yes (Free Text Opportunity - Details)

Extra Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 1% + Look Up (4 secs) + Data Entry by Midwife. Extra Workload: 6 hours Cost: £124.

Aspiration of Gastric Contents

WHEN Only if “Previous Anaesthetic Problems” = “Yes” (1%?)

No

Yes (Free Text Opportunity - Details)

Extra Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 1% + Look Up (4 secs) + Data Entry by Midwife. Extra Workload: 6 hours Cost: £124.

Excessively High Regional Block (including Total Spinal)

WHEN Only if “Previous Anaesthetic Problems” = “Yes” (1%?)

No

Yes (Free Text Opportunity - Details)

Extra Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 1% + Look Up (4 secs) + Data Entry by Midwife. Extra Workload: 6 hours Cost: £124.
Failed Intubation

WHEN Only if “Previous Anaesthetic Problems” = “Yes” (1%?)

No (Free Text Opportunity - Details)

Failed Regional Anaesthesia (including Conversion to General Anaesthesia)

WHEN Only if “Previous Anaesthetic Problems” = “Yes” (1%?)

No (Free Text Opportunity - Details)

Cholinesterase Deficiency

WHEN Only if “Previous Anaesthetic Problems” = “Yes” (1%?)

No (Free Text Opportunity - Details)

Malignant Hyperpyrexia

WHEN Only if “Previous Anaesthetic Problems” = “Yes” (1%?)

No (Free Text Opportunity - Details)

Pain during Regional Anaesthetic Caesarean Section

WHEN Only if “Previous Anaesthetic Problems” = “Yes” (1%?)

No (Free Text Opportunity - Details)

Local Anaesthetic Toxicity

WHEN Only if “Previous Anaesthetic Problems” = “Yes” (1%?)

No (Free Text Opportunity - Details)

Neurological Deficit following Anaesthesia

WHEN Only if “Previous Anaesthetic Problems” = “Yes” (1%?)

No (Free Text Opportunity - Details)

Post Dural Puncture Headache

WHEN Only if “Previous Anaesthetic Problems” = “Yes” (1%?)

No (Free Text Opportunity - Details)
Logical Prioritisation

Anaesthetic Hypotension
>20mm Hg decrease in systolic
WHEN Only if "Previous Anaesthetic Problems" = “Yes”

(1%?)

No

Yes (Free Text Opportunity - Details)
Extra Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, if 1% + Look Up (4 secs) + Data Entry by Midwife. Extra Workload: 6 hours Cost: £124.

Anaesthetic Hypoxia
WHEN Only if "Previous Anaesthetic Problems" = “Yes”

(1%?)

No

Yes (Free Text Opportunity - Details)
Extra Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, if 1% + Look Up (4 secs) + Data Entry by Midwife. Extra Workload: 6 hours Cost: £124.

Anaesthetic Urinary Retention
WHEN Only if "Previous Anaesthetic Problems" = “Yes”

(1%?)

No

Yes (Free Text Opportunity - Details)
Extra Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, if 1% + Look Up (4 secs) + Data Entry by Midwife. Extra Workload: 6 hours Cost: £124.

Other Serious Anaesthetic Problem
WHEN Only if "Previous Anaesthetic Problems" = “Yes”

(1%?)

No

Yes (Free Text Opportunity - Details)
Extra Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, if 1% + Look Up (4 secs) + Data Entry by Midwife. Extra Workload: 6 hours Cost: £124.
Logical Prioritisation

A1-B. PROBLEMS NOT SPECIFIC TO ANAESTHESIA

Anaphylaxis

WHEN Only if “Previous Anaesthetic Problems” = “Yes”

(1%?)

No

Yes (Free Text Opportunity - Details)

Extra Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 1% + Look Up (4 secs) + Data Entry by Midwife. Extra Workload: 6 hours Cost: £124.

Cardio-Pulmonary Arrest

WHEN Only if “Previous Anaesthetic Problems” = “Yes”

(1%?)

No

Yes (Free Text Opportunity - Details)

Extra Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 1% + Look Up (4 secs) + Data Entry by Midwife. Extra Workload: 6 hours Cost: £124.

Unexpected HDU Admission ever

WHEN Only if “Previous Anaesthetic Problems” = “Yes”

(1%?)

No

Yes (Free Text Opportunity - Details)

Extra Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 1% + Look Up (4 secs) + Data Entry by Midwife. Extra Workload: 6 hours Cost: £124.

Unexpected ITU Admission ever

WHEN Only if “Previous Anaesthetic Problems” = “Yes”

(1%?)

No

Yes (Free Text Opportunity - Details)

Extra Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 1% + Look Up (4 secs) + Data Entry by Midwife. Extra Workload: 6 hours Cost: £124.

Haemorrhage (more than 500 mls at any time)

WHEN Only if “Previous Anaesthetic Problems” = “Yes”

(1%?)

No

Yes (Free Text Opportunity - Details)

Extra Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 1% + Look Up (4 secs) + Data Entry by Midwife. Extra Workload: 6 hours Cost: £124.

DATA ITEM

Pain relief

BASIS

To identify method of pain relief during labour

EXPLANATION

To facilitate audit of standards of care in labour

INPUT OPTIONS

Non-mutually exclusive:

- TNS
- Inhalational analgesia
- Narcotics
- Regional – spinal
- Regional – epidural
- Regional – combined spinal/epidural
- Regional – pudendal

DATA ORIGIN

Health Outcome Indicators - Normal Pregnancy and Childbirth, West Midlands Advisory Board - Maternity

Non-mutually exclusive answers need to be documented separately since they have to be entered separately onto the electronic database if they are to be of any future use.

Such answers look fine on paper but do not work on a computer.

How can you enter the data on someone who has more than one of the items on the list?

† = Must be removed when data is anonymity
A3. Anesthetic Involvement in Labour Pain Relief

---

A3-A. ANAESTHETIC INVOLVEMENT IN LABOUR PAIN RELIEF

**Anaesthetist(s) involved in providing Relief for Labour Pain**

WHEN? Only if “Was there Labour before Birth?” = “Yes” (80%?)

<table>
<thead>
<tr>
<th>Yes (20%)</th>
<th>No</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

 workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Regional Analgesia for Labour Pain given**

WHEN? Only if “Was there Labour before Birth?” = “Yes”

and if “Anaesthetists involved in providing Relief for Labour Pain?” = “Yes” (20%?)

<table>
<thead>
<tr>
<th>Yes (20%)</th>
<th>No</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

 workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Type of Regional Analgesia for Labour given or attempted**

WHEN? As Above (20%?)

<table>
<thead>
<tr>
<th>Epidural</th>
<th>Spinal</th>
<th>Failed Spinal + Successful Epidural</th>
<th>Failed Epidural + Successful Spinal</th>
<th>Failed Regional Analgesia</th>
<th>Unknown</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

 workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Type of Epidural for Labour given or attempted**

WHEN? Only if “Type of Regional Analgesia for Labour given or attempted” = “Epidural” or “Failed Spinal + Successful Epidural” or “Failed Epidural + Successful Spinal” (20%?)

<table>
<thead>
<tr>
<th>Low dose Epidural</th>
<th>Patient Controlled Epidural Analgesia</th>
<th>Combined Spinal/Epidural Analgesia</th>
<th>Other</th>
<th>Unknown</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

 workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

**Main Medical Indication for Regional Analgesia**

DATA ITEM Analgesia / Anaesthesia for birth

BASIS Identifies analgesia/anaesthesia used for birth

EXPLANATION Facilitates audit of practice, may be relevant to complications and effect on mother/infant bonding

INPUT OPTIONS Non-mutually exclusive

<table>
<thead>
<tr>
<th>Epidural</th>
<th>Spinal</th>
<th>Caudal</th>
<th>Pudendal Block</th>
<th>Local Anaesthetic Infiltrate</th>
<th>General anaesthetic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

 DATA ORIGIN Commissioning Data Set, Hospital Episode Statistics, West Midlands Advisory Board - Maternity

Non-mutually exclusive answers need to be documented separately since they have to be entered separately onto the electronic database if they are to be of any future use. Such answers look fine on paper but do not work on a computer.

How can you enter the data on someone who has more than one of the items on the list?

† = Must be removed when data is anonymity

© Rupert Fawdry 2005 “Logical Prioritisation” compared with MANNERS Maternity
Logical Prioritisation

in Labour

WHEN? As Above
Slow progress in Labour
Maternal Distress
Pre-Eclampsia - Hypertension
Multiple Birth
Breech
Pre-term Labour
None
Unknown
Other

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

A4. Analgesia/Aneasthesia for Birth

A4-A. ANALGESIA/ANAESTHESIA FOR THE
BIRTH EVENT

Most Significant Type of Birth Analgesia /
Anaesthesia for Mother

WHEN? All (100%)
None
Spinal
General Anaesthetic
Epidural
Caudal
Combined Spinal / Epidural
Pudendal
Local Anaesthetic Infiltration
Abdominal Wall Infiltration
Field Block of Abdomen
Other
Unknown

Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated

A4-C. IF A REGIONAL BLOCK FOR BIRTH

Reasons for Regional Block for Birth

WHEN? Only if “Analgesia/Aneasthesia for (Any) Birth” = “Yes”
and if “Most Significant Type of Analgesia/Anaesthesia for (Any) Birth” = “Spinal”
or “Epidural” or “Caudal” (20%)?

Caesarean
Maternal request
Obstetric considerations
Labour epidural in situ
Failed general anaesthesia
Other technique unsuitable
Unknown
Other

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, if 20% + Look Up (10 secs) + Data Entry by Midwife, Extra Workload: 310 hours
Cost: £6,200

A4-D. IF GENERAL ANAESTHESIA FOR BIRTH

Reasons for General Anaesthesia for Birth

WHEN? Only if “Analgesia/Aneasthesia for (Any) Birth” = “Yes”
and if “Most Significant Type of Analgesia/Anaesthesia for (Any) Birth” = “General Anaesthesia” (5%)?

Maternal Request
Obstetric Considerations
Insufficient Time for Regional Block
Failed Regional Block
Unsuitable for Regional Block
Unknown
Other (Free text option - Details)

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.
Annually, if 5% + Look Up (10 secs) + Data Entry by Midwife, Extra Workload: 77 hours
Cost: £1,550

† = Must be removed when data is anonymity

EEP.D.02_DATASETS.L_LARGE.MANNERS.500cfM-30 (27th November 2005)
© Rupert Fawdry 2005  “ Logical Prioritisation” compared with MANNERS Maternity  Page 133 of 171
A5. Analgesia/Anaesthesia Post-Delivery

**Analgesia / Analgesia for Immediate Post-Delivery Problems**

**WHEN?** All (100%)

**No**

**Yes**

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.

Annually, if 5% + Look Up (10 secs) + Data Entry by Midwife, Extra Workload: 77 hours

Cost: £1,550

**Method of Post Labour Analgesia / Anaesthesia**

(Separate from Birth Analgesia / Anaesthesia)

**WHEN?** Only if "Anaesthesia for Immediate Post-Delivery Problems?" = "Yes"

And "Continuation of Anaesthesia given for Birth?" = "No"

**General Anaesthetic**

Combined spinal-epidural = “Spinal, epidural or both components active”

**Spinal**

**Epidural**

**Caudal**

**Unknown**

**Other**

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality.

Annually, if 5% + Look Up (10 secs) + Data Entry by Midwife, Extra Workload: 77 hours

Cost: £1,550

† = Must be removed when data is anonymity
A6. Anaesthesia / Analgesia Retrospective

A6-A. IF ANY FORM OF REGIONAL ANALGESIA (Epidural / Caudal / Spinal)

Any Serious Problems with Regional Analgesia?
WHEN? Only if “Was there Labour before Birth?” = “Yes” and if “Anaesthetists involved in providing Relief for Labour Pain?” = “Yes” and if “Regional Analgesia for Labour Pain given?” = “Yes” and or “Regional Analgesia given for Birth” = “Yes” (20%?)

No
Yes

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality. Annually, if 20% + Look Up (10 secs) + Data Entry by Midwife, Extra Workload: 310 hours Cost: £6,200

Accidental Dural Puncture?
WHEN? Only if “Any Serious Problems with Regional Analgesia?” = “Yes” (1%?)

No
Yes (<1%?)

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality. Annually, if 1% + Look Up (10 secs) + Data Entry by Midwife, Extra Workload: 16 hours Cost: £310

Post Dural Puncture Headache?
WHEN? Only if “Any Serious Problems with Regional Analgesia?” = “Yes” (1%?)

No
Yes

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality. Annually, if 1% + Look Up (10 secs) + Data Entry by Midwife, Extra Workload: 16 hours Cost: £310

Epidural Blood Patch performed or attempted?
WHEN? Only if “Post Dural Puncture headache?” = “Yes” or if “Accidental Dural Puncture?” = “Yes” (<1%)?

No
Yes

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality. Annually, if 1% + Look Up (10 secs) + Data Entry by Midwife, Extra Workload: 16 hours Cost: £310

Excessively High Regional Block?
WHEN? Only if “Any Serious Problems with Regional Analgesia?” = “Yes”

No
Yes

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality. Annually, if 1% + Look Up (10 secs) + Data Entry by Midwife, Extra Workload: 16 hours Cost: £310

Local Anaesthetic Toxicity?
WHEN? Only if “Any Serious Problems with Regional Analgesia?” = “Yes”

No
Yes (Free Text Opportunity - Details)

Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality. Annually, if 1% + Look Up (10 secs) + Data Entry by Midwife, Extra Workload: 16 hours Cost: £310
Logical Prioritisation

Backache following Regional Anaesthesia?
WHEN? Only if “Any Serious Problems with Regional Analgesia?” = “Yes”

No
Yes

Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 1% + Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 16 hours
Cost: £310

Neurological Deficit?
WHEN? Only if “Any Serious Problems with Regional Analgesia?” = “Yes”

No
Yes

Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 1% + Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 16 hours
Cost: £310

Anaesthesia Induced Urinary Retention?
WHEN? Only if “Any Serious Problems with Regional Analgesia?” = “Yes”

No
Yes

Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 1% + Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 16 hours
Cost: £310

Other serious complications with Regional Analgesia?
WHEN? Only if “Any Serious Problems with Regional Analgesia?” = “Yes”

No
Yes (Free text option - Details)

Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 1% + Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 16 hours
Cost: £310

† = Must be removed when data is anonymity
A7. Anaesthesia / Analgesia Quality and Follow-Up

Mother assessed by Anaesthetist before Discharge?

WHEN  Only if “Was there Labour before Birth?” =

“Yes”  and if “Anaesthetists involved in providing

Relief for Labour Pain?” = “Yes”  and / or “Anaesthesia / Analgesia given for

Birth” = “Yes”  and / or “Anaesthesia / Analgesia for Immediate

Post-Delivery Problems ” = “Yes” (20%)  

No  

Yes

Workload / Cost (All Phases of Maternity EPR) A3: Individual Care Quality.
Annually, if 20% + Look Up (10 secs) + Data Entry by Midwife. Extra Workload: 310 hours
Cost: £6,200

Anaesthetic Post-Natal Follow-Up needed?

WHEN  Only if “Was there Labour before Birth?” =

“Yes”  and if “Anaesthetists involved in providing

Relief for Labour Pain?” = “Yes”  and / or “Anaesthesia / Analgesia given for

Birth” = “Yes”  and / or “Anaesthesia / Analgesia for Immediate

Post-Delivery Problems ” = “Yes” (20%)  

No  

Yes

Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral

Anaesthetist Postnatal Follow-Up Appointment arranged?

WHEN  Only if “Anaesthetic Follow-Up Required” =

“Yes”  

[Date]

Workload / Cost (All Phases of Maternity EPR)  A2: Cost Neutral

† = Must be removed when data is anonymity
Logical Prioritisation

D. Stillbirth and Deaths

D1. Stillbirth or Neonatal Death

D1-A. POSSIBLE POST-MORTEM

Stillbirth or Death of a Neonate?

WHEN? All
No (Automatic Default)
Stillbirth (Automatic Default if “Outcome of Birth” does not = “Livebirth”)
Death of Baby

Post-Mortem/Pathology Consent Decision (Baby)?

WHEN? Only if “Stillbirth or Death of a Neonate” = “Stillbirth” or “Death of Baby” (<1%)
Agreed to Full Post-Mortem
Agreed to Partial Post-Mortem
Post-mortem Consent Requested but Refused
Undecided so far
Never asked
Other (Specify)
Unknown

D1-B. IF STILLBIRTH

Cause for Stillbirth (As on Stillbirth Certificate)?

WHEN? Only if “Outcome of Birth (Live or Stillbirth)” = “Stillbirth” (<1%)
Nationally Agreed Set of Potential answers
or Free Text

Cause for Stillbirth (Final Opinion)?

WHEN? Only if “Outcome of Birth (Live or Stillbirth)” = “Stillbirth” (<1%)
Nationally Agreed Set of Potential answers
or Free Text

K. NEONATAL DEATH DATA

DATA ITEM
Post Mortem examination
DATA ORIGIN
British Association of Perinatal Medicine, CESDI, West Midlands Advisory Board - Paediatrics

† = Must be removed when data is anonymity

EEP.D.02_DATASETS.L_LARGE.MANNERS.500cM-30 (27th November 2005)
© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 138 of 171
Logical Prioritisation

D1-C. IF NEONATAL DEATH

Death of Baby (Date)?
WHEN? Only if “Stillbirth or Death of a Neonate” = "Death of Baby" (<1%)
[Date]
Unknown
Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Age at Death - Baby (Weeks and Days)?
WHEN? Only if “Stillbirth or Death of a Neonate” = "Death of Baby" (<1%)
[Weeks and Days]
Unknown
Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

Place of Death should possibly be part of Fawdry 500

Weight of Baby at Death (Grams)?
WHEN? Only if “Stillbirth or Death of a Neonate” = "Death of Baby" (<1%)
[Weight in Grams]
Unknown
Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Cause of Death of Neonate (As on Birth Certificate)?
WHEN? Only if “Stillbirth or Death of a Neonate” = "Death of Baby" (<1%)
Nationally Agreed Set of Potential answers or Free Text

Cause of Death of Neonate (Final Opinion)?
WHEN? Only if “Stillbirth or Death of a Neonate” = "Death of Baby" (<1%)
Nationally Agreed Set of Potential answers or Free Text

MANNERS - Maternity

Date of death
DATA ITEM
Date
BASIS
Record of the date and time of death of the baby
EXPLANATION
Used to calculate duration of survival. An important outcome indicator, which has resource implications
INPUT OPTIONS
DD/MM/YYYY
DATA ORIGIN
British Association of Perinatal Medicine, CESDI, Health Outcome Indicators - Normal Pregnancy and Childbirth, West Midlands Advisory Board - Paediatrics

Time of death
DATA ITEM
Time
BASIS
Record of the time of death of the baby
EXPLANATION
Used to calculate duration of survival. An important outcome indicator, which has resource implications
INPUT OPTIONS
HH:MM (24 hour clock)
DATA ORIGIN
British Association of Perinatal Medicine, CESDI, Health Outcome Indicators - Normal Pregnancy and Childbirth, West Midlands Advisory Board - Paediatrics

Another “Paralysis by Analysis” ("Below the line") Item
No value as an “Individual Patient Encounter Assistance” ("Above the line") item.

A 1 in nn sample would probably give almost the same audit and managerial information with significantly less electronic data entry work by overburdened front line health care workers.

Place of death
DATA ITEM
Place of death
BASIS
Location of place of death of baby
EXPLANATION
Facilitates audit of infant mortality
INPUT OPTIONS
Mutually exclusive: Hospital (+ free text to document details) / Other (+ free text to document details)
DATA ORIGIN
CESDI

Cause of death
DATA ITEM
Cause of death
BASIS
A description of cause of death of a baby
EXPLANATION
An important outcome indicator
INPUT OPTIONS
As per Medical certificate of cause of death
DATA ORIGIN
Office of National Statistics CESDI, West Midlands Advisory Board - Paediatrics, Office of National Statistics

Birth Certificate Version or Final Version?

† = Must be removed when data is anonymity
© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity  Page 139 of 171
D1-D. CLASSIFICATION

Neonatal Death (First Month)?
WHEN? Only if “Stillbirth or Death of a Neonate” =
“Death of Baby” (<1%)
Default automatically to No
Yes
Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

Early Neonatal Death (First Week)?
WHEN? Only if “Stillbirth or Death of a Neonate” =
“Death of Baby” (<1%)
Yes
No
Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

Late Neonatal Death (First Week)?
WHEN? Only if “Stillbirth or Death of a Neonate” =
“Death of Baby” (<1%)
Yes
No
Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

Perinatal Death (Y/N)?
WHEN? Only if “Stillbirth or Death of a Neonate” =
“Death of Baby” (<1%)
Default automatically to No
Yes
Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

† = Must be removed when data is anonymity
Logical Prioritisation

D2. Maternal Death

D2-A. MATERNAL DEATH

Maternal Death?

WHEN? All
No (Automatic Default)
Yes

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Place of Death should probably be part of Fawdry 500

D2-B. DATES

Death of Mother (Date)?

WHEN Only if “Maternal Death?” = “Yes” (<0.01%) [Date]

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

I. MATERNAL DEATH DATA

DATA ITEM Place of death

BASIS Location of place of death of mother
EXPLANATION Facilitates audit of maternal mortality
INPUT OPTIONS Mutually exclusive: Hospital (pick list provided) / Other (+ free text to document details)
DATA ORIGIN Confidential Enquiry into Maternal Deaths

DATA ITEM Date of death

BASIS Record of the date of death of the mother
EXPLANATION Used in audit of maternal mortality
INPUT OPTIONS DD/MM/YYYY
DATA ORIGIN Confidential Enquiry into Maternal Deaths, Health Outcome Indicators - Normal Pregnancy and Childbirth

DATA ITEM Time of death

BASIS Record of the time of death of the mother
EXPLANATION Used in audit of maternal mortality
INPUT OPTIONS HH:MM (24 hour clock)
DATA ORIGIN Confidential Enquiry into Maternal Deaths, Health Outcome Indicators - Normal Pregnancy and Childbirth

Another “Paralysis by Analysis” (“Below the line”) Item
No value as an “Individual Patient Encounter Assistance” (“Above the line”) item.

A 1 in nn sample would probably give almost the same audit and managerial information with significantly less electronic data entry work by overburdened front line health care workers.

Pregnant or Post Delivery Maternal Death?

WHEN Only if “Maternal Death?” = “Yes” (<0.01%)
Pregnant
Post-delivery
Unknown

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

D2-C. IF DEATH WHILE STILL PREGNANT

Final Probable Due Date?

WHEN Only if “Maternal Death - Pregnant or Post Delivery?” = “Pregnant” (<0.01%) [Date]

Unknown

Workload / Cost (All Phases of Maternity EPR) Already recorded electronically or A2: Cost Neutral

Gestation at time of Death?

WHEN Only if “Maternal Death - Pregnant or Post Delivery?” = “Pregnant” (<0.01%)

[Date]

Unknown

Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated: based on A1-4 data

D2-D. IF DEATH POST DELIVERY

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  “ Logical Prioritisation” compared with MANNERS Maternity  Page 141 of 171
Logical Prioritisation

Number of Weeks and Days Post-Natal?
WHEN Only if “Maternal Death - Pregnant or Post Delivery?” = “Post-Delivery” (<0.01%) [Weeks] and [Days]
Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

D2-E. CAUSE OF DEATH

Reason for Death - Mother (As on Death Certificate)?
WHEN Only if “Maternal Death?” = “Yes” (<0.01%)
????? List of commonest reasons from confidential enquiry needed
Other (Free Text)
Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

Reason for Death - Mother (Final Opinion)?
WHEN Only if “Maternal Death?” = “Yes” (<0.01%)
????? List of commonest reasons from confidential enquiry needed
Other (Free Text)
Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral

DATA ITEM Cause of death
BASIS A description of cause of death of a mother
EXPLANATION An important outcome indicator
INPUT OPTIONS As per Medical certificate of cause of death
DATA ORIGIN Office of National Statistics Confidential Enquiry into Maternal Deaths, Health Outcome Indicators - Normal Pregnancy and Childbirth, West Midlands Advisory Board - Maternity, Office of National Statistics

Birth Certificate Version or Final Version?

† = Must be removed when data is anonymity
EEP.D.02_DATASETS.L_LARGE.MANNERS.500cfM-30 (27th November 2005) © Rupert Fawdry 2005 “Logical Prioritisation” compared with MANNERS Maternity Page 142 of 171
Logical Prioritisation

P. Past Obstetric History (POH)

Pregnancy Summary items. Created automatically after the end of the current pregnancy.
or when reviewing a history of all past pregnancies (either at booking or relevant gynaecology history taking). For eventual long term storage in Primary Health Care EPR.

Originally this section formed part of the Initial Assessment (Booking) section of the EPR dataset. However it gradually became clear a) firstly, that each item in a Past Obstetric History needed to be carefully related to the possible existence of electronic data collected at the time of a previous pregnancy and b) even later it became clear that whenever all the electronic data in a full Maternity EPR is available concerning any pregnancy, the mass of detail will be overwhelming unless a summarised electronic version is automatically created both for immediate or later use, hence this separate section. For example the Primary Health Centre will require such a summary as part of it’s own EPR, or such a summary might be needed by a G.P. or for a gynaecological admission, or most commonly when the woman returns for a subsequent pregnancy in the same hospital or another hospital with a compatible maternity EPR. Thus an electronic “Past” Pregnancy Summary was needed soon after each full pregnancy episode.

In the end this section has proved to be more complex and more difficult to document than any other part!

----------------------------------------

P2. Total Number of Previous Pregnancies

----------------------------------------

Total Number of Past Pregnancies (Not fetuses or babies) of any kind?
WHEN? All (100%)
2 character integer (e.g. 10)
Unknown

or the same answer, created electronically from her Maternity EPR

Workload / Cost (All Phases of Maternity EPR) A2: Cost Neutral
P3. For Each Individual Past Pregnancies

P3-A. BASIC DATA ABOUT EACH PREGNANCY

**Pregnancy Number?**

*WHEN Only if “Total Number of Past Pregnancies of any kind” > 0*

**[Integer]**

This Should automatically be displayed in sequence whenever a previous Maternity EPR exists.

- **Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available.**
- **A3:** Individual Care Quality.
- **For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload**
- **?? hours Cost £??,???
- **When previous maternity EPR available.**
- **A5:** Computer generated. Cost Free (except for rare error corrections)

**Year (not Date) of giving Birth or other End of this Pregnancy?**

*WHEN Only if “Total Number of Past Pregnancies of any kind” = > 0*

**[Year]**

or the same answer, created electronically from her Maternity EPR based on:

- **[P. Pregnancy. P1. “Date of End of this Pregnancy” for non-viable pregnancies or]**
- **[E. Event. E5-A. “Date of Birth Event” (= Date of Last Birth)]**

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. **A3:** Individual Care Quality.

- **For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload**
- **?? hours Cost £??,???
- **When previous maternity EPR available.**
- **A5:** Computer generated. Cost Free (except for rare error corrections)

**Gestation at End of this Pregnancy?**

*WHEN Only if “Total Number of Past Pregnancies of any kind” > 0*

**[Weeks]**

or the same answer, created electronically from her Maternity EPR and based on:

- **[P. Pregnancy. P1. “Gestation at End of this Pregnancy”]**
- **or**
- **[E. Event. E5-A. “Gestation (Best Pre-Birth Estimate - Last Birth)’]”**

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. **A3:** Individual Care Quality.

- **For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload**
- **?? hours Cost £??,???
- **When previous maternity EPR available.**
- **A5:** Computer generated. Cost Free (except for rare error corrections)
Type of Ending for this Pregnancy?

WHEN Only if “Total Number of Past Pregnancies of any kind” > 0

- One (or More) Registrable Birth(s)
- Spontaneous Miscarriage (including “Hidden Miscarriage”)
- Miscarriage following an Invasive Procedure
- Termination of Pregnancy - not by Hysterotomy
- Termination of Pregnancy - by Hysterotomy
- Ectopic Pregnancy
- Other (Free Text)

or one of the same answer options, created electronically from her Maternity EPR and based on:

- [P. PREGNANCY. P1. “Reason for Closing Record for Birth in this District”]
- [or P3. Retrospective Data about the whole of the Present Pregnancy]
  - Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.
  - For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
  - ??? hours Cost £??,???
  - When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)

Place where this baby was born, or this pregnancy ended?

WHEN Only if “Total Number of Past Pregnancies of any kind” > 0

- This Hospital
- Another Hospital (Name if available? - but see comment below)
- Home
- Other (Free Text)
- Unknown

or one of the same answer options, created electronically from her Maternity EPR.

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.

- For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
- ??? hours Cost £??,???
- When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)
Logical Prioritisation

P3-B. IF TERMINATION OF THIS PREGNANCY

If Termination of Pregnancy, Reason or Indication?
WHEN Only if “Type of Ending for this pregnancy”
   = “Termination of Pregnancy”
A. Risk to the Life of the Pregnant Woman
B. Permanent Risk to Physical or Mental Health of the
Pregnant Woman
C. Less than 24 weeks. Risk to Physical or Mental
Health of the Pregnant Woman
greater than if the pregnancy were terminated.
D. Less than 24 weeks. Risk to Physical or Mental
Health of any Existing Child(ren)
greater than if the pregnancy were terminated.
E. Substantial Risk of Seriously Handicap - Severe Fetal
Anomalies
or one of the same answer options, created electronically from
her Maternity EPR and based on:
[P. PREGNANCY. P1. Indication for Termination]
Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
??? hours Cost £??,???.
When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)

If for Severe Fetal Anomaly, Description?
WHEN Only if “Indication for Termination”
   = “E. Substantial Risk of Seriously Handicap - Severe Fetal Anomalies”
   [Free Text]
or if her Maternity EPR is available then use the answer given
in:
[P. PREGNANCY. P1. Description of the Fetal Anomaly]
[that was the indication for the Termination]
Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
??? hours Cost £??,???.
When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)

P3-C. PREGNANCY PROBLEMS IN THIS
PREVIOUS PREGNANCY

Any Serious Ante-natal Problems in this pregnancy?
WHEN Only if “Gestation” = “12 weeks or More”
Omit this question if no electronic data available
Instead see below under H4-A. “Ante-Natal Problems in
any Previous Pregnancy”
Include any relevant positive answers, created electronically
from her Maternity EPR and based on:
[P3. Retrospective Data about the whole of the Present
Pregnancy]
See 11-H. Relevant Medical or Surgical Problems????
whenever the wording “Electronic Dataset Output: Past
Pregnancy Summary (if . . . .)” appears
Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
??? hours Cost £??,???.
When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)

† = Must be removed when data is anonymity
EEP.D_02_DATASETS.L_LARGE.MANNERS.500cIM-30 (27th November 2005)
© Rupert Fawdry 2005  “Logical Prioritisation” compared with MANNERS Maternity Page 146 of 171
Logical Prioritisation

P3-D. LABOUR IN THIS PREVIOUS PREGNANCY

No Labour or Type of Onset of Labour?

WHEN Only if “Gestation” = “20 weeks or More”
and “Type of Ending for this Pregnancy”
= “One (or More) Registrable Birth(s)” or “Spontaneous
Miscarriage”

Spontaneous Onset
Induction and / or Ripening followed by Labour
Never in Labour (e.g. Planned Caesarean)
Other (Free Text)
Unknown

or one of the same answer options, created electronically from
her Maternity EPR and based on:

before Birth” and
E.Event.E1-C. Ripenings or Inductions.

“Type of Onset of Labour (Spontaneous or Induced/
Ripening)”

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3:
Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Miderlo Extra Workload
??? hours Cost £??,???
When previous maternity EPR available. A5: Computer generated. Cost Free (except for
rare error corrections)

† = Must be removed when data is anonymity

© Rupert Fawdry 2005

“Logical Prioritisation” compared with MANNERS Maternity Page 147 of 171

EEP.D.02_DATASETS.L_LARGE.MANNERS.500cIFM-30 (27th November 2005)
Logical Prioritisation

IF LABOUR

Augmentation?
WHEN Only if “Onset of Labour” = “Spontaneous Onset”

or
“Induction and / or Ripening followed by Labour”
Natural, no Augmentation
Augmented
Unknown

or one of the same answer options, created electronically from
her Maternity EPR and based on:

E.EVENT.E1-????

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3:
Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
???? hours Cost £??? ???
When previous maternity EPR available. A5: Computer generated. Cost Free (except for
rare error corrections)

Regional Analgesia for Labour?
WHEN Only if “Onset of Labour” = “Spontaneous Onset”

or
“Induction and / or Ripening followed by Labour”
No
Yes, Epidural or equivalent given for labour
Unknown

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3:
Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
???? hours Cost £??? ???
When previous maternity EPR available. A5: Computer generated. Cost Free (except for
rare error corrections)

Duration of Labour?
WHEN Only if “Onset of Labour” = “Spontaneous Onset”

or
“Induction and / or Ripening followed by Labour”
Within Normal Limits (2 - 24 hours)
Less than 2 hour Labour
More than 24 hour Labour (Free Text)
Unknown

or one of the same answer options, created electronically
from her Maternity EPR and based on:

E.EVENT.E1-B. LABOUR SUMMARY. “Was there
Labour before Birth” and
E.EVENT.E1-????

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3:
Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
???? hours Cost £??? ???
When previous maternity EPR available. A5: Computer generated. Cost Free (except for
rare error corrections)

† = Must be removed when data is anonymity
General Anaesthesia or Regional Anaesthesia/Analgesia for the Birth Event?

- WHEN Only if “Gestation” = “20 weeks or More”
- None
- Regional Anaesthesia/Analgesia (e.g. Epidural etc)
- General Anaesthesia
- Other (Free Text)
- Unknown

or one of the same answer options, created electronically from her Maternity EPR and based on:

A. Anaesthesia. ????

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.

For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload ??? hours Cost £????

When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)

Number of Registrable Babies Born?

- WHEN “Type of Ending for this Pregnancy” = “One (or More) Registrable Birth(s)”
- [Single Integer]
- Unknown

or if her Maternity EPR is available then use the answer given in:

E1-B. Labour Summary. “Number of Babies Born during this Birth Event”

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.

For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload ??? hours Cost £????

When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)

Any Serious Labour or Birth Event Problem(s) in this pregnancy?

- WHEN Only if “Gestation” = “12 weeks or More”
- Omit this question if no electronic data available, instead see below under H4-A. “Other Serious Labour or Birth Event Problems in any Previous Pregnancy”

Include any relevant positive answers, created electronically from her Maternity EPR and based on ????

whenever the wording “Future EPR Visibility?: Past Pregnancy Summary (if . . . . )” appears

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.

For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload ??? hours Cost £????

When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)
First Name?

WHEN Only if “Gestation” = “12 weeks or more”

Omit this question if no electronic data available, EPR data entry unjustifiable extra work

or if her Maternity EPR is available then use the answer given in:

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
???? hours Cost £??,???
When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)

Method of Birth?

WHEN “Type of Ending for this Pregnancy” = “One (or More) Registrable Birth(s)”
Vaginal Cephalic (No operative assistance)
Vaginal Cephalic with Vacuum
Vaginal Cephalic with Forceps (Free Text if available)
Vaginal Breech
Caesarean - Planned
Caesarean - Emergency
Other (Free Text)
Unknown

or if her Maternity EPR is available then use the more detailed answer given in:

B2-A. Route and Method of Birth. Method of Birth

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
???? hours Cost £??,???
When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)

If for Assisted Birth, Reason?

WHEN Only if “Outcome (Livebirth/Stillbirth)” = “Stillbirth” [Free Text]

or if her Maternity EPR is available then use the answer given in:

????

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
???? hours Cost £??,???
When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)

If Caesarean Section, Comments Regarding Future Deliveries?

WHEN? Only if “Method of Birth” = “Caesarean”
Vaginal Delivery probably reasonable (Free Text)
Probable Caesarean needed (Free Text)
Definite Caesarean required (Free Text)
No Comment

or if her Maternity EPR is available then use the answer given in:

E. (Birth) Event. E4-C. Recommendations for Future Delivery.

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
???? hours Cost £??,???
When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)
Outcome (Livebirth/Stillbirth)?

WHEN Only if “Gestation” = “20 weeks or More” and “Type of Ending for this Pregnancy” = “One (or More) Registrable Birth(s)”

- Livebirth
- Stillbirth
- Unknown

or if her Maternity EPR is available then use the more detailed answers given in:

B1-H. Outcome and D. Reason for Stillbirth

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.

For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload

??? hours Cost £??,???

When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)

If for Stillbirth, Reason?

WHEN Only if “Outcome (Livebirth/Stillbirth)” = “Stillbirth” [Free Text]

or if her Maternity EPR is available then use the answer given in:

????

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.

For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload

??? hours Cost £??,???

When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)
Logical Prioritisation

Sex?

WHEN Only if “Gestation” = “20 weeks or More”
and “Type of Ending for this Pregnancy” = “One (or More)

Registrable Birth(s)“
Female
Male
Unknown

or if her Maternity EPR is available then use the more detailed
answer given in:

N1-B. Final Decision on Sex of Baby
Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3:
Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
??? hours Cost £??,???
When previous maternity EPR available. A5: Computer generated. Cost Free (except for
rare error corrections)

Birth Weight?

WHEN Only if “Gestation” = “20 weeks or More”
and “Type of Ending for this Pregnancy” = “One (or More)

Registrable Birth(s)“
[Imperial or Metric]
Unknown

or if her Maternity EPR is available then use the answer given
in:

B9-C. Initial Measurements. Birth Weight.
Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3:
Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
??? hours Cost £??,???
When previous maternity EPR available. A5: Computer generated. Cost Free (except for
rare error corrections)

Weight Centile (using all relevant and available
data)?

WHEN Only if “Gestation” = “20 weeks or More”
and “Type of Ending for this Pregnancy” = “One (or More)

Registrable Birth(s)“
and “Birth Weight” not “Unknown”
Within Normal Limits
Smaller than 10th Centile
Smaller than 5th Centile
Larger than 10th centile
Larger than 5th Centile
Not possible to calculate

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3:
Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
??? hours Cost £??,???
When previous maternity EPR available. A5: Computer generated. Cost Free (except for
rare error corrections)

NHS Number?

WHEN Only if “Gestation” = “20 weeks or More”
and “Type of Ending for this Pregnancy” = “One (or More)

Registrable Birth(s)“
[Omit this question if no electronic data available]

or if her Maternity EPR is available then use the answer (if it
exists) given in:

???

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3:
Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
??? hours Cost £??,???
When previous maternity EPR available. A5: Computer generated. Cost Free (except for
rare error corrections)

† = Must be removed when data is anonymity
P3-G. MOTHER AFTER GIVING BIRTH

Perineum, Third Stage, Puerperium?

WHEN Only if “Gestation” = “20 weeks or More”
and “Method of Birth” for any babies born at this Birth

Event = “Vaginal”

Omit this question if no electronic data available
Instead see below under

Include any relevant positive answers, created electronically
from her Maternity EPR and based on:

- whenever the wording “Future EPR Visibility?: Past Pregnancy
Summary (if . . . . )” appears
  Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3:
  Individual Care Quality.
  For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
  ??? hours Cost £???
  When previous maternity EPR available. A5: Computer generated. Cost Free (except for
  rare error corrections)

Any other Post-Natal Problems in this Previous
Pregnancy?

WHEN Only if “Gestation” = “20 weeks or More”

Omit this question if no electronic data available
Instead see below under

Include any relevant positive answers, created electronically
from her Maternity EPR and based on:

- whenever the wording “Future EPR Visibility?: Past Pregnancy
Summary (if . . . . )” appears
  Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3:
  Individual Care Quality.
  For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
  ??? hours Cost £???
  When previous maternity EPR available. A5: Computer generated. Cost Free (except for
  rare error corrections)
Logical Prioritisation

P4-H. EACH CHILD

Any Major Congenital Anomalies?
WHEN Only if “Type of Ending for this Pregnancy” = “One (or More) Registrable Birth(s)”

No serious congenital anomalies
Serious congenital anomalies (Free Text)

or include any relevant positive answers, created electronically from her Maternity EPR and based on:

whenever the wording “Future EPR Visibility?: Past Pregnancy Summary (if . . . . )” appears

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
??? hours Cost £??,???
When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)

Fetal Life-Threatening Complication not included above?
WHEN Only if “Type of Ending for this Pregnancy” = “One (or More) Registrable Birth(s)”

No
Yes (Free Text)

Include any relevant positive answers, created electronically from her Maternity EPR and based on:

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
??? hours Cost £??,???
When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)

Main Method of Feeding?
WHEN Only if “Outcome” = “Livebirth”

Breast
Artificial
Unknown

Duration of Breast Feeding?
WHEN Only if “Method of Feeding” = “Breast”

[Weeks]

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
??? hours Cost £??,???
When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)

Present State?
WHEN Only “Outcome” = “Livebirth”

Alive and Well
Unwell (Free Text)
Died

if her Maternity EPR is available and contains data concerning Neonatal or other Death
then the answer should automatically default to “Died”

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
??? hours Cost £??,???
When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)

† = Must be removed when data is anonymity
**Logical Prioritisation**

**If Dead: Age at Death?**

WHEN Only if “Present State” = “Died
[Free Text for Months and/or Years]

if her Maternity EPR is available and contains data concerning
Neonatal or other Death
then the answer should automatically be available in:

- Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available.  A3: Individual Care Quality.
- For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
  - When previous maternity EPR available.  A5: Computer generated. Cost Free (except for rare error corrections)

**Cause of Death?**

WHEN Only if “Present State” = “Died
[Free Text]

if her Maternity EPR is available and contains data concerning
Neonatal or other Death
then the answer may automatically be available in:

- Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available.  A3: Individual Care Quality.
- For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
  - When previous maternity EPR available.  A5: Computer generated. Cost Free (except for rare error corrections)
P4-B. BIRTH EVENT PROBLEMS IN ANY PREVIOUS PREGNANCY

Any Important Birth Problems in any Previous Pregnancy?

WHEN? Only if any previous pregnancy with a gestation > 20 weeks

No
Yes

Maternity EPR. Not relevant here. Any data relevant to this question should already have been displayed above in the detailed obstetric history of each previous pregnancy and is therefore irrelevant here. Any relevant EPR data regarding any previous pregnancy will also automatically appear in the R. Risks Assessment section.

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload ??7 hours Cost £??,???

“Difficult” or “Failed Attempt” vaginal delivery (Any Previous Pregnancy)?

WHEN? Only if “Gestation” = “20 weeks or More”

No
Yes (Free Text)

Maternity EPR. Not relevant here.

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload ??7 hours Cost £??,???

Severe Perineum Problems?

WHEN Only if “Method of Birth” = Vaginal of some sort and “Method of Birth” for any babies = “Vaginal”

No serious problems
Problems with Bad Tear or Episiotomy (Free Text)
Other (Free Text)

Maternity EPR. Not relevant here.

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload ??7 hours Cost £??,???

Third Stage Problems (Any Previous Pregnancy)?

WHEN Only if “Gestation” = “20 weeks or More”

No serious problems
Retained Placenta
Other (Free Text)

Maternity EPR. Not relevant here.

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload ??7 hours Cost £??,???
Serious Post-Partum Haemorrhage (Any Previous Pregnancy)?

**WHEN?** Only if "Any Serious Medical or Obstetric Problem in any Previous Pregnancy" = "Yes" (5%?)

- **No**
- **Yes** (Free Text)

Maternity EPR. Not relevant here.

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available.  A3:
Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
??? hours Cost £??,???
When previous maternity EPR available.  A5: Computer generated. Cost Free (except for rare error corrections)

Any other Serious Birth Event Problems (Any Previous Pregnancy)?

**WHEN?** Only if "Any Serious Medical or Obstetric Problem in any Previous Pregnancy" = "Yes" (5%?)

- **No**
- **Yes** (Free Text)

Maternity EPR. Not relevant here.

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available.  A3:
Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
??? hours Cost £??,???
When previous maternity EPR available.  A5: Computer generated. Cost Free (except for rare error corrections)
Pregnancy Related Mental Disturbance requiring supervised Care?

WHEN? Only if “Total Number of Past Pregnancies of any kind” > 0

- **No serious problems**
  - No problem at all
  - Depression but not sufficient to need supervised care

(Free Text)

- **Serious Problems requiring supervised Care (Free Text)**
- **Other (Free Text)**

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
??? hours Cost £??,???
When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)

Hydatidiform Mole (Any Previous Pregnancy, Any Gestation)?

WHEN? Only if “Total Number of Past Pregnancies of any kind” > 0

- **No**
  - **Yes (Free Text)**

Maternity EPR. Not relevant here. See above.
Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
??? hours Cost £??,???
When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)

Any Other Serious Antenatal Problems in any Previous Pregnancy?

WHEN? Only if any previous pregnancy with a gestation > 12 weeks??

- **No**
  - **Yes**

Maternity EPR. Not relevant here. See above
Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
??? hours Cost £??,???
When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)

Prolonged Serious Vomiting Problem (Any Previous Pregnancy)?

WHEN? Only if “Any Other Serious Antenatal Problem(s) in any Previous Pregnancy” = “Yes” (5%)?

- **No**
  - **Yes (Free Text)**

Maternity EPR. Not relevant here. See above
Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
??? hours Cost £??,???
When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)
Logical Prioritisation

Gestational Diabetes Problem (Any Previous Pregnancy)?

WHEN? Only if “Any Other Serious Antenatal Problem(s) in any Previous Pregnancy” = “Yes” (5%?)

No

Yes (Free Text)

Maternity EPR. Not relevant here. See above

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.

For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload

?? hours Cost £???

When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)

Severe Proteinuric Gestational Hypertension (PET) (Any Previous Pregnancy)?

WHEN? Only if “Any Other Serious Antenatal Problem(s) in any Previous Pregnancy” = “Yes” (5%?)

No

Yes (Free Text)

Maternity EPR. Not relevant here. See above

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.

For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload

?? hours Cost £???

When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)

Fits of any kind (Any Previous Pregnancy)?

WHEN? Only if “Any Other Serious Antenatal Problem(s) in any Previous Pregnancy” = “Yes” (5%?)

No

Yes (Free Text)

Maternity EPR. Not relevant here. See above

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.

For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload

?? hours Cost £???

When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)

Serious Ante-Partum Haemorrhage (Any Previous Pregnancy)?

WHEN? Only if “Any Serious Antenatal Problem(s) in any Previous Pregnancy” = “Yes” (5%?)

No

Yes (Free Text)

Maternity EPR. Not relevant here. See above

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.

For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload

?? hours Cost £???

When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)

Cervical Suture any kind (Any Previous Pregnancy)?

WHEN? Only if “Any Serious Antenatal Problem(s) in any Previous Pregnancy” = “Yes” (5%?)

No

Yes (Free Text)

Maternity EPR. Not relevant here. See above

Workload / Cost (All Phases of Maternity EPR) Until previous maternity EPR available. A3: Individual Care Quality.

For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload

?? hours Cost £???

When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)

† = Must be removed when data is anonymity
Logical Prioritisation

Any other Serious Problems (Any Previous Pregnancy)?

WHEN? Only if “Any Serious Antenatal Problem(s) in any Previous Pregnancy” = “Yes” (5%?)

No
Yes (Free Text)

Maternity EPR. Not relevant here. See above

Workload / Cost [All Phases of Maternity EPR] Until previous maternity EPR available. A3:
Individual Care Quality.
For each Past Pregnancy, Quick Lookup (4 secs) + Data Entry by Midwife Extra Workload
??? hours Cost £??,???
When previous maternity EPR available. A5: Computer generated. Cost Free (except for rare error corrections)
## Logical Prioritisation

### MANNERS - Maternity

#### P6. Obstetric Numbers (All Computer Generated)

### P6-A. REGISTERABLE PREGNANCIES

**Total Number of Registerable Pregnancies (= Birth Events not Babies)?**

| WHEN? | All
|-------|-------
| **2 character integer (e.g. 10)** | Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated: based on A1-4 data

**Total Number of Registerable Livebirths?**

| WHEN? | Only if “Total Number of Registerable Pregnancies” does not = 0 (50%?)
|-------|-------
| **2 character integer (Can be 0)** | Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated: based on A1-4 data

**Total Number of Registerable Stillbirths?**

| WHEN? | Only if “Total Number of Registerable Pregnancies” does not = 0 and “Total Number of Registerable Livebirths” does not = No of Registerable Pregnancies (50%?)
|-------|-------
| **2 character integer (Can be 0)** | Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated: based on A1-4 data

**Total Number of her Children who have Died?**

| WHEN? | Only if “Total Number of Registerable Pregnancies” does not = 0 and “Total Number of Children living now” does not = No of Registerable Pregnancies (50%)?
|-------|-------
| **2 character integer (Can be 0)** | Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated: based on A1-4 data

**Total Number of Neonatal Deaths?**

| WHEN? | Only if “Total Number of Children who have died” does not = 0 (1%)?
|-------|-------
| **2 character integer (Can be 0)** | Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated: based on A1-4 data

**Total Number of her Children Living Now?**

| WHEN? | Only if “Total Number of Registerable Pregnancies” does not = 0 and “Total Number of Registerable Stillbirths” does not = No of Registerable Pregnancies (50%)?
|-------|-------
| **2 character integer (Can be 0)** | Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated: based on A1-4 data

**Total Number of Previous Caesarean(s)?**

† = Must be removed when data is anonymity

---

© Rupert Fawdry 2005  
“Logical Prioritisation” compared with MANNERS Maternity  
EEP.D.02_DATASETS.L_LARGE.MANNERS.500cfM-30 (27th November 2005)
Logical Prioritisation

When? Only if “Total Number of Registrable
Pregnancies” does not = 0 (50%?)
2 character integer (Can be 0)
Unknown
Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

P6-D. NON-REGISTERABLE PREGNANCIES (TOTALS)

Total Number of Non-Registerable Pregnancies?
When?
2 character integer (Can be 0)
Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

Total Number of Spontaneous Miscarriages?
When?
2 character integer (Can be 0)
Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

Total Number of Induced Terminations?
When?
2 character integer (Can be 0)
Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

P6-E. PREGNANCIES BY GESTATION
NOT REGISTRATION

Total No of Pregnancies ending before 12 wks?
When? Only if “Total Number of Past Pregnancies of any kind”

does not = “Total Number of Registrable
Pregnancies” (50%?)
2 character integer (Can be 0)
Unknown
Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

Spontaneous Miscarriages (Before 12 wks)?
When? Only if “Total No of Non-Registerable
Pregnancies ending before 12 wks”

does not = 0 (20%?)
2 character integer (can be 0)
Unknown
Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

Induced Terminations (Before 12 wks)?
When? Only if “Total No of Non-Registerable
Pregnancies ending before 12 wks”

does not = 0 (20%?)
2 character integer (can be 0)
Unknown
Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

Number of Pregnancies ending between 12 and 24 wks?
When? Only if “Total Total Number of Past
Pregnancies of any kind”

does not = “Total Number of Registrable
Pregnancies” (20%?)
2 character integer (Can be 0)
Unknown
Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

Spontaneous Miscarriages (12 and 24 wks)?
When? Only if “Total No of Non-Registerable
Pregnancies ending between 12 and 24 wks” does not = 0 (5%?)
2 character integer (can be 0)
Unknown
Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

Induced Terminations (12 and 24 wks)?
When? Only if “Total No of Non-Registerable
Pregnancies ending

† = Must be removed when data is anonymity

© Rupert Fawdry 2005  “ Logical Prioritisation” compared with MANNERS Maternity  Page 162 of 171
Logical Prioritisation

between 12 and 24 wks” does not = 0 (5%?)
2 character integer (can be 0)
Unknown

Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

Induced Terminations (24 wks or more)?

WHEN? Only if “Total No of Non-Registable
Pregnancies ending
between 12 and 24 wks” does not = 0 (5%?)
2 character integer (can be 0)

Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

By Hysterotomy?

WHEN? Only if “Total No of Non-Registable
Pregnancies ending
between 12 and 24 wks” <= 0 (5%?)????
2 character integer (can be 0)

Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated: based on A1-4 data

P6-F. SERIOUS PROBLEMS WITH BABY IN ANY
PREVIOUS PREGNANCY

e.g. Any Neural Tube Defects, Downs Syndrome,
Other Major Congenital Anomalies, Birth Weight Less
than 2.5 Kgs, Birth Weight More than 4.5 Kgs, Any
Small for Dates or Large for Dates, any Very
Premature - < 32 weeks etc.

If no previous Maternity EPR exists, then any relevant
data about each baby should already have been
entered when details of each previous pregnancy
were entered above.

If a previous Maternity EPR already exists then any
relevant data about each baby should already have
been displayed above with the details of each
previous pregnancy.

In both cases this section forms part of the computer
generated R.Risk Assessment Section and has
therefore not been duplicated here.
**Logical Prioritisation**

**P6-G. PREGNANCIES BY PATHOLOGY**

**Ectopics?**

WHEN? Only if “Total No of Non-Registrable Pregnanacies ending between 12 and 24 wks” does not = 0 (5%)?

2 character integer *(can be 0)*

Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated: based on A1-4 data

**Hydatidiform Mole (No viable Fetus/Neonate)?**

WHEN? Only if “Total No of Non-Registrable Pregnanacies ending between 12 and 24 wks” does not = 0 (5%)?

2 character integer *(can be 0)*

Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated: based on A1-4 data

**Hydatidiform Molar Tissue found in Placenta with viable Fetus/Neonate?**

WHEN? Only if “Total No of Non-Registrable Pregnanacies ending between 12 and 24 wks” does not = 0 (5%)?

2 character integer *(can be 0)*

Workload / Cost (All Phases of Maternity EPR) A5: Computer Generated: based on A1-4 data

† = Must be removed when data is anonymity
Where should this be entered chronologically?

*Does this only refer to the decision (as made by the expectant mother or by the community midwife or by the consultant) “made at the time of Initial Assessment” or the current decision? For example an expectant mother may “At Initial Assessment “ have been “booked for a Home Delivery”, At 18 weeks she then changed her mind and was subsequently “booked for an NHS District General Hospital”, but she moved house at is currently “booked for NHS Midwifery Unit”*

In practice, due to the lack of computer terminals at all the potential times and places where such decisions may be made this piece of data in an electronic record is only accurate retrospectively at the end of pregnancy as is yet another “Paralysis by Analysis” Item

A 1 in 10 sample should be quite sufficient

---

### Logical Prioritisation

#### MANNERS - Maternity

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Booked place of delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>Assist with monitoring changes during pregnancy, delivery or postpartum</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Clinical decision related to risk factors at time of booking</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Mutually exclusive: Hospital inside region (pick list provided) / Hospital outside region (+ free text to document details) / Home / Private hospital / Private birth centre / Unbooked</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>British Association of Perinatal Medicine, Commissioning Data Set, Hospital Episode Statistics, West Midlands Advisory Board - Maternity</td>
</tr>
</tbody>
</table>

---

### DATA ITEM

- **Initial antenatal care plan**

  Intended designated professionals to provide antenatal care

  Clinical decision related to risk factors at time of booking

  Mutually exclusive: Midwife + GP shared care Midwife, / Obstetrician + GP Midwife only / Midwife + Obstetrician / Obstetrician only

  Commissioning Data Set, Hospital Episode Statistics, West Midlands Advisory Board - Maternity

---

See comments above. Works easily on hand held antenatal paper. Yet another “Paralysis by Analysis” when attempted as part of an electronic dataset.

A 1 in 10 sample should be quite sufficient

---

† = Must be removed when data is anonymity
### V. GENERAL MEDICAL VALUES - GENERIC

#### MANNERS - Maternity

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>End of care episode</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>Date denoting change of care episode</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Facilitates tracking of care episodes and calculation of duration</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>DD/MM/YYYY</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>Commissioning Data Set, Hospital Episode Statistics, West Midlands Advisory Board - Maternity</td>
</tr>
</tbody>
</table>

**End of care episode - Mother or Baby or just a generic item?**

- **If Mother**
  - Date of end of Hospital General Maternal Care
    - (Postnatal Discharge from Hospital of Mother)
    - or ITU Maternal Care
    - or Community Care of Mother?

- **If Baby**
  - Date of end of Hospital General Neonatal Care
    - (Postnatal Discharge from Hospital of Baby)
    - or Special Care Baby Unit
    - or Community Care of Baby?

  *(Probably Hospital Discharge only)*

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Transfer details</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>Record of next episode of care</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Facilitates tracking of care episodes and auditing of practice</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Mutually exclusive: Home / Mother &amp; baby Unit / ITU / HDU Died / Other hospital (+ free text to document details) / Other (+ free text to document details)</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>Commissioning Data Set, Hospital Episode Statistics, Health Outcome Indicators - Normal Pregnancy and Childbirth</td>
</tr>
</tbody>
</table>

**Mother or Baby or Maternity or Generic?**

- *ITU to Ward or to Home or from Community to GP or Generic?*
### LABORATORY AND OTHER TESTS - GENERIC.

**D1. PRENATAL DIAGNOSIS – Diagnostic tests**

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Offer of test</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>RCOG Guidance No. 8A 2004</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Monitoring of service provision and indicator of risk</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Mutually exclusive: Offer accepted / Offer declined (+ free text to document details) / Not offered (+ free text to document details)</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>NSC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Type of Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>RCOG Guidance No. 8A 2004</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Monitoring of service provision and indicator of risk</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Mutually exclusive: Chorionic Villus Sampling / Amniocentesis / Fetal blood sampling / Test not done (+ free text to document details)</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>NSC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Why offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>RCOG Guidance No. 8A 2004</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Monitoring of service provision and indicator of risk</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Non-mutually exclusive; Higher Risk / Maternal Age / Family History / USS Indication</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>NSC</td>
</tr>
</tbody>
</table>

Non-mutually exclusive answers need to be documented separately since they have to be entered separately onto the electronic database if they are to be of any future use. Such answers look fine on paper but do not work on a computer.

**How can you enter the data on someone who has more than one of the items on the list?**

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Test performed by</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>RCOG Guidance No. 8A 2004</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Monitoring of service provision and indicator of risk</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Mutually exclusive; Consultant (Obs &amp; Gyn) / Consultant (FM) / Registrar / Midwife / Trainee under Consultant supervision / Other (+ free text to document details)</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>NSC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Laboratory Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>RCOG Guidance No. 8A 2004</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Monitoring of service provision</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Non-Mutually exclusive: Full karyotype / PCR / FISH / DNA Analysis</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>NSC</td>
</tr>
</tbody>
</table>

**Generic Item**

i.e. may be used several times in a single EPR

However it must be clear that on each different occasion when this question is asked the answer must be “Mutually Exclusive”

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Test date</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>RCOG Guidance No. 8A 2004</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Monitoring of service provision and gestation of pregnancy and maternal age</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>DD/MM/YYYY</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>NSC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DATA ITEM</th>
<th>Test result</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIS</td>
<td>RCOG Guidance No. 8A 2004</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td>Monitoring of service provision and congenital anomalies</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Mutually exclusive: Normal karyotype / Positive Down’s / Other (+ free text to document details)</td>
</tr>
<tr>
<td>DATA ORIGIN</td>
<td>NSC</td>
</tr>
</tbody>
</table>

Note: Must be removed when data is anonymised.

© Rupert Fawdry 2005

“Logical Prioritisation” compared with MANNERS Maternity  Page 167 of 171
### Fetal heart
**Basis:** Detection/screening of fetal anomalies during antenatal period
**Explanation:** Facilitates assessment of pregnancy viability
**Input Options:** Mutually exclusive: Present / Not present
**Data Origin:** NSC, RCOG, RCR, RUG

### Placental site
**Basis:** Detection of risk factor during antenatal period
**Explanation:** Clinical factor relevant to pregnancy care and outcome
**Input Options:** Mutually exclusive: Clear of os Covering os
**Data Origin:** NICE, RUG

### Biparietal diameter (BPD)
**Basis:** Record of BPD measurement at time of scan
**Explanation:** Calculate estimated fetal weight to monitor growth
**Input Options:** Numerical format, expressed in millimetres
**Data Origin:** West Midlands Congenital Anomalies Register, NSC, RCOG, RCR, RUG

### Head circumference (HC)
**Basis:** Record of HC measurement at time of scan
**Explanation:** Calculate estimated fetal weight to monitor growth, and detect anomalies e.g. microcephaly, hydrocephaly
**Input Options:** Numerical format, expressed in millimetres
**Data Origin:** West Midlands Congenital Anomalies Register, NSC, RCOG, RCR, RUG

### Femur length (FL)
**Basis:** Record of FL measurement at time of scan
**Explanation:** Calculate estimated fetal weight to monitor growth and detect anomalies e.g. short-limbed dwarf
**Input Options:** Numerical format, expressed in millimetres
**Data Origin:** West Midlands Congenital Anomalies Register, NSC, RCOG, RCR, RUG

### Abdominal circumference (AC)
**Basis:** Record of AC measurement at time of scan
**Explanation:** Calculate estimated fetal weight to monitor growth
**Input Options:** Numerical format, expressed in millimetres
**Data Origin:** West Midlands Congenital Anomalies Register, NSC, RCOG, RCR, RUG

† = Must be removed when data is anonymity
H. Health Care Workers

In time all hospitals and trusts will need a District Personnel/Governance Database (covering all those who work in hospital e.g. GPs etc not just hospital trust employees) with automatic electronic downloading to the Maternity EPR whenever required.

Both are essential for openness in medical care (e.g. Every patient should have the right to know the name or midwife who 'did' a delivery or the doctor who did the Caesarean or Hysterectomy)

but also for Governance Purposes.

X3. Dataset required for a Health Care Workers Database

0. Trust Staff?
   It may be better to create separate databases for Trust and Non-Trust Employees

1. UNIQUE TO EACH INDIVIDUAL

1A Type of Occupation/Professional Group?
1B Surname/Family Name? †
1C First Forename? †
1D Second Forename? †
1E Initials? †
1F Personal Governance Code of some sort. (e.g. GMC number)? †
1G Work Phone Number? †
1H Mobile Phone Number? †
1I Current Grade or Seniority; which for example for an SpR (Specialist Registrar) will change annually. For future reference it will be essential to store in the maternity EPR the current grade at the time any particular procedure takes place e.g. the Caesarean done on 5 October 1998 was done by Dr. P Jones when he was a Year 4 SpR even though he is now a local consultant?
1J Qualifications (In time this will probably need to be more than a free text list but will contain details of each separate qualification with a pick list of those most relevant to a particular occupation)? †
1K C.C.S.T. Holder (Certificate of Completion of Specialist Training)? Y / N / ?
   In which Specialty?
1L Sub-Specialty Training Certificate Holder?
   In which Specialty?

† = Must be removed when data is anonymity
Logical Prioritisation

1M Intensive Short Course Certificates. (e.g. A.L.S., A.L.T.S., and in maternity A.L.S.O and M.O.E.T.)
The Resuscitation Officer, the Study Leave Department and Management (e.g. for Fire Certificates) are often already trying to keep track of which members of staff have passed and kept up to date with which such certificates? This requirement is likely to become even more important in future.

† Naturally, whenever any of the above information is incorporated within the maternity EPR of an individual expectant mother, almost all of the above, possibly with the exception of the type of Occupation, Seniority and some kind of scrambled Governance Code will needs to be removed whenever such individual maternity records are anonymised.

2. COLLECTIVE DATA

2A Base Address of Employer?
2B Base Postcode of Employer?
2C Code for Base Premises of Employer?
2D Switchboard Telephone Number (Public Access) of Employer?
2E Telephone Number (Restricted) e.g. Health Centre Number only for use by professionals?

† = Must be removed when data is anonymity
C. Suggested Standard Flow-Pattern of Staff Questions

**B7-A. WHO ‘DID’ THE PROCEDURE (E.G. DELIVERY)**

**Person who ‘did’ the Procedure**
- WHEN All (100%)
  - On system
  - Bank
  - Locum
  - New Staff not on the system yet
  - Temporary Trainee
  - Other (Specify)
  - Unknown
  
  Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality?

**Person who ‘did’ the Procedure (Professional Group)?**
- WHEN? All (100%)
  - Midwife (Including Trainees)
  - Hospital Doctor (Including Trainees)
  - General Practitioner (Including Trainees)
  - None - Delivered Herself
  - Other (Specify)
  - Unknown
  
  Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality?

**Person who ‘did’ the Procedure (Name)? †**
- WHEN? All (100%)
  - [Name] [from Appropriate Pick List]
  
  Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality?

**Person who ‘did’ the Procedure (Seniority/Grade)?**
- WHEN? All (100%)
  - [Grade/Seniority]
  
  Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated

**Person who ‘did’ the Procedure (Governance Code)?**
- WHEN? All (100%)
  - [Code]
  
  Workload / Cost (All Phases of Maternity EPR) A5: Computer-Generated

**IF LOCUM, BANK, NEW STAFF, TEMPORARY TRAINEE, OTHER, ‘DID’ THE PROCEDURE**

**Locum, Bank, New Staff, Temporary Trainee, Other (Name)?**
- WHEN Only if “Name of Health Care Worker” = “Locum”, “New Staff”, “Temporary Trainee”, “Other”
  - [Free Text]
  
  Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality?

**Locum, Bank, New Staff, Other (Seniority)?**
- WHEN Only if “Name of Health Care Worker” = “Locum”, “New Staff”, “Other”
  - [Free Text]
  
  Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality?

**Locum, Bank, New Staff, Other (Governance Code)?**
- WHEN Only if “Name of Health Care Worker” = “Locum”, “New Staff”, “Other”
  - [Free Text. Usually GMC Number for Doctors or Registration Number for others]
  
  Workload / Cost (All Phases of Maternity EPR) A3 : Individual Care Quality?

† = Must be removed when data is anonymity

© Rupert Fawdry 2005

“Logical Prioritisation” compared with MANNERS Maternity Page 171 of 171
Conclusion:

MANNERS - Goes further in the right direction than any other similar initiative; but is sadly not yet a viable standard maternity “Electronic Patient Record”.

LOGICAL PRIORITISATION (“Start Standardisation with the Fawdry 500”) - Still awaiting the recognition it urgently needs”

There remains an urgent requirement for three complex but utterly distinctive Perinatal Datasets to be eventually accepted internationally.

A. Pregnancy Data Items which do not differ even if there is a multiple pregnancy
B. Neonatal Data Items which may differ for each fetus/neonate if there is a multiple pregnancy
C. Special Care Data Items only relevant for those neonates receiving Special Care

It is hoped that the above comparison makes it sufficiently clear that this cannot be achieved until some clear criteria is used to decide which items have priority and which items can vary locally. This remains unachievable until there is a more general discussion regarding the criteria for inclusion in, or exclusion from, such a dataset.

Because clear generally agreed criteria do not yet seem to have been discussed, let alone agreed, the MANNERS set of datasets seem to depend still too much on local and national data collection pressures rather than any logical universal criteria. As a result, while the MANNERS group of datasets make a useful contribution regarding the detail of many questions, it is not yet suitable as a universal standard.

As far as is known to the writer the “Logical Prioritisation” dataset is the only existing Perinatal Data set which does use logical reasons for inclusion and exclusion and is therefore commended as a unique international standard. Now that it exists all are welcome (especially the dedicated MANNERS co-workers) to contribute to it’s continuing development.

The MANNERS project could have provided a unique opportunity to encourage those who have created full scale maternity and neonatal computer systems (i.e. Protos, Euroking and Terranova) to standardise their separate datasets for the benefit of all. Instead it has attempted to replace all such systems without having the resources (both financial or in personnel) to achieve what has already been achieved over many years by those who have specialised in this field.

At least the MANNERS project is worthy of great commendation for having made so much use of previous work. And also for having recognised that the future in Maternity Care lies with “Chips and Paper” NOT with some Paperless system. Sadly from all I have so far heard this has not yet been true of the NPIIT initiative which seems to have specifically decided to re-invent the wheel in a way that is either destructive or impractical; and not yet to have seriously consulted those medical and IT professionals who have had long years of experience in this extremely difficult area.

Rupert Fawdry. October 2005

† = Must be removed when data is anonymity